

Gerald Gabrielse

List of Publications by Year in descending order

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58
papers

5,481
citations

236833

25
h-index

189801

50
g-index

59
all docs

59
docs citations

59
times ranked

5325
citing authors

#	ARTICLE	IF	CITATIONS
1	Geonium theory: Physics of a single electron or ion in a Penning trap. <i>Reviews of Modern Physics</i> , 1986, 58, 233-311.	16.4	1,180
2	New Measurement of the Electron Magnetic Moment and the Fine Structure Constant. <i>Physical Review Letters</i> , 2008, 100, 120801.	2.9	870
3	Background-Free Observation of Cold Antihydrogen with Field-Ionization Analysis of Its States. <i>Physical Review Letters</i> , 2002, 89, 213401.	2.9	515
4	New Measurement of the Electron Magnetic Moment Using a One-Electron Quantum Cyclotron. <i>Physical Review Letters</i> , 2006, 97, 030801.	2.9	289
5	Observation of inhibited spontaneous emission. <i>Physical Review Letters</i> , 1985, 55, 67-70.	2.9	262
6	Thousandfold improvement in the measured antiproton mass. <i>Physical Review Letters</i> , 1990, 65, 1317-1320.	2.9	250
7	Cavity control of a single-electron quantum cyclotron: Measuring the electron magnetic moment. <i>Physical Review A</i> , 2011, 83, .	1.0	227
8	Precision spectroscopy of a charged particle in an imperfect Penning trap. <i>Physical Review A</i> , 1982, 25, 2423-2425.	1.0	198
9	Driven Production of Cold Antihydrogen and the First Measured Distribution of Antihydrogen States. <i>Physical Review Letters</i> , 2002, 89, 233401.	2.9	191
10	Observing the Quantum Limit of an Electron Cyclotron: QND Measurements of Quantum Jumps between Fock States. <i>Physical Review Letters</i> , 1999, 83, 1287-1290.	2.9	187
11	Trapped Antihydrogen in Its Ground State. <i>Physical Review Letters</i> , 2012, 108, 113002.	2.9	165
12	Cylindrical Penning traps with orthogonalized anharmonicity compensation. <i>International Journal of Mass Spectrometry and Ion Processes</i> , 1984, 57, 1-17.	1.9	140
13	Observation of a Relativistic, Bistable Hysteresis in the Cyclotron Motion of a Single Electron. <i>Physical Review Letters</i> , 1985, 54, 537-539.	2.9	140
14	Antihydrogen Production within a Penning-Ioffe Trap. <i>Physical Review Letters</i> , 2008, 100, 113001.	2.9	99
15	Self-shielding superconducting solenoid systems. <i>Journal of Applied Physics</i> , 1988, 63, 5143-5148.	1.1	80
16	One-Particle Measurement of the Antiproton Magnetic Moment. <i>Physical Review Letters</i> , 2013, 110, 130801.	2.9	73
17	First Measurement of the Velocity of Slow Antihydrogen Atoms. <i>Physical Review Letters</i> , 2004, 93, 073401.	2.9	63
18	Why Is Sideband Mass Spectrometry Possible with Ions in a Penning Trap?. <i>Physical Review Letters</i> , 2009, 102, 172501.	2.9	59

#	ARTICLE	IF	CITATIONS
19	Detection, damping, and translating the center of the axial oscillation of a charged particle in a Penning trap with hyperbolic electrodes. <i>Physical Review A</i> , 1984, 29, 462-469.	1.0	51
20	Direct Measurement of the Proton Magnetic Moment. <i>Physical Review Letters</i> , 2012, 108, 153001.	2.9	48
21	Adiabatic Cooling of Antiprotons. <i>Physical Review Letters</i> , 2011, 106, 073002.	2.9	45
22	One electron in an orthogonalized cylindrical Penning trap. <i>Applied Physics Letters</i> , 1989, 55, 2144-2146.	1.5	42
23	Antiproton Confinement in a Penning-Ioffe Trap for Antihydrogen. <i>Physical Review Letters</i> , 2007, 98, 113002.	2.9	41
24	Magnetic and electric dipole moments of the H^{\pm}	1.0	35
25	Towards an Improved Test of the Standard Model's Most Precise Prediction. <i>Atoms</i> , 2019, 7, 45.	0.7	29
26	Stimulated Raman adiabatic passage preparation of a coherent superposition of ThO^{\pm} states for an improved electron electric-dipole-moment measurement. <i>Physical Review A</i> , 2016, 93, .	1.0	23
27	Shot-noise-limited spin measurements in a pulsed molecular beam. <i>Physical Review A</i> , 2013, 88, .	1.0	20
28	The magnetic moment of the antiproton. <i>Hyperfine Interactions</i> , 1993, 76, 379-380.	0.2	14
29	High efficiency positron accumulation for high-precision magnetic moment experiments. <i>Review of Scientific Instruments</i> , 2015, 86, 053301.	0.6	14
30	(Anti)hydrogen recombination studies in a nested Penning trap. <i>Hyperfine Interactions</i> , 1993, 76, 181-188.	0.2	13
31	Portable trap carries particles 5000 kilometers. <i>Hyperfine Interactions</i> , 1993, 76, 381-386.	0.2	13
32	Centrifugal Separation of Antiprotons and Electrons. <i>Physical Review Letters</i> , 2010, 105, 213002.	2.9	13
33	Extremely cold antiprotons for antihydrogen production. <i>Hyperfine Interactions</i> , 1993, 76, 81-93.	0.2	12
34	Resolving an Individual One-Proton Spin Flip to Determine a Proton Spin State. <i>Physical Review Letters</i> , 2013, 110, 140406.	2.9	12
35	Optimized planar Penning traps for quantum information studies. <i>Hyperfine Interactions</i> , 2011, 199, 279-289.	0.2	9
36	Gaseous 3He nuclear magnetic resonance probe for cryogenic environments. <i>Review of Scientific Instruments</i> , 2019, 90, 083107.	0.6	9

#	ARTICLE	IF	CITATIONS
37	Using electric fields to prevent mirror-trapped antiprotons in antihydrogen studies. Physical Review A, 2013, 87, .	1.0	7
38	Trapped positrons for antihydrogen. Hyperfine Interactions, 1994, 89, 371-380.	0.2	6
39	Circumventing Detector Backaction on a Quantum Cyclotron. Physical Review Letters, 2021, 126, 070402.	2.9	6
40	Driven one-particle quantum cyclotron. Physical Review A, 2021, 103, .	1.0	6
41	Extremely cold positrons for antihydrogen production. Hyperfine Interactions, 1993, 76, 143-150.	0.2	5
42	CAVITY SHIFTS OF MEASURED ELECTRON MAGNETIC MOMENTS. Advanced Series on Directions in High Energy Physics, 1990, , 389-418.	0.7	3
43	Determining the Fine Structure Constant. Advanced Series on Directions in High Energy Physics, 2009, , 195-218.	0.7	3
44	Slow Antihydrogen. AIP Conference Proceedings, 2004, , .	0.3	2
45	ATRAP antihydrogen experiments. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 3437-3442.	0.8	2
46	Switchable damping for a one-particle oscillator. Review of Scientific Instruments, 2021, 92, 023201.	0.6	2
47	Measurements of the Electron Magnetic Moment. Advanced Series on Directions in High Energy Physics, 2009, , 157-194.	0.7	2
48	ATRAP " Progress Towards Trapped Antihydrogen. AIP Conference Proceedings, 2005, , .	0.3	1
49	Cryogenic Particle Accumulation In ATRAP And The First Antihydrogen Production Within A Magnetic Gradient Trap For Neutral Antimatter. AIP Conference Proceedings, 2008, , .	0.3	1
50	One-electron quantum cyclotron (and implications for cold antihydrogen). AIP Conference Proceedings, 2001, , .	0.3	0
51	HELIUM 23P FINE STRUCTURE MEASUREMENT IN A DISCHARGE CELL. , 2005, , .		0
52	Laser-Controlled Antihydrogen Production by Two-Stage Charge Exchange. AIP Conference Proceedings, 2005, , .	0.3	0
53	Narrowing laser linewidth using a stabilized optical frequency comb. , 0, , .		0
54	New Measurement of the Electron Magnetic Moment and the Fine Structure Constant. AIP Conference Proceedings, 2006, , .	0.3	0

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55	New Measurement of the Electron Magnetic Moment and the Fine Structure Constant. AIP Conference Proceedings, 2006, , .	0.3	0
56	COLD ANTIHYDROGEN AND CPT. , 2002, , .		0
57	Observations of Cold Antihydrogen. , 2003, , .		0
58	MORE ACCURATE MEASUREMENT OF THE ELECTRON MAGNETIC MOMENT AND THE FINE STRUCTURE CONSTANT. , 2009, , .		0