

Richard D Thomas

List of Publications by Year in descending order

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60
papers

1,135
citations

430874
18
h-index

395702
33
g-index

60
all docs

60
docs citations

60
times ranked

1065
citing authors

#	ARTICLE	IF	CITATIONS
1	First storage of ion beams in the Double Electrostatic Ion-Ring Experiment: DESIREE. <i>Review of Scientific Instruments</i> , 2013, 84, 055115.	1.3	116
2	The double electrostatic ion ring experiment: A unique cryogenic electrostatic storage ring for merged ion-beams studies. <i>Review of Scientific Instruments</i> , 2011, 82, 065112.	1.3	105
3	Dynamics of Hollow Atom Formation in Intense X-Ray Pulses Probed by Partial Covariance Mapping. <i>Physical Review Letters</i> , 2013, 111, 073002.	7.8	83
4	Three-body reaction dynamics in electron-ion dissociative recombination. <i>Physical Chemistry Chemical Physics</i> , 2001, 3, 4471-4480.	2.8	55
5	When electrons meet molecular ions and what happens next: Dissociative recombination from interstellar molecular clouds to internal combustion engines. <i>Mass Spectrometry Reviews</i> , 2008, 27, 485-530.	5.4	53
6	Storing keV Negative Ions for an Hour: The Lifetime of the Metastable H^- . <i>Mass Spectrometry Reviews</i> , 2008, 27, 485-530.	7.8	53
7	Precision Lifetime Measurements of He^- . <i>Mass Spectrometry Reviews</i> , 2008, 27, 485-530.	7.8	48
8	Cryogenic Electrostatic Ion-Beam Trap. <i>Physical Review Letters</i> , 2009, 103, 213002.	7.8	48
9	High-resolution storage-ring measurements of the dissociative recombination of H_2^+ . <i>Physical Review A</i> , 2010, 82, .	2.5	48
10	Rotationally Cold OH^- Ions in the Cryogenic Electrostatic Ion-Beam Storage Ring DESIREE. <i>Physical Review Letters</i> , 2017, 119, 073001.	7.8	41
11	Operating a triple stack microchannel plate-phosphor assembly for single particle counting in the 12–300 K temperature range. <i>Review of Scientific Instruments</i> , 2007, 78, 113301.	1.3	33
12	Dissociative recombination of C_2H^+ and C_2H_4^+ : Absolute cross sections and product branching ratios. <i>Physical Chemistry Chemical Physics</i> , 2004, 6, 949.	2.8	32
13	DESIREE as a new tool for interstellar ion chemistry. <i>International Journal of Astrobiology</i> , 2008, 7, 205-208.	1.6	29
14	Investigating the three-body fragmentation dynamics of water via dissociative recombination and theoretical modeling calculations. <i>Physical Review A</i> , 2002, 66, .	2.5	28
15	Covariance mapping of two-photon double core hole states in C_2H_2 and C_2H_6 produced by an x-ray free electron laser. <i>New Journal of Physics</i> , 2015, 17, 073002.	2.9	28
16	PDRs4All: A JWST Early Release Science Program on Radiative Feedback from Massive Stars. <i>Publications of the Astronomical Society of the Pacific</i> , 2022, 134, 054301.	3.1	26
17	Dissociative recombination of CH_3^+ . <i>Physical Review Letters</i> , 2019, 122, 193001.	2.5	19
18	Substituent effects on the relaxation dynamics of furan, furfural and β -furfural: a combined theoretical and experimental approach. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 2025-2035.	2.8	19

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19	Three-Body Breakup in the Dissociative Recombination of the Covalent Triatomic Molecular Ion O ₃ ⁺ . Physical Review Letters, 2007, 98, 223201. Cryogenic merged-ion-beam experiments in DESIREE: Final-state-resolved mutual neutralization of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mrow> <mml:mi>Li</mml:mi> </mml:mrow></mml:msup><mml:mrow> <mml:mi>Li</mml:mi> </mml:mrow>+</mml:math> and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mrow> <mml:mi>Li</mml:mi> </mml:mrow></mml:msup><mml:mrow> <mml:mi>Li</mml:mi> </mml:mrow>+</mml:math> mathvariant="normal">D</mml:mi></mml:mrow><mml:mo>â˜</mml:mo></mml:mrow></mml:msup></mml:math>, Physical Review A, 2020, 102, .	7.8	18
20	Dissociative recombination of water cluster ions with free electrons: Cross sections and branching ratios. Journal of Chemical Physics, 2008, 128, 044311.	3.0	17
21	Excited state dynamics of acrylonitrile: Substituent effects at conical intersections interrogated via time-resolved photoelectron spectroscopy and ab initio simulation. Journal of Chemical Physics, 2016, 145, 114306.	3.0	17
22	Dynamics in higher lying excited states: Valence to Rydberg transitions in the relaxation paths of pyrrole and methylated derivatives. Journal of Chemical Physics, 2017, 146, 144307.	3.0	17
23	Investigation into the vibrational yield of OH products in the OH+H+H channel arising from the dissociative recombination of H ₃ O ⁺ . Journal of Chemical Physics, 2009, 130, 214302.	3.0	15
24	Radiative lifetimes of the bound excited states of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mrow> <mml:mi>Pt</mml:mi> </mml:mrow></mml:msup><mml:mrow> <mml:mi>Pt</mml:mi> </mml:mrow>+</mml:math> Physical Review A, 2016, 94, .	2.5	15
25	Lifetime of the bound excited level in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mrow> <mml:mi>Ni</mml:mi> </mml:mrow></mml:msup><mml:mrow> <mml:mi>Ni</mml:mi> </mml:mrow>+</mml:math> Physical Review A, 2016, 93, .	2.5	14
26	Final-state-resolved mutual neutralization of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mrow> <mml:mi>Na</mml:mi> </mml:mrow></mml:msup><mml:mrow> <mml:mi>Na</mml:mi> </mml:mrow>+</mml:math> and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mrow> <mml:mi>Na</mml:mi> </mml:mrow></mml:msup><mml:mrow> <mml:mi>Na</mml:mi> </mml:mrow>+</mml:math> mathvariant="normal">D</mml:mi></mml:mrow><mml:mo>â˜</mml:mo></mml:mrow></mml:msup></mml:math>, Physical Review A, 2021, 103, .	2.5	13
27	Influence of Alkoxy Groups on the Photoinduced Dynamics of Organic Molecules Exemplified on Alkyl Vinyl Ethers. Journal of Physical Chemistry A, 2015, 119, 11105-11112.	2.5	10
28	Time-Resolved Photoelectron Spectroscopy Studies of Isoxazole and Oxazole. Journal of Physical Chemistry A, 2020, 124, 3984-3992.	2.5	10
29	A localized view on molecular dissociation via electron-ion partial covariance. Communications Chemistry, 2022, 5, .	4.5	10
30	Dissociative recombination study of at CRYRING: absolute cross-section, chemical branching ratios and three-body fragmentation dynamics. Molecular Physics, 2005, 103, 2735-2745.	1.7	9
31	Dissociative Recombination of CH ₄ ⁻ . Journal of Physical Chemistry A, 2013, 117, 9999-10005.	2.5	9
32	Competition between ring-puckering and ring-opening excited state reactions exemplified on 5H-furan-2-one and derivatives. Journal of Chemical Physics, 2020, 152, 064301.	3.0	8
33	Sequential formation of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"> <mml:mrow><mml:msub><mml:mrow> <mml:mi>CH</mml:mi> </mml:mrow></mml:msub><mml:mn>3</mml:mn></mml:mrow></mml:math> in the dissociative recombination of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"> <mml:mrow><mml:msup><mml:mrow> <mml:mi>CH</mml:mi> </mml:mrow></mml:msup><mml:mn>5</mml:mn></mml:mrow></mml:math>, Physical Review A, 2009, 79, .	2.5	7
34	Low-Energy Collisions of Protonated Enantiopure Amino Acids with Chiral Target Gases. Journal of the American Society for Mass Spectrometry, 2017, 28, 2686-2691.	2.8	7
35	The ring-opening channel and the influence of Rydberg states on the excited state dynamics of furan and its derivatives. Journal of Chemical Physics, 2018, 149, 084303.	3.0	7

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37	Electron-impact fragmentation of Cl ₂ â". Physical Review A, 2005, 72, .	2.5	6
38	The lifetime of the helium anion. Journal of Physics: Conference Series, 2012, 388, 012006.	0.4	6
39	High-energy collisions of protonated enantiopure amino acids with a chiral target gas. International Journal of Mass Spectrometry, 2015, 388, 59-64.	1.5	6
40	Dissociative Recombination of CD ₃ OD ₂ +. Proceedings of the International Astronomical Union, 2005, 1, 117.	0.0	5
41	Chirally sensitive collision induced dissociation of protonâbound diastereomeric complexes of tryptophan and 2âbutanol. Chirality, 2017, 29, 115-119.	2.6	5
42	Mutual neutralisation of O ⁺ with O ⁺ : investigation of the role of metastable ions in a combined experimental and theoretical study. Physical Chemistry Chemical Physics, 2021, 23, 24607-24616. <i>Strong ring study of the mutual neutralization of O^{+} and O^{+}.</i>	2.8	5
43	xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mrow><mml:mi>N</mml:mi></mml:mrow><mml:mo>+</mml:mo></mml:msup></mml:math> with <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mrow><mml:mo>O</mml:mo></mml:mrow><mml:mo>â</mml:mo></mml:msup></mml:math>, Physical Review A, 2022, 105,	2.5	4
44	Formation of Highly Rovibrationally Excited Ammonia from Dissociative Recombination of NH ₄ ⁺ . Journal of Physical Chemistry Letters, 2010, 1, 2519-2523.	4.6	3
45	Hot Water from Cold. The Dissociative Recombination of Water Cluster Ions. Journal of Physical Chemistry A, 2010, 114, 4843-4846.	2.5	3
46	Commissioning of the DESIREE storage rings â" a new facility for cold ion-ion collisions. Journal of Physics: Conference Series, 2014, 488, 012040.	0.4	2
47	Photoionization Dynamics of the Tetraoxo Complexes OsO ₄ and RuO ₄ . Inorganic Chemistry, 2020, 59, 7274-7282.	4.0	2
48	First results from the Double ElectroStatic Ion-Ring ExpEriment, DESIREE. Journal of Physics: Conference Series, 2014, 488, 092003.	0.4	1
49	Measuring the ² D _{3/2} Ni ⁻ excited state lifetime in DESIREE. Journal of Physics: Conference Series, 2015, 635, 092142.	0.4	1
50	Rotationally cold (> 99% J = 0) OH â" molecular ions in a cryogenic storage ring. Journal of Physics: Conference Series, 2017, 875, 012016.	0.4	1
51	Lifetimes of bound excited states of Ptâ". Journal of Physics: Conference Series, 2017, 875, 022051.	0.4	1
52	Time-Resolved Photoelectron Studies of Thiophene and 2,5-Dimethylthiophene. Journal of Physical Chemistry A, 2018, 122, 8809-8818.	2.5	1
53	Dissociation kinetics of excited ions: PEPICO measurements of Os ₃ (CO) ₁₂ â" The 7-35 eV single ionization binding energy region. Journal of Chemical Physics, 2018, 148, 084301.	3.0	1
54	Non-covalently bonded diastereomeric adducts of amino acids and (S)-1-phenylethanol in low-energy dissociative collisions. Molecular Physics, 2020, 118, 1615145.	1.7	1

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55	Negative ion relaxation and reactions in a cryogenic storage ring. <i>Journal of Physics: Conference Series</i> , 2020, 1412, 062006.	0.4	1
56	A field ionizer for photodetachment studies of negative ions. <i>Review of Scientific Instruments</i> , 2022, 93, .	1.3	1
57	Experiments on Interactions of Electrons with Molecular Ions in Fusion and Astrophysical Plasmas. <i>AIP Conference Proceedings</i> , 2007, , .	0.4	0
58	Collision-induced dissociation of \sim 142-MeV O ₃ ⁺ and N ₃ ⁺ ions. <i>Physical Review A</i> , 2013, 87, .	2.5	0
59	Radiative cooling of hot C _n and C _n H _m molecules. <i>Journal of Physics: Conference Series</i> , 2015, 635, 112124.	0.4	0
60	Storing keV negative ions for hours: Lifetime measurements in new time domains. <i>Journal of Physics: Conference Series</i> , 2015, 635, 112119.	0.4	0