

# Miguel Zilhao

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5788637/publications.pdf>

Version: 2024-02-01

61  
papers

3,096  
citations

218677

26  
h-index

155660

55  
g-index

62  
all docs

62  
docs citations

62  
times ranked

2589  
citing authors

#	ARTICLE	IF	CITATIONS
1	Testing general relativity with present and future astrophysical observations. <i>Classical and Quantum Gravity</i> , 2015, 32, 243001.	4.0	943
2	Black holes, gravitational waves and fundamental physics: a roadmap. <i>Classical and Quantum Gravity</i> , 2019, 36, 143001.	4.0	451
3	Prospects for fundamental physics with LISA. <i>General Relativity and Gravitation</i> , 2020, 52, 1.	2.0	198
4	Nonlinear Dynamics of Spinning Bosonic Stars: Formation and Stability. <i>Physical Review Letters</i> , 2019, 123, 221101.	7.8	82
5	New horizons for fundamental physics with LISA. <i>Living Reviews in Relativity</i> , 2022, 25, .	26.7	82
6	Lensing and dynamics of ultracompact bosonic stars. <i>Physical Review D</i> , 2017, 96, .	4.7	73
7	Nonlinear interactions between black holes and Proca fields. <i>Classical and Quantum Gravity</i> , 2015, 32, 234003.	4.0	68
8	Quasi-periodic Behavior of Mini-disks in Binary Black Holes Approaching Merger. <i>Astrophysical Journal Letters</i> , 2018, 853, L17.	8.3	65
9	Thermodynamics, transport and relaxation in non-conformal theories. <i>Journal of High Energy Physics</i> , 2016, 2016, 1.	4.7	56
10	AN INTRODUCTION TO THE EINSTEIN TOOLKIT. <i>International Journal of Modern Physics A</i> , 2013, 28, 1340014.	1.5	55
11	Holographic Collisions across a Phase Transition. <i>Physical Review Letters</i> , 2018, 121, 261601.	7.8	53
12	Mathisson's helical motions for a spinning particle: Are they unphysical?. <i>Physical Review D</i> , 2012, 85, .	4.7	52
13	Numerical relativity for $D$ dimensional space-times: Head-on collisions of black holes and gravitational wave extraction. <i>Physical Review D</i> , 2010, 82, .	4.7	51
14	Numerical relativity for $D$ dimensional axially symmetric space-times: Formalism and code tests. <i>Physical Review D</i> , 2010, 81, .	4.7	51
15	NR/HEP: roadmap for the future. <i>Classical and Quantum Gravity</i> , 2012, 29, 244001.	4.0	50
16	Collisions of charged black holes. <i>Physical Review D</i> , 2012, 85, .	4.7	49
17	Phase transitions, inhomogeneous horizons and second-order hydrodynamics. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	4.7	41
18	Paths to equilibrium in non-conformal collisions. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	4.7	40

#	ARTICLE	IF	CITATIONS
19	Strong cosmic censorship: The nonlinear story. <i>Physical Review D</i> , 2019, 99, .	4.7	38
20	Collisions of oppositely charged black holes. <i>Physical Review D</i> , 2014, 89, .	4.7	36
21	Holographic collisions in non-conformal theories. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	4.7	36
22	Black holes in a box: Toward the numerical evolution of black holes in AdS space-times. <i>Physical Review D</i> , 2010, 82, .	4.7	35
23	Dynamical bar-mode instability in spinning bosonic stars. <i>Physical Review D</i> , 2020, 102, .	4.7	35
24	Head-on collisions of unequal mass black holes in $D=5$ dimensions. <i>Physical Review D</i> , 2011, 83, .	4.7	32
25	Testing the nonlinear stability of Kerr-Newman black holes. <i>Physical Review D</i> , 2014, 90, .	4.7	27
26	Bubble wall velocity from holography. <i>Physical Review D</i> , 2021, 104, .	4.7	27
27	Synchronized gravitational atoms from mergers of bosonic stars. <i>Physical Review D</i> , 2020, 102, .	4.7	26
28	Spacetime dynamics of spinning particles: Exact electromagnetic analogies. <i>Physical Review D</i> , 2016, 93, .	4.7	25
29	Dynamics of phase separation from holography. <i>Journal of High Energy Physics</i> , 2020, 2020, 1.	4.7	23
30	Black hole binaries: Ergoregions, photon surfaces, wave scattering, and quasinormal modes. <i>Physical Review D</i> , 2018, 98, .	4.7	21
31	Resolving the relative influence of strong field spacetime dynamics and MHD on circumbinary disk physics. <i>Physical Review D</i> , 2015, 91, .	4.7	20
32	Towards spacetime entanglement entropy for interacting theories. <i>Journal of High Energy Physics</i> , 2020, 2020, 1.	4.7	20
33	Dynamics of black holes in de Sitter spacetimes. <i>Physical Review D</i> , 2012, 85, .	4.7	19
34	Black hole binaries and light fields: Gravitational molecules. <i>Physical Review D</i> , 2021, 103, .	4.7	19
35	Mass-ratio and Magnetic Flux Dependence of Modulated Accretion from Circumbinary Disks. <i>Astrophysical Journal</i> , 2021, 922, 175.	4.5	19
36	Dynamic fisheye grids for binary black hole simulations. <i>Classical and Quantum Gravity</i> , 2014, 31, 065013.	4.0	18

#	ARTICLE	IF	CITATIONS
37	Crossing a large- $N$ phase transition at finite volume. <i>Journal of High Energy Physics</i> , 2021, 2021, 1.	4.7	18
38	Physics of black hole binaries: Geodesics, relaxation modes, and energy extraction. <i>Physical Review D</i> , 2019, 100, .	4.7	17
39	Higher-dimensional puncture initial data. <i>Physical Review D</i> , 2011, 84, .	4.7	15
40	Black hole fusion in the extreme mass ratio limit. <i>Physical Review D</i> , 2018, 97, .	4.7	15
41	A double Myers-Perry black hole in five dimensions. <i>Journal of High Energy Physics</i> , 2008, 2008, 009-009.	4.7	12
42	Dynamical friction in slab geometries and accretion discs. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 489, 5424-5435.	4.4	11
43	Hyperbolicity of general relativity in Bondi-like gauges. <i>Physical Review D</i> , 2020, 102, .	4.7	11
44	Mass inflation in a $D$ -dimensional Reissner-Nordström black hole: A hierarchy of particle accelerators?. <i>Physical Review D</i> , 2011, 84, .	4.7	10
45	Higher dimensional numerical relativity: Code comparison. <i>Physical Review D</i> , 2014, 90, .	4.7	10
46	Collective Scalarization or Tachyonization: When Averaging Fails. <i>Physical Review Letters</i> , 2020, 124, 221104.	7.8	8
47	Domain collisions. <i>Journal of High Energy Physics</i> , 2022, 2022, .	4.7	6
48	Black holes in a box. <i>Journal of Physics: Conference Series</i> , 2010, 229, 012072.	0.4	5
49	Mathisson's helical motions demystified. , 2012, , .		4
50	Gauge structure of the Einstein field equations in Bondi-like coordinates. <i>Physical Review D</i> , 2022, 105, .	4.7	4
51	Instabilities of Scalar Fields around Oscillating Stars. <i>Physical Review Letters</i> , 2021, 127, 191101.	7.8	3
52	Numerical relativity in higher dimensions. <i>Journal of Physics: Conference Series</i> , 2010, 229, 012074.	0.4	2
53	Simulations of black holes in compactified spacetimes. <i>Journal of Physics: Conference Series</i> , 2011, 314, 012103.	0.4	2
54	Numerical Relativity in $D$ -dimensional space-times: Collisions of unequal mass black holes. <i>Journal of Physics: Conference Series</i> , 2011, 314, 012104.	0.4	2

#	ARTICLE	IF	CITATIONS
55	Inspiring black-hole binary spacetimes: Challenges in transitioning from analytical to numerical techniques. Physical Review D, 2016, 93, .	4.7	2
56	A Double Myers-Perry Black Hole: an Inverse Scattering Construction. , 2009, , .		1
57	DYNAMICS OF CHARGED BLACK HOLES. , 2015, , .		1
58	Binary superradiance: A numerical study. Physical Review D, 2022, 105, .	4.7	1
59	BLACK HOLES IN A BOX. , 2012, , .		0
60	Paths to equilibrium in non-conformal collisions. EPJ Web of Conferences, 2018, 175, 07030.	0.3	0
61	Black Hole Collisions in Asymptotically de Sitter Spacetimes. Springer Proceedings in Physics, 2014, , 247-254.	0.2	0