

ELLIOTT CHEU

**Interim Senior Vice President for
Research and Innovation**

The University of Arizona

(Nominated by Carol Stewart)

An Active or Emeritus Member TAA Member must complete and submit this nomination form in collaboration with the potential nominee. The nomination form and additional requested documentation must be received by the TAA Clerk **no later than 11:59 p.m. on October 1, 2023.**

GENERAL INFORMATION					
Name: Elliott Cheu		Length of residency*: 28 years			
Home Address: [REDACTED]					
E-mail Address: echeu@arizona.edu					
Home Phone No.: [REDACTED]		Mobile Phone No.: [REDACTED]			
PROFESSIONAL INFORMATION					
Company: University of Arizona		Profession/Industry: Higher Education			
Position/Title: Interim Senior Vice President for Research and Innovation					
Work Address: 1401 E. University Blvd, Tucson, AZ 85721					
Work Phone No.: 520-621-9131		Work E-mail Address: echeu@arizona.edu			
DEMOGRAPHIC INFORMATION (Optional)					
What is your race/ethnicity? Please mark the one box that describes the race/ethnicity with which you primarily identify.	☐	Hispanic or Latino: a person of Cuban, Mexican, Chicano, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.			
	☐	White: a person that has origins in any of the original peoples of Europe, the Middle East, or North Africa.			
	☐	Black or African American: a person that has origins in any of the Black racial groups of Africa.			
	☒	Asian: a person that has origins in any of the original peoples of East Asia, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.			
	☐	Native Hawaiian or Other Pacific Islander: a person that has origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.			
	☐	American Indian or Alaska Native: a person that has origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.			
	☐	Two or More Races: a person who primarily identifies with two or more of the above race/ethnicity categories.			
What is your gender? Please mark the one box that describes the gender with which you primarily identify.	☒	Male	What is your age? Please mark one box below.	☐	Under 40
	☐	Female		☐	41-50
	☐	Non-binary		☒	51-60
				☐	Over 60
Do you have a disability? Please mark the appropriate box.	☐	Yes, I have a disability (or previously had a disability).			
	☒	No, I do not have (nor have I previously had) a disability.			

*Length of residence in the Tucson International Airport air service area. Pursuant to Section 2.1.1 of the TAA Bylaws, this area encompasses "the general Southern Arizona region."

QUESTIONNAIRE

Is the potential nominee a local, State, or Federal elected official or government employee? <i>If "Yes," list the agency and position/title below. Also, submit a copy of the job description along with the nomination form.</i>	YES ☒	NO ☐
University of Arizona Interim Senior Vice President for Research and Innovation		

Please summarize the nominee's professional background and expertise. *(Additional detail may be provided in the nominee's Letter of Interest)*

Elliott Cheu currently serves as the Interim Senior VP for Research and Innovation where he oversees the research enterprise at the UA, a nearly \$1B portfolio that touches all aspects of the human endeavor from the humanities and arts to engineering and science. He also oversees the commercialization activities at the UA such as intellectual property, licensing and start ups as well as overseeing the two UA Tech Parks. He is a strong leader specializing in strategy and management.

Please list activities demonstrating the nominee's care and commitment to community service or involvement, including previous or current membership in non-profit or community organizations and the duration of service.

ORGANIZATION/INVOLVEMENT	DURATION OF SERVICE
Tucson Festival of Books: developed and oversaw Science City	7 Years
Southern Arizona Leadership Council: P-20 committee	1 year
Arizona SciTech Festival: Steering committee	6 years
Tucson Values Teachers: Teacher Appreciation Planning Committee	4 years

Please describe how the nominee's personal experience will translate into becoming a fierce advocate of TAA in local, national, and international communities. *(Additional detail may be provided in the nominee's Letter of Interest)*

Elliott Cheu has been a strong advocate for building connections between the University of Arizona and the local community. He has had strong relationships with many local and state organizations. His combination of local insight, professional expertise, and dedication to community engagement will enable him to effectively advocate for TAA and the communities, both local and distant, it serves.
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QUESTIONNAIRE

Please indicate any of the TAA advisory councils which might benefit from the potential nominee's working knowledge, membership, and participation.

COUNCIL		
Audit	☐	☐
Corporate Governance	☒	☐
Finance and Risk Management	☒	☐
Finance and Risk Management – Environmental/Sustainability Sub Council	☐	☐
Nominating	☐	☐

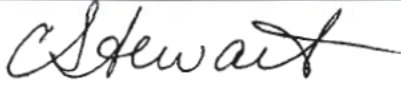
Provide a brief explanation of how the TAA will benefit from their participation on the council(s) indicated.
(Additional detail may be provided in the nominee's Letter of Interest)

Elliott Cheu has served for over sixteen years in many leadership roles at the University of Arizona. He has extensive experience dealing with large budgets and overseeing large organizations. This experience will allow him to provide helpful insight from the perspective of a large and diverse public institution.

References

	NAME	E-MAIL ADDRESS	PHONE NO.
1.	Doug Hockstadt	douglash@arizona.edu	☐
2.	Bruce Beach	bbeach@beachfleischman.co	☐
3.	JP Roczniak	roczniak@arizona.edu	☐

Nominated By:

TAA MEMBER (NAME)	SIGNATURE	DATE
Carol Stewart		9/22/2024

Due Date: October 1, 2023 by 11:59 p.m.

Email to:

bjones@flytucson.com

Mail to:

Tucson Airport Authority
Attn: TAA Clerk
7250 S. Tucson Blvd., Ste. 300
Tucson, AZ 85756

A **complete** nomination packet must include the following:

- **New Member Nomination Form** (Signed and dated by a current Active Member or Emeritus Member)
- **Statement of Interest Letter**
- **Resume**
- **Biographical Information** (e.g., company profile, website, or LinkedIn profile)
- **Executed Disclosure Statement**

Board of Directors
Tucson Airport Authority
7250 S. Tucson Blvd., Ste 300
Tucson, AZ 85756

Dear Members of the Board,

I am writing to express my intent to become a Tucson Airport Authority Member. As a long-time resident of Tucson with a deep appreciation for our community and its growth, I believe I can contribute meaningfully to TAA's mission.

Since coming to Tucson, in 1996, I have been a huge advocate of Tucson International Airport. As a faculty member at the University of Arizona, my research requires me to travel frequently to Chicago, IL and Geneva, Switzerland, accumulating over 2M miles in the process. I have come to realize the value of our local airport and strongly advocate to all for support of this important local resource. In my leadership roles at the University of Arizona, I have overseen many units and groups that connect to our local community and support our region's economy. In my current position, both research and commercialization contribute directly to our region's economic success, which relies strongly on a robust and vibrant transportation system. As such, I am particularly passionate about ensuring that the airport serves as a vital hub for economic development while also being sensitive to community needs.

My involvement with local and state-wide organizations goes back many years. For example, I developed the concept of Science City for the Tucson Festival of Books in 2012. This STEM-focused activity has become a key attraction of the Festival of Books, which brings in over 130K visitors to the Festival and contributes over \$4M to the local economy. These types of engagements have strengthened my ability to collaborate with diverse communities and advocate for growth of travel to and from Tucson. I believe that my experience in connecting the university with our local and state communities will be beneficial in supporting the Tucson Airport Authority's goals and initiatives.

I am eager to contribute to the advancement of our local airport and to work alongside dedicated individuals who share a commitment to enhancing Tucson's connectivity and economic vitality. Thank you for considering my application. I look forward to the opportunity to discuss how I can support the important work of the Tucson Airport Authority.

Sincerely,



Elliott Cheu
Interim Senior Vice President, Research and Innovation
Distinguished Professor of Physics
The University of Arizona

Elliott Cheu, Ph.D.

University of Arizona
Research, Innovation and Impact
Administration, Room 601
Tucson, AZ 85721

Phone: (520) 621-9131
Email: echeu@arizona.edu
Homepage: <https://profiles.arizona.edu/person/echeu>

Leadership Roles

Interim Senior Vice President, Research and Innovation (2023-present)

- Oversee a \$140M budget that includes research operations, research development, University-wide centers and institutes and the UA innovation enterprise

- Developed and implemented a review of UA research priorities

- Oversee a strategic review of University-wide centers and institutes

- Developing an RII strategic plan for Phoenix research and innovation activities

Associate Vice President, Research Institutes (2022-2023)

- Reorganized 16 University-wide centers and institutes; oversaw process to reauthorize nearly 100 centers and institutes; developed consistent procedures for new centers and institutes

- Oversee 12 University Shared Research Cores

- Oversee four University Museums and initiated a \$50M renovation for the Arizona State Museum

- Developed a structure for RII Faculty Affairs including its first faculty constitution and bylaws; obtained a voting seat on Faculty Senate for RII faculty

Interim Dean, College of Science (2019-2021)

- Manage \$96M budget, including faculty raise process, budget reallocation and teaching budget

- Oversee over 500 unique external grant awards with an obligated total amount of \$163M

- Re-organized Dean's management structure from 32 direct reports to 24 direct reports (15 department heads) to empower Senior Leadership Team and create clearer structure

- Created first ever communication strategy to help disseminate Administrative Office decisions and plans to all College of Science leadership, faculty and staff

- Worked with donors to solicit over \$40M in gifts to College with direct involvement in over \$15M

- Launched a new Student Success Initiative for the College of Science

- Created first diversity, equity and inclusion committee for College

co-Chair UA Strategic Plan (2017-2019)

- Developed and implemented process for Strategic Plan

- Provided leadership for the overall plan, and guided plan to completion

- Led collaboration and communication efforts across stakeholders to effectively gather feedback

- Oversaw Pillar 1 (Wildcat Journey) of Strategic Plan

Interim Dean, Honors College (2016-2017)

- Oversaw development of new Honors Village and helped develop programming for it

- Improved diversity by 20% compared to incoming class, and revamped application process

- Created new program for admitting students from KEYS high school research program

- Started new math program for high achieving high school students

Associate Dean, College of Science (2008-2016,2017-2019)

- Created Arizona STEM Learning Center

- Created Tucson Festival of Books Science City

- Helped create and support implementation of Math 100 for Schedule for Success

- Oversaw development of Pima Community College/UA transfer retention program

- Co-developed BGS degree for students in the Colleges of Letters, Arts and Sciences

- Raised approximately \$1.5M for renovating Flandrau Planetarium

Director of Undergraduate Studies, Physics Department (2006-2008)

- Developed tool for extracting student information from student data system

- Initiated revamp of Physics introductory laboratories

- Revamped Physics curriculum, including new computational courses

Education

Cornell University, Ithaca, NY

Ph.D. Physics, July 1991

Stanford University, Stanford, CA

B.S. Physics with Honors, June 1986

Employment

University of Arizona (1996-present)

- Interim Senior Vice President, Research and Innovation (2023-present)

 - Institutional Official (2023-present)

- Associate Vice President, Research, Innovation and Impact (2022-2023)

- Interim Dean, College of Science (2019-2021)

- Associate Dean, College of Science (2017-2019)

- Interim Dean, Honors College (2016-2017)

- Distinguished Professor of Physics (2016-present)

- Associate Dean, College of Science (2009-2016)

- Interim Associate Dean, College of Science (2008-2009)

- Professor (2008-present)

- Director of Undergraduate Studies, Dept. of Physics (2006-2008)

- Associate Professor (2002-2008)

- Assistant Professor (1996-2002)

University of Chicago (1991-1996)

- Research Scientist (1994-1996)

- McCormick Fellow (1991-1994)

Cornell University (1986-1991)

- Research Assistant (1987-1991)

Honors and Awards

Metropolitan Pima Alliance Common Grounds Semi-finalist, 2017
 Tucson Festival of Books Award of Contribution, 2017
 UA Team Award for Excellence, 2017
 University Distinguished Professor, 2016
 Galileo Circle Dean's Award, 2013
 AAFSAA Outstanding Faculty Award, 2010
 Arizona Leadership Institute Fellow, 2010
 Leon Blitzer Excellence in the Teaching of Physics Award, 2010
 College of Science Distinguished Advising Award, 2008
 College of Science Innovation in Teaching Award, 2000
 Arthur Holly Compton Lecturer, 1993
 Robert R. McCormick Postdoctoral Fellowship, 1991-1994.

Service Activities

Local Outreach

Arizona Science Radio Show, July 2022
 ASTA Structure and Function for Teaching Science Symposium, Jul. 2019
 Mansfeld STEM Night presentation, Feb. 2019
 Sun Corridor CEO Interview Series, Jan. 2019
 Wake Up Tucson Radio Show, Mar. 2018
 Road Scholar Lifelong Learning Institute Lecture, Nov. 2017
 ASTA Energy Symposium, May 2017
 Academic Village Public Lecture, Mar. 2017
 Arizona Science Radio Show, Feb. 2017
 College of Science Lecture Series, Feb. 2017
 Arizona Science Radio Show, Apr. 2016
 Biosphere 2 What If Lecture, Jan. 2016
 The Graduate Club Public Lecture, Jan. 2016
 Splendido Public Lecture, Apr. 2015
 Particle Fever Movie Panel, April 2014
 Bill Buckmaster Radio Show, Mar. 2014
 Nanotechnology Public Lecture, Feb. 2014
 Science Cafe, Prescott, Apr. 2012
 Downtown Science Public Lecture, Dec. 2011
 Science Cafe, Sep. 2010
 KUAT Wavelengths Television segment, Mar. 2010
 Let's Talk Science Lecture, Mar. 2009
 College of Science Public Lecture, Feb. 2009
 LHC public presentation, Sept. 2008 Physics Phun Night Presenter and MC, 2003, 2001

Local Activities

Campus Research Corporation Board of Directors, Vice Chair, 2023-present
 Agnese Nelms Haury Donor Advised Fund Board, 2023-present
 Arizona Alzheimer's Consortium Board of Directors, 2023-present
 Salpointe High School Board of Directors, 2017-2019
 Amphitheater School District STEM Core Committee, 2014-2015
 Salpointe High School Board of Directors Academic Committee, 2013-2019
 Arizona STEM Diploma Advisory member, 2013-2014

AZ SciTech Festival, Steering Committee, 2013-2019
Tucson Festival of Books Steering Committee, 2012-2019
Champions for Change Advisory Board, 2011-2013
Tucson Values Teachers Teacher Appreciation Planning Committee, 2010-2014

University Committees

UA Climate Action Plan, 2023-present
UA Steps in the Scholar Journey Mentor, 2022-present
UA Undergraduate Research Task Force Steering Committee, 2022-present
UA Biobanking Task Force, 2022-present
UA-UAGC Academics Working Group, 2023
UA Promotion and Tenure Policy Review Committee, 2021-2022
University Strategic Planning and Budget Advisory Committee, 2020-present
UA BIO5 Deans Advisory Board, 2019-2021
UA Master Plan Steering Committee, 2019-present
KEYS Advisory Board, 2019-2021
UA Women in Science and Engineering Advisory Board, 2019-2021
UA Athletics Strategic Planning group, 2019
UA CRM Executive Sponsors Committee, 2019-present
UAHS Strategic Planning Advisory Board, 2018-2019
UA FTFT Retention Committee, chair (2019), 2019-present
UA Net Tuition Revenue Committee, chair (2019), 2019-present
UA Executive Director, OSFA, search committee, 2019
UA General Education Reform Committee, chair, 2019
UA Strategic Planning Steering Committee, co-chair, 2017-2019
UA Resource Centered Management Budget 3-year Review Committee, 2017-2019
UA Presents Student Engagement Committee, 2017-2019
UA Deans Council, 2016-2017, 2019-2021
Program Coordinator for Curricular Affairs search committee, 2016
Assistant Director for Curricular Affairs search committee, 2016-2017
WEES UA Advisory Committee, 2015-2018
ORD Cores Advisory Committee, 2015-2017
CESL International Advisory Board, 2015-2019
Associate Deans for Research Council, 2015-2018, 2019
Enrollment Management Council, 2014-2019
UA Vitae Faculty Advisory Committee, 2013-2015
100% Engagement Task Force, 2014
Director of Community Relations Search committee, 2014
College of SBS Associate Dean Search committee, 2014
Resource Centered Management Budget Steering Committee, 2013-2015
AAU STEM Advisory Committee, 2013-2015
UA STEM Learning Center Advisory Board, chair, 2013-2019
College of Science Senior Development Officer Search Committee, 2013
Arizona Leadership Institute Advisory committee, 2012-2018
Teacher Course Evaluation Advisory Group, 2012-2014
College of Medicine Prerequisite committee, 2012-2013
Strategic Priorities Faculty Initiative committee, 2011-2014
Transfer Task Force, 2011-2014
SBS Associate Dean Search committee, 2011
Assistant Director of Employer Development Search committee, 2011
P-20 Education Council of Southern Arizona, 2008-2013
TRIF Workforce Development Subgroup, 2008-2014

Integrated Science Advisory Board, 2008-2013
 Assessment Coordinating Council, 2008-2015
 Mosaic Student Systems Advisory Group, 2009-2011
 Business Analytics Advisory Group, 2009-2011
 Honors College Advisory Board, 2008-2009
 University Budget Redesign Task Force, 2008-2009
 Student Affairs Policy committee, 2006-2008
 University of Arizona Graduate Representative, 1996-2003
 President, Asian American Faculty Staff and Alumni Association, 1999

Departmental Committees

Physics Department Recruitment, Inclusivity and Retention committee, 2022-present
 Physics Department Learning Assessment committee, 2019-2021
 Physics Department Outreach committee, 2010-2018
 Physics Department Undergraduate Curriculum committee, chair, 2006-2010, 2011
 Physics Department Undergraduate Curriculum committee, 2006-present
 Physics Department Graduate Curriculum committee, 2012-2013
 Physics Department Service Course committee, chair, 2006-2008
 Physics Department Executive committee, 2004-2008
 Physics Department Undergraduate Recruitment & Scholarships, 2003-2014
 Physics Department Undergraduate Recruitment & Scholarships, chair, 2010
 Physics Department Graduate Examinations, chair 2004-2006
 Physics Department Undergraduate Recruitment & Scholarships, 2003-2007
 Physics Department CAPE committee, 2002-2003.
 Physics Department Laboratory Equipment committee, 2002-2006.
 Physics Department Strategic Plan Committee, 2000-2001.
 Physics Department Library Committee, chair, 2000-2001.
 Physics Department Strategic Plan Committee, 2000-2001.
 Physics Department Library Committee, 1999-2004.
 Physics Department Academic Program Review, 1999-2000
 Physics Department Teaching Improvement and Evaluation Committee, 1997-2004.
 Physics Department Colloquium Committee, 1997-1998

Professional Activities

VPR representative, Hispanic Serving Research Universities, 2023-present
 SRO representative, Association of American Universities, 2023-present
 Council on Research, Association of Public and Land-Grant Universities, 2023-present
 Sigma Xi Honor Society, 2017-present
 NSF Quarknet Review Panel, 2001, 2004
 Reviewer DOE Proposals, 1999-present
 Editor, Proceedings of the Seventh International Conference on Calorimetry in High Energy Physics, 1997
 Local organizing committee for the Seventh International Conference on Calorimetry in High Energy Physics, Tucson, Arizona, 1996-1997
 Member, American Physical Society, 1986-present

Grants and Contracts

A percent effort of 20% indicates the grant is evenly shared by five researchers.

Experimental Elementary Particle Physics
 April 2023-March 2027
 \$ 3,242,285 (Department of Energy)

25% effort

MREFC: US ATLAS HL-LHC HTT UpGrade

April 2020-March 2025

\$647,195 (NSF)

33% effort

MREFC: US ATLAS HL-LHC LAR UpGrade

April 2020-March 2025

\$1,263,402 (NSF)

33% effort

Experimental Elementary Particle Physics

April 2019-March 2023

\$3,265,000 (Department of Energy)

25% effort

U.S. ATLAS Operations: Discovery and Measurement at the Energy Frontier

February 2017-April 2020

\$190,590 (NSF)

33% effort

Experimental Elementary Particle Physics

April 2016-March 2019

\$2,445,000 (Department of Energy)

25% effort

Cosmic Frontier Physics

April 2016-March 2019

\$50,000 (Department of Energy)

100% effort

Pilot Bridge Program in the Sciences

April 2015-June 2020

\$400,000 (Sherman Fairchild Foundation)

100% effort

Cosmic Frontier Physics

April 2014-March 2016

\$100,000 (Department of Energy)

100% effort

Experimental Elementary Particle Physics

May 2013-March 2016

\$2,410,000 (Department of Energy)

20% effort

Experimental Elementary Particle Physics

February 2010-January 2013

\$3,122,000 (Department of Energy)

20% effort

Large Synoptic Survey Telescope Power Supply Prototype

August 2009-August 2012

\$17,500 (SLAC National Accelerator Laboratory)

100% effort

Faculty Seed Grant

October 2008

\$600 (University of Arizona)

100% effort

Experimental Elementary Particle Physics

February 2007-January 2010

\$2,635,000 (Department of Energy)

20% effort

ATLAS CSC Muon M&O

March 2006-July 2007

\$45,000 (Department of Energy)

40% effort

ATLAS CSC Muon Calibration

March 2005-February 2006

\$21,000 (Department of Energy)

45% effort

Experimental Elementary Particle Physics

February 2004-January 2007

\$2,639,000 (Department of Energy)

20% effort

Experimental Elementary Particle Physics

February 2001-January 2004

\$2,415,000 (Department of Energy)

25% effort

University Travel Grant

November 2000

\$500 (University of Arizona)

100% effort

Experimental Elementary Particle Physics

February 1998-January 2001

\$1,971,000 (Department of Energy)

25% effort

KTeV Trigger Electronics

April 1998-April 1999

\$12,900 (Department of Energy)

100% effort

University Small Grant

June 1998-May 1999

\$4,960 (University of Arizona)

100% effort

Travel Grant

March 1999-December 1999

\$5,000 (Department of Energy)

100% effort

Experimental Elementary Particle Physics

February 1997-January 1998

\$507,000 (Department of Energy)

25% effort

List of Publications

1. Aad, G. *et al.* Beam-induced backgrounds measured in the ATLAS detector during local gas injection into the LHC beam vacuum. *JINST* **19**, P06014 (2024).
2. Aad, G. *et al.* Measurements of electroweak $W^\pm Z$ boson pair production in association with two jets in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **06**, 192 (2024).
3. Aad, G. *et al.* Measurement of vector boson production cross sections and their ratios using pp collisions at $s=13.6$ TeV with the ATLAS detector. *Phys. Lett. B* **854**, 138725 (2024).
4. Aad, G. *et al.* Measurement of t-channel production of single top quarks and antiquarks in pp collisions at 13 TeV using the full ATLAS Run 2 data sample. *JHEP* **05**, 305 (2024).
5. Aad, G. *et al.* Searches for exclusive Higgs boson decays into $D^*\gamma$ and Z boson decays into $D0\gamma$ and $Ks0\gamma$ in pp collisions at $s=13$ TeV with the ATLAS detector. *Phys. Lett. B* **855**, 138762 (2024).
6. Aad, G. *et al.* Search for high-mass resonances in final states with a τ -lepton and missing transverse momentum with the ATLAS detector. *Phys. Rev. D* **109**, 112008 (2024).
7. Aad, G. *et al.* Search for new particles in final states with a boosted top quark and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **05**, 263 (2024).
8. Aad, G. *et al.* Combination of searches for heavy spin-1 resonances using 139 fb^{-1} of proton-proton collision data at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **04**, 118 (2024).
9. Hayrapetyan, A. *et al.* Combination of Measurements of the Top Quark Mass from Data Collected by the ATLAS and CMS Experiments at $s=7$ and 8 TeV. *Phys. Rev. Lett.* **132**, 261902 (2024).
10. Aad, G. *et al.* Performance of the ATLAS forward proton Time-of-Flight detector in Run 2. *JINST* **19**, P05054 (2024).
11. Aad, G. *et al.* ATLAS Run 2 searches for electroweak production of supersymmetric particles interpreted within the pMSSM. *JHEP* **05**, 106 (2024).
12. Aad, G. *et al.* Search for electroweak production of supersymmetric particles in final states with two τ -leptons in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. *JHEP* **05**, 150 (2024).
13. Aad, G. *et al.* Search for pair-production of vector-like quarks in lepton+jets final states containing at least one b-tagged jet using the Run 2 data from the ATLAS experiment. *Phys. Lett. B* **854**, 138743 (2024).
14. Aad, G. *et al.* A search for R-parity-violating supersymmetry in final states containing many jets in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **05**, 003 (2024).
15. Aad, G. *et al.* Search for pair production of higgsinos in events with two Higgs bosons and missing transverse momentum in $s=13$ TeV pp collisions at the ATLAS experiment. *Phys. Rev. D* **109**, 112011 (2024).
16. Aad, G. *et al.* Search for Nearly Mass-Degenerate Higgsinos Using Low-Momentum Mildly Displaced Tracks in pp Collisions at $s=13$ TeV with the ATLAS Detector. *Phys. Rev. Lett.* **132**, 221801 (2024).
17. Aad, G. *et al.* Search for new phenomena with top-quark pairs and large missing transverse momentum using 140 fb^{-1} of pp collision data at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **03**, 139 (2024).
18. Aad, G. *et al.* Combination of searches for pair-produced leptoquarks at $s=13$ TeV with the ATLAS detector. *Phys. Lett. B* **854**, 138736 (2024).
19. Aad, G. *et al.* The ATLAS trigger system for LHC Run 3 and trigger performance in 2022. *JINST* **19**, P06029 (2024).
20. Aad, G. *et al.* Measurement of the total and differential cross-sections of $t\bar{t}W$ production in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **05**, 131 (2024).
21. Aad, G. *et al.* Search for Dark Photons in Rare Z Boson Decays with the ATLAS Detector. *Phys. Rev. Lett.* **131**, 251801 (2023).
22. Aad, G. *et al.* Measurement of the Higgs boson mass with $H \rightarrow \gamma\gamma$ decays in 140 fb^{-1} of $s=13$ TeV pp collisions with the ATLAS detector. *Phys. Lett. B* **847**, 138315 (2023).

23. Aad, G. *et al.* Search for magnetic monopoles and stable particles with high electric charges in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. *JHEP* **11**, 112 (2023).
24. Aad, G. *et al.* Combined measurement of the Higgs boson mass from the $H \rightarrow \gamma\gamma$ and $H \rightarrow ZZ^* \rightarrow 4\ell$ decay channels with the ATLAS detector using $\sqrt{s} = 7, 8$ and 13 TeV pp collision data. *Phys. Rev. Lett.* **131**, 251802 (2023).
25. Aad, G. *et al.* Measurement of the $B_s^0 \rightarrow \mu\mu$ effective lifetime with the ATLAS detector. *JHEP* **09**, 199 (2023).
26. Aad, G. *et al.* Pursuit of paired dijet resonances in the Run 2 dataset with ATLAS. *Phys. Rev. D* **108**, 112005 (2023).
27. Aad, G. *et al.* Search for a new heavy scalar particle decaying into a Higgs boson and a new scalar singlet in final states with one or two light leptons and a pair of τ -leptons with the ATLAS detector. *JHEP* **10**, 009 (2023).
28. Aad, G. *et al.* Anomaly detection search for new resonances decaying into a Higgs boson and a generic new particle X in hadronic final states using $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. *Phys. Rev. D* **108**, 052009 (2023).
29. Aad, G. *et al.* Measurement of the cross-sections of the electroweak and total production of a $Z\gamma$ pair in association with two jets in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett. B* **846**, 138222 (2023).
30. Aad, G. *et al.* Measurements of multijet event isotropies using optimal transport with the ATLAS detector. *JHEP* **10**, 060 (2023).
31. Aad, G. *et al.* Search for leptoquarks decaying into the $b\tau$ final state in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **10**, 001 (2023).
32. Aad, G. *et al.* Search for Majorana neutrinos in same-sign WW scattering events from pp collisions at $\sqrt{s} = 13$ TeV. *Eur. Phys. J. C* **83**, 824 (2023).
33. Aad, G. *et al.* Search for dark matter produced in association with a Higgs boson decaying to tau leptons at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **09**, 189 (2023).
34. Aad, G. *et al.* Search for periodic signals in the dielectron and diphoton invariant mass spectra using 139 fb⁻¹ of pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **10**, 079 (2023).
35. Aad, G. *et al.* Search for single production of vector-like T quarks decaying into Ht or Zt in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **08**, 153 (2023).
36. Aad, G. *et al.* Search for pairs of muons with small displacements in pp collisions at $s=13$ TeV with the ATLAS detector. *Phys. Lett. B* **846**, 138172 (2023).
37. Aad, G. *et al.* Search for a new pseudoscalar decaying into a pair of muons in events with a top-quark pair at $s=13$ TeV with the ATLAS detector. *Phys. Rev. D* **108**, 092007 (2023).
38. Aad, G. *et al.* Performance of the reconstruction of large impact parameter tracks in the inner detector of ATLAS. *Eur. Phys. J. C* **83**, 1081 (2023).
39. Aad, G. *et al.* Search in diphoton and dielectron final states for displaced production of Higgs or Z bosons with the ATLAS detector in $s=13$ TeV pp collisions. *Phys. Rev. D* **108**, 012012 (2023).
40. Aad, G. *et al.* Search for high-mass $W\gamma$ and $Z\gamma$ resonances using hadronic W/Z boson decays from 139 fb⁻¹ of pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **07**, 125 (2023).
41. Aad, G. *et al.* Search for an axion-like particle with forward proton scattering in association with photon pairs at ATLAS. *JHEP* **07**, 234 (2023).
42. Aad, G. *et al.* Search for heavy Majorana or Dirac neutrinos and right-handed W gauge bosons in final states with charged leptons and jets in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J. C* **83**, 1164 (2023).
43. Aad, G. *et al.* Observation of an Excess of Dicharmonium Events in the Four-Muon Final State with the ATLAS Detector. *Phys. Rev. Lett.* **131**, 151902 (2023).

44. Aad, G. *et al.* Fiducial and differential cross-section measurements for the vector-boson-fusion production of the Higgs boson in the $H \rightarrow WW^* \rightarrow e\nu\mu\nu$ decay channel at 13 TeV with the ATLAS detector. *Phys. Rev. D* **108**, 072003 (2023).
45. Aad, G. *et al.* Evidence of off-shell Higgs boson production from ZZ leptonic decay channels and constraints on its total width with the ATLAS detector. *Phys. Lett. B* **846**, 138223 (2023).
46. Aad, G. *et al.* New techniques for jet calibration with the ATLAS detector. *Eur. Phys. J. C* **83**, 761 (2023).
47. Aad, G. *et al.* Observation of four-top-quark production in the multilepton final state with the ATLAS detector. *Eur. Phys. J. C* **83**, 496 (2023).
48. Aad, G. *et al.* Inclusive and differential cross-sections for dilepton $t\bar{t}$ production measured in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. *JHEP* **07**, 141 (2023).
49. Aad, G. *et al.* Search for heavy long-lived multi-charged particles in the full LHC Run 2 pp collision data at $s=13$ TeV using the ATLAS detector. *Phys. Lett. B* **847**, 138316 (2023).
50. Aad, G. *et al.* Comparison of inclusive and photon-tagged jet suppression in 5.02 TeV Pb+Pb collisions with ATLAS. *Phys. Lett. B* **846**, 138154 (2023).
51. Aad, G. *et al.* Search for excited τ -leptons and leptoquarks in the final state with τ -leptons and jets in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **06**, 199 (2023).
52. Aad, G. *et al.* Search for third-generation vector-like leptons in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **07**, 118 (2023).
53. Aad, G. *et al.* Search for pair production of third-generation leptoquarks decaying into a bottom quark and a τ -lepton with the ATLAS detector. *Eur. Phys. J. C* **83**, 1075 (2023).
54. Aad, G. *et al.* Search for a light charged Higgs boson in $t \rightarrow H^\pm b$ decays, with $H^\pm \rightarrow cb$, in the lepton+jets final state in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **09**, 004 (2023).
55. Aad, G. *et al.* Searches for lepton-flavour-violating decays of the Higgs boson into $e\tau$ and $\mu\tau$ in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. *JHEP* **07**, 166 (2023).
56. Aad, G. *et al.* Measurements of the suppression and correlations of dijets in Xe+Xe collisions at $s_{NN}=5.44$ TeV. *Phys. Rev. C* **108**, 024906 (2023).
57. Aad, G. *et al.* Observation of Single-Top-Quark Production in Association with a Photon Using the ATLAS Detector. *Phys. Rev. Lett.* **131**, 181901 (2023).
58. Aad, G. *et al.* Measurement of the production of a W boson in association with a charmed hadron in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev. D* **108**, 032012 (2023).
59. Aad, G. *et al.* Inclusive-photon production and its dependence on photon isolation in pp collisions at $\sqrt{s} = 13$ TeV using 139 fb $^{-1}$ of ATLAS data. *JHEP* **07**, 086 (2023).
60. Aad, G. *et al.* Search for long-lived, massive particles in events with displaced vertices and multiple jets in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **2306**, 200 (2023).
61. Aad, G. *et al.* Search for flavor-changing neutral-current couplings between the top quark and the Z boson with proton-proton collisions at $s=13$ TeV with the ATLAS detector. *Phys. Rev. D* **108**, 032019 (2023).
62. Aad, G. *et al.* Model-independent search for the presence of new physics in events including $H \rightarrow \gamma\gamma$ with $\sqrt{s} = 13$ TeV pp data recorded by the ATLAS detector at the LHC. *JHEP* **07**, 176 (2023).
63. Aad, G. *et al.* Search for exclusive Higgs and Z boson decays to $\omega\gamma$ and Higgs boson decays to $K^*\gamma$ with the ATLAS detector. *Phys. Lett. B* **847**, 138292 (2023).
64. Aad, G. *et al.* Search for a new Z' gauge boson in 4μ events with the ATLAS experiment. *JHEP* **07**, 090 (2023).
65. Aad, G. *et al.* Determination of the strong coupling constant from transverse energy–energy correlations in multijet events at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **07**, 085 (2023).
66. Aad, G. *et al.* Measurements of differential cross sections of Higgs boson production through gluon fusion in the $H \rightarrow WW^* \rightarrow e\nu\mu\nu$ final state at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J. C* **83**, 774 (2023).

67. Aad, G. *et al.* Calibration of the light-flavour jet mistagging efficiency of the b-tagging algorithms with Z+jets events using 139 fb^{-1} of ATLAS proton–proton collision data at $\sqrt{s} = 13 \text{ TeV}$. *Eur. Phys. J. C* **83**, 728 (2023).
68. Aad, G. *et al.* Measurement of Suppression of Large-Radius Jets and Its Dependence on Substructure in Pb+Pb Collisions at $\sqrt{s_{NN}}=5.02 \text{ TeV}$ with the ATLAS Detector. *Phys. Rev. Lett.* **131**, 172301 (2023).
69. Aad, G. *et al.* Search for a new scalar resonance in flavour-changing neutral-current top-quark decays $t \rightarrow qX$ ($q = u, c$), with $X \rightarrow b\bar{b}$, in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. *JHEP* **07**, 199 (2023).
70. Aad, G. *et al.* Search for leptonic charge asymmetry in $t\bar{t}W$ production in final states with three leptons at $\sqrt{s} = 13 \text{ TeV}$. *JHEP* **07**, 033 (2023).
71. Aad, G. *et al.* Search for nonresonant pair production of Higgs bosons in the $b\bar{b}b\bar{b}$ final state in pp collisions at $\sqrt{s}=13 \text{ TeV}$ with the ATLAS detector. *Phys. Rev. D* **108**, 052003 (2023).
72. Aad, G. *et al.* Measurement of the charge asymmetry in top-quark pair production in association with a photon with the ATLAS experiment. *Phys. Lett. B* **843**, 137848 (2023).
73. Aad, G. *et al.* Luminosity determination in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ using the ATLAS detector at the LHC. *Eur. Phys. J. C* **83**, 982 (2023).
74. Aad, G. *et al.* Search for dark photons from Higgs boson decays via ZH production with a photon plus missing transverse momentum signature from pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. *JHEP* **07**, 133 (2023).
75. Aad, G. *et al.* Measurements of $Z\gamma$ +jets differential cross sections in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. *JHEP* **07**, 072 (2023).
76. Aad, G. *et al.* Studies of the muon momentum calibration and performance of the ATLAS detector with pp collisions at $\sqrt{s} = 13 \text{ TeV}$. *Eur. Phys. J. C* **83**, 686 (2023).
77. Aad, G. *et al.* Measurement of the CP properties of Higgs boson interactions with τ -leptons with the ATLAS detector. *Eur. Phys. J. C* **83**, 563 (2023).
78. Aad, G. *et al.* Search for pair-produced vector-like top and bottom partners in events with large missing transverse momentum in pp collisions with the ATLAS detector. *Eur. Phys. J. C* **83**, 719 (2023).
79. Aad, G. *et al.* Measurement of exclusive pion pair production in proton–proton collisions at $\sqrt{s} = 7 \text{ TeV}$ with the ATLAS detector. *Eur. Phys. J. C* **83**, 627 (2023).
80. Aaboud, M. *et al.* Measurement of the inclusive $t\bar{t}$ production cross section in the lepton+jets channel in pp collisions at $\sqrt{s}=7 \text{ TeV}$ with the ATLAS detector using support vector machines. *Phys. Rev. D* **108**, 032014 (2023).
81. Aad, G. *et al.* Tools for estimating fake/non-prompt lepton backgrounds with the ATLAS detector at the LHC. *JINST* **18**, T11004 (2023).
82. Aad, G. *et al.* Charged-hadron production in pp , $p+\text{Pb}$, $\text{Pb}+\text{Pb}$, and $\text{Xe}+\text{Xe}$ collisions at $\sqrt{s_{NN}} = 5 \text{ TeV}$ with the ATLAS detector at the LHC. *JHEP* **07**, 074 (2023).
83. Aad, G. *et al.* Measurement of $Z\gamma\gamma$ production in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. *Eur. Phys. J. C* **83**, 539 (2023).
84. Aad, G. *et al.* ATLAS flavour-tagging algorithms for the LHC Run 2 pp collision dataset. *Eur. Phys. J. C* **83**, 681 (2023).
85. Aad, G. *et al.* Search for dark matter produced in association with a single top quark and an energetic W boson in $\sqrt{s} = 13 \text{ TeV}$ pp collisions with the ATLAS detector. *Eur. Phys. J. C* **83**, 603 (2023).
86. Aad, G. *et al.* Measurement of substructure-dependent jet suppression in Pb+Pb collisions at 5.02 TeV with the ATLAS detector. *Phys. Rev. C* **107**, 054909 (2023).
87. Aad, G. *et al.* Observation of gauge boson joint-polarisation states in $W\pm Z$ production from pp collisions at $\sqrt{s}=13 \text{ TeV}$ with the ATLAS detector. *Phys. Lett. B* **843**, 137895 (2023).

88. Aad, G. *et al.* Search for new phenomena in multi-body invariant masses in events with at least one isolated lepton and two jets using $\sqrt{s} = 13$ TeV proton–proton collision data collected by the ATLAS detector. *JHEP* **07**, 202 (2023).
89. Aad, G. *et al.* Search for supersymmetry in final states with missing transverse momentum and three or more b-jets in 139 fb⁻¹ of proton–proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J. C* **83**, 561 (2023).
90. Aad, G. *et al.* Search for doubly charged Higgs boson production in multi-lepton final states using 139 fb⁻¹ of proton–proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J. C* **83**, 605 (2023).
91. Aad, G. *et al.* Search for dark matter produced in association with a dark Higgs boson decaying into W^+W^- in the one-lepton final state at $\sqrt{s}=13$ TeV using 139 fb⁻¹ of pp collisions recorded with the ATLAS detector. *JHEP* **07**, 116 (2023).
92. Aad, G. *et al.* Constraints on spin-0 dark matter mediators and invisible Higgs decays using ATLAS 13 TeV pp collision data with two top quarks and missing transverse momentum in the final state. *Eur. Phys. J. C* **83**, 503 (2023).
93. Aad, G. *et al.* Search for boosted diphoton resonances in the 10 to 70 GeV mass range using 138 fb⁻¹ of 13 TeV pp collisions with the ATLAS detector. *JHEP* **07**, 155 (2023).
94. Aad, G. *et al.* A search for heavy Higgs bosons decaying into vector bosons in same-sign two-lepton final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **07**, 200 (2023).
95. Aad, G. *et al.* Search for $t\bar{t}H/A \rightarrow t\bar{t}t\bar{t}$ production in the multilepton final state in proton–proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **07**, 203 (2023).
96. Aad, G. *et al.* Constraints on the Higgs boson self-coupling from single- and double-Higgs production with the ATLAS detector using pp collisions at $s=13$ TeV. *Phys. Lett. B* **843**, 137745 (2023).
97. Aad, G. *et al.* Search for pair-production of vector-like quarks in pp collision events at $s=13$ TeV with at least one leptonically decaying Z boson and a third-generation quark with the ATLAS detector. *Phys. Lett. B* **843**, 138019 (2023).
98. Aad, G. *et al.* Search for Higgs boson pair production in association with a vector boson in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J. C* **83**, 519 (2023).
99. Aad, G. *et al.* Search for pair-produced scalar and vector leptoquarks decaying into third-generation quarks and first- or second-generation leptons in pp collisions with the ATLAS detector. *JHEP* **2306**, 188 (2023).
100. Aad, G. *et al.* A search for new resonances in multiple final states with a high transverse momentum Z boson in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. *JHEP* **06**, 036 (2023).
101. Aad, G. *et al.* Measurement of the polarisation of W bosons produced in top-quark decays using dilepton events at $s=13$ TeV with the ATLAS experiment. *Phys. Lett. B* **843**, 137829 (2023).
102. Aad, G. *et al.* Search for direct pair production of sleptons and charginos decaying to two leptons and neutralinos with mass splittings near the W-boson mass in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. *JHEP* **06**, 031 (2023).
103. Aad, G. *et al.* Search for resonant and non-resonant Higgs boson pair production in the $b\bar{b}\tau^+\tau^-$ decay channel using 13 TeV pp collision data from the ATLAS detector. *JHEP* **07**, 040 (2023).
104. Aad, G. *et al.* Measurement of single top-quark production in the s-channel in proton–proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **06**, 191 (2023).
105. Aad, G. *et al.* Measurements of observables sensitive to colour reconnection in $t\bar{t}$ events with the ATLAS detector at $\sqrt{s} = 13$ TeV. *Eur. Phys. J. C* **83**, 518 (2023).
106. Aad, G. *et al.* Search for displaced photons produced in exotic decays of the Higgs boson using 13 TeV pp collisions with the ATLAS detector. *Phys. Rev. D* **108**, 032016 (2023).
107. Aad, G. *et al.* Measurement of the top-quark mass using a leptonic invariant mass in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **06**, 019 (2023).
108. Aad, G. *et al.* Measurement of electroweak $Z(\nu\bar{\nu})\gamma jj$ production and limits on anomalous quartic gauge couplings in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **06**, 082 (2023).

109. Aad, G. *et al.* Evidence for the charge asymmetry in $pp \rightarrow t\bar{t}$ production at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **08**, 077 (2023).
110. Aad, G. *et al.* Search for flavour-changing neutral current interactions of the top quark and the Higgs boson in events with a pair of τ -leptons in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **2306**, 155 (2023).
111. Aad, G. *et al.* Searches for exclusive Higgs and Z boson decays into a vector quarkonium state and a photon using 139 fb⁻¹ of ATLAS $\sqrt{s} = 13$ TeV proton–proton collision data. *Eur. Phys. J. C* **83**, 781 (2023).
112. Aad, G. *et al.* Test of CP Invariance in Higgs Boson Vector-Boson-Fusion Production Using the $H \rightarrow \gamma\gamma$ Channel with the ATLAS Detector. *Phys. Rev. Lett.* **131**, 061802 (2023).
113. Aad, G. *et al.* Exclusive dielectron production in ultraperipheral Pb+Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV with ATLAS. *JHEP* **2306**, 182 (2023).
114. Aad, G. *et al.* Measurement of the total cross section and ρ -parameter from elastic scattering in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J. C* **83**, 441 (2023).
115. Aad, G. *et al.* Measurement of the total and differential Higgs boson production cross-sections at $\sqrt{s} = 13$ TeV with the ATLAS detector by combining the $H \rightarrow ZZ^* \rightarrow 4\ell$ and $H \rightarrow \gamma\gamma$ decay channels. *JHEP* **05**, 028 (2023).
116. Aad, G. *et al.* Search for resonant WZ production in the fully leptonic final state in proton–proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J. C* **83**, 633 (2023).
117. Aad, G. *et al.* Measurement of the $t\bar{t}$ production cross-section in pp collisions at $\sqrt{s} = 5.02$ TeV with the ATLAS detector. *JHEP* **06**, 138 (2023).
118. Aad, G. *et al.* Search for heavy resonances decaying into a Z or W boson and a Higgs boson in final states with leptons and b-jets in 139 fb⁻¹ of pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **06**, 016 (2023).
119. Aad, G. *et al.* Measurements of Higgs boson production by gluon-gluon fusion and vector-boson fusion using $H \rightarrow WW^* \rightarrow e\nu\mu\nu$ decays in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev. D* **108**, 032005 (2023).
120. Aad, G. *et al.* Measurement of the properties of Higgs boson production at $\sqrt{s} = 13$ TeV in the $H \rightarrow \gamma\gamma$ channel using 139 fb⁻¹ of pp collision data with the ATLAS experiment. *JHEP* **07**, 088 (2023).
121. Aad, G. *et al.* Measurement of the Higgs boson mass in the $H \rightarrow ZZ^* \rightarrow 4\ell$ decay channel using 139 fb⁻¹ of $\sqrt{s} = 13$ TeV pp collisions recorded by the ATLAS detector at the LHC. *Phys. Lett. B* **843**, 137880 (2023).
122. Aad, G. *et al.* Measurements of W^+W^- production in decay topologies inspired by searches for electroweak supersymmetry. *Eur. Phys. J. C* **83**, 718 (2023).
123. Aad, G. *et al.* Measurement of muon pairs produced via $\gamma\gamma$ scattering in nonultraperipheral Pb+Pb collisions at $s_{NN}=5.02$ TeV with the ATLAS detector. *Phys. Rev. C* **107**, 054907 (2023).
124. Aad, G. *et al.* Search for light long-lived neutral particles that decay to collimated pairs of leptons or light hadrons in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **06**, 153 (2023).
125. Aad, G. *et al.* Search for new phenomena in final states with photons, jets and missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **07**, 021 (2023).
126. Aad, G. *et al.* Strong Constraints on Jet Quenching in Centrality-Dependent p+Pb Collisions at 5.02 TeV from ATLAS. *Phys. Rev. Lett.* **131**, 072301 (2023).
127. Aad, G. *et al.* Combination of inclusive top-quark pair production cross-section measurements using ATLAS and CMS data at $\sqrt{s} = 7$ and 8 TeV. *JHEP* **07**, 213 (2023).
128. Aad, G. *et al.* Search for heavy, long-lived, charged particles with large ionisation energy loss in pp collisions at $\sqrt{s} = 13$ TeV using the ATLAS experiment and the full Run 2 dataset. *JHEP* **2306**, 158 (2023).
129. Aad, G. *et al.* Production of $\Upsilon(nS)$ mesons in Pb+Pb and pp collisions at 5.02 TeV. *Phys. Rev. C* **107**, 054912 (2023).

130. Aad, G. *et al.* Search for flavour-changing neutral-current couplings between the top quark and the photon with the ATLAS detector at $\sqrt{s}=13$ TeV. *Phys. Lett. B* **842**, 137379 (2023).
131. Aad, G. *et al.* Cross-section measurements for the production of a Z boson in association with high-transverse-momentum jets in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **06**, 080 (2023).
132. Aad, G. *et al.* Differential $t\bar{t}$ cross-section measurements using boosted top quarks in the all-hadronic final state with 139 fb^{-1} of ATLAS data. *JHEP* **04**, 080 (2023).
133. Aad, G. *et al.* Measurements of the suppression and correlations of dijets in Pb+Pb collisions at $\sqrt{s_{NN}}=5.02$ TeV. *Phys. Rev. C* **107**, 054908 (2023).
134. Aad, G. *et al.* Correlations between flow and transverse momentum in Xe+Xe and Pb+Pb collisions at the LHC with the ATLAS detector: A probe of the heavy-ion initial state and nuclear deformation. *Phys. Rev. C* **107**, 054910 (2023).
135. Aad, G. *et al.* Observation of the $\gamma\gamma \rightarrow \tau\tau$ Process in Pb+Pb Collisions and Constraints on the τ -Lepton Anomalous Magnetic Moment with the ATLAS Detector. *Phys. Rev. Lett.* **131**, 151802 (2023).
136. Aad, G. *et al.* Measurement of the nuclear modification factor of b -jets in 5.02 TeV Pb+Pb collisions with the ATLAS detector. *Eur. Phys. J. C* **83**, 438 (2023).
137. Aad, G. *et al.* Searches for new phenomena in events with two leptons, jets, and missing transverse momentum in 139 fb^{-1} of $\sqrt{s} = 13$ TeV $p\bar{p}$ collisions with the ATLAS detector. *Eur. Phys. J. C* **83**, 515 (2023).
138. Aad, G. *et al.* Search for Heavy Neutral Leptons in Decays of W Bosons Using a Dilepton Displaced Vertex in $\sqrt{s}=13$ TeV pp Collisions with the ATLAS Detector. *Phys. Rev. Lett.* **131**, 061803 (2023).
139. Aad, G. *et al.* Search for the charged-lepton-flavor-violating decay $Z \rightarrow e\mu$ in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev. D* **108**, 032015 (2023).
140. Aad, G. *et al.* Observation of electroweak production of two jets and a Z-boson pair. *Nature Phys.* **19**, 237–253 (2023).
141. Aad, G. *et al.* Study of $B_c^+ \rightarrow J/\psi D_s^+$ and $B_c^+ \rightarrow J/\psi D_s^{*+}$ decays in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **08**, 087 (2022).
142. Aad, G. *et al.* Search for neutral long-lived particles in pp collisions at $\sqrt{s} = 13$ TeV that decay into displaced hadronic jets in the ATLAS calorimeter. *JHEP* **06**, 005 (2022).
143. Aad, G. *et al.* Search for events with a pair of displaced vertices from long-lived neutral particles decaying into hadronic jets in the ATLAS muon spectrometer in pp collisions at $\sqrt{s}=13$ TeV. *Phys. Rev. D* **106**, 032005 (2022).
144. Aad, G. *et al.* Measurements of jet observables sensitive to b-quark fragmentation in $t\bar{t}$ events at the LHC with the ATLAS detector. *Phys. Rev. D* **106**, 032008 (2022).
145. Aad, G. *et al.* Measurements of differential cross-sections in top-quark pair events with a high transverse momentum top quark and limits on beyond the Standard Model contributions to top-quark pair production with the ATLAS detector at $\sqrt{s} = 13$ TeV. *JHEP* **06**, 063 (2022).
146. Aad, G. *et al.* Measurement of the polarisation of single top quarks and antiquarks produced in the t-channel at $\sqrt{s} = 13$ TeV and bounds on the tWb dipole operator from the ATLAS experiment. *JHEP* **11**, 040 (2022).
147. Aad, G. *et al.* Search for invisible Higgs-boson decays in events with vector-boson fusion signatures using 139 fb^{-1} of proton-proton data recorded by the ATLAS experiment. *JHEP* **08**, 104 (2022).
148. Aad, G. *et al.* Search for resonant pair production of Higgs bosons in the $b\bar{b}b\bar{b}$ final state using pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev. D* **105**, 092002 (2022).
149. Aad, G. *et al.* Search for type-III seesaw heavy leptons in leptonic final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J. C* **82**, 988 (2022).
150. Aad, G. *et al.* Two-particle Bose–Einstein correlations in pp collisions at $\sqrt{s} = 13$ TeV measured with the ATLAS detector at the LHC. *Eur. Phys. J. C* **82**, 608 (2022).

151. Aad, G. *et al.* Measurements of the Higgs boson inclusive and differential fiducial cross-sections in the diphoton decay channel with pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **08**, 027 (2022).
152. Aad, G. *et al.* Observation of WWW Production in pp Collisions at $\sqrt{s} = 13$ TeV with the ATLAS Detector. *Phys. Rev. Lett.* **129**, 061803 (2022).
153. Aad, G. *et al.* Direct constraint on the Higgs-charm coupling from a search for Higgs boson decays into charm quarks with the ATLAS detector. *Eur. Phys. J. C* **82**, 717 (2022).
154. Aad, G. *et al.* Measurements of Higgs boson production cross-sections in the $H \rightarrow \tau^+\tau^-$ decay channel in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **08**, 175 (2022).
155. Aad, G. *et al.* Search for single production of a vectorlike T quark decaying into a Higgs boson and top quark with fully hadronic final states using the ATLAS detector. *Phys. Rev. D* **105**, 092012 (2022).
156. Aad, G. *et al.* Search for long-lived charginos based on a disappearing-track signature using 136 fb $^{-1}$ of pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J. C* **82**, 606 (2022).
157. Aad, G. *et al.* Search for Higgs boson pair production in the two bottom quarks plus two photons final state in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev. D* **106**, 052001 (2022).
158. Aad, G. *et al.* Determination of the parton distribution functions of the proton using diverse ATLAS data from pp collisions at $\sqrt{s} = 7, 8$ and 13 TeV. *Eur. Phys. J. C* **82**, 438 (2022).
159. Aad, G. *et al.* Modelling and computational improvements to the simulation of single vector-boson plus jet processes for the ATLAS experiment. *JHEP* **08**, 089 (2022).
160. Aad, G. *et al.* A search for an unexpected asymmetry in the production of $e^+\mu^-$ and $e^-\mu^+$ pairs in proton-proton collisions recorded by the ATLAS detector at $\sqrt{s} = 13$ TeV. *Phys. Lett. B* **830**, 137106 (2022).
161. Aad, G. *et al.* Search for flavour-changing neutral-current interactions of a top quark and a gluon in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J. C* **82**, 334 (2022).
162. Aad, G. *et al.* Search for associated production of a Z boson with an invisibly decaying Higgs boson or dark matter candidates at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett. B* **829**, 137066 (2022).
163. Aad, G. *et al.* Constraints on Higgs boson production with large transverse momentum using $H \rightarrow b\bar{b}$ decays in the ATLAS detector. *Phys. Rev. D* **105**, 092003 (2022).
164. Aad, G. *et al.* Measurements of azimuthal anisotropies of jet production in Pb+Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV with the ATLAS detector. *Phys. Rev. C* **105**, 064903 (2022).
165. Aad, G. *et al.* Measurement of Higgs boson decay into b -quarks in associated production with a top-quark pair in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **06**, 097 (2022).
166. Aad, G. *et al.* Measurement of the energy asymmetry in $t\bar{t}j$ production at 13 TeV with the ATLAS experiment and interpretation in the SMEFT framework. *Eur. Phys. J. C* **82**, 374 (2022).
167. Aad, G. *et al.* Constraints on Higgs boson properties using $WW^*(\rightarrow e\nu\mu\nu)jj$ production in 36.1 fb $^{-1}$ of $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. *Eur. Phys. J. C* **82**, 622 (2022).
168. Aad, G. *et al.* Measurement of the nuclear modification factor for muons from charm and bottom hadrons in Pb+Pb collisions at 5.02 TeV with the ATLAS detector. *Phys. Lett. B* **829**, 137077 (2022).
169. Aad, G. *et al.* Search for lepton-flavor-violation in Z -boson decays with τ -leptons with the ATLAS detector. *Phys. Rev. Lett.* **127**, 271801 (2022).
170. Aad, G. *et al.* Search for single top-quark production via flavour-changing neutral currents at 8 TeV with the ATLAS detector. *Eur. Phys. J. C* **76**. [Erratum: *Eur.Phys.J.C* 82, 70 (2022)], 55 (2016).
171. Aad, G. *et al.* Search for Higgs bosons decaying into new spin-0 or spin-1 particles in four-lepton final states with the ATLAS detector with 139 fb $^{-1}$ of pp collision data at $\sqrt{s} = 13$ TeV. *JHEP* **03**, 041 (2022).
172. Aad, G. *et al.* Search for Higgs boson decays into a pair of pseudoscalar particles in the $b\bar{b}\mu\mu$ final state with the ATLAS detector in pp collisions at $\sqrt{s} = 13$ TeV. *Phys. Rev. D* **105**, 012006 (2022).

173. Aad, G. *et al.* Measurement of the c-jet mistagging efficiency in $t\bar{t}$ events using pp collision data at $\sqrt{s} = 13$ TeV collected with the ATLAS detector. *Eur. Phys. J. C* **82**, 95 (2022).
174. Aad, G. *et al.* Search for exotic decays of the Higgs boson into $b\bar{b}$ and missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **01**, 063 (2022).
175. Aad, G. *et al.* Operation and performance of the ATLAS semiconductor tracker in LHC Run 2. *JINST* **17**, P01013 (2022).
176. Aad, G. *et al.* AtlFast3: the next generation of fast simulation in ATLAS. *Comput. Softw. Big Sci.* **6**, 7 (2022).
177. Aad, G. *et al.* Observation of electroweak production of two jets in association with an isolated photon and missing transverse momentum, and search for a Higgs boson decaying into invisible particles at 13 TeV with the ATLAS detector. *Eur. Phys. J. C* **82**, 105 (2022).
178. Aad, G. *et al.* Search for dark matter produced in association with a Standard Model Higgs boson decaying into b-quarks using the full Run 2 dataset from the ATLAS detector. *JHEP* **11**, 209 (2021).
179. Aad, G. *et al.* Measurement of b-quark fragmentation properties in jets using the decay $B^\pm \rightarrow J/\psi K^\pm$ in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **12**, 131 (2021).
180. Aad, G. *et al.* Search for heavy particles in the b-tagged dijet mass distribution with additional b-tagged jets in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS experiment. *Phys. Rev. D* **105**, 012001 (2022).
181. Aad, G. *et al.* Measurement of the energy response of the ATLAS calorimeter to charged pions from $W^\pm \rightarrow \tau^\pm (\rightarrow \pi^\pm \nu_\tau) \nu_\tau$ events in Run 2 data. *Eur. Phys. J. C* **82**, 223 (2022).
182. Aad, G. *et al.* Search for charginos and neutralinos in final states with two boosted hadronically decaying bosons and missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev. D* **104**, 112010 (2021).
183. Aad, G. *et al.* Search for new phenomena in pp collisions in final states with tau leptons, b-jets, and missing transverse momentum with the ATLAS detector. *Phys. Rev. D* **104**, 112005 (2021).
184. Aad, G. *et al.* Measurement of the production cross section of pairs of isolated photons in pp collisions at 13 TeV with the ATLAS detector. *JHEP* **11**, 169 (2021).
185. Aad, G. *et al.* Search for exotic decays of the Higgs boson into long-lived particles in pp collisions at $\sqrt{s} = 13$ TeV using displaced vertices in the ATLAS inner detector. *JHEP* **11**, 229 (2021).
186. Aad, G. *et al.* The ATLAS inner detector trigger performance in pp collisions at 13 TeV during LHC Run 2. *Eur. Phys. J. C* **82**, 206 (2022).
187. Aad, G. *et al.* Search for new phenomena in three- or four-lepton events in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett. B* **824**, 136832 (2022).
188. Aad, G. *et al.* Measurement of the $t\bar{t}t\bar{t}$ production cross section in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **11**, 118 (2021).
189. Aad, G. *et al.* Search for R-parity-violating supersymmetry in a final state containing leptons and many jets with the ATLAS experiment using $\sqrt{s} = 13$ TeV proton-proton collision data. *Eur. Phys. J. C* **81**, 1023 (2021).
190. Aad, G. *et al.* Measurements of sensor radiation damage in the ATLAS inner detector using leakage currents. *JINST* **16**, P08025 (2021).
191. Aad, G. *et al.* Configuration and performance of the ATLAS b-jet triggers in Run 2. *Eur. Phys. J. C* **81**, 1087 (2021).
192. Aad, G. *et al.* Search for chargino-neutralino pair production in final states with three leptons and missing transverse momentum in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. *Eur. Phys. J. C* **81**, 1118 (2021).
193. Aad, G. *et al.* Search for New Phenomena in Final States with Two Leptons and One or No b-Tagged Jets at $\sqrt{s} = 13$ TeV Using the ATLAS Detector. *Phys. Rev. Lett.* **127**, 141801 (2021).

194. Aad, G. *et al.* Performance of the ATLAS Level-1 topological trigger in Run 2. *Eur. Phys. J. C* **82**, 7 (2022).
195. Aad, G. *et al.* Search for dark matter in events with missing transverse momentum and a Higgs boson decaying into two photons in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **10**, 013 (2021).
196. Aad, G. *et al.* A search for the decays of stopped long-lived particles at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **07**, 173 (2021).
197. Aad, G. *et al.* Measurements of the inclusive and differential production cross sections of a top-quark–antiquark pair in association with a Z boson at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J. C* **81**, 737 (2021).
198. Aad, G. *et al.* Search for supersymmetry in events with four or more charged leptons in 139 fb^{-1} of $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. *JHEP* **07**, 167 (2021).
199. Aad, G. *et al.* Evidence for Higgs boson decays to a low-mass dilepton system and a photon in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett. B* **819**, 136412 (2021).
200. Aad, G. *et al.* Measurements of $W^+W^- + \geq 1$ jet production cross-sections in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **06**, 003 (2021).
201. Aad, G. *et al.* Search for bottom-squark pair production in pp collision events at $\sqrt{s} = 13$ TeV with hadronically decaying τ -leptons, b -jets and missing transverse momentum using the ATLAS detector. *Phys. Rev. D* **104**, 032014 (2021).
202. Aad, G. *et al.* Measurements of differential cross-sections in four-lepton events in 13 TeV proton-proton collisions with the ATLAS detector. *JHEP* **07**, 005 (2021).
203. Aad, G. *et al.* Search for resonances decaying into photon pairs in 139 fb^{-1} of pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett. B* **822**, 136651 (2021).
204. Aad, G. *et al.* Performance of the ATLAS RPC detector and Level-1 muon barrel trigger at $\sqrt{s} = 13$ TeV. *JINST* **16**, P07029 (2021).
205. Aad, G. *et al.* Search for new phenomena in events with an energetic jet and missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev. D* **103**, 112006 (2021).
206. Aad, G. *et al.* Search for charged Higgs bosons decaying into a top quark and a bottom quark at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **06**, 145 (2021).
207. Aad, G. *et al.* Emulating the impact of additional proton–proton interactions in the ATLAS simulation by presampling sets of inelastic Monte Carlo events. *Comput. Softw. Big Sci.* **6**, 3 (2022).
208. Aad, G. *et al.* Search for new phenomena in events with two opposite-charge leptons, jets and missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **04**, 165 (2021).
209. Aad, G. *et al.* Search for new phenomena in final states with b -jets and missing transverse momentum in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. *JHEP* **05**, 093 (2021).
210. Aad, G. *et al.* Search for doubly and singly charged Higgs bosons decaying into vector bosons in multi-lepton final states with the ATLAS detector using proton-proton collisions at $\sqrt{s} = 13$ TeV. *JHEP* **06**, 146 (2021).
211. Aad, G. *et al.* Search for pair production of third-generation scalar leptoquarks decaying into a top quark and a τ -lepton in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **06**, 179 (2021).
212. Aad, G. *et al.* Two-particle azimuthal correlations in photonuclear ultraperipheral Pb+Pb collisions at 5.02 TeV with ATLAS. *Phys. Rev. C* **104**, 014903 (2021).
213. Aad, G. *et al.* Determination of the parton distribution functions of the proton from ATLAS measurements of differential $W^\pm$ and Z boson production in association with jets. *JHEP* **07**, 223 (2021).
214. Aad, G. *et al.* The ATLAS Fast TracKer system. *JINST* **16**, P07006 (2021).
215. Aad, G. *et al.* Search for squarks and gluinos in final states with one isolated lepton, jets, and missing transverse momentum at $\sqrt{s} = 13$ with the ATLAS detector. *Eur. Phys. J. C* **81**. [Erratum: *Eur. Phys. J. C* **81**, 956 (2021)], 600 (2021).

216. Aad, G. *et al.* Search for new phenomena with top quark pairs in final states with one lepton, jets, and missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **04**, 174 (2021).
217. Aad, G. *et al.* Muon reconstruction and identification efficiency in ATLAS using the full Run 2 pp collision data set at $\sqrt{s} = 13$ TeV. *Eur. Phys. J. C* **81**, 578 (2021).
218. Aad, G. *et al.* Exclusive dimuon production in ultraperipheral Pb+Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV with ATLAS. *Phys. Rev. C* **104**, 024906 (2021).
219. Aad, G. *et al.* Search for trilepton resonances from chargino and neutralino pair production in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. *Phys. Rev. D* **103**, 112003 (2021).
220. Aad, G. *et al.* Search for dark matter produced in association with a single top quark in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. *Eur. Phys. J. C* **81**, 860 (2021).
221. Aad, G. *et al.* Measurements of Higgs bosons decaying to bottom quarks from vector boson fusion production with the ATLAS experiment at $\sqrt{s} = 13$ TeV. *Eur. Phys. J. C* **81**, 537 (2021).
222. Aad, G. *et al.* Search for Displaced Leptons in $\sqrt{s} = 13$ TeV pp Collisions with the ATLAS Detector. *Phys. Rev. Lett.* **127**, 051802 (2021).
223. Aad, G. *et al.* Search for a heavy Higgs boson decaying into a Z boson and another heavy Higgs boson in the $\ell\ell b\bar{b}$ and $\ell\ell W W$ final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J. C* **81**, 396 (2021).
224. Aad, G. *et al.* Search for dark matter in association with an energetic photon in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **02**, 226 (2021).
225. Aad, G. *et al.* Search for squarks and gluinos in final states with jets and missing transverse momentum using 139 fb^{-1} of $\sqrt{s} = 13$ TeV pp collision data with the ATLAS detector. *JHEP* **02**, 143 (2021).
226. Aad, G. *et al.* Search for Higgs boson production in association with a high-energy photon via vector-boson fusion with decay into bottom quark pairs at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **03**, 268 (2021).
227. Aad, G. *et al.* Search for Dark Matter Produced in Association with a Dark Higgs Boson Decaying into $W^{\pm}W^{\mp}$ or ZZ in Fully Hadronic Final States from $\sqrt{s} = 13$ TeV pp Collisions Recorded with the ATLAS Detector. *Phys. Rev. Lett.* **126**, 121802 (2021).
228. Aad, G. *et al.* Observation of photon-induced $W^{+}W^{-}$ production in pp collisions at $\sqrt{s} = 13$ TeV using the ATLAS detector. *Phys. Lett. B* **816**, 136190 (2021).
229. Aad, G. *et al.* Search for charged-lepton-flavour violation in Z-boson decays with the ATLAS detector. *Nature Phys.* **17**, 819–825 (2021).
230. Aad, G. *et al.* Search for pair production of scalar leptoquarks decaying into first- or second-generation leptons and top quarks in proton–proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J. C* **81**, 313 (2021).
231. Aad, G. *et al.* Search for phenomena beyond the Standard Model in events with large b -jet multiplicity using the ATLAS detector at the LHC. *Eur. Phys. J. C* **81**. [Erratum: *Eur.Phys.J.C* 81, 249 (2021)], 11 (2021).
232. Aad, G. *et al.* Search for heavy resonances decaying into a pair of Z bosons in the $\ell^{+}\ell^{-}\ell'^{+}\ell'^{-}$ and $\ell^{+}\ell^{-}\nu\bar{\nu}$ final states using 139 fb^{-1} of proton–proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J. C* **81**, 332 (2021).
233. Aad, G. *et al.* Optimisation of large-radius jet reconstruction for the ATLAS detector in 13 TeV proton–proton collisions. *Eur. Phys. J. C* **81**, 334 (2021).
234. Aad, G. *et al.* Medium-Induced Modification of Z-Tagged Charged Particle Yields in $Pb + Pb$ Collisions at 5.02 TeV with the ATLAS Detector. *Phys. Rev. Lett.* **126**, 072301 (2021).
235. Aad, G. *et al.* Search for type-III seesaw heavy leptons in dilepton final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J. C* **81**, 218 (2021).

236. Aad, G. *et al.* Measurement of light-by-light scattering and search for axion-like particles with 2.2 nb⁻¹ of Pb+Pb data with the ATLAS detector. *JHEP* **11**, 050 (2021).
237. Aad, G. *et al.* Measurement of the associated production of a Higgs boson decaying into b -quarks with a vector boson at high transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett. B* **816**, 136204 (2021).
238. Aad, G. *et al.* Test of the universality of τ and μ lepton couplings in W -boson decays with the ATLAS detector. *Nature Phys.* **17**, 813–818 (2021).
239. Aad, G. *et al.* Measurement of hadronic event shapes in high- p_T multijet final states at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **01**. [Erratum: *JHEP* 12, 053 (2021)], 188 (2021).
240. Aad, G. *et al.* A search for the dimuon decay of the Standard Model Higgs boson with the ATLAS detector. *Phys. Lett. B* **812**, 135980 (2021).
241. Aad, G. *et al.* Jet energy scale and resolution measured in proton–proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J. C* **81**, 689 (2021).
242. Aad, G. *et al.* Measurements of WH and ZH production in the $H \rightarrow b\bar{b}$ decay channel in pp collisions at 13 TeV with the ATLAS detector. *Eur. Phys. J. C* **81**, 178 (2021).
243. Aad, G. *et al.* Measurement of single top-quark production in association with a W boson in the single-lepton channel at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Eur. Phys. J. C* **81**, 720 (2021).
244. Aad, G. *et al.* Differential cross-section measurements for the electroweak production of dijets in association with a Z boson in proton–proton collisions at ATLAS. *Eur. Phys. J. C* **81**, 163 (2021).
245. Aad, G. *et al.* Search for new non-resonant phenomena in high-mass dilepton final states with the ATLAS detector. *JHEP* **11**. [Erratum: *JHEP* 04, 142 (2021)], 005 (2020).
246. Aad, G. *et al.* Measurements of top-quark pair single- and double-differential cross-sections in the all-hadronic channel in pp collisions at $\sqrt{s} = 13$ TeV using the ATLAS detector. *JHEP* **01**, 033 (2021).
247. Aad, G. *et al.* Higgs boson production cross-section measurements and their EFT interpretation in the 4ℓ decay channel at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J. C* **80**. [Erratum: *Eur.Phys.J.C* 81, 29 (2021), Erratum: *Eur.Phys.J.C* 81, 398 (2021)], 957 (2020).
248. Aad, G. *et al.* Measurement of the CP -violating phase ϕ_s in $B_s^0 \rightarrow J/\psi\phi$ decays in ATLAS at 13 TeV. *Eur. Phys. J. C* **81**, 342 (2021).
249. Aad, G. *et al.* Search for the $HH \rightarrow b\bar{b}b\bar{b}$ process via vector-boson fusion production using proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **07**. [Erratum: *JHEP* 01, 145 (2021), Erratum: *JHEP* 05, 207 (2021)], 108 (2020).
250. Aad, G. *et al.* Longitudinal Flow Decorrelations in Xe+Xe Collisions at $\sqrt{s_{NN}} = 5.44$ TeV with the ATLAS Detector. *Phys. Rev. Lett.* **126**, 122301 (2021).
251. Aaboud, M. *et al.* Measurement of the relative $B_c^\pm/B^\pm$ production cross section with the ATLAS detector at $\sqrt{s} = 8$ TeV. *Phys. Rev. D* **104**, 012010 (2021).
252. Aad, G. *et al.* Measurement of the jet mass in high transverse momentum $Z(\rightarrow b\bar{b})\gamma$ production at $\sqrt{s} = 13$ TeV using the ATLAS detector. *Phys. Lett. B* **812**, 135991 (2021).
253. Aad, G. *et al.* Observation and Measurement of Forward Proton Scattering in Association with Lepton Pairs Produced via the Photon Fusion Mechanism at ATLAS. *Phys. Rev. Lett.* **125**, 261801 (2020).
254. Aad, G. *et al.* Search for new phenomena in final states with large jet multiplicities and missing transverse momentum using $\sqrt{s} = 13$ TeV proton-proton collisions recorded by ATLAS in Run 2 of the LHC. *JHEP* **10**, 062 (2020).
255. Aad, G. *et al.* Search for heavy resonances decaying into a photon and a hadronically decaying Higgs boson in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev. Lett.* **125**, 251802 (2020).
256. Aad, G. *et al.* Search for direct production of electroweakinos in final states with one lepton, missing transverse momentum and a Higgs boson decaying into two b -jets in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J. C* **80**, 691 (2020).

257. Aad, G. *et al.* Evidence for $t\bar{t}\bar{t}$ production in the multilepton final state in proton–proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J. C* **80**, 1085 (2020).
258. Aad, G. *et al.* Reconstruction and identification of boosted di- τ systems in a search for Higgs boson pairs using 13 TeV proton-proton collision data in ATLAS. *JHEP* **11**, 163 (2020).
259. Aad, G. *et al.* Operation of the ATLAS trigger system in Run 2. *JINST* **15**, P10004 (2020).
260. Aad, G. *et al.* Search for resonances decaying into a weak vector boson and a Higgs boson in the fully hadronic final state produced in proton–proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev. D* **102**, 112008 (2020).
261. Aad, G. *et al.* Alignment of the ATLAS Inner Detector in Run-2. *Eur. Phys. J. C* **80**, 1194 (2020).
262. Aad, G. *et al.* Measurements of inclusive and differential cross-sections of combined $t\bar{t}\gamma$ and $tW\gamma$ production in the $e\mu$ channel at 13 TeV with the ATLAS detector. *JHEP* **09**, 049 (2020).
263. Aad, G. *et al.* Search for new non-resonant phenomena in high-mass dilepton final states with the ATLAS detector. *JHEP* **11**, 005 (2020).
264. Aad, G. *et al.* Measurement of the $t\bar{t}$ production cross-section in the lepton+jets channel at $\sqrt{s} = 13$ TeV with the ATLAS experiment. *Phys. Lett. B* **810**, 135797 (2020).
265. Aad, G. *et al.* Search for top squarks in events with a Higgs or Z boson using 139 fb $^{-1}$ of pp collision data at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J. C* **80**, 1080 (2020).
266. Aad, G. *et al.* Search for pairs of scalar leptoquarks decaying into quarks and electrons or muons in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. *JHEP* **10**, 112 (2020).
267. Aad, G. *et al.* Search for Higgs boson decays into two new low-mass spin-0 particles in the $4b$ channel with the ATLAS detector using pp collisions at $\sqrt{s} = 13$ TeV. *Phys. Rev. D* **102**, 112006 (2020).
268. Aad, G. *et al.* Performance of the missing transverse momentum triggers for the ATLAS detector during Run-2 data taking. *JHEP* **08**, 080 (2020).
269. Aad, G. *et al.* A search for the $Z\gamma$ decay mode of the Higgs boson in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett. B* **809**, 135754 (2020).
270. Aad, G. *et al.* Search for $t\bar{t}$ resonances in fully hadronic final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **10**, 061 (2020).
271. Aad, G. *et al.* Performance of the upgraded PreProcessor of the ATLAS Level-1 Calorimeter Trigger. *JINST* **15**, P11016 (2020).
272. Aad, G. *et al.* Combination of the W boson polarization measurements in top quark decays using ATLAS and CMS data at $\sqrt{s} = 8$ TeV. *JHEP* **08**, 051 (2020).
273. Aad, G. *et al.* Dijet resonance search with weak supervision using $\sqrt{s} = 13$ TeV pp collisions in the ATLAS detector. *Phys. Rev. Lett.* **125**, 131801 (2020).
274. Aad, G. *et al.* Search for heavy diboson resonances in semileptonic final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J. C* **80**, 1165 (2020).
275. Aad, G. *et al.* Search for a scalar partner of the top quark in the all-hadronic $t\bar{t}$ plus missing transverse momentum final state at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J. C* **80**, 737 (2020).
276. Aad, G. *et al.* Performance of the ATLAS muon triggers in Run 2. *JINST* **15**, P09015 (2020).
277. Aad, G. *et al.* Search for direct production of electroweakinos in final states with missing transverse momentum and a Higgs boson decaying into photons in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **10**, 005 (2020).
278. Aad, G. *et al.* CP Properties of Higgs Boson Interactions with Top Quarks in the $t\bar{t}H$ and tH Processes Using $H \rightarrow \gamma\gamma$ with the ATLAS Detector. *Phys. Rev. Lett.* **125**, 061802 (2020).
279. Aad, G. *et al.* Measurements of the Higgs boson inclusive and differential fiducial cross sections in the 4ℓ decay channel at $\sqrt{s} = 13$ TeV. *Eur. Phys. J. C* **80**, 942 (2020).
280. Aad, G. *et al.* Measurement of the Lund Jet Plane Using Charged Particles in 13 TeV Proton-Proton Collisions with the ATLAS Detector. *Phys. Rev. Lett.* **124**, 222002 (2020).

281. Aad, G. *et al.* Higgs boson production cross-section measurements and their EFT interpretation in the 4ℓ decay channel at $\sqrt{s}=13$ TeV with the ATLAS detector. *Eur. Phys. J. C* **80**. [Erratum: *Eur.Phys.J.C* 81, 29 (2021)], 957 (2020).
282. Aad, G. *et al.* Search for Higgs Boson Decays into a Z Boson and a Light Hadronically Decaying Resonance Using 13 TeV pp Collision Data from the ATLAS Detector. *Phys. Rev. Lett.* **125**, 221802 (2020).
283. Aad, G. *et al.* Search for long-lived, massive particles in events with a displaced vertex and a muon with large impact parameter in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev. D* **102**, 032006 (2020).
284. Aad, G. *et al.* Measurements of the production cross-section for a Z boson in association with b -jets in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **07**, 044 (2020).
285. Aad, G. *et al.* Measurement of azimuthal anisotropy of muons from charm and bottom hadrons in Pb+Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV with the ATLAS detector. *Phys. Lett. B* **807**, 135595 (2020).
286. Aad, G. *et al.* Search for heavy Higgs bosons decaying into two tau leptons with the ATLAS detector using pp collisions at $\sqrt{s} = 13$ TeV. *Phys. Rev. Lett.* **125**, 051801 (2020).
287. Aad, G. *et al.* Search for dijet resonances in events with an isolated charged lepton using $\sqrt{s} = 13$ TeV proton-proton collision data collected by the ATLAS detector. *JHEP* **06**, 151 (2020).
288. Aad, G. *et al.* Observation of the associated production of a top quark and a Z boson in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **07**, 124 (2020).
289. Aad, G. *et al.* Test of CP invariance in vector-boson fusion production of the Higgs boson in the $H \rightarrow \tau\tau$ channel in proton–proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett. B* **805**, 135426 (2020).
290. Aad, G. *et al.* Search for the $HH \rightarrow b\bar{b}b\bar{b}$ process via vector-boson fusion production using proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **07**. [Erratum: *JHEP* 01, 145 (2021)], 108 (2020).
291. Aad, G. *et al.* Measurement of soft-drop jet observables in pp collisions with the ATLAS detector at $\sqrt{s}=13$ TeV. *Phys. Rev. D* **101**, 052007 (2020).
292. Aad, G. *et al.* Measurement of isolated-photon plus two-jet production in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **03**, 179 (2020).
293. Aad, G. *et al.* Search for chargino-neutralino production with mass splittings near the electroweak scale in three-lepton final states in $\sqrt{s}=13$ TeV pp collisions with the ATLAS detector. *Phys. Rev. D* **101**, 072001 (2020).
294. Aad, G. *et al.* Measurement of the transverse momentum distribution of Drell–Yan lepton pairs in proton–proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J. C* **80**, 616 (2020).
295. Aad, G. *et al.* Search for long-lived neutral particles produced in pp collisions at $\sqrt{s} = 13$ TeV decaying into displaced hadronic jets in the ATLAS inner detector and muon spectrometer. *Phys. Rev. D* **101**, 052013 (2020).
296. Aad, G. *et al.* Searches for electroweak production of supersymmetric particles with compressed mass spectra in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. *Phys. Rev. D* **101**, 052005 (2020).
297. Aad, G. *et al.* Search for direct stau production in events with two hadronic τ -leptons in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. *Phys. Rev. D* **101**, 032009 (2020).
298. Aad, G. *et al.* Measurement of the $Z(\rightarrow \ell^+\ell^-)\gamma$ production cross-section in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **03**, 054 (2020).
299. Aad, G. *et al.* Measurement of the azimuthal anisotropy of charged-particle production in $Xe + Xe$ collisions at $\sqrt{s_{NN}} = 5.44$ TeV with the ATLAS detector. *Phys. Rev. C* **101**, 024906 (2020).
300. Aad, G. *et al.* ATLAS data quality operations and performance for 2015–2018 data-taking. *JINST* **15**, P04003 (2020).

301. Aad, G. *et al.* Measurement of differential cross sections for single diffractive dissociation in $\sqrt{s} = 8$ TeV pp collisions using the ATLAS ALFA spectrometer. *JHEP* **02**. [Erratum: *JHEP* 10, 182 (2020)], 042 (2020).
302. Aad, G. *et al.* Transverse momentum and process dependent azimuthal anisotropies in $\sqrt{s_{NN}} = 8.16$ TeV p +Pb collisions with the ATLAS detector. *Eur. Phys. J. C* **80**, 73 (2020).
303. Aad, G. *et al.* Z boson production in Pb+Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV measured by the ATLAS experiment. *Phys. Lett. B* **802**, 135262 (2020).
304. Aad, G. *et al.* Evidence for electroweak production of two jets in association with a $Z\gamma$ pair in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett. B* **803**, 135341 (2020).
305. Aad, G. *et al.* Measurement of the $t\bar{t}$ production cross-section and lepton differential distributions in $e\mu$ dilepton events from pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J. C* **80**, 528 (2020).
306. Aad, G. *et al.* Search for new resonances in mass distributions of jet pairs using 139 fb^{-1} of pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **03**, 145 (2020).
307. Aaboud, M. *et al.* Determination of jet calibration and energy resolution in proton-proton collisions at $\sqrt{s} = 8$ TeV using the ATLAS detector. *Eur. Phys. J. C* **80**, 1104 (2020).
308. Aaboud, M. *et al.* Measurement of J/ψ production in association with a $W^{\pm}$ boson with pp data at 8 TeV. *JHEP* **01**, 095 (2020).
309. Aad, G. *et al.* Search for the Higgs boson decays $H \rightarrow ee$ and $H \rightarrow e\mu$ in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett. B* **801**, 135148 (2020).
310. Aad, G. *et al.* Search for squarks and gluinos in final states with same-sign leptons and jets using 139 fb^{-1} of data collected with the ATLAS detector. *JHEP* **06**, 046 (2020).
311. Aad, G. *et al.* Combined measurements of Higgs boson production and decay using up to 80 fb^{-1} of proton-proton collision data at $\sqrt{s} = 13$ TeV collected with the ATLAS experiment. *Phys. Rev. D* **101**, 012002 (2020).
312. Aad, G. *et al.* Measurement of azimuthal anisotropy of muons from charm and bottom hadrons in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev. Lett.* **124**, 082301 (2020).
313. Aad, G. *et al.* Search for light long-lived neutral particles produced in pp collisions at $\sqrt{s} = 13$ TeV and decaying into collimated leptons or light hadrons with the ATLAS detector. *Eur. Phys. J. C* **80**, 450 (2020).
314. Aad, G. *et al.* Performance of electron and photon triggers in ATLAS during LHC Run 2. *Eur. Phys. J. C* **80**, 47 (2020).
315. Aad, G. *et al.* Search for flavour-changing neutral currents in processes with one top quark and a photon using 81 fb^{-1} of pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS experiment. *Phys. Lett. B* **800**, 135082 (2020).
316. Aad, G. *et al.* Search for electroweak production of charginos and sleptons decaying into final states with two leptons and missing transverse momentum in $\sqrt{s} = 13$ TeV pp collisions using the ATLAS detector. *Eur. Phys. J. C* **80**, 123 (2020).
317. Aad, G. *et al.* Search for non-resonant Higgs boson pair production in the $bbl\nu\nu$ final state with the ATLAS detector in pp collisions at $\sqrt{s} = 13$ TeV. *Phys. Lett. B* **801**, 135145 (2020).
318. Aad, G. *et al.* Measurement of angular and momentum distributions of charged particles within and around jets in Pb+Pb and pp collisions at $\sqrt{s_{NN}} = 5.02$ TeV with the ATLAS detector. *Phys. Rev. C* **100**. [Erratum: *Phys.Rev.C* 101, 059903 (2020)], 064901 (2019).
319. Aad, G. *et al.* Search for displaced vertices of oppositely charged leptons from decays of long-lived particles in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett. B* **801**, 135114 (2020).
320. Aad, G. *et al.* Searches for lepton-flavour-violating decays of the Higgs boson in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. *Phys. Lett. B* **800**, 135069 (2020).

321. Aad, G. *et al.* Search for heavy neutral Higgs bosons produced in association with b -quarks and decaying into b -quarks at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev. D* **102**, 032004 (2020).
322. Aad, G. *et al.* Search for diboson resonances in hadronic final states in 139 fb^{-1} of pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **09**. [Erratum: JHEP 06, 042 (2020)], 091 (2019).
323. Aaboud, M. *et al.* Measurement of long-range two-particle azimuthal correlations in Z -boson tagged pp collisions at $\sqrt{s}=8$ and 13 TeV. *Eur. Phys. J. C* **80**, 64 (2020).
324. Aad, G. *et al.* Combination of searches for Higgs boson pairs in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. *Phys. Lett. B* **800**, 135103 (2020).
325. Aad, G. *et al.* Search for Magnetic Monopoles and Stable High-Electric-Charge Objects in 13 TeV Proton-Proton Collisions with the ATLAS Detector. *Phys. Rev. Lett.* **124**, 031802 (2020).
326. Aaboud, M. *et al.* Fluctuations of anisotropic flow in Pb+Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV with the ATLAS detector. *JHEP* **01**, 051 (2020).
327. Aaboud, M. *et al.* Measurements of top-quark pair spin correlations in the $e\mu$ channel at $\sqrt{s} = 13$ TeV using pp collisions in the ATLAS detector. *Eur. Phys. J. C* **80**, 754 (2020).
328. Aaboud, M. *et al.* Measurement of differential cross sections and W^+/W^- cross-section ratios for W boson production in association with jets at $\sqrt{s} = 8$ TeV with the ATLAS detector. *JHEP* **05**. [Erratum: JHEP 10, 048 (2020)], 077 (2018).
329. Aaboud, M. *et al.* Measurement of top quark pair differential cross-sections in the dilepton channel in pp collisions at $\sqrt{s} = 7$ and 8 TeV with ATLAS. *Phys. Rev. D* **94**. [Addendum: Phys.Rev.D 101, 119901 (2020)], 092003 (2016).
330. Aad, G. *et al.* Measurements of top-quark pair differential and double-differential cross-sections in the ℓ +jets channel with pp collisions at $\sqrt{s} = 13$ TeV using the ATLAS detector. *Eur. Phys. J.* **C79**, 1028 (2019).
331. Aad, G. *et al.* Search for bottom-squark pair production with the ATLAS detector in final states containing Higgs bosons, b -jets and missing transverse momentum. *JHEP* **12**, 060 (2019).
332. Aad, G. *et al.* Measurement of the inclusive isolated-photon cross section in pp collisions at $\sqrt{s} = 13$ TeV using 36 fb^{-1} of ATLAS data. *JHEP* **10**, 203 (2019).
333. Aad, G. *et al.* Electron and photon performance measurements with the ATLAS detector using the 2015-2017 LHC proton-proton collision data. *JINST* **14**, P12006 (2019).
334. Aad, G. *et al.* Measurement of K_S^0 and Λ^0 production in $t\bar{t}$ dileptonic events in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Eur. Phys. J.* **C79**, 1017 (2019).
335. Aad, G. *et al.* Measurement of $W^\pm$ boson production in Pb+Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV with the ATLAS detector. *Eur. Phys. J.* **C79**, 935 (2019).
336. Aad, G. *et al.* Measurement of the inclusive cross-section for the production of jets in association with a Z boson in proton-proton collisions at 8 TeV using the ATLAS detector. *Eur. Phys. J.* **C79**, 847 (2019).
337. Aad, G. *et al.* Measurement of flow harmonics correlations with mean transverse momentum in lead-lead and proton-lead collisions at $\sqrt{s_{NN}} = 5.02$ TeV with the ATLAS detector. *Eur. Phys. J.* **C79**, 985 (2019).
338. Aad, G. *et al.* ATLAS b -jet identification performance and efficiency measurement with $t\bar{t}$ events in pp collisions at $\sqrt{s} = 13$ TeV. *Eur. Phys. J.* **C79**, 970 (2019).
339. Aad, G. *et al.* Measurement of $W^\pm$ -boson and Z -boson production cross-sections in pp collisions at $\sqrt{s} = 2.76$ TeV with the ATLAS detector. *Eur. Phys. J.* **C79**, 901 (2019).
340. Aad, G. *et al.* Resolution of the ATLAS muon spectrometer monitored drift tubes in LHC Run 2. *JINST* **14**, P09011 (2019).
341. Aad, G. *et al.* Identification of boosted Higgs bosons decaying into b -quark pairs with the ATLAS detector at 13 TeV. *Eur. Phys. J.* **C79**, 836 (2019).
342. Aad, G. *et al.* Properties of jet fragmentation using charged particles measured with the ATLAS detector in pp collisions at $\sqrt{s} = 13$ TeV. *Phys. Rev.* **D100**, 052011 (2019).

343. Aad, G. *et al.* Search for a heavy charged boson in events with a charged lepton and missing transverse momentum from pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev.* **D100**, 052013 (2019).
344. Aaboud, M. *et al.* Search for excited electrons singly produced in proton-collisions at $\sqrt{s} = 13$ TeV with the ATLAS experiment at the LHC. *Eur. Phys. J.* **C79**, 803 (2019).
345. Aaboud, M. *et al.* Observation of electroweak production of a same-sign W boson pair in association with two jets in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev. Lett.* **123**, 161801 (2019).
346. Aad, G. *et al.* Measurement of distributions sensitive to the underlying event in inclusive Z -boson production in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J.* **C79**, 666 (2019).
347. Aad, G. *et al.* Search for heavy neutral leptons in decays of W bosons produced in 13 TeV pp collisions using prompt and displaced signatures with the ATLAS detector. *JHEP* **10**, 265 (2019).
348. Aad, G. *et al.* Search for the electroweak diboson production in association with a high-mass dijet system in semileptonic final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev.* **D100**, 032007 (2019).
349. Aaboud, M. *et al.* Measurement of ZZ production in the $\ell\ell\nu\nu$ final state with the ATLAS detector in pp collisions at $\sqrt{s} = 13$ TeV. *JHEP* **10**, 127 (2019).
350. Aaboud, M. *et al.* Measurement of fiducial and differential W^+W^- production cross-sections at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J.* **C79**, 884 (2019).
351. Aaboud, M. *et al.* Modelling radiation damage to pixel sensors in the ATLAS detector. *JINST* **14**, P06012 (2019).
352. Aad, G. *et al.* Measurement of the top-quark mass in $t\bar{t} + 1$ -jet events collected with the ATLAS detector in pp collisions at $\sqrt{s} = 8$ TeV. *JHEP* **11**, 150 (2019).
353. Aaboud, M. *et al.* Search for a right-handed gauge boson decaying into a high-momentum heavy neutrino and a charged lepton in pp collisions with the ATLAS detector at $\sqrt{s} = 13$ TeV. *Phys. Lett.* **B798**, 134942 (2019).
354. Aad, G. *et al.* Measurement of the cross-section and charge asymmetry of W bosons produced in proton-proton collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Eur. Phys. J.* **C79**, 760 (2019).
355. Aaboud, M. *et al.* Combination of searches for invisible Higgs boson decays with the ATLAS experiment. *Phys. Rev. Lett.* **122**, 231801 (2019).
356. Aad, G. *et al.* Observation of light-by-light scattering in ultraperipheral Pb+Pb collisions with the ATLAS detector. *Phys. Rev. Lett.* **123**, 052001 (2019).
357. Aad, G. *et al.* Evidence for the production of three massive vector bosons with the ATLAS detector. *Phys. Lett.* **B798**, 134913 (2019).
358. Aad, G. *et al.* Evidence for the production of three massive vectorbosons in pp collisions with the ATLAS detector. *PoS DIS2019*, 135 (2019).
359. Aad, G. *et al.* Measurement of the production cross section for a Higgs boson in association with a vector boson in the $H \rightarrow WW^* \rightarrow \ell\nu\ell\nu$ channel in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett.* **B798**, 134949 (2019).
360. Aad, G. *et al.* Search for high-mass dilepton resonances using 139 fb^{-1} of pp collision data collected at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett.* **B796**, 68–87 (2019).
361. Aaboud, M. *et al.* Measurement of VH , $H \rightarrow b\bar{b}$ production as a function of the vector-boson transverse momentum in 13 TeV pp collisions with the ATLAS detector. *JHEP* **05**, 141 (2019).
362. Aaboud, M. *et al.* Measurement of jet-substructure observables in top quark, W boson and light jet production in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **08**, 033 (2019).
363. Aaboud, M. *et al.* Measurement of prompt photon production in $\sqrt{s_{NN}} = 8.16$ TeV p +Pb collisions with ATLAS. *Phys. Lett.* **B796**, 230–252 (2019).
364. Aaboud, M. *et al.* Constraints on mediator-based dark matter and scalar dark energy models using $\sqrt{s} = 13$ TeV pp collision data collected by the ATLAS detector. *JHEP* **05**, 142 (2019).

365. Aaboud, M. *et al.* Search for heavy particles decaying into a top-quark pair in the fully hadronic final state in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev.* **D99**, 092004 (2019).
366. Aaboud, M. *et al.* Comparison of Fragmentation Functions for Jets Dominated by Light Quarks and Gluons from pp and Pb+Pb Collisions in ATLAS. *Phys. Rev. Lett.* **123**, 042001 (2019).
367. Aaboud, M. *et al.* Searches for third-generation scalar leptoquarks in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. *JHEP* **06**, 144 (2019).
368. Aaboud, M. *et al.* Combinations of single-top-quark production cross-section measurements and $|f_{LV}V_{tb}|$ determinations at $\sqrt{s} = 7$ and 8 TeV with the ATLAS and CMS experiments Combinations of single-top-quark production cross-section measurements and $|f_{LV}V_{tb}|$ determinations at $\sqrt{s} = 7$ and 8 TeV with the ATLAS and CMS experiments. *JHEP* **05**, 088 (2019).
369. Aaboud, M. *et al.* Measurement of the four-lepton invariant mass spectrum in 13 TeV proton-proton collisions with the ATLAS detector. *JHEP* **04**, 048 (2019).
370. Aaboud, M. *et al.* Measurement of $W^{\pm}Z$ production cross sections and gauge boson polarisation in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J.* **C79**, 535 (2019).
371. Aaboud, M. *et al.* Electron reconstruction and identification in the ATLAS experiment using the 2015 and 2016 LHC proton-proton collision data at $\sqrt{s} = 13$ TeV. *Eur. Phys. J.* **C79**, 639 (2019).
372. Aaboud, M. *et al.* Search for long-lived neutral particles in pp collisions at $\sqrt{s} = 13$ TeV that decay into displaced hadronic jets in the ATLAS calorimeter. *Eur. Phys. J.* **C79**, 481 (2019).
373. Aaboud, M. *et al.* Search for heavy charged long-lived particles in the ATLAS detector in 36.1 fb^{-1} of proton-proton collision data at $\sqrt{s} = 13$ TeV. *Phys. Rev.* **D99**, 092007 (2019).
374. Abouzaid, E. *et al.* Measurement of the branching ratio of π^0 Dalitz Decay using $K_L \rightarrow \pi^0 \pi^0 \pi^0$ Decays. *Phys. Rev.* **D100**, 032003 (2019).
375. Aaboud, M. *et al.* Searches for scalar leptoquarks and differential cross-section measurements in dilepton-dijet events in proton-proton collisions at a centre-of-mass energy of $\sqrt{s} = 13$ TeV with the ATLAS experiment. *Eur. Phys. J.* **C79**, 733 (2019).
376. Aaboud, M. *et al.* Search for low-mass resonances decaying into two jets and produced in association with a photon using pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett.* **B795**, 56–75 (2019).
377. Aaboud, M. *et al.* Dijet azimuthal correlations and conditional yields in pp and $p+\text{Pb}$ collisions at $\sqrt{s}=5.02\text{TeV}$ with the ATLAS detector. *Phys. Rev.* **C100**, 034903 (2019).
378. Aaboud, M. *et al.* Measurement of the ratio of cross sections for inclusive isolated-photon production in pp collisions at $\sqrt{s} = 13$ and 8 TeV with the ATLAS detector. *JHEP* **04**, 093 (2019).
379. Aaboud, M. *et al.* Search for scalar resonances decaying into $\mu^+\mu^-$ in events with and without b -tagged jets produced in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **07**, 117 (2019).
380. Aaboud, M. *et al.* Measurement of the $t\bar{t}Z$ and $t\bar{t}W$ cross sections in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev.* **D99**, 072009 (2019).
381. Aaboud, M. *et al.* Search for top-quark decays $t \rightarrow Hq$ with 36 fb^{-1} of pp collision data at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **05**, 123 (2019).
382. Aaboud, M. *et al.* Search for large missing transverse momentum in association with one top-quark in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **05**, 041 (2019).
383. Aaboud, M. *et al.* Observation of electroweak $W^{\pm}Z$ boson pair production in association with two jets in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett.* **B793**, 469–492 (2019).
384. Aaboud, M. *et al.* Search for chargino and neutralino production in final states with a Higgs boson and missing transverse momentum at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev.* **D100**, 012006 (2019).
385. Aaboud, M. *et al.* Properties of $g \rightarrow b\bar{b}$ at small opening angles in pp collisions with the ATLAS detector at $\sqrt{s} = 13$ TeV. *Phys. Rev.* **D99**, 052004 (2019).
386. Aaboud, M. *et al.* Search for single production of vector-like quarks decaying into Wb in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **05**, 164 (2019).

387. Aaboud, M. *et al.* Electron and photon energy calibration with the ATLAS detector using 2015-2016 LHC proton-proton collision data. *JINST* **14**, P03017 (2019).
388. Aaboud, M. *et al.* Search for heavy long-lived multicharged particles in proton-proton collisions at $\sqrt{s} = 13$ TeV using the ATLAS detector. *Phys. Rev.* **D99**, 052003 (2019).
389. Aaboud, M. *et al.* Study of the rare decays of B_s^0 and B^0 mesons into muon pairs using data collected during 2015 and 2016 with the ATLAS detector. *JHEP* **04**, 098 (2019).
390. Aaboud, M. *et al.* Measurements of inclusive and differential fiducial cross-sections of $t\bar{t}\gamma$ production in leptonic final states at $\sqrt{s} = 13$ TeV in ATLAS. *Eur. Phys. J.* **C79**, 382 (2019).
391. Aaboud, M. *et al.* Measurements of inclusive and differential fiducial cross-sections of $t\bar{t}$ production with additional heavy-flavour jets in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **04**, 046 (2019).
392. Aaboud, M. *et al.* Search for Higgs boson pair production in the $WW^{(*)}WW^{(*)}$ decay channel using ATLAS data recorded at $\sqrt{s} = 13$ TeV. *JHEP* **05**, 124 (2019).
393. Aaboud, M. *et al.* Study of the hard double-parton scattering contribution to inclusive four-lepton production in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Phys. Lett.* **B790**. [Phys. Lett.790,595(2019)], 595–614 (2019).
394. Aaboud, M. *et al.* Cross-section measurements of the Higgs boson decaying into a pair of τ -leptons in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev.* **D99**, 072001 (2019).
395. Aaboud, M. *et al.* Search for long-lived particles produced in pp collisions at $\sqrt{s} = 13$ TeV that decay into displaced hadronic jets in the ATLAS muon spectrometer. *Phys. Rev.* **D99**, 052005 (2019).
396. Aaboud, M. *et al.* Search for Higgs boson pair production in the $b\bar{b}WW^*$ decay mode at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **04**, 092 (2019).
397. Aaboud, M. *et al.* Search for four-top-quark production in the single-lepton and opposite-sign dilepton final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev.* **D99**, 052009 (2019).
398. Aaboud, M. *et al.* Search for the Production of a Long-Lived Neutral Particle Decaying within the ATLAS Hadronic Calorimeter in Association with a Z Boson from pp Collisions at $\sqrt{s} = 13$ TeV. *Phys. Rev. Lett.* **122**, 151801 (2019).
399. Aaboud, M. *et al.* Measurements of W and Z boson production in pp collisions at $\sqrt{s} = 5.02$ TeV with the ATLAS detector. *Eur. Phys. J.* **C79**. [Erratum: Eur. Phys. J.C79,no.5,374(2019)], 128 (2019).
400. Aaboud, M. *et al.* Measurement of the photon identification efficiencies with the ATLAS detector using LHC Run 2 data collected in 2015 and 2016. *Eur. Phys. J.* **C79**, 205 (2019).
401. Aaboud, M. *et al.* Measurement of the top quark mass in the $t\bar{t} \rightarrow \text{lepton} + \text{jets}$ channel from $\sqrt{s} = 8$ TeV ATLAS data and combination with previous results. *Eur. Phys. J.* **C79**, 290 (2019).
402. Aaboud, M. *et al.* Search for heavy Majorana or Dirac neutrinos and right-handed W gauge bosons in final states with two charged leptons and two jets at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **01**, 016 (2019).
403. Aaboud, M. *et al.* Measurement of photon-jet transverse momentum correlations in 5.02 TeV Pb + Pb and pp collisions with ATLAS. *Phys. Lett.* **B789**, 167–190 (2019).
404. Aaboud, M. *et al.* Search for invisible Higgs boson decays in vector boson fusion at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett.* **B793**, 499–519 (2019).
405. Aaboud, M. *et al.* A search for pairs of highly collimated photon-jets in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev.* **D99**, 012008 (2019).
406. Aaboud, M. *et al.* Measurements of gluon-gluon fusion and vector-boson fusion Higgs boson production cross-sections in the $H \rightarrow WW^* \rightarrow e\nu\mu\nu$ decay channel in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett.* **B789**, 508–529 (2019).
407. Aaboud, M. *et al.* Performance of top-quark and W -boson tagging with ATLAS in Run 2 of the LHC. *Eur. Phys. J.* **C79**, 375 (2019).

408. Aaboud, M. *et al.* Search for squarks and gluinos in final states with hadronically decaying τ -leptons, jets, and missing transverse momentum using pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev. D* **D99**, 012009 (2019).
409. Aaboud, M. *et al.* Search for heavy charged long-lived particles in proton-proton collisions at $\sqrt{s} = 13$ TeV using an ionisation measurement with the ATLAS detector. *Phys. Lett. B* **B788**, 96–116 (2019).
410. Aaboud, M. *et al.* Search for long-lived particles in final states with displaced dimuon vertices in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev. D* **D99**, 012001 (2019).
411. Aaboud, M. *et al.* Search for doubly charged scalar bosons decaying into same-sign W boson pairs with the ATLAS detector. *Eur. Phys. J. C* **C79**, 58 (2019).
412. Aaboud, M. *et al.* Search for vector-boson resonances decaying to a top quark and bottom quark in the lepton plus jets final state in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett. B* **B788**, 347–370 (2019).
413. Aaboud, M. *et al.* In situ calibration of large-radius jet energy and mass in 13 TeV proton-proton collisions with the ATLAS detector. *Eur. Phys. J. C* **C79**, 135 (2019).
414. Aaboud, M. *et al.* A strategy for a general search for new phenomena using data-derived signal regions and its application within the ATLAS experiment. *Eur. Phys. J. C* **C79**, 120 (2019).
415. Aaboud, M. *et al.* Correlated long-range mixed-harmonic fluctuations measured in pp , p +Pb and low-multiplicity Pb+Pb collisions with the ATLAS detector. *Phys. Lett. B* **B789**, 444–471 (2019).
416. Aaboud, M. *et al.* Search for Higgs boson decays into a pair of light bosons in the $b\bar{b}\mu\mu$ final state in pp collision at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett. B* **B790**, 1–21 (2019).
417. Aaboud, M. *et al.* Measurement of the nuclear modification factor for inclusive jets in Pb+Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV with the ATLAS detector. *Phys. Lett. B* **B790**, 108–128 (2019).
418. Aaboud, M. *et al.* Search for pair production of Higgs bosons in the $b\bar{b}b\bar{b}$ final state using proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **01**, 030 (2019).
419. Aaboud, M. *et al.* Search for light resonances decaying to boosted quark pairs and produced in association with a photon or a jet in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett. B* **B788**, 316–335 (2019).
420. Aaboud, M. *et al.* Search for supersymmetry in final states with two same-sign or three leptons and jets using 36 fb^{-1} of $\sqrt{s} = 13$ TeV pp collision data with the ATLAS detector. *JHEP* **09**. [Erratum: *JHEP*08,121(2019)], 084 (2017).
421. Aaboud, M. *et al.* Measurement of the W boson polarisation in $t\bar{t}$ events from pp collisions at $\sqrt{s} = 8$ TeV in the lepton + jets channel with ATLAS. *Eur. Phys. J. C* **C77**. [Erratum: *Eur. Phys. J. C*79,no.1,19(2019)], 264 (2017).
422. Aad, G. *et al.* A search for an excited muon decaying to a muon and two jets in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *New J. Phys.* **18**. [Erratum: *New J. Phys.*21,no.10,109501(2019)], 073021 (2016).
423. Ivezic, Z. *et al.* LSST: from Science Drivers to Reference Design and Anticipated Data Products. *Astrophys. J.* **873**, 111 (2019).
424. Aaboud, M. *et al.* Measurement of the $Z\gamma \rightarrow \nu\bar{\nu}\gamma$ production cross section in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector and limits on anomalous triple gauge-boson couplings. *JHEP* **12**, 010 (2018).
425. Aaboud, M. *et al.* Comparison between simulated and observed LHC beam backgrounds in the ATLAS experiment at $E_{\text{beam}} = 4$ TeV. *JINST* **13**, P12006 (2018).
426. Aaboud, M. *et al.* Observation of $H \rightarrow b\bar{b}$ decays and VH production with the ATLAS detector. *Phys. Lett. B* **B786**, 59–86 (2018).
427. Aaboud, M. *et al.* Measurement of the azimuthal anisotropy of charged particles produced in $\sqrt{s_{NN}} = 5.02$ TeV Pb+Pb collisions with the ATLAS detector. *Eur. Phys. J. C* **C78**, 997 (2018).

428. Aaboud, M. *et al.* Search for charged Higgs bosons decaying into top and bottom quarks at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **11**, 085 (2018).
429. Aaboud, M. *et al.* Combination of the searches for pair-produced vector-like partners of the third-generation quarks at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev. Lett.* **121**, 211801 (2018).
430. Aaboud, M. *et al.* Combination of searches for heavy resonances decaying into bosonic and leptonic final states using 36 fb^{-1} of proton-proton collision data at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev.* **D98**, 052008 (2018).
431. Aaboud, M. *et al.* Search for pair production of heavy vector-like quarks decaying into hadronic final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev.* **D98**, 092005 (2018).
432. Aaboud, M. *et al.* Constraints on off-shell Higgs boson production and the Higgs boson total width in $ZZ \rightarrow 4\ell$ and $ZZ \rightarrow 2\ell 2\nu$ final states with the ATLAS detector. *Phys. Lett.* **B786**, 223–244 (2018).
433. Aaboud, M. *et al.* Search for resonant and non-resonant Higgs boson pair production in the $b\bar{b}\tau^+\tau^-$ decay channel in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev. Lett.* **121**. [Erratum: *Phys. Rev. Lett.* 122,no.8,089901(2019)], 191801 (2018).
434. Aaboud, M. *et al.* Search for new phenomena in events with same-charge leptons and b -jets in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **12**, 039 (2018).
435. Aaboud, M. *et al.* Search for dark matter in events with a hadronically decaying vector boson and missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **10**, 180 (2018).
436. Aaboud, M. *et al.* Search for Higgs bosons produced via vector-boson fusion and decaying into bottom quark pairs in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. *Phys. Rev.* **D98**, 052003 (2018).
437. Aaboud, M. *et al.* Search for Higgs boson pair production in the $\gamma\gamma WW^*$ channel using pp collision data recorded at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J.* **C78**, 1007 (2018).
438. Aaboud, M. *et al.* Search for charged Higgs bosons decaying via $H^\pm \rightarrow \tau^\pm \nu_\tau$ in the τ -jets and τ -lepton final states with 36 fb^{-1} of pp collision data recorded at $\sqrt{s} = 13$ TeV with the ATLAS experiment. *JHEP* **09**, 139 (2018).
439. Aaboud, M. *et al.* Search for lepton-flavor violation in different-flavor, high-mass final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev.* **D98**, 092008 (2018).
440. Aaboud, M. *et al.* Prompt and non-prompt J/ψ elliptic flow in Pb+Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV with the ATLAS detector. *Eur. Phys. J.* **C78**, 784 (2018).
441. Aaboud, M. *et al.* Search for Higgs boson pair production in the $\gamma\gamma b\bar{b}$ final state with 13 TeV pp collision data collected by the ATLAS experiment. *JHEP* **11**, 040 (2018).
442. Aaboud, M. *et al.* Searches for exclusive Higgs and Z boson decays into $J/\psi\gamma$, $\psi(2S)\gamma$, and $\Upsilon(nS)\gamma$ at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett.* **B786**, 134–155 (2018).
443. Aaboud, M. *et al.* Search for pair- and single-production of vector-like quarks in final states with at least one Z boson decaying into a pair of electrons or muons in pp collision data collected with the ATLAS detector at $\sqrt{s} = 13$ TeV. *Phys. Rev.* **D98**, 112010 (2018).
444. Aaboud, M. *et al.* Observation of centrality-dependent acoplanarity for muon pairs produced via two-photon scattering in Pb+Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV with the ATLAS detector. *Phys. Rev. Lett.* **121**, 212301 (2018).
445. Aaboud, M. *et al.* Search for the Higgs boson produced in association with a vector boson and decaying into two spin-zero particles in the $H \rightarrow aa \rightarrow 4b$ channel in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **10**, 031 (2018).
446. Aaboud, M. *et al.* Probing the quantum interference between singly and doubly resonant top-quark production in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev. Lett.* **121**, 152002 (2018).
447. Aaboud, M. *et al.* Search for pair production of higgsinos in final states with at least three b -tagged jets in $\sqrt{s} = 13$ TeV pp collisions using the ATLAS detector. *Phys. Rev.* **D98**, 092002 (2018).
448. Aaboud, M. *et al.* Operation and performance of the ATLAS Tile Calorimeter in Run 1. *Eur. Phys. J.* **C78**, 987 (2018).

449. Aaboud, M. *et al.* Search for chargino-neutralino production using recursive jigsaw reconstruction in final states with two or three charged leptons in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev.* **D98**, 092012 (2018).
450. Aaboud, M. *et al.* Search for pair production of heavy vector-like quarks decaying into high- p_T W bosons and top quarks in the lepton-plus-jets final state in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **08**, 048 (2018).
451. Aaboud, M. *et al.* Search for resonant WZ production in the fully leptonic final state in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett.* **B787**, 68–88 (2018).
452. Aaboud, M. *et al.* Observation of Higgs boson production in association with a top quark pair at the LHC with the ATLAS detector. *Phys. Lett.* **B784**, 173–191 (2018).
453. Aaboud, M. *et al.* Measurement of the Higgs boson mass in the $H \rightarrow ZZ^* \rightarrow 4\ell$ and $H \rightarrow \gamma\gamma$ channels with $\sqrt{s} = 13$ TeV pp collisions using the ATLAS detector. *Phys. Lett.* **B784**, 345–366 (2018).
454. Aaboud, M. *et al.* Search for new phenomena using the invariant mass distribution of same-flavour opposite-sign dilepton pairs in events with missing transverse momentum in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. *Eur. Phys. J.* **C78**, 625 (2018).
455. Aaboud, M. *et al.* Combined measurement of differential and total cross sections in the $H \rightarrow \gamma\gamma$ and the $H \rightarrow ZZ^* \rightarrow 4\ell$ decay channels at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett.* **B786**, 114–133 (2018).
456. Aaboud, M. *et al.* Search for resonances in the mass distribution of jet pairs with one or two jets identified as b -jets in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev.* **D98**, 032016 (2018).
457. Aaboud, M. *et al.* Measurement of jet fragmentation in Pb+Pb and pp collisions at $\sqrt{s_{NN}} = 5.02$ TeV with the ATLAS detector. *Phys. Rev.* **C98**, 024908 (2018).
458. Aaboud, M. *et al.* Measurement of the suppression and azimuthal anisotropy of muons from heavy-flavor decays in Pb+Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV with the ATLAS detector. *Phys. Rev.* **C98**, 044905 (2018).
459. Aaboud, M. *et al.* Measurement of dijet azimuthal decorrelations in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector and determination of the strong coupling. *Phys. Rev.* **D98**, 092004 (2018).
460. Aaboud, M. *et al.* Angular analysis of $B_d^0 \rightarrow K^* \mu^+ \mu^-$ decays in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *JHEP* **10**, 047 (2018).
461. Aaboud, M. *et al.* Prompt and non-prompt J/ψ and $\psi(2S)$ suppression at high transverse momentum in 5.02 TeV Pb+Pb collisions with the ATLAS experiment. *Eur. Phys. J.* **C78**, 762 (2018).
462. Aaboud, M. *et al.* Search for flavor-changing neutral currents in top quark decays $t \rightarrow Hc$ and $t \rightarrow Hu$ in multilepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev.* **D98**, 032002 (2018).
463. Aaboud, M. *et al.* Measurement of colour flow using jet-pull observables in $t\bar{t}$ events with the ATLAS experiment at $\sqrt{s} = 13$ TeV. *Eur. Phys. J.* **C78**, 847 (2018).
464. Aaboud, M. *et al.* Search for supersymmetry in final states with charm jets and missing transverse momentum in 13 TeV pp collisions with the ATLAS detector. *JHEP* **09**, 050 (2018).
465. Aaboud, M. *et al.* Search for heavy resonances decaying to a photon and a hadronically decaying $Z/W/H$ boson in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev.* **D98**, 032015 (2018).
466. Aaboud, M. *et al.* Measurements of b -jet tagging efficiency with the ATLAS detector using $t\bar{t}$ events at $\sqrt{s} = 13$ TeV. *JHEP* **08**, 089 (2018).
467. Aaboud, M. *et al.* Search for heavy particles decaying into top-quark pairs using lepton-plus-jets events in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J.* **C78**, 565 (2018).
468. Aaboud, M. *et al.* A search for lepton-flavor-violating decays of the Z boson into a τ -lepton and a light lepton with the ATLAS detector. *Phys. Rev.* **D98**, 092010 (2018).

469. Aaboud, M. *et al.* Search for R-parity-violating supersymmetric particles in multi-jet final states produced in p - p collisions at $\sqrt{s} = 13$ TeV using the ATLAS detector at the LHC. *Phys. Lett.* **B785**, 136–158 (2018).
470. Aaboud, M. *et al.* Search for supersymmetry in events with four or more leptons in $\sqrt{s} = 13$ TeV pp collisions with ATLAS. *Phys. Rev.* **D98**, 032009 (2018).
471. Aaboud, M. *et al.* Search for low-mass dijet resonances using trigger-level jets with the ATLAS detector in pp collisions at $\sqrt{s} = 13$ TeV. *Phys. Rev. Lett.* **121**, 081801 (2018).
472. Aaboud, M. *et al.* Search for a heavy Higgs boson decaying into a Z boson and another heavy Higgs boson in the $\ell\ell b\bar{b}$ final state in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett.* **B783**, 392–414 (2018).
473. Aaboud, M. *et al.* Search for Higgs boson decays into pairs of light (pseudo)scalar particles in the $\gamma\gamma jj$ final state in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett.* **B782**, 750–767 (2018).
474. Aaboud, M. *et al.* Search for top squarks decaying to tau sleptons in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev.* **D98**, 032008 (2018).
475. Aaboud, M. *et al.* Search for flavour-changing neutral current top-quark decays $t \rightarrow qZ$ in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **07**, 176 (2018).
476. Aaboud, M. *et al.* Search for pair production of up-type vector-like quarks and for four-top-quark events in final states with multiple b -jets with the ATLAS detector. *JHEP* **07**, 089 (2018).
477. Aaboud, M. *et al.* Search for electroweak production of supersymmetric particles in final states with two or three leptons at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J.* **C78**, 995 (2018).
478. Aaboud, M. *et al.* Performance of missing transverse momentum reconstruction with the ATLAS detector using proton-proton collisions at $\sqrt{s} = 13$ TeV. *Eur. Phys. J.* **C78**, 903 (2018).
479. Aaboud, M. *et al.* Measurements of differential cross sections of top quark pair production in association with jets in pp collisions at $\sqrt{s} = 13$ TeV using the ATLAS detector. *JHEP* **10**, 159 (2018).
480. Aaboud, M. *et al.* Search for the Decay of the Higgs Boson to Charm Quarks with the ATLAS Experiment. *Phys. Rev. Lett.* **120**, 211802 (2018).
481. Aaboud, M. *et al.* Measurements of Higgs boson properties in the diphoton decay channel with 36 fb^{-1} of pp collision data at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev.* **D98**, 052005 (2018).
482. Aaboud, M. *et al.* Search for Higgs boson decays to beyond-the-Standard-Model light bosons in four-lepton events with the ATLAS detector at $\sqrt{s} = 13$ TeV. *JHEP* **06**, 166 (2018).
483. Aaboud, M. *et al.* Search for photonic signatures of gauge-mediated supersymmetry in 13 TeV pp collisions with the ATLAS detector. *Phys. Rev.* **D97**, 092006 (2018).
484. Aaboud, M. *et al.* Search for a Structure in the $B_s^0 \pi^\pm$ Invariant Mass Spectrum with the ATLAS Experiment. *Phys. Rev. Lett.* **120**, 202007 (2018).
485. Aaboud, M. *et al.* Search for $W' \rightarrow tb$ decays in the hadronic final state using pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett.* **B781**, 327–348 (2018).
486. Aaboud, M. *et al.* Search for High-Mass Resonances Decaying to $\tau\nu$ in pp Collisions at $\sqrt{s}=13$ TeV with the ATLAS Detector. *Phys. Rev. Lett.* **120**, 161802 (2018).
487. Aaboud, M. *et al.* Measurements of $t\bar{t}$ differential cross-sections of highly boosted top quarks decaying to all-hadronic final states in pp collisions at $\sqrt{s} = 13$ TeV using the ATLAS detector. *Phys. Rev.* **D98**, 012003 (2018).
488. Aaboud, M. *et al.* Measurement of the cross section for isolated-photon plus jet production in pp collisions at $\sqrt{s} = 13$ TeV using the ATLAS detector. *Phys. Lett.* **B780**, 578–602 (2018).
489. Aaboud, M. *et al.* Search for the standard model Higgs boson produced in association with top quarks and decaying into a $b\bar{b}$ pair in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev.* **D97**, 072016 (2018).
490. Aaboud, M. *et al.* Evidence for the associated production of the Higgs boson and a top quark pair with the ATLAS detector. *Phys. Rev.* **D97**, 072003 (2018).

491. Aaboud, M. *et al.* Search for electroweak production of supersymmetric states in scenarios with compressed mass spectra at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev.* **D97**, 052010 (2018).
492. Aaboud, M. *et al.* Measurement of the production cross section of three isolated photons in pp collisions at $\sqrt{s} = 8$ TeV using the ATLAS detector. *Phys. Lett.* **B781**, 55–76 (2018).
493. Aaboud, M. *et al.* Measurement of the inclusive and fiducial $t\bar{t}$ production cross-sections in the lepton+jets channel in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Eur. Phys. J.* **C78**, 487 (2018).
494. Aaboud, M. *et al.* Search for heavy resonances decaying into a W or Z boson and a Higgs boson in final states with leptons and b -jets in 36 fb^{-1} of $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. *JHEP* **03**. [Erratum: JHEP11,051(2018)], 174 (2018).
495. Aaboud, M. *et al.* Search for heavy ZZ resonances in the $\ell^+\ell^-\ell^+\ell^-$ and $\ell^+\ell^-\nu\bar{\nu}$ final states using proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J.* **C78**, 293 (2018).
496. Aaboud, M. *et al.* Search for exclusive Higgs and Z boson decays to $\phi\gamma$ and $\rho\gamma$ with the ATLAS detector. *JHEP* **07**, 127 (2018).
497. Aaboud, M. *et al.* Search for squarks and gluinos in final states with jets and missing transverse momentum using 36 fb^{-1} of $\sqrt{s} = 13$ TeV pp collision data with the ATLAS detector. *Phys. Rev.* **D97**, 112001 (2018).
498. Aaboud, M. *et al.* Measurement of the Higgs boson coupling properties in the $H \rightarrow ZZ^* \rightarrow 4\ell$ decay channel at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **03**, 095 (2018).
499. Aaboud, M. *et al.* Search for long-lived charginos based on a disappearing-track signature in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **06**, 022 (2018).
500. Aaboud, M. *et al.* Measurement of differential cross-sections of a single top quark produced in association with a W boson at $\sqrt{s} = 13$ TeV with ATLAS. *Eur. Phys. J.* **C78**, 186 (2018).
501. Aaboud, M. *et al.* Search for top-squark pair production in final states with one lepton, jets, and missing transverse momentum using 36 fb^{-1} of $\sqrt{s} = 13$ TeV pp collision data with the ATLAS detector. *JHEP* **06**, 108 (2018).
502. Aaboud, M. *et al.* Measurement of the Soft-Drop Jet Mass in pp Collisions at $\sqrt{s} = 13$ TeV with the ATLAS Detector. *Phys. Rev. Lett.* **121**, 092001 (2018).
503. Aaboud, M. *et al.* Search for dark matter and other new phenomena in events with an energetic jet and large missing transverse momentum using the ATLAS detector. *JHEP* **01**, 126 (2018).
504. Aaboud, M. *et al.* Measurement of inclusive jet and dijet cross-sections in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **05**, 195 (2018).
505. Aaboud, M. *et al.* Search for supersymmetry in final states with missing transverse momentum and multiple b -jets in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **06**, 107 (2018).
506. Aaboud, M. *et al.* Search for dark matter produced in association with bottom or top quarks in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. *Eur. Phys. J.* **C78**, 18 (2018).
507. Aaboud, M. *et al.* Search for doubly charged Higgs boson production in multi-lepton final states with the ATLAS detector using proton-proton collisions at $\sqrt{s} = 13$ TeV. *Eur. Phys. J.* **C78**, 199 (2018).
508. Aaboud, M. *et al.* Measurement of differential cross sections of isolated-photon plus heavy-flavour jet production in pp collisions at $\sqrt{s} = 8$ TeV using the ATLAS detector. *Phys. Lett.* **B776**, 295–317 (2018).
509. Aaboud, M. *et al.* Search for WW/WZ resonance production in $\ell\nu qq$ final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **03**, 042 (2018).
510. Aaboud, M. *et al.* A search for pair-produced resonances in four-jet final states at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J.* **C78**, 250 (2018).
511. Aaboud, M. *et al.* Search for B-L R -parity-violating top squarks in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS experiment. *Phys. Rev.* **D97**, 032003 (2018).
512. Aaboud, M. *et al.* Search for long-lived, massive particles in events with displaced vertices and missing transverse momentum in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. *Phys. Rev.* **D97**, 052012 (2018).

513. Aaboud, M. *et al.* Measurement of the production cross-section of a single top quark in association with a Z boson in proton-proton collisions at 13 TeV with the ATLAS detector. *Phys. Lett.* **B780**, 557–577 (2018).
514. Aaboud, M. *et al.* Search for heavy resonances decaying into WW in the $e\nu\mu\nu$ final state in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J.* **C78**, 24 (2018).
515. Aaboud, M. *et al.* Search for new phenomena in high-mass final states with a photon and a jet from pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J.* **C78**, 102 (2018).
516. Aaboud, M. *et al.* $ZZ \rightarrow \ell^+ \ell^- \ell'^+ \ell'^-$ cross-section measurements and search for anomalous triple gauge couplings in 13 TeV pp collisions with the ATLAS detector. *Phys. Rev.* **D97**, 032005 (2018).
517. Aaboud, M. *et al.* Search for additional heavy neutral Higgs and gauge bosons in the ditau final state produced in 36 fb^{-1} of pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **01**, 055 (2018).
518. Aaboud, M. *et al.* A search for resonances decaying into a Higgs boson and a new particle X in the $XH \rightarrow qqbb$ final state with the ATLAS detector. *Phys. Lett.* **B779**, 24–45 (2018).
519. Aaboud, M. *et al.* Combination of inclusive and differential $t\bar{t}$ charge asymmetry measurements using ATLAS and CMS data at $\sqrt{s} = 7$ and 8 TeV. *JHEP* **04**, 033 (2018).
520. Aaboud, M. *et al.* Direct top-quark decay width measurement in the $t\bar{t}$ lepton+jets channel at $\sqrt{s}=8$ TeV with the ATLAS experiment. *Eur. Phys. J.* **C78**, 129 (2018).
521. Aaboud, M. *et al.* Measurement of τ polarisation in $Z/\gamma^* \rightarrow \tau\tau$ decays in proton-proton collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Eur. Phys. J.* **C78**, 163 (2018).
522. Aaboud, M. *et al.* Measurement of quarkonium production in proton-lead and proton-proton collisions at 5.02 TeV with the ATLAS detector. *Eur. Phys. J.* **C78**, 171 (2018).
523. Aaboud, M. *et al.* Measurement of longitudinal flow decorrelations in Pb+Pb collisions at $\sqrt{s_{NN}} = 2.76$ and 5.02 TeV with the ATLAS detector. *Eur. Phys. J.* **C78**, 142 (2018).
524. Aaboud, M. *et al.* Searches for heavy ZZ and ZW resonances in the $\ell\ell qq$ and $\nu\nu qq$ final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **03**, 009 (2018).
525. Aaboud, M. *et al.* Search for an invisibly decaying Higgs boson or dark matter candidates produced in association with a Z boson in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett.* **B776**, 318–337 (2018).
526. Aaboud, M. *et al.* Search for the direct production of charginos and neutralinos in final states with tau leptons in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. *Eur. Phys. J.* **C78**, 154 (2018).
527. Aaboud, M. *et al.* Search for diboson resonances with boson-tagged jets in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett.* **B777**, 91–113 (2018).
528. Aaboud, M. *et al.* Measurement of the exclusive $\gamma\gamma \rightarrow \mu^+\mu^-$ process in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett.* **B777**, 303–323 (2018).
529. Aaboud, M. *et al.* Measurement of long-range multiparticle azimuthal correlations with the subevent cumulant method in pp and $p + Pb$ collisions with the ATLAS detector at the CERN Large Hadron Collider. *Phys. Rev.* **C97**, 024904 (2018).
530. Aaboud, M. *et al.* Search for a new heavy gauge boson resonance decaying into a lepton and missing transverse momentum in 36 fb^{-1} of pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS experiment. *Eur. Phys. J.* **C78**, 401 (2018).
531. Aaboud, M. *et al.* Measurement of jet fragmentation in 5.02 TeV proton-lead and proton-proton collisions with the ATLAS detector. *Nucl. Phys.* **A978**, 65 (2018).
532. Aaboud, M. *et al.* Measurement of the W -boson mass in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Eur. Phys. J.* **C78**, [Erratum: *Eur. Phys. J.* C78,no.11,898(2018)], 110 (2018).
533. Aaboud, M. *et al.* Measurement of the cross-section for producing a W boson in association with a single top quark in pp collisions at $\sqrt{s} = 13$ TeV with ATLAS. *JHEP* **01**, 063 (2018).
534. Aaboud, M. *et al.* Measurement of the Drell-Yan triple-differential cross section in pp collisions at $\sqrt{s} = 8$ TeV. *JHEP* **12**, 059 (2017).

535. Aaboud, M. *et al.* Measurement of the cross-section for electroweak production of dijets in association with a Z boson in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett.* **B775**, 206–228 (2017).
536. Aaboud, M. *et al.* Measurement of lepton differential distributions and the top quark mass in $t\bar{t}$ production in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Eur. Phys. J.* **C77**, 804 (2017).
537. Aaboud, M. *et al.* Study of ordered hadron chains with the ATLAS detector. *Phys. Rev.* **D96**, 092008 (2017).
538. Aaboud, M. *et al.* Search for a scalar partner of the top quark in the jets plus missing transverse momentum final state at $\sqrt{s}=13$ TeV with the ATLAS detector. *JHEP* **12**, 085 (2017).
539. Aaboud, M. *et al.* Search for supersymmetry in events with b -tagged jets and missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **11**, 195 (2017).
540. Aaboud, M. *et al.* Search for squarks and gluinos in events with an isolated lepton, jets, and missing transverse momentum at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev.* **D96**, 112010 (2017).
541. Aaboud, M. *et al.* Evidence for the $H \rightarrow b\bar{b}$ decay with the ATLAS detector. *JHEP* **12**, 024 (2017).
542. Aaboud, M. *et al.* Search for direct top squark pair production in final states with two leptons in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. *Eur. Phys. J.* **C77**, 898 (2017).
543. Aaboud, M. *et al.* Measurement of inclusive and differential cross sections in the $H \rightarrow ZZ^* \rightarrow 4\ell$ decay channel in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **10**, 132 (2017).
544. Aaboud, M. *et al.* Search for new phenomena with large jet multiplicities and missing transverse momentum using large-radius jets and flavour-tagging at ATLAS in 13 TeV pp collisions. *JHEP* **12**, 034 (2017).
545. Aaboud, M. *et al.* Measurements of top-quark pair differential cross-sections in the lepton+jets channel in pp collisions at $\sqrt{s} = 13$ TeV using the ATLAS detector. *JHEP* **11**, 191 (2017).
546. Aaboud, M. *et al.* Searches for the $Z\gamma$ decay mode of the Higgs boson and for new high-mass resonances in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **10**, 112 (2017).
547. Aaboud, M. *et al.* Search for heavy resonances decaying to a W or Z boson and a Higgs boson in the $q\bar{q}^{(\prime)}b\bar{b}$ final state in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett.* **B774**, 494–515 (2017).
548. Aaboud, M. *et al.* Search for Heavy Higgs Bosons A/H Decaying to a Top Quark Pair in pp Collisions at $\sqrt{s} = 8$ TeV with the ATLAS Detector. *Phys. Rev. Lett.* **119**, 191803 (2017).
549. Aaboud, M. *et al.* Study of $WW\gamma$ and $WZ\gamma$ production in pp collisions at $\sqrt{s} = 8$ TeV and search for anomalous quartic gauge couplings with the ATLAS experiment. *Eur. Phys. J.* **C77**, 646 (2017).
550. Aaboud, M. *et al.* Analysis of the Wtb vertex from the measurement of triple-differential angular decay rates of single top quarks produced in the t -channel at $\sqrt{s} = 8$ TeV with the ATLAS detector. *JHEP* **12**, 017 (2017).
551. Aaboud, M. *et al.* Search for new phenomena in high-mass diphoton final states using 37 fb $^{-1}$ of proton–proton collisions collected at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett.* **B775**, 105–125 (2017).
552. Aaboud, M. *et al.* Search for pair production of heavy vector-like quarks decaying to high- p_T W bosons and b quarks in the lepton-plus-jets final state in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **10**, 141 (2017).
553. Aaboud, M. *et al.* Measurement of detector-corrected observables sensitive to the anomalous production of events with jets and large missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV using the ATLAS detector. *Eur. Phys. J.* **C77**, 765 (2017).
554. Aaboud, M. *et al.* Study of the material of the ATLAS inner detector for Run 2 of the LHC. *JINST* **12**, P12009 (2017).
555. Aaboud, M. *et al.* Determination of the strong coupling constant α_s from transverse energy-energy correlations in multijet events at $\sqrt{s} = 8$ TeV using the ATLAS detector. *Eur. Phys. J.* **C77**, 872 (2017).
556. Aaboud, M. *et al.* Search for new high-mass phenomena in the dilepton final state using 36 fb $^{-1}$ of proton-proton collision data at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **10**, 182 (2017).

557. Aaboud, M. *et al.* Search for top quark decays $t \rightarrow qH$, with $H \rightarrow \gamma\gamma$, in $\sqrt{s} = 13$ TeV pp collisions using the ATLAS detector. *JHEP* **10**, 129 (2017).
558. Aaboud, M. *et al.* Search for Dark Matter Produced in Association with a Higgs Boson Decaying to $b\bar{b}$ using 36 fb⁻¹ of pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS Detector. *Phys. Rev. Lett.* **119**, 181804 (2017).
559. Aaboud, M. *et al.* Measurement of jet p_T correlations in Pb+Pb and pp collisions at $\sqrt{s_{NN}} = 2.76$ TeV with the ATLAS detector. *Phys. Lett.* **B774**, 379–402 (2017).
560. Aaboud, M. *et al.* Search for direct top squark pair production in events with a Higgs or Z boson, and missing transverse momentum in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. *JHEP* **08**, 006 (2017).
561. Aaboud, M. *et al.* Search for dark matter in association with a Higgs boson decaying to two photons at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev.* **D96**, 112004 (2017).
562. Aaboud, M. *et al.* Measurement of the inclusive jet cross-sections in proton-proton collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *JHEP* **09**, 020 (2017).
563. Aaboud, M. *et al.* Measurement of the $t\bar{t}\gamma$ production cross section in proton-proton collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *JHEP* **11**, 086 (2017).
564. Aaboud, M. *et al.* Measurement of $WW/WZ \rightarrow \ell\nu qq'$ production with the hadronically decaying boson reconstructed as one or two jets in pp collisions at $\sqrt{s} = 8$ TeV with ATLAS, and constraints on anomalous gauge couplings. *Eur. Phys. J.* **C77**, 563 (2017).
565. Aaboud, M. *et al.* Search for pair production of vector-like top quarks in events with one lepton, jets, and missing transverse momentum in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. *JHEP* **08**, 052 (2017).
566. Aaboud, M. *et al.* Search for the dimuon decay of the Higgs boson in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev. Lett.* **119**, 051802 (2017).
567. Aaboud, M. *et al.* Measurement of multi-particle azimuthal correlations in pp , p +Pb and low-multiplicity Pb+Pb collisions with the ATLAS detector. *Eur. Phys. J.* **C77**, 428 (2017).
568. Aaboud, M. *et al.* Measurement of b -hadron pair production with the ATLAS detector in proton-proton collisions at $\sqrt{s} = 8$ TeV. *JHEP* **11**, 062 (2017).
569. Aaboud, M. *et al.* Identification and rejection of pile-up jets at high pseudorapidity with the ATLAS detector. *Eur. Phys. J.* **C77**. [Erratum: *Eur. Phys. J.* C77,no.10,712(2017)], 580 (2017).
570. Aaboud, M. *et al.* Studies of $Z\gamma$ production in association with a high-mass dijet system in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *JHEP* **07**, 107 (2017).
571. Aaboud, M. *et al.* Search for new phenomena in a lepton plus high jet multiplicity final state with the ATLAS experiment using $\sqrt{s} = 13$ TeV proton-proton collision data. *JHEP* **09**, 088 (2017).
572. Aaboud, M. *et al.* Performance of the ATLAS Track Reconstruction Algorithms in Dense Environments in LHC Run 2. *Eur. Phys. J.* **C77**, 673 (2017).
573. Aaboud, M. *et al.* Search for dark matter at $\sqrt{s} = 13$ TeV in final states containing an energetic photon and large missing transverse momentum with the ATLAS detector. *Eur. Phys. J.* **C77**, 393 (2017).
574. Aaboud, M. *et al.* Measurements of integrated and differential cross sections for isolated photon pair production in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Phys. Rev.* **D95**, 112005 (2017).
575. Aaboud, M. *et al.* Femtoscopy with identified charged pions in proton-lead collisions at $\sqrt{s_{NN}} = 5.02$ TeV with ATLAS. *Phys. Rev.* **C96**, 064908 (2017).
576. Aaboud, M. *et al.* Measurement of the k_t splitting scales in $Z \rightarrow \ell\ell$ events in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *JHEP* **08**, 026 (2017).
577. Aaboud, M. *et al.* Jet reconstruction and performance using particle flow with the ATLAS Detector. *Eur. Phys. J.* **C77**, 466 (2017).
578. Aaboud, M. *et al.* Jet energy scale measurements and their systematic uncertainties in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev.* **D96**, 072002 (2017).

579. Aaboud, M. *et al.* Search for new phenomena in dijet events using 37 fb^{-1} of pp collision data collected at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. *Phys. Rev.* **D96**, 052004 (2017).
580. Aaboud, M. *et al.* Measurements of electroweak Wjj production and constraints on anomalous gauge couplings with the ATLAS detector. *Eur. Phys. J.* **C77**, 474 (2017).
581. Aaboud, M. *et al.* Measurement of the $t\bar{t}$ production cross section in the $\tau + \text{jets}$ final state in pp collisions at $\sqrt{s} = 8 \text{ TeV}$ using the ATLAS detector. *Phys. Rev.* **D95**, 072003 (2017).
582. Aaboud, M. *et al.* Probing the W tb vertex structure in t -channel single-top-quark production and decay in pp collisions at $\sqrt{s} = 8 \text{ TeV}$ with the ATLAS detector. *JHEP* **04**, 124 (2017).
583. Aaboud, M. *et al.* Top-quark mass measurement in the all-hadronic $t\bar{t}$ decay channel at $\sqrt{s} = 8 \text{ TeV}$ with the ATLAS detector. *JHEP* **09**, 118 (2017).
584. Aaboud, M. *et al.* Performance of the ATLAS Transition Radiation Tracker in Run 1 of the LHC: tracker properties. *JINST* **12**, P05002 (2017).
585. Aaboud, M. *et al.* Measurements of the production cross section of a Z boson in association with jets in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector. *Eur. Phys. J.* **C77**, 361 (2017).
586. Aaboud, M. *et al.* Measurement of the W^+W^- production cross section in pp collisions at a centre-of-mass energy of $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS experiment. *Phys. Lett.* **B773**, 354–374 (2017).
587. Aaboud, M. *et al.* Fiducial, total and differential cross-section measurements of t -channel single top-quark production in pp collisions at 8 TeV using data collected by the ATLAS detector. *Eur. Phys. J.* **C77**, 531 (2017).
588. Aaboud, M. *et al.* Evidence for light-by-light scattering in heavy-ion collisions with the ATLAS detector at the LHC. *Nature Phys.* **13**, 852–858 (2017).
589. Aaboud, M. *et al.* Measurement of jet fragmentation in Pb+Pb and pp collisions at $\sqrt{s_{NN}} = 2.76 \text{ TeV}$ with the ATLAS detector at the LHC. *Eur. Phys. J.* **C77**, 379 (2017).
590. Aaboud, M. *et al.* Measurement of the cross section for inclusive isolated-photon production in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ using the ATLAS detector. *Phys. Lett.* **B770**, 473–493 (2017).
591. Aaboud, M. *et al.* Measurement of charged-particle distributions sensitive to the underlying event in $\sqrt{s} = 13 \text{ TeV}$ proton-proton collisions with the ATLAS detector at the LHC. *JHEP* **03**, 157 (2017).
592. Aaboud, M. *et al.* Measurements of top quark spin observables in $t\bar{t}$ events using dilepton final states in $\sqrt{s} = 8 \text{ TeV}$ pp collisions with the ATLAS detector. *JHEP* **03**, 113 (2017).
593. Aaboud, M. *et al.* Measurements of top-quark pair differential cross-sections in the $e\mu$ channel in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ using the ATLAS detector. *Eur. Phys. J.* **C77**, 292 (2017).
594. Aaboud, M. *et al.* Measurements of top-quark pair to Z -boson cross-section ratios at $\sqrt{s} = 13, 8, 7 \text{ TeV}$ with the ATLAS detector. *JHEP* **02**, 117 (2017).
595. Aaboud, M. *et al.* Precision measurement and interpretation of inclusive W^+ , W^- and Z/γ^* production cross sections with the ATLAS detector. *Eur. Phys. J.* **C77**, 367 (2017).
596. Aaboud, M. *et al.* Measurement of the prompt J/ψ pair production cross-section in pp collisions at $\sqrt{s} = 8 \text{ TeV}$ with the ATLAS detector. *Eur. Phys. J.* **C77**, 76 (2017).
597. Aaboud, M. *et al.* Electron efficiency measurements with the ATLAS detector using 2012 LHC proton-proton collision data. *Eur. Phys. J.* **C77**, 195 (2017).
598. Aaboud, M. *et al.* Reconstruction of primary vertices at the ATLAS experiment in Run 1 proton-proton collisions at the LHC. *Eur. Phys. J.* **C77**, 332 (2017).
599. Aaboud, M. *et al.* Performance of the ATLAS Trigger System in 2015. *Eur. Phys. J.* **C77**, 317 (2017).
600. Aaboud, M. *et al.* High- E_T isolated-photon plus jets production in pp collisions at $\sqrt{s} = 8 \text{ TeV}$ with the ATLAS detector. *Nucl. Phys.* **B918**, 257–316 (2017).
601. Aaboud, M. *et al.* Search for new phenomena in events containing a same-flavour opposite-sign dilepton pair, jets, and large missing transverse momentum in $\sqrt{s} = 13 \text{ TeV}$ pp collisions with the ATLAS detector. *Eur. Phys. J.* **C77**, 144 (2017).

602. Aaboud, M. *et al.* Measurement of $W^\pm W^\pm$ vector-boson scattering and limits on anomalous quartic gauge couplings with the ATLAS detector. *Phys. Rev.* **D96**, 012007 (2017).
603. Aaboud, M. *et al.* Measurement of jet activity produced in top-quark events with an electron, a muon and two b -tagged jets in the final state in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J.* **C77**, 220 (2017).
604. Aaboud, M. *et al.* Measurements of $\psi(2S)$ and $X(3872) \rightarrow J/\psi \pi^+ \pi^-$ production in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *JHEP* **01**, 117 (2017).
605. Aaboud, M. *et al.* Measurements of charge and CP asymmetries in b -hadron decays using top-quark events collected by the ATLAS detector in pp collisions at $\sqrt{s} = 8$ TeV. *JHEP* **02**, 071 (2017).
606. Aaboud, M. *et al.* Measurement of the ZZ production cross section in proton-proton collisions at $\sqrt{s} = 8$ TeV using the $ZZ \rightarrow \ell^- \ell^+ \ell'^- \ell'^+$ and $ZZ \rightarrow \ell^- \ell^+ \nu \bar{\nu}$ channels with the ATLAS detector. *JHEP* **01**, 099 (2017).
607. Aaboud, M. *et al.* Search for triboson $W^\pm W^\pm W^\mp$ production in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Eur. Phys. J.* **C77**, 141 (2017).
608. Aad, G. *et al.* Performance of algorithms that reconstruct missing transverse momentum in $\sqrt{s} = 8$ TeV proton-proton collisions in the ATLAS detector. *Eur. Phys. J.* **C77**, 241 (2017).
609. Aaboud, M. *et al.* Measurement of W boson angular distributions in events with high transverse momentum jets at $\sqrt{s} = 8$ TeV using the ATLAS detector. *Phys. Lett.* **B765**, 132–153 (2017).
610. Aaboud, M. *et al.* Measurements of long-range azimuthal anisotropies and associated Fourier coefficients for pp collisions at $\sqrt{s} = 5.02$ and 13 TeV and p +Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV with the ATLAS detector. *Phys. Rev.* **C96**, 024908 (2017).
611. Aaboud, M. *et al.* Search for anomalous electroweak production of WW/WZ in association with a high-mass dijet system in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Phys. Rev.* **D95**, 032001 (2017).
612. Aaboud, M. *et al.* Search for dark matter in association with a Higgs boson decaying to b -quarks in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett.* **B765**, 11–31 (2017).
613. Aaboud, M. *et al.* Measurement of the inclusive cross-sections of single top-quark and top-antiquark t -channel production in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **04**, 086 (2017).
614. Aaboud, M. *et al.* Measurement of the $t\bar{t}Z$ and $t\bar{t}W$ production cross sections in multilepton final states using 3.2 fb^{-1} of pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J.* **C77**, 40 (2017).
615. Aaboud, M. *et al.* A measurement of the calorimeter response to single hadrons and determination of the jet energy scale uncertainty using LHC Run-1 pp -collision data with the ATLAS detector. *Eur. Phys. J.* **C77**, 26 (2017).
616. Aaboud, M. *et al.* Search for heavy resonances decaying to a Z boson and a photon in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett.* **B764**, 11–30 (2017).
617. Aaboud, M. *et al.* Search for new resonances decaying to a W or Z boson and a Higgs boson in the $\ell^+ \ell^- b\bar{b}$, $\ell \nu b\bar{b}$, and $\nu \bar{\nu} b\bar{b}$ channels with pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett.* **B765**, 32–52 (2017).
618. Aaboud, M. *et al.* Measurement of forward-backward multiplicity correlations in lead-lead, proton-lead, and proton-proton collisions with the ATLAS detector. *Phys. Rev.* **C95**, 064914 (2017).
619. Aaboud, M. *et al.* Measurement of the $t\bar{t}$ production cross-section using $e\mu$ events with b -tagged jets in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. *Phys. Lett.* **B761**. [Erratum: *Phys. Lett.* **B772**, 879(2017)], 136–157 (2016).
620. Aad, G. *et al.* Search for lepton-flavour-violating decays of the Higgs and Z bosons with the ATLAS detector. *Eur. Phys. J.* **C77**, 70 (2017).
621. Aad, G. *et al.* Topological cell clustering in the ATLAS calorimeters and its performance in LHC Run 1. *Eur. Phys. J.* **C77**, 490 (2017).

622. Aad, G. *et al.* Measurement of the charge asymmetry in top-quark pair production in the lepton-plus-jets final state in pp collision data at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Eur. Phys. J.* **C76**. [Erratum: *Eur. Phys. J.* C77,564(2017)], 87 (2016).
623. Aaboud, M. *et al.* A measurement of material in the ATLAS tracker using secondary hadronic interactions in 7 TeV pp collisions. *JINST* **11**, P11020 (2016).
624. Aaboud, M. *et al.* Luminosity determination in pp collisions at $\sqrt{s} = 8$ TeV using the ATLAS detector at the LHC. *Eur. Phys. J.* **C76**, 653 (2016).
625. Aaboud, M. *et al.* Measurement of W^+W^- production in association with one jet in proton-proton collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Phys. Lett.* **B763**, 114–133 (2016).
626. Aaboud, M. *et al.* Search for dark matter produced in association with a hadronically decaying vector boson in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett.* **B763**, 251–268 (2016).
627. Aaboud, M. *et al.* Study of hard double-parton scattering in four-jet events in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS experiment. *JHEP* **11**, 110 (2016).
628. Aaboud, M. *et al.* Search for Minimal Supersymmetric Standard Model Higgs bosons H/A and for a Z' boson in the $\tau\tau$ final state produced in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS Detector. *Eur. Phys. J.* **C76**, 585 (2016).
629. Aaboud, M. *et al.* Dark matter interpretations of ATLAS searches for the electroweak production of supersymmetric particles in $\sqrt{s} = 8$ TeV proton-proton collisions. *JHEP* **09**, 175 (2016).
630. Aaboud, M. *et al.* Measurement of the $b\bar{b}$ dijet cross section in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Eur. Phys. J.* **C76**, 670 (2016).
631. Aaboud, M. *et al.* Search for new phenomena in different-flavour high-mass dilepton final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J.* **C76**, 541 (2016).
632. Aaboud, M. *et al.* Measurement of the total cross section from elastic scattering in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Phys. Lett.* **B761**, 158–178 (2016).
633. Aaboud, M. *et al.* Search for squarks and gluinos in events with hadronically decaying tau leptons, jets and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV recorded with the ATLAS detector. *Eur. Phys. J.* **C76**, 683 (2016).
634. Aaboud, M. *et al.* Measurement of exclusive $\gamma\gamma \rightarrow W^+W^-$ production and search for exclusive Higgs boson production in pp collisions at $\sqrt{s} = 8$ TeV using the ATLAS detector. *Phys. Rev.* **D94**, 032011 (2016).
635. Aaboud, M. *et al.* Search for high-mass new phenomena in the dilepton final state using proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett.* **B761**, 372–392 (2016).
636. Aaboud, M. *et al.* Search for Higgs and Z Boson Decays to $\phi\gamma$ with the ATLAS Detector. *Phys. Rev. Lett.* **117**, 111802 (2016).
637. Aaboud, M. *et al.* Measurement of jet activity in top quark events using the $e\mu$ final state with two b -tagged jets in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *JHEP* **09**, 074 (2016).
638. Aaboud, M. *et al.* Search for supersymmetry in a final state containing two photons and missing transverse momentum in $\sqrt{s} = 13$ TeV pp collisions at the LHC using the ATLAS detector. *Eur. Phys. J.* **C76**, 517 (2016).
639. Aaboud, M. *et al.* Search for bottom squark pair production in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J.* **C76**, 547 (2016).
640. Aaboud, M. *et al.* Search for the Higgs boson produced in association with a W boson and decaying to four b -quarks via two spin-zero particles in pp collisions at 13 TeV with the ATLAS detector. *Eur. Phys. J.* **C76**, 605 (2016).
641. Aad, G. *et al.* The performance of the jet trigger for the ATLAS detector during 2011 data taking. *Eur. Phys. J.* **C76**, 526 (2016).
642. Aaboud, M. *et al.* Search for heavy long-lived charged R -hadrons with the ATLAS detector in 3.2 fb^{-1} of proton-proton collision data at $\sqrt{s} = 13$ TeV. *Phys. Lett.* **B760**, 647–665 (2016).

643. Aaboud, M. *et al.* Searches for heavy diboson resonances in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *JHEP* **09**, 173 (2016).
644. Aaboud, M. *et al.* Search for pair production of Higgs bosons in the $b\bar{b}b\bar{b}$ final state using proton–proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev.* **D94**, 052002 (2016).
645. Aaboud, M. *et al.* Measurement of the $W^{\pm}Z$ boson pair-production cross section in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS Detector. *Phys. Lett.* **B762**, 1–22 (2016).
646. Aaboud, M. *et al.* Search for new resonances in events with one lepton and missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Lett.* **B762**, 334–352 (2016).
647. Aaboud, M. *et al.* Search for top squarks in final states with one isolated lepton, jets, and missing transverse momentum in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. *Phys. Rev.* **D94**, 052009 (2016).
648. Aaboud, M. *et al.* Search for resonances in diphoton events at $\sqrt{s}=13$ TeV with the ATLAS detector. *JHEP* **09**, 001 (2016).
649. Aaboud, M. *et al.* Measurement of the Inelastic Proton-Proton Cross Section at $\sqrt{s} = 13$ TeV with the ATLAS Detector at the LHC. *Phys. Rev. Lett.* **117**, 182002 (2016).
650. Aad, G. *et al.* Measurements of the Higgs boson production and decay rates and constraints on its couplings from a combined ATLAS and CMS analysis of the LHC pp collision data at $\sqrt{s} = 7$ and 8 TeV. *JHEP* **08**, 045 (2016).
651. Aaboud, M. *et al.* Search for TeV-scale gravity signatures in high-mass final states with leptons and jets with the ATLAS detector at $\sqrt{s} = 13$ TeV. *Phys. Lett.* **B760**, 520–537 (2016).
652. Aaboud, M. *et al.* Search for the Standard Model Higgs boson produced by vector-boson fusion and decaying to bottom quarks in $\sqrt{s} = 8$ TeV pp collisions with the ATLAS detector. *JHEP* **11**, 112 (2016).
653. Aaboud, M. *et al.* Measurement of the top quark mass in the $t\bar{t} \rightarrow$ dilepton channel from $\sqrt{s} = 8$ TeV ATLAS data. *Phys. Lett.* **B761**, 350–371 (2016).
654. Aaboud, M. *et al.* Measurement of the photon identification efficiencies with the ATLAS detector using LHC Run-1 data. *Eur. Phys. J.* **C76**, 666 (2016).
655. Aad, G. *et al.* Measurement of the double-differential high-mass Drell-Yan cross section in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *JHEP* **08**, 009 (2016).
656. Aaboud, M. *et al.* Charged-particle distributions at low transverse momentum in $\sqrt{s} = 13$ TeV pp interactions measured with the ATLAS detector at the LHC. *Eur. Phys. J.* **C76**, 502 (2016).
657. Aad, G. *et al.* Measurement of the angular coefficients in Z -boson events using electron and muon pairs from data taken at $\sqrt{s} = 8$ TeV with the ATLAS detector. *JHEP* **08**, 159 (2016).
658. Aad, G. *et al.* Search for pair production of gluinos decaying via stop and sbottom in events with b -jets and large missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Phys. Rev.* **D94**, 032003 (2016).
659. Aaboud, M. *et al.* Measurement of the relative width difference of the B^0 - $\bar{B}^0$ system with the ATLAS detector. *JHEP* **06**, 081 (2016).
660. Aad, G. *et al.* Transverse momentum, rapidity, and centrality dependence of inclusive charged-particle production in $\sqrt{s_{NN}} = 5.02$ TeV $p + \text{Pb}$ collisions measured by the ATLAS experiment. *Phys. Lett.* **B763**, 313–336 (2016).
661. Aaboud, M. *et al.* Search for scalar leptoquarks in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS experiment. *New J. Phys.* **18**, 093016 (2016).
662. Aad, G. *et al.* Search for gluinos in events with an isolated lepton, jets and missing transverse momentum at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J.* **C76**, 565 (2016).
663. Aaboud, M. *et al.* Search for squarks and gluinos in final states with jets and missing transverse momentum at $\sqrt{s} = 13$ TeV with the ATLAS detector. *Eur. Phys. J.* **C76**, 392 (2016).
664. Aad, G. *et al.* Measurement of the inclusive isolated prompt photon cross section in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *JHEP* **08**, 005 (2016).

665. Aaboud, M. *et al.* Search for new phenomena in final states with an energetic jet and large missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV using the ATLAS detector. *Phys. Rev.* **D94**, 032005 (2016).
666. Aad, G. *et al.* Measurements of the charge asymmetry in top-quark pair production in the dilepton final state at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Phys. Rev.* **D94**, 032006 (2016).
667. Aad, G. *et al.* Measurements of $Z\gamma$ and $Z\gamma\gamma$ production in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Phys. Rev.* **D93**, 112002 (2016).
668. Aaboud, M. *et al.* Search for metastable heavy charged particles with large ionization energy loss in pp collisions at $\sqrt{s} = 13$ TeV using the ATLAS experiment. *Phys. Rev.* **D93**, 112015 (2016).
669. Aaboud, M. *et al.* Study of the rare decays of B_s^0 and B^0 into muon pairs from data collected during the LHC Run 1 with the ATLAS detector. *Eur. Phys. J.* **C76**, 513 (2016).
670. Aad, G. *et al.* Search for the Standard Model Higgs boson decaying into $b\bar{b}$ produced in association with top quarks decaying hadronically in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *JHEP* **05**, 160 (2016).
671. Aad, G. *et al.*
672. Aad, G. *et al.* Measurement of four-jet differential cross sections in $\sqrt{s} = 8$ TeV proton-proton collisions using the ATLAS detector. *JHEP* **12**, 105 (2015).
673. Aad, G. *et al.* Search for flavour-changing neutral current top quark decays $t \rightarrow Hq$ in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *JHEP* **12**, 061 (2015).
674. Aad, G. *et al.* Measurement of the $t\bar{t}W$ and $t\bar{t}Z$ production cross sections in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *JHEP* **11**, 172 (2015).
675. Aad, G. *et al.* Searches for Higgs boson pair production in the $hh \rightarrow b\bar{b}\tau\tau, \gamma\gamma WW^*, \gamma\gamma b\bar{b}, b\bar{b}b\bar{b}$ channels with the ATLAS detector. *Phys. Rev.* **D92**, 092004 (2015).
676. Aad, G. *et al.* Search for pair production of a new heavy quark that decays into a W boson and a light quark in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Phys. Rev.* **D92**, 112007 (2015).
677. Aad, G. *et al.* Constraints on new phenomena via Higgs boson couplings and invisible decays with the ATLAS detector. *JHEP* **11**, 206 (2015).
678. Aad, G. *et al.* Summary of the ATLAS experiment's sensitivity to supersymmetry after LHC Run 1 interpreted in the phenomenological MSSM. *JHEP* **10**, 134 (2015).
679. Aad, G. *et al.* Search for lepton-flavour-violating $H \rightarrow \mu\tau$ decays of the Higgs boson with the ATLAS detector. *JHEP* **11**, 211 (2015).
680. Aad, G. *et al.* Measurement of transverse energy-energy correlations in multi-jet events in pp collisions at $\sqrt{s} = 7$ TeV using the ATLAS detector and determination of the strong coupling constant $\alpha_s(m_Z)$. *Phys. Lett.* **B750**, 427–447 (2015).
681. Aad, G. *et al.* Determination of the ratio of b -quark fragmentation fractions f_s/f_d in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Rev. Lett.* **115**, 262001 (2015).
682. Aad, G. *et al.* Measurement of the branching ratio $\Gamma(\Lambda_b^0 \rightarrow \psi(2S)\Lambda^0)/\Gamma(\Lambda_b^0 \rightarrow J/\psi\Lambda^0)$ with the ATLAS detector. *Phys. Lett.* **B751**, 63–80 (2015).
683. Aad, G. *et al.* Z boson production in p +Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV measured with the ATLAS detector. *Phys. Rev.* **C92**, 044915 (2015).
684. Aad, G. *et al.* Summary of the searches for squarks and gluinos using $\sqrt{s} = 8$ TeV pp collisions with the ATLAS experiment at the LHC. *JHEP* **10**, 054 (2015).
685. Aad, G. *et al.* Search for photonic signatures of gauge-mediated supersymmetry in 8 TeV pp collisions with the ATLAS detector. *Phys. Rev.* **D92**, 072001 (2015).
686. Aad, G. *et al.* Determination of the top-quark pole mass using $t\bar{t} + 1$ -jet events collected with the ATLAS experiment in 7 TeV pp collisions. *JHEP* **10**, 121 (2015).

687. Aad, G. *et al.* Measurement of the production of neighbouring jets in lead-lead collisions at $\sqrt{s_{\text{NN}}} = 2.76\text{TeV}$ with the ATLAS detector. *Phys. Lett.* **B751**, 376–395 (2015).
688. Aad, G. *et al.* ATLAS Run 1 searches for direct pair production of third-generation squarks at the Large Hadron Collider. *Eur. Phys. J.* **C75**. [Erratum: *Eur. Phys. J.* C76,no.3,153(2016)], 510 (2015).
689. Aad, G. *et al.* Measurement of exclusive $\gamma\gamma \rightarrow \ell^+\ell^-$ production in proton-proton collisions at $\sqrt{s} = 7\text{TeV}$ with the ATLAS detector. *Phys. Lett.* **B749**, 242–261 (2015).
690. Aad, G. *et al.* Study of (W/Z)H production and Higgs boson couplings using $H \rightarrow WW^*$ decays with the ATLAS detector. *JHEP* **08**, 137 (2015).
691. Aad, G. *et al.* Search for heavy Majorana neutrinos with the ATLAS detector in pp collisions at $\sqrt{s} = 8\text{TeV}$. *JHEP* **07**, 162 (2015).
692. Aad, G. *et al.* Search for the associated production of the Higgs boson with a top quark pair in multilepton final states with the ATLAS detector. *Phys. Lett.* **B749**, 519–541 (2015).
693. Aad, G. *et al.* Study of the spin and parity of the Higgs boson in diboson decays with the ATLAS detector. *Eur. Phys. J.* **C75**. [Erratum: *Eur. Phys. J.* C76,no.3,152(2016)], 476 (2015).
694. Aad, G. *et al.* Measurement of colour flow with the jet pull angle in $t\bar{t}$ events using the ATLAS detector at $\sqrt{s} = 8\text{TeV}$. *Phys. Lett.* **B750**, 475–493 (2015).
695. Aad, G. *et al.* Modelling $Z \rightarrow \tau\tau$ processes in ATLAS with τ -embedded $Z \rightarrow \mu\mu$ data. *JINST* **10**, P09018 (2015).
696. Aad, G. *et al.* Search for metastable heavy charged particles with large ionisation energy loss in pp collisions at $\sqrt{s} = 8\text{TeV}$ using the ATLAS experiment. *Eur. Phys. J.* **C75**, 407 (2015).
697. Aad, G. *et al.* Measurements of the top quark branching ratios into channels with leptons and quarks with the ATLAS detector. *Phys. Rev.* **D92**, 072005 (2015).
698. Aad, G. *et al.* Search for type-III Seesaw heavy leptons in pp collisions at $\sqrt{s} = 8\text{TeV}$ with the ATLAS Detector. *Phys. Rev.* **D92**, 032001 (2015).
699. Aad, G. *et al.* Search for heavy lepton resonances decaying to a Z boson and a lepton in pp collisions at $\sqrt{s} = 8\text{TeV}$ with the ATLAS detector. *JHEP* **09**, 108 (2015).
700. Aad, G. *et al.* Search for Dark Matter in Events with Missing Transverse Momentum and a Higgs Boson Decaying to Two Photons in pp Collisions at $\sqrt{s} = 8\text{TeV}$ with the ATLAS Detector. *Phys. Rev. Lett.* **115**, 131801 (2015).
701. Aad, G. *et al.* Search for high-mass diboson resonances with boson-tagged jets in proton-proton collisions at $\sqrt{s} = 8\text{TeV}$ with the ATLAS detector. *JHEP* **12**, 055 (2015).
702. Aad, G. *et al.* Search for Higgs boson pair production in the $b\bar{b}b\bar{b}$ final state from pp collisions at $\sqrt{s} = 8\text{TeV}$ with the ATLAS detector. *Eur. Phys. J.* **C75**, 412 (2015).
703. Aad, G. *et al.* Measurement of differential J/ψ production cross sections and forward-backward ratios in p + Pb collisions with the ATLAS detector. *Phys. Rev.* **C92**, 034904 (2015).
704. Aad, G. *et al.* Search for new light gauge bosons in Higgs boson decays to four-lepton final states in pp collisions at $\sqrt{s} = 8\text{TeV}$ with the ATLAS detector at the LHC. *Phys. Rev.* **D92**, 092001 (2015).
705. Aad, G. *et al.* A search for $t\bar{t}$ resonances using lepton-plus-jets events in proton-proton collisions at $\sqrt{s} = 8\text{TeV}$ with the ATLAS detector. *JHEP* **08**, 148 (2015).
706. Aad, G. *et al.* Search for production of vector-like quark pairs and of four top quarks in the lepton-plus-jets final state in pp collisions at $\sqrt{s} = 8\text{TeV}$ with the ATLAS detector. *JHEP* **08**, 105 (2015).
707. Aad, G. *et al.* Search for Higgs bosons decaying to aa in the $\mu\mu\tau\tau$ final state in pp collisions at $\sqrt{s} = 8\text{TeV}$ with the ATLAS experiment. *Phys. Rev.* **D92**, 052002 (2015).
708. Aad, G. *et al.* Measurements of the Total and Differential Higgs Boson Production Cross Sections Combining the $H \rightarrow \gamma\gamma$ and $H \rightarrow ZZ^* \rightarrow 4l$ Decay Channels at $\sqrt{s}=8\text{TeV}$ with the ATLAS Detector. *Phys. Rev. Lett.* **115**, 091801 (2015).

709. Aad, G. *et al.* Search for high-mass diphoton resonances in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Phys. Rev.* **D92**, 032004 (2015).
710. Aad, G. *et al.* Search for massive, long-lived particles using multitrack displaced vertices or displaced lepton pairs in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Phys. Rev.* **D92**, 072004 (2015).
711. Aad, G. *et al.* Analysis of events with b -jets and a pair of leptons of the same charge in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *JHEP* **10**, 150 (2015).
712. Aad, G. *et al.* Measurement of charged-particle spectra in Pb+Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV with the ATLAS detector at the LHC. *JHEP* **09**, 050 (2015).
713. Aad, G. *et al.* Search for invisible decays of the Higgs boson produced in association with a hadronically decaying vector boson in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Eur. Phys. J.* **C75**, 337 (2015).
714. Aad, G. *et al.* Measurement of the top pair production cross section in 8 TeV proton-proton collisions using kinematic information in the lepton+jets final state with ATLAS. *Phys. Rev.* **D91**, 112013 (2015).
715. Aad, G. *et al.* Search for heavy long-lived multi-charged particles in pp collisions at $\sqrt{s} = 8$ TeV using the ATLAS detector. *Eur. Phys. J.* **C75**, 362 (2015).
716. Aad, G. *et al.* Search for long-lived, weakly interacting particles that decay to displaced hadronic jets in proton-proton collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Phys. Rev.* **D92**, 012010 (2015).
717. Aad, G. *et al.* Measurement of the correlation between flow harmonics of different order in lead-lead collisions at $\sqrt{s_{NN}} = 2.76$ TeV with the ATLAS detector. *Phys. Rev.* **C92**, 034903 (2015).
718. Aad, G. *et al.* Search for New Phenomena in Dijet Angular Distributions in Proton-Proton Collisions at $\sqrt{s} = 8$ TeV Measured with the ATLAS Detector. *Phys. Rev. Lett.* **114**, 221802 (2015).
719. Aad, G. *et al.* Search for low-scale gravity signatures in multi-jet final states with the ATLAS detector at $\sqrt{s} = 8$ TeV. *JHEP* **07**, 032 (2015).
720. Aad, G. *et al.* Search for a new resonance decaying to a W or Z boson and a Higgs boson in the $\ell\ell/\ell\nu/\nu\nu + b\bar{b}$ final states with the ATLAS detector. *Eur. Phys. J.* **C75**, 263 (2015).
721. Aad, G. *et al.* Combined Measurement of the Higgs Boson Mass in pp Collisions at $\sqrt{s} = 7$ and 8 TeV with the ATLAS and CMS Experiments. *Phys. Rev. Lett.* **114**, 191803 (2015).
722. Aad, G. *et al.* Measurement of the top quark mass in the $t\bar{t} \rightarrow$ lepton+jets and $t\bar{t} \rightarrow$ dilepton channels using $\sqrt{s} = 7$ TeV ATLAS data. *Eur. Phys. J.* **C75**, 330 (2015).
723. Aad, G. *et al.* Search for vector-like B quarks in events with one isolated lepton, missing transverse momentum and jets at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Phys. Rev.* **D91**, 112011 (2015).
724. Aad, G. *et al.* Search for the Standard Model Higgs boson produced in association with top quarks and decaying into $b\bar{b}$ in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Eur. Phys. J.* **C75**, 349 (2015).
725. Aad, G. *et al.* Search for production of WW/WZ resonances decaying to a lepton, neutrino and jets in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Eur. Phys. J.* **C75**. [Erratum: *Eur. Phys. J.* **C75**, 370(2015)], 209 (2015).
726. Aad, G. *et al.* Search for a Heavy Neutral Particle Decaying to $e\mu$, $e\tau$, or $\mu\tau$ in pp Collisions at $\sqrt{s} = 8$ TeV with the ATLAS Detector. *Phys. Rev. Lett.* **115**, 031801 (2015).
727. Aad, G. *et al.* Search for a Charged Higgs Boson Produced in the Vector-Boson Fusion Mode with Decay $H^{\pm} \rightarrow W^{\pm}Z$ using pp Collisions at $\sqrt{s} = 8$ TeV with the ATLAS Experiment. *Phys. Rev. Lett.* **114**, 231801 (2015).
728. Aad, G. *et al.* Measurement of the forward-backward asymmetry of electron and muon pair-production in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *JHEP* **09**, 049 (2015).
729. Aad, G. *et al.* Determination of spin and parity of the Higgs boson in the $WW^* \rightarrow e\nu\mu\nu$ decay channel with the ATLAS detector. *Eur. Phys. J.* **C75**, 231 (2015).
730. Aad, G. *et al.* Search for supersymmetry in events containing a same-flavour opposite-sign dilepton pair, jets, and large missing transverse momentum in $\sqrt{s} = 8$ TeV pp collisions with the ATLAS detector. *Eur. Phys. J.* **C75**. [Erratum: *Eur. Phys. J.* **C75**, no.10, 463(2015)], 318 (2015).

731. Aad, G. *et al.* Evidence of $W\gamma\gamma$ Production in pp Collisions at $\sqrt{s}=8$ TeV and Limits on Anomalous Quartic Gauge Couplings with the ATLAS Detector. *Phys. Rev. Lett.* **115**, 031802 (2015).
732. Aad, G. *et al.* Constraints on the off-shell Higgs boson signal strength in the high-mass ZZ and WW final states with the ATLAS detector. *Eur. Phys. J.* **C75**, 335 (2015).
733. Aad, G. *et al.* Two-particle Bose-Einstein correlations in pp collisions at $\sqrt{s} = 0.9$ and 7 TeV measured with the ATLAS detector. *Eur. Phys. J.* **C75**, 466 (2015).
734. Aad, G. *et al.* A search for high-mass resonances decaying to $\tau^+\tau^-$ in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *JHEP* **07**, 157 (2015).
735. Aad, G. *et al.* Differential top-antitop cross-section measurements as a function of observables constructed from final-state particles using pp collisions at $\sqrt{s} = 7$ TeV in the ATLAS detector. *JHEP* **06**, 100 (2015).
736. Aad, G. *et al.* Search for massive supersymmetric particles decaying to many jets using the ATLAS detector in pp collisions at $\sqrt{s} = 8$ TeV. *Phys. Rev.* **D91**. [Erratum: *Phys. Rev.*D93,no.3,039901(2016)], 112016 (2015).
737. Aad, G. *et al.* Search for a CP-odd Higgs boson decaying to Zh in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Phys. Lett.* **B744**, 163–183 (2015).
738. Aad, G. *et al.* Search for new phenomena in final states with an energetic jet and large missing transverse momentum in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Eur. Phys. J.* **C75**. [Erratum: *Eur. Phys. J.*C75,no.9,408(2015)], 299 (2015).
739. Aad, G. *et al.* Observation of top-quark pair production in association with a photon and measurement of the $t\bar{t}\gamma$ production cross section in pp collisions at $\sqrt{s} = 7$ TeV using the ATLAS detector. *Phys. Rev.* **D91**, 072007 (2015).
740. Aad, G. *et al.* Measurement of the charge asymmetry in dileptonic decays of top quark pairs in pp collisions at $\sqrt{s} = 7$ TeV using the ATLAS detector. *JHEP* **05**, 061 (2015).
741. Aad, G. *et al.* Search for direct pair production of a chargino and a neutralino decaying to the 125 GeV Higgs boson in $\sqrt{s} = 8$ TeV pp collisions with the ATLAS detector. *Eur. Phys. J.* **C75**, 208 (2015).
742. Aad, G. *et al.* Evidence for the Higgs-boson Yukawa coupling to tau leptons with the ATLAS detector. *JHEP* **04**, 117 (2015).
743. Aad, G. *et al.* Search for pair-produced long-lived neutral particles decaying in the ATLAS hadronic calorimeter in pp collisions at $\sqrt{s} = 8$ TeV. *Phys. Lett.* **B743**, 15–34 (2015).
744. Aad, G. *et al.* Search for squarks and gluinos in events with isolated leptons, jets and missing transverse momentum at $\sqrt{s} = 8$ TeV with the ATLAS detector. *JHEP* **04**, 116 (2015).
745. Aad, G. *et al.* Search for Higgs and Z Boson Decays to $J/\Psi\gamma$ and $\Upsilon(nS)\gamma$ with the ATLAS Detector. *Phys. Rev. Lett.* **114**, 121801 (2015).
746. Aad, G. *et al.* Search for Scalar Charm Quark Pair Production in pp Collisions at $\sqrt{s} = 8$ TeV with the ATLAS Detector. *Phys. Rev. Lett.* **114**, 161801 (2015).
747. Aad, G. *et al.* Identification and energy calibration of hadronically decaying tau leptons with the ATLAS experiment in pp collisions at $\sqrt{s}=8$ TeV. *Eur. Phys. J.* **C75**, 303 (2015).
748. Aad, G. *et al.* Search for charged Higgs bosons decaying via $H^\pm \rightarrow \tau^\pm\nu$ in fully hadronic final states using pp collision data at $\sqrt{s} = 8$ TeV with the ATLAS detector. *JHEP* **03**, 088 (2015).
749. Aad, G. *et al.* Observation and measurements of the production of prompt and non-prompt J/ψ mesons in association with a Z boson in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Eur. Phys. J.* **C75**, 229 (2015).
750. Aad, G. *et al.* Measurement of Spin Correlation in Top-Antitop Quark Events and Search for Top Squark Pair Production in pp Collisions at $\sqrt{s} = 8$ TeV Using the ATLAS Detector. *Phys. Rev. Lett.* **114**, 142001 (2015).
751. Aad, G. *et al.* Centrality and rapidity dependence of inclusive jet production in $\sqrt{s_{NN}} = 5.02$ TeV proton-lead collisions with the ATLAS detector. *Phys. Lett.* **B748**, 392–413 (2015).

752. Aad, G. *et al.* Observation and measurement of Higgs boson decays to WW^* with the ATLAS detector. *Phys. Rev.* **D92**, 012006 (2015).
753. Aad, G. *et al.* Measurement of the transverse polarization of Λ and $\bar{\Lambda}$ hyperons produced in proton-proton collisions at $\sqrt{s} = 7$ TeV using the ATLAS detector. *Phys. Rev.* **D91**, 032004 (2015).
754. Aad, G. *et al.* Search for anomalous production of prompt same-sign lepton pairs and pair-produced doubly charged Higgs bosons with $\sqrt{s} = 8$ TeV pp collisions using the ATLAS detector. *JHEP* **03**, 041 (2015).
755. Aad, G. *et al.* Searches for heavy long-lived charged particles with the ATLAS detector in proton-proton collisions at $\sqrt{s} = 8$ TeV. *JHEP* **01**, 068 (2015).
756. Aad, G. *et al.* Search for new phenomena in events with three or more charged leptons in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *JHEP* **08**, 138 (2015).
757. Aad, G. *et al.* Measurements of the Nuclear Modification Factor for Jets in Pb+Pb Collisions at $\sqrt{s_{NN}} = 2.76$ TeV with the ATLAS Detector. *Phys. Rev. Lett.* **114**, 072302 (2015).
758. Aad, G. *et al.* Measurement of three-jet production cross-sections in pp collisions at 7 TeV centre-of-mass energy using the ATLAS detector. *Eur. Phys. J.* **C75**, 228 (2015).
759. Aad, G. *et al.* Search for new phenomena in events with a photon and missing transverse momentum in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Phys. Rev.* **D91**. [Erratum: *Phys. Rev.* **D92**, no.5, 059903(2015)], 012008 (2015).
760. Aad, G. *et al.* Measurement of the inclusive jet cross-section in proton-proton collisions at $\sqrt{s} = 7$ TeV using 4.5 fb^{-1} of data with the ATLAS detector. *JHEP* **02**. [Erratum: *JHEP* **09**, 141(2015)], 153 (2015).
761. Aad, G. *et al.* Measurement of the $WW + WZ$ cross section and limits on anomalous triple gauge couplings using final states with one lepton, missing transverse momentum, and two jets with the ATLAS detector at $\sqrt{s} = 7$ TeV. *JHEP* **01**, 049 (2015).
762. Aad, G. *et al.* Search for invisible particles produced in association with single-top-quarks in proton-proton collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Eur. Phys. J.* **C75**, 79 (2015).
763. Aad, G. *et al.* Search for the X_b and other hidden-beauty states in the $\pi^+\pi^-\Upsilon(1S)$ channel at ATLAS. *Phys. Lett.* **B740**, 199–217 (2015).
764. Aad, G. *et al.* Search for $W' \rightarrow t\bar{b}$ in the lepton plus jets final state in proton-proton collisions at a centre-of-mass energy of $\sqrt{s} = 8$ TeV with the ATLAS detector. *Phys. Lett.* **B743**, 235–255 (2015).
765. Aad, G. *et al.* Search for dark matter in events with heavy quarks and missing transverse momentum in pp collisions with the ATLAS detector. *Eur. Phys. J.* **C75**, 92 (2015).
766. Aad, G. *et al.* Search for s -channel single top-quark production in proton-proton collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Phys. Lett.* **B740**, 118–136 (2015).
767. Aad, G. *et al.* Measurements of the W production cross sections in association with jets with the ATLAS detector. *Eur. Phys. J.* **C75**, 82 (2015).
768. Aad, G. *et al.* Search for the $b\bar{b}$ decay of the Standard Model Higgs boson in associated $(W/Z)H$ production with the ATLAS detector. *JHEP* **01**, 069 (2015).
769. Aad, G. *et al.* Search for resonant diboson production in the $\ell\ell q\bar{q}$ final state in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Eur. Phys. J.* **C75**, 69 (2015).
770. Aad, G. *et al.* Search for $H \rightarrow \gamma\gamma$ produced in association with top quarks and constraints on the Yukawa coupling between the top quark and the Higgs boson using data taken at 7 TeV and 8 TeV with the ATLAS detector. *Phys. Lett.* **B740**, 222–242 (2015).
771. Aad, G. *et al.* Measurement of the top-quark mass in the fully hadronic decay channel from ATLAS data at $\sqrt{s} = 7$ TeV. *Eur. Phys. J.* **C75**, 158 (2015).
772. Aad, G. *et al.* Measurements of Higgs boson production and couplings in the four-lepton channel in pp collisions at center-of-mass energies of 7 and 8 TeV with the ATLAS detector. *Phys. Rev.* **D91**, 012006 (2015).
773. Aad, G. *et al.* Measurement of the production and lepton charge asymmetry of W bosons in Pb+Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV with the ATLAS detector. *Eur. Phys. J.* **C75**, 23 (2015).

774. Aad, G. *et al.* Performance of the ATLAS muon trigger in pp collisions at $\sqrt{s} = 8$ TeV. *Eur. Phys. J.* **C75**, 120 (2015).
775. Aad, G. *et al.* Search for $W' \rightarrow tb \rightarrow qqbb$ decays in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Eur. Phys. J.* **C75**, 165 (2015).
776. Aad, G. *et al.* Search for new phenomena in the dijet mass distribution using $p-p$ collision data at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Phys. Rev.* **D91**, 052007 (2015).
777. Aad, G. *et al.* Measurement of the $t\bar{t}$ production cross-section as a function of jet multiplicity and jet transverse momentum in 7 TeV proton-proton collisions with the ATLAS detector. *JHEP* **01**, 020 (2015).
778. Aad, G. *et al.* Simultaneous measurements of the $t\bar{t}$, W^+W^- , and $Z/\gamma^* \rightarrow \tau\tau$ production cross-sections in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Rev.* **D91**, 052005 (2015).
779. Aad, G. *et al.* Search For Higgs Boson Pair Production in the $\gamma\gamma b\bar{b}$ Final State using pp Collision Data at $\sqrt{s} = 8$ TeV from the ATLAS Detector. *Phys. Rev. Lett.* **114**, 081802 (2015).
780. Aad, G. *et al.* Jet energy measurement and its systematic uncertainty in proton-proton collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Eur. Phys. J.* **C75**, 17 (2015).
781. Newman, J. A. *et al.* Spectroscopic needs for imaging dark energy experiments. *Astropart. Phys.* **63**. [Erratum: *Astropart. Phys.* 65,112(2015)], 81–100 (2015).
782. Aad, G. *et al.* Measurements of $W\gamma$ and $Z\gamma$ production in pp collisions at $\sqrt{s}=7$ TeV with the ATLAS detector at the LHC. *Phys. Rev.* **D87**. [Erratum: *Phys. Rev.* D91,no.11,119901(2015)], 112003 (2013).
783. Aad, G. *et al.* Search for neutral Higgs bosons of the minimal supersymmetric standard model in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *JHEP* **11**, 056 (2014).
784. Aad, G. *et al.* Search for nonpointing and delayed photons in the diphoton and missing transverse momentum final state in 8 TeV pp collisions at the LHC using the ATLAS detector. *Phys. Rev.* **D90**, 112005 (2014).
785. Aad, G. *et al.* Search for pair and single production of new heavy quarks that decay to a Z boson and a third-generation quark in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *JHEP* **11**, 104 (2014).
786. Aad, G. *et al.* Measurement of distributions sensitive to the underlying event in inclusive Z-boson production in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Eur. Phys. J.* **C74**, 3195 (2014).
787. Aad, G. *et al.* Measurement of long-range pseudorapidity correlations and azimuthal harmonics in $\sqrt{s_{NN}} = 5.02$ TeV proton-lead collisions with the ATLAS detector. *Phys. Rev.* **C90**, 044906 (2014).
788. Aad, G. *et al.* Search for long-lived neutral particles decaying into lepton jets in proton-proton collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *JHEP* **11**, 088 (2014).
789. Aad, G. *et al.* Measurement of Higgs boson production in the diphoton decay channel in pp collisions at center-of-mass energies of 7 and 8 TeV with the ATLAS detector. *Phys. Rev.* **D90**, 112015 (2014).
790. Aad, G. *et al.* A measurement of the ratio of the production cross sections for W and Z bosons in association with jets with the ATLAS detector. *Eur. Phys. J.* **C74**, 3168 (2014).
791. Aad, G. *et al.* Measurement of the total cross section from elastic scattering in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Nucl. Phys.* **B889**, 486–548 (2014).
792. Aad, G. *et al.* Search for the lepton flavor violating decay $Z \rightarrow e\mu$ in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Phys. Rev.* **D90**, 072010 (2014).
793. Aad, G. *et al.* Measurement of flow harmonics with multi-particle cumulants in Pb+Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV with the ATLAS detector. *Eur. Phys. J.* **C74**, 3157 (2014).
794. Aad, G. *et al.* Fiducial and differential cross sections of Higgs boson production measured in the four-lepton decay channel in pp collisions at $\sqrt{s}=8$ TeV with the ATLAS detector. *Phys. Lett.* **B738**, 234–253 (2014).
795. Aad, G. *et al.* Search for new resonances in $W\gamma$ and $Z\gamma$ final states in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Phys. Lett.* **B738**, 428–447 (2014).

796. Aad, G. *et al.* Search for new particles in events with one lepton and missing transverse momentum in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *JHEP* **09**, 037 (2014).
797. Aad, G. *et al.* Search for Scalar Diphoton Resonances in the Mass Range 65 – 600 GeV with the ATLAS Detector in pp Collision Data at $\sqrt{s} = 8$ TeV. *Phys. Rev. Lett.* **113**, 171801 (2014).
798. Aad, G. *et al.* Measurements of jet vetoes and azimuthal decorrelations in dijet events produced in pp collisions at $\sqrt{s} = 7$ TeV using the ATLAS detector. *Eur. Phys. J.* **C74**, 3117 (2014).
799. Aad, G. *et al.* Measurement of the production cross-section of $\psi(2S) \rightarrow J/\psi(\rightarrow \mu^+\mu^-)\pi^+\pi^-$ in pp collisions at $\sqrt{s} = 7$ TeV at ATLAS. *JHEP* **09**, 079 (2014).
800. Aad, G. *et al.* Electron and photon energy calibration with the ATLAS detector using LHC Run 1 data. *Eur. Phys. J.* **C74**, 3071 (2014).
801. Aad, G. *et al.* Measurements of spin correlation in top-antitop quark events from proton-proton collisions at $\sqrt{s} = 7$ TeV using the ATLAS detector. *Phys. Rev.* **D90**, 112016 (2014).
802. Aad, G. *et al.* Measurements of fiducial and differential cross sections for Higgs boson production in the diphoton decay channel at $\sqrt{s} = 8$ TeV with ATLAS. *JHEP* **09**, 112 (2014).
803. Aad, G. *et al.* Measurement of the muon reconstruction performance of the ATLAS detector using 2011 and 2012 LHC proton-proton collision data. *Eur. Phys. J.* **C74**, 3130 (2014).
804. Aad, G. *et al.* Measurement of differential production cross-sections for a Z boson in association with b -jets in 7 TeV proton-proton collisions with the ATLAS detector. *JHEP* **10**, 141 (2014).
805. Aad, G. *et al.* Search for contact interactions and large extra dimensions in the dilepton channel using proton-proton collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Eur. Phys. J.* **C74**, 3134 (2014).
806. Aad, G. *et al.* Flavor tagged time-dependent angular analysis of the $B_s \rightarrow J/\psi\phi$ decay and extraction of $\Delta\Gamma$ s and the weak phase ϕ_s in ATLAS. *Phys. Rev.* **D90**, 052007 (2014).
807. Aad, G. *et al.* Observation of an Excited $B_c^\pm$ Meson State with the ATLAS Detector. *Phys. Rev. Lett.* **113**, 212004 (2014).
808. Aad, G. *et al.* Measurement of the cross-section of high transverse momentum vector bosons reconstructed as single jets and studies of jet substructure in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *New J. Phys.* **16**, 113013 (2014).
809. Aad, G. *et al.* Search for pair-produced third-generation squarks decaying via charm quarks or in compressed supersymmetric scenarios in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Phys. Rev.* **D90**, 052008 (2014).
810. Aad, G. *et al.* Search for supersymmetry in events with large missing transverse momentum, jets, and at least one tau lepton in 20 fb⁻¹ of $\sqrt{s} = 8$ TeV proton-proton collision data with the ATLAS detector. *JHEP* **09**, 103 (2014).
811. Aad, G. *et al.* Search for strong production of supersymmetric particles in final states with missing transverse momentum and at least three b -jets at $\sqrt{s} = 8$ TeV proton-proton collisions with the ATLAS detector. *JHEP* **10**, 024 (2014).
812. Aad, G. *et al.* Search for top squark pair production in final states with one isolated lepton, jets, and missing transverse momentum in $\sqrt{s} = 8$ TeV pp collisions with the ATLAS detector. *JHEP* **11**, 118 (2014).
813. Aad, G. *et al.* Measurements of normalized differential cross sections for $t\bar{t}$ production in pp collisions at $\sqrt{s} = 7$ TeV using the ATLAS detector. *Phys. Rev.* **D90**, 072004 (2014).
814. Aad, G. *et al.* Search for the direct production of charginos, neutralinos and staus in final states with at least two hadronically decaying taus and missing transverse momentum in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *JHEP* **10**, 096 (2014).
815. Aad, G. *et al.* Comprehensive measurements of t -channel single top-quark production cross sections at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Rev.* **D90**, 112006 (2014).
816. Aad, G. *et al.* A neural network clustering algorithm for the ATLAS silicon pixel detector. *JINST* **9**, P09009 (2014).

817. Aad, G. *et al.* Search for the Standard Model Higgs boson decay to $\mu^+\mu^-$ with the ATLAS detector. *Phys. Lett.* **B738**, 68–86 (2014).
818. Aad, G. *et al.* Measurement of the $t\bar{t}$ production cross-section using $e\mu$ events with b-tagged jets in pp collisions at $\sqrt{s} = 7$ and 8 TeV with the ATLAS detector. *Eur. Phys. J.* **C74**. [Addendum: *Eur. Phys. J.* **C76**, no.11, 642(2016)], 3109 (2014).
819. Aad, G. *et al.* Search for WZ resonances in the fully leptonic channel using pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Phys. Lett.* **B737**, 223–243 (2014).
820. Aad, G. *et al.* Measurement of the Higgs boson mass from the $H \rightarrow \gamma\gamma$ and $H \rightarrow ZZ^* \rightarrow 4\ell$ channels with the ATLAS detector using 25 fb^{-1} of pp collision data. *Phys. Rev.* **D90**, 052004 (2014).
821. Aad, G. *et al.* Measurement of the Z/γ^* boson transverse momentum distribution in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *JHEP* **09**, 145 (2014).
822. Aad, G. *et al.* Measurement of inclusive jet charged-particle fragmentation functions in Pb+Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV with the ATLAS detector. *Phys. Lett.* **B739**, 320–342 (2014).
823. Aad, G. *et al.* Search for direct pair production of the top squark in all-hadronic final states in proton-proton collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *JHEP* **09**, 015 (2014).
824. Aad, G. *et al.* Measurement of the underlying event in jet events from 7 TeV proton-proton collisions with the ATLAS detector. *Eur. Phys. J.* **C74**, 2965 (2014).
825. Aad, G. *et al.* Search for squarks and gluinos with the ATLAS detector in final states with jets and missing transverse momentum using $\sqrt{s} = 8$ TeV proton–proton collision data. *JHEP* **09**, 176 (2014).
826. Aad, G. *et al.* Light-quark and gluon jet discrimination in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Eur. Phys. J.* **C74**, 3023 (2014).
827. Aad, G. *et al.* Evidence for Electroweak Production of $W^\pm W^\pm jj$ in pp Collisions at $\sqrt{s} = 8$ TeV with the ATLAS Detector. *Phys. Rev. Lett.* **113**, 141803 (2014).
828. Aad, G. *et al.* Search for supersymmetry in events with four or more leptons in $\sqrt{s} = 8$ TeV pp collisions with the ATLAS detector. *Phys. Rev.* **D90**, 052001 (2014).
829. Aad, G. *et al.* Search for microscopic black holes and string balls in final states with leptons and jets with the ATLAS detector at $\sqrt{s} = 8$ TeV. *JHEP* **08**, 103 (2014).
830. Aad, G. *et al.* Search for high-mass dilepton resonances in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Phys. Rev.* **D90**, 052005 (2014).
831. Aad, G. *et al.* Measurement of the centrality and pseudorapidity dependence of the integrated elliptic flow in lead-lead collisions at $\sqrt{s_{NN}} = 2.76$ TeV with the ATLAS detector. *Eur. Phys. J.* **C74**, 2982 (2014).
832. Aad, G. *et al.* Monitoring and data quality assessment of the ATLAS liquid argon calorimeter. *JINST* **9**, P07024 (2014).
833. Aad, G. *et al.* Operation and performance of the ATLAS semiconductor tracker. *JINST* **9**, P08009 (2014).
834. Aad, G. *et al.* Measurement of the cross section of high transverse momentum $Z \rightarrow b\bar{b}$ production in proton–proton collisions at $\sqrt{s} = 8 \text{ TeV}$ with the ATLAS Detector. *Phys. Lett.* **B738**, 25–43 (2014).
835. Aad, G. *et al.* Measurement of χ_{c1} and χ_{c2} production with $\sqrt{s} = 7$ TeV pp collisions at ATLAS. *JHEP* **07**, 154 (2014).
836. Aad, G. *et al.* Muon reconstruction efficiency and momentum resolution of the ATLAS experiment in proton-proton collisions at $\sqrt{s} = 7$ TeV in 2010. *Eur. Phys. J.* **C74**, 3034 (2014).
837. Aad, G. *et al.* Search for supersymmetry at $\sqrt{s} = 8$ TeV in final states with jets and two same-sign leptons or three leptons with the ATLAS detector. *JHEP* **06**, 035 (2014).
838. Aad, G. *et al.* Electron reconstruction and identification efficiency measurements with the ATLAS detector using the 2011 LHC proton-proton collision data. *Eur. Phys. J.* **C74**, 2941 (2014).
839. Aad, G. *et al.* Measurement of the low-mass Drell-Yan differential cross section at $\sqrt{s} = 7$ TeV using the ATLAS detector. *JHEP* **06**, 112 (2014).

840. Aad, G. *et al.* Measurement of the parity-violating asymmetry parameter α_b and the helicity amplitudes for the decay $\Lambda_b^0 \rightarrow J/\psi + \Lambda^0$ with the ATLAS detector. *Phys. Rev.* **D89**, 092009 (2014).
841. Aad, G. *et al.* Search for dark matter in events with a Z boson and missing transverse momentum in pp collisions at $\sqrt{s}=8$ TeV with the ATLAS detector. *Phys. Rev.* **D90**, 012004 (2014).
842. Aad, G. *et al.* Search for top quark decays $t \rightarrow qH$ with $H \rightarrow \gamma\gamma$ using the ATLAS detector. *JHEP* **06**, 008 (2014).
843. Aad, G. *et al.* Measurements of Four-Lepton Production at the Z Resonance in pp Collisions at $\sqrt{s}=7$ and 8 TeV with ATLAS. *Phys. Rev. Lett.* **112**, 231806 (2014).
844. Aad, G. *et al.* Search for direct production of charginos, neutralinos and sleptons in final states with two leptons and missing transverse momentum in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *JHEP* **05**, 071 (2014).
845. Aad, G. *et al.* Search for direct top squark pair production in events with a Z boson, b-jets and missing transverse momentum in $\sqrt{s}=8$ TeV pp collisions with the ATLAS detector. *Eur. Phys. J.* **C74**, 2883 (2014).
846. Aad, G. *et al.* Search for direct top-squark pair production in final states with two leptons in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *JHEP* **06**, 124 (2014).
847. Aad, G. *et al.* Measurement of event-plane correlations in $\sqrt{s_{NN}} = 2.76$ TeV lead-lead collisions with the ATLAS detector. *Phys. Rev.* **C90**, 024905 (2014).
848. Aad, G. *et al.* Search for direct production of charginos and neutralinos in events with three leptons and missing transverse momentum in $\sqrt{s} = 8$ TeV pp collisions with the ATLAS detector. *JHEP* **04**, 169 (2014).
849. Aad, G. *et al.* Measurement of the production of a W boson in association with a charm quark in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *JHEP* **05**, 068 (2014).
850. Aad, G. *et al.* The differential production cross section of the ϕ (1020) meson in $\sqrt{s} = 7$ TeV pp collisions measured with the ATLAS detector. *Eur. Phys. J.* **C74**, 2895 (2014).
851. Aad, G. *et al.* Search for Invisible Decays of a Higgs Boson Produced in Association with a Z Boson in ATLAS. *Phys. Rev. Lett.* **112**, 201802 (2014).
852. Aad, G. *et al.* Search for Higgs boson decays to a photon and a Z boson in pp collisions at $\sqrt{s}=7$ and 8 TeV with the ATLAS detector. *Phys. Lett.* **B732**, 8–27 (2014).
853. Aad, G. *et al.* Measurement of the electroweak production of dijets in association with a Z-boson and distributions sensitive to vector boson fusion in proton-proton collisions at $\sqrt{s} = 8$ TeV using the ATLAS detector. *JHEP* **04**, 031 (2014).
854. Aad, G. *et al.* Measurement of the production cross section of prompt J/ψ mesons in association with a $W^\pm$ boson in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *JHEP* **04**, 172 (2014).
855. Aad, G. *et al.* Measurement of dijet cross sections in pp collisions at 7 TeV centre-of-mass energy using the ATLAS detector. *JHEP* **05**, 059 (2014).
856. Aad, G. *et al.* Search for a multi-Higgs-boson cascade in $W^+W^-b\bar{b}$ events with the ATLAS detector in pp collisions at $\sqrt{s} = 8$ TeV. *Phys. Rev.* **D89**, 032002 (2014).
857. Aad, G. *et al.* Standalone vertex finding in the ATLAS muon spectrometer. *JINST* **9**, P02001 (2014).
858. Aad, G. *et al.* Measurement of the top quark pair production charge asymmetry in proton-proton collisions at $\sqrt{s} = 7$ TeV using the ATLAS detector. *JHEP* **02**, 107 (2014).
859. Aad, G. *et al.* Search for Quantum Black Hole Production in High-Invariant-Mass Lepton+Jet Final States Using pp Collisions at $\sqrt{s} = 8$ TeV and the ATLAS Detector. *Phys. Rev. Lett.* **112**, 091804 (2014).
860. Aad, G. *et al.* Measurement of the inclusive isolated prompt photons cross section in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector using 4.6 fb^{-1} . *Phys. Rev.* **D89**, 052004 (2014).
861. Aad, G. *et al.* Measurement of the mass difference between top and anti-top quarks in pp collisions at $\sqrt{s} = 7$ TeV using the ATLAS detector. *Phys. Lett.* **B728**, 363–379 (2014).

862. Aad, G. *et al.* Search for dark matter in events with a hadronically decaying W or Z boson and missing transverse momentum in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Phys. Rev. Lett.* **112**, 041802 (2014).
863. Aad, G. *et al.* Search for new phenomena in photon+jet events collected in proton-proton collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *Phys. Lett.* **B728**, 562–578 (2014).
864. Aad, G. *et al.* Search for new phenomena in final states with large jet multiplicities and missing transverse momentum at $\sqrt{s}=8$ TeV proton-proton collisions using the ATLAS experiment. *JHEP* **10**. [Erratum: JHEP01,109(2014)], 130 (2013).
865. Aad, G. *et al.* Measurements of Higgs boson production and couplings in diboson final states with the ATLAS detector at the LHC. *Phys. Lett.* **B726**. [Erratum: Phys. Lett.B734,406(2014)], 88–119 (2013).
866. Aad, G. *et al.* Study of heavy-flavor quarks produced in association with top-quark pairs at $\sqrt{s} = 7$ TeV using the ATLAS detector. *Phys. Rev.* **D89**, 072012 (2014).
867. Aad, G. *et al.* Search for long-lived stopped R-hadrons decaying out-of-time with pp collisions using the ATLAS detector. *Phys. Rev.* **D88**, 112003 (2013).
868. Aad, G. *et al.* Search for charginos nearly mass degenerate with the lightest neutralino based on a disappearing-track signature in pp collisions at $\sqrt{s}=8$ TeV with the ATLAS detector. *Phys. Rev.* **D88**, 112006 (2013).
869. Aad, G. *et al.* Search for microscopic black holes in a like-sign dimuon final state using large track multiplicity with the ATLAS detector. *Phys. Rev.* **D88**, 072001 (2013).
870. Aad, G. *et al.* Search for direct third-generation squark pair production in final states with missing transverse momentum and two b -jets in $\sqrt{s} = 8$ TeV pp collisions with the ATLAS detector. *JHEP* **10**, 189 (2013).
871. Aad, G. *et al.* Search for excited electrons and muons in $\sqrt{s}=8$ TeV proton-proton collisions with the ATLAS detector. *New J. Phys.* **15**, 093011 (2013).
872. Aad, G. *et al.* Dynamics of isolated-photon plus jet production in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Nucl. Phys.* **B875**, 483–535 (2013).
873. Aad, G. *et al.* Measurement of Top Quark Polarization in Top-Antitop Events from Proton-Proton Collisions at $\sqrt{s} = 7$ TeV Using the ATLAS Detector. *Phys. Rev. Lett.* **111**, 232002 (2013).
874. Aad, G. *et al.* Measurement of jet shapes in top-quark pair events at $\sqrt{s} = 7$ TeV using the ATLAS detector. *Eur. Phys. J.* **C73**, 2676 (2013).
875. Aad, G. *et al.* Measurement of the top quark charge in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *JHEP* **11**, 031 (2013).
876. Aad, G. *et al.* Evidence for the spin-0 nature of the Higgs boson using ATLAS data. *Phys. Lett.* **B726**, 120–144 (2013).
877. Aad, G. *et al.* Measurement of the differential cross-section of B^+ meson production in pp collisions at $\sqrt{s} = 7$ TeV at ATLAS. *JHEP* **10**, 042 (2013).
878. Aad, G. *et al.* Measurement of the Azimuthal Angle Dependence of Inclusive Jet Yields in Pb+Pb Collisions at $\sqrt{s_{NN}} = 2.76$ TeV with the ATLAS detector. *Phys. Rev. Lett.* **111**, 152301 (2013).
879. Aad, G. *et al.* Performance of jet substructure techniques for large- R jets in proton-proton collisions at $\sqrt{s} = 7$ TeV using the ATLAS detector. *JHEP* **09**, 076 (2013).
880. Aad, G. *et al.* Measurement of the high-mass Drell-Yan differential cross-section in pp collisions at $\sqrt{s}=7$ TeV with the ATLAS detector. *Phys. Lett.* **B725**, 223–242 (2013).
881. Aad, G. *et al.* Measurement of the distributions of event-by-event flow harmonics in lead-lead collisions at $\sqrt{s}=2.76$ TeV with the ATLAS detector at the LHC. *JHEP* **11**, 183 (2013).
882. Aad, G. *et al.* Search for $t\bar{t}$ resonances in the lepton plus jets final state with ATLAS using 4.7 fb^{-1} of pp collisions at $\sqrt{s} = 7$ TeV. *Phys. Rev.* **D88**, 012004 (2013).
883. Aad, G. *et al.* Triggers for displaced decays of long-lived neutral particles in the ATLAS detector. *JINST* **8**, P07015 (2013).

884. Aad, G. *et al.* Search for resonant diboson production in the $WW/WZ \rightarrow l\nu jj$ decay channels with the ATLAS detector at $\sqrt{s} = 7$ TeV. *Phys. Rev.* **D87**, 112006 (2013).
885. Aad, G. *et al.* Measurement of the production cross section of jets in association with a Z boson in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *JHEP* **07**, 032 (2013).
886. Aad, G. *et al.* Search for nonpointing photons in the diphoton and E_T^{miss} final state in $\sqrt{s}=7$ TeV proton-proton collisions using the ATLAS detector. *Phys. Rev.* **D88**, 012001 (2013).
887. Aad, G. *et al.* Measurement of the inclusive jet cross section in pp collisions at $\sqrt{s}=2.76$ TeV and comparison to the inclusive jet cross section at $\sqrt{s}=7$ TeV using the ATLAS detector. *Eur. Phys. J.* **C73**, 2509 (2013).
888. Aad, G. *et al.* Measurement with the ATLAS detector of multi-particle azimuthal correlations in p+Pb collisions at $\sqrt{s_{NN}}=5.02$ TeV. *Phys. Lett.* **B725**, 60–78 (2013).
889. Aad, G. *et al.* Search for third generation scalar leptoquarks in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *JHEP* **06**, 033 (2013).
890. Aad, G. *et al.* Characterisation and mitigation of beam-induced backgrounds observed in the ATLAS detector during the 2011 proton-proton run. *JINST* **8**, P07004 (2013).
891. Aad, G. *et al.* Search for WH production with a light Higgs boson decaying to prompt electron-jets in proton-proton collisions at $\sqrt{s}=7$ TeV with the ATLAS detector. *New J. Phys.* **15**, 043009 (2013).
892. Aad, G. *et al.* Improved luminosity determination in pp collisions at $\sqrt{s} = 7$ TeV using the ATLAS detector at the LHC. *Eur. Phys. J.* **C73**, 2518 (2013).
893. Aad, G. *et al.* Search for a light charged Higgs boson in the decay channel $H^+ \rightarrow c\bar{s}$ in $t\bar{t}$ events using pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Eur. Phys. J.* **C73**, 2465 (2013).
894. Aad, G. *et al.* Measurement of the cross-section for W boson production in association with b-jets in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *JHEP* **06**, 084 (2013).
895. Aad, G. *et al.* Measurement of kT splitting scales in $W\text{-}\ell\nu$ events at $\sqrt{s}=7$ TeV with the ATLAS detector. *Eur. Phys. J.* **C73**, 2432 (2013).
896. Aad, G. *et al.* Measurement of hard double-parton interactions in $W(\rightarrow l\nu)+2$ jet events at $\sqrt{s}=7$ TeV with the ATLAS detector. *New J. Phys.* **15**, 033038 (2013).
897. Aad, G. *et al.* Search for long-lived, multi-charged particles in pp collisions at $\sqrt{s}=7$ TeV using the ATLAS detector. *Phys. Lett.* **B722**, 305–323 (2013).
898. Aad, G. *et al.* Search for single b^* -quark production with the ATLAS detector at $\sqrt{s} = 7$ TeV. *Phys. Lett.* **B721**, 171–189 (2013).
899. Aad, G. *et al.* Multi-channel search for squarks and gluinos in $\sqrt{s} = 7$ TeV pp collisions with the ATLAS detector. *Eur. Phys. J.* **C73**, 2362 (2013).
900. Aad, G. *et al.* A search for prompt lepton-jets in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Lett.* **B719**, 299–317 (2013).
901. Aad, G. *et al.* Observation of Associated Near-Side and Away-Side Long-Range Correlations in $\sqrt{s_{NN}}=5.02$ TeV Proton-Lead Collisions with the ATLAS Detector. *Phys. Rev. Lett.* **110**, 182302 (2013).
902. Aad, G. *et al.* Search for charged Higgs bosons through the violation of lepton universality in $t\bar{t}$ events using pp collision data at $\sqrt{s} = 7$ TeV with the ATLAS experiment. *JHEP* **03**, 076 (2013).
903. Aad, G. *et al.* Search for a heavy narrow resonance decaying to $e\mu$, $e\tau$, or $\mu\tau$ with the ATLAS detector in $\sqrt{s} = 7$ TeV pp collisions at the LHC. *Phys. Lett.* **B723**, 15–32 (2013).
904. Aad, G. *et al.* Measurement of Upsilon production in 7 TeV pp collisions at ATLAS. *Phys. Rev.* **D87**, 052004 (2013).
905. Aad, G. *et al.* Measurement of the $t\bar{t}$ production cross section in the tau+jets channel using the ATLAS detector. *Eur. Phys. J.* **C73**, 2328 (2013).
906. Aad, G. *et al.* Search for the neutral Higgs bosons of the Minimal Supersymmetric Standard Model in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *JHEP* **02**, 095 (2013).

907. Aad, G. *et al.* Measurement of angular correlations in Drell-Yan lepton pairs to probe Z/γ^* boson transverse momentum at $\sqrt{s}=7$ TeV with the ATLAS detector. *Phys. Lett.* **B720**, 32–51 (2013).
908. Aad, G. *et al.* Search for new phenomena in events with three charged leptons at $\sqrt{s}=7$ TeV with the ATLAS detector. *Phys. Rev.* **D87**, 052002 (2013).
909. Aad, G. *et al.* Measurement of ZZ production in pp collisions at $\sqrt{s}=7$ TeV and limits on anomalous ZZZ and $ZZ\gamma$ couplings with the ATLAS detector. *JHEP* **03**, 128 (2013).
910. Aad, G. *et al.* Search for resonances decaying into top-quark pairs using fully hadronic decays in pp collisions with ATLAS at $\sqrt{s}=7$ TeV. *JHEP* **01**, 116 (2013).
911. Aad, G. *et al.* Measurement of isolated-photon pair production in pp collisions at $\sqrt{s}=7$ TeV with the ATLAS detector. *JHEP* **01**, 086 (2013).
912. Aad, G. *et al.* Searches for heavy long-lived sleptons and R-Hadrons with the ATLAS detector in pp collisions at $\sqrt{s}=7$ TeV. *Phys. Lett.* **B720**, 277–308 (2013).
913. Aad, G. *et al.* Search for supersymmetry in events with photons, bottom quarks, and missing transverse momentum in proton-proton collisions at a centre-of-mass energy of 7 TeV with the ATLAS detector. *Phys. Lett.* **B719**, 261–279 (2013).
914. Aad, G. *et al.* Search for contact interactions and large extra dimensions in dilepton events from pp collisions at $\sqrt{s}=7$ TeV with the ATLAS detector. *Phys. Rev.* **D87**, 015010 (2013).
915. Aad, G. *et al.* Search for Extra Dimensions in diphoton events using proton-proton collisions recorded at $\sqrt{s}=7$ TeV with the ATLAS detector at the LHC. *New J. Phys.* **15**, 043007 (2013).
916. Aad, G. *et al.* Search for long-lived, heavy particles in final states with a muon and multi-track displaced vertex in proton-proton collisions at $\sqrt{s}=7$ TeV with the ATLAS detector. *Phys. Lett.* **B719**, 280–298 (2013).
917. Aad, G. *et al.* A search for high-mass resonances decaying to $\tau^+\tau^-$ in pp collisions at $\sqrt{s}=7$ TeV with the ATLAS detector. *Phys. Lett.* **B719**, 242–260 (2013).
918. Aad, G. *et al.* Measurement of Z boson Production in Pb+Pb Collisions at $\sqrt{s_{NN}}=2.76$ TeV with the ATLAS Detector. *Phys. Rev. Lett.* **110**, 022301 (2013).
919. Aad, G. *et al.* Jet energy resolution in proton-proton collisions at $\sqrt{s}=7$ TeV recorded in 2010 with the ATLAS detector. *Eur. Phys. J.* **C73**, 2306 (2013).
920. Aad, G. *et al.* Search for pair production of heavy top-like quarks decaying to a high-pT W boson and a b quark in the lepton plus jets final state at $\sqrt{s}=7$ TeV with the ATLAS detector. *Phys. Lett.* **B718**, 1284–1302 (2013).
921. Aad, G. *et al.* Search for pair-produced massive coloured scalars in four-jet final states with the ATLAS detector in proton-proton collisions at $\sqrt{s}=7$ TeV. *Eur. Phys. J.* **C73**, 2263 (2013).
922. Aad, G. *et al.* Search for dark matter candidates and large extra dimensions in events with a jet and missing transverse momentum with the ATLAS detector. *JHEP* **04**, 075 (2013).
923. Aad, G. *et al.* Measurement of W^+W^- production in pp collisions at $\sqrt{s}=7$ TeV with the ATLAS detector and limits on anomalous $WW\gamma$ and WWZ couplings. *Phys. Rev.* **D87**. [Erratum: *Phys. Rev.* **D88**, no.7, 079906(2013)], 112001 (2013).
924. Aad, G. *et al.* Search for direct chargino production in anomaly-mediated supersymmetry breaking models based on a disappearing-track signature in pp collisions at $\sqrt{s}=7$ TeV with the ATLAS detector. *JHEP* **01**, 131 (2013).
925. Aad, G. *et al.* ATLAS search for new phenomena in dijet mass and angular distributions using pp collisions at $\sqrt{s}=7$ TeV. *JHEP* **01**, 029 (2013).
926. Aad, G. *et al.* Measurement of the flavour composition of dijet events in pp collisions at $\sqrt{s}=7$ TeV with the ATLAS detector. *Eur. Phys. J.* **C73**, 2301 (2013).
927. Aad, G. *et al.* Search for displaced muonic lepton jets from light Higgs boson decay in proton-proton collisions at $\sqrt{s}=7$ TeV with the ATLAS detector. *Phys. Lett.* **B721**, 32–50 (2013).

928. Aad, G. *et al.* Search for dark matter candidates and large extra dimensions in events with a photon and missing transverse momentum in pp collision data at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Rev. Lett.* **110**, 011802 (2013).
929. Aad, G. *et al.* Search for light top squark pair production in final states with leptons and b^- jets with the ATLAS detector in $\sqrt{s} = 7$ TeV proton-proton collisions. *Phys. Lett.* **B720**, 13–31 (2013).
930. Aad, G. *et al.* Search for direct production of charginos and neutralinos in events with three leptons and missing transverse momentum in $\sqrt{s} = 7$ TeV pp collisions with the ATLAS detector. *Phys. Lett.* **B718**, 841–859 (2013).
931. Aad, G. *et al.* Search for direct slepton and gaugino production in final states with two leptons and missing transverse momentum with the ATLAS detector in pp collisions at $\sqrt{s} = 7$ TeV. *Phys. Lett.* **B718**, 879–901 (2013).
932. Aad, G. *et al.* Search for new phenomena in the WW to $\ell\nu\ell'\nu'$ final state in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Lett.* **B718**, 860–878 (2013).
933. Aad, G. *et al.* Measurement of the jet radius and transverse momentum dependence of inclusive jet suppression in lead-lead collisions at $\sqrt{s_{NN}} = 2.76$ TeV with the ATLAS detector. *Phys. Lett.* **B719**, 220–241 (2013).
934. Aad, G. *et al.* Search for squarks and gluinos with the ATLAS detector in final states with jets and missing transverse momentum using 4.7 fb^{-1} of $\sqrt{s} = 7$ TeV proton-proton collision data. *Phys. Rev.* **D87**, 012008 (2013).
935. Aad, G. *et al.* Measurement of charged-particle event shape variables in $\sqrt{s} = 7$ TeV proton-proton interactions with the ATLAS detector. *Phys. Rev.* **D88**, 032004 (2013).
936. Aad, G. *et al.* Measurements of top quark pair relative differential cross-sections with ATLAS in pp collisions at $\sqrt{s} = 7$ TeV. *Eur. Phys. J.* **C73**, 2261 (2013).
937. Aad, G. *et al.* Measurement of the Λ_b^0 lifetime and mass in the ATLAS experiment. *Phys. Rev.* **D87**, 032002 (2013).
938. Aad, G. *et al.* Single hadron response measurement and calorimeter jet energy scale uncertainty with the ATLAS detector at the LHC. *Eur. Phys. J.* **C73**, 2305 (2013).
939. Aad, G. *et al.* Jet energy measurement with the ATLAS detector in proton-proton collisions at $\sqrt{s} = 7$ TeV. *Eur. Phys. J.* **C73**, 2304 (2013).
940. Aad, G. *et al.* Search for supersymmetry in final states with jets, missing transverse momentum and one isolated lepton in $\sqrt{s} = 7$ TeV pp collisions using 1 fb^{-1} of ATLAS data. *Phys. Rev.* **D85**. [Erratum: *Phys. Rev.* **D87**, 099903(2013)], 012006 (2012).
941. Aad, G. *et al.* A particle consistent with the Higgs Boson observed with the ATLAS Detector at the Large Hadron Collider. *Science* **338**, 1576–1582 (2012).
942. Aad, G. *et al.* Search for doubly-charged Higgs bosons in like-sign dilepton final states at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Eur. Phys. J.* **C72**, 2244 (2012).
943. Aad, G. *et al.* Search for pair production of massive particles decaying into three quarks with the ATLAS detector in $\sqrt{s} = 7$ TeV pp collisions at the LHC. *JHEP* **12**, 086 (2012).
944. Aad, G. *et al.* Search for anomalous production of prompt like-sign lepton pairs at $\sqrt{s} = 7$ TeV with the ATLAS detector. *JHEP* **12**, 007 (2012).
945. Aad, G. *et al.* Search for R-parity-violating supersymmetry in events with four or more leptons in $\sqrt{s} = 7$ TeV pp collisions with the ATLAS detector. *JHEP* **12**, 124 (2012).
946. Aad, G. *et al.* Search for Supersymmetry in Events with Large Missing Transverse Momentum, Jets, and at Least One Tau Lepton in 7 TeV Proton-Proton Collision Data with the ATLAS Detector. *Eur. Phys. J.* **C72**, 2215 (2012).
947. Aad, G. *et al.* Search for resonant top plus jet production in $t\bar{t} + \text{jets}$ events with the ATLAS detector in pp collisions at $\sqrt{s} = 7$ TeV. *Phys. Rev.* **D86**, 091103 (2012).

948. Aad, G. *et al.* ATLAS search for a heavy gauge boson decaying to a charged lepton and a neutrino in pp collisions at $\sqrt{s} = 7$ TeV. *Eur. Phys. J.* **C72**, 2241 (2012).
949. Aad, G. *et al.* Search for a heavy top-quark partner in final states with two leptons with the ATLAS detector at the LHC. *JHEP* **11**, 094 (2012).
950. Aad, G. *et al.* Search for high-mass resonances decaying to dilepton final states in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *JHEP* **11**, 138 (2012).
951. Aad, G. *et al.* Search for diphoton events with large missing transverse momentum in 7 TeV proton-proton collision data with the ATLAS detector. *Phys. Lett.* **B718**, 411–430 (2012).
952. Aad, G. *et al.* Measurements of the pseudorapidity dependence of the total transverse energy in proton-proton collisions at $\sqrt{s} = 7$ TeV with ATLAS. *JHEP* **11**, 033 (2012).
953. Aad, G. *et al.* Further search for supersymmetry at $\sqrt{s} = 7$ TeV in final states with jets, missing transverse momentum and isolated leptons with the ATLAS detector. *Phys. Rev.* **D86**, 092002 (2012).
954. Aad, G. *et al.* Search for light scalar top quark pair production in final states with two leptons with the ATLAS detector in $\sqrt{s} = 7$ TeV proton-proton collisions. *Eur. Phys. J.* **C72**, 2237 (2012).
955. Aad, G. *et al.* Search for direct top squark pair production in final states with one isolated lepton, jets, and missing transverse momentum in $\sqrt{s} = 7$ TeV pp collisions using 4.7 fb^{-1} of ATLAS data. *Phys. Rev. Lett.* **109**, 211803 (2012).
956. Aad, G. *et al.* Search for a supersymmetric partner to the top quark in final states with jets and missing transverse momentum at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Rev. Lett.* **109**, 211802 (2012).
957. Aad, G. *et al.* Measurement of WZ production in proton-proton collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Eur. Phys. J.* **C72**, 2173 (2012).
958. Aad, G. *et al.* Time-dependent angular analysis of the decay $B_s^0 \rightarrow J/\psi\phi$ and extraction of $\Delta\Gamma_s$ and the CP-violating weak phase ϕ_s by ATLAS. *JHEP* **12**, 072 (2012).
959. Aad, G. *et al.* Underlying event characteristics and their dependence on jet size of charged-particle jet events in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Rev.* **D86**, 072004 (2012).
960. Aad, G. *et al.* Observation of a new particle in the search for the Standard Model Higgs boson with the ATLAS detector at the LHC. *Phys. Lett.* **B716**, 1–29 (2012).
961. Aad, G. *et al.* Search for magnetic monopoles in $\sqrt{s} = 7$ TeV pp collisions with the ATLAS detector. *Phys. Rev. Lett.* **109**, 261803 (2012).
962. Aad, G. *et al.* Search for top and bottom squarks from gluino pair production in final states with missing transverse energy and at least three b-jets with the ATLAS detector. *Eur. Phys. J.* **C72**, 2174 (2012).
963. Aad, G. *et al.* A search for $t\bar{t}$ resonances in lepton+jets events with highly boosted top quarks collected in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *JHEP* **09**, 041 (2012).
964. Aad, G. *et al.* Combined search for the Standard Model Higgs boson in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Rev.* **D86**, 032003 (2012).
965. Aad, G. *et al.* Search for the Standard Model Higgs boson produced in association with a vector boson and decaying to a b -quark pair with the ATLAS detector. *Phys. Lett.* **B718**, 369–390 (2012).
966. Aad, G. *et al.* Search for the Higgs boson in the $H \rightarrow WW \rightarrow l\nu jj$ decay channel at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Lett.* **B718**, 391–410 (2012).
967. Aad, G. *et al.* Search for the Standard Model Higgs boson in the $H \rightarrow \tau^+\tau^-$ decay mode in $\sqrt{s} = 7$ TeV pp collisions with ATLAS. *JHEP* **09**, 070 (2012).
968. Aad, G. *et al.* ATLAS Measurements of the Properties of Jets for Boosted Particle Searches. *Phys. Rev.* **D86**, 072006 (2012).
969. Aad, G. *et al.* Measurement of the b-hadron production cross section using decays to $D^*\mu^-X$ final states in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Nucl. Phys.* **B864**, 341–381 (2012).
970. Aad, G. *et al.* Search for a standard model Higgs boson in the mass range 200–600 GeV in the $H \rightarrow ZZ \rightarrow \ell^+\ell^-q\bar{q}$ decay channel with the ATLAS detector. *Phys. Lett.* **B717**, 70–88 (2012).

971. Aad, G. *et al.* Measurement of event shapes at large momentum transfer with the ATLAS detector in pp collisions at $\sqrt{s} = 7$ TeV. *Eur. Phys. J.* **C72**, 2211 (2012).
972. Aad, G. *et al.* Hunt for new phenomena using large jet multiplicities and missing transverse momentum with ATLAS in 4.7 fb^{-1} of $\sqrt{s} = 7$ TeV proton-proton collisions. *JHEP* **07**, 167 (2012).
973. Aad, G. *et al.* Search for the Standard Model Higgs boson in the $H \rightarrow WW(*) \rightarrow \ell\nu\ell\nu$ decay mode with 4.7 /fb of ATLAS data at $\sqrt{s} = 7$ TeV. *Phys. Lett.* **B716**, 62–81 (2012).
974. Aad, G. *et al.* A search for flavour changing neutral currents in top-quark decays in pp collision data collected with the ATLAS detector at $\sqrt{s} = 7$ TeV. *JHEP* **09**, 139 (2012).
975. Aad, G. *et al.* Search for a standard model Higgs boson in the $H \rightarrow ZZ \rightarrow \ell^+\ell^-\nu\bar{\nu}$ decay channel using 4.7 fb^{-1} of $\sqrt{s} = 7$ TeV data with the ATLAS detector. *Phys. Lett.* **B717**, 29–48 (2012).
976. Aad, G. *et al.* Evidence for the associated production of a W boson and a top quark in ATLAS at $\sqrt{s} = 7$ TeV. *Phys. Lett.* **B716**, 142–159 (2012).
977. Aad, G. *et al.* A search for $t\bar{t}$ resonances with the ATLAS detector in 2.05 fb^{-1} of proton-proton collisions at $\sqrt{s} = 7$ TeV. *Eur. Phys. J.* **C72**, 2083 (2012).
978. Aad, G. *et al.* Measurement of the t -channel single top-quark production cross section in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Lett.* **B717**, 330–350 (2012).
979. Aad, G. *et al.* Measurement of $W\gamma$ and $Z\gamma$ production cross sections in pp collisions at $\sqrt{s} = 7$ TeV and limits on anomalous triple gauge couplings with the ATLAS detector. *Phys. Lett.* **B717**, 49–69 (2012).
980. Aad, G. *et al.* Measurement of the W boson polarization in top quark decays with the ATLAS detector. *JHEP* **06**, 088 (2012).
981. Aad, G. *et al.* Measurement of the top quark pair cross section with ATLAS in pp collisions at $\sqrt{s} = 7$ TeV using final states with an electron or a muon and a hadronically decaying τ lepton. *Phys. Lett.* **B717**, 89–108 (2012).
982. Aad, G. *et al.* Search for $t\bar{b}$ resonances in proton-proton collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Rev. Lett.* **109**, 081801 (2012).
983. Aad, G. *et al.* Search for lepton flavour violation in the $e\mu$ continuum with the ATLAS detector in $\sqrt{s} = 7$ TeV pp collisions at the LHC. *Eur. Phys. J.* **C72**, 2040 (2012).
984. Aad, G. *et al.* Search for a fermiophobic Higgs boson in the diphoton decay channel with the ATLAS detector. *Eur. Phys. J.* **C72**, 2157 (2012).
985. Aad, G. *et al.* Search for scalar top quark pair production in natural gauge mediated supersymmetry models with the ATLAS detector in pp collisions at $\sqrt{s} = 7$ TeV. *Phys. Lett.* **B715**, 44–60 (2012).
986. Aad, G. *et al.* Measurement of τ polarization in $W^- \rightarrow \tau\nu$ decays with the ATLAS detector in pp collisions at $\sqrt{s} = 7$ TeV. *Eur. Phys. J.* **C72**, 2062 (2012).
987. Aad, G. *et al.* Search for supersymmetry in events with three leptons and missing transverse momentum in $\sqrt{s} = 7$ TeV pp collisions with the ATLAS detector. *Phys. Rev. Lett.* **108**, 261804 (2012).
988. Aad, G. *et al.* Search for TeV-scale gravity signatures in final states with leptons and jets with the ATLAS detector at $\sqrt{s} = 7$ TeV. *Phys. Lett.* **B716**, 122–141 (2012).
989. Aad, G. *et al.* Search for supersymmetry with jets, missing transverse momentum and at least one hadronically decaying τ lepton in proton-proton collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Lett.* **B714**, 197–214 (2012).
990. Aad, G. *et al.* Search for charged Higgs bosons decaying via $H^\pm \rightarrow \tau\nu$ in top quark pair events using pp collision data at $\sqrt{s} = 7$ TeV with the ATLAS detector. *JHEP* **06**, 039 (2012).
991. Aad, G. *et al.* Search for resonant WZ production in the $WZ \rightarrow \ell\nu\ell'\ell'$ channel in $\sqrt{s} = 7$ TeV pp collisions with the ATLAS detector. *Phys. Rev.* **D85**, 112012 (2012).
992. Aad, G. *et al.* Search for pair production of a new quark that decays to a Z boson and a bottom quark with the ATLAS detector. *Phys. Rev. Lett.* **109**, 071801 (2012).

993. Aad, G. *et al.* Search for the decay $B_s^0 \rightarrow \mu\mu$ with the ATLAS detector. *Phys. Lett.* **B713**, 387–407 (2012).
994. Aad, G. *et al.* Search for events with large missing transverse momentum, jets, and at least two tau leptons in 7 TeV proton-proton collision data with the ATLAS detector. *Phys. Lett.* **B714**, 180–196 (2012).
995. Aad, G. *et al.* Measurement of the WW cross section in $\sqrt{s} = 7$ TeV pp collisions with the ATLAS detector and limits on anomalous gauge couplings. *Phys. Lett.* **B712**, 289–308 (2012).
996. Aad, G. *et al.* Search for supersymmetry in pp collisions at $\sqrt{s} = 7$ TeV in final states with missing transverse momentum and b^- jets with the ATLAS detector. *Phys. Rev.* **D85**, 112006 (2012).
997. Aad, G. *et al.* Search for gluinos in events with two same-sign leptons, jets and missing transverse momentum with the ATLAS detector in pp collisions at $\sqrt{s} = 7$ TeV. *Phys. Rev. Lett.* **108**, 241802 (2012).
998. Aad, G. *et al.* Measurement of the top quark mass with the template method in the $t\bar{t} \rightarrow \ell\bar{\ell}$ lepton + jets channel using ATLAS data. *Eur. Phys. J.* **C72**, 2046 (2012).
999. Aad, G. *et al.* Search for heavy neutrinos and right-handed W bosons in events with two leptons and jets in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Eur. Phys. J.* **C72**, 2056 (2012).
1000. Aad, G. *et al.* Measurement of $t\bar{t}$ production with a veto on additional central jet activity in pp collisions at $\sqrt{s} = 7$ TeV using the ATLAS detector. *Eur. Phys. J.* **C72**, 2043 (2012).
1001. Aad, G. *et al.* Jet mass and substructure of inclusive jets in $\sqrt{s} = 7$ TeV pp collisions with the ATLAS experiment. *JHEP* **05**, 128 (2012).
1002. Aad, G. *et al.* Measurement of the charge asymmetry in top quark pair production in pp collisions at $\sqrt{s} = 7$ TeV using the ATLAS detector. *Eur. Phys. J.* **C72**, 2039 (2012).
1003. Aad, G. *et al.* Observation of spin correlation in $t\bar{t}$ events from pp collisions at $\sqrt{s} = 7$ TeV using the ATLAS detector. *Phys. Rev. Lett.* **108**, 212001 (2012).
1004. Aad, G. *et al.* Determination of the strange quark density of the proton from ATLAS measurements of the $W \rightarrow \ell\nu$ and $Z \rightarrow \ell\ell$ cross sections. *Phys. Rev. Lett.* **109**, 012001 (2012).
1005. Aad, G. *et al.* Measurement of inclusive two-particle angular correlations in pp collisions with the ATLAS detector at the LHC. *JHEP* **05**, 157 (2012).
1006. Aad, G. *et al.* Search for second generation scalar leptoquarks in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Eur. Phys. J.* **C72**, 2151 (2012).
1007. Aad, G. *et al.* Measurement of the production cross section of an isolated photon associated with jets in proton-proton collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Rev.* **D85**, 092014 (2012).
1008. Aad, G. *et al.* Forward-backward correlations and charged-particle azimuthal distributions in pp interactions using the ATLAS detector. *JHEP* **07**, 019 (2012).
1009. Aad, G. *et al.* Measurement of the azimuthal anisotropy for charged particle production in $\sqrt{s_{NN}} = 2.76$ TeV lead-lead collisions with the ATLAS detector. *Phys. Rev.* **C86**, 014907 (2012).
1010. Aad, G. *et al.* Measurement of the polarisation of W bosons produced with large transverse momentum in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS experiment. *Eur. Phys. J.* **C72**, 2001 (2012).
1011. Aad, G. *et al.* Search for a light Higgs boson decaying to long-lived weakly-interacting particles in proton-proton collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Rev. Lett.* **108**, 251801 (2012).
1012. Aad, G. *et al.* Search for new particles decaying to ZZ using final states with leptons and jets with the ATLAS detector in $\sqrt{s} = 7$ TeV proton-proton collisions. *Phys. Lett.* **B712**, 331–350 (2012).
1013. Aad, G. *et al.* Search for FCNC single top-quark production at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Lett.* **B712**, 351–369 (2012).
1014. Aad, G. *et al.* Measurement of the azimuthal ordering of charged hadrons with the ATLAS detector. *Phys. Rev.* **D86**, 052005 (2012).
1015. Aad, G. *et al.* Search for down-type fourth generation quarks with the ATLAS detector in events with one lepton and hadronically decaying W bosons. *Phys. Rev. Lett.* **109**, 032001 (2012).

1016. Aad, G. *et al.* Search for same-sign top-quark production and fourth-generation down-type quarks in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *JHEP* **04**, 069 (2012).
1017. Aad, G. *et al.* Measurement of the cross section for top-quark pair production in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector using final states with two high-pt leptons. *JHEP* **05**, 059 (2012).
1018. Aad, G. *et al.* Search for anomaly-mediated supersymmetry breaking with the ATLAS detector based on a disappearing-track signature in pp collisions at $\sqrt{s} = 7$ TeV. *Eur. Phys. J.* **C72**, 1993 (2012).
1019. Aad, G. *et al.* Search for pair-produced heavy quarks decaying to Wq in the two-lepton channel at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Rev.* **D86**, 012007 (2012).
1020. Aad, G. *et al.* Search for pair production of a heavy up-type quark decaying to a W boson and a b quark in the lepton+jets channel with the ATLAS detector. *Phys. Rev. Lett.* **108**, 261802 (2012).
1021. Aad, G. *et al.* Search for the Standard Model Higgs boson in the decay channel $H \rightarrow ZZ^{(*)} \rightarrow 4\ell$ with 4.8 fb^{-1} of pp collision data at $\sqrt{s} = 7$ TeV with ATLAS. *Phys. Lett.* **B710**, 383–402 (2012).
1022. Aad, G. *et al.* Search for the Standard Model Higgs boson in the diphoton decay channel with 4.9 fb^{-1} of pp collisions at $\sqrt{s} = 7$ TeV with ATLAS. *Phys. Rev. Lett.* **108**, 111803 (2012).
1023. Aad, G. *et al.* Combined search for the Standard Model Higgs boson using up to 4.9 fb^{-1} of pp collision data at $\sqrt{s} = 7$ TeV with the ATLAS detector at the LHC. *Phys. Lett.* **B710**, 49–66 (2012).
1024. Aad, G. *et al.* Search for decays of stopped, long-lived particles from 7 TeV pp collisions with the ATLAS detector. *Eur. Phys. J.* **C72**, 1965 (2012).
1025. Aad, G. *et al.* Search for excited leptons in proton-proton collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Rev.* **D85**, 072003 (2012).
1026. Aad, G. *et al.* Rapidity gap cross sections measured with the ATLAS detector in pp collisions at $\sqrt{s} = 7$ TeV. *Eur. Phys. J.* **C72**, 1926 (2012).
1027. Aad, G. *et al.* Measurement of the top quark pair production cross-section with ATLAS in the single lepton channel. *Phys. Lett.* **B711**, 244–263 (2012).
1028. Aad, G. *et al.* Study of jets produced in association with a W boson in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Rev.* **D85**, 092002 (2012).
1029. Aad, G. *et al.* Search for anomalous production of prompt like-sign muon pairs and constraints on physics beyond the Standard Model with the ATLAS detector. *Phys. Rev.* **D85**, 032004 (2012).
1030. Aad, G. *et al.* Measurement of inclusive jet and dijet production in pp collisions at $\sqrt{s} = 7$ TeV using the ATLAS detector. *Phys. Rev.* **D86**, 014022 (2012).
1031. Aad, G. *et al.* Search for heavy vector-like quarks coupling to light quarks in proton-proton collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Lett.* **B712**, 22–39 (2012).
1032. Aad, G. *et al.* Observation of a new χ_b state in radiative transitions to $\Upsilon(1S)$ and $\Upsilon(2S)$ at ATLAS. *Phys. Rev. Lett.* **108**, 152001 (2012).
1033. Aad, G. *et al.* Search for first generation scalar leptoquarks in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Lett.* **B709**. [Erratum: *Phys. Lett.* **B711**, 442(2012)], 158–176 (2012).
1034. Aad, G. *et al.* Measurement of $D^{*+/-}$ meson production in jets from pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Rev.* **D85**, 052005 (2012).
1035. Aad, G. *et al.* Search for contact interactions in dilepton events from pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Lett.* **B712**, 40–58 (2012).
1036. Aad, G. *et al.* Search for scalar bottom quark pair production with the ATLAS detector in pp Collisions at $\sqrt{s} = 7$ TeV. *Phys. Rev. Lett.* **108**, 181802 (2012).
1037. Aad, G. *et al.* Search for production of resonant states in the photon-jet mass distribution using pp collisions at $\sqrt{s} = 7$ TeV collected by the ATLAS detector. *Phys. Rev. Lett.* **108**, 211802 (2012).
1038. Aad, G. *et al.* Search for the Higgs boson in the $H \rightarrow WW^{(*)} \rightarrow \ell_\nu \ell_\nu$ decay channel in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Rev. Lett.* **108**, 111802 (2012).

1039. Aad, G. *et al.* Search for extra dimensions using diphoton events in 7 TeV proton-proton collisions with the ATLAS detector. *Phys. Lett.* **B710**, 538–556 (2012).
1040. Aad, G. *et al.* Measurement of the $W^\pm Z$ production cross section and limits on anomalous triple gauge couplings in proton-proton collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Lett.* **B709**, 341–357 (2012).
1041. Aad, G. *et al.* Search for diphoton events with large missing transverse momentum in fb^{-1} of 7 TeV proton-proton collision data with the ATLAS detector. *Phys. Lett.* **B710**, 519–537 (2012).
1042. Aad, G. *et al.* Measurement of the production cross section for Z/γ^* in association with jets in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Rev.* **D85**, 032009 (2012).
1043. Aad, G. *et al.* Kshort and Λ production in pp interactions at $\sqrt{s} = 0.9$ and 7 TeV measured with the ATLAS detector at the LHC. *Phys. Rev.* **D85**, 012001 (2012).
1044. Aad, G. *et al.* Search for strong gravity signatures in same-sign dimuon final states using the ATLAS detector at the LHC. *Phys. Lett.* **B709**, 322–340 (2012).
1045. Aad, G. *et al.* A study of the material in the ATLAS inner detector using secondary hadronic interactions. *JINST* **7**, P01013 (2012).
1046. Aad, G. *et al.* Searches for supersymmetry with the ATLAS detector using final states with two leptons and missing transverse momentum in $\sqrt{s} = 7$ TeV proton-proton collisions. *Phys. Lett.* **B709**, 137–157 (2012).
1047. Aad, G. *et al.* Measurement of the ZZ production cross section and limits on anomalous neutral triple gauge couplings in proton-proton collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Rev. Lett.* **108**, 041804 (2012).
1048. Aad, G. *et al.* Electron performance measurements with the ATLAS detector using the 2010 LHC proton-proton collision data. *Eur. Phys. J.* **C72**, 1909 (2012).
1049. Aad, G. *et al.* Performance of the ATLAS Trigger System in 2010. *Eur. Phys. J.* **C72**, 1849 (2012).
1050. Aad, G. *et al.* Search for squarks and gluinos using final states with jets and missing transverse momentum with the ATLAS detector in $\sqrt{s} = 7$ TeV proton-proton collisions. *Phys. Lett.* **B710**, 67–85 (2012).
1051. Aad, G. *et al.* Measurement of the inclusive $W^\pm$ and Z/γ cross sections in the electron and muon decay channels in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Rev.* **D85**, 072004 (2012).
1052. Aad, G. *et al.* Search for New Phenomena in $t\bar{t}$ Events With Large Missing Transverse Momentum in Proton-Proton Collisions at $\sqrt{s} = 7$ TeV with the ATLAS Detector. *Phys. Rev. Lett.* **108**, 041805 (2012).
1053. Aad, G. *et al.* Search for displaced vertices arising from decays of new heavy particles in 7 TeV pp collisions at ATLAS. *Phys. Lett.* **B707**, 478–496 (2012).
1054. Aad, G. *et al.* Measurement of the cross-section for b -jets produced in association with a Z boson at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Lett.* **B706**, 295–313 (2012).
1055. Aad, G. *et al.* Measurement of the cross section for the production of a W boson in association with b^- jets in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Lett.* **B707**, 418–437 (2012).
1056. Aad, G. *et al.* Measurements of the electron and muon inclusive cross-sections in proton-proton collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Lett.* **B707**, 438–458 (2012).
1057. Aad, G. *et al.* Search for New Physics in the Dijet Mass Distribution using 1 fb^{-1} of pp Collision Data at $\sqrt{s} = 7$ TeV collected by the ATLAS Detector. *Phys. Lett.* **B708**, 37–54 (2012).
1058. Aad, G. *et al.* Measurement of the Transverse Momentum Distribution of W Bosons in pp Collisions at $\sqrt{s} = 7$ TeV with the ATLAS Detector. *Phys. Rev.* **D85**, 012005 (2012).
1059. Aad, G. *et al.* Measurement of the centrality dependence of the charged particle pseudorapidity distribution in lead-lead collisions at $\sqrt{s_{NN}} = 2.76$ TeV with the ATLAS detector. *Phys. Lett.* **B710**, 363–382 (2012).
1060. Aad, G. *et al.* Measurement of the pseudorapidity and transverse momentum dependence of the elliptic flow of charged particles in lead-lead collisions at $\sqrt{s_{NN}} = 2.76$ TeV with the ATLAS detector. *Phys. Lett.* **B707**, 330–348 (2012).

1061. Aad, G. *et al.* Performance of Missing Transverse Momentum Reconstruction in Proton-Proton Collisions at 7 TeV with ATLAS. *Eur. Phys. J.* **C72**, 1844 (2012).
1062. Aad, G. *et al.* Search for a heavy Standard Model Higgs boson in the channel $H \rightarrow ZZ \rightarrow \ell^+ \ell^- q \bar{q}$ using the ATLAS detector. *Phys. Lett.* **B707**, 27–45 (2012).
1063. Aad, G. *et al.* A measurement of the ratio of the W and Z cross sections with exactly one associated jet in pp collisions at $\sqrt{s} = 7$ TeV with ATLAS. *Phys. Lett.* **B708**, 221–240 (2012).
1064. Aad, G. *et al.* Measurement of the $W \rightarrow \tau \nu_\tau$ cross section in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS experiment. *Phys. Lett.* **B706**, 276–294 (2012).
1065. Aad, G. *et al.* Measurement of the top quark pair production cross section in pp collisions at $\sqrt{s} = 7$ TeV in dilepton final states with ATLAS. *Phys. Lett.* **B707**, 459–477 (2012).
1066. Aad, G. *et al.* Measurement of the isolated di-photon cross-section in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Rev.* **D85**, 012003 (2012).
1067. Aad, G. *et al.* Search for Massive Colored Scalars in Four-Jet Final States in $\sqrt{s} = 7$ TeV proton-proton collisions with the ATLAS Detector. *Eur. Phys. J.* **C71**, 1828 (2011).
1068. Aad, G. *et al.* Search for new phenomena in final states with large jet multiplicities and missing transverse momentum using $\sqrt{s} = 7$ TeV pp collisions with the ATLAS detector. *JHEP* **11**, 099 (2011).
1069. Aad, G. *et al.* Measurement of the inclusive and dijet cross-sections of b^- jets in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Eur. Phys. J.* **C71**, 1846 (2011).
1070. Aad, G. *et al.* Search for the Standard Model Higgs boson in the decay channel $H \rightarrow ZZ(*) \rightarrow 4l$ with the ATLAS detector. *Phys. Lett.* **B705**, 435–451 (2011).
1071. Aad, G. *et al.* Measurement of the jet fragmentation function and transverse profile in proton-proton collisions at a center-of-mass energy of 7 TeV with the ATLAS detector. *Eur. Phys. J.* **C71**, 1795 (2011).
1072. Aad, G. *et al.* Search for the Higgs boson in the $H \rightarrow WW \rightarrow lvjj$ decay channel in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Rev. Lett.* **107**, 231801 (2011).
1073. Aad, G. *et al.* Search for a Standard Model Higgs boson in the $H \rightarrow ZZ \rightarrow l^+ l^- \nu \nu^-$ decay channel with the ATLAS detector. *Phys. Rev. Lett.* **107**, 221802 (2011).
1074. Aad, G. *et al.* Search for a heavy neutral particle decaying into an electron and a muon using 1 fb⁻¹ of ATLAS data. *Eur. Phys. J.* **C71**, 1809 (2011).
1075. Aad, G. *et al.* Search for the Standard Model Higgs boson in the two photon decay channel with the ATLAS detector at the LHC. *Phys. Lett.* **B705**, 452–470 (2011).
1076. Aad, G. *et al.* Measurement of the Z to tau tau Cross Section with the ATLAS Detector. *Phys. Rev.* **D84**, 112006 (2011).
1077. Aad, G. *et al.* Search for dilepton resonances in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Rev. Lett.* **107**, 272002 (2011).
1078. Aad, G. *et al.* Search for a heavy gauge boson decaying to a charged lepton and a neutrino in 1 fb⁻¹ of pp collisions at $\sqrt{s} = 7$ TeV using the ATLAS detector. *Phys. Lett.* **B705**, 28–46 (2011).
1079. Aad, G. *et al.* Inclusive search for same-sign dilepton signatures in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *JHEP* **10**, 107 (2011).
1080. Aad, G. *et al.* Measurement of the inclusive isolated prompt photon cross-section in pp collisions at $\sqrt{s} = 7$ TeV using 35 pb⁻¹ of ATLAS data. *Phys. Lett.* **B706**, 150–167 (2011).
1081. Aad, G. *et al.* Search for neutral MSSM Higgs bosons decaying to $\tau^+ \tau^-$ pairs in proton-proton collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Lett.* **B705**, 174–192 (2011).
1082. Aad, G. *et al.* Properties of jets measured from tracks in proton-proton collisions at center-of-mass energy $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Rev.* **D84**, 054001 (2011).
1083. Aad, G. *et al.* Measurement of the transverse momentum distribution of Z/γ^* bosons in proton-proton collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Lett.* **B705**, 415–434 (2011).

1084. Aad, G. *et al.* Measurement of multi-jet cross sections in proton-proton collisions at a 7 TeV center-of-mass energy. *Eur. Phys. J.* **C71**, 1763 (2011).
1085. Aad, G. *et al.* Measurement of dijet production with a veto on additional central jet activity in pp collisions at $\sqrt{s} = 7$ TeV using the ATLAS detector. *JHEP* **09**, 053 (2011).
1086. Aad, G. *et al.* Search for Diphoton Events with Large Missing Transverse Energy with 36 pb⁻¹ of 7 TeV Proton-Proton Collision Data with the ATLAS Detector. *Eur. Phys. J.* **C71**, 1744 (2011).
1087. Aad, G. *et al.* Measurement of the $\Upsilon(1S)$ production cross-section in pp collisions at $\sqrt{s} = 7$ TeV in ATLAS. *Phys. Lett.* **B705**, 9–27 (2011).
1088. Aad, G. *et al.* Search for new phenomena with the monojet and missing transverse momentum signature using the ATLAS detector in $\sqrt{s} = 7$ TeV proton-proton collisions. *Phys. Lett.* **B705**, 294–312 (2011).
1089. Aad, G. *et al.* Search for heavy long-lived charged particles with the ATLAS detector in pp collisions at $\sqrt{s} = 7$ TeV. *Phys. Lett.* **B703**, 428–446 (2011).
1090. Aad, G. *et al.* Limits on the production of the Standard Model Higgs Boson in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Eur. Phys. J.* **C71**, 1728 (2011).
1091. Aad, G. *et al.* Measurement of $W\gamma$ and $Z\gamma$ production in proton-proton collisions at $\sqrt{s} = 7$ TeV with the ATLAS Detector. *JHEP* **09**, 072 (2011).
1092. Abouzaid, E. *et al.* Search for the Rare Decays $K_L \rightarrow \pi^0 \pi^0 \mu^+ \mu^-$ and $K_L \rightarrow \pi^0 \pi^0 X^0 \rightarrow \pi^0 \pi^0 \mu^+ \mu^-$. *Phys. Rev. Lett.* **107**, 201803 (2011).
1093. Aad, G. *et al.* Measurement of the WW cross section in $\sqrt{s} = 7$ TeV pp collisions with ATLAS. *Phys. Rev. Lett.* **107**, 041802 (2011).
1094. Aad, G. *et al.* Search for Contact Interactions in Dimuon Events from pp Collisions at $\sqrt{s} = 7$ TeV with the ATLAS Detector. *Phys. Rev.* **D84**, 011101 (2011).
1095. Aad, G. *et al.* Search for pair production of first or second generation leptoquarks in proton-proton collisions at $\sqrt{s} = 7$ TeV using the ATLAS detector at the LHC. *Phys. Rev.* **D83**, 112006 (2011).
1096. Aad, G. *et al.* Measurement of the differential cross-sections of inclusive, prompt and non-prompt J/ψ production in proton-proton collisions at $\sqrt{s} = 7$ TeV. *Nucl. Phys.* **B850**, 387–444 (2011).
1097. Aad, G. *et al.* Measurement of the Inelastic Proton-Proton Cross-Section at $\sqrt{s} = 7$ TeV with the ATLAS Detector. *Nature Commun.* **2**, 463 (2011).
1098. Aad, G. *et al.* Search for an excess of events with an identical flavour lepton pair and significant missing transverse momentum in $\sqrt{s} = 7$ TeV proton-proton collisions with the ATLAS detector. *Eur. Phys. J.* **C71**, 1647 (2011).
1099. Aad, G. *et al.* Search for supersymmetric particles in events with lepton pairs and large missing transverse momentum in $\sqrt{s} = 7$ TeV proton-proton collisions with the ATLAS experiment. *Eur. Phys. J.* **C71**, 1682 (2011).
1100. Aad, G. *et al.* Search for high mass dilepton resonances in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS experiment. *Phys. Lett.* **B700**, 163–180 (2011).
1101. Aad, G. *et al.* Search for a heavy particle decaying into an electron and a muon with the ATLAS detector in $\sqrt{s} = 7$ TeV pp collisions at the LHC. *Phys. Rev. Lett.* **106**, 251801 (2011).
1102. Aad, G. *et al.* Search for supersymmetry in pp collisions at $\sqrt{s} = 7$ TeV in final states with missing transverse momentum and b -jets. *Phys. Lett.* **B701**, 398–416 (2011).
1103. Aad, G. *et al.* Search for New Physics in Dijet Mass and Angular Distributions in pp Collisions at $\sqrt{s} = 7$ TeV Measured with the ATLAS Detector. *New J. Phys.* **13**, 053044 (2011).
1104. Aad, G. *et al.* Measurement of the W charge asymmetry in the $W \rightarrow \mu\nu$ decay mode in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Lett.* **B701**, 31–49 (2011).
1105. Aad, G. *et al.* Search for stable hadronising squarks and gluinos with the ATLAS experiment at the LHC. *Phys. Lett.* **B701**, 1–19 (2011).

1106. Aad, G. *et al.* Measurements of underlying-event properties using neutral and charged particles in pp collisions at 900 GeV and 7 TeV with the ATLAS detector at the LHC. *Eur. Phys. J.* **C71**, 1636 (2011).
1107. Aad, G. *et al.* Search for high-mass states with one lepton plus missing transverse momentum in proton-proton collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Lett.* **B701**, 50–69 (2011).
1108. Aad, G. *et al.* Search for squarks and gluinos using final states with jets and missing transverse momentum with the ATLAS detector in $\sqrt{s} = 7$ TeV proton-proton collisions. *Phys. Lett.* **B701**, 186–203 (2011).
1109. Aad, G. *et al.* Measurement of Dijet Azimuthal Decorrelations in pp Collisions at $\sqrt{s} = 7$ TeV. *Phys. Rev. Lett.* **106**, 172002 (2011).
1110. Aad, G. *et al.* Search for supersymmetry using final states with one lepton, jets, and missing transverse momentum with the ATLAS detector in $\sqrt{s} = 7$ TeV pp . *Phys. Rev. Lett.* **106**, 131802 (2011).
1111. Aad, G. *et al.* Search for Massive Long-lived Highly Ionising Particles with the ATLAS Detector at the LHC. *Phys. Lett.* **B698**, 353–370 (2011).
1112. Aad, G. *et al.* Luminosity Determination in pp Collisions at $\sqrt{s} = 7$ TeV Using the ATLAS Detector at the LHC. *Eur. Phys. J.* **C71**, 1630 (2011).
1113. Aad, G. *et al.* Study of Jet Shapes in Inclusive Jet Production in pp Collisions at $\sqrt{s} = 7$ TeV using the ATLAS Detector. *Phys. Rev.* **D83**, 052003 (2011).
1114. Aad, G. *et al.* Measurement of the production cross section for W-bosons in association with jets in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Lett.* **B698**, 325–345 (2011).
1115. Aad, G. *et al.* Measurement of the centrality dependence of J/Ψ yields and observation of Z production in lead-lead collisions with the ATLAS detector at the LHC. *Phys. Lett.* **B697**, 294–312 (2011).
1116. Aad, G. *et al.* Measurement of the inclusive isolated prompt photon cross section in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. *Phys. Rev.* **D83**, 052005 (2011).
1117. Aad, G. *et al.* Charged-particle multiplicities in pp interactions measured with the ATLAS detector at the LHC. *New J. Phys.* **13**, 053033 (2011).
1118. Aad, G. *et al.* Search for Diphoton Events with Large Missing Transverse Energy in 7 TeV Proton-Proton Collisions with the ATLAS Detector. *Phys. Rev. Lett.* **106**, 121803 (2011).
1119. Aad, G. *et al.* Measurement of the top quark-pair production cross section with ATLAS in pp collisions at $\sqrt{s} = 7$ TeV. *Eur. Phys. J.* **C71**, 1577 (2011).
1120. Aad, G. *et al.* Measurement of underlying event characteristics using charged particles in pp collisions at $\sqrt{s} = 900\text{GeV}$ and 7 TeV with the ATLAS detector. *Phys. Rev.* **D83**, 112001 (2011).
1121. Aad, G. *et al.* Studies of the performance of the ATLAS detector using cosmic-ray muons. *Eur. Phys. J.* **C71**, 1593 (2011).
1122. Abouzaid, E. *et al.* Precise Measurements of Direct CP Violation, CPT Symmetry, and Other Parameters in the Neutral Kaon System. *Phys. Rev.* **D83**, 092001 (2011).
1123. Aad, G. *et al.* Search for Quark Contact Interactions in Dijet Angular Distributions in pp Collisions at $\sqrt{s} = 7$ TeV Measured with the ATLAS Detector. *Phys. Lett.* **B694**, 327–345 (2011).
1124. Aad, G. *et al.* Measurement of Inclusive Jet and Dijet Cross Sections in Proton-Proton Collisions at 7 TeV Centre-of-Mass Energy with the ATLAS Detector. *Eur. Phys. J.* **C71**, 1512 (2011).
1125. Abazov, V. M. *et al.* Search for CP violation in $B_s^0 \rightarrow \mu^+ D_s^- X$ decays in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV. *Phys. Rev.* **D82**. [Erratum: *Phys. Rev.* **D83**, 119901(2011)], 012003 (2010).
1126. Aad, G. *et al.* Observation of a Centrality-Dependent Dijet Asymmetry in Lead-Lead Collisions at $\sqrt{s_{NN}} = 2.77$ TeV with the ATLAS Detector at the LHC. *Phys. Rev. Lett.* **105**, 252303 (2010).
1127. Aad, G. *et al.* Measurement of the $W \rightarrow \ell\nu$ and $Z/\gamma^* \rightarrow \ell\ell$ Production Cross Sections in Proton-Proton Collisions at $\sqrt{s} = 7$ TeV with the ATLAS Detector. *JHEP* **12**, 060 (2010).
1128. Alexopoulos, T. *et al.* Development of large size Micromegas detector for the upgrade of the ATLAS muon system. *Nucl. Instrum. Meth.* **A617**, 161–165 (2010).

1129. Aad, G. *et al.* Search for New Particles in Two-Jet Final States in 7 TeV Proton-Proton Collisions with the ATLAS Detector at the LHC. *Phys. Rev. Lett.* **105**, 161801 (2010).
1130. Aad, G. *et al.* Readiness of the ATLAS Tile Calorimeter for LHC collisions. *Eur. Phys. J.* **C70**, 1193–1236 (2010).
1131. Aad, G. *et al.* Commissioning of the ATLAS Muon Spectrometer with Cosmic Rays. *Eur. Phys. J.* **C70**, 875–916 (2010).
1132. Aad, G. *et al.* Performance of the ATLAS Detector using First Collision Data. *JHEP* **09**, 056 (2010).
1133. Aad, G. *et al.* The ATLAS Simulation Infrastructure. *Eur. Phys. J.* **C70**, 823–874 (2010).
1134. Aad, G. *et al.* The ATLAS Inner Detector commissioning and calibration. *Eur. Phys. J.* **C70**, 787–821 (2010).
1135. Aad, G. *et al.* Charged-particle multiplicities in pp interactions at $\sqrt{s} = 900$ GeV measured with the ATLAS detector at the LHC. *Phys. Lett.* **B688**, 21–42 (2010).
1136. Aad, G. *et al.* Drift Time Measurement in the ATLAS Liquid Argon Electromagnetic Calorimeter using Cosmic Muons. *Eur. Phys. J.* **C70**, 755–785 (2010).
1137. Aaltonen, T. *et al.* Combination of Tevatron Searches for the Standard Model Higgs Boson in the W^+W^- Decay Mode. *Phys. Rev. Lett.* **104**, 061802 (2010).
1138. Abazov, V. M. *et al.* Search for Higgs Boson Production in Dilepton and Missing Energy Final States with 5.4 fb^{-1} of $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV. *Phys. Rev. Lett.* **104**, 061804 (2010).
1139. Abazov, V. M. *et al.* Dependence of the $t\bar{t}$ Production Cross Section on the Transverse Momentum of the Top Quark. *Phys. Lett.* **B693**, 515–521 (2010).
1140. Abazov, V. M. *et al.* Search for the standard model Higgs boson in the $ZH \rightarrow \ell \nu \ell \bar{\nu}$ channel in 5.2 fb^{-1} of $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV. *Phys. Rev. Lett.* **104**, 071801 (2010).
1141. Abazov, V. M. *et al.* Double parton interactions in $\gamma+3$ jet events in $p\bar{p}$ collisions $\sqrt{s} = 1.96$ TeV. *Phys. Rev.* **D81**, 052012 (2010).
1142. Aad, G. *et al.* Readiness of the ATLAS Liquid Argon Calorimeter for LHC Collisions. *Eur. Phys. J.* **C70**, 723–753 (2010).
1143. Abouzaid, E. *et al.* Dispersive analysis of $K(L\mu 3)$ and $K(L e 3)$ scalar and vector form factors using KTeV data. *Phys. Rev.* **D81**, 052001 (2010).
1144. Abazov, V. M. *et al.* Search for single top quarks in the tau+jets channel using 4.8 fb^{-1} of $p\bar{p}$ collision data. *Phys. Lett.* **B690**, 5–14 (2010).
1145. Abazov, V. M. *et al.* Search for the associated production of a b quark and a neutral supersymmetric Higgs boson which decays to tau pairs. *Phys. Rev. Lett.* **104**, 151801 (2010).
1146. Abazov, V. M. *et al.* Search for a resonance decaying into WZ boson pairs in $p\bar{p}$ collisions. *Phys. Rev. Lett.* **104**, 061801 (2010).
1147. Abazov, V. M. *et al.* Measurement of the $t\bar{t}$ cross section using high-multiplicity jet events. *Phys. Rev.* **D82**, 032002 (2010).
1148. Abazov, V. M. *et al.* Measurement of $Z/\gamma^* + \text{jet} + X$ angular distributions in p anti- p collisions at $\sqrt{s} = 1.96$ TeV. *Phys. Lett.* **B682**, 370–380 (2010).
1149. Abazov, V. M. *et al.* Measurement of the t-channel single top quark production cross section. *Phys. Lett.* **B682**, 363–369 (2010).
1150. Abazov, V. M. *et al.* Measurement of the WW production cross section in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV. *Phys. Rev. Lett.* **94**, [Erratum: *Phys. Rev. Lett.* 100, 139901 (2008)], 151801 (2005).
1151. Abazov, V. M. *et al.* Determination of the strong coupling constant from the inclusive jet cross section in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV. *Phys. Rev.* **D80**, 111107 (2009).
1152. Abazov, V. M. *et al.* Direct measurement of the W boson width. *Phys. Rev. Lett.* **103**, 231802 (2009).
1153. Argyropoulos, T. *et al.* Cathode strip chambers in ATLAS: Installation, commissioning and in situ performance. *IEEE Trans. Nucl. Sci.* **56**, 1568–1574 (2009).

1154. Abazov, V. M. *et al.* Search for Charged Higgs Bosons in Top Quark Decays. *Phys. Lett.* **B682**, 278–286 (2009).
1155. Abazov, V. M. *et al.* Measurement of the W boson mass. *Phys. Rev. Lett.* **103**, 141801 (2009).
1156. Abazov, V. M. *et al.* Measurement of trilinear gauge boson couplings from WW + WZ to $l \nu j j$ events in p anti-p collisions at $s^{**}(1/2) = 1.96$ TeV. *Phys. Rev.* **D80**, 053012 (2009).
1157. Abazov, V. M. *et al.* A Novel method for modeling the recoil in W boson events at hadron collider. *Nucl. Instrum. Meth.* **A609**, 250–262 (2009).
1158. Abazov, V. M. *et al.* Search for pair production of first-generation leptoquarks in p anti-p collisions at $s^{**}(1/2) = 1.96$ -TeV. *Phys. Lett.* **B681**, 224–232 (2009).
1159. Abazov, V. M. *et al.* Search for charged Higgs bosons in decays of top quarks. *Phys. Rev.* **D80**, 051107 (2009).
1160. Abazov, V. M. *et al.* Measurement of dijet angular distributions at $s^{**}(1/2) = 1.96$ -TeV and searches for quark compositeness and extra spatial dimensions. *Phys. Rev. Lett.* **103**, 191803 (2009).
1161. Abazov, V. M. *et al.* Search for Resonant Pair Production of long-lived particles decaying to b anti-b in p anti-p collisions at $s^{**}(1/2) = 1.96$ -TeV. *Phys. Rev. Lett.* **103**, 071801 (2009).
1162. Abazov, V. M. *et al.* Direct measurement of the mass difference between top and antitop quarks. *Phys. Rev. Lett.* **103**, 132001 (2009).
1163. Abazov, V. M. *et al.* Search for squark production in events with jets, hadronically decaying tau leptons and missing transverse energy at $s^{**}(1/2) = 1.96$ -TeV. *Phys. Lett.* **B680**, 24–33 (2009).
1164. Abazov, V. M. *et al.* Search for NMSSM Higgs bosons in the h to aa to mu mu mu mu, mu mu tau tau channels using p anti-p collisions at $s^{**}(1/2) = 1.96$ -TeV. *Phys. Rev. Lett.* **103**, 061801 (2009).
1165. Abazov, V. M. *et al.* Search for dark photons from supersymmetric hidden valleys. *Phys. Rev. Lett.* **103**, 081802 (2009).
1166. Abazov, V. M. *et al.* Measurement of the Top Quark Mass in Final States with Two Leptons. *Phys. Rev.* **D80**, 092006 (2009).
1167. Abazov, V. M. *et al.* Measurement of the WW production cross section with dilepton final states in p anti-p collisions at $s^{**}(1/2) = 1.96$ -TeV and limits on anomalous trilinear gauge couplings. *Phys. Rev. Lett.* **103**, 191801 (2009).
1168. Abazov, V. M. *et al.* Combination of t anti-t cross section measurements and constraints on the mass of the top quark and its decays into charged Higgs bosons. *Phys. Rev.* **D80**, 071102 (2009).
1169. Abazov, V. M. *et al.* Search for the standard model Higgs boson in tau final states. *Phys. Rev. Lett.* **102**, 251801 (2009).
1170. Abazov, V. M. *et al.* Measurements of differential cross sections of Z/gamma*+jets+X events in proton anti-proton collisions at $s^{**}(1/2) = 1.96$ -TeV. *Phys. Lett.* **B678**, 45–54 (2009).
1171. Abazov, V. M. *et al.* Observation of Single Top Quark Production. *Phys. Rev. Lett.* **103**, 092001 (2009).
1172. Abazov, V. M. *et al.* Measurement of the Z gamma to nu anti-nu gamma cross section and limits on anomalous Z Z gamma and Z gamma gamma couplings in p anti-p collisions at $s^{**}(1/2) = 1.96$ -TeV. *Phys. Rev. Lett.* **102**, 201802 (2009).
1173. Abazov, V. M. *et al.* Measurement of the t anti-t production cross section and top quark mass extraction using dilepton events in p anti-p collisions. *Phys. Lett.* **B679**, 177–185 (2009).
1174. Abazov, V. M. *et al.* Search for Resonant Diphoton Production with the D0 Detector. *Phys. Rev. Lett.* **102**, 231801 (2009).
1175. Abazov, V. M. *et al.* Search for admixture of scalar top quarks in the t anti-t lepton+jets final state at $s^{**}(1/2) = 1.96$ -TeV. *Phys. Lett.* **B674**, 4–10 (2009).
1176. Abazov, V. M. *et al.* Measurement of gamma + b + X and gamma + c + X production cross sections in p anti-p collisions at $s^{**}(1/2) = 1.96$ -TeV. *Phys. Rev. Lett.* **102**, 192002 (2009).

1177. Abazov, V. M. *et al.* Search for associated production of charginos and neutralinos in the trilepton final state using 2.3 fb^{-1} of data. *Phys. Lett.* **B680**, 34–43 (2009).
1178. Abazov, V. M. *et al.* Search for anomalous top quark couplings with the D0 detector. *Phys. Rev. Lett.* **102**, 092002 (2009).
1179. Abazov, V. M. *et al.* Evidence for decay $B_s^0 \rightarrow D_s^{(*)} D_s^{(*)}$ and a measurement of $\Delta\Gamma_s^{CP}/\Gamma_s$. *Phys. Rev. Lett.* **102**, 091801 (2009).
1180. Abazov, V. M. *et al.* Search for the lightest scalar top quark in events with two leptons in $p\bar{p}$ collisions at $\sqrt{s} = 1.96\text{-TeV}$. *Phys. Lett.* **B675**, 289–296 (2009).
1181. Abazov, V. M. *et al.* Search for neutral Higgs bosons at high $\tan\beta$ in the $b(h/H/A) \rightarrow b\tau^+\tau^-$ channel. *Phys. Rev. Lett.* **102**, 051804 (2009).
1182. Abazov, V. M. *et al.* Evidence of $WW+WZ$ production with lepton + jets final states in proton-antiproton collisions at $\sqrt{s} = 1.96 \text{ TeV}$. *Phys. Rev. Lett.* **102**, 161801 (2009).
1183. Abazov, V. M. *et al.* Measurement of the angular and lifetime parameters of the decays $B_d^0 \rightarrow J/\psi K^{*0}$ and $B_s^0 \rightarrow J/\psi\phi$. *Phys. Rev. Lett.* **102**, 032001 (2009).
1184. Abazov, V. M. *et al.* Search for Long-Lived Charged Massive Particles with the D0 Detector. *Phys. Rev. Lett.* **102**, 161802 (2009).
1185. Aad, G. *et al.* The ATLAS Experiment at the CERN Large Hadron Collider. *JINST* **3**, S08003 (2008).
1186. Abazov, V. M. *et al.* Search for Large extra spatial dimensions in the dielectron and diphoton channels in $p\bar{p}$ collisions at $\sqrt{s} = 1.96\text{-TeV}$. *Phys. Rev. Lett.* **102**, 051601 (2009).
1187. Abazov, V. M. *et al.* Observation of the doubly strange b baryon Ω_b^- . *Phys. Rev. Lett.* **101**, 232002 (2008).
1188. Abazov, V. M. *et al.* Search for pair production of second generation scalar leptoquarks. *Phys. Lett.* **B671**, 224–232 (2009).
1189. Abazov, V. M. *et al.* A Search for associated W and Higgs Boson production in $p\bar{p}$ collisions at $\sqrt{s} = 1.96\text{-TeV}$. *Phys. Rev. Lett.* **102**, 051803 (2009).
1190. Abazov, V. M. *et al.* Measurement of $\sigma(p\bar{p} \rightarrow Z + X) \text{ Br}(Z \rightarrow \tau^+\tau^-)$ at $\sqrt{s} = 1.96\text{-TeV}$. *Phys. Lett.* **B670**, 292–299 (2009).
1191. Abazov, V. M. *et al.* Measurement of differential $Z/\gamma^* + \text{jet} + X$ cross sections in $p\bar{p}$ collisions at $\sqrt{s} = 1.96\text{-TeV}$. *Phys. Lett.* **B669**, 278–286 (2008).
1192. Abazov, V. M. *et al.* A search for the standard model Higgs boson in the missing energy and acoplanar b-jet topology at $\sqrt{s}=1.96$. *Phys. Rev. Lett.* **101**, 251802 (2008).
1193. Abazov, V. M. *et al.* Observation of ZZ production in $p\bar{p}$ collisions at $\sqrt{s} = 1.96\text{-TeV}$. *Phys. Rev. Lett.* **101**, 171803 (2008).
1194. Abazov, V. M. *et al.* Search for Scalar Leptoquarks and T -odd Quarks in the Acoplanar Jet Topology using 2.5 fb^{-1} of $p\bar{p}$ Collision Data at $\sqrt{s} = 1.96\text{-TeV}$. *Phys. Lett.* **B668**, 357–363 (2008).
1195. Abazov, V. M. *et al.* $ZZ \rightarrow \ell^+\ell^- \nu \text{ anti-}\nu$ production in $p\bar{p}$ collisions at $\sqrt{s} = 1.96\text{-TeV}$. *Phys. Rev.* **D78**, 072002 (2008).
1196. Abazov, V. M. *et al.* Measurement of the electron charge asymmetry in $p\bar{p} \rightarrow W + X \rightarrow e\nu + X$ events at $\sqrt{s} = 1.96\text{-TeV}$. *Phys. Rev. Lett.* **101**, 211801 (2008).
1197. Abazov, V. M. *et al.* Precise measurement of the top quark mass from lepton+jets events at D0. *Phys. Rev. Lett.* **101**, 182001 (2008).
1198. Abazov, V. M. *et al.* Search for anomalous Wtb couplings in single top quark production. *Phys. Rev. Lett.* **101**, 221801 (2008).
1199. Abazov, V. M. *et al.* Search for charged Higgs bosons decaying to top and bottom quarks in $p\bar{p}$ collisions. *Phys. Rev. Lett.* **102**, 191802 (2009).
1200. Abouzaid, E. *et al.* Detailed Study of the $K(L)$ to $\pi^0 \pi^0 \pi^0$ Dalitz Plot. *Phys. Rev.* **D78**, 032009 (2008).
1201. Abazov, V. M. *et al.* Search for third generation scalar leptoquarks decaying into τb . *Phys. Rev. Lett.* **101**, 241802 (2008).

1202. Abazov, V. M. *et al.* Search for long-lived particles decaying into electron or photon pairs with the D0 detector. *Phys. Rev. Lett.* **101**, 111802 (2008).
1203. Abazov, V. M. *et al.* Search for a scalar or vector particle decaying into $Z\gamma$ in $p\bar{p}$ collisions at $\sqrt{s}=1.96$ TeV. *Phys. Lett.* **B671**, 349–355 (2009).
1204. Abazov, V. M. *et al.* Search for neutral Higgs bosons in multi-b-jet events in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ -TeV. *Phys. Rev. Lett.* **101**, 221802 (2008).
1205. Abazov, V. M. *et al.* Measurement of the lifetime of the $B_c^\pm$ meson in the semileptonic decay channel. *Phys. Rev. Lett.* **102**, 092001 (2009).
1206. Abazov, V. M. *et al.* Relative rates of B meson decays into ψ_{2S} and J/ψ mesons. *Phys. Rev.* **D79**, 111102 (2009).
1207. Abazov, V. M. *et al.* Search for Higgs bosons decaying to τ pairs in $p\bar{p}$ collisions with the D0 detector. *Phys. Rev. Lett.* **101**, 071804 (2008).
1208. Abouzaid, E. *et al.* Final Results from the KTeV Experiment on the Decay $K_L \rightarrow \pi^0 \gamma \gamma$. *Phys. Rev.* **D77**, 112004 (2008).
1209. Abazov, V. M. *et al.* Search for $t\bar{t}$ resonances in the lepton plus jets final state in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ -TeV. *Phys. Lett.* **B668**, 98–104 (2008).
1210. Abazov, V. M. *et al.* Measurement of the forward-backward charge asymmetry and extraction of $\sin^2 \Theta(W)(\text{eff})$ in p anti- p to $Z/\gamma^* + X$ to $e^+ e^- + X$ events produced at $s^{1/2} = 1.96$ TeV. *Phys. Rev. Lett.* **101**, 191801 (2008).
1211. Abazov, V. M. *et al.* Measurement of the polarization of the v_{1S} and v_{2S} states in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ -TeV. *Phys. Rev. Lett.* **101**, 182004 (2008).
1212. Abazov, V. M. *et al.* Measurement of the Differential Cross-Section for the Production of an Isolated Photon with Associated Jet in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ -TeV. *Phys. Lett.* **B666**, 435–445 (2008).
1213. Abazov, V. M. *et al.* Search for W' Boson Resonances Decaying to a Top Quark and a Bottom Quark. *Phys. Rev. Lett.* **100**, 211803 (2008).
1214. Abazov, V. M. *et al.* Measurement of the $t\bar{t}$ production cross section in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ -TeV. *Phys. Rev. Lett.* **100**, 192004 (2008).
1215. Abazov, V. M. *et al.* Search for scalar top quarks in the acoplanar charm jets and missing transverse energy final state in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ -TeV. *Phys. Lett.* **B665**, 1–8 (2008).
1216. Abazov, V. M. *et al.* Measurement of the ratio of the $p\bar{p} \rightarrow W^+ c^-$ jet cross section to the inclusive $p\bar{p} \rightarrow W + \text{jets}$ cross section. *Phys. Lett.* **B666**, 23–30 (2008).
1217. Abazov, V. M. *et al.* Search for large extra dimensions via single photon plus missing energy final states at $\sqrt{s} = 1.96$ -TeV. *Phys. Rev. Lett.* **101**, 011601 (2008).
1218. Abazov, V. M. *et al.* Search for pair production of doubly-charged Higgs bosons in the $H^{++}H^{--} \rightarrow \mu^+ \mu^+ \mu^- \mu^-$ final state at D0. *Phys. Rev. Lett.* **101**, 071803 (2008).
1219. Abazov, V. M. *et al.* Search for decay of a fermiophobic Higgs boson $h(f) \rightarrow \gamma\gamma$ with the D0 detector at $\sqrt{s} = 1.96$ -TeV. *Phys. Rev. Lett.* **101**, 051801 (2008).
1220. Abazov, V. M. *et al.* Evidence for production of single top quarks. *Phys. Rev.* **D78**, 012005 (2008).
1221. Abazov, V. M. *et al.* First study of the radiation-amplitude zero in $W\gamma$ production and limits on anomalous $WW\gamma$ couplings at $\sqrt{s} = 1.96$ - TeV. *Phys. Rev. Lett.* **100**, 241805 (2008).
1222. Abazov, V. M. *et al.* Observation of the B_c Meson in the Exclusive Decay $B_c \rightarrow J/\psi\pi$. *Phys. Rev. Lett.* **101**, 012001 (2008).
1223. Abazov, V. M. *et al.* Study of direct CP violation in $B^\pm \rightarrow J/\psi K^\pm(\pi^\pm)$ decays. *Phys. Rev. Lett.* **100**, 211802 (2008).
1224. Abazov, V. M. *et al.* Measurement of the inclusive jet cross-section in $p\bar{p}$ collisions at $s^{1/2} = 1.96$ -TeV. *Phys. Rev. Lett.* **101**, 062001 (2008).

1225. Abazov, V. M. *et al.* Measurement of B_s^0 mixing parameters from the flavor-tagged decay $B_s^0 \rightarrow J/\psi\phi$. *Phys. Rev. Lett.* **101**, 241801 (2008).
1226. Abouzaid, E. *et al.* Determination of the Parity of the Neutral Pion via the Four-Electron Decay. *Phys. Rev. Lett.* **100**, 182001 (2008).
1227. Abazov, V. M. *et al.* Simultaneous measurement of the ratio $B(t \rightarrow Wb) / B(t \rightarrow Wq)$ and the top quark pair production cross section with the D0 detector at $\sqrt{s} = 1.96$ -TeV. *Phys. Rev. Lett.* **100**, 192003 (2008).
1228. Abazov, V. M. *et al.* Search for excited electrons in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ -TeV. *Phys. Rev.* **D77**, 091102 (2008).
1229. Abazov, V. M. *et al.* Search for squarks and gluinos in events with jets and missing transverse energy using 2.1 fb^{-1} of $p\bar{p}$ collision data at $\sqrt{s} = 1.96$ -TeV. *Phys. Lett.* **B660**, 449–457 (2008).
1230. Abazov, V. M. *et al.* Measurement of the B_s^0 semileptonic branching ratio to an orbitally excited D_s state, $\text{Br}(B_s^0 \rightarrow D_{s1}^-(2536)\mu^+\nu X)$. *Phys. Rev. Lett.* **102**, 051801 (2009).
1231. Abazov, V. M. *et al.* First measurement of the forward-backward charge asymmetry in top quark pair production. *Phys. Rev. Lett.* **100**, 142002 (2008).
1232. Abazov, V. M. *et al.* Measurement of the shape of the boson transverse momentum distribution in $p\bar{p} \rightarrow Z/\gamma^* \rightarrow e^+e^- + X$ events produced at $\sqrt{s}=1.96$ -TeV. *Phys. Rev. Lett.* **100**, 102002 (2008).
1233. Abazov, V. M. *et al.* Search for ZZ and $Z\gamma^*$ production in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV and limits on anomalous $ZZZZ$ and $ZZ\gamma^*$ couplings. *Phys. Rev. Lett.* **100**, 131801 (2008).
1234. Abazov, V. M. *et al.* A Combined search for the standard model Higgs boson at $\sqrt{s} = 1.96$ -TeV. *Phys. Lett.* **B663**, 26–36 (2008).
1235. Abouzaid, E. *et al.* Search for lepton flavor violating decays of the neutral kaon. *Phys. Rev. Lett.* **100**, 131803 (2008).
1236. Abazov, V. M. *et al.* Search for Scalar Neutrino Superpartners in $e + \mu$ Final States in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ -TeV. *Phys. Rev. Lett.* **100**, 241803 (2008).
1237. Abazov, V. M. *et al.* Model-independent measurement of the W boson helicity in top quark decays at D0. *Phys. Rev. Lett.* **100**, 062004 (2008).
1238. Abazov, V. M. *et al.* Observation and properties of the orbitally excited $B^*(s2)$ meson. *Phys. Rev. Lett.* **100**, 082002 (2008).
1239. Abazov, V. M. *et al.* Search for supersymmetry in di-photon final states at $\sqrt{s} = 1.96$ -TeV. *Phys. Lett.* **B659**, 856–863 (2008).
1240. Abazov, V. M. *et al.* Search for Randall-Sundrum gravitons with 1 fb^{-1} of data from $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ -TeV. *Phys. Rev. Lett.* **100**, 091802 (2008).
1241. Abazov, V. M. *et al.* Search for W' bosons decaying to an electron and a neutrino with the D0 detector. *Phys. Rev. Lett.* **100**, 031804 (2008).
1242. Abazov, V. M. *et al.* Measurement of the $p\bar{p} \rightarrow WZ + X$ cross-section at $\sqrt{s} = 1.96$ -TeV and limits on WWZ trilinear gauge couplings. *Phys. Rev.* **D76**, 111104 (2007).
1243. Abouzaid, E. *et al.* Search for the Rare Decay $K_L \rightarrow \pi^0\pi^0\gamma$. *Phys. Rev.* **D78**, 032014 (2008).
1244. Abazov, V. M. *et al.* Search for flavor-changing-neutral-current D meson decays. *Phys. Rev. Lett.* **100**, 101801 (2008).
1245. Abazov, V. M. *et al.* Search for $B_s \rightarrow \mu^+\mu^-$ at D0. *Phys. Rev.* **D76**, 092001 (2007).
1246. Abazov, V. M. *et al.* Search for the lightest scalar top quark in events with two leptons in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ -TeV. *Phys. Lett.* **B659**, 500–508 (2008).
1247. Abouzaid, E. *et al.* Measurement of the Decay $K_L \rightarrow \pi^0 e^+ e^- \gamma$. *Phys. Rev.* **D76**, 052001 (2007).
1248. Abazov, V. M. *et al.* Measurement of the Λ_b^0 lifetime using semileptonic decays. *Phys. Rev. Lett.* **99**, 182001 (2007).

1249. Abazov, V. M. *et al.* Direct observation of the strange b baryon Ξ_b^- . *Phys. Rev. Lett.* **99**, 052001 (2007).
1250. Abazov, V. M. *et al.* Measurement of the $t\bar{t}$ production cross-section in $p\bar{p}$ collisions using dilepton events. *Phys. Rev.* **D76**, 052006 (2007).
1251. Abazov, V. M. *et al.* Observation and Properties of $L = 1B_1$ and B_2^* Mesons. *Phys. Rev. Lett.* **99**, 172001 (2007).
1252. Abouzaid, E. *et al.* First observation of $K_L \rightarrow \pi^\pm e^\mp \nu e^+ e^-$. *Phys. Rev. Lett.* **99**, 081803 (2007).
1253. Abazov, V. M. *et al.* Measurement of the $t\bar{t}$ production cross section in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ -TeV using kinematic characteristics of lepton + jets events. *Phys. Rev.* **D76**, 092007 (2007).
1254. Abazov, V. M. *et al.* $Z\gamma$ production and limits on anomalous $ZZ\gamma$ and $Z\gamma\gamma$ couplings in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ -TeV. *Phys. Lett.* **B653**, 378–386 (2007).
1255. Abazov, V. M. *et al.* Search for third-generation leptoquarks in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ -TeV. *Phys. Rev. Lett.* **99**, 061801 (2007).
1256. Abazov, V. M. *et al.* Search for Stopped Gluinos from $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ -TeV. *Phys. Rev. Lett.* **99**, 131801 (2007).
1257. Abazov, V. M. *et al.* Measurement of the Λ_b Lifetime in the Exclusive Decay $\Lambda_b \rightarrow J/\psi \Lambda$. *Phys. Rev. Lett.* **99**, 142001 (2007).
1258. Abazov, V. M. *et al.* Search for a Higgs Boson Produced in Association with a Z Boson in $p\bar{p}$ Collisions. *Phys. Lett.* **B655**, 209–216 (2007).
1259. Abazov, V. M. *et al.* Measurement of the Branching Fraction $\text{Br}(B^0(s) \rightarrow D_s^{(*)} D_s^{(*)})$. *Phys. Rev. Lett.* **99**, 241801 (2007).
1260. Abouzaid, E. *et al.* Measurements of the Decay $K_L \rightarrow e^+ e^- \gamma$. *Phys. Rev. Lett.* **99**, 051804 (2007).
1261. Abazov, V. M. *et al.* Combined D^0 Measurements Constraining the CP-Violating Phase and Width Difference in the B_s^0 System. *Phys. Rev.* **D76**, 057101 (2007).
1262. Abazov, V. M. *et al.* Measurement of the Shape of the Boson Rapidity Distribution for $p\bar{p} \rightarrow Z/\gamma^* \rightarrow e^+ e^- + X$ Events Produced at $\sqrt{s}$ of 1.96-TeV. *Phys. Rev.* **D76**, 012003 (2007).
1263. Abazov, V. M. *et al.* Measurement of the Top Quark Mass in the Lepton + Jets Channel using the Ideogram Method. *Phys. Rev.* **D75**, 092001 (2007).
1264. Abazov, V. M. *et al.* Search for Production of Single Top Quarks Via Flavor-Changing Neutral Current Couplings. *Phys. Rev. Lett.* **99**, 191802 (2007).
1265. Abazov, V. M. *et al.* Lifetime Difference and CP-Violating Phase in the B_s^0 System. *Phys. Rev. Lett.* **98**, 121801 (2007).
1266. Abazov, V. M. *et al.* Measurement of the Charge Asymmetry in Semileptonic B_s Decays. *Phys. Rev. Lett.* **98**, 151801 (2007).
1267. Abazov, V. M. *et al.* Evidence for production of single top quarks and first direct measurement of $-\text{Vtb}-$. *Phys. Rev. Lett.* **98**, 181802 (2007).
1268. Abazov, V. M. *et al.* Measurement of the $p\bar{p} \rightarrow t\bar{t}$ production cross section at $\sqrt{s} = 1.96$ -TeV in the fully hadronic decay channel. *Phys. Rev.* **D76**, 072007 (2007).
1269. Abazov, V. M. *et al.* Search for techniparticles in e+jets events at D0. *Phys. Rev. Lett.* **98**, 221801 (2007).
1270. Abazov, V. M. *et al.* Search for single production of scalar leptoquarks in p anti-p collisions decaying into muons and quarks with the D0 detector. *Phys. Lett.* **B647**, 74–81 (2007).
1271. Abouzaid, E. *et al.* Improved K(L) to $\pi^\pm e^\mp \nu$ form factor and phase space integral with reduced model uncertainty. *Phys. Rev.* **D74**, 097101 (2006).
1272. Abazov, V. M. *et al.* Search for the pair production of scalar top quarks in the acoplanar charm jet final state in p anti-p collisions at $\sqrt{s} = 1.96$ -TeV. *Phys. Lett.* **B645**, 119–127 (2007).
1273. Abazov, V. M. *et al.* Measurement of the t anti-t production cross section in p anti-p collisions at $\sqrt{s} = 1.96$ -TeV using secondary vertex b tagging. *Phys. Rev.* **D74**, 112004 (2006).

1274. Abouzaid, E. *et al.* Measurement of the Rare Decay $\pi^0 \rightarrow e^+e^-$. *Phys. Rev.* **D75**, 012004 (2007).
1275. Abazov, V. M. *et al.* Measurement of the top quark mass in the dilepton channel. *Phys. Lett.* **B655**, 7–14 (2007).
1276. Abazov, V. M. *et al.* Measurement of the top quark mass in the lepton+jets final state with the matrix element method. *Phys. Rev.* **D74**, 092005 (2006).
1277. Abazov, V. M. *et al.* Measurement of the W boson helicity in top quark decay at D0. *Phys. Rev.* **D75**, 031102 (2007).
1278. Abazov, V. M. *et al.* Measurement of B_d mixing using opposite-side flavor tagging. *Phys. Rev.* **D74**, 112002 (2006).
1279. Abazov, V. M. *et al.* Measurement of the CP-violation parameter of B0 mixing and decay with p anti-p to mu mu X data. *Phys. Rev.* **D74**, 092001 (2006).
1280. Abazov, V. M. *et al.* Measurement of the ratios of the Z/gamma* + ℓ = n jet production cross sections to the total inclusive Z/gamma* cross section in p anti-p collisions at $\sqrt{s}(1/2) = 1.96$ -TeV. *Phys. Lett.* **B658**, 112–119 (2008).
1281. Abazov, V. M. *et al.* Experimental discrimination between charge 2e/3 top quark and charge 4e/3 exotic quark production scenarios. *Phys. Rev. Lett.* **98**, 041801 (2007).
1282. Abazov, V. M. *et al.* Search for pair production of scalar bottom quarks in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ -TeV. *Phys. Rev. Lett.* **97**, 171806 (2006).
1283. Abazov, V. M. *et al.* Limits on anomalous trilinear gauge couplings from $WW \rightarrow e^+e^-$, $WW \rightarrow e^\pm\mu^\mp$, and $WW \rightarrow \mu^+\mu^-$ events from $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ -TeV. *Phys. Rev.* **D74**. [Erratum: *Phys. Rev.* **D74**, 059904(2006)], 057101 (2006).
1284. Abouzaid, E. *et al.* Ξ^0 and $\bar{\Xi}^0$ Polarization Measurements at 800-GeV/c. *Phys. Rev.* **D75**, 012005 (2007).
1285. Abazov, V. M. *et al.* Search for W' boson production in the top quark decay channel. *Phys. Lett.* **B641**, 423–431 (2006).
1286. Abazov, V. M. *et al.* Search for associated Higgs boson production $WH \rightarrow WWW^* \rightarrow \ell^\pm\nu\ell' + \nu' + X$ in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ -TeV. *Phys. Rev. Lett.* **97**, 151804 (2006).
1287. Abazov, V. M. *et al.* Search for neutral, long-lived particles decaying into two muons in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ -TeV. *Phys. Rev. Lett.* **97**, 161802 (2006).
1288. Abazov, V. M. *et al.* Search for the Standard Model Higgs Boson in the $p\bar{p} \rightarrow ZH \rightarrow \nu\bar{\nu}b\bar{b}$ channel. *Phys. Rev. Lett.* **97**, 161803 (2006).
1289. Abazov, V. M. *et al.* Search for scalar leptoquarks in the acoplanar jet topology in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ -TeV. *Phys. Lett.* **B640**, 230–237 (2006).
1290. Abazov, V. M. *et al.* Search for a heavy resonance decaying into a Z+ jet final state in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ -TeV using the D0 detector. *Phys. Rev.* **D74**, 011104 (2006).
1291. Abazov, V. M. *et al.* Search for particles decaying into a Z boson and a photon in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV. *Phys. Lett.* **B641**. [Erratum: *Phys. Lett.* **B670**, 455(2009)], 415–422 (2006).
1292. Abazov, V. M. *et al.* Search for resonant second generation slepton production at the Tevatron. *Phys. Rev. Lett.* **97**, 111801 (2006).
1293. Abazov, V. M. *et al.* Search for neutral Higgs bosons decaying to τ pairs in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ -TeV. *Phys. Rev. Lett.* **97**, 121802 (2006).
1294. Abazov, V. M. *et al.* Search for R-parity violating supersymmetry via the LL anti-E couplings λ_{121} , λ_{122} or λ_{133} in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ -TeV. *Phys. Lett.* **B638**, 441–449 (2006).
1295. Abazov, V. M. *et al.* A Precise measurement of the B_s^0 lifetime. *Phys. Rev. Lett.* **97**, 241801 (2006).
1296. Abazov, V. M. *et al.* Search for excited muons in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ - TeV. *Phys. Rev.* **D73**, 111102 (2006).
1297. Abouzaid, E. *et al.* Measurement of direct photon emission in the $K_L \rightarrow \pi^+\pi^-\gamma$ decay mode. *Phys. Rev.* **D74**. [Erratum: *Phys. Rev.* **D74**, 039905(2006)], 032004 (2006).

1298. Abazov, V. M. *et al.* Search for Squarks and Gluinos in Events with Jets and Missing Transverse Energy in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ -TeV. *Phys. Lett.* **B638**, 119–127 (2006).
1299. Abazov, V. M. *et al.* Multivariate searches for single top quark production with the D0 detector. *Phys. Rev.* **D75**, 092007 (2007).
1300. Abazov, V. M. *et al.* Search for the rare decay $B_s^0 \rightarrow \phi \mu^+ \mu^-$ with the D0 detector. *Phys. Rev.* **D74**, 031107 (2006).
1301. Abazov, V. M. *et al.* First direct two-sided bound on the B_s^0 oscillation frequency. *Phys. Rev. Lett.* **97**, 021802 (2006).
1302. Abazov, V. M. *et al.* Measurement of $B(t \rightarrow Wb) / B(t \rightarrow Wq)$ at $\sqrt{s} = 1.96$ -TeV. *Phys. Lett.* **B639**, 616–622 (2006).
1303. Abazov, V. M. *et al.* Search for pair production of second generation scalar leptoquarks in p anti- p collisions at $\sqrt{s} = 1.96$ -TeV. *Phys. Lett.* **B636**, 183–190 (2006).
1304. Abazov, V. M. *et al.* Measurement of the isolated photon cross section in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ -TeV. *Phys. Lett.* **B639**. [Erratum: *Phys. Lett.* B658,285(2008)], 151–158 (2006).
1305. Abazov, V. M. *et al.* Search for the Higgs boson in $H \rightarrow WW^{(*)}$ decays in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ -TeV. *Phys. Rev. Lett.* **96**, 011801 (2006).
1306. Abouzaid, E. *et al.* A Measurement of the K^0 charge radius and a CP violating asymmetry together with a search for CP violating e^+ direct photon emission in the rare decay $K(L)$ to $\pi^+ \pi^- e^+ e^-$. *Phys. Rev. Lett.* **96**, 101801 (2006).
1307. Abazov, V. M. *et al.* The Upgraded D0 detector. *Nucl. Instrum. Meth.* **A565**, 463–537 (2006).
1308. Abazov, V. M. *et al.* Measurement of the Lifetime Difference in the B_s^0 system. *Phys. Rev. Lett.* **95**, 171801 (2005).
1309. Abazov, V. M. *et al.* Measurement of semileptonic branching fractions of B mesons to narrow D^{**} states. *Phys. Rev. Lett.* **95**, 171803 (2005).
1310. Abazov, V. M. *et al.* Search for large extra spatial dimensions in dimuon production at D0. *Phys. Rev. Lett.* **95**, 161602 (2005).
1311. Abazov, V. M. *et al.* Measurement of the $t\bar{t}$ production cross section in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ -TeV in dilepton final states. *Phys. Lett.* **B626**, 55–64 (2005).
1312. Abazov, V. M. *et al.* Search for single top quark production in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ -TeV. *Phys. Lett.* **B622**, 265–276 (2005).
1313. Abazov, V. M. *et al.* Search for right-handed W bosons in top quark decay. *Phys. Rev.* **D72**, 011104 (2005).
1314. Abazov, V. M. *et al.* Search for Randall-Sundrum gravitons in dilepton and diphoton final states. *Phys. Rev. Lett.* **95**, 091801 (2005).
1315. Abazov, V. M. *et al.* Measurement of the $t\bar{t}$ production cross section in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ -TeV using lepton + jets events with lifetime b^- tagging. *Phys. Lett.* **B626**, 35–44 (2005).
1316. Abouzaid, E. *et al.* Observation of the decay Ξ^0 to $\Sigma^+ \mu^- \text{ anti-}\nu(\mu)$. *Phys. Rev. Lett.* **95**, 081801 (2005).
1317. Abazov, V. M. *et al.* Measurement of the $t\bar{t}$ production cross section in $p\bar{p}$ collisions at $\sqrt{s} = 1.96 = \text{TeV}$ using kinematic characteristics of lepton + jets events. *Phys. Lett.* **B626**, 45–54 (2005).
1318. Abazov, V. M. *et al.* Search for supersymmetry via associated production of charginos and neutralinos in final states with three leptons. *Phys. Rev. Lett.* **95**, 151805 (2005).
1319. Abazov, V. M. *et al.* Production of WZ events in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ -TeV and limits on anomalous WWZ couplings. *Phys. Rev. Lett.* **95**, 141802 (2005).
1320. Abazov, V. M. *et al.* Search for neutral supersymmetric Higgs bosons in multijet events at $\sqrt{s} = 1.96$ -TeV. *Phys. Rev. Lett.* **95**, 151801 (2005).

1321. Abazov, V. M. *et al.* Measurement of the $p - \bar{p} \rightarrow W\gamma + X$ cross section at $\sqrt{s} = 1.96$ -TeV and $WW\gamma$ anomalous coupling limits. *Phys. Rev.* **D71**, 091108 (2005).
1322. Abazov, V. M. *et al.* Study of $Z\gamma$ events and limits on anomalous $ZZ\gamma$ and $Z\gamma\gamma$ couplings in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ -TeV. *Phys. Rev. Lett.* **95**, 051802 (2005).
1323. Abazov, V. M. *et al.* Measurement of inclusive differential cross sections for v_{1S} production in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ -TeV. *Phys. Rev. Lett.* **94**, [Erratum: *Phys. Rev. Lett.* 100,049902(2008)], 232001 (2005).
1324. Cheu, E. KTeV results on rare kaon decays. *Frascati Phys. Ser.* **35**, [377(2004)], 377–384 (2004).
1325. Cheu, E. Properties of heavy meson states B^{**} and B_c . *Int. J. Mod. Phys.* **A20**, 3664–3668 (2005).
1326. Abazov, V. M. *et al.* Search for first-generation scalar leptoquarks in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ -TeV. *Phys. Rev.* **D71**, 071104 (2005).
1327. Abazov, V. M. *et al.* First measurement of $\sigma(p\bar{p} \rightarrow Z)$. $\text{Br}(Z \rightarrow \tau\tau)$ at $\sqrt{s} = 1.96$ - TeV. *Phys. Rev.* **D71**, [Erratum: *Phys. Rev.* D77,039901(2008)], 072004 (2005).
1328. Abazov, V. M. *et al.* A Search for anomalous heavy-flavor quark production in association with W bosons. *Phys. Rev. Lett.* **94**, 152002 (2005).
1329. Abazov, V. M. *et al.* A measurement of the ratio of inclusive cross sections $\sigma(pp \rightarrow Z + b - \text{jet})/\sigma(pp \rightarrow Z + \text{jet})$ at $\sqrt{s} = 1.96$ TeV. *Phys. Rev. Lett.* **94**, 161801 (2005).
1330. Alexopoulos, T. *et al.* Measurements of the branching fractions and decay distributions for $K(L)$ to $\pi^+\pi^-$ ν γ and $K(L)$ to $\pi^+\pi^- e^+ \nu$ γ . *Phys. Rev.* **D71**, 012001 (2005).
1331. Abazov, V. M. *et al.* A Search for $Wb\bar{b}$ and WH Production in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV. *Phys. Rev. Lett.* **94**, 091802 (2005).
1332. Abazov, V. M. *et al.* Measurement of the Λ_b^0 lifetime in the decay $\Lambda_b^0 \rightarrow J/\psi \Lambda^0$ with the DØ detector. *Phys. Rev. Lett.* **94**, 102001 (2005).
1333. Abazov, V. M. *et al.* Measurement of the ratio of B^+ and B^0 meson lifetimes. *Phys. Rev. Lett.* **94**, 182001 (2005).
1334. Abazov, V. M. *et al.* A search for the flavor-changing neutral current decay $B_s^0 \rightarrow \mu^+\mu^-$ in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV with the DØ detector. *Phys. Rev. Lett.* **94**, 071802 (2005).
1335. Abazov, V. M. *et al.* Measurement of the B_s^0 lifetime in the exclusive decay channel $B_s^0 \rightarrow J/\psi \phi$. *Phys. Rev. Lett.* **94**, 042001 (2005).
1336. Abazov, V. M. *et al.* Measurement of dijet azimuthal decorrelations at central rapidities in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV. *Phys. Rev. Lett.* **94**, 221801 (2005).
1337. Abazov, V. M. *et al.* Search for supersymmetry with gauge-mediated breaking in diphoton events at D0. *Phys. Rev. Lett.* **94**, 041801 (2005).
1338. Alexopoulos, T. *et al.* Measurements of semileptonic $K(L)$ decay form-factors. *Phys. Rev.* **D70**, 092007 (2004).
1339. Alexopoulos, T. *et al.* Measurements of $K(L)$ branching fractions and the CP violation parameter $-\eta_{+-}$. *Phys. Rev.* **D70**, 092006 (2004).
1340. Alexopoulos, T. *et al.* A Determination of the CKM parameter $-\text{V}(us)-$. *Phys. Rev. Lett.* **93**, 181802 (2004).
1341. Abazov, V. M. *et al.* Observation and properties of the $X(3872)$ decaying to $J/\psi \pi^+\pi^-$ in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV. *Phys. Rev. Lett.* **93**, 162002 (2004).
1342. Abazov, V. M. *et al.* Search for doubly-charged Higgs boson pair production in the decay to $\mu^+\mu^+\mu^-\mu^-$ in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV. *Phys. Rev. Lett.* **93**, 141801 (2004).
1343. Alavi-Harati, A. *et al.* Search for the rare decay $K(L)$ to $\pi^0 e^+ e^-$. *Phys. Rev. Lett.* **93**, 021805 (2004).
1344. Alavi-Harati, A. *et al.* Measurements of the Decay $K_L \rightarrow e^+e^-\mu^+\mu^-$. *Phys. Rev. Lett.* **90**, 141801 (2003).
1345. Alavi-Harati, A. *et al.* Search for the $K_L \rightarrow \pi^0\pi^0 e^+e^-$ Decay in the KTeV Experiment. *Phys. Rev. Lett.* **89**, 211801 (2002).

1346. Alavi-Harati, A. *et al.* Measurements of direct CP violation, CPT symmetry, and other parameters in the neutral kaon system. *Phys. Rev.* **D67**. [Erratum: *Phys. Rev.*D70,079904(2004)], 012005 (2003).
1347. Alavi-Harati, A. *et al.* A Measurement of the K_L Charge Asymmetry. *Phys. Rev. Lett.* **88**, 181601 (2002).
1348. Alavi-Harati, A. *et al.* Radiative Decay Width Measurements of Neutral Kaon Excitations using the Primakoff Effect. *Phys. Rev. Lett.* **89**, 072001 (2002).
1349. Alavi-Harati, A. *et al.* Measurement of the branching ratio and form-factor of $K(L)$ to $\mu^+ \mu^- \gamma$. *Phys. Rev. Lett.* **87**, 071801 (2001).
1350. Alavi-Harati, A. *et al.* Branching ratio measurement of the decay $K(L)$ to $e^+ e^- \mu^+ \mu^-$. *Phys. Rev. Lett.* **87**, 111802 (2001).
1351. Alavi-Harati, A. *et al.* A New Measurement of the Radiative K_{e3} Branching Ratio and Photon Spectrum. *Phys. Rev.* **D64**, 112004 (2001).
1352. Alavi-Harati, A. *et al.* First Measurement of Form-Factors of the Decay $\Xi^0 \rightarrow \Sigma^+ e^- \bar{\nu}_e$. *Phys. Rev. Lett.* **87**, 132001 (2001).
1353. Alavi-Harati, A. *et al.* Measurements of the Rare Decay $K_L \rightarrow e^+ e^- e^+ e^-$. *Phys. Rev. Lett.* **86**, 5425–5429 (2001).
1354. Cheu, E. Status of the KTeV $\text{Re}(\epsilon'/\epsilon)$ measurement. *Frascati Phys. Ser.* **20**. [487(2000)], 487–498 (2001).
1355. Alavi-Harati, A. *et al.* A Measurement of the branching ratio and asymmetry of the decay Ξ^0 to $\Sigma^0 \gamma$. *Phys. Rev. Lett.* **86**, 3239–3243 (2001).
1356. Alavi-Harati, A. *et al.* First observation of the decay $K(L)$ to $\pi^0 e^+ e^- \gamma$. *Phys. Rev. Lett.* **87**, 021801 (2001).
1357. Alavi-Harati, A. *et al.* A Measurement of the Branching Ratio of $K_L \rightarrow e^+ e^- \gamma \gamma$. *Phys. Rev.* **D64**, 012003 (2001).
1358. Alavi-Harati, A. *et al.* Search for the decay $K(L)$ to $\pi^0 e^+ e^-$. *Phys. Rev. Lett.* **86**, 397–401 (2001).
1359. Alavi-Harati, A. *et al.* Study of the $K^0(L)$ to $\pi^+ \pi^- \gamma$ direct emission vertex. *Phys. Rev. Lett.* **86**, 761–764 (2001).
1360. Alavi-Harati, A. *et al.* Search for the Decay $K_L \rightarrow \pi^0 \mu^+ \mu^-$. *Phys. Rev. Lett.* **84**, 5279–5282 (2000).
1361. Alavi-Harati, A. *et al.* Observation of the Decay $K_L \rightarrow \mu^+ \mu^- \gamma \gamma$. *Phys. Rev.* **D62**, 112001 (2000).
1362. Cheu, E. Measurement of $\text{Re}(\epsilon'/\epsilon)$ by the KTeV experiment. *Frascati Phys. Ser.* **16**. [89(1999)], 89–98 (1999).
1363. Alavi-Harati, A. *et al.* Search for the weak decay of a lightly bound H^0 dibaryon. *Phys. Rev. Lett.* **84**, 2593–2597 (2000).
1364. Alavi-Harati, A. *et al.* Observation of CP violation in $K(L)$ to $\pi^+ \pi^- e^+ e^-$ decays. *Phys. Rev. Lett.* **84**, 408–411 (2000).
1365. Alavi-Harati, A. *et al.* Search for the decay $K(L)$ to π^0 neutrino anti-neutrino using π^0 to $e^+ e^- \gamma$. *Phys. Rev.* **D61**, 072006 (2000).
1366. Alavi-Harati, A. *et al.* Observation of direct CP violation in $K_{S,L} \rightarrow \pi\pi$ decays. *Phys. Rev. Lett.* **83**, 22–27 (1999).
1367. Alavi-Harati, A. *et al.* Light gluino search for decays containing $\pi^+ \pi^-$ or π^0 from a neutral hadron beam at Fermilab. *Phys. Rev. Lett.* **83**, 2128–2132 (1999).
1368. Alavi-Harati, A. *et al.* Measurement of the branching ratio of π^0 to $e^+ e^-$ using $K(L)$ to 3 π^0 decays in flight. *Phys. Rev. Lett.* **83**, 922–925 (1999).
1369. Alavi-Harati, A. *et al.* Measurement of the decay $K(L)$ to $\pi^0 \gamma \gamma$. *Phys. Rev. Lett.* **83**, 917–921 (1999).
1370. Affolder, A. A. *et al.* Observation of the decay Ξ^0 to $\Sigma^+ e^-$ anti-neutrino. *Phys. Rev. Lett.* **82**, 3751–3754 (1999).

1371. Arisaka, K. *et al.* Search for the lepton-family number violating decays $K(L)$ to $\pi^0 \mu^+ e^-$. *Phys. Lett.* **B432**, 230–234 (1998).
1372. Adams, J. *et al.* Search for the decay $K(L)$ to π^0 neutrino anti-neutrino. *Phys. Lett.* **B447**, 240–245 (1999).
1373. Adams, J. *et al.* Measurement of the branching fraction of the decay $K(L)$ to $\pi^+ \pi^- e^+ e^-$. *Phys. Rev. Lett.* **80**, 4123–4126 (1998).
1374. Adams, J. *et al.* Search for light gluinos via the spontaneous appearance of $\pi^+ \pi^-$ pairs with an 800-GeV/c proton beam at Fermilab. *Phys. Rev. Lett.* **79**, 4083–4087 (1997).
1375. Gu, P. *et al.* First evidence for the decay $K(L)$ to $e^+ e^- \mu^+ \mu^-$. *Phys. Rev. Lett.* **76**, 4312–4315 (1996).
1376. Matthews, J. N. *et al.* New measurement of the CP violation parameter $\eta(+ - \gamma)$. *Phys. Rev. Lett.* **75**, 2803–2806 (1995).
1377. Bown, C., Cheu, E., Dusatko, J., Sanders, H. & Zeleznik, M. The KTeV hardware cluster counter. *Nucl. Instrum. Meth.* **A369**, 248–254 (1996).
1378. Spencer, M. B. *et al.* A Measurement of the branching ratio and form-factor of $K(L)$ to $\mu^+ \mu^- \gamma$. *Phys. Rev. Lett.* **74**, 3323–3326 (1995).
1379. Roberts, D. *et al.* Search for the decay $K^0(L)$ to $\pi^0 \pi^0 \gamma$. *Phys. Rev.* **D50**, 1874–1878 (1994).
1380. Nakaya, T. *et al.* Measurement of the branching ratio of $K(L)$ to $e^+ e^- \gamma \gamma$. *Phys. Rev. Lett.* **73**, 2169–2172 (1994).
1381. Weaver, M. *et al.* Limit on the branching ratio of $K(L)$ to π^0 neutrino anti-neutrino. *Phys. Rev. Lett.* **72**, 3758–3761 (1994).
1382. Gu, P. *et al.* Measurement of the branching ratio and a study of CP for the leptonic decay $K(L)$ to $e^+ e^- e^+ e^-$. *Phys. Rev. Lett.* **72**, 3000–3003 (1994).
1383. Krolak, P. *et al.* A Limit on the lepton family number violating process π^0 to $\mu^+ e^-$. FNAL-799 experiment. *Phys. Lett.* **B320**, 407–410 (1994).
1384. Ramberg, E. J. *et al.* Polarization of Lambda and anti-Lambda produced by 800-GeV protons. *Phys. Lett.* **B338**, 403–408 (1994).
1385. Harris, D. A. *et al.* A Limit on the branching ratio of $K(L)$ to $\pi^0 \mu^+ \mu^-$. *Phys. Rev. Lett.* **71**, 3914–3917 (1993).
1386. Harris, D. A. *et al.* A Limit on the branching ratio of $K(L)$ to $\pi^0 e^+ e^-$. *Phys. Rev. Lett.* **71**, 3918–3921 (1993).
1387. McFarland, K. S. *et al.* A Measurement of the branching ratio of π^0 to $e^+ e^-$ using decays in flight of $K(L)$ to $\pi^0 \pi^0 \pi^0$. *Phys. Rev. Lett.* **71**, 31–34 (1993).
1388. Avery, P. *et al.* D / s^+ decays to $\eta \rho^+$, η' ρ^+ , and $\Phi \rho^+$. *Phys. Rev. Lett.* **68**, 1279–1282 (1992).
1389. Alexander, J. P. *et al.* D / s^+ decays to $\eta \pi^+$ and η' π^+ . *Phys. Rev. Lett.* **68**, 1275–1278 (1992).
1390. Kubota, Y. *et al.* The CLEO-II detector. *Nucl. Instrum. Meth.* **A320**, 66–113 (1992).
1391. Ammar, R. *et al.* The Electronic branching ratio of the tau lepton. *Phys. Rev.* **D45**, 3976–3985 (1992).
1392. Daoudi, M. *et al.* Two-body $D(s)^+$ decays to $\eta \pi^+$, η' π^+ , $\eta \rho^+$, η' ρ^+ , $\Phi \rho^+$. *Phys. Rev.* **D45**, 3965–3975 (1992).
1393. Henderson, S. *et al.* Measurements of semileptonic branching fractions of B mesons at the Upsilon (4S) resonance. *Phys. Rev.* **D45**, 2212–2231 (1992).
1394. Crawford, G. D. *et al.* Measurement of the ratio $B(D^0 \text{ to } K^{*-} e^+ \text{ electron-neutrino}) / B(D^0 \text{ to } K^- e^+ \text{ electron-neutrino})$. *Phys. Rev.* **D44**, 3394–3401 (1991).
1395. Ammar, R. *et al.* Unusual decay modes of D^0 and D^+ mesons. *Phys. Rev.* **D44**, 3383–3393 (1991).

1396. Crawford, G. D. *et al.* Measurement of baryon production in B meson decay. *Phys. Rev.* **D45**, 752–770 (1992).
1397. Kubota, Y. *et al.* Study of continuum D^*+ spin alignment. *Phys. Rev.* **D44**, 593–600 (1991).
1398. Avery, P. *et al.* Inclusive production of the charmed baryon $\Lambda_b(c)$ from e^+e^- annihilations at $s^{**}(1/2) = 10.55\text{-GeV}$. *Phys. Rev.* **D43**, 3599–3610 (1991).
1399. Avery, P. *et al.* Measurement of the $\Lambda_b(c)$ decay asymmetry parameter. *Phys. Rev. Lett.* **65**, 2842–2845 (1990).
1400. Goldberg, M. *et al.* Study of K^* production in tau decay. *Phys. Lett.* **B251**, 223–228 (1990).
1401. Fulton, R. *et al.* Exclusive and inclusive semileptonic decays of B mesons to D mesons. *Phys. Rev.* **D43**, 651–663 (1991).
1402. Alexander, J. P. *et al.* Study of the decays D_0 to K anti-K, pi anti-pi. *Phys. Rev. Lett.* **65**, 1184–1187 (1990).
1403. Alexander, J. P. *et al.* Observation of $\Upsilon(4s)$ Decays Into Non - $B\bar{B}$ Final States Containing ψ Mesons. *Phys. Rev. Lett.* **64**, 2226 (1990).
1404. Bortoletto, D. *et al.* Exclusive and Inclusive Decays of B Mesons Into $D(s)$ Mesons. *Phys. Rev. Lett.* **64**, 2117 (1990).
1405. Bortoletto, D. *et al.* Study of the Decay $\bar{B}^0 \rightarrow D^* + L^-$ Anti-neutrino. *Phys. Rev. Lett.* **63**, 1667–1670 (1989).
1406. Chen, W. Y. *et al.* Measurement of $\gamma\gamma$ Widths of Charmonium States. *Phys. Lett.* **B243**, 169–174 (1990).
1407. Fulton, R. *et al.* Observation of B Meson Semileptonic Decays to Noncharmed Final States. *Phys. Rev. Lett.* **64**, 16–20 (1990).
1408. Bowcock, T. J. V. *et al.* Search for Neutrinoless Decays of the τ Lepton. *Phys. Rev.* **D41**, 805 (1990).
1409. Fulton, R. *et al.* RADIATIVE UPSILON (1S) DECAYS. *Phys. Rev.* **D41**, 1401 (1990).
1410. Avery, P. *et al.* P Wave Charmed Mesons in e^+e^- Annihilation. *Phys. Rev.* **D41**, 774 (1990).
1411. Bowcock, T. J. V. *et al.* Search for the Production of Fractionally Charged Particles in e^+e^- Annihilations at $\sqrt{s} = 10.5\text{ GeV}$. *Phys. Rev.* **D40**, 263 (1989).
1412. Avery, P. *et al.* A Search for Exclusive Penguin Decays of B Mesons. *Phys. Lett.* **B223**, 470–475 (1989).
1413. Mir, R. *et al.* STUDY OF STRAW CHAMBER LIFETIME WITH ARGON ETHANE. *Nucl. Instrum. Meth.* **A283**, 679–681 (1989).
1414. Bortoletto, D. *et al.* A Search for $b \rightarrow u$ Transitions in Exclusive Hadronic B Meson Decays. *Phys. Rev. Lett.* **62**, 2436 (1989).
1415. Alam, M. S. *et al.* Search for a Neutral Higgs Boson in B Meson Decay. *Phys. Rev.* **D40**. [Erratum: *Phys. Rev.* **D40**, 3790(1989)], 712–720 (1989).
1416. Chen, W. Y. *et al.* Measurement of the Muonic Branching Fractions of the $\Upsilon(1s)$ and $\Upsilon(3s)$. *Phys. Rev.* **D39**, 3528 (1989).
1417. Artuso, M. *et al.* B_0 anti- B_0 Mixing at the Upsilon (4S). *Phys. Rev. Lett.* **62**, 2233 (1989).
1418. Avery, P. *et al.* Observation of the Charmed Strange Baryon $\Xi(c)0$. *Phys. Rev. Lett.* **62**, 863 (1989).
1419. Fulton, R. *et al.* First Observation of Inclusive ψ Production in Υ Decays. *Phys. Lett.* **B224**, 445–449 (1989).
1420. Adler, J. *et al.* The Mark-III Vertex Chamber. *Nucl. Instrum. Meth.* **A276**, 42 (1989).
1421. Schwingenheuer, B. *et al.* CPT tests in the neutral kaon system. *Phys. Rev. Lett.* **74**, 4376–4379 (1995).
1422. Battle, M. *et al.* A Measurement of the tau lepton lifetime. *Phys. Lett.* **B291**. [,260(1992)], 488–495 (1992).
1423. Alam, M. S. *et al.* Shape studies of quark jets versus gluon jets at $s^{**}(1.2) = 10\text{-GeV}$. *Phys. Rev.* **D46**, 4822–4827 (1992).

1424. Henderson, S. *et al.* Observation of the decay $\chi(c)0$ to ωK^+ . *Phys. Lett.* **B283**, 161–164 (1992).
1425. Bortoletto, D. *et al.* Inclusive and exclusive decays of B mesons to final states including charm and charmonium mesons. *Phys. Rev.* **D45**, 21–35 (1992).
1426. Morrison, R. *et al.* Inclusive $\chi(2p)$ production in $\Upsilon(3S)$ decay. *Phys. Rev. Lett.* **67**, 1696–1700 (1991).
1427. Akerib, D. S. *et al.* Measurement of the inclusive B^* cross-section above the $\Upsilon(4S)$. *Phys. Rev. Lett.* **67**, 1692–1695 (1991).
1428. Brock, I. C. *et al.* Study of $\pi^+ \pi^-$ transitions from the $\Upsilon(3S)$ and a search for the $h(b)$. *Phys. Rev.* **D43**, 1448–1458 (1991).
1429. Kinoshita, K. *et al.* Study of $D0$ decays into final states with a π^0 or η . *Phys. Rev.* **D43**, 2836–2843 (1991).
1430. Alexander, J. P. *et al.* Determination of $B(D(s)^+ \rightarrow \phi \pi^+)$ via observations of $D(s)^+ \rightarrow \phi l^+ \nu$. *Phys. Rev. Lett.* **65**, 1531–1534 (1990).
1431. Chen, W. Y. *et al.* Measurement of $D(s)$ Decay Modes. *Phys. Lett.* **B226**, 192–196 (1989).
1432. Alam, M. S. *et al.* Measurement of the Isospin Mass Splitting $\Xi^+(c) \chi_{i0}(c)$. *Phys. Lett.* **B226**, 401–404 (1989).
1433. Katayama, N. *et al.* TEST INSTALLATION OF A 2.3-cm RADIUS BEAM PIPE AND VERTEX DRIFT CHAMBER IN CLEO AT CESR. *Nucl. Instrum. Meth.* **A283**, 539–543 (1989).
1434. Bowcock, T. J. V. *et al.* $\Sigma(c)^{++}$ and $\Sigma(c)0$ Production From e^+e^- Annihilation in the Υ Energy Region. *Phys. Rev. Lett.* **62**, 1240 (1989).
1435. Bebek, C. *et al.* Search for the Charmless Decays $B \rightarrow p\bar{p}\pi$ and $p\bar{p}\pi\pi$. *Phys. Rev. Lett.* **62**, 8 (1989).

Member/Board of Directors Annual Disclosure Statement
(Adopted August 7, 2012)

Name: Elliott Cheu	
In an effort to avoid any appearance of a lack of integrity and transparency in Tucson Airport Authority's decision-making processes, TAA has adopted a Conflict of Interest Policy applicable to all TAA members. In addition, members of the TAA Board of Directors are required to submit an annual disclosure statement to disclose (i) any personal or financial interests that have a reasonable likelihood to create, or to appear to create, a conflict of interest with TAA, and (ii) any current business relationships involving TAA.	
I have the following personal or financial interests to disclose in accordance with the Policy:	
Campus Research Corporation Board of Directors: Vice Chair Agnese Helms Haury Advised Fund Board	
In addition, I currently have the following business, contractual or other financial relations with the TAA:	
N/A	
I have read and agree to comply with the Tucson Airport Authority Conflict of Interest Policy. I have disclosed on the attached form all potential conflicts and relevant business relationships involving TAA of which I am aware, if any. I will promptly report any changes that may create or appear to create a conflict of interest with TAA.	
SIGNATURE	DATE
	9/22/2024