Werner Scheid

List of Publications by Year
in descending order

123 papers	3,370 citations	136950 32 h-index	155660 55 g-index
123 all docs	123 docs citations	123 times ranked	945 citing authors

#	ARTICLE	IF	CITATIONS
1	A method for solving the quantum inverse scattering problem for coupled channels at fixed energy. International Journal of Modern Physics E, 2016, 25, 1650094.	1.0	0
2	Quantum inversion with elastic phase shifts to discrete different energies. International Journal of Modern Physics E, 2014, 23, 1450077.	1.0	0
3	DISCUSSION OF THE CENTER OF MASS MOTION IN A SYSTEM WITH THREE DEGREES OF FREEDOM. International Journal of Modern Physics E, 2013, 22, 1350043.	1.0	0
4	Theoretical study of the synthesis of superheavy nuclei with $Z=119$ and 120 in heavy-ion reactions with trans-uranium targets. Physical Review C, 2012, 85, .	2.9	124
5	Relating the probability distribution of a de Broglie wave to its phase velocity. Science Bulletin, 2012, 57, 1494-1498.	1.7	4
6	Dynamics of dinuclear system formation and its decay in heavy ion collisions. Journal of Physics: Conference Series, 2011, 282, 012010.	0.4	7
7	DISCUSSION OF QUANTUM INVERSE SCATTERING PROBLEMS FOR COUPLED CHANNELS AT FIXED ENERGY. International Journal of Modern Physics E, 2011, 20, 1765-1773.	1.0	2
8	Production mechanism of superheavy nuclei in massive fusion reactions. Nuclear Physics A, 2010, 834, 384c-387c.	1.5	1
9	Production of Superheavy Nuclei in Massive fusion reactions. Nuclear Physics A, 2010, 834, 353c-356c.	1.5	8
10	Development of a Cox–Thompson inverse scattering method to charged particles. Journal of Physics G: Nuclear and Particle Physics, 2010, 37, 025101.	3.6	2
11	Dynamical nucleus-nucleus potential at short distances. Physical Review C, 2010, 81, .	2.9	16
12	A NEW BARRIER PENETRATION FORMULA AND ITS APPLICATION TO α-DECAY HALF-LIVES. International Journal of Modern Physics E, 2010, 19, 359-370.	1.0	42
13	Study of the Cox–Thompson inverse scattering method with a Coulomb potential. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 225302.	2.1	1
14	Acceleration of electrons and electromagnetic fields of highly intense laser pulses. Laser and Particle Beams, 2010, 28, 195-201.	1.0	17
15	COMPARISON OF THE FUSION-FISSION AND QUASIFISSION MECHANISMS IN HEAVY-ION COLLISIONS. International Journal of Modern Physics E, 2009, 18, 841-849.	1.0	6
16	Production of heavy and superheavy nuclei in massive fusion reactions. Nuclear Physics A, 2009, 816, 33-51.	1.5	62
17	Non-Markovian master equation for a system of Fermions interacting with an electromagnetic field. Annals of Physics, 2008, 323, 1168-1190.	2.8	8
18	QUANTUM INVERSE SCATTERING PROBLEM FOR COUPLED CHANNELS. Modern Physics Letters B, 2008, 22, 2241-2256.	1.9	0

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19	Fusion-fission reactions with a modified Woods-Saxon potential. Physical Review C, 2008, 77, .	2.9	48
20	Quasi-elastic scattering and fusion with a modified Woods-Saxon potential. Physical Review C, 2008, 78, .	2.9	38
21	Systematic study of fusion barriers. Journal of Physics G: Nuclear and Particle Physics, 2007, 34, 1935-1953.	3.6	22
22	Quantum interference between nuclear excitation by electron capture and radiative recombination. Physical Review A, 2007, 75, .	2.5	24
23	Formation of superheavy nuclei in cold fusion reactions. Physical Review C, 2007, 76, .	2.9	124
24	Interatomic-potential inversion from ultracold Bose-gas collision. Nuclear Physics A, 2007, 790, 767c-770c.	1.5	1
25	Superradiant dissipative tunneling in a double pâ€"iâ€"n semiconductor heterostructure with thermal injection of electrons. Physica A: Statistical Mechanics and Its Applications, 2007, 374, 203-210.	2.6	3
26	Theory of nuclear excitation by electron capture for heavy ions. Physical Review A, 2006, 73, .	2.5	53
27	APPEARANCE OF FAST-FISSION AND QUASI-FISSION IN REACTIONS WITH MASSIVE NUCLEI. Modern Physics Letters A, 2005, 20, 391-405.	1.2	47
28	Coupled channel inverse scattering problem at fixed energy in Born approximation. Journal of Physics A, 2004, 37, 8721-8734.	1.6	2
29	Calculations for electron transitions on a three-dimensional lattice in relativistic heavy-ion collisions. Physical Review A, 2004, 70, .	2.5	16
30	Angular distribution and correlation of photons emitted during dielectronic recombination into hydrogen-like ions. Nuclear Instruments & Methods in Physics Research B, 2003, 205, 386-390.	1.4	10
31	Closed-shell effects from the stability and instability of nuclei against cluster decays in the mass regions 130â€"158 and 180â€"198. Physical Review C, 2003, 68, .	2.9	15
32	Cluster decay of hot56Ni*formed in the32S+24Mgreaction. Physical Review C, 2003, 68, .	2.9	91
33	Solution of the CoxÂThompson inverse scattering problem using finite set of phase shifts. Journal of Physics A, 2003, 36, 4815-4826.	1.6	10
34	Coupled channel calculations for electronÂpositron pair production in collisions of heavy ions. Journal of Physics B: Atomic, Molecular and Optical Physics, 2003, 36, 1397-1407.	1.5	12
35	Emission of intermediate mass fragments from hot116Ba* formed in low-energy58Ni +58Ni reaction. Journal of Physics G: Nuclear and Particle Physics, 2003, 29, 2703-2719.	3.6	84
36	Decay of excited 116Ba* formed in the 58Ni+58Ni reaction via the emission of intermediate mass fragments. Physical Review C, 2002, 65, .	2.9	65

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37	The cluster–core model for the halo structure of light nuclei at the drip lines. Journal of Physics G: Nuclear and Particle Physics, 2002, 28, 699-712.	3.6	44
38	Effects of nonlocality in time of interactions of an atom with its surroundings on the broadening of spectral lines of atoms. Physics Letters, Section A: General, Atomic and Solid State Physics, 2002, 306, 1-9.	2.1	21
39	EFFECT OF SHORT-RANGE NUCLEAR CORRELATIONS ON THE (Î³,p) CROSS SECTIONS FOR 208Pb IN A PARTICLE-HOLE MODEL. International Journal of Modern Physics E, 2001, 10, 83-89.	1.0	1
40	The halo structure of neutron-drip line nuclei: (neutron) cluster-core model. Journal of Physics G: Nuclear and Particle Physics, 2000, 26, L23-L32.	3.6	30
41	Cold fission versus exotic cluster decay in234,236,238U nuclei. Journal of Physics G: Nuclear and Particle Physics, 2000, 26, 1373-1388.	3.6	9
42	alpha-nucleus structure in fusion-fission and cluster decay modes of56Ni formed in heavy-ion reactions. Journal of Physics G: Nuclear and Particle Physics, 2000, 26, L45-L58.	3.6	31
43	Super-asymmetric Cold Fission and Exotic Cluster-decay Processes. , 1999, , 804-826.		0
44	Neutron Drip-line Nuclei â€" Their Halo Structure, Synthesis, and Decay via Cluster Emissions. , 1999, , 1050-1073.		0
45	On the absence of an alpha-nucleus structure in a two-centre shell model. Journal of Physics G: Nuclear and Particle Physics, 1999, 25, L47-L53.	3.6	15
46	A new treatment of the fermion doubling problem. Physics Letters, Section A: General, Atomic and Solid State Physics, 1999, 254, 337-340.	2.1	5
47	Stability and instability of nuclei in the mass regionA= 68-82 based on exotic cluster decay studies. Journal of Physics G: Nuclear and Particle Physics, 1999, 25, 1089-1097.	3.6	8
48	Angular distribution of radiation emitted after resonant transfer and excitation. Journal of Physics B: Atomic, Molecular and Optical Physics, 1998, 31, 4645-4654.	1.5	18
49	Non-perturbative coupled harmonic oscillators description of charge and mass correlations in fission yields of. Journal of Physics G: Nuclear and Particle Physics, 1998, 24, 2119-2132.	3.6	0
50	The modified Newton–Sabatier method for the coupled channel inverse scattering problem with charged particles at fixed energy. Journal of Mathematical Physics, 1998, 39, 3061-3072.	1.1	6
51	Photo recombination on highly charged few-electron uranium ions. Journal of Physics B: Atomic, Molecular and Optical Physics, 1997, 30, 5259-5270.	1.5	35
52	Structural Configurations in an Extended Orbiting Cluster Model for Molecular Resonance States. International Journal of Modern Physics E, 1997, 06, 259-274.	1.0	46
53	Fixed-Energy Inversion of Polarisation-Corrected Electron-Atom Scattering Phase-Shifts into Effective Potentials. Lecture Notes in Physics, 1997, , 156-168.	0.7	0
54	The Inverse Scattering Problem for Coupled Channels with the Modified Newton-Sabatier Method. Lecture Notes in Physics, 1997, , 98-111.	0.7	0

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55	Molecular states in the equator-equator orientation of two oblately deformedC12nuclei. Physical Review C, 1996, 53, 322-333.	2.9	6
56	Neutron-halo nuclei in cold synthesis and cluster decay of heavy nuclei:Z=104 nucleus as an example. Physical Review C, 1995, 51, 2623-2629.	2.9	7
57	Conceptual evaluation of a TeV electron acceleration for high luminosity using laser interaction in vacuum. AIP Conference Proceedings, 1994, , .	0.4	3
58	C12+12C elastic scattering potentials obtained by unifying phase-shift analysis with the modified Newton-Sabatier inverse method. Physical Review C, 1994, 49, 2608-2617.	2.9	13
59	Spin-dependent generalized collective model in relation to thej=3/2 interacting boson fermion model. Physical Review C, 1994, 50, 812-817.	2.9	4
60	Acceleration of electrons by intense laser pulses in vacuum. Physics Letters, Section A: General, Atomic and Solid State Physics, 1994, 186, 189-192.	2.1	27
61	Production of Electron-Positron Pairs in Atomic heavy Ion Collisions at Relativistic Energies. NATO ASI Series Series B: Physics, 1994, , 595-606.	0.2	0
62	Nuclear Molecular Phenomena in Heavy Ion Collisions. NATO ASI Series Series B: Physics, 1994, , 407-418.	0.2	0
63	Energy Dependence of the Inverted Scattering Potentials of the 12 C + 12 C System in the Range E cm = 8â€"12 MeV. NATO ASI Series Series B: Physics, 1994, , 419-420.	0.2	0
64	Electron-Positron Pair Creation in Relativistic Atomic Heavy Ion Collisions. NATO ASI Series Series B: Physics, 1994, , 453-464.	0.2	0
65	Density matrix for the damped harmonic oscillator within the Lindblad theory. Journal of Mathematical Physics, 1993, 34, 3887-3900.	1.1	35
66	Instabilities against exotic cluster decays in â€˜â€˜stableâ€™â€™ nuclei withZandNin the neighborhood of spherical and deformed closed shells. Physical Review C, 1993, 47, 561-566.	2.9	53
67	Theory of ions emitted from a plasma by relativistic self-focusing of laser beams. Physical Review A, 1992, 45, 1278-1281.	2.5	40
68	Electron-positron pair creation with capture and ionization in relativistic heavy-ion collisions by the finite-difference method. Physical Review A, 1992, 46, 2607-2612.	2.5	27
69	Acceleration of Electrons by Lasers in Vacuum. , 1992, , 607-624.		0
70	Quasiprobability distributions for open quantum systems within the Lindblad theory. Journal of Mathematical Physics, 1991, 32, 2128-2134.	1.1	20
71	Expansion of the TDHF-density matrix into gaussian phase-space densities and application to atomic collisions. Annals of Physics, 1991, 207, 267-281.	2.8	0
72	Energy and angular distribution of ions emitted from a plasma after relativistic self-focusing of laser beams. Laser and Particle Beams, 1991, 9, 675-690.	1.0	2

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73	Schematic model based on two-center shell model for neutron sub-Coulomb transfer in colliding deformed and oriented $Mg24$ nuclei. Physical Review C, 1991, 43, 2358-2366.	2.9	2
74	Nonperturbative character of electron-positron pair production in relativistic heavy-ion collisions. Physical Review Letters, 1991, 66, 2613-2616.	7.8	60
75	Reaction calculations for $O17+12C$ including fusion within the molecular particle-core model. Physical Review C, 1991, 43, 1480-1483.	2.9	4
76	LINEARIZED COLLECTIVE SCHRÃ—DINGER EQUATION WITH SPIN-DEPENDENT POTENTIALS FOR SPIN-3/2 NUCLEI AND APPLICATION TO 187,180,191Ir. Modern Physics Letters A, 1991, 06, 3653-3660.	1.2	4
77	Coulomb and photo cross sections for nucleon emission from relativistic 16O projectiles. Nuclear Physics A, 1990, 510, 817-826.	1.5	4
78	Auger rates for dielectronic recombination cross sections with highly charged relativistic heavy ions. Physics Letters, Section A: General, Atomic and Solid State Physics, 1990, 148, 457-462.	2.1	57
79	Linearized SchrÃ¶dinger equation for nuclear quadrupole surface vibrations. Physical Review C, 1990, 42, 262-279.	2.9	1
80	On electron acceleration by plane transverse electromagnetic pulses in vacuum. Laser and Particle Beams, 1989, 7, 315-332.	1.0	39
81	COLLECTIVE SPIN FROM THE LINEARIZATION OF THE SCHRÃ—DINGER EQUATION IN MULTIDIMENSIONAL RIEMANNIAN SPACES USED IN COLLECTIVE NUCLEAR MODELS. International Journal of Modern Physics A, 1989, 04, 4961-4975.	1.5	3
82	Nuclear polarization effects due to classical dynamics of two colliding $U238$ nuclei with frictional forces. Physical Review C, 1989, 40, 1653-1661.	2.9	1
83	Cross sections for photons produced in the stopping phase in relativistic heavy-ion collisions. Nuclear Physics A, 1989, 504, 864-874.	1.5	2
84	Coulomb and photo cross sections for nucleon emission by relativistic heavy ions and application to 40Ar on 89Y. Nuclear Physics A, 1989, 493, 583-596.	1.5	4
85	The inverse scattering problem in nuclear heavy-ion physics at fixed angular momentum with bound states. Nuclear Physics A, 1989, 499, 200-208.	1.5	1
86	The inversion procedure for nuclear scattering problems from phase shifts at fixed angular momentum. Nuclear Physics A, 1988, 485, 173-180.	1.5	2
87	Trajectory method for time-dependent Thomas-Fermi equations and application to Ar atoms in laser fields. Physics Letters, Section A: General, Atomic and Solid State Physics, 1988, 134, 57-61.	2.1	10
88	Lepton-pair production by brensstrahlung in central relativistic heavy-ion collisions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1988, 207, 366-370.	4.1	8
89	Description of nuclear molecular resonances in 24Mg+24Mg with the two-center shell model and the neck degree of freedom. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1988, 202, 26-30.	4.1	20
90	Analytical calculation of relativistic self-focusing length in the WKB approximation. Journal of the Optical Society of America B: Optical Physics, 1988, 5, 2029.	2.1	37

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91	Semiclassical theory of sub-Coulomb neutron transfer in collisions of deformed heavy ions and its application to the238U+238U reaction. Physical Review C, 1988, 37, 1502-1510.	2.9	8
92	COLLECTIVE SPIN BY LINEARIZATION OF THE SCHRÃ—DINGER EQUATION FOR NUCLEAR COLLECTIVE MOTION. Modern Physics Letters A, 1988, 03, 859-866.	1.2	6
93	Inelastic excitation and neutron transfer in theâˆ'1313C scattering with the molecular particle-core model. Physical Review C, 1987, 36, 647-656.	2.9	18
94	Two-center shell model for deformed and arbitrarily oriented nuclei. Physical Review C, 1987, 35, 2146-2155.	2.9	16
95	Molecular single-particle effects in the12C+17,18O and13C+17O reactions. Physical Review C, 1987, 36, 2341-2348.	2.9	17
96	Classical dynamical polarization effects due to Coulomb potential between deformed nuclei. Physical Review C, 1987, 36, 1232-1234.	2.9	4
97	Frictional forces for deep inelastic heavy ion collisions of deformed nuclei and application to 238U on 238U. Nuclear Physics A, 1987, 468, 59-92.	1.5	21
98	Application of the modified Newton method to the inversion of elastic 12C+12C phases at Ec.m. = 18.5 MeV. Nuclear Physics A, 1987, 466, 157-167.	1.5	17
99	Solution of the TDHF equation for atomic collisions by expanding the one-particle density matrix into gaussian matrices. Physics Letters, Section A: General, Atomic and Solid State Physics, 1987, 126, 103-106.	2.1	3
100	Nonperturbative Treatment of Excitation and Ionization inU92++U91+Collisions at 1 GeV/amu. Physical Review Letters, 1986, 56, 2016-2019.	7.8	36
101	Potential barriers and Landau-Zener promotion in the inelastic excitation ofO17byC13ions. Physical Review C, 1986, 33, 1674-1678.	2.9	13
102	Classical treatment of deep inelastic collisions between deformed nuclei and application to 238U on 238U. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1985, 162, 265-268.	4.1	15
103	Nuclear molecular barrier resonances in the scattering ofSi28onSi28studied by coupled channel calculations. Physical Review C, 1984, 29, 864-867.	2.9	11
104	Molecular Interpretation of the Neutron Transfer in the ReactionC13(C13,C12)C14within the Two-Center Shell Model. Physical Review Letters, 1983, 51, 366-369.	7.8	17
105	Molecular single-particle excitations in heavy-ion reactions involving deformed light nuclei. Physical Review C, 1982, 25, 1902-1914.	2.9	15
106	Theory of nuclear molecular states. Lecture Notes in Physics, 1982, , 337-357.	0.7	3
107	Heavy-ion potentials for ellipsoidally deformed nuclei and application to the system 238U + 238U. Nuclear Physics A, 1982, 388, 381-401.	1.5	18
108	Solution of the time-dependent SchrÃ¶dinger equation with a trajectory method and application to H+-H scattering. Physics Letters, Section A: General, Atomic and Solid State Physics, 1982, 88, 33-36.	2.1	24

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109	Signatures of molecular single-particle states by level crossings in heavy ion collisions. Physical Review C, 1980, 21, 958-962.	2.9	52
110	Modification of the Newton Method for the Inverse-Scattering Problem at Fixed Energy. Physical Review Letters, 1980, 44, 1299-1302.	7.8	72
111	Theory of nucleon transfer in the dynamical two-center shell model. Physical Review C, 1979, 20, 188-200.	2.9	17
112	Numerical Solution of the Time-Dependent Schrödinger Equation and Application toH+-H. Physical Review Letters, 1979, 43, 512-515.	7.8	49
113	Theory of molecular collective excitation in the scattering of identical nuclei. Nuclear Physics A, 1979, 325, 283-304.	1.5	18
114	Molecular particle-core model and its application toC13-C13scattering. Physical Review C, 1978, 18, 265-283.	2.9	28
115	Quasimolecular states in theC12-C12system. Physical Review C, 1977, 16, 2276-2290.	2.9	27
116	Possibility of Detecting Density Isomers in High-Density Nuclear Mach Shock Waves. Physical Review Letters, 1976, 36, 88-91.	7.8	147
117	Theory of Charge Dispersion in Nuclear Fission. Physical Review Letters, 1975, 35, 353-356.	7.8	198
118	Nuclear Shock Waves in Heavy-Ion Collisions. Physical Review Letters, 1974, 32, 741-745.	7.8	362
119	Spurious rotational states in deformed nuclear shell models. Annals of Physics, 1972, 69, 375-399.	2.8	9
120	Quasimolecular Structure in ElasticO16+O16Scattering. Physical Review Letters, 1970, 25, 176-180.	7.8	152
121	Quasimolecular nuclear optical potentials. Zeitschrift Für Physik A, 1969, 226, 364-394.	0.9	106
122	Theory of projection of spurious center of mass and rotational states from many-body nuclear wave functions. Annals of Physics, 1968, 48, 493-525.	2.8	34
123	Ion-Ion Potentials and the Compressibility of Nuclear Matter. Physical Review Letters, 1968, 21, 1479-1482.	7.8	107