

E A Hinds

List of Publications by Year in descending order

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104
papers

7,076
citations

61687

45
h-index

62345

84
g-index

105
all docs

105
docs citations

105
times ranked

3394
citing authors

#	ARTICLE	IF	CITATIONS
1	Methods for measuring the electron's electric dipole moment using ultracold YbF molecules. Quantum Science and Technology, 2021, 6, 014006.	2.6	24
2	New techniques for a measurement of the electron's electric dipole moment. New Journal of Physics, 2020, 22, 053031.	1.2	22
3	Deep Laser Cooling and Efficient Magnetic Compression of Molecules. Physical Review Letters, 2019, 123, 033202.	2.9	58
4	A buffer gas beam source for short, intense and slow molecular pulses. Journal of Modern Optics, 2018, 65, 648-656.	0.6	40
5	Magnetic Trapping and Coherent Control of Laser-Cooled Molecules. Physical Review Letters, 2018, 120, 163201.	2.9	91
6	Laser Cooled YbF Molecules for Measuring the Electron's Electric Dipole Moment. Physical Review Letters, 2018, 120, 123201.	2.9	146
7	An intense, cold, velocity-controlled molecular beam by frequency-chirped laser slowing. New Journal of Physics, 2017, 19, 022001.	1.2	58
8	Molecules cooled below the Doppler limit. Nature Physics, 2017, 13, 1173-1176.	6.5	268
9	Characteristics of a magneto-optical trap of molecules. New Journal of Physics, 2017, 19, 113035.	1.2	54
10	A versatile dual-species Zeeman slower for caesium and ytterbium. Review of Scientific Instruments, 2016, 87, 043109.	0.6	18
11	Production and characterization of a dual species magneto-optical trap of cesium and ytterbium. Review of Scientific Instruments, 2016, 87, 023105.	0.6	27
12	Observing coherence effects in an overdamped quantum system. Nature Communications, 2016, 7, 13933.	5.8	23
13	Low magnetic Johnson noise electric field plates for precision measurement. Review of Scientific Instruments, 2016, 87, 115110.	0.6	5
14	Design and fabrication of diffractive atom chips for laser cooling and trapping. Applied Physics B: Lasers and Optics, 2016, 122, 172.	1.1	25
15	A high quality, efficiently coupled microwave cavity for trapping cold molecules. Journal of Physics B: Atomic, Molecular and Optical Physics, 2015, 48, 045001.	0.6	12
16	Stochastic multi-channel lock-in detection. New Journal of Physics, 2014, 16, 013005.	1.2	4
17	Laser cooling and slowing of CaF molecules. Physical Review A, 2014, 89, .	1.0	238
18	Design for a fountain of YbF molecules to measure the electron's electric dipole moment. New Journal of Physics, 2013, 15, 053034.	1.2	91

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19	Time reversal symmetry violation in the YbF molecule. <i>Hyperfine Interactions</i> , 2013, 214, 119-126.	0.2	2
20	Shaking-induced dynamics of cold atoms in magnetic traps. <i>Physical Review A</i> , 2013, 88, .	1.0	4
21	Is the electron round? Particle physics with cold and ultracold molecular beams. , 2013, , .		0
22	Time reversal symmetry violation in the YbF molecule. , 2013, , 119-126.		0
23	Measurement of the electron's electric dipole moment using YbF molecules: methods and data analysis. <i>New Journal of Physics</i> , 2012, 14, 103051.	1.2	105
24	Traveling-wave deceleration of heavy polar molecules in low-field-seeking states. <i>Physical Review A</i> , 2012, 86, .	1.0	29
25	ICP polishing of silicon for high-quality optical resonators on a chip. <i>Journal of Micromechanics and Microengineering</i> , 2012, 22, 125011.	1.5	9
26	Frank-Condon factors and radiative lifetime of the $A^2\hat{1}1/2\hat{a}^{\infty}X^2\hat{1}\hat{g}^+$ transition of ytterbium monofluoride, YbF. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 19013.	1.3	31
27	Stark deceleration of CaF molecules in strong- and weak-field seeking states. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 18991.	1.3	19
28	Improved measurement of the shape of the electron. <i>Nature</i> , 2011, 473, 493-496.	13.7	584
29	Prospects for using integrated atom-photon junctions for quantum information processing. <i>Quantum Information Processing</i> , 2011, 10, 941-953.	1.0	3
30	Arrays of waveguide-coupled optical cavities that interact strongly with atoms. <i>New Journal of Physics</i> , 2011, 13, 113002.	1.2	37
31	Fast cavity-enhanced atom detection with low noise and high fidelity. <i>Nature Communications</i> , 2011, 2, 418.	5.8	17
32	Diffusion, thermalization, and optical pumping of YbF molecules in a cold buffer-gas cell. <i>Physical Review A</i> , 2011, 83, .	1.0	36
33	Atom chip for BEC interferometry. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2010, 43, 051003.	0.6	18
34	Measuring Energy Differences by BEC Interferometry on a Chip. <i>Physical Review Letters</i> , 2010, 105, 243003.	2.9	58
35	Experiments on a videotape atom chip: fragmentation and transport studies. <i>New Journal of Physics</i> , 2010, 12, 093017.	1.2	6
36	Transport of polar molecules by an alternating-gradient guide. <i>Physical Review A</i> , 2009, 80, .	1.0	14

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37	Stark deceleration of lithium hydride molecules. <i>New Journal of Physics</i> , 2009, 11, 055038.	1.2	27
38	Integrated magneto-optical traps on a chip using silicon pyramid structures. <i>Optics Express</i> , 2009, 17, 14109.	1.7	49
39	Prospects for measuring the electric dipole moment of the electron using electrically trapped polar molecules. <i>Faraday Discussions</i> , 2009, 142, 37.	1.6	61
40	Tight focusing of plane waves from micro-fabricated spherical mirrors. <i>Optics Express</i> , 2008, 16, 17808.	1.7	7
41	Nonlinear dynamics in an alternating gradient guide for neutral particles. <i>New Journal of Physics</i> , 2008, 10, 073011.	1.2	14
42	Lifetime of the A and Franck-Condon factor of the v		

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55	A three-dimensional electrostatic actuator with a locking mechanism for microcavities on atom chips. <i>Journal of Micromechanics and Microengineering</i> , 2005, 15, S39-S46.	1.5	11
56	Atomic spin decoherence near conducting and superconducting films. <i>Physical Review A</i> , 2005, 72, .	1.0	61
57	Microfabricated high-finesse optical cavity with open access and small volume. <i>Applied Physics Letters</i> , 2005, 87, 211106.	1.5	140
58	Bose-Einstein condensation on a permanent-magnet atom chip. <i>Physical Review A</i> , 2005, 72, .	1.0	59
59	Etching techniques for realizing optical micro-cavity atom traps on silicon. <i>Journal of Micromechanics and Microengineering</i> , 2004, 14, S82-S85.	1.5	23
60	Cold atoms probe the magnetic field near a wire. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2004, 37, L15-L20.	0.6	37
61	Slowing Heavy, Ground-State Molecules using an Alternating Gradient Decelerator. <i>Physical Review Letters</i> , 2004, 92, 173002.	2.9	163
62	Thermal spin flips in atom chips. <i>Physical Review A</i> , 2004, 70, .	1.0	68
63	Possibility of single-atom detection on a chip. <i>Physical Review A</i> , 2003, 67, .	1.0	83
64	Spin Coupling between Cold Atoms and the Thermal Fluctuations of a Metal Surface. <i>Physical Review Letters</i> , 2003, 91, 080401.	2.9	166
65	Measurement of the Electron Electric Dipole Moment Using YbF Molecules. <i>Physical Review Letters</i> , 2002, 89, 023003.	2.9	359
66	MIRRORS, WAVEGUIDES AND INTEGRATED CIRCUITS FOR COLD ATOMS. , 2002, , .		0
67	A jet beam source of cold YbF radicals. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2002, 35, 5013-5022.	0.6	44
68	Measuring the electron electric dipole moment in YbF. <i>AIP Conference Proceedings</i> , 2001, , .	0.3	0
69	Miniature guides for neutral atoms. <i>AIP Conference Proceedings</i> , 2001, , .	0.3	1
70	Periodic trajectories of cold atoms in a gravitational cavity. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2001, 34, 2869-2880.	0.6	9
71	Two-Wire Waveguide and Interferometer for Cold Atoms. <i>Physical Review Letters</i> , 2001, 86, 1462-1465.	2.9	120
72	Magnetic whispering-gallery mirror for atoms. <i>Physical Review A</i> , 2001, 63, .	1.0	9

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73	Transport of cold atoms in a miniature guide. <i>New Journal of Physics</i> , 2000, 2, 25-25.	1.2	3
74	Manipulation of cold atoms using a corrugated magnetic reflector. <i>Physical Review A</i> , 2000, 61, .	1.0	30
75	Quantum propagation of neutral atoms in a magnetic quadrupole guide. <i>Physical Review A</i> , 2000, 61, .	1.0	32
76	Quantum gates with neutral atoms: Controlling collisional interactions in time-dependent traps. <i>Physical Review A</i> , 2000, 61, .	1.0	190
77	Propagation of Cold Atoms along a Miniature Magnetic Guide. <i>Physical Review Letters</i> , 2000, 84, 1371-1373.	2.9	144
78	Reconstruction of a Cold Atom Cloud by Magnetic Focusing. <i>Physical Review Letters</i> , 1999, 82, 468-471.	2.9	76
79	Perturbed hyperfine doubling in the $A\hat{\epsilon}S2\hat{1}/2$ and $[18.6]0.5$ states of YbF. <i>Journal of Chemical Physics</i> , 1999, 110, 8424-8428.	1.2	31
80	Magnetic atom optics: mirrors, guides, traps, and chips for atoms. <i>Journal Physics D: Applied Physics</i> , 1999, 32, R119-R146.	1.3	217
81	Magnetic Atom Optics. , 1999, , 131-142.		0
82	Blackbody Excitation of an Atom Controlled by a Tunable Cavity. <i>Physical Review Letters</i> , 1998, 81, 2671-2674.	2.9	14
83	Magnetic Waveguide for Trapping Cold Atom Gases in Two Dimensions. <i>Physical Review Letters</i> , 1998, 80, 645-649.	2.9	86
84	Title is missing!. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1997, 30, 647-658.	0.6	42
85	Atom optics with magnetic surfaces: II. Microscopic analysis of the 'floppy disk' mirror. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1997, 30, 2119-2132.	0.6	41
86	Atoms in micron-sized metallic and dielectric waveguides. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 1997, 355, 2353-2365.	1.6	21
87	Testing time reversal symmetry using molecules. <i>Physica Scripta</i> , 1997, T70, 34-41.	1.2	75
88	Spectroscopy of atoms confined to the single node of a standing wave in a parallel-plate cavity. <i>Physical Review A</i> , 1996, 53, 1919-1922.	1.0	28
89	Laser double resonance spectroscopy of 174YbF in the $X\hat{\epsilon}\%02\hat{1}\text{f}+$ state: Spin rotation, hyperfine interactions, and the electric dipole moment. <i>Journal of Chemical Physics</i> , 1996, 105, 7412-7420.	1.2	76
90	Aharonov-Casher phase in an atomic system. <i>Physical Review A</i> , 1995, 51, 1776-1786.	1.0	51

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91	Realization of a Magnetic Mirror for Cold Atoms. Physical Review Letters, 1995, 75, 629-632.	2.9	161
92	Precise Optical Measurement of Lamb Shifts in Atomic Hydrogen. Physical Review Letters, 1995, 75, 2470-2473.	2.9	110
93	Measurement of the Casimir-Polder force. Physical Review Letters, 1993, 70, 560-563.	2.9	370
94	Measurement of the Aharonov-Casher phase in an atomic system. Physical Review Letters, 1993, 71, 3641-3644.	2.9	119
95	Direct measurement of the van der Waals interaction between an atom and its images in a micron-sized cavity. Physical Review Letters, 1992, 68, 3432-3435.	2.9	175
96	Cavity QED level shifts of simple atoms. Physical Review A, 1991, 43, 398-403.	1.0	89
97	Search for time-reversal-symmetry violation in thallium fluoride using a jet source. Physical Review A, 1991, 44, 2783-2799.	1.0	93
98	Radiative properties of atoms near a conducting plane: An old problem in a new light. Physical Review A, 1990, 41, 1587-1596.	1.0	137
99	Laser spectroscopy of the 1S-2S transition in hydrogen and deuterium: Determination of the 1S Lamb shift and the Rydberg constant. Physical Review A, 1989, 40, 6169-6184.	1.0	62
100	Tenfold improvement of limits on T violation in thallium fluoride. Physical Review Letters, 1989, 63, 2559-2562.	2.9	104
101	Measuring the van der Waals forces between a Rydberg atom and a metallic surface. Physical Review A, 1988, 37, 3594-3597.	1.0	71
102	New limits on time-reversal invariance from the hyperfine structure of thallium fluoride. Physical Review Letters, 1987, 59, 991-994.	2.9	21
103	Suppression of spontaneous decay at optical frequencies: Test of vacuum-field anisotropy in confined space. Physical Review Letters, 1987, 58, 666-669.	2.9	295
104	Reflection of thermal Cs atoms grazing a polished glass surface. Physical Review A, 1986, 34, 3513-3516.	1.0	29