Hans-Werner Hammer

List of Publications by Year
in descending order

126 papers	9,384 citations	47006 47 h-index	37204 96 g-index
130 all docs	130 docs citations	130 times ranked	2820 citing authors

#	Article	IF	Citations
1	Modern theory of nuclear forces. Reviews of Modern Physics, 2009, 81, 1773-1825.	45.6	1,376
2	Universality in few-body systems with large scattering length. Physics Reports, 2006, 428, 259-390.	25.6	1,069
3	Renormalization of the Three-Body System with Short-Range Interactions. Physical Review Letters, 1999, 82, 463-467.	7.8	470
4	The three-boson system with short-range interactions. Nuclear Physics A, 1999, 646, 444-466.	1.5	318
5	Colloquium: Three-body forces: From cold atoms to nuclei. Reviews of Modern Physics, 2013, 85, 197-217.	45.6	279
6	Effective theory of the triton. Nuclear Physics A, 2000, 676, 357-370.	1.5	252
7	Nuclear effective field theory: Status and perspectives. Reviews of Modern Physics, 2020, 92, .	45.6	229
8	Effective field theory for halo nuclei: shallow -wave states. Nuclear Physics A, 2002, 712, 37-58.	1.5	201
9	Three-body Recombination in Bose Gases with Large Scattering Length. Physical Review Letters, 2000, 85, 908-911.	7.8	192
10	Dispersion analysis of the nucleon form factors including meson continua. Physical Review C, 2007, 75, .	2.9	183
11	Four-boson system with short-range interactions. Physical Review A, 2004, 70, .	2.5	176
12	Low energy expansion in the three body system to all orders and the triton channel. Nuclear Physics A, 2003, 714, 589-610.	1.5	154
13	Narrow resonances in effective field theory. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2003, 569, 159-167.	4.1	152
14	Efimov physics in cold atoms. Annals of Physics, 2007, 322, 120-163.	2.8	141
15	Three-Body Recombination into Deep Bound States in a Bose Gas with Large Scattering Length. Physical Review Letters, 2001, 87, 160407.	7.8	125
16	Effective field theory description of halo nuclei. Journal of Physics G: Nuclear and Particle Physics, 2017, 44, 103002.	3.6	123
17	Effective theory for neutron-deuteron scattering: Energy dependence. Physical Review C, 1998, 58, R641-R644.	2.9	122
18	Three-particle quantization condition in a finite volume: 2. General formalism and the analysis of data. Journal of High Energy Physics, 2017, 2017, 1.	4.7	119

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19	On the correlation between the binding energies of the triton and the Î±-particle. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2005, 607, 254-258.	4.1	117
20	Three-particle quantization condition in a finite volume: 1. The role of the three-particle force. Journal of High Energy Physics, 2017, 2017, 1.	4.7	105
21	Effective field theory for dilute Fermi systems. Nuclear Physics A, 2000, 678, 277-294.	1.5	99
22	Î±Î± scattering in halo effective field theory. Nuclear Physics A, 2008, 809, 171-188.	1.5	92
23	Efimov States in Nuclear and Particle Physics. Annual Review of Nuclear and Particle Science, 2010, 60, 207-236.	10.2	91
24	Theoretical constraints and systematic effects in the determination of the proton form factors. Physical Review D, 2015, 91, .	4.7	89
25	An Infrared Renormalization Group Limit Cycle in QCD. Physical Review Letters, 2003, 91, 102002.	7.8	88
26	Three-body spectrum in a finite volume: The role of cubic symmetry. Physical Review D, 2018, 97, .	4.7	86
27	Range corrections to doublet S-wave neutronâ€“deuteron scattering. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2001, 516, 353-361.	4.1	85
28	Three-body problem in heteronuclear mixtures with resonant interspecies interaction. Physical Review A, 2010, 81, .	2.5	81
29	Are occupation numbers observable?. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2002, 531, 203-208.	4.1	78
30	Dispersion-theoretical analysis of the nucleon electromagnetic form factors: Inclusion of time-like data. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1996, 385, 343-347.	4.1	77
31	Nuclear Physics Around the Unitarity Limit. Physical Review Letters, 2017, 118, 202501.	7.8	74
32	Electric properties of the Beryllium-11 system in Halo EFT. Nuclear Physics A, 2011, 865, 17-42.	1.5	73
33	The strangeness radius and magnetic moment of the nucleon revisited. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1996, 367, 323-328.	4.1	70
34	Analytical approach to the Bose-polaron problem in one dimension. Physical Review A, 2017, 96, .	2.5	67
35	Efimov physics in a finite volume. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2009, 673, 260-263.	4.1	66
36	The triton in a finite volume. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 694, 424-429.	4.1	66

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37	Causality and the effective range expansion. Annals of Physics, 2010, 325, 2212-2233.	2.8	65
38	Updated dispersion-theoretical analysis of the nucleon electromagnetic form factors. European Physical Journal A, 2004, 20, 469-473.	2.5	64
39	Topological phases for bound states moving in a finite volume. Physical Review D, 2011, 84, .	4.7	64
40	Enhanced dimer relaxation in an atomic and molecular Bose-Einstein condensate. Physical Review A, 2004, 70, .	2.5	59
41	Nonuniversal effects in the homogeneous Bose gas. Physical Review A, 2001, 63, .	2.5	58
42	Universal Properties of Two-Dimensional Boson Droplets. Physical Review Letters, 2004, 93, 250408.	7.8	57
43	Precise numerical results for limit cycles in the quantum three-body problem. Annals of Physics, 2006, 321, 225-259.	2.8	53
44	Efimov Physics Around the Neutron-Rich<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mmultiscripts><mml:mi>Ca</mml:mi><mml:mprescripts /><mml:none /><mml:mn>60</mml:mn></mml:mmultiscripts></mml:math>Isotope. Physical Review Letters, 2013, 111, 132501.	7.8	53
45	Electromagnetic structure of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:msub><mml:mrow><mml:mi>Z</mml:mi></mml:mrow><mml:mrow><mml:mi>c</mml:mi></mml:mrow></m stretchy="false">(</mml:mo><mml:mn>3900</mml:mn><mml:mo) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 412 Td (stretchy="fal High-Energy Physics, 2013, 726, 326-329.	4.1	51
46	Is a Trineutron Resonance Lower in Energy than a Tetraneutron Resonance?. Physical Review Letters, 2017, 118, 232501.	7.8	51
47	Effective field theory for proton halo nuclei. Physical Review C, 2014, 89, .	2.9	50
48	A renormalized equation for the three-body system with short-range interactions. Nuclear Physics A, 2001, 690, 535-546.	1.5	47
49	The hypertriton in effective field theory. Nuclear Physics A, 2002, 705, 173-189.	1.5	46
50	Effective theory of³H and³He. Journal of Physics G: Nuclear and Particle Physics, 2016, 43, 055106.	3.6	45
51	Scattering of an ultrasoft pion and 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 ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 172 Td (stretchy="fal	4.7	44
52	On the strong energy dependence of 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.elsevi. Physics	4.1	43
53	Causality and universality in low-energy quantum scattering. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2009, 681, 500-503.	4.1	42
54	Energy shift of the three-particle system in a finite volume. Physical Review D, 2019, 99, .	4.7	42

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55	Universal equation for Efimov states. Physical Review A, 2003, 67, .	2.5	41
56	On the limit cycle for the 1/r2 potential in momentum space. Annals of Physics, 2006, 321, 306-317.	2.8	41
57	Renormalization in the three-body problem with resonant<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>p</mml:mi></mml:math>-wave interactions. Physical Review A, 2012, 86, .	2.5	41
58	Range corrections for two-neutron halo nuclei in effective theory. Nuclear Physics A, 2010, 836, 275-292.	1.5	40
59	Scattering of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>D</mml:mi></mml:math>and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mi>D</mml:mi><mml:mo>*</mml:mo></mml:msup></mml:math>mesons off the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>X</mml:mi><mml:mo		

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73	Universality in the triton charge form factor. Nuclear Physics A, 2006, 766, 132-141.	1.5	27
74	Benchmark calculations for elastic fermion-dimer scattering. Physical Review C, 2012, 86, .	2.9	27
75	Spectral content of isoscalar nucleon form factors. Physical Review C, 1999, 60, .	2.9	26
76	More on the infrared renormalization group limit cycle in QCD. European Physical Journal C, 2006, 48, 169-178.	3.9	26
77	Dissecting reaction calculations using halo effective field theory and ab initio input. Physical Review C, 2018, 98, .	2.9	25
78	Dispersion-theoretical analysis of the electromagnetic form factors of the nucleon: Past, present and future. European Physical Journal A, 2021, 57, 1.	2.5	25
79	Efimov physics from a renormalization group perspective. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 2679-2700.	3.4	23
80	High-precision determination of the electric and magnetic radius of the proton. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 816, 136254.	4.1	22
81	Nucleon strangeness and unitarity. Physical Review D, 1997, 55, 2741-2755.	4.7	20
82	The protonâ€“deuteron system in pionless EFT revisited. Journal of Physics G: Nuclear and Particle Physics, 2015, 42, 045101.	3.6	20
83	Constraints on a possible dineutron state from pionless EFT. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2014, 736, 208-213.	4.1	19
84	Universal few-body physics in a harmonic trap. Comptes Rendus Physique, 2011, 12, 59-70.	0.9	17
85	Impurities in a one-dimensional Bose gas: the flow equation approach. SciPost Physics, 2021, 11, .	4.9	17
86	In-medium bound states of two bosonic impurities in a one-dimensional Fermi gas. Physical Review Research, 2019, 1, .	3.6	17
87	Three-body losses of a polarized Fermi gas near a <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>p</mml:mi></mml:math> -wave Feshbach resonance in effective field theory. Physical Review A, 2020, 101, .	2.5	16
88	Model-independent extraction of two-photon effects in elastic electronâ€“proton scattering. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2008, 658, 138-142.	4.1	15
89	Quantum Monte Carlo calculations of two neutrons in finite volume. Physical Review C, 2016, 94, .	2.9	15
90	Range corrections in proton halo nuclei. Annals of Physics, 2016, 367, 13-32.	2.8	15

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91	Lifetime of the hypertriton. Physical Review C, 2020, 102, .	2.9	15
92	Unnuclear physics: Conformal symmetry in nuclear reactions. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	15
93	Threshold effects and the line shape of 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 ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 652 Td (stretchy="false	4.7	12
94	Universal physics of bound states of a few charged particles. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 798, 135016.	4.1	12
95	Î²-delayed proton emission from 11Be in effective field theory. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 821, 136610.	4.1	11
96	Efimov physics in atom-dimer scattering of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mmultiscripts><mml:mi mathvariant="normal">Li</mml:mi><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>6</mml:mn></mml:mrow></mml:mmultiscripts></mml:math>atoms. Physical Review A, 2010, 82, .	2.5	10
97	Tetramer bound states in heteronuclear systems. Physical Review A, 2017, 95, .	2.5	9
98	More on the Universal Equation for Efimov States. Few-Body Systems, 2019, 60, 1.	1.5	9
99	Gandolfi etÂal. Reply:. Physical Review Letters, 2019, 123, 069202.	7.8	9
100	Nuclear Structure at the Crossroads. Few-Body Systems, 2021, 62, 1.	1.5	9
101	Neutron-neutron scattering length from the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mmultiscripts><mml:mi>He</mml:mi><mml:mprescripts /><mml:none /><mml:mn>6</mml:mn></mml:mmultiscripts><mml:mo>(</mml:mo><mml:mi>p</mml:mi><mml:mo>,</mml:mo><mml:mi>p</mml:mi><mml:mi reaction. Physical Review C, 2021, 104, .	2.9	9
102	Interpretation of Neutral Charm Mesons near Threshold as Unparticles. Physical Review Letters, 2022, 128, 032002.	7.8	9
103	Three-body resonances in pionless effective field theory. Physical Review C, 2022, 105, .	2.9	9
104	Convergence properties of the effective theory for trapped bosons. Journal of Physics G: Nuclear and Particle Physics, 2013, 40, 055004.	3.6	8
105	Flow equations for cold Bose gases. New Journal of Physics, 2017, 19, 113051.	2.9	8
106	Electromagnetic properties of the Beryllium-11 nucleus in Halo EFT. EPJ Web of Conferences, 2010, 3, 06002.	0.3	7
107	Precision calculation of the quartet-channelpâ^'dscattering length. Physical Review C, 2014, 90, .	2.9	7
108	An alternative scheme for effective range corrections in pionless EFT. European Physical Journal A, 2021, 57, 1.	2.5	7

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109	Nuclei and the Unitary Limit. Few-Body Systems, 2018, 59, 1.	1.5	6
110	Momentum-Space Probability Density of ^{6}He in Halo Effective Field Theory. Few-Body Systems, 2019, 60, 1.	1.5	6
111	Electric structure of shallow D-wave states in Halo EFT. Journal of Physics G: Nuclear and Particle Physics, 2019, 46, 115101.	3.6	5
112	Morphology of three-body quantum states from machine learning. New Journal of Physics, 2021, 23, 065009.	2.9	5
113	General Aspects of Effective Field Theories and Few-Body Applications. Lecture Notes in Physics, 2017, , 93-153.	0.7	5
114	Simulating core excitation in breakup reactions of halo nuclei using an effective three-body force. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2022, 825, 136847.	4.1	5
115	Artificial atoms from cold bosons in one dimension. New Journal of Physics, 0, , .	2.9	5
116	Neutral pion photoproduction off 3H and 3He in chiral perturbation theory. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 700, 365-368.	4.1	4
117	Few-Body Universality in Halo Nuclei. EPJ Web of Conferences, 2016, 113, 01004.	0.3	4
118	From ab initio structure predictions to reaction calculations via EFT. Journal of Physics: Conference Series, 2018, 1023, 012010.	0.4	4
119	Neutron transfer reactions in halo effective field theory. Physical Review C, 2019, 99, .	2.9	4
120	Differential cross section predictions for PRad-II from dispersion theory. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2022, 827, 136981.	4.1	4
121	Causality, universality, and effective field theory for van der Waals interactions. Physical Review A, 2013, 87, .	2.5	2
122	Spurious poles in a finite volume. Journal of High Energy Physics, 2022, 2022, .	4.7	2
123	The Low-Energy pâ€“d System in Pionless EFT. Few-Body Systems, 2013, 54, 231-234.	1.5	1
124	Limit Cycles from the Similarity Renormalization Group. Few-Body Systems, 2015, 56, 869-879.	1.5	1
125	THREE-BODY FORCES IN EFFECTIVE THEORY. , 2001, , .		0
126	STRANGE VECTOR FORM FACTORS OF THE NUCLEON. , 2001, , .		0