Thomas P Sotiriou

List of Publications by Year
in descending order

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Version: 2024-02-01

100 papers	11,802 citations	38742 50 h-index	32842 100 g-index
102 all docs	102 docs citations	102 times ranked	3922 citing authors

#	Article	IF	Citations
1	Ghost of vector fields in compact stars. Physical Review D, 2022, 105, .	4.7	22
2	Detecting fundamental fields with LISA observations of gravitational waves from extreme mass-ratio inspirals. Nature Astronomy, 2022, 6, 464-470.	10.1	39
3	New horizons for fundamental physics with LISA. Living Reviews in Relativity, 2022, 25, .	26.7	82
4	Compact object scalarization with general relativity as a cosmic attractor. Physical Review D, 2021, 103, .	4.7	17
5	Spin-Induced Scalarized Black Holes. Physical Review Letters, 2021, 126, 011103.	7.8	128
6	Numerical black hole solutions in modified gravity theories: Axial symmetry case. Physical Review D, 2021, 103, .	4.7	16
7	Black hole scalarization with Gauss-Bonnet and Ricci scalar couplings. Physical Review D, 2021, 104, .	4.7	24
8	Probing the nature of black holes: Deep in the mHz gravitational-wave sky. Experimental Astronomy, 2021, 51, 1385-1416.	3.7	29
9	Neutron star scalarization with Gauss-Bonnet and Ricci scalar couplings. Physical Review D, 2021, 104, .	4.7	8
10	Detecting Scalar Fields with Extreme Mass Ratio Inspirals. Physical Review Letters, 2020, 125, 141101.	7.8	38
11	Onset of spontaneous scalarization in generalized scalar-tensor theories. Physical Review D, 2020, 102, .	4.7	27
12	Prospects for fundamental physics with LISA. General Relativity and Gravitation, 2020, 52, 1.	2.0	198
13	Spin-Induced Black Hole Spontaneous Scalarization. Physical Review Letters, 2020, 125, 231101.	7.8	120
14	Cosmology with subdominant Horndeski scalar field. Physical Review D, 2020, 101, .	4.7	10
15	Numerical black hole solutions in modified gravity theories: Spherical symmetry case. Physical Review D, 2020, 101, .	4.7	17
16	Black holes, gravitational waves and fundamental physics: a roadmap. Classical and Quantum Gravity, 2019, 36, 143001.	4.0	451
17	Classification of shift-symmetric Horndeski theories and hairy black holes. Physical Review D, 2019, 99, .	4.7	21
18	Spontaneous scalarization in generalized scalar-tensor theory. Physical Review D, 2019, 99, .	4.7	60

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19	Multipole moments and universal relations for scalarized neutron stars. Physical Review D, 2019, 99, .	4.7	11
20	Self-interactions and spontaneous black hole scalarization. Physical Review D, 2019, 99, .	4.7	104
21	Black holes and binary mergers in scalar Gauss-Bonnet gravity: Scalar field dynamics. Physical Review D, 2019, 99, .	4.7	131
22	Stability of scalarized black hole solutions in scalar-Gauss-Bonnet gravity. Physical Review D, 2019, 99, .	4.7	121
23	Detecting Lorentz Violations with Gravitational Waves From Black Hole Binaries. Physical Review Letters, 2018, 120, .	7.8	19
24	HoÅ™ava gravity after GW170817. Physical Review D, 2018, 97, .	4.7	84
25	Spontaneous Scalarization of Black Holes and Compact Stars from a Gauss-Bonnet Coupling. Physical Review Letters, 2018, 120, 131104.	7.8	391
26	Constructing neutron stars with a gravitational Higgs mechanism. Physical Review D, 2018, 97, .	4.7	7
27	Causal structure of black holes in shift-symmetric Horndeski theories. Physical Review D, 2018, 98, .	4.7	10
28	Revisiting the cuscuton as a Lorentz-violating gravity theory. Physical Review D, 2018, 97, .	4.7	19
29	Dynamical obstruction to perpetual motion from Lorentz-violating black holes. Physical Review D, 2018, 98, .	4.7	6
30	Black hole hair formation in shift-symmetric generalised scalar-tensor gravity. Classical and Quantum Gravity, 2017, 34, 064001.	4.0	77
31	Gravitational Higgs mechanism in neutron star interiors. Physical Review D, 2017, 95, .	4.7	13
32	Black hole horizons at the extremal limit in Lorentz-violating gravity. Physical Review D, 2017, 96, .	4.7	1
33	Dynamical scalar hair formation around a Schwarzschild black hole. Physical Review D, 2016, 94, .	4.7	57
34	Extrinsic curvature in two-dimensional causal dynamical triangulation. Physical Review D, 2016, 94, .	4.7	6
35	Slowly rotating black holes in Einstein-Ã¦ther theory. Physical Review D, 2016, 93, .	4.7	70
36	Evolution and spherical collapse in Einstein-Ã†ther theory and HoÅ™ava gravity. Physical Review D, 2016, 93, .	4.7	17

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37	Causality and black holes in spacetimes with a preferred foliation. Classical and Quantum Gravity, 2016, 33, 235003.	4.0	29
38	Uninvited guest in mixed derivative HoÅ™ava gravity. Physical Review D, 2016, 94, .	4.7	7
39	HoÅ™ava gravity with mixed derivative terms: Power counting renormalizability with lower order dispersions. Physical Review D, 2015, 92, .	4.7	12
40	Black holes and scalar fields. Classical and Quantum Gravity, 2015, 32, 214002.	4.0	112
41	HoÅ™ava gravity with mixed derivative terms. Physical Review D, 2015, 91, .	4.7	19
42	Multipole moments in scalar-tensor theory of gravity. Physical Review D, 2015, 91, .	4.7	32
43	Geodesic properties in terms of multipole moments in scalarâ€“tensor theories of gravity: Table 1.. Monthly Notices of the Royal Astronomical Society, 2015, 453, 2863-2877.	4.4	22
44	Gravity and Scalar Fields. Lecture Notes in Physics, 2015, , 3-24.	0.7	36
45	Rotating black holes in three-dimensional HoÅ™ava gravity. Physical Review D, 2014, 90, .	4.7	42
46	Black hole hair in generalized scalar-tensor gravity: An explicit example. Physical Review D, 2014, 90, .	4.7	272
47	Black Hole Hair in Generalized Scalar-Tensor Gravity. Physical Review Letters, 2014, 112, 251102.	7.8	343
48	Gravity with auxiliary fields. Physical Review D, 2013, 88, .	4.7	38
49	Black Holes with Surrounding Matter in Scalar-Tensor Theories. Physical Review Letters, 2013, 111, 111101.	7.8	112
50	Gradient expansion of superhorizon perturbations in G-inflation. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 020-020.	5.4	7
51	Black holes in Lorentz-violating gravity theories. Classical and Quantum Gravity, 2013, 30, 244010.	4.0	85
52	Slowly rotating black holes in HoÅ™ava-Lifshitz gravity. Physical Review D, 2013, 87, .	4.7	78
53	Matter around Kerr black holes in scalar-tensor theories: Scalarization and superradiant instability. Physical Review D, 2013, 88, .	4.7	92
54	HoÅ™ava-Lifshitz gravity with detailed balance. Journal of Physics: Conference Series, 2013, 453, 012022.	0.4	13

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55	Black Holes in Scalar-Tensor Gravity. Physical Review Letters, 2012, 108, 081103.	7.8	303
56	Scale Hierarchy in HoÅ™ava-Lifshitz Gravity: Strong Constraint from Synchrotron Radiation in the Crab Nebula. Physical Review Letters, 2012, 109, 151602.	7.8	43
57	No-Go Theorem for Slowly Rotating Black Holes in HoÅ™ava-Lifshitz Gravity. Physical Review Letters, 2012, 109, 181101.	7.8	43
58	HoÅ™ava-Lifshitz gravity: Detailed balance revisited. Physical Review D, 2012, 85, .	4.7	32
59	Dynamical apparent horizons in inhomogeneous Brans-Dicke universes. Physical Review D, 2012, 86, .	4.7	15
60	Surface Singularities in Eddington-Inspired Born-Infeld Gravity. Physical Review Letters, 2012, 109, 251102.	7.8	114
61	Black holes in Einstein-aether and HoÅ™ava-Lifshitz gravity. Physical Review D, 2011, 83, .	4.7	190
62	Generalizations of teleparallel gravity and local Lorentz symmetry. Physical Review D, 2011, 83, .	4.7	226
63	<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>T</mml:mi><mml:mo) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 417 Td (stretchy="false") 83, .	4.7	399
64	The dynamics of metric-affine gravity. Annals of Physics, 2011, 326, 1259-1273.	2.8	74
65	Spectral Dimension as a Probe of the Ultraviolet Continuum Regime of Causal Dynamical Triangulations. Physical Review Letters, 2011, 107, 131303.	7.8	62
66	Large-scale structure in<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>T</mml:mi><mml:mo) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 292 Td (stretchy="false")</mml:mo	4.7	193
67	Lower-dimensional HoÅ™avaâ€“Lifshitz gravity. Physical Review D, 2011, 83, .	4.7	34
68	From dispersion relations to spectral dimensionâ€”and back again. Physical Review D, 2011, 84, .	4.7	49
69	HoÅ™ava-Lifshitz gravity: a status report. Journal of Physics: Conference Series, 2011, 283, 012034.	0.4	167
70	Projectable HoÅ™avaâ€“Lifshitz gravity in a nutshell. Journal of Physics: Conference Series, 2010, 222, 012054.	0.4	55
71	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>f</mml:mi><mml:mrow><mml:mo>(</mml:mo><mml:mi>R</mml:mi><mml:mo>)</mml:mo> of gravity. Reviews of Modern Physics, 2010, 82, 451-497.	45.6	3,043
72	Strong coupling in extended HoÅ™avaâ€“Lifshitz gravity. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 685, 197-200.	4.1	119

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73	Spinning Black Holes as Particle Accelerators. Physical Review Letters, 2010, 104, 021101.	7.8	162
74	Destroying black holes with test bodies. Journal of Physics: Conference Series, 2010, 222, 012041.	0.4	32
75	Gedanken experiments on nearly extremal black holes and the third law. Physical Review D, 2010, 82, .	4.7	37
76	Dynamics of generalized Palatini theories of gravity. Physical Review D, 2010, 82, .	4.7	39
77	Overspinning a Black Hole with a Test Body. Physical Review Letters, 2009, 103, 141101.	7.8	162
78	Phenomenologically Viable Lorentz-Violating Quantum Gravity. Physical Review Letters, 2009, 102, 251601.	7.8	226
79	Quantum gravity without Lorentz invariance. Journal of High Energy Physics, 2009, 2009, 033-033.	4.7	247
80	Covariant effective action for loop quantum cosmology from order reduction. Physical Review D, 2009, 79, .	4.7	26
81	6+1 lessons fromf(R) gravity. Journal of Physics: Conference Series, 2009, 189, 012039.	0.4	43
82	f (R) gravity, torsion and non-metricity. Classical and Quantum Gravity, 2009, 26, 152001.	4.0	54
83	The viability of theories with matter coupled to the Ricci scalar. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2008, 664, 225-228.	4.1	83
84	THEORY OF GRAVITATION THEORIES: A NO-PROGRESS REPORT. International Journal of Modern Physics D, 2008, 17, 399-423.	2.1	89
85	A no-go theorem for polytropic spheres in Palatini f (R) gravity. Classical and Quantum Gravity, 2008, 25, 062001.	4.0	104
86	Modified gravity with R â€“matter couplings and (non-)geodesic motion. Classical and Quantum Gravity, 2008, 25, 205002.	4.0	162
87	Perturbed Kerr Black Holes Can Probe Deviations from General Relativity. Physical Review Letters, 2008, 101, 099001.	7.8	96
88	THE SIGNIFICANCE OF MATTER COUPLING IN f(R) GRAVITY. , 2008, , .		1
89	The metric-affine formalism off(R) gravity. Journal of Physics: Conference Series, 2007, 68, 012022.	0.4	39
90	Reply to â€œCan gravitational dynamics be obtained by diffeomorphism invariance of action?â€• Physical Review D, 2007, 75, .	4.7	0

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91	Post-Newtonian expansion for Gauss-Bonnet gravity. Physical Review D, 2007, 75, .	4.7	41
92	Metric-affine f(R) theories of gravity. Annals of Physics, 2007, 322, 935-966.	2.8	280
93	Curvature scalar instability inf(R)gravity. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2007, 645, 389-392.	4.1	74
94	Unification of inflation and cosmic acceleration in the Palatini formalism. Physical Review D, 2006, 73, .	4.7	86
95	f (R) gravity and scalarâ€“tensor theory. Classical and Quantum Gravity, 2006, 23, 5117-5128.	4.0	305
96	Field equations from a surface term. Physical Review D, 2006, 74, .	4.7	7
97	The nearly Newtonian regime in non-linear theories of gravity. General Relativity and Gravitation, 2006, 38, 1407-1417.	2.0	114
98	Constraining f (R) gravity in the Palatini formalism. Classical and Quantum Gravity, 2006, 23, 1253-1267.	4.0	97
99	Tracing the geometry around a massive, axisymmetric body to measure, through gravitational waves, its mass moments and electromagnetic moments. Physical Review D, 2005, 71, .	4.7	8
100	Corrections and comments on the multipole moments of axisymmetric electrovacuum spacetimes. Classical and Quantum Gravity, 2004, 21, 5727-5733.	4.0	61