Thomas P Sotiriou

List of Publications by Year
in descending order

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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	<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
2	Black holes, gravitational waves and fundamental physics: a roadmap. Classical and Quantum Gravity, 2019, 36, 143001.	4.0	451
3	<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 50 657 Td (stretchy="false") 83, .	4.7	399
4	Spontaneous Scalarization of Black Holes and Compact Stars from a Gauss-Bonnet Coupling. Physical Review Letters, 2018, 120, 131104.	7.8	391
5	Black Hole Hair in Generalized Scalar-Tensor Gravity. Physical Review Letters, 2014, 112, 251102.	7.8	343
6	f (R) gravity and scalarâ€“tensor theory. Classical and Quantum Gravity, 2006, 23, 5117-5128.	4.0	305
7	Black Holes in Scalar-Tensor Gravity. Physical Review Letters, 2012, 108, 081103.	7.8	303
8	Metric-affine f(R) theories of gravity. Annals of Physics, 2007, 322, 935-966.	2.8	280
9	Black hole hair in generalized scalar-tensor gravity: An explicit example. Physical Review D, 2014, 90, .	4.7	272
10	Quantum gravity without Lorentz invariance. Journal of High Energy Physics, 2009, 2009, 033-033.	4.7	247
11	Phenomenologically Viable Lorentz-Violating Quantum Gravity. Physical Review Letters, 2009, 102, 251601.	7.8	226
12	Generalizations of teleparallel gravity and local Lorentz symmetry. Physical Review D, 2011, 83, .	4.7	226
13	Prospects for fundamental physics with LISA. General Relativity and Gravitation, 2020, 52, 1.	2.0	198
14	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 50 212 Td (stretchy="false">)</mml:mo	4.7	193
15	Black holes in Einstein-aether and HoÅ™ava-Lifshitz gravity. Physical Review D, 2011, 83, .	4.7	190
16	HoÅ™ava-Lifshitz gravity: a status report. Journal of Physics: Conference Series, 2011, 283, 012034.	0.4	167
17	Modified gravity with R â€“matter couplings and (non-)geodesic motion. Classical and Quantum Gravity, 2008, 25, 205002.	4.0	162
18	Overspinning a Black Hole with a Test Body. Physical Review Letters, 2009, 103, 141101.	7.8	162

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19	Spinning Black Holes as Particle Accelerators. Physical Review Letters, 2010, 104, 021101.	7.8	162
20	Black holes and binary mergers in scalar Gauss-Bonnet gravity: Scalar field dynamics. Physical Review D, 2019, 99, .	4.7	131
21	Spin-Induced Scalarized Black Holes. Physical Review Letters, 2021, 126, 011103.	7.8	128
22	Stability of scalarized black hole solutions in scalar-Gauss-Bonnet gravity. Physical Review D, 2019, 99, .	4.7	121
23	Spin-Induced Black Hole Spontaneous Scalarization. Physical Review Letters, 2020, 125, 231101.	7.8	120
24	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
25	The nearly Newtonian regime in non-linear theories of gravity. General Relativity and Gravitation, 2006, 38, 1407-1417.	2.0	114
26	Surface Singularities in Eddington-Inspired Born-Infeld Gravity. Physical Review Letters, 2012, 109, 251102.	7.8	114
27	Black Holes with Surrounding Matter in Scalar-Tensor Theories. Physical Review Letters, 2013, 111, 111101.	7.8	112
28	Black holes and scalar fields. Classical and Quantum Gravity, 2015, 32, 214002.	4.0	112
29	A no-go theorem for polytropic spheres in Palatini f (R) gravity. Classical and Quantum Gravity, 2008, 25, 062001.	4.0	104
30	Self-interactions and spontaneous black hole scalarization. Physical Review D, 2019, 99, .	4.7	104
31	Constraining f (R) gravity in the Palatini formalism. Classical and Quantum Gravity, 2006, 23, 1253-1267.	4.0	97
32	Perturbed Kerr Black Holes Can Probe Deviations from General Relativity. Physical Review Letters, 2008, 101, 099001.	7.8	96
33	Matter around Kerr black holes in scalar-tensor theories: Scalarization and superradiant instability. Physical Review D, 2013, 88, .	4.7	92
34	THEORY OF GRAVITATION THEORIES: A NO-PROGRESS REPORT. International Journal of Modern Physics D, 2008, 17, 399-423.	2.1	89
35	Unification of inflation and cosmic acceleration in the Palatini formalism. Physical Review D, 2006, 73, .	4.7	86
36	Black holes in Lorentz-violating gravity theories. Classical and Quantum Gravity, 2013, 30, 244010.	4.0	85

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37	HoÅ™ava gravity after GW170817. Physical Review D, 2018, 97, .	4.7	84
38	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
39	New horizons for fundamental physics with LISA. Living Reviews in Relativity, 2022, 25, .	26.7	82
40	Slowly rotating black holes in HoÅ™ava-Lifshitz gravity. Physical Review D, 2013, 87, .	4.7	78
41	Black hole hair formation in shift-symmetric generalised scalar-tensor gravity. Classical and Quantum Gravity, 2017, 34, 064001.	4.0	77
42	Curvature scalar instability inf(R)gravity. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2007, 645, 389-392.	4.1	74
43	The dynamics of metric-affine gravity. Annals of Physics, 2011, 326, 1259-1273.	2.8	74
44	Slowly rotating black holes in Einstein-Ã¦ther theory. Physical Review D, 2016, 93, .	4.7	70
45	Spectral Dimension as a Probe of the Ultraviolet Continuum Regime of Causal Dynamical Triangulations. Physical Review Letters, 2011, 107, 131303.	7.8	62
46	Corrections and comments on the multipole moments of axisymmetric electrovacuum spacetimes. Classical and Quantum Gravity, 2004, 21, 5727-5733.	4.0	61
47	Spontaneous scalarization in generalized scalar-tensor theory. Physical Review D, 2019, 99, .	4.7	60
48	Dynamical scalar hair formation around a Schwarzschild black hole. Physical Review D, 2016, 94, .	4.7	57
49	Projectable HoÅ™avaâ€“Lifshitz gravity in a nutshell. Journal of Physics: Conference Series, 2010, 222, 012054.	0.4	55
50	f (R) gravity, torsion and non-metricity. Classical and Quantum Gravity, 2009, 26, 152001.	4.0	54
51	From dispersion relations to spectral dimensionâ€”and back again. Physical Review D, 2011, 84, .	4.7	49
52	6+1 lessons fromf(R) gravity. Journal of Physics: Conference Series, 2009, 189, 012039.	0.4	43
53	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
54	No-Go Theorem for Slowly Rotating Black Holes in HoÅ™ava-Lifshitz Gravity. Physical Review Letters, 2012, 109, 181101.	7.8	43

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55	Rotating black holes in three-dimensional HoÅ™ava gravity. Physical Review D, 2014, 90, .	4.7	42
56	Post-Newtonian expansion for Gauss-Bonnet gravity. Physical Review D, 2007, 75, .	4.7	41
57	The metric-affine formalism off(R) gravity. Journal of Physics: Conference Series, 2007, 68, 012022.	0.4	39
58	Dynamics of generalized Palatini theories of gravity. Physical Review D, 2010, 82, .	4.7	39
59	Detecting fundamental fields with LISA observations of gravitational waves from extreme mass-ratio inspirals. Nature Astronomy, 2022, 6, 464-470.	10.1	39
60	Gravity with auxiliary fields. Physical Review D, 2013, 88, .	4.7	38
61	Detecting Scalar Fields with Extreme Mass Ratio Inspirals. Physical Review Letters, 2020, 125, 141101.	7.8	38
62	Gedanken experiments on nearly extremal black holes and the third law. Physical Review D, 2010, 82, .	4.7	37
63	Gravity and Scalar Fields. Lecture Notes in Physics, 2015, , 3-24.	0.7	36
64	Lower-dimensional HoÅ™avaâ€“Lifshitz gravity. Physical Review D, 2011, 83, .	4.7	34
65	Destroying black holes with test bodies. Journal of Physics: Conference Series, 2010, 222, 012041.	0.4	32
66	HoÅ™ava-Lifshitz gravity: Detailed balance revisited. Physical Review D, 2012, 85, .	4.7	32
67	Multipole moments in scalar-tensor theory of gravity. Physical Review D, 2015, 91, .	4.7	32
68	Causality and black holes in spacetimes with a preferred foliation. Classical and Quantum Gravity, 2016, 33, 235003.	4.0	29
69	Probing the nature of black holes: Deep in the mHz gravitational-wave sky. Experimental Astronomy, 2021, 51, 1385-1416.	3.7	29
70	Onset of spontaneous scalarization in generalized scalar-tensor theories. Physical Review D, 2020, 102, .	4.7	27
71	Covariant effective action for loop quantum cosmology from order reduction. Physical Review D, 2009, 79, .	4.7	26
72	Black hole scalarization with Gauss-Bonnet and Ricci scalar couplings. Physical Review D, 2021, 104, .	4.7	24

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73	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
74	Ghost of vector fields in compact stars. Physical Review D, 2022, 105, .	4.7	22
75	Classification of shift-symmetric Horndeski theories and hairy black holes. Physical Review D, 2019, 99, .	4.7	21
76	HoÅ™ava gravity with mixed derivative terms. Physical Review D, 2015, 91, .	4.7	19
77	Detecting Lorentz Violations with Gravitational Waves From Black Hole Binaries. Physical Review Letters, 2018, 120, .	7.8	19
78	Revisiting the cuscuton as a Lorentz-violating gravity theory. Physical Review D, 2018, 97, .	4.7	19
79	Evolution and spherical collapse in Einstein-Ã†ther theory and HoÅ™ava gravity. Physical Review D, 2016, 93, .	4.7	17
80	Numerical black hole solutions in modified gravity theories: Spherical symmetry case. Physical Review D, 2020, 101, .	4.7	17
81	Compact object scalarization with general relativity as a cosmic attractor. Physical Review D, 2021, 103, .	4.7	17
82	Numerical black hole solutions in modified gravity theories: Axial symmetry case. Physical Review D, 2021, 103, .	4.7	16
83	Dynamical apparent horizons in inhomogeneous Brans-Dicke universes. Physical Review D, 2012, 86, .	4.7	15
84	HoÅ™ava-Lifshitz gravity with detailed balance. Journal of Physics: Conference Series, 2013, 453, 012022.	0.4	13
85	Gravitational Higgs mechanism in neutron star interiors. Physical Review D, 2017, 95, .	4.7	13
86	HoÅ™ava gravity with mixed derivative terms: Power counting renormalizability with lower order dispersions. Physical Review D, 2015, 92, .	4.7	12
87	Multipole moments and universal relations for scalarized neutron stars. Physical Review D, 2019, 99, .	4.7	11
88	Causal structure of black holes in shift-symmetric Horndeski theories. Physical Review D, 2018, 98, .	4.7	10
89	Cosmology with subdominant Horndeski scalar field. Physical Review D, 2020, 101, .	4.7	10
90	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

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91	Neutron star scalarization with Gauss-Bonnet and Ricci scalar couplings. Physical Review D, 2021, 104, .	4.7	8
92	Field equations from a surface term. Physical Review D, 2006, 74, .	4.7	7
93	Gradient expansion of superhorizon perturbations in G-inflation. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 020-020.	5.4	7
94	Uninvited guest in mixed derivative HoÅ™ava gravity. Physical Review D, 2016, 94, .	4.7	7
95	Constructing neutron stars with a gravitational Higgs mechanism. Physical Review D, 2018, 97, .	4.7	7
96	Extrinsic curvature in two-dimensional causal dynamical triangulation. Physical Review D, 2016, 94, .	4.7	6
97	Dynamical obstruction to perpetual motion from Lorentz-violating black holes. Physical Review D, 2018, 98, .	4.7	6
98	Black hole horizons at the extremal limit in Lorentz-violating gravity. Physical Review D, 2017, 96, .	4.7	1
99	THE SIGNIFICANCE OF MATTER COUPLING IN f(R) GRAVITY. , 2008, , .		1
100	Reply to â€œCan gravitational dynamics be obtained by diffeomorphism invariance of action?â€• Physical Review D, 2007, 75, .	4.7	0