Rana X Adhikari

List of Publications by Year
in descending order

32 papers	31,641 citations	257101 24 h-index	414034 32 g-index
32 all docs	32 docs citations	32 times ranked	15849 citing authors

#	Article	IF	Citations
1	Observation of Gravitational Waves from a Binary Black Hole Merger. Physical Review Letters, 2016, 116, 061102.	2.9	8,753
2	GW170817: Observation of Gravitational Waves from a Binary Neutron Star Inspiral. Physical Review Letters, 2017, 119, 161101.	2.9	6,413
3	Multi-messenger Observations of a Binary Neutron Star Merger[*]. Astrophysical Journal Letters, 2017, 848, L12.	3.0	2,805
4	GW151226: Observation of Gravitational Waves from a 22-Solar-Mass Binary Black Hole Coalescence. Physical Review Letters, 2016, 116, 241103.	2.9	2,701
5	GW170104: Observation of a 50-Solar-Mass Binary Black Hole Coalescence at Redshift 0.2. Physical Review Letters, 2017, 118, 221101.	2.9	1,987
6	Advanced LIGO. Classical and Quantum Gravity, 2015, 32, 074001.	1.5	1,929
7	GW170817: Measurements of Neutron Star Radii and Equation of State. Physical Review Letters, 2018, 121, 161101.	2.9	1,473
8	GW190425: Observation of a Compact Binary Coalescence with Total MassÂâˆ¼Â3.4 M_{âŠ™}. Astrophysical Journal Letters, 2020, 892, L3.	3.0	1,049
9	Characterization of the LIGO detectors during their sixth science run. Classical and Quantum Gravity, 2015, 32, 115012.	1.5	1,029
10	Exploring the sensitivity of next generation gravitational wave detectors. Classical and Quantum Gravity, 2017, 34, 044001.	1.5	735
11	Properties of the Binary Black Hole Merger GW150914. Physical Review Letters, 2016, 116, 241102.	2.9	673
12	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.	3.0	566
13	Tests of General Relativity with GW170817. Physical Review Letters, 2019, 123, 011102.	2.9	370
14	Quantum-Enhanced Advanced LIGO Detectors in the Era of Gravitational-Wave Astronomy. Physical Review Letters, 2019, 123, 231107.	2.9	359
15	Characterization of transient noise in Advanced LIGO relevant to gravitational wave signal GW150914. Classical and Quantum Gravity, 2016, 33, 134001.	1.5	225
16	A cryogenic silicon interferometer for gravitational-wave detection. Classical and Quantum Gravity, 2020, 37, 165003.	1.5	120
17	Low-latency Gravitational-wave Alerts for Multimessenger Astronomy during the Second Advanced LIGO and Virgo Observing Run. Astrophysical Journal, 2019, 875, 161.	1.6	71
18	Low-frequency terrestrial gravitational-wave detectors. Physical Review D, 2013, 88, .	1.6	70

#	Article	IF	Citations
19	Approaching the motional ground state of a 10-kg object. Science, 2021, 372, 1333-1336.	6.0	59
20	Noise reduction in gravitational-wave data via deep learning. Physical Review Research, 2020, 2, .	1.3	46
21	Astrophysics and cosmology with a decihertz gravitational-wave detector: TianGO. Physical Review D, 2020, 102, .	1.6	42
22	Gravitational-wave physics with Cosmic Explorer: Limits to low-frequency sensitivity. Physical Review D, 2021, 103, .	1.6	37
23	Constraining the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>p</mml:mi></mml:math> -Modeâ€“ <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>g</mml:mi></mml:math> -Mode Tidal Instability with GW170817. Physical Review Letters, 2019, 122, 061104.	2.9	36
24	Global feed-forward vibration isolation in a km scale interferometer. Classical and Quantum Gravity, 2012, 29, 215008.	1.5	27
25	Early warning of coalescing neutron-star and neutron-star-black-hole binaries from the nonstationary noise background using neural networks. Physical Review D, 2021, 104, .	1.6	19
26	Probing Microplasticity in Small-Scale FCC Crystals via Dynamic Mechanical Analysis. Physical Review Letters, 2017, 118, 155501.	2.9	18
27	Nonlinear Noise Cleaning in Gravitational-Wave Detectors With Convolutional Neural Networks. Frontiers in Artificial Intelligence, 2022, 5, 811563.	2.0	9
28	Effects of transients in LIGO suspensions on searches for gravitational waves. Review of Scientific Instruments, 2017, 88, 124501.	0.6	6
29	Systematic calibration error requirements for gravitational-wave detectors via the CramÃ©râ€“Rao bound. Classical and Quantum Gravity, 2019, 36, 205006.	1.5	6
30	An instrument to measure mechanical up-conversion phenomena in metals in the elastic regime. Review of Scientific Instruments, 2016, 87, 065107.	0.6	5
31	Measurement of mechanical losses in the carbon nanotube black coating of silicon wafers. Classical and Quantum Gravity, 2020, 37, 015004.	1.5	2
32	Using silicon disk resonators to measure mechanical losses caused by an electric field. Review of Scientific Instruments, 2022, 93, 014501.	0.6	1