

Nicholas Hutzler

List of Publications by Year in descending order

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Version: 2024-02-01

33
papers

2,370
citations

361413

20
h-index

454955

30
g-index

33
all docs

33
docs citations

33
times ranked

1643
citing authors

#	ARTICLE	IF	CITATIONS
1	Order of Magnitude Smaller Limit on the Electric Dipole Moment of the Electron. <i>Science</i> , 2014, 343, 269-272.	12.6	820
2	The Buffer Gas Beam: An Intense, Cold, and Slow Source for Atoms and Molecules. <i>Chemical Reviews</i> , 2012, 112, 4803-4827.	47.7	274
3	Precision Measurement of Time-Reversal Symmetry Violation with Laser-Cooled Polyatomic Molecules. <i>Physical Review Letters</i> , 2017, 119, 133002.	7.8	179
4	Radio Frequency Magneto-Optical Trapping of CaF with High Density. <i>Physical Review Letters</i> , 2017, 119, 103201.	7.8	172
5	Building one molecule from a reservoir of two atoms. <i>Science</i> , 2018, 360, 900-903.	12.6	171
6	Search for the electric dipole moment of the electron with thorium monoxide. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2010, 43, 074007.	1.5	104
7	Laser slowing of CaF molecules to near the capture velocity of a molecular MOT. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2016, 49, 174001.	1.5	75
8	A cryogenic beam of refractory, chemically reactive molecules with expansion cooling. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 18976.	2.8	57
9	Polyatomic molecules as quantum sensors for fundamental physics. <i>Quantum Science and Technology</i> , 2020, 5, 044011.	5.8	54
10	Enhancement factor for the electric dipole moment of the electron in the BaOH and YbOH molecules. <i>Physical Review A</i> , 2019, 99, .	2.5	50
11	Methods, analysis, and the treatment of systematic errors for the electron electric dipole moment search in thorium monoxide. <i>New Journal of Physics</i> , 2017, 19, 073029.	2.9	47
12	Zeeman interaction in ThO H	2.5	39
13	the electron electric dipole moment search. <i>Physical Review A</i> , 2014, 89, .	2.5	35
14	Probing Fundamental Symmetries of Deformed Nuclei in Symmetric Top Molecules. <i>Physical Review Letters</i> , 2021, 126, 023003.	7.8	33
15	Eliminating light shifts for single atom trapping. <i>New Journal of Physics</i> , 2017, 19, 023007.	2.9	31
16	Enhanced molecular yield from a cryogenic buffer gas beam source via excited state chemistry. <i>New Journal of Physics</i> , 2020, 22, 022002.	2.9	31
17	The pure rotational spectrum of YbOH. <i>Chemical Physics Letters</i> , 2019, 715, 105-108.	2.6	29
18	Motional-ground-state cooling outside the Lamb-Dicke regime. <i>Physical Review A</i> , 2018, 97, .	2.5	27

#	ARTICLE	IF	CITATIONS
19	Enhanced P,T-violating nuclear magnetic quadrupole moment effects in laser-coolable molecules. Journal of Chemical Physics, 2020, 152, 084303.	3.0	26
20	Hypermetallic polar molecules for precision measurements. Physical Review A, 2019, 100, .	2.5	21
21	Shot-noise-limited spin measurements in a pulsed molecular beam. Physical Review A, 2013, 88, .	2.5	20
22	Fine and hyperfine interactions in $^{171}\text{YbOH}$ and $^{173}\text{YbOH}$. Journal of Chemical Physics, 2021, 154, 244309.	3.0	17
23	One-dimensional magneto-optical compression of a cold CaF molecular beam. New Journal of Physics, 2017, 19, 033035.	2.9	15
24	Electronic structure of the ytterbium monohydroxide molecule to search for axionlike particles. Physical Review A, 2021, 103, .	2.5	9
25	Simulation of cryogenic buffer gas beams. Physical Review Research, 2021, 3, .	3.6	9
26	Advanced cold molecule electron EDM. EPJ Web of Conferences, 2013, 57, 02004.	0.3	7
27	Study of HgOH to Assess Its Suitability for Electron Electric Dipole Moment Searches. Atoms, 2021, 9, 7.	1.6	6
28	Shaped nozzles for cryogenic buffer-gas beam sources. Physical Review A, 2019, 99, .	2.5	5
29	Chi-squared test for binned, Gaussian samples. Metrologia, 2019, 56, 055007.	1.2	4
30	A low-temperature external cavity diode laser for broad wavelength tuning. Review of Scientific Instruments, 2016, 87, 113104.	1.3	3
31	Sweeping molecules with light. New Journal of Physics, 2017, 19, 031001.	2.9	0
32	Trapped Ions Test Fundamental Particle Physics. Physics Magazine, 2017, 10, .	0.1	0
33	A New Way to Laser-Cool Molecules. Physics Magazine, 2020, 13, .	0.1	0