Ubirajara van Kolck

List of Publications by Year
in descending order

135 papers	9,735 citations	47006 47 h-index	34986 98 g-index
142 all docs	142 docs citations	142 times ranked	2005 citing authors

#	Article	IF	Citations
1	EFFECTIVEFIELDTHEORY FORFEW-NUCLEONSYSTEMS. Annual Review of Nuclear and Particle Science, 2002, 52, 339-396.	10.2	657
2	Renormalization of the Three-Body System with Short-Range Interactions. Physical Review Letters, 1999, 82, 463-467.	7.8	470
3	Two-nucleon potential from chiral Lagrangians. Physical Review C, 1996, 53, 2086-2105.	2.9	462
4	Few-nucleon forces from chiral Lagrangians. Physical Review C, 1994, 49, 2932-2941.	2.9	431
5	Electric dipole moments of nucleons, nuclei, and atoms: The Standard Model and beyond. Progress in Particle and Nuclear Physics, 2013, 71, 21-74.	14.4	393
6	Effective field theory of short-range forces. Nuclear Physics A, 1999, 645, 273-302.	1.5	352
7	Nucleon-nucleon potential from an effective chiral Lagrangian. Physical Review Letters, 1994, 72, 1982-1985.	7.8	348
8	The three-boson system with short-range interactions. Nuclear Physics A, 1999, 646, 444-466.	1.5	318
9	Renormalization of one-pion exchange and power counting. Physical Review C, 2005, 72, .	2.9	299
10	Towards a perturbative theory of nuclear forces. Nuclear Physics A, 2002, 700, 377-402.	1.5	262
11	Chiral lagrangians and nuclear forces. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1992, 291, 459-464.	4.1	252
12	Effective theory of the triton. Nuclear Physics A, 2000, 676, 357-370.	1.5	252
13	Effective field theory of nuclear forces. Progress in Particle and Nuclear Physics, 1999, 43, 337-418.	14.4	249
14	Nuclear effective field theory: Status and perspectives. Reviews of Modern Physics, 2020, 92, .	45.6	229
15	Effective field theory for halo nuclei: shallow -wave states. Nuclear Physics A, 2002, 712, 37-58.	1.5	201
16	Pion interactions in the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>X</mml:mi><mml:mo stretchy="false">(</mml:mo><mml:mn>3872</mml:mn><mml:mo) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 132 Td (stretchy="false">)</m	4.7	173
17	Nucleon-deuteron scattering from an effective field theory. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1998, 428, 221-226.	4.1	170
18	Chiral symmetry and three-nucleon forces. Physical Review C, 1999, 59, 53-58.	2.9	153

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19	Narrow resonances in effective field theory. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2003, 569, 159-167.	4.1	152
20	Nuclear parity violation in effective field theory. Nuclear Physics A, 2005, 748, 435-498.	1.5	140
21	Singular potentials and limit cycles. Physical Review A, 2001, 64, .	2.5	133
22	New Leading Contribution to Neutrinoless Double- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>Î²</mml:mi></mml:mrow></mml:math> Decay. Physical Review Letters, 2018, 120, 202001.	7.8	123
23	Effective theory for neutron-deuteron scattering: Energy dependence. Physical Review C, 1998, 58, R641-R644.	2.9	122
24	ppâ†'ppÏ€0reaction near threshold: A chiral power counting approach. Physical Review C, 1996, 53, 2661-2673.	2.9	117
25	Convergence properties ofab initiocalculations of light nuclei in a harmonic oscillator basis. Physical Review C, 2012, 86, .	2.9	95
26	No-core shell model in an effective-field-theory framework. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2007, 653, 358-362.	4.1	93
27	Î±Î± scattering in halo effective field theory. Nuclear Physics A, 2008, 809, 171-188.	1.5	92
28	The effective chiral Lagrangian from dimension-six parity and time-reversal violation. Annals of Physics, 2013, 338, 50-96.	2.8	88
29	Effective Field Theory for Lattice Nuclei. Physical Review Letters, 2015, 114, 052501.	7.8	83
30	Chiral Three-Nucleon Forces fromp-wave Pion Production. Physical Review Letters, 2000, 85, 2905-2908.	7.8	81
31	Electromagnetic Corrections to the One-Pion-Exchange Potential. Physical Review Letters, 1998, 80, 4386-4389.	7.8	74
32	Nuclear Physics Around the Unitarity Limit. Physical Review Letters, 2017, 118, 202501.	7.8	74
33	Ground-state properties of 4He and 16O extrapolated from lattice QCD with pionless EFT. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 772, 839-848.	4.1	73
34	Phenomenological aspects of isospin violation in the nuclear force. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1996, 371, 169-174.	4.1	72
35	Nuclear matter on a lattice. Physical Review C, 2000, 61, .	2.9	72
36	Effective theory for trapped few-fermion systems. Physical Review A, 2007, 76, .	2.5	71

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37	Renormalization of singular potentials and power counting. Annals of Physics, 2008, 323, 1304-1323.	2.8	70
38	Electric dipole moments of light nuclei from chiral effective field theory. Physical Review C, 2011, 84, .	2.9	66
39	Renormalized approach to neutrinoless double- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î²</mml:mi></mml:math> decay. Physical Review C, 2019, 100, .	2.9	66
40	Neutral pion photoproduction on deuterium in baryon chiral perturbation theory to order q4. Nuclear Physics A, 1997, 618, 381-401.	1.5	62
41	Observation of the Charge Symmetry Breakingd+dâ†'He4+Ï€0Reaction Near Threshold. Physical Review Letters, 2003, 91, 142302.	7.8	60
42	The effective chiral Lagrangian from the theta term. Annals of Physics, 2010, 325, 2363-2409.	2.8	58
43	The nucleon electric dipole form factor from dimension-six time-reversal violation. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 695, 268-274.	4.1	57
44	Charge symmetry violation in pnâ†'dÏ€0 and chiral effective field theory. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2000, 493, 65-72.	4.1	52
45	The electric dipole form factor of the nucleon in chiral perturbation theory to sub-leading order. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 696, 97-102.	4.1	52
46	An effective field theory approach to two trapped particles. Annals of Physics, 2010, 325, 1644-1666.	2.8	48
47	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>P</mml:mi></mml:math>and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>T</mml:mi></mml:math>Violating Form Factors of the Deuteron. Physical Review Letters, 2011, 107, 091804.	7.8	48
48	Meson exchange and pion rescattering contributions to the cross section for pp â†' ppÏ€0. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1996, 388, 679-685.	4.1	46
49	Compton scattering on the proton, neutron, and deuteron in chiral perturbation theory to. Nuclear Physics A, 2005, 747, 311-361.	1.5	45
50	Effective theory of³H and³He. Journal of Physics G: Nuclear and Particle Physics, 2016, 43, 055106.	3.6	45
51	The Problem of Renormalization of Chiral Nuclear Forces. Frontiers in Physics, 2020, 8, .	2.1	45
52	Charge-independence breaking in the two-pion-exchange nucleon-nucleon force. Physical Review C, 1999, 60, .	2.9	43
53	The anapole form factor of the nucleon. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2000, 478, 73-78.	4.1	43
54	Nucleon polarizabilities from low-energy Compton scattering. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2003, 567, 200-206.	4.1	42

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55	Charge-symmetry breaking and the two-pion-exchange two-nucleon interaction. Physical Review C, 2003, 68, .	2.9	42
56	Three and four harmonically trapped particles in an effective-field-theory framework. Physical Review A, 2010, 82, .	2.5	41
57	The time-reversal- and parity-violating nuclear potential in chiral effective theory. Nuclear Physics A, 2011, 872, 117-160.	1.5	41
58	Spectra and scattering of light lattice nuclei from effective field theory. Physical Review C, 2015, 92, .	2.9	41
59	Effective field theory for few-boson systems. Physical Review A, 2016, 94, .	2.5	41
60	The dilated chiral quark model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1994, 328, 137-142.	4.1	40
61	Novel Three-Nucleon-Force Terms in the Three-Nucleon System. Few-Body Systems, 2001, 30, 95-120.	1.5	40
62	The electric dipole form factor of the nucleon. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2005, 605, 273-278.	4.1	40
63	Isospin Violation in Low-energy Hadronic Physics. Few-Body Systems, 1995, , 444-448.	0.2	38
64	Survey of charge symmetry breaking operators forddâ†'Î±Ï€0. Physical Review C, 2004, 69, .	2.9	38
65	The axial vector coupling and magnetic moment of the quark. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1992, 284, 384-389.	4.1	37
66	Four-Body Scale in Universal Few-Boson Systems. Physical Review Letters, 2019, 122, 143001.	7.8	37
67	The nucleon anapole form factor in chiral perturbation theory to sub-leading order. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2000, 488, 167-174.	4.1	36
68	Nucleon-mass difference in chiral perturbation theory and nuclear forces. Physical Review C, 2004, 70, .	2.9	35
69	Effective Field Theory and the Gamow Shell Model. Few-Body Systems, 2013, 54, 725-735.	1.5	34
70	Compton scattering on the deuteron in baryon chiral perturbation theory. Nuclear Physics A, 1999, 656, 367-399.	1.5	32
71	An effective field theory for coupled-channel scattering. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2004, 588, 57-66.	4.1	32
72	Charge-symmetry-breaking three-nucleon forces. Physical Review C, 2005, 71, .	2.9	32

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73	Two-nucleon S01 amplitude zero in chiral effective field theory. Physical Review C, 2018, 97, .	2.9	31
74	NNâ†'NNÏ€+reaction near threshold in a chiral power counting approach. Physical Review C, 2000, 61, .	2.9	30
75	Realistic few-body physics in the <mml:math altimg="si1.gif" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.elsevier.co. Ph	4.1	30
76	Ï€N scattering in the region in an effective field theory. Nuclear Physics A, 2010, 840, 39-75.	1.5	29
77	Baryon-Number Violation by Two Units and the Deuteron Lifetime. Physical Review Letters, 2019, 122, 172501.	7.8	29
78	Power counting in peripheral partial waves: The singlet channels. Physical Review C, 2017, 95, .	2.9	28
79	Neutral pion photoproduction on nuclei in baryon chiral perturbation theory. Physical Review C, 1995, 52, 2914-2924.	2.9	27
80	Î" effects in pion-nucleon scattering and the strength of the two-pion-exchange three-nucleon interaction. Physical Review C, 2005, 71, .	2.9	27
81	Nucleon-nucleon interaction and isospin violation. Lecture Notes in Physics, 1998, , 62-77.	0.7	25
82	Two and three nucleons in a trap, and the continuum limit. Physical Review C, 2012, 85, .	2.9	25
83	Effective interactions for light nuclei: an effective (field theory) approach. Journal of Physics G: Nuclear and Particle Physics, 2010, 37, 064033.	3.6	24
84	Ground-State Properties of Unitary Bosons: From Clusters to Matter. Physical Review Letters, 2017, 119, 223002.	7.8	24
85	Unitarity and Discrete Scale Invariance. Few-Body Systems, 2017, 58, 1.	1.5	23
86	Fate of the neutronâ€"deuteron virtual state as an Efimov level. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 791, 414-419.	4.1	21
87	Effective field theory of nucleon-nucleon scattering on large discrete lattices. Physical Review C, 2006, 73, .	2.9	20
88	Triton binding energy and neutron-deuteron scattering up to next-to-leading order in chiral effective field theory. Physical Review C, 2017, 96, .	2.9	20
89	Naturalness in nuclear effective field theories. European Physical Journal A, 2020, 56, 1.	2.5	20
90	Effective Field Theory and Time-Reversal Violation in Light Nuclei. Annual Review of Nuclear and Particle Science, 2015, 65, 215-243.	10.2	19

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91	Toy model for pion production in nucleon-nucleon collisions. Physical Review C, 2001, 63, .	2.9	16
92	Deuteron magnetic quadrupole moment from chiral effective field theory. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 713, 447-452.	4.1	16
93	The role of the Roper in QCD. Journal of Physics G: Nuclear and Particle Physics, 2005, 31, 921-933.	3.6	15
94	Parity-violating electron-deuteron scattering. Physical Review C, 2001, 63, .	2.9	14
95	The role of the Roper in chiral perturbation theory. Nuclear Physics A, 2011, 870-871, 72-82.	1.5	14
96	Nonrelativistic effective field theory with a resonance field. European Physical Journal A, 2021, 57, 1.	2.5	12
97	Poisson Random Walk for Solving Wave Equations. Progress of Theoretical Physics, 1992, 87, 285-292.	2.0	11
98	Toroidal quadrupole form factor of the deuteron. Physical Review C, 2013, 88, .	2.9	11
99	Effective field theory for two-body systems with shallow <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e2078" altimg="si3.svg"><mml:mi>S</mml:mi></mml:math>-wave resonances. Annals of Physics, 2020, 422, 168283.	2.8	10
100	Chiral perturbation theory in few-body systems. Nuclear Physics A, 1998, 631, 56-69.	1.5	9
101	From effective field theories to effective density functionals in and beyond the mean field. Physica Scripta, 2016, 91, 063005.	2.5	9
102	Nuclear Effective Field Theories: Reverberations of the Early Days. Few-Body Systems, 2021, 62, 1.	1.5	9
103	Clustering of Four-Component Unitary Fermions. Physical Review Letters, 2020, 124, 143402.	7.8	8
104	Nuclear Physics with Effective Field Theory II. , 1999, , .		8
105	Effective Field Theories of Light Nuclei. Nuclear Physics A, 2005, 752, 145-154.	1.5	7
106	Renormalizability of the nuclear many-body problem with the Skyrme interaction beyond mean field. Physical Review C, 2017, 95, .	2.9	7
107	Recent developments in nuclear effective field theory. Nuclear Physics A, 2002, 699, 33-40.	1.5	4
108	Nuclear Physics with Effective Field Theory. , 1998, , .		4

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109	Effective Field Theories of Loosely Bound Nuclei. Lecture Notes in Physics, 2014, , 123-182.	0.7	3
110	HALO EFFECTIVE FIELD THEORY. International Journal of Modern Physics E, 2005, 14, 11-19.	1.0	2
111	Nuclear Effective Field Theory Without Pions. Nuclear Physics A, 2007, 787, 405-414.	1.5	2
112	Publisher's Note: Two and three nucleons in a trap, and the continuum limit [Phys. Rev. C85, 034003 (2012)]. Physical Review C, 2012, 85, .	2.9	2
113	Nuclear physics from an expansion around the unitarity limit. Journal of Physics: Conference Series, 2018, 966, 012014.	0.4	2
114	Renormalization of one-pion exchange in chiral effective field theory for antinucleon-nucleon scattering. Physical Review C, 2022, 105, .	2.9	2
115	Chiral lagrangians and few-nucleon forces. AIP Conference Proceedings, 1995, , .	0.4	1
116	Effective field theories for strongly interacting systems. Nuclear Physics A, 2001, 680, 17-24.	1.5	1
117	Introduction to Effective Field Theories in QCD. AIP Conference Proceedings, 2002, , .	0.4	1
118	Nuclear effective field theory with pions. Nuclear Physics A, 2007, 790, 39c-45c.	1.5	1
119	Finite-size effects in heavy halo nuclei from effective field theory. European Physical Journal A, 2020, 56, 1.	2.5	1
120	Nucleon decay in the deuteron. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 820, 136525.	4.1	1
121	Effective Field Theories for Nuclear and (Some) Atomic Physics. , 2020, , 362-414.		1
122	Panel session I: Interface of QCD and nuclear physics. , 2012, , .		1
123	Chiral perturbation theory in few-nucleon systems. , 1997, , .		0
124	Effective field theories for weakly bound nuclei. Journal of Physics G: Nuclear and Particle Physics, 2005, 31, S1245-S1252.	3.6	0
125	Chiral Nuclear Effective Field Theory. AIP Conference Proceedings, 2007, , .	0.4	0
126	Publisher's Note: Effective theory for trapped few-fermion systems [Phys. Rev. A76, 063613 (2007)]. Physical Review A, 2008, 77, .	2.5	0

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127	X(3872): the hidden charm of nuclear physics. , 2010, , .		0
128	Time-reversal violation in the nucleon and light nuclei. EPJ Web of Conferences, 2014, 73, 01011.	0.3	0
129	Few-Nucleon Systems in a Quirky World. Few-Body Systems, 2015, 56, 745-752.	1.5	0
130	DEUTERON COMPTON SCATTERING IN CHIRAL PERTURBATION THEORY. , 2001, , .		0
131	Nuclear Forces in EFT. , 2001, , .		0
132	Summary of the Working Group on Few-Body Physics Workshop on Chiral Dynamics. , 2001, , .		0
133	NUCLEAR EFFECTIVE FIELD THEORIES. , 2007, , .		0
134	POWER COUNTING IN NUCLEAR CHIRAL EFFECTIVE FIELD THEORY. , 2007, , .		0
135	Time-Reversal Violation in the Nucleon and the Nucleus. , 2012, , .		0