

Nicholas Hutzler

List of Publications by Year in descending order

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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	Probing Fundamental Symmetries of Deformed Nuclei in Symmetric Top Molecules. <i>Physical Review Letters</i> , 2021, 126, 023003.		7.8	33
2	Study of HgOH to Assess Its Suitability for Electron Electric Dipole Moment Searches. <i>Atoms</i> , 2021, 9, 7.		1.6	6
3	Electronic structure of the ytterbium monohydroxide molecule to search for axionlike particles. <i>Physical Review A</i> , 2021, 103, .		2.5	9
4	Simulation of cryogenic buffer gas beams. <i>Physical Review Research</i> , 2021, 3, .		3.6	9
5	Fine and hyperfine interactions in $^{171}\text{YbOH}$ and $^{173}\text{YbOH}$. <i>Journal of Chemical Physics</i> , 2021, 154, 244309.		3.0	17
6	A New Way to Laser-Cool Molecules. <i>Physics Magazine</i> , 2020, 13, .		0.1	0
7	Enhanced P,T-violating nuclear magnetic quadrupole moment effects in laser-coolable molecules. <i>Journal of Chemical Physics</i> , 2020, 152, 084303.		3.0	26
8	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
9	Polyatomic molecules as quantum sensors for fundamental physics. <i>Quantum Science and Technology</i> , 2020, 5, 044011.		5.8	54
10	Hypermetallic polar molecules for precision measurements. <i>Physical Review A</i> , 2019, 100, .		2.5	21
11	Chi-squared test for binned, Gaussian samples. <i>Metrologia</i> , 2019, 56, 055007.		1.2	4
12	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
13	The pure rotational spectrum of YbOH. <i>Chemical Physics Letters</i> , 2019, 715, 105-108.		2.6	29
14	Shaped nozzles for cryogenic buffer-gas beam sources. <i>Physical Review A</i> , 2019, 99, .		2.5	5
15	Building one molecule from a reservoir of two atoms. <i>Science</i> , 2018, 360, 900-903.		12.6	171
16	Motional-ground-state cooling outside the Lamb-Dicke regime. <i>Physical Review A</i> , 2018, 97, .		2.5	27
17	Sweeping molecules with light. <i>New Journal of Physics</i> , 2017, 19, 031001.		2.9	0
18	One-dimensional magneto-optical compression of a cold CaF molecular beam. <i>New Journal of Physics</i> , 2017, 19, 033035.		2.9	15

#	ARTICLE	IF	CITATIONS
19	Precision Measurement of Time-Reversal Symmetry Violation with Laser-Cooled Polyatomic Molecules. Physical Review Letters, 2017, 119, 133002.	7.8	179
20	Radio Frequency Magneto-Optical Trapping of CaF with High Density. Physical Review Letters, 2017, 119, 103201.	7.8	172
21	Methods, analysis, and the treatment of systematic errors for the electron electric dipole moment search in thorium monoxide. New Journal of Physics, 2017, 19, 073029.	2.9	47
22	Eliminating light shifts for single atom trapping. New Journal of Physics, 2017, 19, 023007.	2.9	31
23	Trapped Ions Test Fundamental Particle Physics. Physics Magazine, 2017, 10, .	0.1	0
24	A low-temperature external cavity diode laser for broad wavelength tuning. Review of Scientific Instruments, 2016, 87, 113104.	1.3	3
25	Laser slowing of CaF molecules to near the capture velocity of a molecular MOT. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 174001.	1.5	75
26	Zeeman interaction in ThO $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" width="0.16em" \rangle \langle mml:mrow \rangle \langle mml:mi \rangle H \langle /mml:mi \rangle \langle mml:msup \rangle \langle mml:mspace \rangle \langle mml:mn \rangle 3 \langle /mml:mn \rangle \langle /mml:msup \rangle \langle mml:msub \rangle \langle mml:mi \rangle \hat{\tau} \langle /mml:mi \rangle \langle mml:mn \rangle 1 \langle /mml:mn \rangle \langle /mml:msub \rangle \langle /mml:msup \rangle \langle /mml:mrow \rangle \langle /mml:math \rangle$ the electron electric-dipole-moment search. Physical Review A, 2014, 89, .	2.5	39
27	Order of Magnitude Smaller Limit on the Electric Dipole Moment of the Electron. Science, 2014, 343, 269-272.	12.6	820
28	Shot-noise-limited spin measurements in a pulsed molecular beam. Physical Review A, 2013, 88, .	2.5	20
29	Advanced cold molecule electron EDM. EPJ Web of Conferences, 2013, 57, 02004.	0.3	7
30	The Buffer Gas Beam: An Intense, Cold, and Slow Source for Atoms and Molecules. Chemical Reviews, 2012, 112, 4803-4827.	47.7	274
31	Magnetic and electric dipole moments of the $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" \rangle \langle mml:mi \rangle H \langle /mml:mi \rangle \langle /mml:math \rangle \langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" \rangle \langle mml:mrow \rangle \langle mml:msup \rangle \langle mml:math \rangle$. Physical Chemistry Chemical Physics, 2011, 13, 18976.	2.5	35
32	A cryogenic beam of refractory, chemically reactive molecules with expansion cooling. Physical Chemistry Chemical Physics, 2011, 13, 18976.	2.8	57
33	Search for the electric dipole moment of the electron with thorium monoxide. Journal of Physics B: Atomic, Molecular and Optical Physics, 2010, 43, 074007.	1.5	104