

# Hanno EssÃ©n

## List of Publications by Year in descending order

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55  
papers

557  
citations

687363

13  
h-index

677142

22  
g-index

55  
all docs

55  
docs citations

55  
times ranked

260  
citing authors

#	ARTICLE	IF	CITATIONS
1	The physics of the born-oppenheimer approximation. International Journal of Quantum Chemistry, 1977, 12, 721-735.	2.0	65
2	An RKR-like inversion procedure for bound-continuum transition intensities. Journal of Chemical Physics, 1983, 78, 6732-6740.	3.0	58
3	Force on a spinning sphere moving in a rarefied gas. Physics of Fluids, 2003, 15, 736-741.	4.0	43
4	Quantization and independent coordinates. American Journal of Physics, 1978, 46, 983-988.	0.7	40
5	Meissner effect, diamagnetism, and classical physics—a review. American Journal of Physics, 2012, 80, 164-169.	0.7	38
6	Average angular velocity. European Journal of Physics, 1993, 14, 201-205.	0.6	26
7	Darwin magnetic interaction energy and its macroscopic consequences. Physical Review E, 1996, 53, 5228-5239.	2.1	25
8	MAGNETIC FIELD AND CURRENT ARE ZERO INSIDE IDEAL CONDUCTORS. Progress in Electromagnetics Research B, 2011, 27, 187-212.	1.0	23
9	Periodic table of the elements and the Thomas-Fermi atom. International Journal of Quantum Chemistry, 1982, 21, 717-726.	2.0	21
10	Magnetism of matter and phase-space energy of charged particle systems. Journal of Physics A, 1999, 32, 2297-2314.	1.6	18
11	From least action in electrodynamics to magnetomechanical energy—a review. European Journal of Physics, 2009, 30, 515-539.	0.6	18
12	Electrodynamics of Perfect Conductors. International Journal of Theoretical Physics, 2013, 52, 1701-1705.	1.2	15
13	Phase-space energy of charged particles with negligible radiation: Proof of spontaneous formation of magnetic structures and new effective forces. Physical Review E, 1997, 56, 5858-5865.	2.1	13
14	Magnetic fields, rotating atoms and the origin of diamagnetism. Physica Scripta, 1989, 40, 761-767.	2.5	10
15	Some results on the electrostatic energy of ionic crystals. Canadian Journal of Chemistry, 1996, 74, 885-891.	1.1	10
16	A study of lattice and magnetic interactions of conduction electrons. Physica Scripta, 1995, 52, 388-394.	2.5	9
17	Hamiltonian of a homogeneous two-component plasma. Physical Review E, 2004, 69, 036404.	2.1	9
18	Turning points of the spherical pendulum and the golden ratio. European Journal of Physics, 2009, 30, 427-432.	0.6	9

#	ARTICLE	IF	CITATIONS
19	Calculation of coordinates from molecular geometric parameters and the concept of a geometric calculator. <i>Computers &amp; Chemistry</i> , 1996, 20, 389-395.	1.2	8
20	Electrodynamic model connecting superconductor response to magnetic field and to rotation. <i>European Journal of Physics</i> , 2005, 26, 279-285.	0.6	8
21	The comfortable roller coaster – on the shape of tracks with a constant normal force. <i>European Journal of Physics</i> , 2010, 31, 1307-1317.	0.6	8
22	The exact Darwin Lagrangian. <i>Europhysics Letters</i> , 2007, 79, 60002.	2.0	7
23	MAGNETIC ENERGY OF SURFACE CURRENTS ON A TORUS. <i>Progress in Electromagnetics Research B</i> , 2013, 46, 357-378.	1.0	7
24	Magnetic dynamics of simple collective modes in a two-sphere plasma model. <i>Physics of Plasmas</i> , 2005, 12, 122101.	1.9	6
25	General relativity as a conformally invariant scalar gauge field theory. <i>International Journal of Theoretical Physics</i> , 1990, 29, 183-187.	1.2	5
26	Static deformation of a heavy spring due to gravity and centrifugal force. <i>European Journal of Physics</i> , 2010, 31, 603-609.	0.6	5
27	Drift velocity of charged particles in magnetic fields and its relation to the direction of the source current. <i>European Physical Journal D</i> , 2016, 70, 1.	1.3	5
28	Space-time curvature and the sources of gravity. <i>European Journal of Physics</i> , 1987, 8, 182-185.	0.6	4
29	The skipping rope curve. <i>European Journal of Physics</i> , 2007, 28, 241-247.	0.6	4
30	Classical diamagnetism, magnetic interaction energies, and repulsive forces in magnetized plasmas. <i>Europhysics Letters</i> , 2011, 94, 47003.	2.0	4
31	Vibration – rotation coupling in polyatomic molecules; additions to the eckart conditions. <i>Chemical Physics</i> , 1979, 44, 373-388.	1.9	3
32	The cat landing on its feet revisited or angular momentum conservation and torque – free rotations of nonrigid mechanical systems. <i>American Journal of Physics</i> , 1981, 49, 756-758.	0.7	3
33	On the general transformation from molecular geometric parameters to cartesian coordinates. <i>Journal of Computational Chemistry</i> , 1983, 4, 136-141.	3.3	3
34	Note on the relativistic elastic head-on collision. <i>European Journal of Physics</i> , 2002, 23, 565-568.	0.6	3
35	Magnetic field expulsion from an infinite cylindrical superconductor. <i>Physica C: Superconductivity and Its Applications</i> , 2014, 497, 54-57.	1.2	3
36	Empirical and theoretical evidence for gravitational polarization of matter. <i>Physica Scripta</i> , 1992, 45, 22-25.	2.5	2

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37	A simple mechanical model for the shape of the Earth. European Journal of Physics, 1996, 17, 131-135.	0.6	2
38	Systems with preferred spin direction. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 1999, 455, 933-941.	2.1	2
39	Magnetic energy per particle in constant current density. Europhysics Letters, 2008, 84, 20011.	2.0	2
40	A simple model for the falling cat problem. European Journal of Physics, 2018, 39, 035004.	0.6	2
41	An exact formula for electromagnetic momentum in terms of the charge density and the Coulomb gauge vector potential. European Journal of Physics, 2018, 39, 025202.	0.6	2
42	An impacting linear three body system. European Journal of Physics, 2018, 39, 015001.	0.6	2
43	Effective shell charge of electrons on a sphere. Theoretica Chimica Acta, 1983, 63, 365-376.	0.8	1
44	Interior Schwarzschild Problem and Its Integration. International Journal of Theoretical Physics, 1998, 37, 875-889.	1.2	1
45	The field outside a spherical 2l-pole distribution is a pure 2l-pole field. American Journal of Physics, 1998, 66, 163-163.	0.7	1
46	On the equilateral triangle solution to the three-body problem. European Journal of Physics, 2000, 21, 579-590.	0.6	1
47	Magnetohydrodynamic self-consistent exact helical solutions. Journal of Physics A, 2004, 37, 9831-9840.	1.6	1
48	Relativistic version of the Feynmanâ€“Dysonâ€“Hughes derivation of the Lorentz force law and Maxwell's homogeneous equations. European Journal of Physics, 2016, 37, 055201.	0.6	1
49	THE MAGNETIC INTERACTION ENERGY BETWEEN AN INFINITE SOLENOID AND A PASSING POINT CHARGE. Progress in Electromagnetics Research M, 2018, 71, 145-156.	0.9	1
50	A new completely separable molecule-like four-body system. Physics Letters, Section A: General, Atomic and Solid State Physics, 1988, 133, 56-58.	2.1	0
51	Response to â€œComment on â€“Force on a spinning sphere moving in a rarefied gasâ€™ and â€“On the inverse Magnus effect in free molecular flowâ€™â€•[Phys. Fluids16, 3832 (2004)]. Physics of Fluids, 2004, 16, 3833-3833.	4.0	0
52	A variational proof of Thomson's theorem. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 2703-2705.	2.1	0
53	Reply to Comment on â€“An impacting linear three body systemâ€™. European Journal of Physics, 2018, 39, 038002.	0.6	0
54	On a tendency of the magnetic field to maximise its energy. European Journal of Physics, 2019, 40, 035202.	0.6	0

#	ARTICLE	IF	CITATIONS
55	Difference in Coulomb Electrostatic Energy for Localized versus Delocalized Electrons and Electron Pairsâ€”Exact Results Based on Cubic Charge Distributions. AppliedMath, 2022, 2, 131-142.	0.6	0