Grant E Johnson

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8785515/publications.pdf

Version: 2024-02-01

71 papers	2,936 citations	136885 32 h-index	175177 52 g-index
75 all docs	75 docs citations	75 times ranked	2163 citing authors

#	Article	IF	Citations
1	Surface characterization of nanomaterials and nanoparticles: Important needs and challenging opportunities. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2013, 31, 50820.	0.9	227
2	Clusters as model systems for investigating nanoscale oxidation catalysis. Chemical Physics Letters, 2009, 475, 1-9.	1.2	160
3	Influence of Charge State on the Mechanism of CO Oxidation on Gold Clusters. Journal of the American Chemical Society, 2008, 130, 1694-1698.	6.6	147
4	Influence of Charge State on Catalytic Oxidation Reactions at Metal Oxide Clusters Containing Radical Oxygen Centers. Journal of the American Chemical Society, 2009, 131, 5460-5470.	6.6	135
5	Stoichiometric Zirconium Oxide Cations as Potential Building Blocks for Cluster Assembled Catalysts. Journal of the American Chemical Society, 2008, 130, 13912-13920.	6.6	120
6	Cluster reactivity experiments: Employing mass spectrometry to investigate the molecular level details of catalytic oxidation reactions. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 18108-18113.	3.3	116
7	Soft Landing of Complex Molecules on Surfaces. Annual Review of Analytical Chemistry, 2011, 4, 83-104.	2.8	98
8	Rational design of efficient electrodeâ€“electrolyte interfaces for solid-state energy storage using ion soft landing. Nature Communications, 2016, 7, 11399.	5.8	86
9	Experimental and Theoretical Study of the Structure and Reactivity of Fe<i>_m</i>O<i>_n</i>⁺ (<i>m</i> = 1, 2; <i>n</i> = 1â^'5) with CO. Journal of Physical Chemistry C, 2007, 111, 19086-19097.	1.5	81
10	From Isolated Ions to Multilayer Functional Materials Using Ion Soft Landing. Angewandte Chemie - International Edition, 2018, 57, 16270-16284.	7.2	75
11	Experimental and Theoretical Study of the Structure and Reactivity of Fe1-2Oâ‰6- Clusters with CO. Journal of Physical Chemistry A, 2007, 111, 4158-4166.	1.1	69
12	Generation of Oxygen Radical Centers in Binary Neutral Metal Oxide Clusters for Catalytic Oxidation Reactions. Angewandte Chemie - International Edition, 2010, 49, 407-410.	7.2	68
13	Softâ€•and reactive landing of ions onto surfaces: Concepts and applications. Mass Spectrometry Reviews, 2016, 35, 439-479.	2.8	67
14	Soft landing of bare nanoparticles with controlled size, composition, and morphology. Nanoscale, 2015, 7, 3491-3503.	2.8	65
15	Charge Retention by Gold Clusters on Surfaces Prepared Using Soft Landing of Mass Selected Ions. ACS Nano, 2012, 6, 573-582.	7.3	59
16	Influence of Stoichiometry and Charge State on the Structure and Reactivity of Cobalt Oxide Clusters with CO. Journal of Physical Chemistry A, 2008, 112, 11330-11340.	1.1	55
17	Joint experimental and theoretical investigations of the reactivity of Au2Onâ^' and Au3Onâ^' (n=1â€“5) with carbon monoxide. Journal of Chemical Physics, 2006, 125, 204311.	1.2	53
18	Oxidation of CO by Aluminum Oxide Cluster Ions in the Gas Phase. Journal of Physical Chemistry A, 2008, 112, 4732-4735.	1.1	51

#	Article	IF	Citations
19	Gas-Phase Reactivity of Gold Oxide Cluster Cations with CO. Journal of Physical Chemistry C, 2008, 112, 9730-9736.	1.5	51
20	Reactivity Trends in the Oxidation of CO by Anionic Transition Metal Oxide Clusters. Journal of Physical Chemistry C, 2010, 114, 5438-5446.	1.5	51
21	Monodisperse Au₁₁ Clusters Prepared by Soft Landing of Mass Selected Ions. Analytical Chemistry, 2011, 83, 8069-8072.	3.2	49
22	Understanding ligand effects in gold clusters using mass spectrometry. Analyst, The, 2016, 141, 3573-3589.	1.7	47
23	Influence of charge state on the reaction of FeO3+/- with carbon monoxide. Chemical Physics Letters, 2007, 435, 295-300.	1.2	45
24	Design and performance of a high-flux electrospray ionization source for ion soft landing. Analyst, The, 2015, 140, 2957-2963.	1.7	44
25	Self-organizing layers from complex molecular anions. Nature Communications, 2018, 9, 1889.	5.8	43
26	Coverage-Dependent Charge Reduction of Cationic Gold Clusters on Surfaces Prepared Using Soft Landing of Mass-Selected Ions. Journal of Physical Chemistry C, 2012, 116, 24977-24986.	1.5	42
27	In Situ Reactivity and TOF-SIMS Analysis of Surfaces Prepared by Soft and Reactive Landing of Mass-Selected Ions. Analytical Chemistry, 2010, 82, 5718-5727.	3.2	39
28	IonCCDâ„¢ for Direct Position-Sensitive Charged-Particle Detection: from Electrons and keV Ions to Hyperthermal Biomolecular Ions. Journal of the American Society for Mass Spectrometry, 2011, 22, 612-623.	1.2	36
29	Preparation of Surface Organometallic Catalysts by Gasâ€Phase Ligand Stripping and Reactive Landing of Massâ€Selected Ions. Chemistry - A European Journal, 2010, 16, 14433-14438.	1.7	35
30	Redox chemistry in thin layers of organometallic complexes prepared using ion soft landing. Physical Chemistry Chemical Physics, 2011, 13, 267-275.	1.3	34
31	Size-dependent stability toward dissociation and ligand binding energies of phosphine ligated gold cluster ions. Chemical Science, 2014, 5, 3275.	3.7	34
32	Controlling the Charge State and Redox Properties of Supported Polyoxometalates via Soft Landing of Mass-Selected Ions. Journal of Physical Chemistry C, 2014, 118, 27611-27622.	1.5	32
33	Soft landing of bare PtRu nanoparticles for electrochemical reduction of oxygen. Nanoscale, 2015, 7, 12379-12391.	2.8	32
34	Soft Landing of Complex Ions for Studies in Catalysis and Energy Storage. Journal of Physical Chemistry C, 2016, 120, 23305-23322.	1.5	31
35	Ligand induced structural isomerism in phosphine coordinated gold clusters revealed by ion mobility mass spectrometry. Chemical Communications, 2017, 53, 7389-7392.	2.2	31
36	Controlling the Activity and Stability of Electrochemical Interfaces Using Atom-by-Atom Metal Substitution of Redox Species. ACS Nano, 2019, 13, 458-466.	7.3	29

#	Article	IF	Citations
37	Cationic gold clusters ligated with differently substituted phosphines: effect of substitution on ligand reactivity and binding. Physical Chemistry Chemical Physics, 2015, 17, 14636-14646.	1.3	25
38	In Situ Infrared Spectroelectrochemistry for Understanding Structural Transformations of Precisely Defined Ions at Electrochemical Interfaces. Analytical Chemistry, 2018, 90, 10935-10942.	3.2	25
39	Properties of perhalogenated {<i>closo</i>-B₁₀} and {<i>closo</i>-B₁₁} multiply charged anions and a critical comparison with {<i>closo</i>-B₁₂} in the gas and the condensed phase. Physical Chemistry Chemical Physics, 2019, 21, 5903-5915.	1.3	24
40	Effect of charge state and stoichiometry on the structure and reactivity of nickel oxide clusters with CO. International Journal of Mass Spectrometry, 2009, 280, 93-100.	0.7	23
41	In situ solid-state electrochemistry of mass-selected ions at well-defined electrodeâ€“electrolyte interfaces. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 13324-13329.	3.3	23
42	Observing the real time formation of phosphine-ligated gold clusters by electrospray ionization mass spectrometry. Physical Chemistry Chemical Physics, 2017, 19, 17187-17198.	1.3	21
43	Direct functionalization of Câˆ’H bonds by electrophilic anions. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 23374-23379.	3.3	21
44	Insights into Spontaneous Solid Electrolyte Interphase Formation at Magnesium Metal Anode Surface from <i>Ab Initio</i> Molecular Dynamics Simulations. ACS Applied Materials & Interfaces, 2021, 13, 38816-38825.	4.0	20
45	Light Exposure Promotes Degradation of Intermediates and Growth of Phosphine-Ligated Gold Clusters. Journal of Physical Chemistry C, 2020, 124, 3396-3402.	1.5	18
46	Role of sterics in phosphine-ligated gold clusters. Physical Chemistry Chemical Physics, 2019, 21, 1689-1699.	1.3	17
47	Enhanced Raman scattering from aromatic dithiols electrosprayed into plasmonic nanojunctions. Faraday Discussions, 2015, 184, 339-357.	1.6	15
48	Charge retention of soft-landed phosphotungstate Keggin anions on self-assembled monolayers. Physical Chemistry Chemical Physics, 2016, 18, 9021-9028.	1.3	15
49	Characterization of the Ion Beam Focusing in a Mass Spectrometer Using an IonCCDâ„¢ Detector. Journal of the American Society for Mass Spectrometry, 2011, 22, 1388-1394.	1.2	14
50	Synthesis and Characterization of Gold Clusters Ligated with 1,3â€Bis(dicyclohexylphosphino)propane. ChemPlusChem, 2013, 78, 1033-1039.	1.3	14
51	Investigating the Synthesis of Ligated Metal Clusters in Solution Using a Flow Reactor and Electrospray Ionization Mass Spectrometry. Journal of Physical Chemistry A, 2014, 118, 8464-8470.	1.1	14
52	Fabrication of electrocatalytic Ta nanoparticles by reactive sputtering and ion soft landing. Journal of Chemical Physics, 2016, 145, 174701.	1.2	14
53	Gas-Phase Synthesis of Singly and Multiply Charged Polyoxovanadate Anions Employing Electrospray Ionization and Collision Induced Dissociation. Journal of the American Society for Mass Spectrometry, 2013, 24, 1385-1395.	1.2	13
54	DRILL Interface Makes Ion Soft Landing Broadly Accessible for Energy Science and Applications. Batteries and Supercaps, 2018, 1, 97-101.	2.4	13

#	Article	IF	Citations
55	Influence of Interligand Interactions and Core-Charge Distribution on Gold Cluster Stability: Enthalpy Versus Entropy. Journal of Physical Chemistry C, 2019, 123, 24899-24911.	1.5	13
56	Role of Polysulfide Anions in Solid-Electrolyte Interphase Formation at the Lithium Metal Surface in Liâ€“S Batteries. Journal of Physical Chemistry Letters, 2021, 12, 9360-9367.	2.1	13
57	Gas-Phase Fragmentation Pathways of Mixed Addenda Keggin Anions: PMo12-nWnO40 3â€“ (n = 0â€“12). Journal of the American Society for Mass Spectrometry, 2015, 26, 1027-1035.	1.2	12
58	Structure and Stability of the Ionic Liquid Clusters [EMIM]_{<i>n</i>}[BF₄]_{<i>n</i>+1}^{â€“} (<i>n</i> = 1â€“9): Implications for Electrochemical Separations. Journal of Physical Chemistry Letters, 2020, 11, 6844-6851.	2.1	12
59	ESI-MS Identification of the Cationic Phosphine-Ligated Gold Clusters Au_{1â€“22}: Insight into the Goldâ€“Ligand Ratio and Abundance of Larger Clusters. Journal of the American Society for Mass Spectrometry, 2021, 32, 237-246.	1.2	12
60	Ion Mobility Spectrometry Characterization of the Intermediate Hydrogen-Containing Gold Cluster Au₇(PPh₃)₇H₅²⁺. Journal of Physical Chemistry Letters, 2021, 12, 2502-2508.	2.1	11
61	Soft landing of mass-selected gold clusters: Influence of ion and ligand on charge retention and reactivity. International Journal of Mass Spectrometry, 2015, 377, 205-213.	0.7	10
62	Von isolierten Ionen zu mehrschichtigen funktionellen Materialien durch sanfte Landung von Ionen. Angewandte Chemie, 2018, 130, 16506-16521.	1.6	10
63	Influence of heteroanion and ammonium cation size on the composition and gas-phase fragmentation of polyoxovanadates. International Journal of Mass Spectrometry, 2013, 354-355, 333-341.	0.7	9
64	Graphene Oxide as a Pb(II) Separation Medium: Has Part of the Story Been Overlooked?. Jacs Au, 2021, 1, 766-776.	3.6	9
65	Simplified Ab Initio Molecular Dynamics-Based Raman Spectral Simulations. Applied Spectroscopy, 2020, 74, 1350-1357.	1.2	7
66	The Reactivity of Gas-Phase Metal Oxide Clusters: Systems for Understanding the Mechanisms of Heterogeneous Catalysts. , 2010, , 293-317.		7
67	Tuning the Charge and Hydrophobicity of Graphene Oxide Membranes by Functionalization with Ionic Liquids at Epoxide Sites. ACS Applied Materials & Interfaces, 2022, 14, 19031-19042.	4.0	6
68	Mapping Localized Peroxyl Radical Generation on a PEM Fuel Cell Catalyst Using Integrated Scanning Electrochemical Cell Microspectroscopy. Frontiers in Chemistry, 2020, 8, 572563.	1.8	5
69	Functionalization of Electrodes with Tunable [EMIM]_{<i>x</i>}[Cl]_{<i>x</i>+1}^{â€“} Ionic Liquid Clusters for Electrochemical Separations. Chemistry of Materials, 2022, 34, 2612-2623.	3.2	5
70	In Situ SIMS and IR Spectroscopy of Well-defined Surfaces Prepared by Soft Landing of Mass-selected Ions. Journal of Visualized Experiments, 2014, , .	0.2	2
71	Tribute to A. W. Castleman, Jr.. Journal of Physical Chemistry A, 2014, 118, 8011-8013.	1.1	0