

Maxim Pospelov

List of Publications by Year in descending order

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157
papers

13,458
citations

16451

64
h-index

21540

114
g-index

159
all docs

159
docs citations

159
times ranked

9935
citing authors

#	ARTICLE	IF	CITATIONS
1	Novel multilepton signatures of dark sectors in light meson decays. Physical Review D, 2022, 105, .	4.7	17
2	Improved Indirect Limits on Muon Electric Dipole Moment. Physical Review Letters, 2022, 128, 131803.	7.8	12
3	Long-range axion forces and hadronic $C\langle P\rangle$ violation. Physical Review D, 2022, 105, .	4.7	6
4	Low-energy signals from the formation of dark-matter nucleus bound states. Physical Review D, 2022, 105, .	4.7	2
5	Improved indirect limits on charm and bottom quark EDMs. Journal of High Energy Physics, 2022, 2022, .	4.7	2
6	Dark Higgs dark matter. Physical Review D, 2021, 103, .	4.7	15
7	Millicharged cosmic rays and low recoil detectors. Physical Review D, 2021, 103, .	4.7	17
8	Terrestrial probes of electromagnetically interacting dark radiation. Physical Review D, 2021, 103, .	4.7	7
9	Edges and Endpoints in 21-cm Observations from Resonant Photon Production. Physical Review Letters, 2021, 127, 011102.	7.8	5
10	A precise photometric ratio via laser excitation of the sodium layer II. Two-photon excitation using lasers detuned from 589.16 and 819.71Ånm resonances. Monthly Notices of the Royal Astronomical Society, 2021, 508, 4412-4428.	4.4	4
11	A precise photometric ratio via laser excitation of the sodium layer I. One-photon excitation using 342.78Ånm light. Monthly Notices of the Royal Astronomical Society, 2021, 508, 4399-4411.	4.4	4
12	Cosmological and astrophysical probes of dark baryons. Physical Review D, 2021, 103, .	4.7	19
13	Earth-bound millicharge relics. Physical Review D, 2021, 103, .	4.7	17
14	Neutron Star Internal Heating Constraints on Mirror Matter. Physical Review Letters, 2021, 127, 061805.	7.8	25
15	Constraints on decaying sterile neutrinos from solar antineutrinos. Physical Review D, 2021, 104, .	4.7	13
16	The Search for Feebly Interacting Particles. Annual Review of Nuclear and Particle Science, 2021, 71, 279-313.	10.2	44
17	Solar reflection of dark matter. Physical Review D, 2021, 104, .	4.7	17
18	Search for topological defect dark matter with a global network of optical magnetometers. Nature Physics, 2021, 17, 1396-1401.	16.7	42

#	ARTICLE	IF	CITATIONS
19	Hydrogen Portal to Exotic Radioactivity. Physical Review Letters, 2020, 125, 231803.	7.8	27
20	Quark flavor phenomenology of the QCD axion. Physical Review D, 2020, 102, .	4.7	75
21	QED corrections to Big-Bang nucleosynthesis reaction rates. Physical Review C, 2020, 102, .	2.9	5
22	Pair production of dark particles in meson decays. Physical Review D, 2020, 102, .	4.7	11
23	Search for Dark Matter Induced Deexcitation of Tam180. Physical Review Letters, 2020, 124, 181802.	7.8	20
24	Metastable nuclear isomers as dark matter accelerators. Physical Review D, 2020, 101, .	4.7	27
25	New limits on dark photons from solar emission and keV scale dark matter. Physical Review D, 2020, 102, .	4.7	51
26	Constraints on millicharged particles from cosmic-ray production. Physical Review D, 2020, 102, .	4.7	36
27	Light vectors coupled to bosonic currents. Physical Review D, 2019, 99, .	4.7	19
28	Cosmological beam dump: Constraints on dark scalars mixed with the Higgs boson. Physical Review D, 2019, 99, .	4.7	27
29	Foraging for dark matter in large volume liquid scintillator neutrino detectors with multiscatter events. Physical Review D, 2019, 99, .	4.7	31
30	Electric dipole moments from dark sectors. Physical Review D, 2019, 100, .	4.7	6
31	Evaluating the price of tiny kinetic mixing. Physical Review D, 2019, 100, .	4.7	68
32	Long-lived particles at the energy frontier: the MATHUSLA physics case. Reports on Progress in Physics, 2019, 82, 116201.	20.1	220
33	Novel Direct Detection Constraints on Light Dark Matter. Physical Review Letters, 2019, 122, 171801.	7.8	174
34	Millicharged Particles in Neutrino Experiments. Physical Review Letters, 2019, 122, 071801.	7.8	69
35	New physics via pion capture and simple nuclear reactions. Physical Review D, 2019, 100, .	4.7	5
36	Light resonances and the low- q^2 bin of R_{K^*} . Journal of High Energy Physics, 2018, 2018, 1.	4.7	25

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37	Directly Detecting MeV-Scale Dark Matter Via Solar Reflection. <i>Physical Review Letters</i> , 2018, 120, 141801.	7.8	79
38	Dipole portal to heavy neutral leptons. <i>Physical Review D</i> , 2018, 98, .	4.7	91
39	Signatures of dark radiation in neutrino and dark matter detectors. <i>Physical Review D</i> , 2018, 97, .	4.7	41
40	Room for New Physics in the Rayleigh-Jeans Tail of the Cosmic Microwave Background. <i>Physical Review Letters</i> , 2018, 121, 031103.	7.8	106
41	New Constraints on Light Vectors Coupled to Anomalous Currents. <i>Physical Review Letters</i> , 2017, 119, 141803.	7.8	98
42	Light dark matter in neutrino beams: Production modeling and scattering signatures at MiniBooNE, T2K, and SHiP. <i>Physical Review D</i> , 2017, 95, .	4.7	96
43	Muon beam experiments to probe the dark sector. <i>Physical Review D</i> , 2017, 95, .	4.7	57
44	Muon anomalous magnetic moment through the leptonic Higgs portal. <i>Physical Review D</i> , 2017, 95, .	4.7	65
45	Search for domain wall dark matter with atomic clocks on board global positioning system satellites. <i>Nature Communications</i> , 2017, 8, 1195.	12.8	94
46	BBN for the LHC: Constraints on lifetimes of the Higgs portal scalars. <i>Physical Review D</i> , 2017, 96, .	4.7	64
47	Dark forces coupled to nonconserved currents. <i>Physical Review D</i> , 2017, 96, .	4.7	101
48	Diphoton excess through dark mediators. <i>Journal of High Energy Physics</i> , 2016, 2016, 1.	4.7	3
49	Shedding light on neutrino masses with dark forces. <i>Journal of High Energy Physics</i> , 2016, 2016, 1.	4.7	62
50	Probing the Dark Sector with Dark Matter Bound States. <i>Physical Review Letters</i> , 2016, 116, 151801.	7.8	29
51	Light Particle Solution to the Cosmic Lithium Problem. <i>Physical Review Letters</i> , 2016, 116, 211303.	7.8	34
52	A facility to search for hidden particles at the CERN SPS: the SHiP physics case. <i>Reports on Progress in Physics</i> , 2016, 79, 124201.	20.1	496
53	Sensitivity to light weakly-coupled new physics at the precision frontier. <i>Physical Review D</i> , 2015, 92, .	4.7	7
54	Light new physics in coherent neutrino-nucleus scattering experiments. <i>Physical Review D</i> , 2015, 92, .	4.7	69

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55	MeV-scale dark matter deep underground. Physical Review D, 2015, 92, .	4.7	16
56	Leptophobic dark matter at neutrino factories. Physical Review D, 2014, 90, .	4.7	80
57	Dark matter detection in two easy steps. Physical Review D, 2014, 89, .	4.7	30
58	CKM benchmarks for electron electric dipole moment experiments. Physical Review D, 2014, 89, .	4.7	93
59	Modified big bang nucleosynthesis with nonstandard neutron sources. Physical Review D, 2014, 90, .	4.7	39
60	Cosmological constraints on very dark photons. Physical Review D, 2014, 90, .	4.7	88
61	Quark flavor transitions in $L \rightarrow L + \mu + \mu$. Physical Review D, 2014, 89, .	4.7	27
62	Publisher's Note: Constraints on muon-specific dark forces [Phys. Rev. D90, 073004 (2014)]. Physical Review D, 2014, 90, .	4.7	24
63	Constraints on muon-specific dark forces. Physical Review D, 2014, 90, .	4.7	48
64	Lifshitz-sector mediated SUSY breaking. Journal of High Energy Physics, 2014, 2014, 1.	4.7	13
65	Neutrino Trident Production: A Powerful Probe of New Physics with Neutrino Beams. Physical Review Letters, 2014, 113, 091801.	7.8	340
66	New stellar constraints on dark photons. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 725, 190-195.	4.1	206
67	The Global Network of Optical Magnetometers for Exotic physics (GNOME): A novel scheme to search for physics beyond the Standard Model. Annalen Der Physik, 2013, 525, 659-670.	2.4	89
68	Electric dipole moment signatures of PeV-scale superpartners. Physical Review D, 2013, 87, .	4.7	42
69	Light and dark: A survey of new physics ideas in the 1-100 MeV window. , 2013, , .		0
70	Modified Higgs branching ratios versus $C P$ and lepton flavor violation. Physical Review D, 2012, 86, .	4.7	62
71	Direct Constraints on Charged Excitations of Dark Matter. Physical Review Letters, 2012, 109, 251302.	7.8	12
72	Elastic scattering signals of solar neutrinos with enhanced baryonic currents. Physical Review D, 2012, 85, .	4.7	35

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73	Lorentz violation in Hořava-Lifshitz-type theories. Physical Review D, 2012, 85, .	4.7	100
74	Pion-photon transition form factor and new physics in the ρ -sector. Physical Review D, 2012, 85, .	4.7	11
75	Testing Parity with Atomic Radiative Capture of α . Physical Review Letters, 2012, 108, 263401.	7.8	6
76	Singlet neighbors of the Higgs boson. Journal of High Energy Physics, 2012, 2012, 1.	4.7	52
77	Comments on CPT. Hyperfine Interactions, 2012, 213, 105-113.	0.5	0
78	RESONANT ENHANCEMENT OF NUCLEAR REACTIONS AS A POSSIBLE SOLUTION TO THE COSMOLOGICAL LITHIUM PROBLEM. International Journal of Modern Physics E, 2012, 21, 1250004.	1.0	40
79	Comments on CPT. , 2012, , 325-323.		0
80	Observing a light dark matter beam with neutrino experiments. Physical Review D, 2011, 84, .	4.7	173
81	Neutrino physics with dark matter experiments and the signature of new baryonic neutral currents. Physical Review D, 2011, 84, .	4.7	54
82	New Parity-Violating Muonic Forces and the Proton Charge Radius. Physical Review Letters, 2011, 107, 011803.	7.8	110
83	Primordial Beryllium as a Big Bang Calorimeter. Physical Review Letters, 2011, 106, 121305.	7.8	15
84	Higgs decays to dark matter: Beyond the minimal model. Physical Review D, 2011, 84, .	4.7	54
85	Multilepton signatures of a hidden sector in rare B decays. Physical Review D, 2011, 83, .	4.7	89
86	Searching for Axions and Other Exotics with Dark Matter Detectors. , 2010, , .		0
87	Scalar representations and minimal flavor violation. Journal of High Energy Physics, 2010, 2010, 1.	4.7	50
88	SEARCHING FOR AXIONS AND OTHER EXOTICS WITH DARK MATTER DETECTORS. International Journal of Modern Physics A, 2010, 25, 564-572.	1.5	0
89	Sub-eV scalar dark matter through the super-renormalizable Higgs portal. Physical Review D, 2010, 82, .	4.7	59
90	B_s mixing and electric dipole moments in the framework of minimal flavor violation. Physical Review D, 2010, 82, .	4.7	8

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91	Metastable GeV-scale particles as a solution to the cosmological lithium problem. Physical Review D, 2010, 82, .	4.7	41
92	Solar gamma rays powered by secluded dark matter. Physical Review D, 2010, 81, .	4.7	66
93	Muon capture constraints on sterile neutrino properties. Physical Review D, 2010, 82, .	4.7	29
94	Big Bang Nucleosynthesis as a Probe of New Physics. Annual Review of Nuclear and Particle Science, 2010, 60, 539-568.	10.2	170
95	Pseudoscalar Perturbations and Polarization of the Cosmic Microwave Background. Physical Review Letters, 2009, 103, 051302.	7.8	78
96	Probing CP Violation with Electric Dipole Moments. Advanced Series on Directions in High Energy Physics, 2009, , 439-518.	0.7	2
97	Big Bang nucleosynthesis and particle dark matter. New Journal of Physics, 2009, 11, 105028.	2.9	139
98	Astrophysical signatures of secluded dark matter. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2009, 671, 391-397.	4.1	426
99	Low-energy constraints on \hat{P} -Minkowski extension of the Standard Model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2009, 677, 160-163.	4.1	17
100	Exploring portals to a hidden sector through fixed targets. Physical Review D, 2009, 80, .	4.7	301
101	Probing a secluded U(1) at B factories. Physical Review D, 2009, 79, .	4.7	186
102	Direct detection of multicomponent secluded WIMPs. Physical Review D, 2009, 79, .	4.7	107
103	Scalar-tensor theories with pseudoscalar couplings. Physical Review D, 2009, 80, .	4.7	40
104	Secluded U(1) below the weak scale. Physical Review D, 2009, 80, .	4.7	538
105	Secluded WIMP dark matter. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2008, 662, 53-61.	4.1	830
106	Bosonic super-WIMPs as keV-scale dark matter. Physical Review D, 2008, 78, .	4.7	225
107	Classification of dimension-5 Lorentz-violating interactions in the standard model. Physical Review D, 2008, 77, .	4.7	70
108	Electric dipole moments as probes of CPT invariance. Physical Review D, 2008, 78, .	4.7	23

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109	Environmental dependence of masses and coupling constants. <i>Physical Review D</i> , 2008, 77, .	4.7	237
110	Primordial lithium abundance in catalyzed big bang nucleosynthesis. <i>Physical Review D</i> , 2008, 78, .	4.7	61
111	Resonant scattering and recombination of pseudodegenerate WIMPs. <i>Physical Review D</i> , 2008, 78, .	4.7	22
112	GHOSTS AND TACHYONS IN THE FIFTH DIMENSION. <i>International Journal of Modern Physics A</i> , 2008, 23, 881-893.	1.5	9
113	Constraints on supersymmetric models from catalytic primordial nucleosynthesis of beryllium. <i>Journal of Cosmology and Astroparticle Physics</i> , 2008, 2008, 020.	5.4	67
114	Particle Physics Catalysis of Thermal Big Bang Nucleosynthesis. <i>Physical Review Letters</i> , 2007, 98, 231301.	7.8	200
115	Electric dipole moment constraints on minimal electroweak baryogenesis. <i>Physical Review D</i> , 2007, 75, .	4.7	45
116	The galactic 511 keV line from electroweak scale WIMPs. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2007, 651, 208-215.	4.1	71
117	Breaking of CPT and Lorentz symmetries. , 2007, , 63-70.		0
118	Sensitivity to new supersymmetric thresholds through flavor and CP violating physics. <i>Physical Review D</i> , 2006, 74, .	4.7	15
119	CPT-odd leptogenesis. <i>Physical Review D</i> , 2006, 74, .	4.7	9
120	Breaking of CPT and Lorentz symmetries. <i>Hyperfine Interactions</i> , 2006, 172, 63-70.	0.5	1
121	Flavor- and CP-Violating Physics from New Supersymmetric Thresholds. <i>Physical Review Letters</i> , 2006, 96, 091801.	7.8	21
122	Electric dipole moments as probes of new physics. <i>Annals of Physics</i> , 2005, 318, 119-169.	2.8	764
123	Lorentz Violation in Supersymmetric Field Theories. <i>Physical Review Letters</i> , 2005, 94, 081601.	7.8	144
124	Lorentz violating supersymmetric quantum electrodynamics. <i>Physical Review D</i> , 2005, 72, .	4.7	86
125	CP-odd phase correlations and electric dipole moments. <i>Physical Review D</i> , 2005, 72, .	4.7	66
126	Reexamination of the ^{187}Re rebound on the variation of fundamental couplings. <i>Physical Review D</i> , 2004, 69, .	4.7	84

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127	Electric dipole moments of leptons in the presence of Majorana neutrinos. Physical Review D, 2004, 70, .	4.7	26
128	Quintessence models and the cosmological evolution of $\tilde{\nu}$. Physical Review D, 2004, 70, .	4.7	58
129	Cosmological bounds on large extra dimensions from nonthermal production of Kaluza-Klein modes. Physical Review D, 2004, 69, .	4.7	3
130	Probing CP violation with the deuteron electric dipole moment. Physical Review D, 2004, 70, .	4.7	97
131	Lorentz Invariance on Trial. Physics Today, 2004, 57, 40-46.	0.3	28
132	Dark Matter Particle Production in $\tilde{b} \rightarrow s$ Transitions with Missing Energy. Physical Review Letters, 2004, 93, 201803.	7.8	108
133	Electric dipole moments in the MSSM at large $\tan^2 \beta$. Nuclear Physics B, 2004, 680, 339-374.	2.5	122
134	EXPERIMENTAL CHALLENGES FOR QUANTUM GRAVITY. , 2004, , .		1
135	Hadronic electric dipole moments, the Weinberg operator, and light gluinos. Physical Review D, 2003, 67, .	4.7	80
136	Ultraviolet Modifications of Dispersion Relations in Effective Field Theory. Physical Review Letters, 2003, 90, 211601.	7.8	407
137	Electric Dipole Moments in the Limit of Heavy Superpartners. Physical Review Letters, 2002, 89, 101801.	7.8	52
138	How natural is a small \tilde{A} in left-right supersymmetry models?. Physical Review D, 2002, 65, .	4.7	5
139	Self-interacting dark matter from the hidden heterotic-string sector. Astroparticle Physics, 2002, 16, 451-461.	4.3	77
140	Best values for the CP-odd meson π^0 -nucleon couplings from supersymmetry. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2002, 530, 123-128.	4.1	75
141	Indirect limits on the CPT violating background in the neutrino sector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2002, 534, 114-119.	4.1	40
142	On the stabilization of the size of extra dimensions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2002, 538, 146-158.	4.1	23
143	The Minimal Model of nonbaryonic dark matter: a singlet scalar. Nuclear Physics B, 2001, 619, 709-728.	2.5	818
144	Neutron electric dipole moment from electric and chromoelectric dipole moments of quarks. Physical Review D, 2001, 63, .	4.7	124

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145	(De)stabilization of an extra dimension due to a Casimir force. <i>Physical Review D</i> , 2001, 63, .	4.7	66
146	Probing the desert with ultra-energetic neutrinos from the sun and the earth. <i>Astroparticle Physics</i> , 2000, 13, 31-43.	4.3	26
147	Static solutions for brane models with a bulk scalar field. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2000, 481, 386-396.	4.1	72
148	Low-energy limits on the antisymmetric tensor field background on the brane and on the non-commutative scale. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2000, 489, 390-396.	4.1	157
149	Hadron electric dipole moments from CP-odd operators of dimension five via QCD sum rules: the vector meson. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2000, 471, 388-395.	4.1	11
150	Electric dipole moments of neutron and heavy atoms and constraints on CP SUSY phases. <i>AIP Conference Proceedings</i> , 2000, , .	0.4	0
151	Single-brane cosmological solutions with a stable compact extra dimension. <i>Physical Review D</i> , 2000, 61, .	4.7	94
152	Solving the hierarchy problem in two-brane cosmological models. <i>Physical Review D</i> , 2000, 62, .	4.7	30
153	Theta vacua, QCD sum rules, and the neutron electric dipole moment. <i>Nuclear Physics B</i> , 2000, 573, 177-200.	2.5	83
154	Theta-Induced Electric Dipole Moment of the Neutron via QCD Sum Rules. <i>Physical Review Letters</i> , 1999, 83, 2526-2529.	7.8	137
155	Cosmological 3-brane solutions. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1999, 468, 31-39.	4.1	169
156	The theta term in QCD sum rules and the electric dipole moment of the vector meson. <i>Nuclear Physics B</i> , 1999, 558, 243-258.	2.5	12
157	MSSM predictions for the electric dipole moment of the ^{199}Hg atom. <i>Nuclear Physics B</i> , 1999, 560, 3-22.	2.5	144