Ann-Marie Pendrill

List of Publications by Year
in descending order

126	3,006	172457	175258
papers	citations	29 h-index	52 g-index

130	130	130	1398
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Diagonalisation of the Dirac Hamiltonian as a basis for a relativistic many-body procedure. Journal of Physics B: Atomic and Molecular Physics, 1986, 19, 2799-2815.	1.6	364
2	Isotope shift in the electron affinity of chlorine. Physical Review A, 1995, 51, 231-238.	2.5	174
3	Numerical Many-Body Perturbation Calculations on Be-like Systems Using a Multi-Configurational Model Space. Physica Scripta, 1980, 21, 351-356.	2.5	144
4	Beyond velocity and acceleration: jerk, snap and higher derivatives. European Journal of Physics, 2016, 37, 065008.	0.6	125
5	Nuclear magnetization distribution radii determined by hyperfine transitions in the1slevel of H-like ions185Re74+and187Re74+. Physical Review A, 1998, 57, 879-887.	2.5	119
6	Hyperfine structure of hydrogenlike thallium isotopes. Physical Review A, 2001, 64, .	2.5	102
7	Corrections to the beryllium ground-state energy. Physical Review A, 1992, 45, 1493-1496.	2.5	86
8	Calculation of aP- andT-Nonconserving Weak Interaction in Xe and Hg with Many-Body Perturbation Theory. Physical Review Letters, 1985, 54, 1153-1155.	7.8	77
9	Isotope shifts and hyperfine structure in the 369.4-nm 6s-6p1/2resonance line of singly ionized ytterbium. Physical Review A, 1994, 49, 3351-3365.	2.5	70
10	Need for remeasurements of nuclear magnetic dipole moments. Physical Review A, 1998, 58, 3611-3618.	2.5	63
11	Isotope shifts and nuclear-charge radii in singly ionizedCa40â€“48. Physical Review A, 1992, 45, 4675-4681.	2.5	62
12	Comment on relativistic wave equations and negative-energy states. Physical Review A, 1986, 33, 4426-4429.	2.5	60
13	Self-consistent treatment of the Breit interaction, with application to the electric dipole moment in thallium. Journal of Physics B: Atomic, Molecular and Optical Physics, 1989, 22, 2447-2464.	1.5	60
14	Beryllium atom reinvestigated: A comparison between theory and experiment. Physical Review A, 1991, 43, 3355-3364.	2.5	59
15	Further analysis of the complete Breit interaction. Physical Review A, 1989, 39, 3794-3802.	2.5	50
16	Parity non-conservation in caesium. Journal De Physique, 1985, 46, 1949-1959.	1.8	47
17	Calculations of atomic electric dipole moments. Physica Scripta, 1987, 36, 444-452.	2.5	47
18	Matrix elements in the coupled-cluster approach - with application to low-lying states in Li. Physica Scripta, 1990, 41, 329-347.	2.5	47

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19	Parity non-conservation and electric dipole moments in caesium and thallium. Journal of Physics B: Atomic, Molecular and Optical Physics, 1990, 23, 3417-3436.	1.5	46
20	The Hyperfine Structure in the Alkaline-Earth Ions. Physica Scripta, 1985, 31, 169-172.	2.5	44
21	Magnetic Moment Distributions in Tl Nuclei. Physical Review Letters, 1995, 74, 2184-2187.	7.8	42
22	Hyperfine structure of the4s,4p, and3dstates inCa+evaluated by many-body perturbation theory. Physical Review A, 1984, 30, 712-721.	2.5	41
23	Reanalysis of the isotope shift and nuclear charge radii in radioactive potassium isotopes. Journal of Physics B: Atomic, Molecular and Optical Physics, 1990, 23, 1749-1761.	1.5	39
24	QED procedure applied to the quasidegenerate fine-structure levels of He-like ions. Physical Review A, 2001, 64, .	2.5	38
25	Relativistic Calculations of Core-Polarisation Effects on the Hyperfine Structure in the Alkalis. Physica Scripta, 1983, 27, 291-296.	2.5	37
26	Calculations of isotope shifts in caesium and thallium using many-body perturbation theory. Journal of Physics B: Atomic, Molecular and Optical Physics, 1991, 24, 1193-1207.	1.5	36
27	Comments on the hyperfine structure of the4D2state of rubidium. Physical Review A, 1977, 15, 2123-2125.	2.5	31
28	Infrared cameras in science education. Infrared Physics and Technology, 2016, 75, 150-152.	2.9	30
29	Acceleration and rotation in a pendulum ride, measured using an iPhone 4. Physics Education, 2011, 46, 676-681.	0.5	29
30	A relativistic pair equation projected onto positive energy states. Journal of Physics B: Atomic and Molecular Physics, 1987, 20, 1679-1696.	1.6	28
31	Calculation of the isotope shift in Na. Zeitschrift FÃ¼r Physik A, 1983, 309, 277-284.	1.4	27
32	Rollercoaster loop shapes. Physics Education, 2005, 40, 517-521.	0.5	26
33	Radiative lifetimes of the 6p 2 P 1 2/0 and 6p 2 P 3 2/0 levels in Yb II. Zeitschrift FÃ¼r Physik D-Atoms Molecules and Clusters, 1993, 28, 283-284.	1.0	25
34	Doppler free ?dark resonances? for hyperfine measurements and isotope shifts in Ca+ isotopes in a Paul trap. Zeitschrift FÃ¼r Physik D-Atoms Molecules and Clusters, 1995, 34, 227-232.	1.0	24
35	Classical physics experiments in the amusement park. Physics Education, 2002, 37, 507-511.	0.5	24
36	Jerk within the Context of Science and Engineeringâ€"A Systematic Review. Vibration, 2020, 3, 371-409.	1.9	24

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37	Calculations of the parity non-conserving 6s ? 7s transition in caesium. Theoretica Chimica Acta, 1991, 80, 257-288.	0.8	23
38	Swings and slides. Physics Education, 2005, 40, 527-533.	0.5	23
39	Analysis of the atomic fine structure, using a nonrelativistic many-body and a relativistic central-field approach. Physical Review A, 1982, 26, 3249-3267.	2.5	22
40	Isotope shift and nuclear charge radii of barium isotopes. Journal of Physics B: Atomic, Molecular and Optical Physics, 1992, 25, L551-L559.	1.5	21
41	Velocity, acceleration, jerk, snap and vibration: forces in our bodies during a roller coaster ride. Physics Education, 2020, 55, 065012.	0.5	21
42	Hyperfine structure of the7pstate in Fr. Physical Review A, 1983, 27, 3332-3333.	2.5	20
43	Specific mass shift of the (4s4p)1,3P states in calcium studied with many-body perturbation theory. Physical Review A, 1985, 31, 58-66.	2.5	20
44	Hyperfine structure in the 4d states of Rb-like Sr. Journal of Physics B: Atomic, Molecular and Optical Physics, 2002, 35, 917-924.	1.5	20
45	The equivalence principle comes to schoolâ€"falling objects and other middle school investigations. Physics Education, 2014, 49, 425-430.	0.5	19
46	Limit on a P - and T -Violating Electron-Nucleon Interaction. Europhysics Letters, 1991, 15, 155-160.	2.0	17
47	Stopping a roller coaster train. Physics Education, 2012, 47, 728-735.	0.5	17
48	Four Decades of Hyperfine Anomalies. Advances in Quantum Chemistry, 1998, 30, 343-360.	0.8	16
49	Smartphones and Newtonâ€™s first law in escalators and roller coasters. Physics Education, 2020, 55, 035016.	0.5	16
50	Isotope shifts and energies of the 1s 2p states in helium. Zeitschrift FÃ¼r Physik A, 1984, 316, 265-273.	1.4	15
51	(2p2)1Sstate of beryllium. Physical Review A, 1996, 53, 3151-3156.	2.5	15
52	Thallium hyperfine anomaly. , 2000, 127, 347-352.		15
53	Free fall and harmonic oscillations: analyzing trampoline jumps. Physics Education, 2015, 50, 64-70.	0.5	15
54	Rotating swingsâ€"a theme with variations. Physics Education, 2016, 51, 015014.	0.5	15

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55	Programming and its affordances for physics education: A social semiotic and variation theory approach to learning physics. Physical Review Physics Education Research, 2020, 16, .	2.9	15
56	Hyperfine structure of heavy hydrogen-like ions. Nuclear Instruments & Methods in Physics Research B, 2003, 205, 62-65.	1.4	14
57	Students making sense of motion in a vertical roller coaster loop. Physics Education, 2019, 54, 065017.	0.5	14
58	Convergence of relativistic perturbation theory for the 1s2pstates in low-Zheliumlike systems. Physical Review A, 1995, 51, 3630-3635.	2.5	13
59	Acceleration in one, two, and three dimensions in launched roller coasters. Physics Education, 2008, 43, 483-491.	0.5	13
60	Pendulum rides, rotations and the Coriolis effect. Physics Education, 2018, 53, 045017.	0.5	13
61	A rollercoaster viewed through motion tracker data. Physics Education, 2005, 40, 522-526.	0.5	12
62	Motion on an inclined plane and the nature of science. Physics Education, 2014, 49, 180-186.	0.5	12
63	Gamified physics challenges for teachers and the public. Physics Education, 2020, 55, 045014.	0.5	12
64	Liquid in accelerated motion. Physics Education, 2015, 50, 648-650.	0.5	11
65	Experimental and theoretical investigation of the isotope shift of the 4D level in atomic potassium. Zeitschrift FÃ¼r Physik A, 1984, 318, 285-290.	1.4	10
66	Electron correlation effects in the 4f14shell. International Journal of Quantum Chemistry, 1985, 27, 665-675.	2.0	10
67	Charge radii in francium isotopes. Molecular Physics, 2000, 98, 1201-1204.	1.7	10
68	How do we know that the Earth spins around its axis?. Physics Education, 2008, 43, 158-164.	0.5	10
69	Student investigations of the forces in a roller coaster loop. European Journal of Physics, 2013, 34, 1379-1389.	0.6	10
70	Up and down, light and heavy, fast and slowâ€"but where?. Physics Education, 2019, 54, 025017.	0.5	10
71	The Specific Mass Shift of the Ionisation Energy in Ne Calculated by Many-Body Perturbation Theory. Physica Scripta, 1983, 28, 469-471.	2.5	9
72	Aerodynamics in the amusement park: interpreting sensor data for acceleration and rotation. Physics Education, 2016, 51, 055015.	0.5	8

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73	Isotopes through the looking glass. , 2000, 127, 41-48.		7
74	Force, acceleration and velocity during trampoline jumpsâ€"a challenging assignment. Physics Education, 2017, 52, 065021.	0.5	7
75	Balls rolling down a playground slide: What factors influence their motion?. Physics Education, 2021, 56, 015005.	0.5	7
76	Correlation and Relativistic Effects on LandÃ©gJFactors of Atomic Ions. Hyperfine Interactions, 2003, 146/147, 127-131.	0.5	6
77	Rutherford visits middle school: a case study on how teachers direct attention to the nature of science through a storytelling approach. Physics Education, 2019, 54, 045002.	0.5	6
78	Mathematics, measurement and experience of rotations around three axes. European Journal of Physics, 2019, 40, 015003.	0.6	6
79	Forces in circular motion: discerning student strategies. Physics Education, 2020, 55, 045006.	0.5	6
80	Dirac-Hartree-Fock Calculations for Bismuth Including the Parity-Violating Operator in the Potential. Physica Scripta, 1980, 21, 293-294.	2.5	5
81	Comparisons between different calculations of PNC in Cs and Tl. Physica Scripta, 1987, 36, 122-128.	2.5	5
82	PNC Equations of Motion method. Physica Scripta, 1987, 36, 481-484.	2.5	5
83	Many-body perturbation theory in atomic structure calculations. Physica Scripta, 1993, T46, 102-109.	2.5	5
84	Free fall and the equivalence principle revisited. Physics Education, 2017, 52, 065002.	0.5	5
85	Contemporary science as context for teaching nature of science: teachersâ€™ development of popular science articles as a teaching resource. Physics Education, 2019, 54, 055008.	0.5	5
86	Forces on hockey players: vectors, work, energy and angular momentum. European Journal of Physics, 2019, 40, 065005.	0.6	5
87	Att utgÃ¥ frÃ¥n frÃ¥gor och situationer i fÃ¶rskolans vardag: Vilket naturvetenskapligt innehÃ¥ll kan det leda till? Starting from questions and everyday situations in preschool: What kind of science content could that lead to?. Nordic Studies in Science Education, 2014, 10, 77-89.	0.2	5
88	Virtual reality, video screen shots and sensor data for a large drop tower ride. Physics Education, 2020, 55, 055017.	0.5	5
89	Teachersâ€™ Perceived Requirements for Collaborating with the Surrounding World. Nordic Studies in Science Education, 2012, 8, 227-243.	0.2	4
90	Is the Archimedes principle a law of nature? Discussions in an â€˜extended teacher roomâ€™. Physics Education, 2020, 55, 065025.	0.5	4

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91	Atoms through the looking glass â€“ a relativistic challenge. Canadian Journal of Physics, 2008, 86, 99-109.	1.1	3
92	Achterbahn fahren im Physikunterricht. Physikdidaktik. Physik in Unserer Zeit, 2009, 40, 90-95.	0.0	3
93	Training teachers to use playgrounds in physics teaching. Journal of Physics: Conference Series, 2019, 1286, 012069.	0.4	3
94	Numerical Determination of Non-Relativistic and Relativistic Pair Correlation. , 1989, , 131-160.		3
95	En Delfistudie om lÃrares uppfattning av elevengagemang i NO-undervisningen A Delphi study of teachers views on engagement in the science classroom. Nordic Studies in Science Education, 2019, 15, 128-144.	0.2	3
96	Parity non-conserving effects in atomic systems. Physica Scripta, 1993, T46, 182-183.	2.5	2
97	The Manhattan projectâ€"a part of physics history. Physics Education, 2006, 41, 493-501.	0.5	2
98	Understanding acceleration: An interplay between different mathematics and physics representations. Journal of Physics: Conference Series, 2019, 1286, 012070.	0.4	1
99	Reply to Comment on â€˜Forces on hockey players: vectors, work, energy and angular momentumâ€™. European Journal of Physics, 2021, 42, 028009.	0.6	1
100	Gymnasiets laboratorionsundervisning i fysik â€“ mellan tradition och Ändrade styrdokument. Lumat, 2018, 6, .	0.5	1
101	Gymnasiets laborationsundervisning i fysik â€“ Vad pÃ¥verkar lÃrares val av laborationer?. Lumat, 2019, 7, .	0.5	1
102	Teacher interventions and student strategies for circular motion problems: a matrix representation. Physics Education, 2022, 57, 035003.	0.5	1
103	From skating rink to physics assignmentâ€"viewing a photo from a mechanics perspective. Physics Education, 2022, 57, 055003.	0.5	1
104	Parity Non-Conservation and Pair Correlation in Heavy Atomic Systems. Physica Scripta, 1988, T22, 300-302.	2.5	0
105	The NO-pair equationâ€"Fundamental problems, numerical solutions and applications. AIP Conference Proceedings, 1989, , .	0.4	0
106	Coupled-cluster calculations for atoms. AIP Conference Proceedings, 1991, , .	0.4	0
107	Treatment of atomic quasi-degeneracy in bound-state QED. Application to the 1s2p states of He-like ions. AIP Conference Proceedings, 2001, , .	0.4	0
108	Careers in the Nordic nations. Physics World, 2004, 17, 42-43.	0.0	0

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109	The International Year of Light and Light-based Technologies. Physics Education, 2015, 50, 291-294.	0.5	0
110	Roller coaster loop shapes revisited. Physics Education, 2016, 51, 030106.	0.5	0
111	The cooling of a swedeâ€"part of an EUSO CSI challenge. Physics Education, 2021, 56, 025018.	0.5	0
112	QUASI-DEGENERACY IN BOUND-STATE QED. FINE STRUCTURE OF HELIUMLIKE IONS. , 2003, , .		0
113	Calculation of P- and T-Violating Properties in Atoms and Molecules. , 1992, , 99-156.		0
114	Atomic Spectroscopy as a Probe of Parity Non-Conserving Effects in the Nucleus. NATO ASI Series Series B: Physics, 1992, , 87-92.	0.2	0
115	Teaching with Google Classroom. Educare - Vetenskapliga Skrifter, 2020, , 158-191.	0.2	0
116	Educational Visits to Amusement Parks. , 2021, , 1-26.		0
117	Newton's Laws: Motion and Forces. , 2021, , 1-18.		0
118	Acceleration and Newton's Second Law. , 2021, , 1-34.		0
119	Rotation. , 2021, , 1-18.		0
120	Physics on a Playground. , 2021, , 1-30.		0
121	Circular Motion on a Vertical Plane. , 2021, , 1-30.		0
122	Roller Coasters in Physics Education. , 2021, , 1-30.		0
123	Circular Motion in a Horizontal Plane. , 2021, , 1-22.		0
124	Pendulum Rides. , 2021, , 1-26.		0
125	Technology and Safety. , 2021, , 1-20.		0
126	Illusions. , 2021, , 1-18.		0