

David B Cassidy

List of Publications by Year in descending order

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66

papers

1,974

citations

236912

25

h-index

243610

44

g-index

66

all docs

66

docs citations

66

times ranked

710

citing authors

#	ARTICLE	IF	CITATIONS
1	The production of molecular positronium. <i>Nature</i> , 2007, 449, 195-197.	27.8	237
2	Experimental progress in positronium laser physics. <i>European Physical Journal D</i> , 2018, 72, 1.	1.3	123
3	Positronium cooling in porous silica measured via Doppler spectroscopy. <i>Physical Review A</i> , 2010, 81, .	2.5	121
4	Accumulator for the production of intense positron pulses. <i>Review of Scientific Instruments</i> , 2006, 77, 073106.	1.3	106
5	Experiments with a High-Density Positronium Gas. <i>Physical Review Letters</i> , 2005, 95, 195006.	7.8	102
6	Single shot positron annihilation lifetime spectroscopy. <i>Applied Physics Letters</i> , 2006, 88, 194105.	3.3	100
7	Efficient Production of Rydberg Positronium. <i>Physical Review Letters</i> , 2012, 108, 043401.	7.8	82
8	Production of a Fully Spin-Polarized Ensemble of Positronium Atoms. <i>Physical Review Letters</i> , 2010, 104, 173401.	7.8	56
9	Optical Spectroscopy of Molecular Positronium. <i>Physical Review Letters</i> , 2012, 108, 133402.	7.8	56
10	Atom control and gravity measurements using Rydberg positronium. <i>International Journal of Modern Physics Conference Series</i> , 2014, 30, 1460259.	0.7	55
11	Interactions Between Positronium Atoms in Porous Silica. <i>Physical Review Letters</i> , 2008, 100, 013401.	7.8	51
12	Precision Microwave Spectroscopy of the Positronium $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{ display="block" style="margin-left: 40px;">n \times n = 2^{\text{mml:mn}} \times 2^{\text{mml:mn}}$ Fine Structure. <i>Physical Review Letters</i> , 2020, 125, 073002.	7.8	47
13	Positronium Hyperfine Interval Measured via Saturated Absorption Spectroscopy. <i>Physical Review Letters</i> , 2012, 109, 073401.	7.8	46
14	Selective Production of Rydberg-Stark States of Positronium. <i>Physical Review Letters</i> , 2015, 114, 173001.	7.8	42
15	Delayed emission of cold positronium from mesoporous materials. <i>Physical Review A</i> , 2010, 82, .	2.5	36
16	Cavity Induced Shift and Narrowing of the Positronium Lyman- $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{ display="block" style="margin-left: 40px;">\pm \Delta E$ Transition. <i>Physical Review Letters</i> , 2011, 106, 023401.	7.8	35
17	New Mechanism for Positronium Formation on a Silicon Surface. <i>Physical Review Letters</i> , 2011, 106, 133401.	7.8	34
18	A trap-based pulsed positron beam optimised for positronium laser spectroscopy. <i>Review of Scientific Instruments</i> , 2015, 86, 103101.	1.3	31

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19	Doppler-corrected Balmer spectroscopy of Rydberg positronium. Physical Review A, 2014, 90, .	2.5	30
20	Formation of positron-atom bound states in collisions between Rydberg Ps and neutral atoms. Physical Review A, 2016, 93, .	2.5	29
21	Electrostatically Guided Rydberg Positronium. Physical Review Letters, 2016, 117, 073202.	7.8	28
22	Enhanced Ps-Ps Interactions due to Quantum Confinement. Physical Review Letters, 2011, 107, 213401.	7.8	26
23	Positronium emission from mesoporous silica studied by laser-enhanced time-of-flight spectroscopy. New Journal of Physics, 2015, 17, 043059.	2.9	26
24	Positronium decay from mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>n</mml:mi><mml:mo>=</mml:mo> $\frac{2\pi}{m\hbar}$ </mml:mrow> in electric and magnetic fields. Physical Review A, 2016, 93, .	2.5	25
25	Evidence for positronium molecule formation at a metal surface. Physical Review A, 2007, 76, .	2.5	25
26	Positronium formation via excitonlike states on Si and Ge surfaces. Physical Review B, 2011, 84, .	3.2	25
27	Positronium as a probe of transient paramagnetic centers in $\text{a}^{17}\text{SiO}_2$. Physical Review B, 2007, 75, .	3.2	24
28	Photoemission of Positronium from Si. Physical Review Letters, 2011, 107, 033401.	7.8	23
29	Physics with dense positronium. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 3419-3428.	0.8	22
30	Positronium emission and cooling in reflection and transmission from thin meso-structured silica films. Journal of Physics B: Atomic, Molecular and Optical Physics, 2015, 48, 204003.	1.5	21
31	Laser Excitation of Positronium in the Paschen-Back Regime. Physical Review Letters, 2011, 106, 173401.	7.8	20
32	Measurement of Rydberg positronium fluorescence lifetimes. Physical Review A, 2016, 93, .	2.5	20
33	Positronium production in cryogenic environments. Physical Review B, 2016, 93, .	3.2	20
34	Production of mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>2</mml:mn><mml:mspace width="0.16em" /><mml:mmultiscripts><mml:mi>S</mml:mi><mml:mn>1</mml:mn><mml:mn>1</mml:mn><mml:none /><mml:mprescripts /><mml:mi>S</mml:mi><mml:mn>3</mml:mn></mml:mmultiscripts></mml:mrow></mml:math> positronium atoms by single-photon excitation in an electric field. Physical Review A, 2017, 95, .	2.5	19
35	Velocity selection of Rydberg positronium using a curved electrostatic guide. Physical Review A, 2017, 95, .	2.5	19
36	Controlling Positronium Annihilation with Electric Fields. Physical Review Letters, 2015, 115, 183401.	7.8	18

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37	The development of the intense positron beam at Washington State University. <i>Applied Surface Science</i> , 2002, 194, 296-300.	6.1	17
38	A CF ₄ -based positron trap. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2016, 49, 215001.	1.5	17
39	Prospects for Studies of the Free Fall and Gravitational Quantum States of Antimatter. <i>Advances in High Energy Physics</i> , 2015, 2015, 1-16.	1.1	16
40	Antihydrogen from positronium impact with cold antiprotons: a Monte Carlo simulation. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1999, 32, 1923-1932.	1.5	15
41	Spatial sampling of crystal electrons by in-flight annihilation of fast positrons. <i>Nature</i> , 1999, 402, 157-160.	27.8	14
42	Observation of asymmetric line shapes in precision microwave spectroscopy of the positronium <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>2</mml:mn><mml:mmultiscripts><mml:mi>S</mml:mi></mml:mmultiscripts></mml:mrow></mml:math></><mml:mprescripts /><mml:math></><mml:mn>3</mml:mn></mml:mmultiscripts><mml:mo>â†</mml:mo><mml:mn>2</mml:mn><mml:mmultiscripts><mml:mi>P</mml:mi></mml:mmultiscripts></><mml:mprescripts /><mml:math></><mml:mn>3</mml:mn></mml:mmultiscripts></mml:mrow></mml:math>	2.5	12
43	Doppler Broadening of In-Flight Positron Annihilation Radiation due to Electron Momentum. <i>Physical Review Letters</i> , 2001, 86, 5612-5615.	7.8	10
44	Fundamental Physics with Cold Positronium. <i>AIP Conference Proceedings</i> , 2008, , .	0.4	8
45	Strong drive compression of a gas-cooled positron plasma. <i>Applied Physics Letters</i> , 2010, 96, 101502.	3.3	8
46	State-selective electric-field ionization of Rydberg positronium. <i>Physical Review A</i> , 2018, 98, .	2.5	8
47	Annihilation of positronium atoms confined in mesoporous and macroporous SiO ₂ films. <i>Physical Review B</i> , 2018, 97, .	3.2	8
48	Resonant versus nonresonant nuclear excitation of ¹¹⁵ In by positron annihilation. <i>Physical Review C</i> , 2001, 64, .	2.9	7
49	Single-color two-photon spectroscopy of Rydberg states in electric fields. <i>Physical Review A</i> , 2014, 90, .	2.5	7
50	Multiring electrostatic guide for Rydberg positronium. <i>Physical Review A</i> , 2019, 100, .	2.5	7
51	Excitonic positronium emission from Si(111). <i>Physical Review B</i> , 2012, 86, .	3.2	6
52	Positronium emission from MgO smoke nanocrystals. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2019, 52, 105004.	1.5	6
53	Line-shape modeling in microwave spectroscopy of the positronium <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>n</mml:mi></mml:mrow><mml:mo>=</mml:mo><mml:mn>2</mml:mn></mml:math> fine-structure intervals. <i>Physical Review A</i> , 2021, 104, .	2.5	5
54	Comment on "Relativistic Positron Creation Using Ultraintense Short Pulse Lasers". <i>Physical Review Letters</i> , 2009, 103, 179501.	7.8	3

#	ARTICLE		IF	CITATIONS
55	Resonant shifts of positronium energy levels in MgO powder. <i>Physical Review A</i> , 2020, 101, .		2.5	3
56	Positronium microwave spectroscopy using Ramsey interferometry. <i>European Physical Journal D</i> , 2022, 76, .		1.3	3
57	Sticking coefficient of nitrogen on solid N ₂ at low temperatures. <i>Applied Surface Science</i> , 2007, 253, 9467-9469.		6.1	2
58	Progress towards laser spectroscopy of atomic and molecular positronium. <i>Journal of Physics: Conference Series</i> , 2009, 194, 012037.		0.4	2
59	The Development and Applications of an Accelerator Based Positron Source. , 2009, , .			2
60	Cassidy et al Reply. <i>Physical Review Letters</i> , 2011, 106, .		7.8	2
61	Measurement of the annihilation decay rate of $2\bar{S}1$ positronium. <i>Europhysics Letters</i> , 2020, 132, 13001.		2.0	2
62	Publisher's Note: Positronium cooling in porous silica measured via Doppler spectroscopy [Phys. Rev. A81, 012715 (2010)]. <i>Physical Review A</i> , 2010, 81, .		2.5	1
63	Recent studies with electrons, positrons and positronium. <i>European Physical Journal D</i> , 2020, 74, 1.		1.3	1
64	Fast decay of $23S1$ positronium atoms in an MgO lined cavity. <i>EPJ Techniques and Instrumentation</i> , 2021, 8, .		1.3	1
65	Physics with Cold Polarized Positronium. , 2009, , .			0
66	Rydberg-Stark states of Positronium for atom optics. <i>Journal of Physics: Conference Series</i> , 2015, 635, 052064.		0.4	0