

# David T Anderson

## List of Publications by Year in descending order

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48  
papers

1,049  
citations

394421

19  
h-index

434195

31  
g-index

48  
all docs

48  
docs citations

48  
times ranked

445  
citing authors

#	ARTICLE	IF	CITATIONS
1	Infrared spectroscopy of chemically doped solid parahydrogen. <i>International Reviews in Physical Chemistry</i> , 2006, 25, 469-496.	2.3	89
2	Infrared spectra of CH <sub>3</sub> F(ortho-H <sub>2</sub> ) <sub>n</sub> clusters in solid parahydrogen. <i>Journal of Chemical Physics</i> , 2003, 119, 4731-4742.	3.0	66
3	High-resolution spectroscopy of HCl and DCl isolated in solid parahydrogen: Direct, induced, and cooperative infrared transitions in a molecular quantum solid. <i>Journal of Chemical Physics</i> , 2002, 116, 594-607.	3.0	65
4	Infrared-induced reaction of Cl atoms trapped in solid parahydrogen. <i>Physical Chemistry Chemical Physics</i> , 2006, 8, 3124.	2.8	55
5	Probing reactive potential energy surfaces by vibrational activation of H <sub>2</sub> -OH entrance channel complexes. <i>International Reviews in Physical Chemistry</i> , 2000, 19, 501-529.	2.3	54
6	Probing quantum solvation with infrared spectroscopy: infrared activity induced in solid parahydrogen by N <sub>2</sub> and Ar dopants. <i>Chemical Physics Letters</i> , 2002, 356, 355-360.	2.6	43
7	Photodissociation of N-methylformamide isolated in solid parahydrogen. <i>Journal of Chemical Physics</i> , 2012, 137, 194313.	3.0	38
8	Infrared spectroscopy and time-resolved dynamics of the ortho-H <sub>2</sub> ⋯OH entrance channel complex. <i>Journal of Chemical Physics</i> , 1998, 109, 3461-3473.	3.0	35
9	Reactive quenching of electronically excited OH radicals in collisions with molecular hydrogen. <i>Journal of Chemical Physics</i> , 1999, 110, 11117-11120.	3.0	33
10	State-to-state inelastic scattering from vibrationally activated OH⋯H <sub>2</sub> complexes. <i>Journal of Chemical Physics</i> , 1998, 109, 10707-10718.	3.0	32
11	The spin-orbit transition of atomic chlorine in solid H <sub>2</sub> , HD, and D <sub>2</sub> . <i>Journal of Chemical Physics</i> , 2007, 126, 021106.	3.0	32
12	Preferential solvation of CH <sub>3</sub> F by ortho-H <sub>2</sub> in cryogenic solid hydrogen. <i>Journal of Molecular Structure</i> , 2006, 786, 123-129.	3.6	31
13	The Cl + H <sub>2</sub> → HCl + H Reaction Induced by IR + UV Irradiation of Cl <sub>2</sub> in Solid <i>para</i> -H <sub>2</sub> : Experiment. <i>Journal of Physical Chemistry A</i> , 2009, 113, 7621-7629.	2.5	31
14	Reactive Quenching of OHA <sub>2</sub> <sup>+</sup> in Collisions with Molecular Deuterium via Nonadiabatic Passage through a Conical Intersection. <i>Journal of Physical Chemistry A</i> , 2001, 105, 10031-10036.	2.5	27
15	Reactions of Atomic Hydrogen with Formic Acid and Carbon Monoxide in Solid Parahydrogen I: Anomalous Effect of Temperature. <i>Journal of Physical Chemistry A</i> , 2014, 118, 7640-7652.	2.5	27
16	High-Resolution Vibrational Spectroscopy of <i>trans</i> -Formic Acid in Solid Parahydrogen. <i>Journal of Physical Chemistry A</i> , 2009, 113, 1770-1778.	2.5	24
17	Quantum Diffusion-Controlled Chemistry: Reactions of Atomic Hydrogen with Nitric Oxide in Solid Parahydrogen. <i>Journal of Physical Chemistry A</i> , 2015, 119, 12270-12283.	2.5	22
18	Transient H <sub>2</sub> O Infrared Satellite Peaks Produced in UV Irradiated Formic Acid Doped Solid Parahydrogen. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 342-347.	4.6	21

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19	Matrix Isolation Spectroscopy and Nuclear Spin Conversion of NH <sub>3</sub> and ND <sub>3</sub> in Solid Parahydrogen. <i>Journal of Physical Chemistry A</i> , 2013, 117, 9712-9724.	2.5	20
20	Communication: H-atom reactivity as a function of temperature in solid parahydrogen: The H + N <sub>2</sub> O reaction. <i>Journal of Chemical Physics</i> , 2013, 139, 151104.	3.0	20
21	Synthesis and infrared characterization of Br <sup>+</sup> HBr and Br <sup>+</sup> D <sub>2</sub> Br entrance channel complexes in solid parahydrogen. <i>Physical Chemistry Chemical Physics</i> , 2008, 10, 5564.	2.8	19
22	Conformation Resolved Induced Infrared Activity: <i>trans</i> - and <i>cis</i> -Formic Acid Isolated in Solid Molecular Hydrogen. <i>Journal of Physical Chemistry A</i> , 2011, 115, 13346-13355.	2.5	19
23	Reactions of Atomic Hydrogen with Formic Acid and Carbon Monoxide in Solid Parahydrogen II: Deuterated Reaction Studies. <i>Journal of Physical Chemistry A</i> , 2014, 118, 7653-7662.	2.5	18
24	Kinetic studies of the infrared-induced reaction between atomic chlorine and solid parahydrogen. <i>Journal of Molecular Spectroscopy</i> , 2015, 310, 72-83.	1.2	17
25	Signatures of a quantum diffusion limited hydrogen atom tunneling reaction. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 422-434.	2.8	16
26	Infrared spectra of N <sub>2</sub> O <sup>+</sup> (ortho-D <sub>2</sub> )N and N <sub>2</sub> O <sup>+</sup> (HD)N clusters trapped in bulk solid parahydrogen. <i>Journal of Chemical Physics</i> , 2007, 126, 184506.	3.0	15
27	Infrared Spectroscopy of the Amide I Mode of <i>N</i> -Methylacetamide in Solid Hydrogen at 2 <sup>+</sup> 4 K. <i>Journal of Physical Chemistry B</i> , 2011, 115, 13659-13667.	2.6	15
28	Hydrogen-atom tunneling reactions with methyl formate in solid <i>para</i> -hydrogen: Infrared spectra of the methoxy carbonyl [ <sup>+</sup> C(O)OCH <sub>3</sub> ] and formyloxy methyl [HC(O)OCH <sub>2</sub> ] radicals. <i>Journal of Chemical Physics</i> , 2019, 151, 234302.	3.0	15
29	Transient HDO rovibrational satellite peaks in solid parahydrogen: Evidence of hydrogen atoms or vacancies?. <i>Low Temperature Physics</i> , 2012, 38, 673-678.	0.6	14
30	Stimulated Raman excitation of the ortho-H <sub>2</sub> <sup>+</sup> OH entrance channel complex. <i>Journal of Chemical Physics</i> , 1999, 110, 6732-6742.	3.0	12
31	High-resolution infrared spectroscopy of atomic bromine in solid parahydrogen and orthodeuterium. <i>Journal of Chemical Physics</i> , 2013, 139, 134304.	3.0	12
32	Fourier Transform Infrared Studies of Ammonia Photochemistry in Solid Parahydrogen. <i>Journal of Physical Chemistry A</i> , 2013, 117, 13832-13842.	2.5	11
33	Hydrogen atom catalyzed ortho-to-para conversion in solid molecular hydrogen. <i>Low Temperature Physics</i> , 2019, 45, 676-688.	0.6	11
34	Infrared Spectroscopy and Inelastic Recoil Dynamics of OH Radicals in Complexes with ortho- and para-D <sub>2</sub> . <i>Journal of Physical Chemistry A</i> , 2000, 104, 6532-6544.	2.5	10
35	Femtosecond pump-probe 2D optical Kerr effect spectroscopy of molecular hydrogen crystals. <i>Chemical Physics Letters</i> , 2008, 458, 303-307.	2.6	10
36	Photodissociation of Molecular Bromine in Solid H <sub>2</sub> and D <sub>2</sub> : Spectroscopy of the Atomic Bromine Spin-Orbit Transition. <i>Journal of Physical Chemistry A</i> , 2008, 112, 11153-11158.	2.5	10

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37	Nuclear spin conversion of water confined in solid parahydrogen. <i>Chemical Physics Letters</i> , 2020, 752, 137539.	2.6	9
38	Theoretical Study of Vibrationally Averaged Dipole Moments for the Ground and Excited $\hat{O}$ -Stretching States of <i>trans</i> -Formic Acid. <i>Journal of Chemical Theory and Computation</i> , 2010, 6, 817-827.	5.3	8
39	Hydrogen atom quantum diffusion in solid parahydrogen: The $H + N_2O \hat{\rightarrow} cis$ -HNNO $\hat{\rightarrow} trans$ -HNNO reaction. <i>Journal of Chemical Physics</i> , 2021, 154, 014302.	3.0	8
40	Infrared spectroscopic studies of the rare gas atom perturbed S1(0) rovibron band of solid parahydrogen. <i>Journal of Molecular Spectroscopy</i> , 2007, 244, 138-145.	1.2	7
41	The infrared dielectric function of solid para-hydrogen. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 450, 1032-1041.	4.4	6
42	Infrared Spectroscopy and 193 nm Photochemistry of Methylamine Isolated in Solid Parahydrogen. <i>Journal of Physical Chemistry A</i> , 2015, 119, 2420-2428.	2.5	6
43	Mode-selective decay dynamics of the <i>ortho</i> - $H_2$ -OH complex: experiment and theory. <i>Molecular Physics</i> , 1999, 97, 151-158.	1.7	4
44	Controlling the Relative Orientation of Reactants with Intermolecular Forces: Intermolecular State-Dependent Structure in Prereactive $H_2$ -OH Complexes. <i>Journal of Physical Chemistry A</i> , 2003, 107, 2606-2615.	2.5	4
45	Matrix Isolation Spectroscopy and Nuclear Spin Conversion of Propyne Suspended in Solid Parahydrogen. <i>Journal of Physical Chemistry A</i> , 2020, 124, 4471-4483.	2.5	4
46	Time resolved dynamics of phonons and rotons in solid parahydrogen. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 17435.	2.8	3
47	Solid Parahydrogen Infrared Matrix Isolation and Computational Studies of $Li_n(C_2H_4)_m$ Complexes. <i>Journal of Physical Chemistry A</i> , 2018, 122, 985-991.	2.5	1
48	High resolution infrared spectroscopy of (HCl) <sub>2</sub> and (DCl) <sub>2</sub> isolated in solid parahydrogen: Interchange-tunneling in a quantum solid. <i>Journal of Chemical Physics</i> , 2021, 154, 164309.	3.0	0