

# Andrew Cc Hodgson

## List of Publications by Year in descending order

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90  
papers

5,470  
citations

94433

37  
h-index

79698

73  
g-index

95  
all docs

95  
docs citations

95  
times ranked

4156  
citing authors

#	ARTICLE	IF	CITATIONS
1	Water adsorption and the wetting of metal surfaces. Surface Science Reports, 2009, 64, 381-451.	7.2	650
2	A molecular perspective of water at metal interfaces. Nature Materials, 2012, 11, 667-674.	27.5	568
3	Water at Interfaces. Chemical Reviews, 2016, 116, 7698-7726.	47.7	536
4	A one-dimensional ice structure built from pentagons. Nature Materials, 2009, 8, 427-431.	27.5	212
5	Growth of thin crystalline ice films on Pt(). Surface Science, 2002, 505, 171-182.	1.9	193
6	Hydrogen Bonding in Mixed OH+H <sub>2</sub> O Overlayers on Pt(111). Physical Review Letters, 2004, 92, 046102.	7.8	179
7	State resolved desorption measurements as a probe of surface reactions. Progress in Surface Science, 2000, 63, 1-61.	8.3	141
8	Growth of intact water ice on Ru(0001) between 140 and 160 K: Experiment and density-functional theory calculations. Physical Review B, 2006, 73, .	3.2	125
9	Intact and dissociative adsorption of water on Ru(0001). Chemical Physics Letters, 2004, 388, 89-93.	2.6	122
10	Adsorption and desorption dynamics of H <sub>2</sub> and D <sub>2</sub> on Cu(111): The role of surface temperature and evidence for corrugation of the dissociation barrier. Journal of Chemical Physics, 1998, 108, 4199-4211.	3.0	114
11	The structure and crystallization of thin water films on Pt(111). Journal of Chemical Physics, 2005, 123, 174701.	3.0	110
12	Energy transfer and vibrational effects in the dissociation and scattering of D <sub>2</sub> from Cu (111). Nature, 1992, 356, 501-504.	27.8	107
13	Quantum state-selected photodissociation dynamics in H <sub>2</sub> O and D <sub>2</sub> O. Molecular Physics, 1985, 54, 351-368.	1.7	90
14	$\frac{c}{2} \tilde{A}^{-2} \frac{dT}{dT_0} \frac{dT}{dT_0}$ by Bjerrum Defects. Physical Review Letters, 2011, 106, 046103.		
15	Bias-Driven Conductance Increase with Length in Porphyrin Tapes. Journal of the American Chemical Society, 2018, 140, 12877-12883.	13.7	84
16	Structure of water adsorbed on the open Cu(110) surface: H-up, H-down, or both?. Chemical Physics Letters, 2006, 429, 415-419.	2.6	82
17	Rotational Excitation and Vibrational Relaxation of H <sub>2</sub> ( $\tilde{v}=1, J=0$ ) Scattered from Cu(111). Physical Review Letters, 1997, 78, 963-966.	7.8	77
18	Photodissociation of H <sub>2</sub> O <sub>2</sub> at 248 nm: translational anisotropy and OH product state distributions. Chemical Physics Letters, 1986, 128, 264-269.	2.6	76

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19	Inverted vibrational distributions from N <sub>2</sub> recombination at Ru(001): Evidence for a metastable molecular chemisorption well. <i>Journal of Chemical Physics</i> , 1999, 110, 6954-6962.	3.0	73
20	Photodissociation dynamics of H <sub>2</sub> O <sub>2</sub> at 248 nm. Photofragment quantum-state distributions and vector correlations. <i>Faraday Discussions of the Chemical Society</i> , 1986, 82, 25.	2.2	69
21	Deuterium dissociation on ordered Sn/Pt(111) surface alloys. <i>Journal of Chemical Physics</i> , 1998, 109, 3255-3264.	3.0	64
22	Dissociative chemisorption of O <sub>2</sub> on Cu(110). <i>Surface Science</i> , 1993, 293, 211-226.	1.9	62
23	N <sub>2</sub> O adsorption and reaction at Pd(110). <i>Surface Science</i> , 2000, 463, 1-10.	1.9	59
24	Electron induced restructuring of crystalline ice adsorbed on Pt(111). <i>Surface Science</i> , 2003, 528, 15-19.	1.9	57
25	Water monolayer and multilayer adsorption on Ni(111). <i>Surface Science</i> , 2007, 601, 268-273.	1.9	53
26	Multilayer Growth and Wetting of Ru(0001). <i>Journal of Physical Chemistry C</i> , 2007, 111, 5946-5953.	3.1	49
27	Quantum-state-selected photodissociation of H <sub>2</sub> O( <i>C</i> <sub>1</sub> B <sub>1</sub> ). <i>Chemical Physics Letters</i> , 1984, 107, 1-5.	2.6	47
28	Scattering of vibrationally excited H <sub>2</sub> from Cu(111). <i>Chemical Physics Letters</i> , 1991, 182, 152-158.	2.6	46
29	Molecular emission from H <sub>2</sub> O/D <sub>2</sub> O( <i>C</i> <sub>1</sub> B <sub>1</sub> ) and photodissociation dynamics on the ( <i>B</i> <sub>1</sub> ) <sub>1</sub> surface. <i>Molecular Physics</i> , 1986, 57, 129-147.	1.7	45
30	The structure of the mixed OH+H <sub>2</sub> O overlayer on Pt{111}. <i>Journal of Chemical Physics</i> , 2005, 123, 064711.	3.0	45
31	Water-hydroxyl phases on an open metal surface: breaking the ice rules. <i>Chemical Science</i> , 2012, 3, 93-102.	7.4	45
32	Spherical momentum distribution of the protons in hexagonal ice from modeling of inelastic neutron scattering data. <i>Journal of Chemical Physics</i> , 2012, 136, 024504.	3.0	43
33	The morphology of thin water films on Pt(111) probed by chloroform adsorption. <i>Chemical Physics Letters</i> , 2006, 417, 1-5.	2.6	40
34	Vector Correlations in Molecular Photodissociation: H <sub>2</sub> O <sub>2</sub> , HONO <sub>2</sub> and (CH <sub>3</sub> ) <sub>3</sub> COOH. <i>Zeitschrift Fur Elektrotechnik Und Elektrochemie</i> , 1988, 92, 264-273.	0.9	39
35	Initial stages of Fe(110) oxidation at 300 K: kinetics and structure. <i>Surface Science</i> , 1995, 331-333, 133-137.	1.9	39
36	On the recombinative desorption of N <sub>2</sub> from Ag(111). <i>Surface Science</i> , 1997, 387, 102-111.	1.9	39

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37	Order and disorder in the wetting layer on Ru(0001). Faraday Discussions, 2009, 141, 231-249.	3.2	39
38	Mixed water/OH structures on Pd(111). Surface Science, 2007, 601, 562-568.	1.9	38
39	Detecting Mechanochemical Atropisomerization within an STM Break Junction. Journal of the American Chemical Society, 2018, 140, 710-718.	13.7	38
40	Nitrogen induced restructuring of Cu(111) and explosive desorption of N <sub>2</sub> . Surface Science, 1998, 415, 48-61.	1.9	37
41	Wetting of mixed OH <sup>*</sup> •H <sub>2</sub> O layers on Pt(111). Journal of Chemical Physics, 2008, 128, 074701.	3.0	37
42	Tailoring the Structure of Water at a Metal Surface: A Structural Analysis of the Water Bilayer Formed on an Alloy Template. Physical Review Letters, 2011, 106, 226101.	7.8	37
43	Role of Surface Thermal Motion in the Dissociative Chemisorption and Recombinative Desorption of D <sub>2</sub> on Ag(111). Physical Review Letters, 1997, 78, 4458-4461.	7.8	36
44	Adsorption and Solvation of HCl into Ice Surfaces. Journal of Physical Chemistry B, 2002, 106, 3950-3959.	2.6	36
45	Vibrationally assisted sticking at metal surfaces. Chemical Physics Letters, 1988, 147, 425-429.	2.6	33
46	Endothermic dissociative chemisorption of molecular D <sub>2</sub> on Ag(111). Chemical Physics Letters, 1995, 243, 133-139.	2.6	33
47	Water and mixed OH/water adsorption at close packed metal surfaces. Current Opinion in Solid State and Materials Science, 2005, 9, 11-18.	11.5	33
48	Nitrogen recombination dynamics at Cu(111): Rotational energy release and product angular distributions. Journal of Chemical Physics, 1998, 109, 3619-3628.	3.0	32
49	Ice Nucleation on a Corrugated Surface. Journal of the American Chemical Society, 2018, 140, 15804-15811.	13.7	30
50	Translational energy release in the recombinative desorption of H <sub>2</sub> from Ag(111). Surface Science, 1997, 390, 29-34.	1.9	28
51	Two-Dimensional Wetting of a Stepped Copper Surface. Physical Review Letters, 2018, 120, 076101.	7.8	28
52	A tunnelling model for activated adsorption at metal surfaces. Journal of Electron Spectroscopy and Related Phenomena, 1987, 45, 207-213.	1.7	27
53	The kinetics of O <sub>2</sub> dissociative chemisorption on Fe(110). Surface Science, 1994, 319, 119-130.	1.9	27
54	The recombinative desorption of D <sub>2</sub> from Ag(111): temperature-programmed desorption and low energy electron diffraction. Surface Science, 1995, 328, 67-79.	1.9	25

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55	Strain Relief during Ice Growth on a Hexagonal Template. <i>Journal of the American Chemical Society</i> , 2019, 141, 8599-8607.	13.7	24
56	Vibrational state dependence of D <sub>2</sub> dissociation on Ag(111). <i>Journal of Chemical Physics</i> , 1997, 106, 4714-4722.	3.0	23
57	Translational and vibrational energy release in nitrogen recombinative desorption from Cu(111). <i>Chemical Physics Letters</i> , 1997, 279, 112-118.	2.6	22
58	Kinetics and detection of F(2P) atoms in a discharge flow system. <i>Chemical Physics</i> , 1983, 79, 351-360.	1.9	21
59	Energy disposal during desorption of D <sub>2</sub> from the surface and subsurface region of Ni(111). <i>Faraday Discussions</i> , 2000, 117, 133-146.	3.2	21
60	Water desorption from an oxygen covered Pt(111) surface: Multichannel desorption. <i>Journal of Chemical Physics</i> , 2006, 124, 204712.	3.0	21
61	Scattering and dissociation of H <sub>2</sub> /D <sub>2</sub> at Fe(110). <i>Faraday Discussions</i> , 1993, 96, 161.	3.2	20
62	Absolute rate constants for the reaction of fluorine atoms with H <sub>2</sub> , CH <sub>2</sub> Cl <sub>2</sub> , CH <sub>2</sub> ClF, CH <sub>2</sub> F <sub>2</sub> and CHCl <sub>2</sub> . <i>Journal of the Chemical Society, Faraday Transactions 2</i> , 1985, 81, 443.	1.1	18
63	Two-photon resonance ionisation spectroscopy of OH/OD D <sub>2</sub> . <i>Chemical Physics Letters</i> , 1991, 179, 422-428.	2.6	18
64	Internal state distributions for D <sub>2</sub> recombinative desorption from Ag(111). <i>Surface Science</i> , 1996, 368, 55-60.	1.9	17
65	Water and its partially dissociated fragments at metal surfaces. <i>International Reviews in Physical Chemistry</i> , 2017, 36, 1-38.	2.3	17
66	Strain relief and disorder in commensurate water layers formed on Pd(111). <i>Journal of Physics Condensed Matter</i> , 2012, 24, 124102.	1.8	14
67	The influence of electronic structure on D <sub>2</sub> activated dissociative chemisorption at Cu <sub>85</sub> Pd <sub>15</sub> {110}. <i>Surface Science</i> , 1995, 325, 57-67.	1.9	13
68	The role of lattice parameter in water adsorption and wetting of a solid surface. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 24018-24025.	2.8	13
69	Dissociation dynamics on ordered surface alloys. <i>Journal of Physics Condensed Matter</i> , 1999, 11, 8397-8415.	1.8	12
70	Desorption from thin films of amorphous HCl hydrate. <i>Surface Science</i> , 2003, 532-535, 478-482.	1.9	12
71	Adsorption of oxygen on Cu(110). <i>Journal of Physics Condensed Matter</i> , 1991, 3, S71-S76.	1.8	11
72	The Influence of Water and Hydroxyl on a Bimetallic (Au <sub>3</sub> -Au <sub>3</sub> )R <sub>30</sub> ° Sn/Pt Surface Alloy. <i>Journal of Physical Chemistry C</i> , 2013, 117, 4032-4039.	3.1	11

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73	Dynamics of D resurfacing on Ni(111) and reaction with chemisorbed D. Chemical Physics Letters, 2002, 364, 522-527.	2.6	10
74	Chiral segregation driven by a dynamical response of the adsorption footprint to the local adsorption environment: bitartrate on Cu(110). Physical Chemistry Chemical Physics, 2017, 19, 7617-7623.	2.8	10
75	Water Dissociation and Hydroxyl Formation on Ni(110). Journal of Physical Chemistry C, 2020, 124, 23815-23822.	3.1	10
76	Uptake and Reaction of ClONO <sub>2</sub> on Water Ice and HCl Trihydrate at Low Temperatures. Journal of Physical Chemistry A, 2002, 106, 9226-9232.	2.5	8
77	Hydration of a 2D Supramolecular Assembly: Bitartrate on Cu(110). Journal of the American Chemical Society, 2020, 142, 13814-13822.	13.7	8
78	Formation of Linear Water Chains on Ni(110). Journal of Physical Chemistry Letters, 2020, 11, 2121-2126.	4.6	7
79	The A <sup>2</sup> u state of BO <sub>2</sub> . Radiative lifetime, electronic quenching and coupling with X <sup>2</sup> g. Journal of the Chemical Society, Faraday Transactions 2, 1985, 81, 1445.	1.1	6
80	DISSOCIATIVE CHEMISORPTION OF H <sub>2</sub> (D <sub>2</sub> ) AT Fe(110). Surface Review and Letters, 1994, 01, 693-696.	1.1	6
81	The reactivity of water and OH on Pt <sup>111</sup> Ni(111) films. Physical Chemistry Chemical Physics, 2018, 20, 16743-16748.	2.8	6
82	State-resolved measurements of surface reaction dynamics. Chemical Physics of Solid Surfaces, 2003, 11, 143-175.	0.3	5
83	Influence of alkali coadsorption on hydrogen recombination at Cu(111). Surface Science, 2004, 566-568, 186-191.	1.9	5
84	Comment on "Dissociation of Water Buried under Ice on Pt(111)". Physical Review Letters, 2007, 99, 109601; author reply 109602.	7.8	5
85	Structural Changes to Supported Water Nanoislands Induced by Kosmotropic Ions. Journal of Physical Chemistry C, 2019, 123, 6861-6868.	3.1	5
86	Rotational State Dependence of the Predissociation Dynamics in H <sub>2</sub> O, D <sub>2</sub> O (C <sub>1</sub> f <sup>1</sup> B <sub>1</sub> and I <sup>2</sup> A <sub>1</sub> ). Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1985, 89, 251-254.	0.9	3
87	Comment on "Sensitive quantum state selective detection of H <sub>2</sub> O and D <sub>2</sub> O by (2+1) resonance enhanced multiphoton ionization". Journal of Chemical Physics, 1987, 86, 7246-7247.	3.0	2
88	DISSOCIATION OF O <sub>2</sub> ON Fe(110). Surface Review and Letters, 1994, 01, 501-503.	1.1	2
89	Product State Measurements of Nitrogen Formation at Surfaces. , 2001, , 887-900.		2
90	Scattering of vibrationally excited H <sub>2</sub> (D <sub>2</sub> ) from Cu(111). Journal of Physics Condensed Matter, 1991, 3, S217-S222.	1.8	0