M W Coughlin

List of Publications by Year in Descending Order

207 papers	36,374 citations	61 h-index	190 g-index
222 ext. papers	45,353 ext. citations	6.8 avg, IF	5.71 L-index

#	Paper	IF	Citations
207	Data-driven Expectations for Electromagnetic Counterpart Searches Based on LIGO/Virgo Public Alerts. *Astrophysical Journal*, **2022**, 924, 54	4.7	8
206	Give Me a Few Hours: Exploring Short Timescales in Rubin Observatory Cadence Simulations. *Astrophysical Journal, Supplement Series*, **2022**, 258, 13	8	2
205	Inferring Kilonova Population Properties with a Hierarchical Bayesian Framework. I. Nondetection Methodology and Single-event Analyses. *Astrophysical Journal*, **2022**, 925, 58	4.7	0
204	Optimizing Cadences with Realistic Light-curve Filtering for Serendipitous Kilonova Discovery with Vera Rubin Observatory. *Astrophysical Journal, Supplement Series*, **2022**, 258, 5	8	2
203	Autonomous Real-Time Science-Driven Follow-up of Survey Transients. *Lecture Notes in Computer Science*, **2022**, 59-72	0.9	
202	Constraining Type Ia supernova explosions and early flux excesses with the Zwicky Transient Factory. *Monthly Notices of the Royal Astronomical Society*, **2022**, 512, 1317-1340	4.3	2
201	The Type Icn SN 2021csp: Implications for the Origins of the Fastest Supernovae and the Fates of Wolf□Rayet Stars. *Astrophysical Journal*, **2022**, 927, 180	4.7	4
200	HEALPix Alchemy: Fast All-Sky Geometry and Image Arithmetic in a Relational Database for Multimessenger Astronomy Brokers. *Astronomical Journal*, **2022**, 163, 209	4.9	
199	Target-of-opportunity Observations of Gravitational-wave Events with Vera C. Rubin Observatory. *Astrophysical Journal, Supplement Series*, **2022**, 260, 18	8	2
198	Searches for Modulated □Ray Precursors to Compact Binary Mergers in Fermi-GBM Data. *Astrophysical Journal*, **2022**, 930, 45	4.7	0
197	A 62-minute orbital period black widow binary in a wide hierarchical triple.. *Nature*, **2022**, 605, 41-45	50.4	1
196	Multi-Messenger Constraints on the Hubble Constant through Combination of Gravitational Waves, Gamma-Ray Bursts and Kilonovae from Neutron Star Mergers. *Universe*, **2022**, 8, 289	2.5	0
195	The Challenges Ahead for Multimessenger Analyses of Gravitational Waves and Kilonova: A Case Study on GW190425. *Astrophysical Journal*, **2021**, 922, 269	4.7	7
194	Nuclear Physics Multimessenger Astrophysics Constraints on the Neutron Star Equation of State: Adding NICER□ PSR J0740+6620 Measurement. *Astrophysical Journal*, **2021**, 922, 14	4.7	11
193	Enhancing gravitational-wave science with machine learning. *Machine Learning: Science and Technology*, **2021**, 2, 011002	5.1	36
192	Lunar Gravitational-wave Antenna. *Astrophysical Journal*, **2021**, 910, 1	4.7	12
191	A Gravitational-wave Measurement of the Hubble Constant Following the Second Observing Run of Advanced LIGO and Virgo. *Astrophysical Journal*, **2021**, 909, 218	4.7	46

190	GPU-accelerated periodic source identification in large-scale surveys: measuring P and P. *Monthly Notices of the Royal Astronomical Society*, **2021**, 503, 2665-2675	4.3	2
189	SED Machine Spectra for HO Puppis and V722 Tauri. *Research Notes of the AAS*, **2021**, 5, 86	0.8	
188	Optimizing serendipitous detections of kilonovae: cadence and filter selection. *Monthly Notices of the Royal Astronomical Society*, **2021**, 504, 2822-2831	4.3	5
187	Time-series and Phase-curve Photometry of the Episodically Active Asteroid (6478) Gault in a Quiescent State Using APO, GROWTH, P200, and ZTF. *Astrophysical Journal Letters*, **2021**, 911, L35	7.9	4
186	Tails: Chasing Comets with the Zwicky Transient Facility and Deep Learning. *Astronomical Journal*, **2021**, 161, 218	4.9	0
185	Year 1 of the ZTF high-cadence Galactic plane survey: strategy, goals, and early results on new single-mode hot subdwarf B-star pulsators. *Monthly Notices of the Royal Astronomical Society*, **2021**, 505, 1254-1267	4.3	9
184	The ZTF Source Classification Project II. Periodicity and variability processing metrics. *Monthly Notices of the Royal Astronomical Society*, **2021**, 505, 2954-2965	4.3	3
183	The ZTF Source Classification Project. I. Methods and Infrastructure. *Astronomical Journal*, **2021**, 161, 267	4.9	7
182	Removing Atmospheric Fringes from Zwicky Transient Facility i-band Images using Principal Component Analysis. *Publications of the Astronomical Society of the Pacific*, **2021**, 133, 064503	5	1
181	Predicting electromagnetic counterparts using low-latency gravitational-wave data products. *Monthly Notices of the Royal Astronomical Society*, **2021**, 505, 4235-4248	4.3	5
180	Six Outbursts of Comet 46P/Wirtanen. *Planetary Science Journal*, **2021**, 2, 131	2.9	2
179	Discovery and confirmation of the shortest gamma-ray burst from a collapsar. *Nature Astronomy*, **2021**, 5, 917-927	12.1	11
178	Optical follow-up of the neutron star–black hole mergers S200105ae and S200115j. *Nature Astronomy*, **2021**, 5, 46-53	12.1	34
177	Comparing inclination-dependent analyses of kilonova transients. *Monthly Notices of the Royal Astronomical Society*, **2021**, 502, 3057-3065	4.3	16
176	Initial Characterization of Active Transitioning Centaur, P/2019 LD2 (ATLAS), Using Hubble, Spitzer, ZTF, Keck, Apache Point Observatory, and GROWTH Visible and Infrared Imaging and Spectroscopy. *Astronomical Journal*, **2021**, 161, 116	4.9	7
175	On the Nature of GW190814 and Its Impact on the Understanding of Supranuclear Matter. *Astrophysical Journal Letters*, **2021**, 908, L1	7.9	48
174	A tidal disruption event coincident with a high-energy neutrino. *Nature Astronomy*, **2021**, 5, 510-518	12.1	41
173	Search for Gravitational Waves Associated with Gamma-Ray Bursts Detected by Fermi and Swift during the LIGO–Virgo Run O3a. *Astrophysical Journal*, **2021**, 915, 86	4.7	6

172	SNIascore: Deep-learning Classification of Low-resolution Supernova Spectra. *Astrophysical Journal Letters*, **2021**, 917, L2	7.9	2
171	Fast-transient Searches in Real Time with ZTFReST: Identification of Three Optically Discovered Gamma-Ray Burst Afterglows and New Constraints on the Kilonova Rate. *Astrophysical Journal*, **2021**, 918, 63	4.7	13
170	Search for Long-duration Gravitational-wave Signals Associated with Magnetar Giant Flares. *Astrophysical Journal*, **2021**, 918, 80	4.7	3
169	The large-scale environment of thermonuclear and core-collapse supernovae. *Monthly Notices of the Royal Astronomical Society*, **2021**, 510, 366-372	4.3	1
168	The Koala: A Fast Blue Optical Transient with Luminous Radio Emission from a Starburst Dwarf Galaxy atz= 0.27. *Astrophysical Journal*, **2020**, 895, 49	4.7	32
167	ZTF J1901+5309: a 40.6-min orbital period eclipsing double white dwarf system. *Monthly Notices of the Royal Astronomical Society: Letters*, **2020**, 494, L91-L96	4.3	11
166	GW190814: Gravitational Waves from the Coalescence of a 23 Solar Mass Black Hole with a 2.6 Solar Mass Compact Object. *Astrophysical Journal Letters*, **2020**, 896, L44	7.9	571
165	Dynamic scheduling: target of opportunity observations of gravitational wave events. *Monthly Notices of the Royal Astronomical Society*, **2020**, 495, 4366-4371	4.3	5
164	Cataclysmic Variables in the First Year of the Zwicky Transient Facility. *Astronomical Journal*, **2020**, 159, 198	4.9	12
163	GW190425: Observation of a Compact Binary Coalescence with Total Mass ~ 3.4 M ?. *Astrophysical Journal Letters*, **2020**, 892, L3	7.9	591
162	The First Ultracompact Roche Lobe-filling Hot Subdwarf Binary. *Astrophysical Journal*, **2020**, 891, 45	4.7	29
161	Candidate Electromagnetic Counterpart to the Binary Black Hole Merger Gravitational-Wave Event S190521g. *Physical Review Letters*, **2020**, 124, 251102	7.4	126
160	Characterization of the Nucleus, Morphology, and Activity of Interstellar Comet 2I/Borisov by Optical and Near-infrared GROWTH, Apache Point, IRTF, ZTF, and Keck Observations. *Astronomical Journal*, **2020**, 160, 26	4.9	18
159	Model comparison from LIGO–Virgo data on GW170817's binary components and consequences for the merger remnant. *Classical and Quantum Gravity*, **2020**, 37, 045006	3.3	69
158	A guide to LIGO–Virgo detector noise and extraction of transient gravitational-wave signals. *Classical and Quantum Gravity*, **2020**, 37, 055002	3.3	78
157	Constraining the gravitational-wave afterglow from a binary neutron star coalescence. *Monthly Notices of the Royal Astronomical Society*, **2020**, 492, 4945-4951	4.3	8
156	Implications of the search for optical counterparts during the first six months of the Advanced LIGO's and Advanced Virgo's third observing run: possible limits on the ejecta mass and binary properties. *Monthly Notices of the Royal Astronomical Society*, **2020**, 492, 863-876	4.3	54
155	Standardizing kilonovae and their use as standard candles to measure the Hubble constant. *Physical Review Research*, **2020**, 2,	3.9	21

154	Noise reduction in gravitational-wave data via deep learning. *Physical Review Research*, **2020**, 2,	3.9	19
153	GROWTH on S190814bv: Deep Synoptic Limits on the Optical/Near-infrared Counterpart to a Neutron StarBlack Hole Merger. *Astrophysical Journal*, **2020**, 890, 131	4.7	51
152	ZTF Early Observations of Type Ia Supernovae. III. Early-time Colors As a Test for Explosion Models and Multiple Populations. *Astrophysical Journal*, **2020**, 902, 48	4.7	12
151	A Non-equipartition Shock Wave Traveling in a Dense Circumstellar Environment around SN 2020oi. *Astrophysical Journal*, **2020**, 903, 132	4.7	8
150	Constraining the Kilonova Rate with Zwicky Transient Facility Searches Independent of Gravitational Wave and Short Gamma-Ray Burst Triggers. *Astrophysical Journal*, **2020**, 904, 155	4.7	14
149	A Systematic Search of Zwicky Transient Facility Data for Ultracompact Binary LISA-detectable Gravitational-wave Sources. *Astrophysical Journal*, **2020**, 905, 32	4.7	26
148	Kilonova Luminosity Function Constraints Based on Zwicky Transient Facility Searches for 13 Neutron Star Merger Triggers during O3. *Astrophysical Journal*, **2020**, 905, 145	4.7	29
147	Properties and Astrophysical Implications of the 150 M ? Binary Black Hole Merger GW190521. *Astrophysical Journal Letters*, **2020**, 900, L13	7.9	207
146	Characterization of Temporarily Captured Minimoon 2020 CD3by Keck Time-resolved Spectrophotometry. *Astrophysical Journal Letters*, **2020**, 900, L45	7.9	6
145	An 8.8 Minute Orbital Period Eclipsing Detached Double White Dwarf Binary. *Astrophysical Journal Letters*, **2020**, 905, L7	7.9	9
144	The first six months of the Advanced LIGO and Advanced Virgo third observing run with GRANDMA. *Monthly Notices of the Royal Astronomical Society*, **2020**, 492, 3904-3927	4.3	29
143	GRANDMA observations of advanced LIGO and advanced Virgo third observational campaign. *Monthly Notices of the Royal Astronomical Society*, **2020**, 497, 5518-5539	4.3	29
142	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. *Living Reviews in Relativity*, **2020**, 23, 3	32.5	144
141	A compact X-ray emitting binary in likely association with 4FGLJ0935.3+0901. *Monthly Notices of the Royal Astronomical Society*, **2020**, 493, 4845-4851	4.3	4
140	Using machine learning for transient classification in searches for gravitational-wave counterparts. *Monthly Notices of the Royal Astronomical Society*, **2020**, 497, 1320-1331	4.3	4
139	Implications of the search for optical counterparts during the second part of the Advanced LIGO and Advanced Virgo third observing run: lessons learned for future follow-up observations. *Monthly Notices of the Royal Astronomical Society*, **2020**, 497, 1181-1196	4.3	20
138	Measuring the Hubble constant with a sample of kilonovae. *Nature Communications*, **2020**, 11, 4129	17.4	18
137	Multimessenger constraints on the neutron-star equation of state and the Hubble constant. *Science* , **2020**, 370, 1450-1453	33.3	74

136	GROWTH on S190426c: Real-time Search for a Counterpart to the Probable Neutron Star–Black Hole Merger using an Automated Difference Imaging Pipeline for DECam. *Astrophysical Journal Letters*, **2019**, 881, L7	7.9	28
135	Binary Black Hole Population Properties Inferred from the First and Second Observing Runs of Advanced LIGO and Advanced Virgo. *Astrophysical Journal Letters*, **2019**, 882, L24	7.9	381
134	A Standard Siren Measurement of the Hubble Constant from GW170817 without the Electromagnetic Counterpart. *Astrophysical Journal Letters*, **2019**, 871, L13	7.9	77
133	A Strategy for LSST to Unveil a Population of Kilonovae without Gravitational-wave Triggers. *Publications of the Astronomical Society of the Pacific*, **2019**, 131, 068004	5	12
132	The GROWTH Marshal: A Dynamic Science Portal for Time-domain Astronomy. *Publications of the Astronomical Society of the Pacific*, **2019**, 131, 038003	5	80
131	Ground motion prediction at gravitational wave observatories using archival seismic data. *Classical and Quantum Gravity*, **2019**, 36, 085005	3.3	7
130	The fast, luminous ultraviolet transient AT2018cow: extreme supernova, or disruption of a star by an intermediate-mass black hole?. *Monthly Notices of the Royal Astronomical Society*, **2019**, 484, 1031-1049	4.3	78
129	The Kitt Peak Electron Multiplying CCD demonstrator. *Monthly Notices of the Royal Astronomical Society*, **2019**, 485, 1412-1419	4.3	12
128	Searches for Continuous Gravitational Waves from 15 Supernova Remnants and Fomalhaut b with Advanced LIGO. *Astrophysical Journal*, **2019**, 875, 122	4.7	45
127	Search for Gravitational Waves from a Long-lived Remnant of the Binary Neutron Star Merger GW170817. *Astrophysical Journal*, **2019**, 875, 160	4.7	60
126	Low-latency Gravitational-wave Alerts for Multimessenger Astronomy during the Second Advanced LIGO and Virgo Observing Run. *Astrophysical Journal*, **2019**, 875, 161	4.7	49
125	Coherence-Based Approaches for Estimating the Composition of the Seismic Wavefield. *Journal of Geophysical Research: Solid Earth*, **2019**, 124, 2941-2956	3.6	5
124	A luminosity distribution for kilonovae based on short gamma-ray burst afterglows. *Monthly Notices of the Royal Astronomical Society*, **2019**, 486, 672-690	4.3	35
123	Search for Transient Gravitational-wave Signals Associated with Magnetar Bursts during Advanced LIGO's Second Observing Run. *Astrophysical Journal*, **2019**, 874, 163	4.7	17
122	Neutron star–axion star collisions in the light of multimessenger astronomy. *Monthly Notices of the Royal Astronomical Society*, **2019**, 483, 908-914	4.3	18
121	2900 Square Degree Search for the Optical Counterpart of Short Gamma-Ray Burst GRB 180523B with the Zwicky Transient Facility. *Publications of the Astronomical Society of the Pacific*, **2019**, 131, 048001	5	23
120	Can a black hole–neutron star merger explain GW170817, AT2017gfo, and GRB170817A?. *Physical Review D*, **2019**, 100,	4.9	26
119	The Zwicky Transient Facility: Science Objectives. *Publications of the Astronomical Society of the Pacific*, **2019**, 131, 078001	5	256

118	Classifying the unknown: Discovering novel gravitational-wave detector glitches using similarity learning. *Physical Review D*, **2019**, 99,	4.9	23
117	Searches for Gravitational Waves from Known Pulsars at Two Harmonics in 2015–2017 LIGO Data. *Astrophysical Journal*, **2019**, 879, 10	4.7	63
116	General relativistic orbital decay in a seven-minute-orbital-period eclipsing binary system. *Nature*, **2019**, 571, 528-531	50.4	56
115	Tests of General Relativity with GW170817. *Physical Review Letters*, **2019**, 123, 011102	7.4	204
114	Optimizing multitelescope observations of gravitational-wave counterparts. *Monthly Notices of the Royal Astronomical Society*, **2019**, 489, 5775-5783	4.3	25
113	Multimessenger Bayesian parameter inference of a binary neutron star merger. *Monthly Notices of the Royal Astronomical Society: Letters*, **2019**, 489, L91-L96	4.3	91
112	Search for Eccentric Binary Black Hole Mergers with Advanced LIGO and Advanced Virgo during Their First and Second Observing Runs. *Astrophysical Journal*, **2019**, 883, 149	4.7	36
111	GROWTH on S190510g: DECam Observation Planning and Follow-up of a Distant Binary Neutron Star Merger Candidate. *Astrophysical Journal Letters*, **2019**, 881, L16	7.9	19
110	Search for Subsolar Mass Ultracompact Binaries in Advanced LIGO's Second Observing Run. *Physical Review Letters*, **2019**, 123, 161102	7.4	68
109	GROWTH on S190425z: Searching Thousands of Square Degrees to Identify an Optical or Infrared Counterpart to a Binary Neutron Star Merger with the Zwicky Transient Facility and Palomar Gattini-IR. *Astrophysical Journal Letters*, **2019**, 885, L19	7.9	54
108	Orbital Decay in a 20 Minute Orbital Period Detached Binary with a Hydrogen-poor Low-mass White Dwarf. *Astrophysical Journal Letters*, **2019**, 886, L12	7.9	24
107	Search strategies for long gravitational-wave transients: Hidden Markov model tracking and seedless clustering. *Physical Review D*, **2019**, 100,	4.9	3
106	The Zwicky Transient Facility: System Overview, Performance, and First Results. *Publications of the Astronomical Society of the Pacific*, **2019**, 131, 018002	5	472
105	Control strategy to limit duty cycle impact of earthquakes on the LIGO gravitational-wave detectors. *Classical and Quantum Gravity*, **2018**, 35, 055004	3.3	16
104	Effects of data quality vetoes on a search for compact binary coalescences in Advanced LIGO's first observing run. *Classical and Quantum Gravity*, **2018**, 35, 065010	3.3	62
103	GW170817: Implications for the Stochastic Gravitational-Wave Background from Compact Binary Coalescences. *Physical Review Letters*, **2018**, 120, 091101	7.4	120
102	All-sky search for long-duration gravitational wave transients in the first Advanced LIGO observing run. *Classical and Quantum Gravity*, **2018**, 35, 065009	3.3	12
101	First Search for Nontensorial Gravitational Waves from Known Pulsars. *Physical Review Letters*, **2018**, 120, 031104	7.4	50

100	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. *Living Reviews in Relativity*, **2018**, 21, 3	32.5	543
99	Optimizing searches for electromagnetic counterparts of gravitational wave triggers. *Monthly Notices of the Royal Astronomical Society*, **2018**, 478, 692-702	4.3	36
98	Measurement and subtraction of Schumann resonances at gravitational-wave interferometers. *Physical Review D*, **2018**, 97,	4.9	30
97	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA **2018**, 21, 1		2
96	Observational Implications of Lowering the LIGO-Virgo Alert Threshold. *Astrophysical Journal Letters*, **2018**, 861, L24	7.9	5
95	Constraints on the neutron star equation of state from AT2017gfo using radiative transfer simulations. *Monthly Notices of the Royal Astronomical Society*, **2018**, 480, 3871-3878	4.3	108
94	Testing of the LSST photometric calibration strategy at the CTIO 0.9 meter telescope. *Proceedings of the International Astronomical Union*, **2018**, 14, 485-485	0.1	
93	Gravitational-wave Geodesy: A New Tool for Validating Detection of the Stochastic Gravitational-wave Background. *Astrophysical Journal Letters*, **2018**, 869, L28	7.9	3
92	Search for Subsolar-Mass Ultracompact Binaries in Advanced LIGO's First Observing Run. *Physical Review Letters*, **2018**, 121, 231103	7.4	49
91	Implications of Dedicated Seismometer Measurements on Newtonian-Noise Cancellation for Advanced LIGO. *Physical Review Letters*, **2018**, 121, 221104	7.4	28
90	Testing the magnetar scenario for superluminous supernovae with circular polarimetry. *Monthly Notices of the Royal Astronomical Society*, **2018**, 479, 4984-4990	4.3	6
89	GW170817: Measurements of Neutron Star Radii and Equation of State. *Physical Review Letters*, **2018**, 121, 161101	7.4	867
88	Search for Tensor, Vector, and Scalar Polarizations in the Stochastic Gravitational-Wave Background. *Physical Review Letters*, **2018**, 120, 201102	7.4	60
87	Limiting the effects of earthquakes on gravitational-wave interferometers. *Classical and Quantum Gravity*, **2017**, 34, 044004	3.3	13
86	Exploring the sensitivity of next generation gravitational wave detectors. *Classical and Quantum Gravity*, **2017**, 34, 044001	3.3	454
85	Effects of waveform model systematics on the interpretation of GW150914. *Classical and Quantum Gravity*, **2017**, 34, 104002	3.3	74
84	Upper Limits on the Stochastic Gravitational-Wave Background from Advanced LIGO's First Observing Run. *Physical Review Letters*, **2017**, 118, 121101	7.4	137
83	Directional Limits on Persistent Gravitational Waves from Advanced LIGO's First Observing Run. *Physical Review Letters*, **2017**, 118, 121102	7.4	65

82	First Search for Gravitational Waves from Known Pulsars with Advanced LIGO. *Astrophysical Journal* , **2017**, 839, 12	4.7	107
81	Globally coherent short duration magnetic field transients and their effect on ground based gravitational-wave detectors. *Classical and Quantum Gravity*, **2017**, 34, 074002	3.3	19
80	The basic physics of the binary black hole merger GW150914. *Annalen Der Physik*, **2017**, 529, 1600209	2.6	45
79	GW170814: A Three-Detector Observation of Gravitational Waves from a Binary Black Hole Coalescence. *Physical Review Letters*, **2017**, 119, 141101	7.4	1270
78	Upper Limits on Gravitational Waves from Scorpius X-1 from a Model-based Cross-correlation Search in Advanced LIGO Data. *Astrophysical Journal*, **2017**, 847, 47	4.7	35
77	A kilonova as the electromagnetic counterpart to a gravitational-wave source. *Nature*, **2017**, 551, 75-79	50.4	420
76	GW170817: Observation of Gravitational Waves from a Binary Neutron Star Inspiral. *Physical Review Letters*, **2017**, 119, 161101	7.4	4272
75	Multi-messenger Observations of a Binary Neutron Star Merger. *Astrophysical Journal Letters*, **2017**, 848, L12	7.9	1935
74	Gravitational Waves and Gamma-Rays from a Binary Neutron Star Merger: GW170817 and GRB 170817A. *Astrophysical Journal Letters*, **2017**, 848, L13	7.9	1614
73	Search for Gravitational Waves Associated with Gamma-Ray Bursts during the First Advanced LIGO Observing Run and Implications for the Origin of GRB 150906B. *Astrophysical Journal*, **2017**, 841, 89	4.7	42
72	Search for Post-merger Gravitational Waves from the Remnant of the Binary Neutron Star Merger GW170817. *Astrophysical Journal Letters*, **2017**, 851, L16	7.9	133
71	Estimating the Contribution of Dynamical Ejecta in the Kilonova Associated with GW170817. *Astrophysical Journal Letters*, **2017**, 850, L39	7.9	127
70	GW170104: Observation of a 50-Solar-Mass Binary Black Hole Coalescence at Redshift 0.2. *Physical Review Letters*, **2017**, 118, 221101	7.4	1609
69	GW170608: Observation of a 19 Solar-mass Binary Black Hole Coalescence. *Astrophysical Journal Letters*, **2017**, 851, L35	7.9	809
68	Exploring a search for long-duration transient gravitational waves associated with magnetar bursts. *Classical and Quantum Gravity*, **2017**, 34, 164002	3.3	3
67	Toward Rapid Transient Identification and Characterization of Kilonovae. *Astrophysical Journal*, **2017**, 849, 12	4.7	22
66	Observations of the GRB Afterglow ATLAS17aeu and Its Possible Association with GW 170104. *Astrophysical Journal*, **2017**, 850, 149	4.7	33
65	A collimated beam projector for precise telescope calibration **2016**,		1

64	LOCALIZATION AND BROADBAND FOLLOW-UP OF THE GRAVITATIONAL-WAVE TRANSIENT GW150914. *Astrophysical Journal Letters*, **2016**, 826, L13	7.9	183
63	A SEARCH FOR AN OPTICAL COUNTERPART TO THE GRAVITATIONAL-WAVE EVENT GW151226. *Astrophysical Journal Letters*, **2016**, 827, L40	7.9	35
62	UPPER LIMITS ON THE RATES OF BINARY NEUTRON STAR AND NEUTRON STAR–BLACK HOLE MERGERS FROM ADVANCED LIGO'S FIRST OBSERVING RUN. *Astrophysical Journal Letters*, **2016**, 832, L21	7.9	130
61	GW150914: First results from the search for binary black hole coalescence with Advanced LIGO. *Physical Review D*, **2016**, 93,	4.9	253
60	GW150914: Implications for the Stochastic Gravitational-Wave Background from Binary Black Holes. *Physical Review Letters*, **2016**, 116, 131102	7.4	188
59	GW150914: The Advanced LIGO Detectors in the Era of First Discoveries. *Physical Review Letters*, **2016**, 116, 131103	7.4	328
58	SUPPLEMENT: "LOCALIZATION AND BROADBAND FOLLOW-UP OF THE GRAVITATIONAL-WAVE TRANSIENT GW150914" (2016, ApJL, 826, L13). *Astrophysical Journal, Supplement Series*, **2016**, 225, 8	8	38
57	Tests of General Relativity with GW150914. *Physical Review Letters*, **2016**, 116, 221101	7.4	837
56	Properties of the Binary Black Hole Merger GW150914. *Physical Review Letters*, **2016**, 116, 241102	7.4	515
55	GW151226: Observation of Gravitational Waves from a 22-Solar-Mass Binary Black Hole Coalescence. *Physical Review Letters*, **2016**, 116, 241103	7.4	2136
54	Maximizing the probability of detecting an electromagnetic counterpart of gravitational-wave events. *Experimental Astronomy*, **2016**, 42, 165-178	1.3	15
53	GOING THE DISTANCE: MAPPING HOST GALAXIES OF LIGO AND VIRGO SOURCES IN THREE DIMENSIONS USING LOCAL COSMOGRAPHY AND TARGETED FOLLOW-UP. *Astrophysical Journal Letters*, **2016**, 829, L15	7.9	96
52	A daytime measurement of the lunar contribution to the night sky brightness in LSST's ugrizy bands—Initial results. *Experimental Astronomy*, **2016**, 41, 393-408	1.3	3
51	ASTROPHYSICAL IMPLICATIONS OF THE BINARY BLACK HOLE MERGER GW150914. *Astrophysical Journal Letters*, **2016**, 818, L22	7.9	512
50	Observation of Gravitational Waves from a Binary Black Hole Merger. *Physical Review Letters*, **2016**, 116, 061102	7.4	6108
49	An optical to IR sky brightness model for the LSST **2016**,		11
48	SUPPLEMENT: "GOING THE DISTANCE: MAPPING HOST GALAXIES OF LIGO AND VIRGO SOURCES IN THREE DIMENSIONS USING LOCAL COSMOGRAPHY AND TARGETED FOLLOW-UP" (2016, ApJL, 829, L15). *Astrophysical Journal, Supplement Series*, **2016**, 226, 10	8	33
47	Towards a first design of a Newtonian-noise cancellation system for Advanced LIGO. *Classical and Quantum Gravity*, **2016**, 33, 244001	3.3	23

46	Characterization of transient noise in Advanced LIGO relevant to gravitational wave signal GW150914. *Classical and Quantum Gravity*, **2016**, 33,	3.3	155
45	SUPPLEMENT: THE RATE OF BINARY BLACK HOLE MERGERS INFERRED FROM ADVANCED LIGO OBSERVATIONS SURROUNDING GW150914 (2016, ApJL, 833, L1). *Astrophysical Journal, Supplement Series*, **2016**, 227, 14	8	52
44	Prospects for Observing and Localizing Gravitational-Wave Transients with Advanced LIGO and Advanced Virgo. *Living Reviews in Relativity*, **2016**, 19, 1	32.5	393
43	Subtraction of correlated noise in global networks of gravitational-wave interferometers. *Classical and Quantum Gravity*, **2016**, 33, 224003	3.3	21
42	THE RATE OF BINARY BLACK HOLE MERGERS INFERRED FROM ADVANCED LIGO OBSERVATIONS SURROUNDING GW150914. *Astrophysical Journal Letters*, **2016**, 833, L1	7.9	209
41	Pan-STARRS and PESSTO search for an optical counterpart to the LIGO gravitational-wave source GW150914. *Monthly Notices of the Royal Astronomical Society*, **2016**, 462, 4094-4116	4.3	45
40	Detectability of eccentric compact binary coalescences with advanced gravitational-wave detectors. *Physical Review D*, **2015**, 91,	4.9	29
39	Parameter estimation for compact binaries with ground-based gravitational-wave observations using the LALInference software library. *Physical Review D*, **2015**, 91,	4.9	509
38	Real-time earthquake warning for astronomical observatories. *Experimental Astronomy*, **2015**, 39, 387-404	1.3	2
37	Characterization of the LIGO detectors during their sixth science run. *Classical and Quantum Gravity* , **2015**, 32, 115012	3.3	790
36	Advanced LIGO. *Classical and Quantum Gravity*, **2015**, 32, 074001	3.3	1098
35	Prospects for searches for long-duration gravitational-waves without time slides. *Physical Review D*, **2015**, 92,	4.9	7
34	Mock data and science challenge for detecting an astrophysical stochastic gravitational-wave background with Advanced LIGO and Advanced Virgo. *Physical Review D*, **2015**, 92,	4.9	25
33	Detecting Gravitational-Wave Transients at 5 A Hierarchical Approach. *Physical Review Letters*, **2015**, 115, 181102	7.4	20
32	Detecting compact binary coalescences with seedless clustering. *Physical Review D*, **2014**, 90,	4.9	12
31	Constraining the gravitational wave energy density of the Universe using Earth ring. *Physical Review D*, **2014**, 90,	4.9	16
30	GRAVITATIONAL WAVES FROM KNOWN PULSARS: RESULTS FROM THE INITIAL DETECTOR ERA. *Astrophysical Journal*, **2014**, 785, 119	4.7	109
29	Search for gravitational waves associated with ray bursts detected by the interplanetary network. *Physical Review Letters*, **2014**, 113, 011102	7.4	30

28	Wiener filtering with a seismic underground array at the Sanford Underground Research Facility. *Classical and Quantum Gravity*, **2014**, 31, 215003	3.3	13
27	Constraining the gravitational-wave energy density of the Universe in the range 0.1 Hz to 1 Hz using the Apollo Seismic Array. *Physical Review D*, **2014**, 90,	4.9	12
26	Seedless clustering in all-sky searches for gravitational-wave transients. *Physical Review D*, **2014**, 89,	4.9	24
25	Improved upper limits on the stochastic gravitational-wave background from 2009-2010 LIGO and Virgo data. *Physical Review Letters*, **2014**, 113, 231101	7.4	74
24	Upper limit on a stochastic background of gravitational waves from seismic measurements in the range 0.05-1 Hz. *Physical Review Letters*, **2014**, 112, 101102	7.4	18
23	Search for gravitational waves from binary black hole inspiral, merger, and ringdown in LIGO-Virgo data from 2009–2010. *Physical Review D*, **2013**, 87,	4.9	91
22	Search for long-lived gravitational-wave transients coincident with long gamma-ray bursts. *Physical Review D*, **2013**, 88,	4.9	30
21	Fortifying the characterization of binary mergers in LIGO data. *Physical Review D*, **2013**, 88,	4.9	21
20	Searching for gravitational-wave transients with a qualitative signal model: Seedless clustering strategies. *Physical Review D*, **2013**, 88,	4.9	32
19	Directed search for continuous gravitational waves from the Galactic center. *Physical Review D*, **2013**, 88,	4.9	57
18	IMPLICATIONS FOR THE ORIGIN OF GRB 051103 FROM LIGO OBSERVATIONS. *Astrophysical Journal* , **2012**, 755, 2	4.7	53
17	All-sky search for gravitational-wave bursts in the second joint LIGO-Virgo run. *Physical Review D*, **2012**, 85,	4.9	96
16	Search for gravitational waves from intermediate mass binary black holes. *Physical Review D*, **2012**, 85,	4.9	46
15	Upper limits on a stochastic gravitational-wave background using LIGO and Virgo interferometers at 600–1000 Hz. *Physical Review D*, **2012**, 85,	4.9	40
14	Search for gravitational waves from low mass compact binary coalescence in LIGO's sixth science run and Virgo's science runs 2 and 3. *Physical Review D*, **2012**, 85,	4.9	172
13	Seismic topographic scattering in the context of GW detector site selection. *Classical and Quantum Gravity*, **2012**, 29, 075004	3.3	10
12	Identification of noise artifacts in searches for long-duration gravitational-wave transients. *Classical and Quantum Gravity*, **2012**, 29, 095018	3.3	13
11	First low-latency LIGO+Virgo search for binary inspirals and their electromagnetic counterparts. *Astronomy and Astrophysics*, **2012**, 541, A155	5.1	69

10	SEARCH FOR GRAVITATIONAL WAVES ASSOCIATED WITH GAMMA-RAY BURSTS DURING LIGO SCIENCE RUN 6 AND VIRGO SCIENCE RUNS 2 AND 3. *Astrophysical Journal*, **2012**, 760, 12	4.7	94
9	SEARCH FOR GRAVITATIONAL WAVE BURSTS FROM SIX MAGNETARS. *Astrophysical Journal Letters*, **2011**, 734, L35	7.9	47
8	Long gravitational-wave transients and associated detection strategies for a network of terrestrial interferometers. *Physical Review D*, **2011**, 83,	4.9	57
7	Characterization of the seismic environment at the Sanford Underground Laboratory, South Dakota. *Classical and Quantum Gravity*, **2010**, 27, 225011	3.3	24
6	DECAM-GROWTH SEARCH FOR THE FAINT AND DISTANT BINARY NEUTRON STAR AND NEUTRON STAR-BLACK HOLE MERGERS IN O3A. *Revista Mexicana De Astronomía Y Astrofísica Serie De Conferencias*,53, 91-99	0	1
5	GRANDMA: A NETWORK TO COORDINATE THEM ALL. *Revista Mexicana De Astronomía Y Astrofísica Serie De Conferencias*,53, 198-205	0	0
4	LIGO detector characterization in the second and third observing runs. *Classical and Quantum Gravity*,	3.3	31
3	Discovery and characterization of five new eclipsing AM CVn systems. *Monthly Notices of the Royal Astronomical Society*,	4.3	4
2	The Type II supernova SN 2020jfo in M61, implications for progenitor system, and explosion dynamics. *Astronomy and Astrophysics*,	5.1	2
1	Hardware-accelerated inference for real-time gravitational-wave astronomy. *Nature Astronomy*,	12.1	0