Sownak Bose

List of Publications by Year
in descending order

85 papers	33,793 citations	43973 48 h-index	62479 80 g-index
86 all docs	86 docs citations	86 times ranked	16469 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	GW151226: Observation of Gravitational Waves from a 22-Solar-Mass Binary Black Hole Coalescence. Physical Review Letters, 2016, 116, 241103.	2.9	2,701
4	Gravitational Waves and Gamma-Rays from a Binary Neutron Star Merger: GW170817 and GRB 170817A. Astrophysical Journal Letters, 2017, 848, L13.	3.0	2,314
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	GW170814: A Three-Detector Observation of Gravitational Waves from a Binary Black Hole Coalescence. Physical Review Letters, 2017, 119, 141101.	2.9	1,600
7	GW170817: Measurements of Neutron Star Radii and Equation of State. Physical Review Letters, 2018, 121, 161101.	2.9	1,473
8	Tests of General Relativity with GW150914. Physical Review Letters, 2016, 116, 221101.	2.9	1,224
9	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.	2.9	836
10	Properties of the Binary Black Hole Merger GW150914. Physical Review Letters, 2016, 116, 241102.	2.9	673
11	GW150914: The Advanced LIGO Detectors in the Era of First Discoveries. Physical Review Letters, 2016, 116, 131103.	2.9	466
12	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. Living Reviews in Relativity, 2020, 23, 3.	8.2	447
13	Prospects for Observing and Localizing Gravitational-Wave Transients with Advanced LIGO and Advanced Virgo. Living Reviews in Relativity, 2016, 19, 1.	8.2	427
14	Tests of General Relativity with GW170817. Physical Review Letters, 2019, 123, 011102.	2.9	370
15	GW150914: Implications for the Stochastic Gravitational-Wave Background from Binary Black Holes. Physical Review Letters, 2016, 116, 131102.	2.9	269
16	The massâ€“concentrationâ€“redshift relation of cold and warm dark matter haloes. Monthly Notices of the Royal Astronomical Society, 2016, 460, 1214-1232.	1.6	227
17	Upper Limits on the Stochastic Gravitational-Wave Background from Advanced LIGOâ€™s First Observing Run. Physical Review Letters, 2017, 118, 121101.	2.9	194
18	GW170817: Implications for the Stochastic Gravitational-Wave Background from Compact Binary Coalescences. Physical Review Letters, 2018, 120, 091101.	2.9	166

#	Article	IF	Citations
19	Rapid Reionization by the Oligarchs: The Case for Massive, UV-bright, Star-forming Galaxies with High Escape Fractions. Astrophysical Journal, 2020, 892, 109.	1.6	166
20	A Redshift-independent Efficiency Model: Star Formation and Stellar Masses in Dark Matter Halos at zÂâ‰³Â4. Astrophysical Journal, 2018, 868, 92.	1.6	145
21	A Gravitational-wave Measurement of the Hubble Constant Following the Second Observing Run of Advanced LIGO and Virgo. Astrophysical Journal, 2021, 909, 218.	1.6	144
22	Universal structure of dark matter haloes over a mass range of 20 orders of magnitude. Nature, 2020, 585, 39-42.	13.7	140
23	Search for Subsolar Mass Ultracompact Binaries in Advanced LIGOâ€™s Second Observing Run. Physical Review Letters, 2019, 123, 161102.	2.9	119
24	Modified gravity<i>N</i>-body code comparison project. Monthly Notices of the Royal Astronomical Society, 2015, 454, 4208-4234.	1.6	104
25	The Copernicus Complexio: statistical properties of warm dark matter haloes. Monthly Notices of the Royal Astronomical Society, 2016, 455, 318-333.	1.6	102
26	The extraordinary amount of substructure in the<i>Hubble Frontier Fields</i>cluster AbellÂ2744. Monthly Notices of the Royal Astronomical Society, 2016, 463, 3876-3893.	1.6	99
27	First Star-Forming Structures in Fuzzy Cosmic Filaments. Physical Review Letters, 2019, 123, 141301.	2.9	94
28	Constraints on Cosmic Strings Using Data from the Third Advanced LIGOâ€"Virgo Observing Run. Physical Review Letters, 2021, 126, 241102.	2.9	87
29	Search for Tensor, Vector, and Scalar Polarizations in the Stochastic Gravitational-Wave Background. Physical Review Letters, 2018, 120, 201102.	2.9	85
30	The Copernicus Complexio: a high-resolution view of the small-scale Universe. Monthly Notices of the Royal Astronomical Society, 2016, 457, 3492-3509.	1.6	84
31	Directional Limits on Persistent Gravitational Waves from Advanced LIGOâ€™s First Observing Run. Physical Review Letters, 2017, 118, 121102.	2.9	84
32	Planes of satellite galaxies: when exceptions are the rule. Monthly Notices of the Royal Astronomical Society, 2015, 452, 3838-3852.	1.6	79
33	The Santiagoâ€"Harvardâ€"Edinburghâ€"Durham void comparison â€" I. SHEDding light on chameleon gravity tests. Monthly Notices of the Royal Astronomical Society, 2018, 476, 3195-3217.	1.6	78
34	Search for Subsolar-Mass Ultracompact Binaries in Advanced LIGOâ€™s First Observing Run. Physical Review Letters, 2018, 121, 231103.	2.9	77
35	<scp>AbacusSummit</scp>: a massive set of high-accuracy, high-resolution <i>N</i>-body simulations. Monthly Notices of the Royal Astronomical Society, 2021, 508, 4017-4037.	1.6	74
36	Substructure and galaxy formation in the Copernicus Complexio warm dark matter simulations. Monthly Notices of the Royal Astronomical Society, 2017, 464, 4520-4533.	1.6	72

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37	Satellite galaxies in semi-analytic models of galaxy formation with sterile neutrino dark matter. Monthly Notices of the Royal Astronomical Society, 2016, 461, 60-72.	1.6	70
38	First Search for Nontensorial Gravitational Waves from Known Pulsars. Physical Review Letters, 2018, 120, 031104.	2.9	68
39	On the road toÂpercent accuracy: non-linear reaction of the matter power spectrum to dark energy and modified gravity. Monthly Notices of the Royal Astronomical Society, 2019, 488, 2121-2142.	1.6	67
40	No cores in dark matter-dominated dwarf galaxies with bursty star formation histories. Monthly Notices of the Royal Astronomical Society, 2019, 486, 4790-4804.	1.6	62
41	Limitations to the â€˜basicâ€™ HOD model and beyond. Monthly Notices of the Royal Astronomical Society, 2020, 493, 5506-5519.	1.6	60
42	Constraints on the identity of the dark matter from strong gravitational lenses. Monthly Notices of the Royal Astronomical Society, 2016, 460, 363-372.	1.6	59
43	Revealing the galaxyâ€"halo connection in IllustrisTNG. Monthly Notices of the Royal Astronomical Society, 2019, 490, 5693-5711.	1.6	59
44	Galaxy formation with BECDM â€" II. Cosmic filaments and first galaxies. Monthly Notices of the Royal Astronomical Society, 2020, 494, 2027-2044.	1.6	58
45	The BUFFALO HST Survey. Astrophysical Journal, Supplement Series, 2020, 247, 64.	3.0	57
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. Astrophysical Journal, 2017, 841, 89.	1.6	52
47	Testing the quasi-static approximation in<i>f</i>(<i>R</i>) gravity simulations. Journal of Cosmology and Astroparticle Physics, 2015, 2015, 034-034.	1.9	50
48	Properties of Local Group galaxies in hydrodynamical simulations of sterile neutrino dark matter cosmologies. Monthly Notices of the Royal Astronomical Society, 2017, 468, 4285-4298.	1.6	50
49	The Imprint of Cosmic Reionization on the Luminosity Function of Galaxies. Astrophysical Journal, 2018, 863, 123.	1.6	47
50	The Santiagoâ€"Harvardâ€"Edinburghâ€"Durham void comparison II: unveiling the Vainshtein screening using weak lensing. Monthly Notices of the Royal Astronomical Society, 2019, 484, 1149-1165.	1.6	46
51	Addressing the too big to fail problem with baryon physics and sterile neutrino dark matter. Monthly Notices of the Royal Astronomical Society, 2017, 468, 2836-2849.	1.6	41
52	Speeding up<i>N</i>-body simulations of modified gravity: chameleon screening models. Journal of Cosmology and Astroparticle Physics, 2017, 2017, 050-050.	1.9	40
53	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
54	Extensions to models of the galaxyâ€"halo connection. Monthly Notices of the Royal Astronomical Society, 2020, 501, 1603-1620.	1.6	36

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55	Speeding up N-body simulations of modified gravity: Vainshtein screening models. Journal of Cosmology and Astroparticle Physics, 2015, 2015, 059-059.	1.9	33
56	The galaxyâ€"halo connection of emission-line galaxies in IllustrisTNG. Monthly Notices of the Royal Astronomical Society, 2021, 502, 3599-3617.	1.6	33
57	Evidence for galaxy assembly bias in BOSS CMASS redshift-space galaxy correlation function. Monthly Notices of the Royal Astronomical Society, 2021, 502, 3582-3598.	1.6	32
58	Reionization in sterile neutrino cosmologies. Monthly Notices of the Royal Astronomical Society, 2016, 463, 3848-3859.	1.6	31
59	The little things matter: relating the abundance of ultrafaint satellites to the hostsâ€™ assembly history. Monthly Notices of the Royal Astronomical Society, 2020, 495, 743-757.	1.6	27
60	<scp>AbacusHOD</scp>: a highly efficient extended multitracer HOD framework and its application to BOSS and eBOSS data. Monthly Notices of the Royal Astronomical Society, 2022, 510, 3301-3320.	1.6	26
61	Weak lensing by galaxy troughs with modified gravity. Journal of Cosmology and Astroparticle Physics, 2017, 2017, 031-031.	1.9	23
62	ETHOS â€" an Effective Theory of Structure Formation: detecting dark matter interactions through the Lyman-Î± forest. Monthly Notices of the Royal Astronomical Society, 2019, 487, 522-536.	1.6	23
63	The accuracy of weak lensing simulations. Monthly Notices of the Royal Astronomical Society, 2020, 493, 305-319.	1.6	22
64	Galaxy assembly bias and large-scale distribution: a comparison between IllustrisTNG and a semi-analytic model. Monthly Notices of the Royal Astronomical Society, 2021, 508, 698-718.	1.6	22
65	<scp>compaso</scp>: A new halo finder for competitive assignment to spherical overdensities. Monthly Notices of the Royal Astronomical Society, 2021, 509, 501-521.	1.6	22
66	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
67	First joint observation by the underground gravitational-wave detector KAGRA with GEO 600. Progress of Theoretical and Experimental Physics, 2022, 2022, .	1.8	20
68	Illustrating galaxyâ€"halo connection in the DESI era with <scp>illustrisTNG</scp>. Monthly Notices of the Royal Astronomical Society, 2022, 512, 5793-5811.	1.6	18
69	Dwarf stellar haloes: a powerful probe of small-scale galaxy formation and the nature of dark matter. Monthly Notices of the Royal Astronomical Society, 2022, 511, 4044-4059.	1.6	17
70	Morphological Types of DM Halos in Milky Way-like Galaxies in the TNG50 Simulation: Simple, Twisted, or Stretched. Astrophysical Journal, 2021, 913, 36.	1.6	15
71	Constraining SN feedback: a tug of war between reionization and the Milky Way satellites. Monthly Notices of the Royal Astronomical Society, 2016, 463, 1224-1239.	1.6	10
72	Constructing high-fidelity halo merger trees in<scp>abacussummit</scp>. Monthly Notices of the Royal Astronomical Society, 2022, 512, 837-854.	1.6	10

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73	The signal of decaying dark matter with hydrodynamical simulations. Monthly Notices of the Royal Astronomical Society, 2019, 485, 4071-4089.	1.6	9
74	Degeneracies between baryons and dark matter: the challenge of constraining the nature of dark matter with <i>JWST</i>. Monthly Notices of the Royal Astronomical Society, 2021, 506, 4139-4150.	1.6	9
75	Inferring the Morphology of Stellar Distribution in TNG50: Twisted and Twisted-stretched Shapes. Astrophysical Journal, 2021, 918, 7.	1.6	9
76	Dynamics of intermediate-mass black holes wandering in the milky way galaxy using the illustris TNG50 simulation. Monthly Notices of the Royal Astronomical Society, 2022, 511, 2229-2238.	1.6	9
77	The halo light-cone catalogues of <scp>AbacusSummit</scp>. Monthly Notices of the Royal Astronomical Society, 2021, 509, 2194-2208.	1.6	8
78	Dating the Tidal Disruption of Globular Clusters with GAIAÂData on Their Stellar Streams. Astrophysical Journal Letters, 2018, 859, L13.	3.0	5
79	Measuring the Mass and Concentration of Dark Matter Halos from the Velocity Dispersion Profile of their Stars. Astrophysical Journal, 2021, 912, 114.	1.6	4
80	Simulating the Dark Matter Decay Signal from the Perseus Galaxy Cluster. Astrophysical Journal Letters, 2019, 875, L24.	3.0	3
81	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. , 2018, 21, 1.		2
82	Reionisation in Sterile Neutrino Cosmologies. Springer Theses, 2018, , 77-100.	0.0	0
83	Substructure and Galaxy Formation in Warm Dark Matter Simulations. Springer Theses, 2018, , 51-75.	0.0	0
84	Statistical Properties of Warm Dark Matter Haloes. Springer Theses, 2018, , 15-50.	0.0	0
85	Speeding up N-Body Simulations of Modified Gravity: Chameleon Screening Models. Springer Theses, 2018, , 139-159.	0.0	0