Melody Araya

List of Publications by Year
in descending order

54 papers	43,260 citations	47006 47 h-index	168389 53 g-index
54 all docs	54 docs citations	54 times ranked	16332 citing authors

#	Article	IF	Citations
1	Observation of Gravitational Waves from a Binary Black Hole Merger. Physical Review Letters, 2016, 116, 061102.	7.8	8,753
2	GW170817: Observation of Gravitational Waves from a Binary Neutron Star Inspiral. Physical Review Letters, 2017, 119, 161101.	7.8	6,413
3	Multi-messenger Observations of a Binary Neutron Star Merger[*]. Astrophysical Journal Letters, 2017, 848, L12.	8.3	2,805
4	GW151226: Observation of Gravitational Waves from a 22-Solar-Mass Binary Black Hole Coalescence. Physical Review Letters, 2016, 116, 241103.	7.8	2,701
5	Gravitational Waves and Gamma-Rays from a Binary Neutron Star Merger: GW170817 and GRB 170817A. Astrophysical Journal Letters, 2017, 848, L13.	8.3	2,314
6	GW170104: Observation of a 50-Solar-Mass Binary Black Hole Coalescence at Redshift 0.2. Physical Review Letters, 2017, 118, 221101.	7.8	1,987
7	Advanced LIGO. Classical and Quantum Gravity, 2015, 32, 074001.	4.0	1,929
8	GW170814: A Three-Detector Observation of Gravitational Waves from a Binary Black Hole Coalescence. Physical Review Letters, 2017, 119, 141101.	7.8	1,600
9	GW170817: Measurements of Neutron Star Radii and Equation of State. Physical Review Letters, 2018, 121, 161101.	7.8	1,473
10	Tests of General Relativity with GW150914. Physical Review Letters, 2016, 116, 221101.	7.8	1,224
11	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.	8.3	1,090
12	Characterization of the LIGO detectors during their sixth science run. Classical and Quantum Gravity, 2015, 32, 115012.	4.0	1,029
13	GW170608: Observation of a 19 Solar-mass Binary Black Hole Coalescence. Astrophysical Journal Letters, 2017, 851, L35.	8.3	968
14	GW190521: A Binary Black Hole Merger with a Total Mass of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>150</mml:mn><mml:mtext>â€‰</mml:mtext><mml:mtext>â€‰</mml:mtext><mml:msub> stretchy="false">âŠ™</mml:mo></mml:mrow></mml:msub></mml:mrow></mml:math>. Physical Review Letters, 2020, 125, 101102.	7.8	836
15	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. Living Reviews in Relativity, 2018, 21, 3.	26.7	808
16	Exploring the sensitivity of next generation gravitational wave detectors. Classical and Quantum Gravity, 2017, 34, 044001.	4.0	735
17	Properties of the Binary Black Hole Merger GW150914. Physical Review Letters, 2016, 116, 241102.	7.8	673
18	ASTROPHYSICAL IMPLICATIONS OF THE BINARY BLACK HOLE MERGER GW150914. Astrophysical Journal Letters, 2016, 818, L22.	8.3	633

#	Article	IF	Citations
19	GW150914: The Advanced LIGO Detectors in the Era of First Discoveries. Physical Review Letters, 2016, 116, 131103.	7.8	466
20	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. Living Reviews in Relativity, 2020, 23, 3.	26.7	447
21	Prospects for Observing and Localizing Gravitational-Wave Transients with Advanced LIGO and Advanced Virgo. Living Reviews in Relativity, 2016, 19, 1.	26.7	427
22	Tests of General Relativity with GW170817. Physical Review Letters, 2019, 123, 011102.	7.8	370
23	GW150914: First results from the search for binary black hole coalescence with Advanced LIGO. Physical Review D, 2016, 93, .	4.7	315
24	GW150914: Implications for the Stochastic Gravitational-Wave Background from Binary Black Holes. Physical Review Letters, 2016, 116, 131102.	7.8	269
25	THE RATE OF BINARY BLACK HOLE MERGERS INFERRED FROM ADVANCED LIGO OBSERVATIONS SURROUNDING GW150914. Astrophysical Journal Letters, 2016, 833, L1.	8.3	230
26	Characterization of transient noise in Advanced LIGO relevant to gravitational wave signal GW150914. Classical and Quantum Gravity, 2016, 33, 134001.	4.0	225
27	LOCALIZATION AND BROADBAND FOLLOW-UP OF THE GRAVITATIONAL-WAVE TRANSIENT GW150914. Astrophysical Journal Letters, 2016, 826, L13.	8.3	210
28	Upper Limits on the Stochastic Gravitational-Wave Background from Advanced LIGOâ€™s First Observing Run. Physical Review Letters, 2017, 118, 121101.	7.8	194
29	A guide to LIGOâ€“Virgo detector noise and extraction of transient gravitational-wave signals. Classical and Quantum Gravity, 2020, 37, 055002.	4.0	188
30	Search for gravitational waves from low mass compact binary coalescence in LIGOâ€™s sixth science run and Virgoâ€™s science runs 2 and 3. Physical Review D, 2012, 85, .	4.7	185
31	First Measurement of the Hubble Constant from a Dark Standard Siren using the Dark Energy Survey Galaxies and the LIGO/Virgo Binaryâ€“Black-hole Merger GW170814. Astrophysical Journal Letters, 2019, 876, L7.	8.3	179
32	GW170817: Implications for the Stochastic Gravitational-Wave Background from Compact Binary Coalescences. Physical Review Letters, 2018, 120, 091101.	7.8	166
33	UPPER LIMITS ON THE RATES OF BINARY NEUTRON STAR AND NEUTRON STARâ€“BLACK HOLE MERGERS FROM ADVANCED LIGOâ€™S FIRST OBSERVING RUN. Astrophysical Journal Letters, 2016, 832, L21.	8.3	146
34	First Search for Gravitational Waves from Known Pulsars with Advanced LIGO. Astrophysical Journal, 2017, 839, 12.	4.5	131
35	Effects of waveform model systematics on the interpretation of GW150914. Classical and Quantum Gravity, 2017, 34, 104002.	4.0	98
36	Effects of data quality vetoes on a search for compact binary coalescences in Advanced LIGOâ€™s first observing run. Classical and Quantum Gravity, 2018, 35, 065010.	4.0	94

#	Article	IF	Citations
37	Search for gravitational waves from binary black hole inspiral, merger, and ringdown in LIGO-Virgo data from 2009â€"2010. Physical Review D, 2013, 87, .	4.7	92
38	Search for Tensor, Vector, and Scalar Polarizations in the Stochastic Gravitational-Wave Background. Physical Review Letters, 2018, 120, 201102.	7.8	85
39	Directional Limits on Persistent Gravitational Waves from Advanced LIGOâ€™s First Observing Run. Physical Review Letters, 2017, 118, 121102.	7.8	84
40	Search for Subsolar-Mass Ultracompact Binaries in Advanced LIGOâ€™s First Observing Run. Physical Review Letters, 2018, 121, 231103.	7.8	77
41	On the Progenitor of Binary Neutron Star Merger GW170817. Astrophysical Journal Letters, 2017, 850, L40.	8.3	73
42	Low-latency Gravitational-wave Alerts for Multimessenger Astronomy during the Second Advanced LIGO and Virgo Observing Run. Astrophysical Journal, 2019, 875, 161.	4.5	71
43	The basic physics of the binary black hole merger GW150914. Annalen Der Physik, 2017, 529, 1600209.	2.4	69
44	First Search for Nontensorial Gravitational Waves from Known Pulsars. Physical Review Letters, 2018, 120, 031104.	7.8	68
45	SUPPLEMENT: â€œTHE RATE OF BINARY BLACK HOLE MERGERS INFERRED FROM ADVANCED LIGO OBSERVATIONS SURROUNDING GW150914â€•(2016, ApJL, 833, L1). Astrophysical Journal, Supplement Series, 2016, 227, 14.	7.7	63
46	Searches for Continuous Gravitational Waves from 15 Supernova Remnants and Fomalhaut b with Advanced LIGO[*]. Astrophysical Journal, 2019, 875, 122.	4.5	61
47	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.	4.5	52
48	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.	4.5	46
49	A Fermi Gamma-Ray Burst Monitor Search for Electromagnetic Signals Coincident with Gravitational-wave Candidates in Advanced LIGO's First Observing Run. Astrophysical Journal, 2019, 871, 90.	4.5	30
50	Search for Transient Gravitational-wave Signals Associated with Magnetar Bursts during Advanced LIGOâ€™s Second Observing Run. Astrophysical Journal, 2019, 874, 163.	4.5	26
51	First joint observation by the underground gravitational-wave detector KAGRA with GEO 600. Progress of Theoretical and Experimental Physics, 2022, 2022, .	6.6	20
52	All-sky search for long-duration gravitational wave transients in the first Advanced LIGO observing run. Classical and Quantum Gravity, 2018, 35, 065009.	4.0	18
53	A Joint Fermi-GBM and LIGO/Virgo Analysis of Compact Binary Mergers from the First and Second Gravitational-wave Observing Runs. Astrophysical Journal, 2020, 893, 100.	4.5	12
54	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. , 2018, 21, 1.		2