Harald S W Friedrich

List of Publications by Year
in descending order

54	1,687	516710 16	276875 41
papers	citations	h-index	g-index

61	61	61	716
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The hydrogen atom in a uniform magnetic field â€" An example of chaos. Physics Reports, 1989, 183, 37-79.	25.6	622
2	Quantum reflection by Casimirâ€"van der Waals potential tails. Physical Review A, 2002, 65, .	2.5	173
3	Working with WKB waves far from the semiclassical limit. Physics Reports, 2004, 397, 359-449.	25.6	160
4	Microscopic nucleus-nucleus potentials. Physics Reports, 1981, 74, 209-275.	25.6	116
5	Theoretical Atomic Physics. Advanced Texts in Physics, 1998, , .	0.5	74
6	Quantum reflection times and space shifts for Casimirâ€"van der Waals potential tails. Physical Review A, 2004, 70, .	2.5	52
7	Threshold properties of attractive and repulsive1/r2potentials. Physical Review A, 2001, 63, .	2.5	36
8	Effective-range theory for quantum reflection amplitudes. Physical Review A, 2006, 74, .	2.5	35
9	Near-threshold quantization and scattering for deep potentials with attractive tails. Journal of Physics B: Atomic, Molecular and Optical Physics, 2000, 33, 4033-4051.	1.5	34
10	Quantum Reflection Times for Attractive Potential Tails. Physical Review Letters, 2004, 92, 103202.	7.8	33
11	Dissociation of Feshbach molecules into different partial waves. Physical Review A, 2005, 72, .	2.5	20
12	Quantization function for deep potentials with attractive tails. Physical Review A, 2008, 78, .	2.5	19
13	Realistic model for a quantum reflection trap. Physics Letters, Section A: General, Atomic and Solid State Physics, 2006, 349, 230-235.	2.1	17
14	Influence of realistic atom wall potentials in quantum reflection traps. Physical Review A, 2007, 75, .	2.5	17
15	Considerations on Hund's first rule in a planar two-electron quantum dot. Physical Review A, 2013, 87, .	2.5	17
16	Quantization function for potentials with<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mo>â^'</mml:mo><mml:mn>1</mml:mn><mml:mo>/</mml:mo><mml:msup><mml:mi>r</mml:mi> Physical Review A, 2009, 80, .	2.5	16
17	Near-threshold scattering, quantum reflection, and quantization in two dimensions. Physical Review A, 2008, 78, .	2.5	14
18	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>s</mml:mi></mml:math>-wave scattering for deep potentials with attractive tails falling off faster than<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mo>â^'</mml:mo><mml:mn>1</mml:mn><mml:mo>/</mml:mo><mml:msup><mml:mi>r</mml:mi> Physical Review A, 2011, 84, .	2.5	14

#	Article	IF	Citations
19	Scattering of ultracold atoms by absorbing nanospheres. Physical Review A, 2007, 75, .	2.5	13
20	Near-threshold quantization for potentials with inverse-cube tails. Physical Review A, 2011, 83, .	2.5	12
21	Near-threshold quantization and level densities for potential wells with weak inverse-square tails. Physical Review A, 2001, 64, .	2.5	11
22	Scattering by a Coulomb field in two dimensions. American Journal of Physics, 1998, 66, 274-274.	0.7	9
23	Quantum-mechanical deflection function. Physical Review A, 1999, 60, 853-860.	2.5	9
24	Near-threshold quantization and scattering lengths. Physical Review A, 2008, 77, .	2.5	9
25	Quantization rule for highly excited vibrational states of H. Molecular Physics, 2013, 111, 878-887.	1.7	7
26	Quantum reflection of metastable hydrogen atoms by a conducting surface. Physics Letters, Section A: General, Atomic and Solid State Physics, 2005, 335, 43-49.	2.1	6
27	Addendum to a€œ<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>s</mml:mi></mml:math>-wave scattering for deep potentials with attractive tails falling off faster than<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mo>â^’</mml:mo><mml:mn>1</mml:mn><mml:mo>/</mml:mo><mml:msup><mml:mi>r</mml:mi> Physical Review A, 2011, 84, .	2.5	6
28	Near-threshold Feshbach resonances in interatomic collisions and spectra. Physical Review A, 2012, 85, .	2.5	6
29	Jost functions and singular attractive potentials. Physical Review A, 2008, 77, .	2.5	5
30	s-wave scattering of a polarizable atom by an absorbing nanowire. Physical Review A, 2010, 81, .	2.5	5
31	Influence of higher-order dispersion coefficients on near-threshold bound and continuum states: Application to Sr288. Journal of Chemical Physics, 2011, 135, 214302.	3.0	5
32	Influence of retardation in the scattering of ultracold atoms by conducting nanowires. Physical Review A, 2012, 85, .	2.5	5
33	Paths to chaos. Physics World, 1992, 5, 32-37.	0.0	3
34	Quantum reflection by coupled-channel potentials. Physical Review A, 2002, 66, .	2.5	3
35	Comment on â€œNonuniqueness of the Phase Shift in Central Scattering due to Monodromyâ€• Physical Review Letters, 2009, 102, 188901; author reply 188902.	7.8	3
36	Scattering of ultracold atoms by an absorbing nanowire. European Physical Journal D, 2011, 63, 33-39.	1.3	3

#	Article	IF	Citations
37	Quantum reflection shields ultracold atoms. Physics World, 2004, 17, 20-21.	0.0	2
38	Phases of the amplitudes for transmission and near-side quantum reflection in attractive potential tails. Physical Review A, 2006, 74, .	2.5	2
39	Two-dimensional quantum-reflection traps. Physical Review A, 2007, 75, .	2.5	2
40	Smoothness properties of the quantum-mechanical and WKB phase shifts for two-dimensional scattering. Physical Review A, 2009, 80, .	2.5	2
41	Elastic Scattering by a Conservative Potential. Lecture Notes in Physics, 2013, , 23-135.	0.7	2
42	Atomic Spectra. , 1991, , 117-190.		2
43	Field induced chaos and chaotic scattering. , 1997, , 97-123.		1
44	Quenching of curve crossing probabilities by quantum reflection. Radiation Physics and Chemistry, 2003, 68, 211-214.	2.8	1
45	Publisherâ€™s Note: Near-threshold quantization for potentials with inverse-cube tails [Phys. Rev. A83, 022701 (2011)]. Physical Review A, 2011, 83, .	2.5	0
46	Elastic Scattering by a Conservative Potential. , 2016, , 23-135.		0
47	Atomare Spektren. Springer-Lehrbuch, 1990, , 117-190.	0.0	0
48	Spezielle Themen. Springer-Lehrbuch, 1990, , 249-299.	0.0	0
49	Atomare Spektren. , 1994, , 117-190.		0
50	Spezielle Themen. , 1994, , 249-299.		0
51	Atomic Spectra. Advanced Texts in Physics, 1998, , 121-197.	0.5	0
52	Simple Reactions. Graduate Texts in Physics, 2017, , 287-401.	0.2	0
53	Atomic Spectra. Graduate Texts in Physics, 2017, , 159-286.	0.2	0
54	Review of Quantum Mechanics. Graduate Texts in Physics, 2017, , 1-92.	0.2	0