

# Baojiu Li

## List of Publications by Year in descending order

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133  
papers

5,714  
citations

53660

45  
h-index

88477

70  
g-index

135  
all docs

135  
docs citations

135  
times ranked

1881  
citing authors

#	ARTICLE	IF	CITATIONS
1	Cosmology off(R)gravity in the metric variational approach. Physical Review D, 2007, 75, .	1.6	274
2	<tt>ECOSMOG</tt>: an Efficient COde for Simulating MODified Gravity. Journal of Cosmology and Astroparticle Physics, 2012, 2012, 051-051.	1.9	212
3	Unified description of screened modified gravity. Physical Review D, 2012, 86, .	1.6	183
4	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>N</mml:mi></mml:math>-body simulations for<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>f</mml:mi><mml:mo stretchy="false">(</mml:mo><mml:mi>R</mml:mi><mml:mo>Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 612 Td (stretchy="false">)</mml:mo></mml:math>	1.6	169
5	Review D, 2011, 83, . Haloes and voids in f(R) gravity. Monthly Notices of the Royal Astronomical Society, 2012, 421, 3481-3487.	1.6	145
6	Voids in modified gravity: excursion set predictions. Monthly Notices of the Royal Astronomical Society, 2013, 431, 749-766.	1.6	139
7	Testing gravity using cosmic voids. Monthly Notices of the Royal Astronomical Society, 2015, 451, 1036-1055.	1.6	135
8	Nonlinear structure formation in the cubic Galileon gravity model. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 027-027.	1.9	126
9	The non-linear matter and velocity power spectra in f(R) gravity. Monthly Notices of the Royal Astronomical Society, 2013, 428, 743-755.	1.6	118
10	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>N</mml:mi></mml:math>-body simulations for coupled scalar-field cosmology. Physical Review D, 2011, 83, .	1.6	116
11	The observational status of Galileon gravity after Planck. Journal of Cosmology and Astroparticle Physics, 2014, 2014, 059-059.	1.9	107
12	Redshift-space distortions in f(R) gravity. Monthly Notices of the Royal Astronomical Society, 2012, 425, 2128-2143.	1.6	104
13	Modified gravity<i>N</i>-body code comparison project. Monthly Notices of the Royal Astronomical Society, 2015, 454, 4208-4234.	1.6	104
14	Linear perturbations in Galileon gravity models. Physical Review D, 2012, 86, .	1.6	90
15	STRUCTURE FORMATION IN THE SYMMETRON MODEL. Astrophysical Journal, 2012, 748, 61.	1.6	89
16	Exploring Vainshtein mechanism on adaptively refined meshes. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 023-023.	1.9	89
17	Systematic simulations of modified gravity: symmetron and dilaton models. Journal of Cosmology and Astroparticle Physics, 2012, 2012, 002-002.	1.9	86
18	Weak lensing by voids in modified lensing potentials. Journal of Cosmology and Astroparticle Physics, 2015, 2015, 028-028.	1.9	81

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19	Testing Gravity Using the Environmental Dependence of Dark Matter Halos. <i>Physical Review Letters</i> , 2011, 107, 071303.	2.9	80
20	Using cosmic voids to distinguish $f$ ( $R$ ) gravity in future galaxy surveys. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 451, 4215-4222.	1.6	79
21	The Santiago-Harvard-Edinburgh-Durham void comparison I. SHEDding light on chameleon gravity tests. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 476, 3195-3217.	1.6	78
22	Simulating the quartic Galileon gravity model on adaptively refined meshes. <i>Journal of Cosmology and Astroparticle Physics</i> , 2013, 2013, 012-012.	1.9	76
23	Modeling halo mass functions in chameleon $f$ ( $R$ ) gravity. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 488, 3646-3662.	1.6	75
24	Spherical collapse in Galileon gravity: fifth force solutions, halo mass function and halo bias. <i>Journal of Cosmology and Astroparticle Physics</i> , 2013, 2013, 056-056.	1.9	73
25	Observable tests of self-interacting dark matter in galaxy clusters: cosmological simulations with SIDM and baryons. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 488, 3646-3662.	1.6	72
26	An extended excursion set approach to structure formation in chameleon models. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 421, 1431-1442.	1.6	70
27	Structure formation by a fifth force: N-body versus linear simulations. <i>Physical Review D</i> , 2009, 80, .	1.6	69
28	Nonlinear structure formation with the environmentally dependent dilaton. <i>Physical Review D</i> , 2011, 83, .	1.6	67
29	On the road to 1% accuracy: non-linear reaction of the matter power spectrum to dark energy and modified gravity. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 488, 2121-2142.	1.6	67
30	Chameleon $f$ ( $R$ ) gravity. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 488, 2121-2142.	1.6	66
31	Clear and Measurable Signature of Modified Gravity in the Galaxy Velocity Field. <i>Physical Review Letters</i> , 2014, 112, 221102.	2.9	65
32	Modified gravity tomography. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2012, 715, 38-43.	1.5	63
33	Nonlinear structure formation in nonlocal gravity. <i>Journal of Cosmology and Astroparticle Physics</i> , 2014, 2014, 031-031.	1.9	63
34	Parameter space in Galileon gravity models. <i>Physical Review D</i> , 2013, 87, .	1.6	61
35	Constraining $f$ ( $R$ ) gravity with the Canada-France-Hawaii Telescope Lensing Survey. <i>Physical Review Letters</i> , 2016, 117, 051101.	1.6	61
36	Halo model and halo properties in Galileon gravity cosmologies. <i>Journal of Cosmology and Astroparticle Physics</i> , 2014, 2014, 029-029.	1.9	59

#	ARTICLE	IF	CITATIONS
37	Halo modelling in chameleon theories. <i>Journal of Cosmology and Astroparticle Physics</i> , 2014, 2014, 021-021.	1.9	59
38	Systematic simulations of modified gravity: chameleon models. <i>Journal of Cosmology and Astroparticle Physics</i> , 2013, 2013, 029-029.	1.9	57
39	The Vainshtein mechanism in the cosmic web. <i>Journal of Cosmology and Astroparticle Physics</i> , 2014, 2014, 058-058.	1.9	56
40	Voids in coupled scalar field cosmology. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011, 411, 2615-2627.	1.6	55
41	Constraining the time variation of Newton's constant $G$ with gravitational-wave standard sirens and supernovae. <i>Journal of Cosmology and Astroparticle Physics</i> , 2018, 2018, 052-052.	1.9	53
42	Testing the quasi-static approximation in $f(R)$ gravity simulations. <i>Journal of Cosmology and Astroparticle Physics</i> , 2015, 2015, 034-034.	1.9	50
43	Type Ia supernovae, standardizable candles, and gravity. <i>Physical Review D</i> , 2018, 97, .	1.6	50
44	Novel Probes Project: Tests of gravity on astrophysical scales. <i>Reviews of Modern Physics</i> , 2021, 93, .	16.4	47
45	Structure formation by the fifth force: Segregation of baryons and dark matter. <i>Physical Review D</i> , 2010, 81, .	1.6	46
46	The Santiago–Harvard–Edinburgh–Durham void comparison II: unveiling the Vainshtein screening using weak lensing. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 484, 1149-1165.	1.6	46
47	Cluster abundance in chameleon $f(R)$ gravity I: toward an accurate halo mass function prediction. <i>Journal of Cosmology and Astroparticle Physics</i> , 2016, 2016, 024-024.	1.9	44
48	The integrated Sachs-Wolfe effect in $f(R)$ gravity. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 439, 2978-2989.	1.6	43
49	Galaxy infall kinematics as a test of modified gravity. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 445, 1885-1897.	1.6	43
50	ENVIRONMENT DEPENDENCE OF DARK MATTER HALOS IN SYMMETRON MODIFIED GRAVITY. <i>Astrophysical Journal</i> , 2012, 756, 166.	1.6	42
51	Voids in modified gravity reloaded: Eulerian void assignment. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 450, 3319-3330.	1.6	42
52	Towards testing the theory of gravity with DESI: summary statistics, model predictions and future simulation requirements. <i>Journal of Cosmology and Astroparticle Physics</i> , 2021, 2021, 050.	1.9	41
53	Speeding up $N$ -body simulations of modified gravity: chameleon screening models. <i>Journal of Cosmology and Astroparticle Physics</i> , 2017, 2017, 050-050.	1.9	40
54	Exploring the liminality: properties of haloes and subhaloes in borderline $f(R)$ gravity. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 452, 3179-3191.	1.6	39

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55	Hierarchical clustering in chameleon $f(R)$ gravity. Monthly Notices of the Royal Astronomical Society, 2013, 435, 2806-2821.	1.6	37
56	Linear growth of structure in the symmetron model. Physical Review D, 2011, 84, .	1.6	34
57	Speeding up N-body simulations of modified gravity: Vainshtein screening models. Journal of Cosmology and Astroparticle Physics, 2015, 2015, 059-059.	1.9	33
58	Galaxy cluster lensing masses in modified lensing potentials. Monthly Notices of the Royal Astronomical Society, 2015, 454, 4085-4102.	1.6	32
59	Realistic simulations of galaxy formation in $f(R)$ modified gravity. Nature Astronomy, 2019, 3, 945-954.	4.2	32
60	Emulators for the nonlinear matter power spectrum beyond $\Lambda$ CDM. Physical Review D, 2019, 100, .	1.6	32
61	Modified gravity with massive neutrinos as a testable alternative cosmological model. Physical Review D, 2014, 90, .	1.6	31
62	No evidence for modifications of gravity from galaxy motions on cosmological scales. Nature Astronomy, 2018, 2, 967-972.	4.2	31
63	Testing gravity theories via transverse Doppler and gravitational redshifts in galaxy clusters. Physical Review D, 2013, 88, .	1.6	30
64	New method for initial density reconstruction. Physical Review D, 2018, 97, .	1.6	30
65	Excursion set theory for modified gravity: correlated steps, mass functions and halo bias. Monthly Notices of the Royal Astronomical Society, 2012, 426, 3260-3270.	1.6	29
66	Weak lensing by voids in weak lensing maps. Monthly Notices of the Royal Astronomical Society: Letters, 2018, 480, L101-L105.	1.2	28
67	Marked clustering statistics in $f(R)$ gravity cosmologies. Monthly Notices of the Royal Astronomical Society, 2018, 479, 4824-4835.	1.6	28
68	Excursion set theory for modified gravity: Eulerian versus Lagrangian environments. Monthly Notices of the Royal Astronomical Society, 2012, 425, 730-739.	1.6	26
69	GRAMSES: a new route to general relativistic N-body simulations in cosmology. Part I. Methodology and code description. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 007-007.	1.9	26
70	Large-scale redshift space distortions in modified gravity theories. Monthly Notices of the Royal Astronomical Society, 2019, 485, 2194-2213.	1.6	25
71	The imprint of $f(R)$ gravity on weak gravitational lensing $\hat{\kappa}$ II. Information content in cosmic shear statistics. Monthly Notices of the Royal Astronomical Society, 2017, 466, 2402-2417.	1.6	24
72	Testing modified gravity using a marked correlation function. Monthly Notices of the Royal Astronomical Society, 2018, 478, 3627-3632.	1.6	24

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73	Cosmological test of gravity using weak lensing voids. Monthly Notices of the Royal Astronomical Society, 2019, 490, 4907-4917.	1.6	24
74	Cluster gas fraction as a test of gravity. Monthly Notices of the Royal Astronomical Society, 2016, 456, 146-155.	1.6	23
75	Weak lensing by galaxy troughs with modified gravity. Journal of Cosmology and Astroparticle Physics, 2017, 2017, 031-031.	1.9	23
76	The accuracy of weak lensing simulations. Monthly Notices of the Royal Astronomical Society, 2020, 493, 305-319.	1.6	22
77	The impact of modified gravity on the Sunyaev-Zeldovich effect. Monthly Notices of the Royal Astronomical Society, 2021, 501, 4565-4578.	1.6	22
78	A general framework to test gravity using galaxy clusters – I. Modelling the dynamical mass of haloes in $f(R)$ gravity. Monthly Notices of the Royal Astronomical Society, 2018, 477, 1133-1152.	1.6	21
79	RAY-RAMSES: a code for ray tracing on the fly in N-body simulations. Journal of Cosmology and Astroparticle Physics, 2016, 2016, 001-001.	1.9	20
80	A general framework to test gravity using galaxy clusters II: A universal model for the halo concentration in $f(R)$ gravity. Monthly Notices of the Royal Astronomical Society, 2019, 487, 1410-1425.	1.6	20
81	An optimal non-linear method for simulating relic neutrinos. Monthly Notices of the Royal Astronomical Society, 2021, 507, 2614-2631.	1.6	20
82	An analytic ray-tracing algorithm for weak lensing. Monthly Notices of the Royal Astronomical Society, 2011, 415, 881-892.	1.6	19
83	K-mouflage gravity models that pass Solar System and cosmological constraints. Physical Review D, 2015, 91, .	1.6	19
84	New Probe of Departures from General Relativity Using Minkowski Functionals. Physical Review Letters, 2017, 118, 181301.	2.9	19
85	Galaxy formation in the brane world I: overview and first results. Monthly Notices of the Royal Astronomical Society, 2021, 503, 3867-3885.	1.6	19
86	Reconstructing the baryon acoustic oscillations using biased tracers. Monthly Notices of the Royal Astronomical Society, 2019, 483, 5267-5280.	1.6	18
87	Constraining cosmology with weak lensing voids. Monthly Notices of the Royal Astronomical Society, 0, , .	1.6	17
88	Galaxy galaxy weak gravitational lensing in $f(R)$ gravity. Monthly Notices of the Royal Astronomical Society, 2018, 474, 3599-3614.	1.6	16
89	Towards a non-Gaussian model of redshift space distortions. Monthly Notices of the Royal Astronomical Society, 2020, 498, 1175-1193.	1.6	16
90	Linear perturbations in K-mouflage cosmologies with massive neutrinos. Physical Review D, 2015, 91, .	1.6	15

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91	Fast full N-body simulations of generic modified gravity: conformal coupling models. Journal of Cosmology and Astroparticle Physics, 2022, 2022, 018.	1.9	15
92	Distinguishing general relativity and $f(R)$ gravity. Physical Review D, 2015, 92, .	1.6	14
93	Simulating galaxy formation in $f(R)$ modified gravity: matter, halo, and galaxy statistics. Monthly Notices of the Royal Astronomical Society, 2019, 490, 2507-2520.	1.6	14
94	Baryon acoustic oscillations reconstruction using convolutional neural networks. Monthly Notices of the Royal Astronomical Society, 2020, 501, 1499-1510.	1.6	14
95	Revisiting the matter power spectra in $f(R)$ gravity. Physical Review D, 2013, 88, .	1.6	13
96	Accurate method of modeling cluster scaling relations in modified gravity. Physical Review D, 2016, 93, .	1.6	13
97	Equivalence of cosmological observables in conformally related scalar tensor theories. Physical Review D, 2017, 96, .	1.6	13
98	Measurement of marked correlation functions in SDSS-III Baryon Oscillation Spectroscopic Survey using LOWZ galaxies in Data Release 12. Monthly Notices of the Royal Astronomical Society, 2019, 484, 2148-2165.	1.6	13
99	Fast full N-body simulations of generic modified gravity: derivative coupling models. Journal of Cosmology and Astroparticle Physics, 2022, 2022, 048.	1.9	13
100	Effective Dark Matter Halo Catalog in $f(R)$ gravity. Physical Review D, 2017, 96, .	1.9	12
101	Effective dark matter power spectra in $f(R)$ gravity. Physical Review D, 2017, 96, .	1.6	11
102	Fast generation of mock galaxy catalogues in modified gravity models with COLA. Journal of Cosmology and Astroparticle Physics, 2021, 2021, 021.	1.9	11
103	GRAMSES: a new route to general relativistic $N$ -body simulations in cosmology. Part II. Initial conditions. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 056-056.	1.9	11
104	Revisiting the screening mechanism in $f(R)$ gravity. Physical Review D, 2016, 93, .	1.6	10
105	Probing theories of gravity with phase space-inferred potentials of galaxy clusters. Physical Review D, 2016, 93, .	1.6	10
106	Can background cosmology hold the key for modified gravity tests?. Physical Review D, 2016, 94, .	1.6	10
107	The self-similarity of weak lensing peaks. Monthly Notices of the Royal Astronomical Society, 2019, 488, 5833-5851.	1.6	10
108	Iterative removal of redshift-space distortions from galaxy clustering. Monthly Notices of the Royal Astronomical Society, 2020, 497, 3451-3471.	1.6	10

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109	A general framework to test gravity using galaxy clusters III: observable-mass scaling relations in $f(R)$ gravity. Monthly Notices of the Royal Astronomical Society, 2021, 502, 6101-6116.	1.6	10
110	Redshift space power spectrum beyond Einstein-de Sitter kernels. Journal of Cosmology and Astroparticle Physics, 2021, 2021, 039.	1.9	10
111	Environmental screening of dark matter haloes in $f(R)$ gravity. Monthly Notices of the Royal Astronomical Society, 2017, 469, 705-715.	1.6	9
112	Vector modes in $\Lambda$ CDM: the gravitomagnetic potential in dark matter haloes from relativistic $N$ -body simulations. Monthly Notices of the Royal Astronomical Society, 0, , .	1.6	9
113	Marked correlation functions in perturbation theory. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 006-006.	1.9	8
114	Optimal void finders in weak lensing maps. Monthly Notices of the Royal Astronomical Society, 2020, 500, 2417-2439.	1.6	8
115	Subhalo Abundance Matching in $f(R)$ Gravity. Physical Review Letters, 2016, 117, 221101.	2.9	7
116	Screening maps of the local Universe I – Methodology. Monthly Notices of the Royal Astronomical Society, 2019, 489, 4912-4925.	1.6	7
117	Looking for a twist: probing the cosmological gravitomagnetic effect via weak lensing- $kSZ$ cross-correlations. Monthly Notices of the Royal Astronomical Society, 2022, 510, 3589-3604.	1.6	7
118	Non-linear reconstruction of features in the primordial power spectrum from large-scale structure. Monthly Notices of the Royal Astronomical Society, 2022, 514, 4363-4378.	1.6	7
119	Biased Tracer Reconstruction with Halo Mass Information. Astrophysical Journal, Supplement Series, 2021, 254, 4.	3.0	6
120	Cosmological forecasts with the clustering of weak lensing peaks. Monthly Notices of the Royal Astronomical Society, 2022, 513, 4729-4746.	1.6	6
121	The galaxy-halo connection in modified gravity cosmologies: environment dependence of galaxy luminosity function. Monthly Notices of the Royal Astronomical Society, 2019, 488, 782-802.	1.6	5
122	Early dark energy constraints on growing neutrino quintessence cosmologies. Physical Review D, 2019, 100, .	1.6	5
123	High-redshift test of gravity using enhanced growth of small structures probed by the neutral hydrogen distribution. Physical Review D, 2019, 100, .	1.6	5
124	The matter density PDF for modified gravity and dark energy with Large Deviations Theory. Monthly Notices of the Royal Astronomical Society, 0, , .	1.6	5
125	Proca-stinated cosmology. Part II. Matter, halo, and lensing statistics in the vector Galileon. Journal of Cosmology and Astroparticle Physics, 2021, 2021, 014.	1.9	4
126	Modified Gravity. , 2019, , .		4



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127	A general framework to test gravity using galaxy clusters “ VI. Realistic galaxy formation simulations to study clusters in modified gravity. Monthly Notices of the Royal Astronomical Society, 2022, 514, 3349-3365.	1.6	4
128	Measuring the baryon acoustic oscillation peak position with different galaxy selections. Monthly Notices of the Royal Astronomical Society, 2020, 494, 3120-3130.	1.6	3
129	Towards an accurate model of small-scale redshift-space distortions in modified gravity. Monthly Notices of the Royal Astronomical Society, 2022, 514, 440-459.	1.6	3
130	Approximation methods in modified gravity models. International Journal of Modern Physics D, 2018, 27, 1848004.	0.9	2
131	Testing Gravity using Void Profiles. Proceedings of the International Astronomical Union, 2014, 11, 555-560.	0.0	1
132	Dynamic Task Fusion for Block-Structured Finite Volume Solver over Dynamically Adaptive Mesh with Local Time Stepping. Lecture Notes in Computer Science, 2022, , 153-173.	1.0	1
133	Approximation Methods in Modified Gravity Models. , 2019, , 101-133.		0