

Lijing Shao

List of Publications by Year in descending order

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137
papers

22,707
citations

50276

46
h-index

13379

130
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137
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137
docs citations

137
times ranked

13135
citing authors

#	ARTICLE	IF	CITATIONS
1	GW170817: Observation of Gravitational Waves from a Binary Neutron Star Inspiral. <i>Physical Review Letters</i> , 2017, 119, 161101.	7.8	6,413
2	First M87 Event Horizon Telescope Results. I. The Shadow of the Supermassive Black Hole. <i>Astrophysical Journal Letters</i> , 2019, 875, L1.	8.3	2,264
3	GW170104: Observation of a 50-Solar-Mass Binary Black Hole Coalescence at Redshift 0.2. <i>Physical Review Letters</i> , 2017, 118, 221101.	7.8	1,987
4	GW170814: A Three-Detector Observation of Gravitational Waves from a Binary Black Hole Coalescence. <i>Physical Review Letters</i> , 2017, 119, 141101.	7.8	1,600
5	First M87 Event Horizon Telescope Results. VI. The Shadow and Mass of the Central Black Hole. <i>Astrophysical Journal Letters</i> , 2019, 875, L6.	8.3	897
6	First M87 Event Horizon Telescope Results. V. Physical Origin of the Asymmetric Ring. <i>Astrophysical Journal Letters</i> , 2019, 875, L5.	8.3	814
7	First M87 Event Horizon Telescope Results. IV. Imaging the Central Supermassive Black Hole. <i>Astrophysical Journal Letters</i> , 2019, 875, L4.	8.3	806
8	First M87 Event Horizon Telescope Results. II. Array and Instrumentation. <i>Astrophysical Journal Letters</i> , 2019, 875, L2.	8.3	618
9	First Sagittarius A* Event Horizon Telescope Results. I. The Shadow of the Supermassive Black Hole in the Center of the Milky Way. <i>Astrophysical Journal Letters</i> , 2022, 930, L12.	8.3	568
10	First M87 Event Horizon Telescope Results. III. Data Processing and Calibration. <i>Astrophysical Journal Letters</i> , 2019, 875, L3.	8.3	519
11	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. <i>Living Reviews in Relativity</i> , 2020, 23, 3.	26.7	447
12	Improved effective-one-body model of spinning, nonprecessing binary black holes for the era of gravitational-wave astrophysics with advanced detectors. <i>Physical Review D</i> , 2017, 95, .	4.7	401
13	First M87 Event Horizon Telescope Results. VIII. Magnetic Field Structure near The Event Horizon. <i>Astrophysical Journal Letters</i> , 2021, 910, L13.	8.3	297
14	First M87 Event Horizon Telescope Results. VII. Polarization of the Ring. <i>Astrophysical Journal Letters</i> , 2021, 910, L12.	8.3	215
15	First Sagittarius A* Event Horizon Telescope Results. VI. Testing the Black Hole Metric. <i>Astrophysical Journal Letters</i> , 2022, 930, L17.	8.3	215
16	Prospects for fundamental physics with LISA. <i>General Relativity and Gravitation</i> , 2020, 52, 1.	2.0	198
17	Gravitational Test beyond the First Post-Newtonian Order with the Shadow of the M87 Black Hole. <i>Physical Review Letters</i> , 2020, 125, 141104.	7.8	190
18	First Sagittarius A* Event Horizon Telescope Results. V. Testing Astrophysical Models of the Galactic Center Black Hole. <i>Astrophysical Journal Letters</i> , 2022, 930, L16.	8.3	187

#	ARTICLE	IF	CITATIONS
19	Fundamental physics with the Square Kilometre Array. Publications of the Astronomical Society of Australia, 2020, 37, .	3.4	179
20	The Event Horizon General Relativistic Magnetohydrodynamic Code Comparison Project. Astrophysical Journal, Supplement Series, 2019, 243, 26.	7.7	175
21	Gravitational Wave Astronomy with the SKA. , 2015, , .		174
22	First Sagittarius A* Event Horizon Telescope Results. III. Imaging of the Galactic Center Supermassive Black Hole. Astrophysical Journal Letters, 2022, 930, L14.	8.3	163
23	A wide starâ€“black-hole binary system from radial-velocity measurements. Nature, 2019, 575, 618-621.	27.8	142
24	First Sagittarius A* Event Horizon Telescope Results. II. EHT and Multiwavelength Observations, Data Processing, and Calibration. Astrophysical Journal Letters, 2022, 930, L13.	8.3	142
25	First Sagittarius A* Event Horizon Telescope Results. IV. Variability, Morphology, and Black Hole Mass. Astrophysical Journal Letters, 2022, 930, L15.	8.3	137
26	Constraints on black-hole charges with the 2017 EHT observations of M87*. Physical Review D, 2021, 103, .	4.7	126
27	A new limit on local Lorentz invariance violation of gravity from solitary pulsars. Classical and Quantum Gravity, 2013, 30, 165019.	4.0	91
28	The missing link in gravitational-wave astronomy: discoveries waiting in the decihertz range. Classical and Quantum Gravity, 2020, 37, 215011.	4.0	90
29	Unveiling the gravitational universe at $\hat{1}$ / 4 -Hz frequencies. Experimental Astronomy, 2021, 51, 1333-1383.	3.7	88
30	On the properties of the massive binary black hole merger GW170729. Physical Review D, 2019, 100, .	4.7	82
31	New horizons for fundamental physics with LISA. Living Reviews in Relativity, 2022, 25, .	26.7	82
32	New tests of local Lorentz invariance of gravity with small-eccentricity binary pulsars. Classical and Quantum Gravity, 2012, 29, 215018.	4.0	81
33	Tests of Local Lorentz Invariance Violation of Gravity in the Standard Model Extension with Pulsars. Physical Review Letters, 2014, 112, 111103.	7.8	81
34	Lorentz violation from cosmological objects with very high energy photon emissions. Astroparticle Physics, 2010, 33, 312-315.	4.3	74
35	Constraining Nonperturbative Strong-Field Effects in Scalar-Tensor Gravity by Combining Pulsar Timing and Laser-Interferometer Gravitational-Wave Detectors. Physical Review X, 2017, 7, .	8.9	72
36	Polarimetric Properties of Event Horizon Telescope Targets from ALMA. Astrophysical Journal Letters, 2021, 910, L14.	8.3	67

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37	Overview of KAGRA: Calibration, detector characterization, physical environmental monitors, and the geophysics interferometer. <i>Progress of Theoretical and Experimental Physics</i> , 2021, 2021, .	6.6	66
38	Event Horizon Telescope observations of the jet launching and collimation in Centaurus A. <i>Nature Astronomy</i> , 2021, 5, 1017-1028.	10.1	65
39	Broadband Multi-wavelength Properties of M87 during the 2017 Event Horizon Telescope Campaign. <i>Astrophysical Journal Letters</i> , 2021, 911, L11.	8.3	56
40	Event Horizon Telescope imaging of the archetypal blazar 3C 279 at an extreme 20 microarcsecond resolution. <i>Astronomy and Astrophysics</i> , 2020, 640, A69.	5.1	54
41	Validating the effective-one-body numerical-relativity waveform models for spin-aligned binary black holes along eccentric orbits. <i>Physical Review D</i> , 2020, 101, .	4.7	53
42	Monitoring the Morphology of M87* in 2009â€“2017 with the Event Horizon Telescope. <i>Astrophysical Journal</i> , 2020, 901, 67.	4.5	51
43	Observatory science with eXTP. <i>Science China: Physics, Mechanics and Astronomy</i> , 2019, 62, 1.	5.1	50
44	Constraints on millicharged dark matter and axionlike particles from timing of radio waves. <i>Physical Review D</i> , 2019, 100, .	4.7	49
45	New pulsar limit on local Lorentz invariance violation of gravity in the standard-model extension. <i>Physical Review D</i> , 2014, 90, .	4.7	48
46	THEMIS: A Parameter Estimation Framework for the Event Horizon Telescope. <i>Astrophysical Journal</i> , 2020, 897, 139.	4.5	47
47	Upper Limits on Gravitational Waves from Scorpius X-1 from a Model-based Cross-correlation Search in Advanced LIGO Data. <i>Astrophysical Journal</i> , 2017, 847, 47.	4.5	46
48	Tests of gravitational symmetries with radio pulsars. <i>Science China: Physics, Mechanics and Astronomy</i> , 2016, 59, 1.	5.1	45
49	Verification of Radiative Transfer Schemes for the EHT. <i>Astrophysical Journal</i> , 2020, 897, 148.	4.5	44
50	The Polarized Image of a Synchrotron-emitting Ring of Gas Orbiting a Black Hole. <i>Astrophysical Journal</i> , 2021, 912, 35.	4.5	43
51	Millimeter Light Curves of Sagittarius A* Observed during the 2017 Event Horizon Telescope Campaign. <i>Astrophysical Journal Letters</i> , 2022, 930, L19.	8.3	43
52	Statistical effect in the parton distribution functions of the nucleon. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2009, 671, 30-35.	4.1	40
53	New limits on the violation of local position invariance of gravity. <i>Classical and Quantum Gravity</i> , 2013, 30, 165020.	4.0	40
54	LORENTZ VIOLATION EFFECTS ON ASTROPHYSICAL PROPAGATION OF VERY HIGH ENERGY PHOTONS. <i>Modern Physics Letters A</i> , 2010, 25, 3251-3266.	1.2	37

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55	Bayesian framework to constrain the photon mass with a catalog of fast radio bursts. Physical Review D, 2017, 95, .	4.7	35
56	Combined search for anisotropic birefringence in the gravitational-wave transient catalog GWTC-1. Physical Review D, 2020, 101, .	4.7	35
57	Testing the strong equivalence principle with the triple pulsar PSR $J0337+1715$. Physical Review D, 2016, 93, .	4.7	34
58	WALLABY early science III. An H α study of the spiral galaxy NGC 1566. Monthly Notices of the Royal Astronomical Society, 2019, 487, 2797-2817.	4.4	33
59	Overview of KAGRA: KAGRA science. Progress of Theoretical and Experimental Physics, 2021, 2021, .	6.6	31
60	Photon gas thermodynamics in doubly special relativity. Astroparticle Physics, 2011, 34, 840-845.	4.3	30
61	Accretion in strong field gravity with eXTP. Science China: Physics, Mechanics and Astronomy, 2019, 62, 1.	5.1	27
62	Multiband observation of LIGO/Virgo binary black hole mergers in the gravitational-wave transient catalog GWTC-1. Monthly Notices of the Royal Astronomical Society, 2020, 496, 182-196.	4.4	27
63	Effective action model of dynamically scalarizing binary neutron stars. Physical Review D, 2017, 96, .	4.7	26
64	NANOGrav signal from first-order confinement-deconfinement phase transition in different QCD-matter scenarios. Physical Review D, 2021, 104, .	4.7	25
65	The significant digit law in statistical physics. Physica A: Statistical Mechanics and Its Applications, 2010, 389, 3109-3116.	2.6	24
66	Closing a spontaneous-scalarization window with binary pulsars. Classical and Quantum Gravity, 2022, 39, 11LT01.	4.0	24
67	FIRST DIGIT DISTRIBUTION OF HADRON FULL WIDTH. Modern Physics Letters A, 2009, 24, 3275-3282.	1.2	23
68	Testing velocity-dependent Lorentz-violating gravitational forces with radio pulsars. Physical Review D, 2018, 98, .	4.7	23
69	Empirical mantissa distributions of pulsars. Astroparticle Physics, 2010, 33, 255-262.	4.3	22
70	Lorentz-violation-induced vacuum birefringence and its astrophysical consequences. Physical Review D, 2011, 83, .	4.7	22
71	Reduced-order surrogate models for scalar-tensor gravity in the strong field regime and applications to binary pulsars and GW170817. Physical Review D, 2019, 100, .	4.7	22
72	A revisit of PSR J1909+3744 with 15-yr high-precision timing. Monthly Notices of the Royal Astronomical Society, 2020, 499, 2276-2291.	4.4	22

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73	Gravitational-wave Merging Events from the Dynamics of Stellar-mass Binary Black Holes around the Massive Black Hole in a Galactic Nucleus. <i>Astrophysical Journal</i> , 2019, 877, 87.	4.5	21
74	High angular resolution gravitational wave astronomy. <i>Experimental Astronomy</i> , 2021, 51, 1441-1470.	3.7	21
75	Selective Dynamical Imaging of Interferometric Data. <i>Astrophysical Journal Letters</i> , 2022, 930, L18.	8.3	21
76	Nuclear EMC effect in a statistical model. <i>Nuclear Physics A</i> , 2009, 828, 390-400.	1.5	20
77	Strong-field effects in massive scalar-tensor gravity for slowly spinning neutron stars and application to x-ray pulsar pulse profiles. <i>Physical Review D</i> , 2020, 102, .	4.7	20
78	New graviton mass bound from binary pulsars. <i>Physical Review D</i> , 2020, 102, .	4.7	20
79	New Limits on the Lorentz/CPT Symmetry Through 50 Gravitational-wave Events. <i>Astrophysical Journal</i> , 2021, 921, 158.	4.5	20
80	First joint observation by the underground gravitational-wave detector KAGRA with GEO 600. <i>Progress of Theoretical and Experimental Physics</i> , 2022, 2022, .	6.6	20
81	Characterizing and Mitigating Intraday Variability: Reconstructing Source Structure in Accreting Black Holes with mm-VLBI. <i>Astrophysical Journal Letters</i> , 2022, 930, L21.	8.3	20
82	A Universal Power-law Prescription for Variability from Synthetic Images of Black Hole Accretion Flows. <i>Astrophysical Journal Letters</i> , 2022, 930, L20.	8.3	20
83	Cosmological perturbations in Gauss-Bonnet quasi-dilaton massive gravity. <i>Physical Review D</i> , 2021, 103, .	4.7	19
84	Sea quark contents of octet baryons. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2010, 686, 136-140.	4.1	18
85	SYMBA: An end-to-end VLBI synthetic data generation pipeline. <i>Astronomy and Astrophysics</i> , 2020, 636, A5.	5.1	18
86	Improved deep learning techniques in gravitational-wave data analysis. <i>Physical Review D</i> , 2021, 103, .	4.7	17
87	Testing Gravity with Pulsars in the SKA Era. , 2015, , .		17
88	Testing the Universality of Free Fall towards Dark Matter with Radio Pulsars. <i>Physical Review Letters</i> , 2018, 120, 241104.	7.8	16
89	Triaxially deformed freely precessing neutron stars: continuous electromagnetic and gravitational radiation. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 498, 1826-1838.	4.4	16
90	Degeneracy in studying the supranuclear equation of state and modified gravity with neutron stars. <i>AIP Conference Proceedings</i> , 2019, , .	0.4	15

#	ARTICLE	IF	CITATIONS
91	The missing link in gravitational-wave astronomy. <i>Experimental Astronomy</i> , 2021, 51, 1427-1440.	3.7	15
92	Bounding the mass of graviton in a dynamic regime with binary pulsars. <i>Physical Review D</i> , 2019, 99, .	4.7	14
93	Testing the gravitational weak equivalence principle in the standard model extension with binary pulsars. <i>Physical Review D</i> , 2019, 99, .	4.7	14
94	Resonant instability of axionic dark matter clumps. <i>Journal of Cosmology and Astroparticle Physics</i> , 2020, 2020, 038-038.	5.4	13
95	An 86 GHz Search for Pulsars in the Galactic Center with the Atacama Large Millimeter / submillimeter Array. <i>Astrophysical Journal</i> , 2021, 914, 30.	4.5	13
96	Bounding the photon mass with cosmological propagation of fast radio bursts. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2021, 820, 136596.	4.1	13
97	Rotation and deformation of strangeon stars in the Lennard-Jones model. <i>Monthly Notices of the Royal Astronomical Society</i> , 0, , .	4.4	13
98	Neutron Starâ€“Neutron Star and Neutron Starâ€“Black Hole Mergers: Multiband Observations and Early Warnings. <i>Astrophysical Journal</i> , 2022, 926, 158.	4.5	13
99	First-digit law in nonextensive statistics. <i>Physical Review E</i> , 2010, 82, 041110.	2.1	12
100	Multi-messenger astrophysics with THESEUS in the 2030s. <i>Experimental Astronomy</i> , 2021, 52, 245-275.	3.7	12
101	Neutron stars in massive scalar-Gauss-Bonnet gravity: Spherical structure and time-independent perturbations. <i>Physical Review D</i> , 2022, 105, .	4.7	12
102	Neutron star structure in the minimal gravitational Standard-Model Extension and the implication to continuous gravitational waves. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2020, 803, 135283.	4.1	11
103	Probing dipole radiation from binary neutron stars with ground-based laser-interferometer and atom-interferometer gravitational-wave observatories. <i>Physical Review D</i> , 2021, 104, .	4.7	11
104	The Eccentric and Accelerating Stellar Binary Black Hole Mergers in Galactic Nuclei: Observing in Ground and Space Gravitational-wave Observatories. <i>Astrophysical Journal</i> , 2021, 923, 139.	4.5	11
105	Constraints on fifth forces through perihelion precession of planets. <i>Physical Review D</i> , 2019, 100, .	4.7	10
106	Signatures of Lorentz Violation in Continuous Gravitational-Wave Spectra of Ellipsoidal Neutron Stars. <i>Galaxies</i> , 2021, 9, 12.	3.0	9
107	Eikonal equation of the Lorentz-violating Maxwell theory. <i>European Physical Journal C</i> , 2010, 70, 1153-1164.	3.9	8
108	Limiting superluminal neutrino velocity and Lorentz invariance violation by neutrino emission from the blazar TXS $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 0506 \langle \text{mml:mn} \rangle \langle \text{mml:mo} \rangle + \langle \text{mml:mo} \rangle \langle \text{mml:mn} \rangle 056 \langle \text{mml:mn} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$. <i>Physical Review D</i> , 2020, 102, .	4.7	8

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109	Scalarized neutron stars in massive scalar-tensor gravity: X-ray pulsars and tidal deformability. <i>Physical Review D</i> , 2021, 104, .	4.7	8
110	Extended reduced-order surrogate models for scalar-tensor gravity in the strong field and applications to binary pulsars and gravitational waves. <i>Physical Review D</i> , 2021, 104, .	4.7	8
111	Extending the Fisher Information Matrix in Gravitational-wave Data Analysis. <i>Astrophysical Journal</i> , 2022, 932, 102.	4.5	8
112	Note on a new fundamental length scale l instead of the Newtonian constant G . <i>Science China: Physics, Mechanics and Astronomy</i> , 2011, 54, 1771-1774.	5.1	7
113	Precession of spheroids under Lorentz violation and observational consequences for neutron stars. <i>Physical Review D</i> , 2021, 103, .	4.7	7
114	Prospects for Detecting Exoplanets around Double White Dwarfs with LISA and Taiji. <i>Astronomical Journal</i> , 2021, 162, 247.	4.7	7
115	Electromagnetic follow-up observations of binary neutron star mergers with early warnings from decihertz gravitational-wave observatories. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 515, 739-748.	4.4	7
116	Lorentz-Violating Matter-Gravity Couplings in Small-Eccentricity Binary Pulsars. <i>Symmetry</i> , 2019, 11, 1098.	2.2	6
117	Tests of Conservation Laws in Post-Newtonian Gravity with Binary Pulsars. <i>Astrophysical Journal</i> , 2020, 898, 69.	4.5	6
118	The Variability of the Black Hole Image in M87 at the Dynamical Timescale. <i>Astrophysical Journal</i> , 2022, 925, 13.	4.5	6
119	Cosmology and perturbations in tachyonic massive gravity. <i>Physical Review D</i> , 2022, 105, .	4.7	6
120	Cosmological aspects of cubic Galileon massive gravity. <i>Physical Review D</i> , 2021, 104, .	4.7	5
121	The CPT-violating effects on neutrons' gravitational bound state. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2020, 47, 085002.	3.6	4
122	GW150914 and gravitational-wave astronomy. <i>Chinese Science Bulletin</i> , 2016, 61, 1502-1524.	0.7	4
123	Stringent Tests of Gravity with Highly Relativistic Binary Pulsars in the Era of LISA and SKA. <i>Astrophysical Journal</i> , 2021, 921, 114.	4.5	4
124	Performance of the KAGRA detector during the first joint observation with GEO600 (O3GK). <i>Progress of Theoretical and Experimental Physics</i> , 2023, 2023, .	6.6	4
125	Pulsar tests of the graviton mass. <i>Astronomische Nachrichten</i> , 2021, 342, 300-304.	1.2	3
126	NEW TESTS OF LOCAL LORENTZ INVARIANCE AND LOCAL POSITION INVARIANCE OF GRAVITY WITH PULSARS. , 2015, , .		2

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127	Experimental Studies on the Lorentz Symmetry in Post-Newtonian Gravity with Pulsars. Universe, 2016, 2, 29.	2.5	2
128	An independent test on the local position invariance of gravity with the triple pulsar PSR J0337+1715. Classical and Quantum Gravity, 2017, 34, 175011.	4.0	2
129	Octet quark contents from SU(3) flavor symmetry. Europhysics Letters, 2011, 94, 31001.	2.0	1
130	New Constraints on Preferred Frame Effects from Binary Pulsars. Proceedings of the International Astronomical Union, 2012, 8, 496-498.	0.0	1
131	Testing Fifth Forces from the Galactic Dark Matter. Proceedings (mdpi), 2019, 17, 3.	0.2	1
132	Precession of triaxially deformed neutron stars. Astronomische Nachrichten, 2021, 342, 364-368.	1.2	1
133	Axion induced spin effective couplings. Physical Review D, 2021, 103, .	4.7	1
134	Cosmology of Dirac-Born-Infeld-de Rham-Gabadadze-Tolley massive gravity. Physical Review D, 2022, 106, .	4.7	1
135	Pulsar Tests of Gravitational Lorentz Violation. , 2020, , .		0
136	Workshop on Gravitational-Wave Astrophysics for Early Career Scientists. Nature Astronomy, 2022, 6, 304-305.	10.1	0
137	BlackHoleCam “ Testing general relativity with pulsars orbiting Sagittarius A. , 2022, , .		0