Bradley J Kavanagh

List of Publications by Year
in descending order

40 papers	2,139 citations	279798 23 h-index	302126 39 g-index
40 all docs	40 docs citations	40 times ranked	1944 citing authors

#	Article	IF	Citations
1	Black holes, gravitational waves and fundamental physics: a roadmap. Classical and Quantum Gravity, 2019, 36, 143001.	4.0	451
2	Primordial black holes as a dark matter candidate. Journal of Physics G: Nuclear and Particle Physics, 2021, 48, 043001.	3.6	303
3	AEDGE: Atomic Experiment for Dark Matter and Gravity Exploration in Space. EPJ Quantum Technology, 2020, 7, .	6.3	190
4	Merger rate of a subdominant population of primordial black holes. Physical Review D, 2018, 98, .	4.7	83
5	New horizons for fundamental physics with LISA. Living Reviews in Relativity, 2022, 25, .	26.7	82
6	You can hide but you have to run: direct detection with vector mediators. Journal of High Energy Physics, 2016, 2016, 1.	4.7	75
7	Prospects for exploring New Physics in Coherent Elastic Neutrino-Nucleus Scattering. Journal of Cosmology and Astroparticle Physics, 2018, 2018, 016-016.	5.4	72
8	Detecting dark matter around black holes with gravitational waves: Effects of dark-matter dynamics on the gravitational waveform. Physical Review D, 2020, 102, .	4.7	63
9	Signatures of Earth-scattering in the direct detection of Dark Matter. Journal of Cosmology and Astroparticle Physics, 2017, 2017, 012-012.	5.4	61
10	Earth scattering of superheavy dark matter: Updated constraints from detectors old and new. Physical Review D, 2018, 97, .	4.7	59
11	WIMP physics with ensembles of direct-detection experiments. Physics of the Dark Universe, 2014, 5-6, 45-74.	4.9	57
12	Gravitational wave probes of dark matter: challenges and opportunities. SciPost Physics Core, 2020, 3, .	2.8	52
13	Model Independent Determination of the Dark Matter Mass from Direct Detection Experiments. Physical Review Letters, 2013, 111, 031302.	7.8	45
14	Probing leptophilic dark sectors with hadronic processes. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 771, 339-348.	4.1	36
15	Unique Multimessenger Signal of QCD Axion Dark Matter. Physical Review Letters, 2020, 124, 161101.	7.8	36
16	Improved determination of the WIMP mass from direct detection data. Physical Review D, 2012, 86, .	4.7	34
17	Faint light from dark matter: classifying and constraining dark matter-photon effective operators. Journal of High Energy Physics, 2019, 2019, 1.	4.7	33
18	Measuring the dark matter environments of black hole binaries with gravitational waves. Physical Review D, 2022, 105, .	4.7	29

#	Article	IF	Citations
19	Scattering Searches for Dark Matter in Subhalos: Neutron Stars, Cosmic Rays, and Old Rocks. Physical Review Letters, 2022, 128, .	7.8	28
20	New directional signatures from the nonrelativistic effective field theory of dark matter. Physical Review D, 2015, 92, .	4.7	25
21	Primordial black holes as silver bullets for new physics at the weak scale. Physical Review D, 2019, 100, .	4.7	25
22	Probing WIMP particle physics and astrophysics with direct detection and neutrino telescope data. Physical Review D, 2015, 91, .	4.7	24
23	INTEGRAL x-ray constraints on sub-GeV dark matter. Physical Review D, 2021, 103, .	4.7	24
24	The effect of mission duration on LISA science objectives. General Relativity and Gravitation, 2022, 54, 3.	2.0	24
25	Transient Radio Signatures from Neutron Star Encounters with QCD Axion Miniclusters. Physical Review Letters, 2021, 127, 131103.	7.8	23
26	Digging for dark matter: Spectral analysis and discovery potential of paleo-detectors. Physical Review D, 2019, 99, .	4.7	21
27	Stellar disruption of axion miniclusters in the MilkyÂWay. Physical Review D, 2021, 104, .	4.7	21
28	Bracketing the impact of astrophysical uncertainties on local dark matter searches. Journal of Cosmology and Astroparticle Physics, 2018, 2018, 018-018.	5.4	20
29	Parametrizing the local dark matter speed distribution: A detailed analysis. Physical Review D, 2014, 89, .	4.7	19
30	Reconstructing the three-dimensional local dark matter velocity distribution. Physical Review D, 2016, 94, .	4.7	19
31	Precision constraints on radiative neutrino decay with CMB spectral distortion. Physical Review D, 2018, 98, .	4.7	18
32	Prospects for determining the particle/antiparticle nature of WIMP dark matter with direct detection experiments. Journal of High Energy Physics, 2017, 2017, 1.	4.7	17
33	Time-integrated directional detection of dark matter. Physical Review D, 2017, 96, .	4.7	15
34	Paleodetectors for Galactic supernova neutrinos. Physical Review D, 2020, 101, .	4.7	14
35	Assessing Near-Future Direct Dark Matter Searches with Benchmark-Free Forecasting. Physical Review Letters, 2018, 121, 181101.	7.8	12
36	Impact of substructure on local dark matter searches. Journal of Cosmology and Astroparticle Physics, 2019, 2019, 013-013.	5.4	11

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37	Discretising the velocity distribution for directional dark matter experiments. Journal of Cosmology and Astroparticle Physics, 2015, 2015, 019-019.	5.4	10
38	Discovery prospects of dwarf spheroidal galaxies for indirect dark matter searches. Journal of Cosmology and Astroparticle Physics, 2019, 2019, 040-040.	5.4	6
39	Measuring the local dark matter density in the laboratory. Physical Review D, 2021, 104, .	4.7	2
40	Constraining sub-GeV dark matter with the Integral data. Journal of Physics: Conference Series, 2021, 2156, 012033.	0.4	0