Jerry A Boatz

List of Publications by Year
in descending order

26 papers	19,554 citations	933447 10 h-index	642732 23 g-index
27 all docs	27 docs citations	27 times ranked	14268 citing authors

#	Article	IF	Citations
1	General atomic and molecular electronic structure system. Journal of Computational Chemistry, 1993, 14, 1347-1363.	3.3	19,020
2	Accurate Methods for Large Molecular Systems. Journal of Physical Chemistry B, 2009, 113, 9646-9663.	2.6	188
3	Classical and Quantum-Mechanical Studies of Crystalline FOX-7 (1,1-Diamino-2,2-dinitroethylene). Journal of Physical Chemistry A, 2001, 105, 5010-5021.	2.5	121
4	Synthesis of Nanoparticles from Malleable and Ductile Metals Using Powder-Free, Reactant-Assisted Mechanical Attrition. ACS Applied Materials & Interfaces, 2014, 6, 19579-19591.	8.0	30
5	Boron Nanoparticles with High Hydrogen Loading: Mechanism for Bâ€“H Binding and Potential for Improved Combustibility and Specific Impulse. ACS Applied Materials & Interfaces, 2014, 6, 8513-8525.	8.0	30
6	Chromophore Protonation States and the Proton Shuttle Mechanism in Green Fluorescent Protein:Â Inferences Drawn from ab Initio Theoretical Studies of Chemical Structures and Vibrational Spectraâ€. Journal of Physical Chemistry B, 2001, 105, 2850-2857.	2.6	26
7	Rapid Aluminum Nanoparticle Production by Milling in NH₃ and CH₃NH₂ Atmospheres: An Experimental and Theoretical Study. ACS Applied Materials & Interfaces, 2015, 7, 16101-16116.	8.0	21
8	Aluminum Nanoparticle Production by Acetonitrile-Assisted Milling: Effects of Liquid- vs Vapor-Phase Milling and of Milling Method on Particle Size and Surface Chemistry. Journal of Physical Chemistry C, 2016, 120, 19613-19629.	3.1	20
9	Unusual behavior in magnesium-copper cluster matter produced by helium droplet mediated deposition. Journal of Chemical Physics, 2015, 142, 084307.	3.0	11
10	Atomic spectral methods for molecular electronic structure calculations. Journal of Chemical Physics, 2004, 121, 9323-9342.	3.0	10
11	Organic Crystal Engineering of Thermosetting Cyanate Ester Monomers: Influence of Structure on Melting Point. Crystal Growth and Design, 2016, 16, 4082-4093.	3.0	9
12	Ionic Liquid Clusters Generated from Electrospray Thrusters: Cold Ion Spectroscopic Signatures of Size-Dependent Acidâ€“Base Interactions. Journal of Physical Chemistry A, 2020, 124, 10507-10516.	2.5	9
13	Spectral-product methods for electronic structure calculations. Theoretical Chemistry Accounts, 2008, 120, 199-213.	1.4	8
14	Boraneâ€“Aluminum Surface Interactions: Enhanced Fracturing and Generation of Boronâ€“Aluminum Coreâ€“Shell Nanoparticles. Journal of Physical Chemistry C, 2017, 121, 14176-14190.	3.1	8
15	Multiphoton Ionization Spectroscopy of AlArN Clusters. Journal of Physical Chemistry A, 2003, 107, 6948-6965.	2.5	6
16	Insights into Melting Behavior of Propyl-Bridged Di(cyanate ester) Monomers through Crystal Packing, Thermal Characterization, and Computational Analysis. Crystal Growth and Design, 2018, 18, 1030-1040.	3.0	6
17	Study of the Reaction of Hydroxylamine with Iridium Atomic and Cluster Anions (n = 1â€“5). Journal of Physical Chemistry A, 2021, 125, 5922-5932.	2.5	6
18	Spectral Theory of Chemical Bonding. ACS Symposium Series, 2002, , 221-237.	0.5	5

#	Article	IF	Citations
19	Atomic Spectral-Product Representations of Molecular Electronic Structure: Metric Matrices and Atomic-Product Composition of Molecular Eigenfunctions. Journal of Physical Chemistry A, 2009, 113, 7687-7697.	2.5	5
20	Theoretical Study of Cu/Mg Coreâ€“shell Nanocluster Formation. Journal of Physical Chemistry A, 2016, 120, 9612-9617.	2.5	5
21	Atomic Spectral Methods for Ab Initio Molecular Electronic Energy Surfaces: Transitioning From Small-Molecule to Biomolecular-Suitable Approaches. Journal of Physical Chemistry B, 2016, 120, 8321-8337.	2.6	3
22	Applications of LÃ¶wdinâ€™s Metric Matrix: Atomic Spectral Methods for Electronic Structure Calculations. , 2004, , 97-114.		3
23	Atomic-pair theorem for universal matrix representatives of molecules and atomic clusters in non-relativistic Born-Oppenheimer approximation. Journal of Mathematical Physics, 2018, 59, .	1.1	2
24	Segmented correlation consistent basis sets for the 4d and 5d transition metals. Journal of Chemical Physics, 2022, 156, 064102.	3.0	2
25	Bimetallic cluster film formation of Al and Mg with Cu investigated via He droplet deposition. AIP Conference Proceedings, 2020, , .	0.4	0
26	The gas phase reaction of iridium and iridium carbide anions with 2-hydoxyethylhydrazine (HEH). International Journal of Mass Spectrometry, 2022, , 116875.	1.5	0