

V Alan Kostecký^{1/2}

List of Publications by Year in descending order

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81
papers

16,496
citations

41627
51
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67
g-index

82
all docs

82
docs citations

82
times ranked

6424
citing authors

#	ARTICLE	IF	CITATIONS
1	Lorentz violation in Dirac and Weyl semimetals. Physical Review Research, 2022, 4, .	1.3	20
2	Backgrounds in gravitational effective field theory. Physical Review D, 2021, 103, .	1.6	55
3	Searches for beyond-Riemann gravity. Physical Review D, 2021, 104, .	1.6	17
4	Lorentz symmetry in ghost-free massive gravity. Physical Review D, 2021, 104, .	1.6	8
5	Lorentz and CPT violation in partons. Journal of High Energy Physics, 2020, 2020, 1.	1.6	8
6	Developments in Lorentz and CPT Violation., 2020, , .		1
7	Gauge field theories with Lorentz-violating operators of arbitrary dimension. Physical Review D, 2019, 99, .	1.6	66
8	Combined Search for a Lorentz-Violating Force in Short-Range Gravity Varying as the Inverse Sixth Power of Distance. Physical Review Letters, 2019, 122, 011102.	2.9	24
9	Lorentz and diffeomorphism violations in linearized gravity. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 779, 136-142.	1.5	51
10	Riemann-Finsler geometry and Lorentz-violating scalar fields. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 786, 319-326.	1.5	65
11	Lorentz and $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{ display="inline"} \rangle \langle \text{mml:mi} \rangle C \langle / \text{mml:mi} \rangle \langle \text{mml:mi} \rangle P \langle / \text{mml:mi} \rangle \langle \text{mml:mi} \rangle T \langle / \text{mml:mi} \rangle \langle / \text{mml:math} \rangle$ tests with clock-comparison experiments. Physical Review D, 2018, 98, .	1.6	39
12	Testing local Lorentz invariance with short-range gravity. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 766, 137-143.	1.5	39
13	Constraints on nonmetricity from bounds on Lorentz violation. Physical Review D, 2017, 95, .	1.6	32
14	Combined Search for Lorentz Violation in Short-Range Gravity. Physical Review Letters, 2016, 117, 071102.	2.9	44
15	Lorentz-violating spinor electrodynamics and Penning traps. Physical Review D, 2016, 94, .	1.6	79
16	Lorentz and $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{ display="inline"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle C \langle / \text{mml:mi} \rangle \langle \text{mml:mi} \rangle P \langle / \text{mml:mi} \rangle \langle \text{mml:mi} \rangle T \langle / \text{mml:mi} \rangle \langle / \text{mml:mrow} \rangle \langle / \text{mml:math} \rangle$ tests with hydrogen, antihydrogen, and related systems. Physical Review D, 2015, 92, .		
17	Relativity tested with a split electron. Nature, 2015, 517, 559-560.	13.7	0
18	Short-range gravity and Lorentz violation. Physical Review D, 2015, 91, .	1.6	98

#	ARTICLE	IF	CITATIONS
19	Laboratory tests of Lorentz and $C_P T$ symmetry with muons. Physical Review D, 2014, 90, .		
20	Testing relativity with high-energy astrophysical neutrinos. Physical Review D, 2014, 89, .	1.6	71
21	The magnetic proton. Nature, 2014, 509, 571-572.	13.7	0
22	Constraints on Relativity Violations from Gamma-Ray Bursts. Physical Review Letters, 2013, 110, 201601.	2.9	82
23	Fermions with Lorentz-violating operators of arbitrary dimension. Physical Review D, 2013, 88, .	1.6	187
24	Neutrinos with Lorentz-violating operators of arbitrary dimension. Physical Review D, 2012, 85, .	1.6	238
25	Bipartite Riemann-Finsler geometry and Lorentz violation. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 716, 470-474.	1.5	95
26	Matter-gravity couplings and Lorentz violation. Physical Review D, 2011, 83, .	1.6	266
27	Data tables for Lorentz and $C_P T$ violation. Reviews of Modern Physics, 2011, 83, 11-31.	16.4	978
28	Riemann-Finsler geometry and Lorentz-violating kinematics. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 701, 137-143.	1.5	183
29	Classical kinematics for Lorentz violation. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 693, 443-447.	1.5	83
30	Lorentz violation with an antisymmetric tensor. Physical Review D, 2010, 81, .	1.6	98
31	TOPICS IN LORENTZ AND CPT VIOLATION. , 2010, .		1
32	Prospects for Large Relativity Violations in Matter-Gravity Couplings. Physical Review Letters, 2009, 102, 010402.	2.9	182
33	Electrodynamics with Lorentz-violating operators of arbitrary dimension. Physical Review D, 2009, 80, .	1.6	410
34	Gravity from spontaneous Lorentz violation. Physical Review D, 2009, 79, .	1.6	100
35	Perturbative Lorentz and $C_P T$ violation for neutrino and antineutrino oscillations. Physical Review D, 2009, 80, .	1.6	93
36	Constraints on Torsion from Bounds on Lorentz Violation. Physical Review Letters, 2008, 100, 111102.	2.9	194

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37	Spontaneous Lorentz and diffeomorphism violation, massive modes, and gravity. Physical Review D, 2008, 77, .	1.6	138
38	DATA TABLES FOR LORENTZ AND CPT VIOLATION., 2008, ,.	6	
39	PERSPECTIVES ON LORENTZ AND CPT VIOLATION., 2008, ,.	2	
40	Lorentz-Violating Electrodynamics and the Cosmic Microwave Background. Physical Review Letters, 2007, 99, 011601.	2.9	160
41	Signals for Lorentz violation in post-Newtonian gravity. Physical Review D, 2006, 74, .	1.6	340
42	Geometrical Methods., 2006, , 127-158.	0	
43	Sensitive Polarimetric Search for Relativity Violations in Gamma-Ray Bursts. Physical Review Letters, 2006, 97, 140401.	2.9	189
44	Gravity from local Lorentz violation. General Relativity and Gravitation, 2005, 37, 1675-1679.	0.7	78
45	GRAVITY FROM LOCAL LORENTZ VIOLATION. International Journal of Modern Physics D, 2005, 14, 2341-2346.	0.9	13
46	Spontaneous Lorentz violation, Nambu-Goldstone modes, and gravity. Physical Review D, 2005, 71, .	1.6	297
47	LORENTZ VIOLATION AND GRAVITY., 2005, ,.	2	
48	Gravity, Lorentz violation, and the standard model. Physical Review D, 2004, 69, .	1.6	1,005
49	Bound on Lorentz and CPT Violating Boost Effects for the Neutron. Physical Review Letters, 2004, 93, 230801.	2.9	119
50	NEUTRINO OSCILLATIONS AND LORENTZ VIOLATION., 2004, ,.	0	
51	Probing Lorentz and CPT violation with space-based experiments. Physical Review D, 2003, 68, .	1.6	154
52	Vacuum Photon Splitting in Lorentz-Violating Quantum Electrodynamics. Physical Review Letters, 2003, 91, 031801.	2.9	104
53	One-loop renormalization of Lorentz-violating electrodynamics. Physical Review D, 2002, 65, .	1.6	211
54	Clock-Comparison Tests of Lorentz and CPT Symmetry in Space. Physical Review Letters, 2002, 88, 090801.	2.9	206

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55	Signals for Lorentz violation in electrodynamics. Physical Review D, 2002, 66, .	1.6	651
56	CPT AND LORENTZ VIOLATION IN NEUTRAL-MESON OSCILLATIONS. , 2002, , .	1	
57	Noncommutative Field Theory and Lorentz Violation. Physical Review Letters, 2001, 87, 141601.	2.9	764
58	Stability, causality, and Lorentz and CPT violation. Physical Review D, 2001, 63, .	1.6	437
59	Lorentz and CPT Tests with Spin-Polarized Solids. Physical Review Letters, 2000, 84, 1381-1384.	2.9	186
60	CPT and Lorentz Tests with Muons. Physical Review Letters, 2000, 84, 1098-1101.	2.9	206
61	Off-Shell Structure of the String Sigma Model. Physical Review Letters, 2000, 84, 4541-4544.	2.9	85
62	Testing CPT and Lorentz symmetry with electrons and positrons in Penning traps. AIP Conference Proceedings, 1999, , .	0.3	1
63	Constraints on Lorentz violation from clock-comparison experiments. Physical Review D, 1999, 60, .	1.6	324
64	Nonrelativistic quantum Hamiltonian for Lorentz violation. Journal of Mathematical Physics, 1999, 40, 6245-6253.	0.5	193
65	CPT and Lorentz Tests in Hydrogen and Antihydrogen. Physical Review Letters, 1999, 82, 2254-2257.	2.9	299
66	Radiatively Induced Lorentz and CPT Violation in Electrodynamics. Physical Review Letters, 1999, 82, 3572-3575.	2.9	396
67	Hydrogen and antihydrogen spectroscopy for studies of CPT and Lorentz symmetry., 1999, , .	1	
68	Testing CPT and Lorentz symmetry with protons and antiprotons in Penning traps., 1999, , .	1	
69	Lorentz-violating extension of the standard model. Physical Review D, 1998, 58, .	1.6	1,857
70	CPT and Lorentz tests in Penning traps. Physical Review D, 1998, 57, 3932-3943.	1.6	221
71	Testing CPT with B mesons., 1998, , .	0	
72	Revival structure of Stark wave packets. Physical Review A, 1997, 55, 819-822.	1.0	29

#	ARTICLE		IF	CITATIONS
73	Testing CPT with Anomalous Magnetic Moments. <i>Physical Review Letters</i> , 1997, 79, 1432-1435.		2.9	200
74	CPT violation and the standard model. <i>Physical Review D</i> , 1997, 55, 6760-6774.		1.6	1,442
75	Radial Coulomb and oscillator systems in arbitrary dimensions. <i>Journal of Mathematical Physics</i> , 1996, 37, 2166-2181.		0.5	28
76	CPT, strings, and meson factories. <i>Physical Review D</i> , 1995, 51, 3923-3935.		1.6	427
77	No more spacetime singularities?. <i>General Relativity and Gravitation</i> , 1994, 26, 7-12.		0.7	1
78	SUPERSYMMETRY, COHERENT STATES, AND SQUEEZED STATES FOR RYDBERG ATOMS. , 1994, , .			1
79	NULL EXPERIMENTS FOR NEUTRINO MASSES. <i>Modern Physics Letters A</i> , 1992, 07, 467-476.		0.5	24
80	CPT and strings. <i>Nuclear Physics B</i> , 1991, 359, 545-570.		0.9	513
81	Spontaneous breaking of Lorentz symmetry in string theory. <i>Physical Review D</i> , 1989, 39, 683-685.		1.6	1,141