

Christoph Adam

List of Publications by Year in descending order

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129
papers

2,582
citations

201674

27
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233421

45
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129
all docs

129
docs citations

129
times ranked

503
citing authors

#	ARTICLE	IF	CITATIONS
1	Causality and CPT violation from an Abelian Chern-Simons-like term. Nuclear Physics B, 2001, 607, 247-267.	2.5	180
2	A Skyrme-type proposal for baryonic matter. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 691, 105-110.	4.1	160
3	Photon decay in a CPT-violating extension of quantum electrodynamics. Nuclear Physics B, 2003, 657, 214-228.	2.5	100
4	BPS Skyrme model and baryons at large N_c . Physical Review D, 2010, 82, .	4.7	93
5	k-defects as compactons. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 13625-13643.	2.1	81
6	K fields, compactons and thick branes. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 212004.	2.1	68
7	Bogomol'nyi-Prasad-Sommerfield Skyrme Model and Nuclear Binding Energies. Physical Review Letters, 2013, 111, 232501.	7.8	67
8	Investigation of restricted baby Skyrme models. Physical Review D, 2010, 81, .	4.7	60
9	The Schwinger mass in the massive Schwinger model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1996, 382, 383-388.	4.1	51
10	Compact self-gravitating solutions of quartic (K) fields in brane cosmology. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 375401.	2.1	51
11	BPS Skyrmions as neutron stars. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 742, 136-142.	4.1	49
12	Spectral Walls in Soliton Collisions. Physical Review Letters, 2019, 122, 241601.	7.8	49
13	Causality and radiatively induced CPT violation. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2001, 513, 245-250.	4.1	48
14	Compact gauge K vortices. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 135401.	2.1	47
15	Massive Schwinger Model within Mass Perturbation Theory. Annals of Physics, 1997, 259, 1-63.	2.8	46
16	Extended supersymmetry and BPS solutions in baby Skyrme models. Journal of High Energy Physics, 2013, 2013, 1.	4.7	44
17	$N=1$ supersymmetric extension of the baby Skyrme model. Physical Review D, 2011, 84, .	4.7	41
18	The first-order Euler-Lagrange equations and some of their uses. Journal of High Energy Physics, 2016, 2016, 1.	4.7	41

#	ARTICLE	IF	CITATIONS
19	Overview on the anomaly and Schwinger term in two-dimensional QED. Rivista Del Nuovo Cimento, 1993, 16, 1-52.	5.7	40
20	Some aspects of self-duality and generalised BPS theories. Journal of High Energy Physics, 2013, 2013, 1.	4.7	40
21	Compact baby Skyrmions. Physical Review D, 2009, 80, .	4.7	39
22	The \mathbb{Z}_4 model with the BPS preserving defect. Journal of High Energy Physics, 2019, 2019, 1.	4.7	39
23	Solvable self-dual impurity models. Journal of High Energy Physics, 2019, 2019, 1.	4.7	35
24	Neutron stars in the Bogomol'nyi-Prasad-Sommerfield Skyrme model: Mean-field limit versus full field theory. Physical Review C, 2015, 92, .	2.9	30
25	Zero modes of the Dirac operator in three dimensions. Physical Review D, 1999, 60, .	4.7	29
26	Skyrme models and nuclear matter equation of state. Physical Review C, 2015, 92, .	2.9	29
27	Nuclear binding energies from a Bogomol'nyi-Prasad-Sommerfield Skyrme model. Physical Review C, 2013, 88, .	2.9	28
28	Algebraic construction of twinlike models. Physical Review D, 2011, 84, .	4.7	27
29	Thermodynamics of the BPS Skyrme model. Physical Review D, 2014, 90, .	4.7	27
30	Dispersion relation approach to the anomaly in 2 dimensions. Zeitschrift für Physik C-Particles and Fields, 1992, 56, 123-127.	1.5	26
31	Investigation of the Nicole model. Journal of Mathematical Physics, 2006, 47, 052302.	1.1	26
32	Supersymmetric field theories and defect structures. Physical Review D, 2011, 84, .	4.7	26
33	Topological energy bounds in generalized Skyrme models. Physical Review D, 2014, 89, .	4.7	26
34	k-defects as compactons. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 089801.	2.1	25
35	Gauged BPS baby Skyrme model. Physical Review D, 2012, 86, .	4.7	25
36	Kink-antikink scattering in the \mathbb{Z}_4 model without static intersoliton forces. Physical Review D, 2020, 101, .	4.7	25

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37	BPS property and its breaking in $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \langle \text{mml:mrow} \langle \text{mml:mn} \rangle 1 \langle \text{mml:mn} \rangle 1 \langle \text{mml:mn} \rangle 1 \langle \text{mml:mn} \rangle 1 \langle \text{mml:mrow} \rangle + \langle \text{mml:mo} \rangle + \langle \text{mml:mo} \rangle \langle \text{mml:mn} \rangle 1 \langle \text{mml:mn} \rangle 1 \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$ dimensions. Physical Review D, 2018, 98, .	4.7	23
38	Twinlike models with identical linear fluctuation spectra. Physical Review D, 2012, 85, .	4.7	23
39	Hairy black holes in the general Skyrme model. Physical Review D, 2016, 94, .	4.7	23
40	Instantons and vacuum expectation values in the Schwinger model. Zeitschrift für Physik C-Particles and Fields, 1994, 63, 169-180.	1.5	22
41	Degeneracy of zero modes of the Dirac operator in three dimensions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2000, 485, 314-318.	4.1	22
42	Multiple zero modes of the Dirac operator in three dimensions. Physical Review D, 2000, 62, .	4.7	22
43	BPS soliton-impurity models and supersymmetry. Journal of High Energy Physics, 2019, 2019, 1.	4.7	22
44	The volume of a soliton. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 754, 18-25.	4.1	19
45	Spectral walls in multifield kink dynamics. Journal of High Energy Physics, 2021, 2021, 1.	4.7	18
46	Kink-antikink collisions in a weakly interacting \mathbb{Z}_2 model. Physical Review E, 2020, 102, 062214.	2.1	18
47	Relativistic moduli space for kink collisions. Physical Review D, 2022, 105, .	4.7	18
48	Baryon chemical potential and in-medium properties of BPS skyrmions. Physical Review D, 2015, 91, .	4.7	17
49	Vacuum functional and fermion condensate in the massive Schwinger model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1995, 363, 79-84.	4.1	16
50	Integrability from an Abelian subgroup of the diffeomorphisms group. Journal of Mathematical Physics, 2006, 47, 022303.	1.1	16
51	Symmetries and exact solutions of the BPS Skyrme model. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 135401.	2.1	16
52	Magnetothermodynamics of BPS baby skyrmions. Journal of High Energy Physics, 2014, 2014, 1.	4.7	16
53	Kfields, compactons and thick branes. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 159801.	2.1	15
54	A new consistent neutron star equation of state from a generalized Skyrme model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 811, 135928.	4.1	15

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55	Compact boson stars in K field theories. <i>General Relativity and Gravitation</i> , 2010, 42, 2663-2701.	2.0	14
56	Hopf maps as static solutions of the complex eikonal equation. <i>Journal of Mathematical Physics</i> , 2004, 45, 4017-4024.	1.1	13
57	BPS submodels of the Skyrme model. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2017, 769, 362-367.	4.1	13
58	Improved vector and scalar masses in the massive Schwinger model. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2003, 555, 132-137.	4.1	12
59	Ring-shaped exact Hopf solitons. <i>Journal of Mathematical Physics</i> , 2003, 44, 5243-5249.	1.1	12
60	Topological phase transitions in the gauged BPS baby Skyrme model. <i>Journal of High Energy Physics</i> , 2015, 2015, 1.	4.7	12
61	General bound-state structure of the massive Schwinger model. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1996, 382, 111-116.	4.1	11
62	Hopf solitons and Hopf Q-balls on S^3 . <i>European Physical Journal C</i> , 2006, 47, 513-524.	3.9	11
63	Conservation laws in Skyrme-type models. <i>Journal of Mathematical Physics</i> , 2007, 48, 032302.	1.1	11
64	BPS bounds in supersymmetric extensions of K field theories. <i>Physical Review D</i> , 2012, 86, .	4.7	11
65	The dielectric Skyrme model. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2020, 807, 135560.	4.1	11
66	Charge screening and confinement in the massive Schwinger model. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1997, 394, 161-164.	4.1	10
67	Normalization of the chiral condensate in the massive Schwinger model. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1998, 440, 117-122.	4.1	10
68	Particle creation via relaxing hypermagnetic knots. <i>Physical Review D</i> , 2000, 62, .	4.7	10
69	Hopf instantons in Chern-Simons theory. <i>Physical Review D</i> , 2000, 61, .	4.7	10
70	Generalized integrability conditions and target space geometry. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2005, 626, 235-242.	4.1	10
71	Vector BPS Skyrme model. <i>Physical Review D</i> , 2012, 86, .	4.7	10
72	Rotational-vibrational coupling in the BPS Skyrme model of baryons. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2013, 726, 892-895.	4.1	10

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73	Radial vibrations of BPS skyrmions. Physical Review D, 2016, 94, .	4.7	10
74	Sphalerons and resonance phenomenon in kink-antikink collisions. Physical Review D, 2021, 104, .	4.7	10
75	Symmetries of generalized soliton models and submodels on target space S^2 . Journal of High Energy Physics, 2005, 2005, 004-004.	4.7	9
76	Non-L2 solutions to the Seiberg-Witten equations. Journal of Mathematical Physics, 2000, 41, 5875-5882.	1.1	8
77	Pullback of the volume form, integrable models in higher dimensions and exotic textures. Journal of Mathematical Physics, 2009, 50, 022301.	1.1	8
78	Investigation of anomalous axial QED. Physical Review D, 1997, 56, 5135-5139.	4.7	7
79	Hopf instantons and the Liouville equation in target space. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2000, 479, 329-335.	4.1	7
80	ZERO MODES IN FINITE RANGE MAGNETIC FIELDS. Modern Physics Letters A, 2000, 15, 1577-1581.	1.2	7
81	New integrable sectors in the Skyrme and four-dimensional CPn models. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 1907-1923.	2.1	7
82	Lifshitz field theories with SDiff symmetries. Journal of High Energy Physics, 2013, 2013, 1.	4.7	7
83	Gauged BPS baby Skyrmons with quantized magnetic flux. Physical Review D, 2017, 95, .	4.7	7
84	Dense matter equation of state and phase transitions from a generalized Skyrme model. Physical Review D, 2022, 105, .	4.7	7
85	Perturbative solution of the schwinger model. European Physical Journal D, 1998, 48, 9-19.	0.4	6
86	Consistent and Covariant Commutator Anomalies in the Chiral Schwinger Model. Annals of Physics, 1998, 265, 198-218.	2.8	6
87	Compact shell solitons in K field theories. Journal of Mathematical Physics, 2009, 50, 102303.	1.1	6
88	Strongly coupled Skyrme-Faddeev-Niemi hopfions. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 345402.	2.1	6
89	Vector BPS baby Skyrme model. Physical Review D, 2012, 86, .	4.7	6
90	Topological duality between vortices and planar Skyrmons in BPS theories with area-preserving diffeomorphism symmetries. Physical Review D, 2013, 87, .	4.7	6

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91	On the spin excitation energy of the nucleon in the Skyrme model. International Journal of Modern Physics E, 2016, 25, 1650097.	1.0	6
92	Roper resonances and quasi-normal modes of Skyrmions. Journal of High Energy Physics, 2018, 2018, 1.	4.7	6
93	Inflationary twin models. Physical Review D, 2020, 101, .	4.7	6
94	Quasiuniversal relations for generalized Skyrme stars. Physical Review D, 2021, 103, .	4.7	6
95	Decay widths in the massive Schwinger model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1997, 391, 395-401.	4.1	5
96	BPS sectors of the Skyrme model and their non-BPS extensions. Physical Review D, 2018, 97, .	4.7	5
97	The Dyson-Schwinger equations in the instanton vacuum of the Schwinger model. European Physical Journal D, 1996, 46, 893-904.	0.4	4
98	Scattering processes in the massive Schwinger model. Physical Review D, 1997, 55, 6299-6312.	4.7	4
99	Soliton stability in some knot soliton models. Journal of Mathematical Physics, 2007, 48, 022305.	1.1	4
100	Volume of a vortex and the Bradlow bound. Physical Review D, 2017, 95, .	4.7	4
101	The boson-boson bound state in the massive Schwinger model. Zeitschrift für Physik C-Particles and Fields, 1997, 74, 727-730.	1.5	3
102	THETA VACUUM IN DIFFERENT GAUGES. Modern Physics Letters A, 1999, 14, 185-197.	1.2	3
103	Covariant Schwinger terms. Physical Review D, 2000, 62, .	4.7	3
104	Integrability in theories with local $U(1)$ gauge symmetry. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 9079-9088.	2.1	3
105	A first integration of some knot soliton models. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2008, 659, 761-767.	4.1	3
106	A BPS Skyrme model. Journal of Physics: Conference Series, 2011, 284, 012006.	0.4	3
107	A gauged baby Skyrme model and a novel BPS bound. Journal of Physics: Conference Series, 2013, 410, 012055.	0.4	3
108	Exactly solvable gravitating perfect fluid solitons in $(2 + 1)$ dimensions. Journal of High Energy Physics, 2018, 2018, 1.	4.7	3

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109	SCHWINGER MASS IN RENORMAL-ORDERED CHIRAL PERTURBATION THEORY. International Journal of Modern Physics A, 1999, 14, 4943-4952.	1.5	2
110	Comment on: "Reduction of static field equation of Faddeev model to first order PDE" [Phys. Lett. B 652 (2007) 384]. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2008, 661, 378-380.	4.1	2
111	Infinitely many conservation laws in self-dual Yang-Mills theory. Journal of High Energy Physics, 2008, 2008, 014-014.	4.7	2
112	An integrable subsystem of Yang-Mills dilaton theory. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 095401.	2.1	2
113	Supersymmetric extensions of K field theories. Journal of Physics: Conference Series, 2012, 343, 012008.	0.4	2
114	Incompressible topological solitons. Physical Review D, 2020, 102, .	4.7	2
115	Covariant Stora-Zumino chain terms. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1999, 455, 197-199.	4.1	1
116	Chern-Simons action for zero-mode supporting gauge fields in three dimensions. Physical Review D, 2003, 67, .	4.7	1
117	The symmetries of the Dirac-Pauli equation in two and three dimensions. Journal of Mathematical Physics, 2005, 46, 052304.	1.1	1
118	BPS Skyrme neutron stars in generalized gravity. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 041-041.	5.4	1
119	Adding crust to BPS Skyrme neutron stars. Physical Review D, 2020, 102, .	4.7	1
120	The bound-state masses of the massive Schwinger model. Nuclear Physics, Section B, Proceedings Supplements, 1997, 54, 198-202.	0.4	0
121	The three-boson bound state in massive QED2. European Physical Journal D, 1998, 48, 1013-1023.	0.4	0
122	Decay widths and scattering processes in massive QED2. Nuclear Physics, Section B, Proceedings Supplements, 1998, 64, 301-305.	0.4	0
123	Schwinger terms in Weyl-invariant and diffeomorphism-invariant 2D scalar field theory. Physical Review D, 1998, 57, 4833-4838.	4.7	0
124	Generalized integrability and volume-preserving diffeomorphisms. Journal of Physics: Conference Series, 2008, 128, 012025.	0.4	0
125	A BPS Skyrme model and phenomenology of nuclei. , 2011, , .		0
126	A unified approach to nuclei: The BPS Skyrme Model. Nuclear and Particle Physics Proceedings, 2016, 273-275, 1480-1486.	0.5	0

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127	Radial vibrational excitations in the BPS Skyrme model. AIP Conference Proceedings, 2018, , .	0.4	0
128	Integrability and Diffeomorphisms on Target Space. Symmetry, Integrability and Geometry: Methods and Applications (SIGMA), 2007, , .	0.5	0
129	k-defects as compactons. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 089801.	2.1	0