AndrÃ© Fielicke

List of Publications by Year
in descending order

122 papers	5,792 citations	61984 43 h-index	88630 70 g-index
136 all docs	136 docs citations	136 times ranked	3211 citing authors

#	Article	IF	Citations
1	Unexpected structures of the Au₁₇ gold cluster: the stars are shining. Chemical Communications, 2022, 58, 5785-5788.	4.1	7
2	Evolution of Vibrational Spectra in the Manganeseâ€“Silicon Clusters Mn₂Si_{<i>n</i>}, <i>n</i> = 10, 12, and 13, and Cationic [Mn₂Si₁₃]⁺. Journal of Physical Chemistry A, 2022, 126, 1617-1626.	2.5	7
3	Comparison of Conventional and Nonconventional Hydrogen Bond Donors in Au^{â€“} Complexes. Journal of Physical Chemistry A, 2022, 126, 3880-3892.	2.5	0
4	An octacoordinated Nb atom in the NbAl₈H₈⁺ cluster. Chemical Communications, 2021, 57, 9518-9521.	4.1	5
5	Argon tagging of doubly transition metal doped aluminum clusters: The importance of electronic shielding. Journal of Chemical Physics, 2021, 154, 054312.	3.0	1
6	Atomic Cluster <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msup><mml:mrow><mml:msub><mml:mrow><mml:mstyle mathvariant="normal"><mml:mrow><mml:mtext>Au</mml:mtext></mml:mrow></mml:mstyle></mml:mrow><mml:mrow><mml:mn>1 Is a Strong Broadband Midinfrared Chromophore. Physical Review Letters, 2021, 127, 033002.	7.8	11
7	Infrared action spectroscopy of nitrous oxide on cationic gold and cobalt clusters. Physical Chemistry Chemical Physics, 2021, 23, 329-338.	2.8	8
8	Free electron laser infrared action spectroscopy of nitrous oxide binding to platinum clusters, Pt_n(N₂O)⁺. Physical Chemistry Chemical Physics, 2020, 22, 18606-18613.	2.8	11
9	Infrared Study of OCS Binding and Size-Selective Reactivity with Gold Clusters, Au<i>_n⁺</i> (<i>n</i> = 1â€“10). Journal of Physical Chemistry A, 2020, 124, 5389-5401.	2.5	11
10	Hydrogen Adsorption and Dissociation on Al<i>_n</i>Rh₂⁺ (<i>n</i> = 1 to 9) Clusters: Steric and Coordination Effects. Journal of Physical Chemistry C, 2020, 124, 7624-7633.	3.1	12
11	Altering CO binding on gold cluster cations by Pd-doping. Nanoscale, 2019, 11, 16130-16141.	5.6	23
12	Dinitrogen Fixation and Reduction by Ta₃N₃H_{0,1}^{â€“} Cluster Anions at Room Temperature: Hydrogen-Assisted Enhancement of Reactivity. Journal of the American Chemical Society, 2019, 141, 12592-12600.	13.7	65
13	Hydrogen Chemisorption on Doubly Vanadium Doped Aluminum Clusters. Zeitschrift Fur Physikalische Chemie, 2019, 233, 799-812.	2.8	8
14	Two-to-three dimensional transition in neutral gold clusters: The crucial role of van der Waals interactions and temperature. Physical Review Materials, 2019, 3, .	2.4	40
15	Size-Selected Clusters as Model Systems for Catalysis. Topics in Catalysis, 2018, 61, 1-2.	2.8	29
16	Competitive Molecular and Dissociative Hydrogen Chemisorption on Size Selected Doubly Rhodium Doped Aluminum Clusters. Topics in Catalysis, 2018, 61, 62-70.	2.8	20
17	IR Signature of Sizeâ€Selective CO₂ Activation on Small Platinum Cluster Anions, Pt_{<i>n</i>}^{â^’} (<i>n</i>=4â€“7). Angewandte Chemie, 2018, 130, 15038-15042.	2.0	8
18	IR Signature of Sizeâ€Selective CO₂ Activation on Small Platinum Cluster Anions, Pt_{<i>n</i>}^{â^’} (<i>n</i>=4â€“7). Angewandte Chemie - International Edition, 2018, 57, 14822-14826.	13.8	42

#	Article	IF	Citations
19	Size Dependent H₂ Adsorption on Al_{<i>n</i>}Rh⁺ (<i>n</i> = 1â€“12) Clusters. Journal of Physical Chemistry C, 2018, 122, 18247-18255.	3.1	26
20	Effect of radiative cooling on the size-dependent stability of small boron clusters. Physical Review A, 2018, 98, .	2.5	15
21	Effects of Charge Transfer on the Adsorption of CO on Small Molybdenumâ€Doped Platinum Clusters. Chemistry - A European Journal, 2017, 23, 4120-4127.	3.3	27
22	Infrared Spectroscopy and Structures of Boron-Doped Silicon Clusters (Si_{<i>n</i>}B_{<i>m</i>}, <i>n</i> = 3â€“8, <i>m</i> = 1â€“2). Journal of Physical Chemistry C, 2017, 121, 9560-9571.	3.1	26
23	Structure and Fluxionality of B₁₃⁺ Probed by Infrared Photodissociation Spectroscopy. Angewandte Chemie - International Edition, 2017, 56, 501-504.	13.8	88
24	Untersuchung der Struktur und Dynamik des B₁₃⁺ mithilfe der Infrarotâ€Photodissoziationsspektroskopie. Angewandte Chemie, 2017, 129, 515-519.	2.0	15
25	Liberation of three dihydrogens from two ethene molecules as mediated by the tantalum nitride anion cluster Ta₃N₂^{âˆ’} at room temperature. Physical Chemistry Chemical Physics, 2017, 19, 3136-3142.	2.8	9
26	Hydrogen Chemisorption on Singly Vanadiumâ€Doped Aluminum Clusters. Chemistry - A European Journal, 2017, 23, 15638-15643.	3.3	24
27	Structural Identification of Doped Silicon Clusters. Challenges and Advances in Computational Chemistry and Physics, 2017, , 53-86.	0.6	1
28	InnenrÃ¼cktitelbild: Untersuchung der Struktur und Dynamik des B₁₃⁺ mithilfe der Infrarotâ€Photodissoziationsspektroskopie (Angew. Chem. 2/2017). Angewandte Chemie, 2017, 129, 671-671.	2.0	0
29	Structural determination of niobium-doped silicon clusters by far-infrared spectroscopy and theory. Physical Chemistry Chemical Physics, 2016, 18, 6291-6300.	2.8	40
30	Structure Dependent Magnetic Coupling in Cobalt-Doped Silicon Clusters. Journal of Physical Chemistry C, 2016, 120, 19454-19460.	3.1	15
31	Size-Specific, Dissociative Activation of Carbon Dioxide by Cobalt Cluster Anions. Journal of Physical Chemistry C, 2016, 120, 14209-14215.	3.1	36
32	Characterization of neutral boron-silicon clusters using infrared spectroscopy: The case of Si6B. International Journal of Mass Spectrometry, 2016, 395, 1-6.	1.5	33
33	Charge-induced dipole vs. relativistically enhanced covalent interactions in Ar-tagged Au-Ag tetramers and pentamers. Journal of Chemical Physics, 2015, 143, 024310.	3.0	33
34	Structural Identification of Gold-Doped Silicon Clusters via Far-Infrared Spectroscopy. Journal of Physical Chemistry C, 2015, 119, 10896-10903.	3.1	30
35	Far-IR Spectra and Structures of Small Cationic Ruthenium Clusters: Evidence for Cubic Motifs. Journal of Physical Chemistry C, 2015, 119, 10869-10875.	3.1	12
36	Nature of the interaction between rare gas atoms and transition metal doped silicon clusters: the role of shielding effects. Physical Chemistry Chemical Physics, 2015, 17, 17584-17591.	2.8	11

#	Article	IF	Citations
37	Vibrational spectra and structures of Si_nC clusters (n = 3â€“8). Physical Chemistry Chemical Physics, 2015, 17, 18961-18970.	2.8	22
38	The Nature of Bonding between Argon and Mixed Goldâ€“Silver Trimers. Angewandte Chemie - International Edition, 2015, 54, 10675-10680.	13.8	58
39	Vibrational spectra and structures of bare and Xe-tagged cationic SinOm+ clusters. Journal of Chemical Physics, 2014, 141, 104313.	3.0	13
40	Structure investigation of CoxO y + (x=3â€“6, y=3â€“8) clusters by IR vibrational spectroscopy and DFT calculations. European Physical Journal D, 2014, 68, 1.	1.3	16
41	Far-IR Spectra of Small Neutral Gold Clusters in the Gas Phase. Zeitschrift Fur Physikalische Chemie, 2014, 228, 337-350.	2.8	44
42	The Geometric Structure of Silverâ€Doped Silicon Clusters. ChemPhysChem, 2014, 15, 328-336.	2.1	23
43	Structure Assignment, Electronic Properties, and Magnetism Quenching of Endohedrally Doped Neutral Silicon Clusters, Si_{<i>n</i>}Co (<i>n</i> = 10â€“12). Journal of Physical Chemistry A, 2014, 118, 8198-8203.	2.5	40
44	Superoxide Formation on Isolated Cationic Gold Clusters. Angewandte Chemie - International Edition, 2014, 53, 6554-6557.	13.8	33
45	Vibrational spectra and structures of neutral Si₆X clusters (X = Be, B, C, N, O). Physical Chemistry Chemical Physics, 2014, 16, 22364-22372.	2.8	24
46	Platinum Group Metal Clusters: From Gasâ€Phase Structures and Reactivities towards Model Catalysts. Chemistry - A European Journal, 2014, 20, 3258-3267.	3.3	69
47	Bildung von Superoxiden an isolierten kationischen Goldclustern. Angewandte Chemie, 2014, 126, 6672-6675.	2.0	8
48	Structures of Platinum Oxide Clusters in the Gas Phase. Journal of Physical Chemistry A, 2013, 117, 1233-1239.	2.5	35
49	Gold Clusters in the Gas Phase. Structure and Bonding, 2013, , 243-278.	1.0	10
50	Small Platinum Cluster Hydrides in the Gas Phase. Journal of Physical Chemistry A, 2013, 117, 8230-8237.	2.5	20
51	Unusual Bonding in Platinum Carbido Clusters. Journal of Physical Chemistry Letters, 2013, 4, 892-896.	4.6	25
52	Incipient chemical bond formation of Xe to a cationic silicon cluster: Vibrational spectroscopy and structure of the Si4Xe+ complex. Chemical Physics Letters, 2013, 557, 49-52.	2.6	13
53	Communication: Structure of magnetic lanthanide clusters from far-IR spectroscopy: ${m Tb}_n^+$ Tb n+ (<i>n</i> = 5â˜9). Journal of Chemical Physics, 2013, 138, 031102.	3.0	15
54	The structures of neutral transition metal doped silicon clusters, Si<i>n</i> <i>X</i> (<i>n</i> = 6â˜9;) Tj ETQq0 0 0 rgBT /Overlock 10 T	3.0	40

#	Article	IF	Citations
55	Charge Separation Promoted Activation of Molecular Oxygen by Neutral Gold Clusters. Journal of the American Chemical Society, 2013, 135, 1727-1730.	13.7	68
56	N₂ Activation by Neutral Ruthenium Clusters. Journal of Physical Chemistry C, 2013, 117, 12153-12158.	3.1	64
57	Vibrational Spectra and Structures of Neutral SimCn Clusters (m + n = 6): Sequential Doping of Silicon Clusters with Carbon Atoms. Journal of Physical Chemistry A, 2013, 117, 1158-1163.	2.5	23
58	Communication: IR spectroscopy of neutral transition metal clusters through thermionic emission. Journal of Chemical Physics, 2013, 139, 121101.	3.0	16
59	Not so loosely bound rare gas atoms: finite-temperature vibrational fingerprints of neutral gold-cluster complexes. New Journal of Physics, 2013, 15, 083003.	2.9	56
60	High Magnetic Moments in Manganeseâ€Doped Silicon Clusters. Chemistry - A European Journal, 2012, 18, 15788-15793.	3.3	66
61	Infrared driven CO oxidation reactions on isolated platinum cluster oxides, PtnOm+. Faraday Discussions, 2012, 157, 213.	3.2	27
62	Structure determination of neutral MgO clustersâ€"hexagonal nanotubes and cages. Physical Chemistry Chemical Physics, 2012, 14, 2849.	2.8	100
63	Probing the structures of neutral boron clusters using infrared/vacuum ultraviolet two color ionization: B11, B16, and B17. Journal of Chemical Physics, 2012, 137, 014317.	3.0	105
64	Communication: The structures of small cationic gas-phase platinum clusters. Journal of Chemical Physics, 2012, 136, 211103.	3.0	21
65	Gas-phase structures of neutral silicon clusters. Journal of Chemical Physics, 2012, 136, 064301.	3.0	68
66	Activation of Molecular Oxygen by Anionic Gold Clusters. Angewandte Chemie - International Edition, 2012, 51, 4444-4447.	13.8	101
67	Activated Methane on Small Cationic Platinum Clusters. Angewandte Chemie - International Edition, 2012, 51, 817-819.	13.8	68
68	Structure Determination of Anionic Metal Clusters via Infrared Resonance Enhanced Multiple Photon Electron Detachment Spectroscopy. Journal of Physical Chemistry Letters, 2011, 2, 1720-1724.	4.6	42
69	Effects of Coadsorbed Oxygen on the Infrared Driven Decomposition of N₂O on Isolated Rh₅⁺ Clusters. Journal of Physical Chemistry Letters, 2011, 2, 3053-3057.	4.6	39
70	Comment on â€œElectronic Structures, Vibrational and Thermochemical Properties of Neutral and Charged Niobium Clusters Nbn,n= 7â€"12â€. Journal of Physical Chemistry A, 2011, 115, 7869-7870.	2.5	5
71	Structural Identification of Caged Vanadium Doped Silicon Clusters. Physical Review Letters, 2011, 107, 173401.	7.8	90
72	Infrared-Induced Reactivity of N₂O on Small Gas-Phase Rhodium Clusters. Journal of Physical Chemistry A, 2011, 115, 2489-2497.	2.5	57

#	ARTICLE	IF	CITATIONS
73	CO adsorption on neutral iridium clusters. European Physical Journal D, 2011, 63, 231-234.	1.3	11
74	Structural Diversity and Flexibility of MgO Gasâ€Phase Clusters. Angewandte Chemie - International Edition, 2011, 50, 1716-1719.	13.8	67
75	Probing the structures of gas-phase rhodium cluster cations by far-infrared spectroscopy. Journal of Chemical Physics, 2010, 133, 214304.	3.0	70
76	Farâ€Infrared Spectra of Yttriumâ€Doped Gold Clusters Au_{<i>n</i>}Y (<i>n</i>=1â€“9). ChemPhysChem, 2010, 11, 1932-1943.	2.1	35
77	Communications: The structure of Rh8+ in the gas phase. Journal of Chemical Physics, 2010, 132, 011101.	3.0	55
78	Ferrimagnetic cagelike<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Fe</mml:mtext></mml:mrow><mml:mn>4</mml:mn></mml:msub Structure determination from infrared dissociation spectroscopy. Physical Review B, 2010, 82, .	3.2	33
79	Intensity-resolved IR multiple photon ionization and fragmentation of C60. Journal of Chemical Physics, 2010, 132, 074305.	3.0	63
80	Infrared Induced Reactivity on the Surface of Isolated Size-Selected Clusters: Dissociation of N₂O on Rhodium Clusters. Journal of the American Chemical Society, 2010, 132, 1448-1449.	13.7	72
81	Disparate Effects of Cu and V on Structures of Exohedral Transition Metal-Doped Silicon Clusters: A Combined Far-Infrared Spectroscopic and Computational Study. Journal of the American Chemical Society, 2010, 132, 15589-15602.	13.7	65
82	Infrared Spectroscopy and Binding Geometries of Oxygen Atoms Bound to Cationic Tantalum Clusters. Journal of Physical Chemistry A, 2010, 114, 9755-9761.	2.5	39
83	Nature of Ar bonding to small Con+ clusters and its effect on the structure determination by far-infrared absorption spectroscopy. Journal of Chemical Physics, 2009, 130, 034306.	3.0	54
84	Vibrational spectroscopy of neutral silicon clusters via far-IR-VUV two color ionization. Journal of Chemical Physics, 2009, 131, 171105.	3.0	71
85	The adsorption of CO on transition metal clusters: A case study of cluster surface chemistry. Surface Science, 2009, 603, 1427-1433.	1.9	103
86	Structures of Silicon Cluster Cations in the Gas Phase. Journal of the American Chemical Society, 2009, 131, 1115-1121.	13.7	90
87	Probing Câ€“O bond activation on gas-phase transition metal clusters: Infrared multiple photon dissociation spectroscopy of Fe, Ru, Re, and W cluster CO complexes. Journal of Chemical Physics, 2009, 131, 184706.	3.0	36
88	Tuning the Geometric Structure by Doping Silicon Clusters. ChemPhysChem, 2008, 9, 703-706.	2.1	51
89	Fluxionality and Ïƒâ€Aromaticity in Small Yttriumâ€Doped Gold Clusters. ChemPhysChem, 2008, 9, 2471-2474.	2.1	38
90	Molecular adsorption of H2 on small cationic nickel clusters. Physical Chemistry Chemical Physics, 2008, 10, 5743.	2.8	22

#	Article	IF	Citations
91	The adsorption of CO on group 10 (Ni, Pd, Pt) transition-metal clusters. Physical Chemistry Chemical Physics, 2008, 10, 6144.	2.8	92
92	Structures of Neutral Au ₇ , Au ₁₉ , and Au ₂₀ Clusters in the Gas Phase. Science, 2008, 321, 674-676.	12.6	596
93	The Effect of Charge on CO Binding in Rhodium Carbonyls:â€‰ From Bridging to Terminal CO. Journal of the American Chemical Society, 2008, 130, 2126-2127.	13.7	39
94	H₂ Adsorption on 3d Transition Metal Clusters:â€‰ A Combined Infrared Spectroscopy and Density Functional Study. Journal of Physical Chemistry A, 2008, 112, 1139-1149.	2.5	79
95	The far-infrared spectra of neutral and cationic niobium clusters: Nb50âˆ•+ to Nb90âˆ•+. Journal of Chemical Physics, 2007, 127, 234306.	3.0	61
96	Experimental vibrational spectra of gas-phase tantalum cluster cations. Journal of Chemical Physics, 2007, 127, 234307.	3.0	27
97	Chapter 8 Vibrational spectroscopy of gas-phase clusters and complexes. Chemical Physics of Solid Surfaces, 2007, , 327-375.	0.3	37
98	Argon Physisorption as Structural Probe for Endohedrally Doped Silicon Clusters. Physical Review Letters, 2007, 99, 063401.	7.8	85
99	Hydrogen-Induced Transition from Dissociative to Molecular Chemisorption of CO on Vanadium Clusters. Journal of the American Chemical Society, 2007, 129, 2516-2520.	13.7	43
100	Controlling the Bonding of CO on Cobalt Clusters by Coadsorption of H2. Angewandte Chemie - International Edition, 2007, 46, 5317-5320.	13.8	18
101	Far-Infrared Spectroscopy of Small Neutral Silver Clusters. Journal of Physical Chemistry A, 2006, 110, 8060-8063.	2.5	34
102	Size and charge effects on the binding of CO to late transition metal clusters. Journal of Chemical Physics, 2006, 124, 194305.	3.0	108
103	Far-Infrared spectroscopy of isolated transition metal clusters. European Physical Journal D, 2005, 34, 83-88.	1.3	74
104	Isomer selective infrared spectroscopy of neutral metal clusters. Journal of Chemical Physics, 2005, 122, 091105.	3.0	53
105	Structure determination of small vanadium clusters by density-functional theory in comparison with experimental far-infrared spectra. Journal of Chemical Physics, 2005, 122, 124302.	3.0	74
106	Gold Cluster Carbonyls:Â Vibrational Spectroscopy of the Anions and the Effects of Cluster Size, Charge, and Coverage on the CO Stretching Frequency. Journal of Physical Chemistry B, 2005, 109, 23935-23940.	2.6	109
107	Direct observation of size dependent activation of NO on gold clusters. Physical Chemistry Chemical Physics, 2005, 7, 3906.	2.8	42
108	Gold Cluster Carbonyls:Â Saturated Adsorption of CO on Gold Cluster Cations, Vibrational Spectroscopy, and Implications for Their Structures. Journal of the American Chemical Society, 2005, 127, 8416-8423.	13.7	172

#	Article	IF	Citations
109	Infrared spectroscopy of water adsorption on vanadium cluster cations (Vx+; x=3â€“18). Chemical Physics Letters, 2004, 392, 409-414.	2.6	26
110	Structure Determination of Isolated Metal Clusters via Far-Infrared Spectroscopy. Physical Review Letters, 2004, 93, 023401.	7.8	161
111	Photoionization of Nb3CO and Nb3(CO)2:Â Is CO Molecularly or Dissociatively Adsorbed on Niobium?. Journal of Physical Chemistry A, 2004, 108, 964-970.	2.5	26
112	Size and Charge Effects on the Binding of CO to Small Isolated Rhodium Clustersâ€. Journal of Physical Chemistry B, 2004, 108, 14591-14598.	2.6	105
113	Infrared multiple photon dissociation spectroscopy of transition metal oxide cluster cations. European Physical Journal D, 2003, 24, 69-72.	1.3	59
114	Infrared Spectroscopy of Niobium Oxide Cluster Cations in a Molecular Beam:Â Identifying the Cluster Structures. Journal of the American Chemical Society, 2003, 125, 3659-3667.	13.7	98
115	Vibrational Spectroscopy of CO in Gas-Phase Rhodium Clusterâ^’CO Complexes. Journal of the American Chemical Society, 2003, 125, 11184-11185.	13.7	53
116	The Structures of Vanadium Oxide Clusterâ^’Ethene Complexes. A Combined IR Multiple Photon Dissociation Spectroscopy and DFT Calculation Study. Journal of the American Chemical Society, 2003, 125, 15716-15717.	13.7	57
117	Structure Determination of Gas-Phase Niobium and Tantalum Carbide Nanocrystals via Infrared Spectroscopy. Physical Review Letters, 2002, 89, 013401.	7.8	26
118	Stability and reactivity patterns of medium-sized vanadium oxide cluster cations VxOy+ (4â€‰â‰¤â€‰xâ€‰â‰¤â€‰14). Physical Chemistry Chemical Physics, 2002, 4, 2621-2628.	2.8	36
119	Molybdenum doped bismuth oxide clusters and their reactivity towards ethene: comparison with pure bismuth oxide clusters. Chemical Physics Letters, 2002, 359, 360-366.	2.6	8
120	Antimony and bismuth oxide cluster ions. Physical Chemistry Chemical Physics, 2001, 3, 3034-3041.	2.8	20
121	Interaction of Bismuth Oxide Cluster Cations with Alkenes and Molecular Oxygen:â€‰ Bi4O6+, a Possible Reactive Center for Alkene Oxidation. Journal of Physical Chemistry A, 2000, 104, 6979-6982.	2.5	34
122	Tertiarybutylhydrazine: a new precursor for the MOVPE of Group III-nitrides. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1999, 59, 20-23.	3.5	19