

# Anthony J Stone

## List of Publications by Year in descending order

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78

papers

5,936

citations

76326

40

h-index

85541

71

g-index

79

all docs

79

docs citations

79

times ranked

4683

citing authors

#	ARTICLE	IF	CITATIONS
1	The Nature and Geometry of Intermolecular Interactions between Halogens and Oxygen or Nitrogen. Journal of the American Chemical Society, 1996, 118, 3108-3116.	13.7	790
2	Distributed Multipole Analysis: Stability for Large Basis Sets. Journal of Chemical Theory and Computation, 2005, 1, 1128-1132.	5.3	540
3	Towards an accurate intermolecular potential for water. Molecular Physics, 1992, 77, 439-462.	1.7	267
4	Contribution of Many-Body Terms to the Energy for Small Water Clusters: A Comparison of ab Initio Calculations and Accurate Model Potentials. Journal of Physical Chemistry A, 1997, 101, 9163-9168.	2.5	192
5	Are Halogen Bonded Structures Electrostatically Driven?. Journal of the American Chemical Society, 2013, 135, 7005-7009.	13.7	187
6	Revised Anisotropic Site Potentials for the Water Dimer and Calculated Properties. Journal of Physical Chemistry A, 1998, 102, 754-770.	2.5	170
7	Charge-transfer in Symmetry-Adapted Perturbation Theory. Chemical Physics Letters, 2009, 473, 201-205.	2.6	166
8	Computation of charge-transfer energies by perturbation theory. Chemical Physics Letters, 1993, 211, 101-109.	2.6	160
9	Natural Bond Orbitals and the Nature of the Hydrogen Bond. Journal of Physical Chemistry A, 2017, 121, 1531-1534.	2.5	141
10	Exciton coupling in porphyrin dimers. Chemical Physics, 1989, 133, 395-404.	1.9	125
11	Intermolecular Potentials. Science, 2008, 321, 787-789.	12.6	119
12	Applications of the Mössbauer effect to silicate mineralogy II. Iron silicates of unknown and complex crystal structures. Geochimica Et Cosmochimica Acta, 1968, 32, 547-559.	3.9	94
13	Distributed polarizabilities obtained using a constrained density-fitting algorithm. Journal of Chemical Physics, 2006, 124, 024111.	3.0	87
14	Practical schemes for distributed polarizabilities. Molecular Physics, 1993, 78, 1267-1291.	1.7	79
15	A first principles prediction of the crystal structure of $\text{C}_{12}\text{Mg}_2\text{O}_4$ . Chemical Physics Letters, 2008, 456, 105-109.	2.6	79
16	Beyond Born-Mayer: Improved Models for Short-Range Repulsion in ab Initio Force Fields. Journal of Chemical Theory and Computation, 2016, 12, 3851-3870.	5.3	79
17	Accurate Induction Energies for Small Organic Molecules. 2. Development and Testing of Distributed Polarizability Models against SAPT(DFT) Energies. Journal of Chemical Theory and Computation, 2008, 4, 19-32.	5.3	77
18	The intermolecular potential of chlorine. Molecular Physics, 1988, 63, 173-188.	1.7	72

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19	Distributed dispersion: A new approach. <i>Journal of Chemical Physics</i> , 2003, 119, 4620-4628.	3.0	71
20	Mössbauer Spectrum of Fe <sup>2+</sup> in a Square-Planar Environment. <i>Journal of Chemical Physics</i> , 1967, 47, 4250-4261.	3.0	68
21	Accurate Induction Energies for Small Organic Molecules: I. Theory. <i>Journal of Chemical Theory and Computation</i> , 2008, 4, 7-18.	5.3	68
22	Transition states from molecular symmetry groups: Analysis of non-rigid acetylene trimer. <i>Molecular Physics</i> , 1991, 72, 33-73.	1.7	66
23	Modeling small hydronium-water clusters. <i>Journal of Chemical Physics</i> , 1999, 110, 6766-6772.	3.0	64
24	Electrostatic models for polypeptides: can we assume transferability?. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1992, 88, 1755.	1.7	61
25	Localization methods for distributed polarizabilities. <i>Molecular Physics</i> , 1994, 83, 293-307.	1.7	61
26	Topography of potential-energy surfaces for Van der Waals complexes. <i>Faraday Discussions</i> , 1994, 97, 243.	3.2	61
27	Distributed Multipoles from a Robust Basis-Space Implementation of the Iterated Stockholder Atoms Procedure. <i>Journal of Chemical Theory and Computation</i> , 2014, 10, 5405-5418.	5.3	58
28	Theoretical study of rearrangements in boranes. <i>Inorganic Chemistry</i> , 1987, 26, 3845-3850.	4.0	55
29	Is the Induction Energy Important for Modeling Organic Crystals?. <i>Journal of Chemical Theory and Computation</i> , 2008, 4, 522-532.	5.3	55
30	Dispersion energies for small organic molecules: first row atoms. <i>Molecular Physics</i> , 2008, 106, 1631-1643.	1.7	54
31	The induction energy of an assembly of polarizable molecules. <i>Chemical Physics Letters</i> , 1989, 155, 102-110.	2.6	52
32	Dispersion interactions between semiconducting wires. <i>Physical Review B</i> , 2010, 82, .	3.2	51
33	Electrostatic Damping Functions and the Penetration Energy. <i>Journal of Physical Chemistry A</i> , 2011, 115, 7017-7027.	2.5	51
34	Analytical Potentials for HF Dimer and Larger HF Clusters from ab Initio Calculations. <i>Journal of Physical Chemistry A</i> , 1998, 102, 2455-2465.	2.5	50
35	Vibronic Polarization in the Electronic Spectra of Gillespite, a Mineral Containing Iron(II) in Square-Planar Coordination. <i>Inorganic Chemistry</i> , 1966, 5, 1268-1272.	4.0	44
36	Adsorption of water on the NaCl(001) surface. III. Monte Carlo simulations at ambient temperatures. <i>Journal of Chemical Physics</i> , 2000, 112, 6827-6833.	3.0	43

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37	< i>Ab Initio</i> Atomâ€“Atom Potentials Using C<sub>am</sub>CASP: Theory and Application to Many-Body Models for the Pyridine Dimer. <i>Journal of Chemical Theory and Computation</i> , 2016, 12, 4184-4208.	5.3	43
38	An ab Initio and Diffusion Monte Carlo Study of the Potential Energy Surface of the CO Dimer. <i>Journal of Physical Chemistry A</i> , 1998, 102, 434-445.	2.5	42
39	Intermolecular interactions in halogens: Bromine and iodine. <i>Chemical Physics Letters</i> , 1988, 145, 365-370.	2.6	41
40	Instability of Ice Films. <i>Langmuir</i> , 2002, 18, 4632-4636.	3.5	41
41	Conformational dependence of the molecular charge distribution and its influence on intermolecular interactions. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1996, 92, 1701.	1.7	40
42	Adsorption of water on NaCl(001). I. Intermolecular potentials and low temperature structures. <i>Journal of Chemical Physics</i> , 1999, 110, 12089-12096.	3.0	36
43	A perturbation theory study of adlayer CO on NaCl(100). <i>Journal of Chemical Physics</i> , 1996, 104, 3058-3070.	3.0	35
44	Adsorption of water on the MgO(001) surface. <i>Surface Science</i> , 1999, 437, 239-248.	1.9	35
45	Atomic anisotropy and the structure of liquid chlorine. <i>Journal of the Chemical Society, Faraday Transactions 2</i> , 1987, 83, 1689.	1.1	33
46	Stationary points on the potential energy surfaces of (SO <sub>2</sub> ) <sub>2</sub> and (SO <sub>2</sub> ) <sub>3</sub> . <i>Journal of Chemical Physics</i> , 1992, 96, 8390-8410.	3.0	31
47	Induced dipole moments in acetylene complexes. <i>The Journal of Physical Chemistry</i> , 1991, 95, 3519-3522.	2.9	29
48	Transferability of topologically partitioned polarizabilities: the case of n-alkanes. <i>Molecular Physics</i> , 1996, 89, 595-605.	1.7	29
49	Developments in computational studies of crystallization and morphology applied to urea. <i>Physical Chemistry Chemical Physics</i> , 2000, 2, 3017-3027.	2.8	29
50	Potential energy surfaces of van der Waals complexes of water and hydrogen halides modeled using distributed multipoles. <i>Journal of Chemical Physics</i> , 1995, 102, 5551-5565.	3.0	28
51	Adsorption of water on the BaF <sub>2</sub> (111) surface. <i>Journal of Chemical Physics</i> , 2002, 117, 800-807.	3.0	27
52	Intermolecular perturbation theory for Van der Waals molecules. <i>Faraday Discussions of the Chemical Society</i> , 1982, 73, 19.	2.2	26
53	An OHD-RIKES and simulation study comparing a benzylmethylimidazolium ionic liquid with an equimolar mixture of dimethylimidazolium and benzene. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 9973-9983.	2.8	26
54	H $\ddot{\text{c}}$ $\ddot{\text{c}}$ $\ddot{\text{c}}$ H model potential for exchange-repulsion energy of methane dimer. <i>Journal of Computational Chemistry</i> , 1998, 19, 847-857.	3.3	25

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55	Assessment of multipolar approximations to the induction energy. <i>Chemical Physics Letters</i> , 1989, 155, 111-118.	2.6	24
56	Anomalous nonadditive dispersion interactions in systems of three one-dimensional wires. <i>Physical Review B</i> , 2014, 89, .	3.2	23
57	Temperature variation of proton hyperfine splittings in amino groups. <i>Transactions of the Faraday Society</i> , 1965, 61, 2593.	0.9	22
58	A new representation of the dispersion interaction. <i>Molecular Physics</i> , 2000, 98, 275-286.	1.7	22
59	ISA-Pol: distributed polarizabilities and dispersion models from a basis-space implementation of the iterated stockholder atoms procedure. <i>Theoretical Chemistry Accounts</i> , 2018, 137, 1.	1.4	22
60	Water from First Principles. <i>Science</i> , 2007, 315, 1228-1229.	12.6	21
61	Potential energy surfaces of several van der Waals complexes modelled using distributed multipoles. <i>Chemical Physics Letters</i> , 1995, 240, 89-96.	2.6	20
62	Reply to â€œComment on â€˜Natural Bond Orbitals and the Nature of the Hydrogen Bondâ€™â€. <i>Journal of Physical Chemistry A</i> , 2018, 122, 733-736.	2.5	19
63	Bonding in transition-metal clusters. <i>Inorganic Chemistry</i> , 1989, 28, 3120-3127.	4.0	16
64	Ice Nucleation on a Model Hexagonal Surface. <i>Langmuir</i> , 2004, 20, 8715-8720.	3.5	15
65	Classical Electrostatics in Molecular Interactions. , 1991, , 103-131.		15
66	Using monomer properties to obtain integrated intensities for vibrational transitions of van der Waals complexes. <i>Molecular Physics</i> , 1992, 77, 823-835.	1.7	12
67	Transferable polarizabilities for the alkanes. <i>Molecular Physics</i> , 2004, 102, 985-991.	1.7	12
68	Stereoselectivity and regioselectivity in Dielsâ€“Alder reactions studied by intermolecular perturbation theory. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1994, 90, 1663-1668.	1.7	9
69	The dielectric virial coefficient and model intermolecular potentials. <i>Physical Chemistry Chemical Physics</i> , 2000, 2, 429-434.	2.8	8
70	Physical Basis of Intermolecular Interactions. , 2017, , 3-26.		8
71	An amorphous monolayer: Infrared spectroscopic and theoretical studies of SO <sub>2</sub> on NaCl (100). <i>Journal of Chemical Physics</i> , 1996, 104, 6843-6855.	3.0	6
72	A model with charges and polarizability for CS <sub>2</sub> in an ionic liquid. <i>Journal of Chemical Sciences</i> , 2017, 129, 883-890.	1.5	6

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73	Theoretical studies of the interface between water and Langmuir films of aliphatic alcohols. <i>Journal of Chemical Physics</i> , 2003, 119, 5670-5679.	3.0	5
74	Classical Electrostatics in Molecular Interactions. , 1991, , 103-131.		4
75	A Classical Model for 3-body Interactions in Aqueous Ionic Systems. <i>Journal of Chemical Physics</i> , 0, , .	3.0	3
76	Universal Models of Hydrogen Bonding. , 2000, , 25-34.		1
77	On the search for solutions. <i>Nature</i> , 1988, 335, 465-465.	27.8	0
78	Lattice sums and their derivatives for surface adlayers. <i>Molecular Physics</i> , 2005, 103, 2477-2481.	1.7	0