

# Scott L Anderson

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2387648/publications.pdf>

Version: 2024-02-01

196  
papers

8,184  
citations

34105

52  
h-index

62596

80  
g-index

199  
all docs

199  
docs citations

199  
times ranked

5359  
citing authors

#	ARTICLE	IF	CITATIONS
1	Electronic Structure Controls Reactivity of Size-Selected Pd Clusters Adsorbed on TiO <sub>2</sub> Surfaces. <i>Science</i> , 2009, 326, 826-829.	12.6	552
2	CO Oxidation on Au/TiO <sub>2</sub> Catalysts Produced by Size-Selected Cluster Deposition. <i>Journal of the American Chemical Society</i> , 2004, 126, 5682-5683.	13.7	338
3	Scalable and safe synthetic organic electroreduction inspired by Li-ion battery chemistry. <i>Science</i> , 2019, 363, 838-845.	12.6	305
4	Collision-induced dissociation and ab initio studies of boron cluster ions: determination of structures and stabilities. <i>The Journal of Physical Chemistry</i> , 1988, 92, 5803-5812.	2.9	244
5	Collision-induced dissociation of aluminum cluster ions: Fragmentation patterns, bond energies, and structures for Al <sub>n</sub> <sup>+</sup> . <i>Journal of Chemical Physics</i> , 1987, 87, 260-268.	3.0	160
6	Oxide-Free, Catalyst-Coated, Fuel-Soluble, Air-Stable Boron Nanopowder as Combined Combustion Catalyst and High Energy Density Fuel. <i>Energy &amp; Fuels</i> , 2009, 23, 6111-6120.	5.1	132
7	Chemistry of metal and semimetal cluster ions. <i>Chemical Reviews</i> , 1992, 92, 1541-1565.	47.7	127
8	Ethylene Dehydrogenation on Pt <sub>4,7,8</sub> Clusters on Al <sub>2</sub> O <sub>3</sub> : Strong Cluster Size Dependence Linked to Preferred Catalyst Morphologies. <i>ACS Catalysis</i> , 2017, 7, 3322-3335.	11.2	124
9	Breakdown and Combustion of JP-10 Fuel Catalyzed by Nanoparticulate CeO <sub>2</sub> and Fe <sub>2</sub> O <sub>3</sub> . <i>Energy &amp; Fuels</i> , 2006, 20, 1886-1894.	5.1	122
10	Collision of Li <sup>+</sup> and Na <sup>+</sup> with C <sub>60</sub> : Insertion, fragmentation, and thermionic emission. <i>Physical Review Letters</i> , 1992, 69, 1352-1355.	7.8	110
11	Strong Effects of Cluster Size and Air Exposure on Oxygen Reduction and Carbon Oxidation Electrocatalysis by Size-Selected Pt <sub>n</sub> (n = 11) on Glassy Carbon Electrodes. <i>Journal of the American Chemical Society</i> , 2013, 135, 3073-3086.	13.7	109
12	Boron Switch for Selectivity of Catalytic Dehydrogenation on Size-Selected Pt Clusters on Al <sub>2</sub> O <sub>3</sub> . <i>Journal of the American Chemical Society</i> , 2017, 139, 11568-11575.	13.7	103
13	Ne <sup>++</sup> C <sub>60</sub> : Collision energy and impact parameter dependence for endohedral complex formation, fragmentation, and charge transfer. <i>Journal of Chemical Physics</i> , 1992, 96, 3344-3347.	3.0	98
14	Interaction of boron cluster ions with water: Single collision dynamics and sequential etching. <i>Journal of Chemical Physics</i> , 1990, 92, 292-303.	3.0	97
15	Resonance-enhanced multiphoton ionization of molecular hydrogen via the E <sub>1</sub> F <sub>1</sub> g <sup>+</sup> state: Photoelectron energy and angular distributions. <i>Chemical Physics Letters</i> , 1984, 105, 22-27.	2.6	96
16	Agglomeration, support effects, and CO adsorption on Au/TiO <sub>2</sub> (110) prepared by ion beam deposition. <i>Surface Science</i> , 2005, 578, 5-19.	1.9	92
17	Production and collision-induced dissociation of small boron cluster ions. <i>The Journal of Physical Chemistry</i> , 1987, 91, 5161-5163.	2.9	91
18	Oxidation of small boron cluster ions (B <sub>n</sub> <sup>+</sup> ) by oxygen. <i>Journal of Chemical Physics</i> , 1988, 89, 2848-2860.	3.0	91

#	ARTICLE	IF	CITATIONS
19	Collision of alkali ions with C <sub>60</sub> /C <sub>70</sub> : Insertion, thermionic emission, and fragmentation. <i>Journal of Chemical Physics</i> , 1993, 99, 5858-5870.	3.0	90
20	Fragmentation of nitrous oxide by monochromatic soft x rays. <i>Journal of Chemical Physics</i> , 1986, 85, 5755-5762.	3.0	89
21	Cluster size effects on CO oxidation activity, adsorbate affinity, and temporal behavior of model Au <sup>+</sup> •TiO <sub>2</sub> catalysts. <i>Journal of Chemical Physics</i> , 2005, 123, 124710.	3.0	87
22	Reactions of boron cluster ions (B <sub>n</sub> <sup>+</sup> , n=2-24) with N <sub>2</sub> O: NO versus NN bond activation as a function of size. <i>Journal of Chemical Physics</i> , 1991, 94, 6446-6458.	3.0	81
23	Size-dependent oxidation of Pd <sub>n</sub> (n=1/2-13) on alumina/NiAl(110): Correlation with Pd core level binding energies. <i>Surface Science</i> , 2009, 603, 2764-2770.	1.9	81
24	Size-Dependent Oxygen Activation Efficiency over Pd <sub>n</sub> /TiO <sub>2</sub> (110) for the CO Oxidation Reaction. <i>Journal of the American Chemical Society</i> , 2010, 132, 13097-13099.	13.7	79
25	Electrocatalysis by Mass-Selected Pt <sub>n</sub> Clusters. <i>Accounts of Chemical Research</i> , 2016, 49, 2632-2639.	15.6	79
26	The effect of vibration and translational energy on the reaction dynamics of the H <sub>2</sub> + H <sub>2</sub> system. <i>Journal of Chemical Physics</i> , 1981, 75, 2153-2162.	3.0	76
27	Multiphoton ionization photoelectron spectroscopy: a new method for determining vibrational structure of molecular ions. <i>Chemical Physics Letters</i> , 1982, 93, 11-15.	2.6	73
28	Hypergolic ionic liquids to mill, suspend, and ignite boron nanoparticles. <i>Chemical Communications</i> , 2012, 48, 4311.	4.1	72
29	Ne <sup>++</sup> C <sub>60</sub> collisions: The dynamics of charge and energy transfer, fragmentation, and endohedral complex formation. <i>Journal of Chemical Physics</i> , 1993, 99, 3468-3479.	3.0	71
30	Dissociation Energies for Small Carbon Cluster Ions (C <sub>2</sub> -19 <sup>+</sup> ) Measured by Collision-Induced Dissociation. <i>The Journal of Physical Chemistry</i> , 1995, 99, 10736-10741.	2.9	69
31	Boron cluster ion oxidation: Reactions with CO <sub>2</sub> , dissociation of boron cluster oxide (B <sub>n</sub> O <sup>+</sup> ) ions, and sequential oxidation. <i>Journal of Chemical Physics</i> , 1991, 94, 2833-2847.	3.0	68
32	Cluster Size Controls Branching between Water and Hydrogen Peroxide Production in Electrochemical Oxygen Reduction at Pt <sub>n</sub> /ITO. <i>Journal of Physical Chemistry C</i> , 2015, 119, 11160-11170.	3.1	68
33	Multiphoton ionization photoelectron spectroscopy of phenol: Vibrational frequencies and harmonic force field for the 2B <sub>1</sub> cation. <i>Journal of Chemical Physics</i> , 1985, 82, 5329-5339.	3.0	66
34	Gerade Rydberg states of acetylene studied by multiphoton ionization and photoelectron spectroscopy. <i>Journal of Chemical Physics</i> , 1987, 87, 5105-5115.	3.0	65
35	Fullerene (C <sub>61</sub> <sup>+</sup> ) production and decomposition in carbon-13 (1 <sup>+</sup> ) + fullerene (C <sub>60</sub> ) collisions: carbon-atom exchange and the fragmentation pattern as a function of energy. <i>The Journal of Physical Chemistry</i> , 1992, 96, 3574-3576.	2.9	65
36	O <sup>++</sup> C <sub>60</sub> : C <sub>60</sub> <sup>+</sup> production and decomposition, charge transfer, and formation of C <sub>59</sub> O <sup>+</sup> . Dopeyball or [CO@C <sub>58</sub> <sup>+</sup> . <i>Chemical Physics Letters</i> , 1992, 199, 373-378.	2.6	65

#	ARTICLE	IF	CITATIONS
37	Vibrational mode effects, scattering dynamics, and energy disposal in reaction of C <sub>2</sub> H <sub>2</sub> with methane. Journal of Chemical Physics, 1995, 102, 1199-1216.	3.0	63
38	MPI photoelectron spectroscopy of ungerade excited states of acetylene: Intermediate state mixing and ion state selection. Journal of Chemical Physics, 1987, 87, 852-860.	3.0	62
39	Deposition dynamics and chemical properties of size-selected Ir clusters on TiO <sub>2</sub> . Surface Science, 2003, 542, 253-275.	1.9	62
40	Modular terpene synthesis enabled by mild electrochemical couplings. Science, 2022, 375, 745-752.	12.6	62
41	Thermal decomposition of JP-10 studied by micro-flowtube pyrolysis-mass spectrometry. Combustion and Flame, 2006, 144, 662-674.	5.2	61
42	The effects of collision energy and ion vibrational excitation on proton and charge transfer in H <sub>2</sub> <sup>++</sup> N <sub>2</sub> , CO, O <sub>2</sub> . Journal of Chemical Physics, 1982, 77, 1842-1854.	3.0	58
43	CO adsorption and desorption on size-selected Pd/TiO <sub>2</sub> (110) model catalysts: Size dependence of binding sites and energies, and support-mediated adsorption. Journal of Chemical Physics, 2012, 136, 204705.	3.0	58
44	Nitrogen ion (N <sup>+</sup> ) + C <sub>60</sub> fullerene reactive scattering: substitution, charge transfer, and fragmentation. The Journal of Physical Chemistry, 1992, 96, 10597-10600.	2.9	57
45	Interaction of small boron cluster ions with HF. Journal of Chemical Physics, 1997, 106, 9511-9522.	3.0	56
46	Initial and Final State Effects in the Ultraviolet and X-ray Photoelectron Spectroscopy (UPS and XPS) of Size-Selected Pd <sub>n</sub> Clusters Supported on TiO <sub>2</sub> (110). Journal of Physical Chemistry C, 2015, 119, 6033-6046.	3.1	56
47	Proton affinities of hydrogen halides determined by the molecular beam photoionization method. Journal of Chemical Physics, 1979, 71, 605-609.	3.0	55
48	Direct dynamics study of energy transfer and collision-induced dissociation: Effects of impact energy, geometry, and reactant vibrational mode in H <sub>2</sub> CO+Ne collisions. Journal of Chemical Physics, 2003, 119, 3040-3050.	3.0	55
49	Dissociation energies for carbon cluster ions (C <sub>2</sub> <sup>15</sup> ): A system where photodissociation is misleading. Journal of Chemical Physics, 1991, 95, 4719-4720.	3.0	54
50	Air-stable, unoxidized, hydrocarbon-dispersible boron nanoparticles. Journal of Materials Research, 2009, 24, 3462-3464.	2.6	54
51	Size-dependent electronic structure controls activity for ethanol electro-oxidation at Pt <sub>n</sub> /indium tin oxide (n = 1 to 14). Physical Chemistry Chemical Physics, 2015, 17, 17601-17610.	2.8	54
52	Dynamics of boron cluster ion reactions with deuterium: Adduct formation and decay. Journal of Chemical Physics, 1989, 91, 226-239.	3.0	53
53	Inherent Size Effects on XANES of Nanometer Metal Clusters: Size-Selected Platinum Clusters on Silica. Journal of Physical Chemistry C, 2017, 121, 361-374.	3.1	52
54	Large, mode-selective vibrational effect on the reaction of C <sub>2</sub> H <sub>2</sub> with methane. Journal of Chemical Physics, 1994, 101, 5410-5412.	3.0	49

#	ARTICLE	IF	CITATIONS
55	Proton transfer in the [phenol-NH <sub>3</sub> ] <sup>+</sup> system: An experimental and ab initio study. <i>Journal of Chemical Physics</i> , 2000, 112, 5717-5721.	3.0	49
56	Photoionization of (H <sub>2</sub> ) <sub>2</sub> and the clusters of O <sub>2</sub> molecules. <i>Journal of Chemical Physics</i> , 1980, 73, 4779-4783.	3.0	48
57	Simple radio-frequency power source for ion guides and ion traps. <i>Review of Scientific Instruments</i> , 1997, 68, 3357-3362.	1.3	48
58	Sintering, oxidation, and chemical properties of size-selected nickel clusters on TiO <sub>2</sub> (110). <i>Journal of Chemical Physics</i> , 2002, 117, 5001-5011.	3.0	48
59	Multiphoton Ionization State Selection: Vibrational-Mode and Rotational-State Control. <i>Advances in Chemical Physics</i> , 2007, , 177-212.	0.3	47
60	The effects of bending and stretching vibration on the reaction of acetylene cations with methane. <i>Journal of Chemical Physics</i> , 1989, 90, 1577-1587.	3.0	46
61	Exploring the Structure of Nitrogen-Rich Ionic Liquids and Their Binding to the Surface of Oxide-Free Boron Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2013, 117, 5693-5707.	3.1	45
62	Nonadiabaticity in ion-molecule reactions: Coupling of proton and charge transfer in the H+2 and D+2+Ar system. <i>Journal of Chemical Physics</i> , 1982, 77, 748-755.	3.0	44
63	Interaction of Mn <sup>+</sup> and Mn <sup>2+</sup> with C <sub>60</sub> . Exohedral and endohedral metal-fullerene bonding. <i>Chemical Physics Letters</i> , 1995, 243, 45-48.	2.6	42
64	Chemistry and cooling of transition metal cluster ions. <i>Chemical Physics Letters</i> , 1985, 122, 410-414.	2.6	40
65	Methane ignition catalyzed by in situ generated palladium nanoparticles. <i>Combustion and Flame</i> , 2010, 157, 421-435.	5.2	40
66	Oxygen activation and CO oxidation over size-selected Pt <sub>n</sub> /alumina/Re(0001) model catalysts: correlations with valence electronic structure, physical structure, and binding sites. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 26443-26457.	2.8	40
67	Coking-Resistant Sub-Nano Dehydrogenation Catalysts: Pt <sub>n</sub> Sn <sub>x</sub> /SiO <sub>2</sub> (n = 4, 7). <i>ACS Catalysis</i> , 2020, 10, 4543-4558.	11.2	40
68	Multiphoton ionization photoelectron spectroscopy study of OCS: Rydberg vibronic structure and ion state selection. <i>Journal of Chemical Physics</i> , 1988, 89, 5527-5534.	3.0	39
69	Multiphoton ionization and photoelectron spectroscopy of formaldehyde via its 3p Rydberg states. <i>Journal of Chemical Physics</i> , 2001, 114, 9797-9806.	3.0	39
70	Pyrolysis Chemistry of Cubane and Methylcubane: The Effect of Methyl Substitution on Stability and Product Branching. <i>Journal of Physical Chemistry A</i> , 2003, 107, 1162-1174.	2.5	39
71	Single CdSe/ZnS Nanocrystals in an Ion Trap: Charge and Mass Determination and Photophysics Evolution with Changing Mass, Charge, and Temperature. <i>ACS Nano</i> , 2014, 8, 2387-2398.	14.6	39
72	Observation of circular dichroism in photoelectron angular distributions. <i>Journal of Chemical Physics</i> , 1986, 85, 6803-6804.	3.0	38

#	ARTICLE	IF	CITATIONS
73	Collision-induced dissociation of formaldehyde cations: The effects of vibrational mode, collision energy, and impact parameter. <i>Journal of Chemical Physics</i> , 2002, 116, 5530-5543.	3.0	38
74	Direct Dynamics Trajectory Study of Vibrational Effects: Can Polanyi Rules Be Generalized to a Polyatomic System?. <i>Journal of the American Chemical Society</i> , 2004, 126, 8602-8603.	13.7	38
75	Agglomeration, Sputtering, and Carbon Monoxide Adsorption Behavior for Au/Al <sub>2</sub> O <sub>3</sub> Prepared by Au+Deposition on Al <sub>2</sub> O <sub>3</sub> /NiAl(110). <i>Journal of Physical Chemistry B</i> , 2005, 109, 11340-11347.	2.6	38
76	Fragmentation of acetone following excitation in the region of the oxygen K edge. <i>Journal of Chemical Physics</i> , 1987, 86, 4442-4445.	3.0	37
77	Reaction of aluminum cluster ions with oxygen and nitrous oxide: Energetics and dynamics of cluster oxidation. <i>Journal of Chemical Physics</i> , 1988, 89, 273-286.	3.0	37
78	Reaction mechanisms and energy disposal in the [C <sub>2</sub> H <sub>2</sub> :OCS] <sup>+</sup> system: A mode-selective differential cross section study. <i>Journal of Chemical Physics</i> , 1996, 105, 3089-3107.	3.0	37
79	Simplified radio-frequency generator for driving ion guides, traps, and other capacitive loads. <i>Review of Scientific Instruments</i> , 2000, 71, 4335.	1.3	36
80	Hydrazine Decomposition over Irn/Al <sub>2</sub> O <sub>3</sub> Model Catalysts Prepared by Size-Selected Cluster Deposition. <i>Journal of Physical Chemistry B</i> , 2005, 109, 381-388.	2.6	36
81	In Situ Generation of Pd/PdO Nanoparticle Methane Combustion Catalyst: Correlation of Particle Surface Chemistry with Ignition. <i>Journal of Physical Chemistry C</i> , 2009, 113, 20632-20639.	3.1	36
82	Water on Rutile TiO <sub>2</sub> (110) and Au/TiO <sub>2</sub> (110): Effects on Au Mobility and the Isotope Exchange Reaction. <i>Journal of Physical Chemistry C</i> , 2008, 112, 9006-9015.	3.1	35
83	Alumina support and Pdn cluster size effects on activity of Pdn for catalytic oxidation of CO. <i>Faraday Discussions</i> , 2013, 162, 323.	3.2	35
84	A phase-space-compressing, mass-selecting beamline for hyperthermal, focused ion beam deposition. <i>Review of Scientific Instruments</i> , 1998, 69, 4106-4115.	1.3	34
85	Mode-Selective Differential Scattering as a Probe of Polyatomic Ion Reaction Mechanisms. <i>Accounts of Chemical Research</i> , 1997, 30, 28-36.	15.6	33
86	The effects of different vibrational modes and collision energy on the reaction of acetylene cations with carbonyl sulfide. <i>Journal of Chemical Physics</i> , 1990, 92, 7356-7364.	3.0	32
87	Complex formation and decay in ion-molecule reactions: Mode-selective scattering as a dynamical probe. <i>International Reviews in Physical Chemistry</i> , 2001, 20, 165-188.	2.3	30
88	Synthesis of Nanoparticles from Malleable and Ductile Metals Using Powder-Free, Reactant-Assisted Mechanical Attrition. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 19579-19591.	8.0	30
89	Boron Nanoparticles with High Hydrogen Loading: Mechanism for B-H Binding and Potential for Improved Combustibility and Specific Impulse. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 8513-8525.	8.0	30
90	Binding of Alkenes and Ionic Liquids to B-H-Functionalized Boron Nanoparticles: Creation of Particles with Controlled Dispersibility and Minimal Surface Oxidation. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 9991-10003.	8.0	29

#	ARTICLE	IF	CITATIONS
91	Vibrational mode-selected differential scattering of NH <sub>3</sub> + methanol (d <sub>1</sub> , d <sub>3</sub> , d <sub>4</sub> ): Control of product branching by hydrogen-bonded complex formation. <i>Journal of Chemical Physics</i> , 1998, 108, 2395-2407.	3.0	27
92	Cluster size effects on hydrazine decomposition on Irn/Al <sub>2</sub> O <sub>3</sub> /NiAl(110). <i>Surface Science</i> , 2006, 600, 461-467.	1.9	27
93	Functionalization and Passivation of Boron Nanoparticles with a Hypergolic Ionic Liquid. <i>Journal of Propulsion and Power</i> , 2013, 29, 489-495.	2.2	27
94	Dynamics of the C <sub>2</sub> H <sub>2</sub> + ND <sub>3</sub> Reaction: A Vibrational-Mode-Selective Scattering Study. <i>Journal of Physical Chemistry A</i> , 1997, 101, 6504-6512.	2.5	26
95	Boron Oxide Oligomer Collision-Induced Dissociation: Thermochemistry, Structure, and Implications for Boron Combustion. <i>Journal of Physical Chemistry A</i> , 1997, 101, 9935-9941.	2.5	26
96	The effects of collision energy, vibrational mode, and vibrational angular momentum on energy transfer and dissociation in NO <sub>2</sub> + rare gas collisions: An experimental and trajectory study. <i>Journal of Chemical Physics</i> , 2006, 125, 133115.	3.0	26
97	Cluster size effects on sintering, CO adsorption, and implantation in Ir/SiO <sub>2</sub> . <i>Journal of Chemical Physics</i> , 2009, 131, 114701.	3.0	26
98	Reaction of magnetically state selected NO with O <sub>3</sub> : Effect of fs states and rotational states on reactivity. <i>Journal of Chemical Physics</i> , 1980, 72, 6521-6528.	3.0	25
99	The effects of reactant vibrational, fine structure, and collision energy on the reactions of OCS+ with C <sub>2</sub> H <sub>2</sub> : Complementary studies of reactions in the [C <sub>2</sub> H <sub>2</sub> +OCS]+system. <i>Journal of Chemical Physics</i> , 1991, 94, 6459-6468.	3.0	25
100	Comparison of bending, C-C stretching, and collision energy effects on the reaction of C <sub>2</sub> H <sub>2</sub> with D <sub>2</sub> . <i>Journal of Chemical Physics</i> , 1992, 96, 5781-5788.	3.0	25
101	Optically detected, single nanoparticle mass spectrometer with pre-filtered electrospray nanoparticle source. <i>Review of Scientific Instruments</i> , 2014, 85, 014104.	1.3	25
102	Preparation of Size- and Composition-Controlled Pt <sub>n</sub> /Sn <sub>x</sub> /SiO <sub>2</sub> (n = 4, 7, 24) Bimetallic Model Catalysts with Atomic Layer Deposition. <i>Journal of Physical Chemistry C</i> , 2019, 123, 16194-16209.	3.1	25
103	Sn-modification of Pt <sub>7</sub> /alumina model catalysts: Suppression of carbon deposition and enhanced thermal stability. <i>Journal of Chemical Physics</i> , 2020, 152, 024702.	3.0	25
104	The effects of vibrational mode, spin-orbit state, and collision energy on collision-induced dissociation and predissociation of OCS+. <i>Journal of Chemical Physics</i> , 1991, 95, 3275-3282.	3.0	24
105	Complex formation, rearrangement, and reaction in PhOH+ ND <sub>3</sub> : Vibrational mode effects, recoil velocities, and ab initio studies. <i>Journal of Chemical Physics</i> , 2000, 113, 4158-4170.	3.0	24
106	Spectroscopic Study on the Intermediates and Reaction Rates in the Oxidation of Levitated Droplets of Energetic Ionic Liquids by Nitrogen Dioxide. <i>Journal of Physical Chemistry A</i> , 2018, 122, 7351-7377.	2.5	24
107	Third harmonic interference effects in the mpi spectrum of acetylene. <i>Chemical Physics Letters</i> , 1986, 129, 31-35.	2.6	23
108	A mode-selective differential scattering study of the C <sub>2</sub> H <sub>2</sub> + methanol reaction: Influence of collision intermediates, collision times, and transition states. <i>Journal of Chemical Physics</i> , 1998, 108, 7173-7184.	3.0	23

#	ARTICLE	IF	CITATIONS
109	Reaction of formaldehyde cation with methane: Effects of collision energy and H <sub>2</sub> CO <sup>+</sup> and methane vibrations. <i>Journal of Chemical Physics</i> , 2003, 119, 200-214.	3.0	23
110	Effects of Alumina Thickness on CO Oxidation Activity over Pd <sub>20</sub> /Alumina/Re(0001): Correlated Effects of Alumina Electronic Properties and Pd <sub>20</sub> Geometry on Activity. <i>Journal of Physical Chemistry C</i> , 2015, 119, 1359-1375.	3.1	23
111	Vibrational effects in proton and charge transfer in the H <sub>2</sub> + Ar system. <i>Chemical Physics Letters</i> , 1981, 82, 392-395.	2.6	22
112	Hydride abstraction by NO <sup>+</sup> from ethanol: Effects of collision energy and ion rotational state. <i>Journal of Chemical Physics</i> , 2000, 113, 3002-3010.	3.0	22
113	Cluster ion beam study of a system with structural isomers: C <sub>n</sub> +D <sub>2</sub> (n=2-12). <i>Chemical Physics Letters</i> , 1991, 177, 146-152.	2.6	21
114	Pyrolysis and Isomerization of Quadricyclane, Norbornadiene, and Toluene. <i>Journal of Physical Chemistry A</i> , 1998, 102, 9202-9212.	2.5	21
115	Rapid Aluminum Nanoparticle Production by Milling in NH <sub>3</sub> and CH <sub>3</sub> NH <sub>2</sub> Atmospheres: An Experimental and Theoretical Study. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 16101-16116.	8.0	21
116	Reactions of bare aluminum cluster ions. <i>Chemical Physics Letters</i> , 1986, 129, 429-432.	2.6	20
117	N=O versus N=N bond activation in reaction of N <sub>2</sub> O with carbon cluster ions: Experimental and ab initio studies of the effects of geometric and electronic structure. <i>Journal of Chemical Physics</i> , 1994, 100, 8784-8794.	3.0	20
118	Collisions of rare gas ions with C <sub>60</sub> : Endohedral formation, energy transfer, and scattering dynamics. <i>Journal of Chemical Physics</i> , 1997, 107, 8370-8379.	3.0	20
119	The effects of vibrational mode and collision energy on the reaction of formaldehyde cation with carbonyl sulfide. <i>Journal of Chemical Physics</i> , 2002, 117, 8292-8307.	3.0	20
120	Dynamical control of "statistical" ion-molecule reactions. <i>International Journal of Mass Spectrometry</i> , 2005, 241, 173-184.	1.5	20
121	Thermal and adsorbate effects on the activity and morphology of size-selected Pd <sub>n</sub> /TiO <sub>2</sub> model catalysts. <i>Surface Science</i> , 2014, 621, 40-50.	1.9	20
122	Aluminum Nanoparticle Production by Acetonitrile-Assisted Milling: Effects of Liquid- vs Vapor-Phase Milling and of Milling Method on Particle Size and Surface Chemistry. <i>Journal of Physical Chemistry C</i> , 2016, 120, 19613-19629.	3.1	20
123	Ion beam studies of atomic ion collisions with C <sub>60</sub> : chemistry at surface, substitutional, and endohedral sites. <i>International Journal of Mass Spectrometry and Ion Processes</i> , 1994, 138, 173-185.	1.8	19
124	Effects of Composition, Structure, and H Atom Addition on the Chemistry of Boron Oxide Cluster Ions with HF. <i>The Journal of Physical Chemistry</i> , 1995, 99, 16276-16283.	2.9	19
125	Transition-metal C <sub>60</sub> bonding by guided ion beam scattering. <i>International Journal of Mass Spectrometry</i> , 1999, 185-187, 603-615.	1.5	19
126	Alloying with Sn Suppresses Sintering of Size-Selected Subnano Pt Clusters on SiO <sub>2</sub> with and without Adsorbates. <i>Chemistry of Materials</i> , 2020, 32, 8595-8605.	6.7	19



#	ARTICLE	IF	CITATIONS
127	Direct Dynamics Trajectory Study of the Reaction of Formaldehyde Cation with D <sub>2</sub> : <sup>Å</sup> Vibrational and Zero-Point Energy Effects on Quasiclassical Trajectories. Journal of Physical Chemistry A, 2005, 109, 11376-11384.	2.5	18
128	Multiphoton ionization photoelectron spectroscopy of acetaldehyde via the $\tilde{A}^1\tilde{A}^{\prime\prime}$ , $\tilde{B}^1\tilde{f}$ , $\tilde{C}^1\tilde{f}$ , and $\tilde{D}^1\tilde{f}$ states. Journal of Chemical Physics, 2001, 114, 3018-3028.	3.0	17
129	Spectroscopic Investigation of the Primary Reaction Intermediates in the Oxidation of Levitated Droplets of Energetic Ionic Liquids. Journal of Physical Chemistry Letters, 2017, 8, 6053-6059.	4.6	17
130	Diborane Interactions with Pt <sub>7</sub> /Alumina: Preparation of Size-Controlled Borated Pt Model Catalysts. Journal of Physical Chemistry C, 2018, 122, 1631-1644.	3.1	17
131	Use of a quadrupole mass filter for high energy resolution ion beam production. Review of Scientific Instruments, 1995, 66, 3706-3708.	1.3	16
132	Vibrational mode and collision energy effects on a highly constrained reaction: OCS+( $\hat{1}\hat{1}/2$ )+OCS <sup>+</sup> CS+2+CO <sub>2</sub> and S+2+2 CO. Journal of Chemical Physics, 1995, 102, 1188-1191.	3.0	16
133	Kinetic parameters for heterogenous boron combustion reactions via the Cluster Beam approach. Combustion and Flame, 1996, 105, 68-79.	5.2	16
134	Multiphoton ionization vibrational state selection of H <sub>2</sub> O <sup>+</sup> , D <sub>2</sub> O <sup>+</sup> and HDO <sup>+</sup> . Chemical Physics Letters, 2007, 440, 171-175.	2.6	16
135	In Situ Small-Angle X-ray Scattering from Pd Nanoparticles Formed by Thermal Decomposition of Organo-Pd Catalyst Precursors Dissolved in Hydrocarbons. Journal of Physical Chemistry C, 2013, 117, 22627-22635.	3.1	16
136	Mass-selected supported cluster catalysts: Size effects on CO oxidation activity, electronic structure, and thermal stability of Pd <sub>n</sub> /alumina ( $n \approx 30$ ) model catalysts. International Journal of Mass Spectrometry, 2014, 370, 1-15.	1.5	16
137	Effects of acetonitrile-assisted ball-milled aluminum nanoparticles on the ignition of acoustically levitated exo-tetrahydrodicyclopentadiene (JP-10) droplets. Chemical Physics Letters, 2020, 754, 137679.	2.6	16
138	Oxidation of small carbon cluster ions by O <sub>2</sub> : Effects of structure on the reaction mechanism. Journal of Chemical Physics, 1992, 97, 8164-8172.	3.0	15
139	Photoluminescence of Charged CdSe/ZnS Quantum Dots in the Gas Phase: Effects of Charge and Heating on Absorption and Emission Probabilities. ACS Nano, 2014, 8, 12534-12548.	14.6	15
140	Effect of O <sub>2</sub> and CO Exposure on the Photoelectron Spectroscopy of Size-Selected Pd <sub>n</sub> Clusters Supported on TiO <sub>2</sub> (110). Journal of Physical Chemistry C, 2016, 120, 2126-2138.	3.1	15
141	Reaction of formaldehyde cation with molecular hydrogen: Effects of collision energy and H <sub>2</sub> CO <sup>+</sup> vibrations. Journal of Chemical Physics, 2004, 120, 8528-8536.	3.0	14
142	Vibrational Mode Effects as a Probe of Inter-channel Coupling in the Reactions of Formaldehyde Cation with Ammonia and Water. Journal of Physical Chemistry A, 2004, 108, 9945-9956.	2.5	14
143	State-Selected C <sub>2</sub> H <sub>2</sub> <sup>+</sup> Reactions with Methane at High Internal Energies. H <sup>+</sup> and H <sup>-</sup> Transfer Reactions, Two New Channels in the C <sub>2</sub> H <sub>2</sub> <sup>+</sup> A State Region. The Journal of Physical Chemistry, 1995, 99, 15523-15531.	2.9	13
144	Single Nanoparticle Mass Spectrometry as a High Temperature Kinetics Tool: Sublimation, Oxidation, and Emission Spectra of Hot Carbon Nanoparticles. Journal of Physical Chemistry A, 2015, 119, 12538-12550.	2.5	13

#	ARTICLE	IF	CITATIONS
145	Thermally Brightened CdSe/ZnS Quantum Dots as Noncontact Probes for Surface Chemistry Studies of Dark Nanoparticles Trapped in the Gas Phase. <i>Journal of Physical Chemistry C</i> , 2015, 119, 14561-14570.	3.1	13
146	Thermal emission spectroscopy for single nanoparticle temperature measurement: optical system design and calibration. <i>Applied Optics</i> , 2019, 58, 642.	1.8	13
147	Vibrational mode and collision energy effects on proton transfer in phenol cation-methylamine collisions. <i>Journal of Chemical Physics</i> , 2000, 112, 10831-10837.	3.0	12
148	Thermal Emission Spectroscopy of Single, Isolated Carbon Nanoparticles: Effects of Particle Size, Material, Charge, Excitation Wavelength, and Thermal History. <i>Journal of Physical Chemistry C</i> , 2020, 124, 1704-1716.	3.1	12
149	Reactions of Boron Oxide and BnOmH+ Cluster Ions with Water. <i>Journal of Physical Chemistry A</i> , 1999, 103, 226-234.	2.5	11
150	Vibrational and collision energy effects on the reaction of CH <sub>3</sub> CHO+ with methanol. <i>Journal of Chemical Physics</i> , 2001, 115, 5843-5858.	3.0	11
151	Reaction of acetaldehyde cations with water: The effects of CH <sub>3</sub> CHO+ vibrational mode and impact parameter on reactivity and product branching. <i>Journal of Chemical Physics</i> , 2001, 115, 1274-1286.	3.0	11
152	Vibrational mode and collision energy effects on reaction of H <sub>2</sub> CO+ with C <sub>2</sub> D <sub>4</sub> . <i>Journal of Chemical Physics</i> , 2004, 121, 11746-11759.	3.0	10
153	In situ X-ray Scattering and Dynamical Modeling of Pd Catalyst Nanoparticles Formed in Flames. <i>Journal of Physical Chemistry C</i> , 2015, 119, 19073-19082.	3.1	10
154	Combustion Behavior of High Energy Density Borane-Aluminum Nanoparticles in Hypergolic Ionic Liquids. <i>Energy &amp; Fuels</i> , 2018, 32, 7898-7908.	5.1	10
155	Selective growth of Al <sub>2</sub> O <sub>3</sub> on size-selected platinum clusters by atomic layer deposition. <i>Surface Science</i> , 2020, 691, 121485.	1.9	10
156	Sublimation Kinetics for Individual Graphite and Graphene Nanoparticles (NPs): NP-to-NP Variations and Evolving Structure-Kinetics and Structure-Emissivity Relationships. <i>Journal of the American Chemical Society</i> , 2020, 142, 14090-14101.	13.7	10
157	Collision-induced dissociation and ab initio studies of boron cluster ions: determination of structures and stabilities [Erratum to document cited in CA109(18):156723t]. <i>The Journal of Physical Chemistry</i> , 1990, 94, 2218-2218.	2.9	9
158	The influence of collision and vibrational energy on the reaction of CH <sub>3</sub> CHO+ with acetylene. <i>Journal of Chemical Physics</i> , 2001, 114, 7838-7847.	3.0	9
159	Vibrational effects on the reaction of NO <sub>2</sub> + with C <sub>2</sub> H <sub>2</sub> : Effects of bending and bending angular momentum. <i>Journal of Chemical Physics</i> , 2008, 128, 114304.	3.0	9
160	Oxidation of Aluminum Particles from 1 to 10 nm in Diameter: The Transition from Clusters to Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2019, 123, 23721-23731.	3.1	9
161	Cluster-surface collisions by phase-space compressed guided-ion beam methods. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 1999, 157, 144-154.	1.4	8
162	Vibrational mode and collision energy effects on reaction of H <sub>2</sub> CO+ with C <sub>2</sub> H <sub>2</sub> : Charge state competition and the role of Franck-Condon factors in endoergic charge transfer. <i>Journal of Chemical Physics</i> , 2005, 123, 204313.	3.0	8

#	ARTICLE	IF	CITATIONS
163	Tuning azolium azolate ionic liquids to promote surface interactions with titanium nanoparticles leading to increased passivation and colloidal stability. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 13194.	2.8	8
164	Boron-Shell Aluminum Surface Interactions: Enhanced Fracturing and Generation of Boron-Shell Aluminum Core-Shell Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2017, 121, 14176-14190.	3.1	8
165	A cryogenic single nanoparticle action spectrometer. <i>Review of Scientific Instruments</i> , 2019, 90, 125110.	1.3	8
166	O <sub>2</sub> -oxidation of individual graphite and graphene nanoparticles in the 1200–2200 K range: Particle-to-particle variations and the evolution of the reaction rates and optical properties. <i>Carbon</i> , 2021, 173, 286-300.	10.3	8
167	Kinematic sample mounting system for accurate positioning of transferrable samples. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2000, 18, 2603.	2.1	7
168	Note: Hollow cathode lamp with integral, high optical efficiency isolation valve: A modular vacuum ultraviolet source. <i>Review of Scientific Instruments</i> , 2013, 84, 126101.	1.3	7
169	Oxidation of a Levitated Droplet of 1-Allyl-3-methylimidazolium Dicyanamide by Nitrogen Dioxide. <i>Journal of Physical Chemistry A</i> , 2019, 123, 400-416.	2.5	7
170	Multiphoton ionization and photoelectron spectroscopy of 1,3-trans-butadiene via its 3d Rydberg state. <i>Journal of Chemical Physics</i> , 2001, 114, 6618-6624.	3.0	6
171	Effects of Collision and Vibrational Energy on the Reaction of CH <sub>3</sub> CHO+( <sup>1</sup> / <sub>2</sub> ) with C <sub>2</sub> D <sub>4</sub> . <i>Journal of Physical Chemistry A</i> , 2002, 106, 9798-9808.	2.5	6
172	State-Selective Preparation of NO <sub>2</sub> <sup>+</sup> and the Effects of NO <sub>2</sub> <sup>+</sup> Vibrational Mode on Charge Transfer with NO. <i>Journal of Physical Chemistry A</i> , 2006, 110, 1278-1287.	2.5	6
173	The origin of the large bending enhancement of the reaction of C <sub>2</sub> H <sub>2</sub> <sup>+</sup> with methane: the effects of bending momentum, ruling out the precursor mechanism, and steps toward Polanyi rules for polyatomic reactions. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 8721.	2.8	6
174	Effects of Bending and Bending Angular Momentum on Reaction of NO <sub>2</sub> <sup>+</sup> with C <sub>2</sub> H <sub>2</sub> : A Quasi-Classical Trajectory Study. <i>Journal of Physical Chemistry A</i> , 2009, 113, 3911-3921.	2.5	6
175	Reaction of HOD <sup>+</sup> with NO <sub>2</sub> : Effects of OD and OH Stretching, Bending, and Collision Energy on Reactions on the Singlet and Triplet Potential Surfaces. <i>Journal of Physical Chemistry A</i> , 2011, 115, 1172-1185.	2.5	6
176	Charge transfer between ND <sub>3</sub> <sup>+</sup> and phenol. <i>Journal of Chemical Physics</i> , 2000, 113, 11079-11083.	3.0	5
177	H <sup>+</sup> versus D <sup>+</sup> transfer from HOD <sup>+</sup> to CO <sub>2</sub> : Bond-selective chemistry and the anomalous effect of bending excitation. <i>Journal of Chemical Physics</i> , 2011, 134, 064312.	3.0	5
178	Reprint of Mass-selected supported cluster catalysts: Size effects on CO oxidation activity, electronic structure, and thermal stability of Pd/alumina (n% 30) model catalysts. <i>International Journal of Mass Spectrometry</i> , 2015, 377, 263-277.	1.5	5
179	High-Temperature Oxidation of Single Carbon Nanoparticles: Dependence on the Surface Structure and Probing Real-Time Structural Evolution via Kinetics. <i>Journal of the American Chemical Society</i> , 2022, 144, 4897-4912.	13.7	5
180	Low energy, high resolution ion scattering mass spectrometry of strained molecules and their isomers. <i>International Journal of Mass Spectrometry and Ion Processes</i> , 1997, 167-168, 269-279.	1.8	4

#	ARTICLE	IF	CITATIONS
181	A triple sector, guided-ion-beam mass spectrometer for cluster ion and fullerene scattering. International Journal of Mass Spectrometry and Ion Processes, 1997, 171, 159-172.	1.8	4
182	Reaction of C <sub>2</sub> H <sub>2</sub> <sup>+</sup> (n <sup>+</sup> ·1/2, m <sup>+</sup> ·1/25) with NO <sub>2</sub> : Reaction on the singlet and triplet surfaces. Journal of Chemical Physics, 2011, 134, 034313.	3.0	4
183	Effects of Collisional and Vibrational Velocity on Proton and Deuteron Transfer in the Reaction of HOD <sup>+</sup> with CO. Journal of Physical Chemistry A, 2013, 117, 1083-1093.	2.5	4
184	The interaction of size-selected Ru <sub>3</sub> clusters with RF-deposited TiO <sub>2</sub> : probing Ru-CO binding sites with CO-temperature programmed desorption. Nanoscale Advances, 2021, 3, 3537-3553.	4.6	4
185	Complex formation and decay in ion-molecule reactions: mode-selective scattering as a dynamical probe. International Reviews in Physical Chemistry, 2001, 20, 165-188.	2.3	4
186	Vibrational mode and collision energy effects on reaction of H <sub>2</sub> CO <sup>+</sup> with CO <sub>2</sub> . Physical Chemistry Chemical Physics, 2006, 8, 4575.	2.8	3
187	H <sup>+</sup> versus D <sup>+</sup> transfer from HOD <sup>+</sup> to N <sub>2</sub> : Mode- and bond-selective effects. Journal of Chemical Physics, 2011, 135, 044305.	3.0	3
188	Vibrationally enhanced charge transfer and mode/bond-specific H <sup>+</sup> and D <sup>+</sup> transfer in the reaction of HOD <sup>+</sup> with N <sub>2</sub> O. Journal of Chemical Physics, 2013, 139, 114305.	3.0	3
189	Phthalocyanines as a "Adsorption Strategy to Immobilize Catalyst" on Carbon for Electrochemical Synthesis. Synlett, 2019, 30, 1187-1193.	1.8	3
190	Inert, pulsed, ultrahigh-vacuum-compatible doser for study of hydrazine decomposition on a model Ir <sup>+</sup> ·Al <sub>2</sub> O <sub>3</sub> ·NiAl(110) catalyst. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 269-274.	2.1	2
191	Effects of Translational and Vibrational Excitation on the Reaction of HOD <sup>+</sup> with C <sub>2</sub> H <sub>2</sub> <sup>+</sup> and C <sub>2</sub> D <sub>2</sub> <sup>+</sup> : Mode- and Bond-Specific Effects in Exoergic Proton Transfer. Journal of Physical Chemistry A, 2014, 118, 8360-8372.	2.5	1
192	Metal Cluster Ion Chemistry. Proceedings of SPIE, 1986, , .	0.8	0
193	Size Dependent Reactions of Boron and Carbon Cluster Ions. Materials Research Society Symposia Proceedings, 1990, 206, 121.	0.1	0
194	Vibrational mode effects and energy disposal in reactions of polyatomic ions. , 1995, 2548, 286.		0
195	Vibrational Mode Effects in Polyatomic Ion Reactions. , 1991, , 183-196.		0
196	Semiconductor Cluster Ion Reactions and Energetics. , 1991, , 117-130.		0