

# Paul A Altin

## List of Publications by Citations

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108 papers	31,526 citations	52 h-index	117 g-index
117 ext. papers	39,243 ext. citations	6.9 avg, IF	4.92 L-index

#	Paper	IF	Citations
108	Observation of Gravitational Waves from a Binary Black Hole Merger. <i>Physical Review Letters</i> , <b>2016</b> , 116, 061102	7.4	6108
107	GW170817: Observation of Gravitational Waves from a Binary Neutron Star Inspiral. <i>Physical Review Letters</i> , <b>2017</b> , 119, 161101	7.4	4272
106	GW151226: Observation of Gravitational Waves from a 22-Solar-Mass Binary Black Hole Coalescence. <i>Physical Review Letters</i> , <b>2016</b> , 116, 241103	7.4	2136
105	Multi-messenger Observations of a Binary Neutron Star Merger. <i>Astrophysical Journal Letters</i> , <b>2017</b> , 848, L12	7.9	1935
104	Gravitational Waves and Gamma-Rays from a Binary Neutron Star Merger: GW170817 and GRB 170817A. <i>Astrophysical Journal Letters</i> , <b>2017</b> , 848, L13	7.9	1614
103	GW170104: Observation of a 50-Solar-Mass Binary Black Hole Coalescence at Redshift 0.2. <i>Physical Review Letters</i> , <b>2017</b> , 118, 221101	7.4	1609
102	GW170814: A Three-Detector Observation of Gravitational Waves from a Binary Black Hole Coalescence. <i>Physical Review Letters</i> , <b>2017</b> , 119, 141101	7.4	1270
101	GW170817: Measurements of Neutron Star Radii and Equation of State. <i>Physical Review Letters</i> , <b>2018</b> , 121, 161101	7.4	867
100	Tests of General Relativity with GW150914. <i>Physical Review Letters</i> , <b>2016</b> , 116, 221101	7.4	837
99	GW170608: Observation of a 19 Solar-mass Binary Black Hole Coalescence. <i>Astrophysical Journal Letters</i> , <b>2017</b> , 851, L35	7.9	809
98	GW190425: Observation of a Compact Binary Coalescence with Total Mass $\sim 3.4 M_{\odot}$ . <i>Astrophysical Journal Letters</i> , <b>2020</b> , 892, L3	7.9	591
97	GW190814: Gravitational Waves from the Coalescence of a 23 Solar Mass Black Hole with a 2.6 Solar Mass Compact Object. <i>Astrophysical Journal Letters</i> , <b>2020</b> , 896, L44	7.9	571
96	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. <i>Living Reviews in Relativity</i> , <b>2018</b> , 21, 3	32.5	543
95	Properties of the Binary Black Hole Merger GW150914. <i>Physical Review Letters</i> , <b>2016</b> , 116, 241102	7.4	515
94	ASTROPHYSICAL IMPLICATIONS OF THE BINARY BLACK HOLE MERGER GW150914. <i>Astrophysical Journal Letters</i> , <b>2016</b> , 818, L22	7.9	512
93	Exploring the sensitivity of next generation gravitational wave detectors. <i>Classical and Quantum Gravity</i> , <b>2017</b> , 34, 044001	3.3	454
92	GW190521: A Binary Black Hole Merger with a Total Mass of $150 M_{\odot}$ . <i>Physical Review Letters</i> , <b>2020</b> , 125, 101102	7.4	420

91	A gravitational-wave standard siren measurement of the Hubble constant. <i>Nature</i> , <b>2017</b> , 551, 85-88	50.4	413
90	Prospects for Observing and Localizing Gravitational-Wave Transients with Advanced LIGO and Advanced Virgo. <i>Living Reviews in Relativity</i> , <b>2016</b> , 19, 1	32.5	393
89	Binary Black Hole Population Properties Inferred from the First and Second Observing Runs of Advanced LIGO and Advanced Virgo. <i>Astrophysical Journal Letters</i> , <b>2019</b> , 882, L24	7.9	381
88	GW150914: The Advanced LIGO Detectors in the Era of First Discoveries. <i>Physical Review Letters</i> , <b>2016</b> , 116, 131103	7.4	328
87	GW150914: First results from the search for binary black hole coalescence with Advanced LIGO. <i>Physical Review D</i> , <b>2016</b> , 93,	4.9	253
86	THE RATE OF BINARY BLACK HOLE MERGERS INFERRED FROM ADVANCED LIGO OBSERVATIONS SURROUNDING GW150914. <i>Astrophysical Journal Letters</i> , <b>2016</b> , 833, L1	7.9	209
85	Properties and Astrophysical Implications of the 150 M $\odot$ Binary Black Hole Merger GW190521. <i>Astrophysical Journal Letters</i> , <b>2020</b> , 900, L13	7.9	207
84	Tests of General Relativity with GW170817. <i>Physical Review Letters</i> , <b>2019</b> , 123, 011102	7.4	204
83	Population Properties of Compact Objects from the Second LIGO/Virgo Gravitational-Wave Transient Catalog. <i>Astrophysical Journal Letters</i> , <b>2021</b> , 913, L7	7.9	194
82	GW150914: Implications for the Stochastic Gravitational-Wave Background from Binary Black Holes. <i>Physical Review Letters</i> , <b>2016</b> , 116, 131102	7.4	188
81	LOCALIZATION AND BROADBAND FOLLOW-UP OF THE GRAVITATIONAL-WAVE TRANSIENT GW150914. <i>Astrophysical Journal Letters</i> , <b>2016</b> , 826, L13	7.9	183
80	Characterization of transient noise in Advanced LIGO relevant to gravitational wave signal GW150914. <i>Classical and Quantum Gravity</i> , <b>2016</b> , 33,	3.3	155
79	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. <i>Living Reviews in Relativity</i> , <b>2020</b> , 23, 3	32.5	144
78	Observation of Gravitational Waves from Two Neutron Star Black Hole Coalescences. <i>Astrophysical Journal Letters</i> , <b>2021</b> , 915, L5	7.9	142
77	Upper Limits on the Stochastic Gravitational-Wave Background from Advanced LIGO's First Observing Run. <i>Physical Review Letters</i> , <b>2017</b> , 118, 121101	7.4	137
76	Search for Post-merger Gravitational Waves from the Remnant of the Binary Neutron Star Merger GW170817. <i>Astrophysical Journal Letters</i> , <b>2017</b> , 851, L16	7.9	133
75	UPPER LIMITS ON THE RATES OF BINARY NEUTRON STAR AND NEUTRON STAR BLACK HOLE MERGERS FROM ADVANCED LIGO'S FIRST OBSERVING RUN. <i>Astrophysical Journal Letters</i> , <b>2016</b> , 832, L21	7.9	130
74	Estimating the Contribution of Dynamical Ejecta in the Kilonova Associated with GW170817. <i>Astrophysical Journal Letters</i> , <b>2017</b> , 850, L39	7.9	127

73	GW170817: Implications for the Stochastic Gravitational-Wave Background from Compact Binary Coalescences. <i>Physical Review Letters</i> , <b>2018</b> , 120, 091101	7.4	120
72	First Search for Gravitational Waves from Known Pulsars with Advanced LIGO. <i>Astrophysical Journal</i> , <b>2017</b> , 839, 12	4.7	107
71	Bright solitonic matter-wave interferometer. <i>Physical Review Letters</i> , <b>2014</b> , 113, 013002	7.4	101
70	First Measurement of the Hubble Constant from a Dark Standard Siren using the Dark Energy Survey Galaxies and the LIGO/Virgo Binary Black-hole Merger GW170814. <i>Astrophysical Journal Letters</i> , <b>2019</b> , 876, L7	7.9	91
69	Precision atomic gravimeter based on Bragg diffraction. <i>New Journal of Physics</i> , <b>2013</b> , 15, 023009	2.9	81
68	Cold-atom gravimetry with a Bose-Einstein condensate. <i>Physical Review A</i> , <b>2011</b> , 84,	2.6	81
67	A guide to LIGO/Virgo detector noise and extraction of transient gravitational-wave signals. <i>Classical and Quantum Gravity</i> , <b>2020</b> , 37, 055002	3.3	78
66	Atom lasers: Production, properties and prospects for precision inertial measurement. <i>Physics Reports</i> , <b>2013</b> , 529, 265-296	27.7	75
65	Effects of waveform model systematics on the interpretation of GW150914. <i>Classical and Quantum Gravity</i> , <b>2017</b> , 34, 104002	3.3	74
64	Model comparison from LIGO/Virgo data on GW170817's binary components and consequences for the merger remnant. <i>Classical and Quantum Gravity</i> , <b>2020</b> , 37, 045006	3.3	69
63	Search for Substellar Mass Ultracompact Binaries in Advanced LIGO's Second Observing Run. <i>Physical Review Letters</i> , <b>2019</b> , 123, 161102	7.4	68
62	Directional Limits on Persistent Gravitational Waves from Advanced LIGO's First Observing Run. <i>Physical Review Letters</i> , <b>2017</b> , 118, 121102	7.4	65
61	Searches for Gravitational Waves from Known Pulsars at Two Harmonics in 2015–2017 LIGO Data. <i>Astrophysical Journal</i> , <b>2019</b> , 879, 10	4.7	63
60	Effects of data quality vetoes on a search for compact binary coalescences in Advanced LIGO's first observing run. <i>Classical and Quantum Gravity</i> , <b>2018</b> , 35, 065010	3.3	62
59	11 W narrow linewidth laser source at 780 nm for laser cooling and manipulation of Rubidium. <i>Optics Express</i> , <b>2012</b> , 20, 8915-9	3.3	62
58	Search for Gravitational Waves from a Long-lived Remnant of the Binary Neutron Star Merger GW170817. <i>Astrophysical Journal</i> , <b>2019</b> , 875, 160	4.7	60
57	Search for Tensor, Vector, and Scalar Polarizations in the Stochastic Gravitational-Wave Background. <i>Physical Review Letters</i> , <b>2018</b> , 120, 201102	7.4	60
56	SUPPLEMENT: THE RATE OF BINARY BLACK HOLE MERGERS INFERRED FROM ADVANCED LIGO OBSERVATIONS SURROUNDING GW150914 (2016, ApJL, 833, L1). <i>Astrophysical Journal, Supplement Series</i> , <b>2016</b> , 227, 14	8	52

55	Antiresonance phase shift in strongly coupled cavity QED. <i>Physical Review Letters</i> , <b>2014</b> , 112, 043601	7.4	51
54	First Search for Nontensorial Gravitational Waves from Known Pulsars. <i>Physical Review Letters</i> , <b>2018</b> , 120, 031104	7.4	50
53	On the Progenitor of Binary Neutron Star Merger GW170817. <i>Astrophysical Journal Letters</i> , <b>2017</b> , 850, L40	7.9	50
52	Coherent 455 nm beam production in a cesium vapor. <i>Optics Letters</i> , <b>2009</b> , 34, 2321-3	3	50
51	Low-latency Gravitational-wave Alerts for Multimessenger Astronomy during the Second Advanced LIGO and Virgo Observing Run. <i>Astrophysical Journal</i> , <b>2019</b> , 875, 161	4.7	49
50	Search for Substellar-Mass Ultracompact Binaries in Advanced LIGO's First Observing Run. <i>Physical Review Letters</i> , <b>2018</b> , 121, 231103	7.4	49
49	A Gravitational-wave Measurement of the Hubble Constant Following the Second Observing Run of Advanced LIGO and Virgo. <i>Astrophysical Journal</i> , <b>2021</b> , 909, 218	4.7	46
48	The basic physics of the binary black hole merger GW150914. <i>Annalen Der Physik</i> , <b>2017</b> , 529, 1600209	2.6	45
47	Searches for Continuous Gravitational Waves from 15 Supernova Remnants and Fomalhaut b with Advanced LIGO. <i>Astrophysical Journal</i> , <b>2019</b> , 875, 122	4.7	45
46	Search for Gravitational Waves Associated with Gamma-Ray Bursts during the First Advanced LIGO Observing Run and Implications for the Origin of GRB 150906B. <i>Astrophysical Journal</i> , <b>2017</b> , 841, 89	4.7	42
45	Gradient echo memory in an ultra-high optical depth cold atomic ensemble. <i>New Journal of Physics</i> , <b>2013</b> , 15, 085027	2.9	41
44	SUPPLEMENT: LOCALIZATION AND BROADBAND FOLLOW-UP OF THE GRAVITATIONAL-WAVE TRANSIENT GW150914[(2016, ApJL, 826, L13). <i>Astrophysical Journal, Supplement Series</i> , <b>2016</b> , 225, 8	8	38
43	Collapse and three-body loss in a 85Rb Bose-Einstein condensate. <i>Physical Review A</i> , <b>2011</b> , 84,	2.6	37
42	Search for Eccentric Binary Black Hole Mergers with Advanced LIGO and Advanced Virgo during Their First and Second Observing Runs. <i>Astrophysical Journal</i> , <b>2019</b> , 883, 149	4.7	36
41	Upper Limits on Gravitational Waves from Scorpius X-1 from a Model-based Cross-correlation Search in Advanced LIGO Data. <i>Astrophysical Journal</i> , <b>2017</b> , 847, 47	4.7	35
40	85Rb tunable-interaction Bose-Einstein condensate machine. <i>Review of Scientific Instruments</i> , <b>2010</b> , 81, 063103	1.7	33
39	Gravitational-wave Constraints on the Equatorial Ellipticity of Millisecond Pulsars. <i>Astrophysical Journal Letters</i> , <b>2020</b> , 902, L21	7.9	32
38	Optically guided linear Mach-Zehnder atom interferometer. <i>Physical Review A</i> , <b>2013</b> , 87,	2.6	30

37	Search for Multimessenger Sources of Gravitational Waves and High-energy Neutrinos with Advanced LIGO during Its First Observing Run, ANTARES, and IceCube. <i>Astrophysical Journal</i> , <b>2019</b> , 870, 134	4.7	23
36	A Fermi Gamma-Ray Burst Monitor Search for Electromagnetic Signals Coincident with Gravitational-wave Candidates in Advanced LIGO's First Observing Run. <i>Astrophysical Journal</i> , <b>2019</b> , 871, 90	4.7	22
35	A Bose-condensed, simultaneous dual-species Mach-Zehnder atom interferometer. <i>New Journal of Physics</i> , <b>2014</b> , 16, 073035	2.9	22
34	Constraining the p-Mode-g-Mode Tidal Instability with GW170817. <i>Physical Review Letters</i> , <b>2019</b> , 122, 061104	7.4	22
33	Quantum-projection-noise-limited interferometry with coherent atoms in a Ramsey-type setup. <i>Physical Review A</i> , <b>2010</b> , 81,	2.6	21
32	Constraints on Cosmic Strings Using Data from the Third Advanced LIGO-Virgo Observing Run. <i>Physical Review Letters</i> , <b>2021</b> , 126, 241102	7.4	21
31	Search for Gravitational-wave Signals Associated with Gamma-Ray Bursts during the Second Observing Run of Advanced LIGO and Advanced Virgo. <i>Astrophysical Journal</i> , <b>2019</b> , 886, 75	4.7	21
30	Optically trapped atom interferometry using the clock transition of large-87Rb Bose-Einstein condensates. <i>New Journal of Physics</i> , <b>2011</b> , 13, 065020	2.9	19
29	Search for Transient Gravitational-wave Signals Associated with Magnetar Bursts during Advanced LIGO's Second Observing Run. <i>Astrophysical Journal</i> , <b>2019</b> , 874, 163	4.7	17
28	Observation of Squeezed Light in the 2 <sup>nd</sup> Region. <i>Physical Review Letters</i> , <b>2018</b> , 120, 203603	7.4	17
27	Generation and control of frequency-dependent squeezing via Einstein-Podolsky-Rosen entanglement. <i>Nature Photonics</i> , <b>2020</b> , 14, 223-226	33.9	13
26	Diving below the Spin-down Limit: Constraints on Gravitational Waves from the Energetic Young Pulsar PSR J0537-6910. <i>Astrophysical Journal Letters</i> , <b>2021</b> , 913, L27	7.9	13
25	All-sky search for long-duration gravitational wave transients in the first Advanced LIGO observing run. <i>Classical and Quantum Gravity</i> , <b>2018</b> , 35, 065009	3.3	12
24	Tunable narrow-linewidth laser at 2 <sup>nd</sup> wavelength for gravitational wave detector research. <i>Optics Express</i> , <b>2020</b> , 28, 3280-3288	3.3	11
23	Experimental comparison of Raman and rf outcouplers for high-flux atom lasers. <i>Physical Review A</i> , <b>2010</b> , 81,	2.6	10
22	A two-state Raman coupler for coherent atom optics. <i>Optics Express</i> , <b>2009</b> , 17, 2319-25	3.3	10
21	Searches for Continuous Gravitational Waves from Young Supernova Remnants in the Early Third Observing Run of Advanced LIGO and Virgo. <i>Astrophysical Journal</i> , <b>2021</b> , 921, 80	4.7	10
20	A robust single-beam optical trap for a gram-scale mechanical oscillator. <i>Scientific Reports</i> , <b>2017</b> , 7, 14546.9	4.9	9

19	Ramsey interferometry with an atom laser. <i>Optics Express</i> , <b>2009</b> , 17, 20661-8	3.3	9
18	A Joint Fermi-GBM and LIGO/Virgo Analysis of Compact Binary Mergers from the First and Second Gravitational-wave Observing Runs. <i>Astrophysical Journal</i> , <b>2020</b> , 893, 100	4.7	9
17	Optically trapped atom interferometry using the clock transition of large <sup>87</sup> Rb Bose-Einstein condensates. <i>New Journal of Physics</i> , <b>2011</b> , 13, 119401	2.9	8
16	Constraints from LIGO O3 Data on Gravitational-wave Emission Due to R-modes in the Glitching Pulsar PSR J0537-910. <i>Astrophysical Journal</i> , <b>2021</b> , 922, 71	4.7	8
15	Measurement of inelastic losses in a sample of ultracold Rb <sup>85</sup> . <i>Physical Review A</i> , <b>2010</b> , 81,	2.6	7
14	Quantum enhanced kHz gravitational wave detector with internal squeezing. <i>Classical and Quantum Gravity</i> , <b>2020</b> , 37, 07LT02	3.3	6
13	Squeezed vacuum phase control at 2 $\mu$ m. <i>Optics Letters</i> , <b>2019</b> , 44, 5386-5389	3	6
12	Search for Gravitational Waves Associated with Gamma-Ray Bursts Detected by Fermi and Swift during the LIGO-Virgo Run O3a. <i>Astrophysical Journal</i> , <b>2021</b> , 915, 86	4.7	6
11	Frequency dependence of thermal noise in gram-scale cantilever flexures. <i>Physical Review D</i> , <b>2015</b> , 92,	4.9	5
10	An ultra-high optical depth cold atomic ensemble for quantum memories. <i>Journal of Physics: Conference Series</i> , <b>2013</b> , 467, 012009	0.3	4
9	Search for intermediate-mass black hole binaries in the third observing run of Advanced LIGO and Advanced Virgo. <i>Astronomy and Astrophysics</i> ,	5.1	4
8	Interferometric wavefront sensing with a single diode using spatial light modulation. <i>Applied Optics</i> , <b>2017</b> , 56, 2353-2358	0.2	4
7	Search for Lensing Signatures in the Gravitational-Wave Observations from the First Half of LIGO-Virgo Third Observing Run. <i>Astrophysical Journal</i> , <b>2021</b> , 923, 14	4.7	4
6	Feasibility of squeezing measurements with cavity-based atom detection. <i>Physical Review A</i> , <b>2012</b> , 86,	2.6	2
5	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA <b>2018</b> , 21, 1		2
4	Continuous parametric feedback cooling of a single atom in an optical cavity. <i>Physical Review A</i> , <b>2018</b> , 97,	2.6	1
3	From apples to atoms: measuring gravity with ultra cold atomic test masses. <i>Preview</i> , <b>2013</b> , 2013, 30-33	0.2	1
2	Automatic mode-matching of a Fabry-Pérot cavity with a single photodiode and spatial light modulation. <i>Journal of Optics (United Kingdom)</i> , <b>2020</b> , 22, 105605	1.7	1

- 1 Search for Gravitational Waves Associated with Gamma-Ray Bursts Detected by Fermi and Swift during the LIGO-Virgo Run O3b. *Astrophysical Journal*, **2022**, 928, 186 4.7 1