

Vlasta Bonař-Kouteck½

List of Publications by Year in descending order

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238
papers

10,406
citations

30070

54
h-index

45317

90
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249
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249
docs citations

249
times ranked

5226
citing authors

#	ARTICLE	IF	CITATIONS
1	Quantum chemistry of small clusters of elements of groups Ia, Ib, and IIa: fundamental concepts, predictions, and interpretation of experiments. <i>Chemical Reviews</i> , 1991, 91, 1035-1108.	47.7	577
2	Neutral and Charged Biradicals, Zwitterions, Funnels in S1, and Proton Translocation: Their Role in Photochemistry, Photophysics, and Vision. <i>Angewandte Chemie International Edition in English</i> , 1987, 26, 170-189.	4.4	396
3	Density functional study of structural and electronic properties of bimetallic silver-gold clusters: Comparison with pure gold and silver clusters. <i>Journal of Chemical Physics</i> , 2002, 117, 3120-3131.	3.0	305
4	Effective core potential-configuration interaction study of electronic structure and geometry of small neutral and cationic Ag _n clusters: Predictions and interpretation of measured properties. <i>Journal of Chemical Physics</i> , 1993, 98, 7981-7994.	3.0	262
5	Photophysics of Internal Twisting. <i>Advances in Chemical Physics</i> , 2007, , 1-174.	0.3	203
6	Reactivity of Atomic Gold Anions toward Oxygen and the Oxidation of CO: Experiment and Theory. <i>Journal of the American Chemical Society</i> , 2004, 126, 2526-2535.	13.7	198
7	Ab initio study of the absorption spectra of Ag _n (n=5-8) clusters. <i>Journal of Chemical Physics</i> , 2001, 115, 10450.	3.0	196
8	Theoretical and Experimental Consideration of the Reactions between V _x O _y ⁺ and Ethylene. <i>Journal of the American Chemical Society</i> , 2003, 125, 6289-6299.	13.7	182
9	An accurate relativistic effective core potential for excited states of Ag atom: An application for studying the absorption spectra of Ag _n and Ag _n ⁺ clusters. <i>Journal of Chemical Physics</i> , 1999, 110, 3876-3886.	3.0	167
10	Sudden Polarization in the Zwitterionic Z1 Excited States of Organic Intermediates. Photochemical Implications. <i>Angewandte Chemie International Edition in English</i> , 1975, 14, 575-576.	4.4	161
11	Evolution of the electronic structure of lithium clusters between four and eight atoms. <i>Journal of Chemical Physics</i> , 1992, 96, 1793-1809.	3.0	160
12	Clusters as model systems for investigating nanoscale oxidation catalysis. <i>Chemical Physics Letters</i> , 2009, 475, 1-9.	2.6	160
13	Influence of Charge State on the Mechanism of CO Oxidation on Gold Clusters. <i>Journal of the American Chemical Society</i> , 2008, 130, 1694-1698.	13.7	147
14	Theoretical interpretation of the photoelectron detachment spectra of Na ⁺ and of the absorption spectra of Na ₃ , Na ₄ , and Na ₈ clusters. <i>Journal of Chemical Physics</i> , 1990, 93, 3802-3825.	3.0	146
15	Nonadiabatic dynamics within the time dependent density functional theory: Ultrafast photodynamics in pyrazine. <i>Chemical Physics</i> , 2008, 349, 319-324.	1.9	137
16	Influence of Charge State on Catalytic Oxidation Reactions at Metal Oxide Clusters Containing Radical Oxygen Centers. <i>Journal of the American Chemical Society</i> , 2009, 131, 5460-5470.	13.7	135
17	Geometries of first triplet states of linear polyenes. <i>Journal of the American Chemical Society</i> , 1977, 99, 8134-8140.	13.7	130
18	Non-adiabatic dynamics of pyrrole: Dependence of deactivation mechanisms on the excitation energy. <i>Chemical Physics</i> , 2010, 375, 26-34.	1.9	124

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19	Effective core potential configuration interaction study of electronic structure and geometry of small anionic Ag _n clusters: Predictions and interpretation of photodetachment spectra. <i>Journal of Chemical Physics</i> , 1994, 100, 490-506.	3.0	120
20	Stoichiometric Zirconium Oxide Cations as Potential Building Blocks for Cluster Assembled Catalysts. <i>Journal of the American Chemical Society</i> , 2008, 130, 13912-13920.	13.7	120
21	Theoretical Exploration of Ultrafast Dynamics in Atomic Clusters: Analysis and Control. <i>Chemical Reviews</i> , 2005, 105, 11-66.	47.7	110
22	Cooperative Effects in the Activation of Molecular Oxygen by Anionic Silver Clusters. <i>Journal of the American Chemical Society</i> , 2004, 126, 3442-3443.	13.7	105
23	Oxygen Adsorption on Hydrated Gold Cluster Anions: Experiment and Theory. <i>Journal of the American Chemical Society</i> , 2003, 125, 8408-8414.	13.7	100
24	Nonadiabatic dynamics and simulation of time resolved photoelectron spectra within time-dependent density functional theory: Ultrafast photoswitching in benzyldeneaniline. <i>Journal of Chemical Physics</i> , 2008, 129, 164118.	3.0	100
25	Laser-field-induced surface-hopping method for the simulation and control of ultrafast photodynamics. <i>Physical Review A</i> , 2009, 79, .	2.5	99
26	On a possible mechanism of the multiple fluorescence of p-N, N-dimethylaminobenzonitrile and related compounds. <i>Chemical Physics Letters</i> , 1979, 62, 115-120.	2.6	95
27	Prediction of structural and environmental effects on the S ₁ –S ₀ energy gap and jump probability in double-bond cis–trans photoisomeriz. <i>Chemical Physics Letters</i> , 1984, 104, 440-443.	2.6	88
28	Nonadiabatic Dynamics within Time-Dependent Density Functional Tight Binding Method. <i>Journal of Physical Chemistry A</i> , 2009, 113, 12700-12705.	2.5	88
29	Ab initio predictions of structural and optical response properties of Na _n clusters: Interpretation of depletion spectra at low temperature. <i>Journal of Chemical Physics</i> , 1996, 104, 1427-1440.	3.0	87
30	Synthesis, characterization and optical properties of low nuclearity liganded silver clusters: Ag ₃₁ (SG) ₁₉ and Ag ₁₅ (SG) ₁₁ . <i>Nanoscale</i> , 2013, 5, 5637.	5.6	83
31	A theory of free radical reactions. <i>Journal of the American Chemical Society</i> , 1977, 99, 842-850.	13.7	80
32	Charge-transfer-biradical excited states: relation to anomalous fluorescence. "Negative" S ₁ -T ₁ splitting in twisted aminoborane. <i>Journal of the American Chemical Society</i> , 1985, 107, 1765-1766.	13.7	79
33	Isomer-specific spectroscopy of metal clusters trapped in a matrix: Ag ₉ . <i>Physical Review A</i> , 2004, 70, .	2.5	77
34	Tuning Ag ₂₉ nanocluster light emission from red to blue with one and two-photon excitation. <i>Nanoscale</i> , 2016, 8, 2892-2898.	5.6	75
35	Ab initio configuration interaction study of the electronic and geometric structures of small sodium cationic clusters. <i>Journal of Chemical Physics</i> , 1988, 89, 4861-4866.	3.0	74
36	Probing the Electronic Structure and Chemical Bonding of Gold Oxides and Sulfides in AuO _n and AuS _n (n = 1, 2). <i>Journal of the American Chemical Society</i> , 2008, 130, 9156-9167.	13.7	72

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37	An ab initio configuration interaction study of the excited states of the Na ₄ cluster: Assignment of the absorption spectrum. <i>Chemical Physics Letters</i> , 1990, 166, 32-38.	2.6	71
38	Critically heterosymmetric biradicaloid geometries of protonated Schiff bases. <i>Theoretica Chimica Acta</i> , 1987, 72, 459-474.	0.8	70
39	Ultrafast photodynamics of furan. <i>Journal of Chemical Physics</i> , 2010, 133, 234303.	3.0	69
40	Generation of Oxygen Radical Centers in Binary Neutral Metal Oxide Clusters for Catalytic Oxidation Reactions. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 407-410.	13.8	68
41	Theoretical exploration of femtosecond multi-state nuclear dynamics of small clusters. <i>Journal of Chemical Physics</i> , 1998, 108, 3096-3113.	3.0	67
42	Ligand-induced substrate steering and reshaping of [Ag ₂ (H)] ⁺ scaffold for selective CO ₂ extrusion from formic acid. <i>Nature Communications</i> , 2016, 7, 11746.	12.8	66
43	Interpretation of the absorption spectrum of Na ₈ . <i>Chemical Physics Letters</i> , 1990, 170, 26-34.	2.6	65
44	Competition between planar and nonplanar structure in alkali hexamers: The example of Li ₆ . <i>Physical Review Letters</i> , 1991, 67, 2638-2641.	7.8	65
45	Ab initio CI study of the electronic structure and geometry of neutral and cationic hydrogenated lithium clusters. Predictions and interpretation of measured properties. <i>Chemical Physics Letters</i> , 1993, 206, 528-539.	2.6	62
46	Quantum molecular interpretation of the absorption spectra of Na ₅ , Na ₆ , and Na ₇ clusters. <i>Journal of Chemical Physics</i> , 1992, 96, 7938-7958.	3.0	58
47	Ab initio configuration interaction study of the photoelectron spectra of small sodium cluster anions. <i>Journal of Chemical Physics</i> , 1989, 91, 3794-3795.	3.0	57
48	The Structures of Vanadium Oxide Cluster-Ethene Complexes. A Combined IR Multiple Photon Dissociation Spectroscopy and DFT Calculation Study. <i>Journal of the American Chemical Society</i> , 2003, 125, 15716-15717.	13.7	57
49	How Shaped Light Discriminates Nearly Identical Biochromophores. <i>Physical Review Letters</i> , 2010, 105, 073003.	7.8	57
50	Ab initio Hartree-Fock self-consistent field molecular dynamics study of structure and dynamics of Li ₈ . <i>Journal of Chemical Physics</i> , 1994, 101, 10092-10100.	3.0	56
51	Ab initio study of structural and optical response properties of excess-electron lithium-hydride and sodium-fluoride clusters. <i>Chemical Physics</i> , 1996, 210, 313-341.	1.9	56
52	Biradicals and biradicaloids: a unified view. <i>Tetrahedron</i> , 1988, 44, 7559-7585.	1.9	55
53	Time-dependent density functional theory excited state nonadiabatic dynamics combined with quantum mechanical/molecular mechanical approach: Photodynamics of indole in water. <i>Journal of Chemical Physics</i> , 2011, 135, 054105.	3.0	55
54	Sudden polarization in zwitterionic excited states of organic intermediates in photochemical reactions. On a possible mechanism for bicyclo[3.1.0]hex-2-ene formation. <i>Journal of the American Chemical Society</i> , 1978, 100, 396-402.	13.7	54

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55	An ab initio configuration interaction investigation of the excited states of the Li ₄ cluster. <i>Chemical Physics Letters</i> , 1988, 146, 518-523.	2.6	54
56	Measured and calculated absolute total cross-sections for the single ionization of CF _x and NF _x by electron impact. <i>International Journal of Mass Spectrometry and Ion Processes</i> , 1994, 137, 77-91.	1.8	54
57	Kinetic Analysis of the Reaction between (V ₂ O ₅) _{n=1,2+} and Ethylene. <i>Journal of Physical Chemistry B</i> , 2006, 110, 3015-3022.	2.6	54
58	Enhanced two-photon absorption of ligated silver and gold nanoclusters: theoretical and experimental assessments. <i>Nanoscale</i> , 2019, 11, 12436-12448.	5.6	54
59	Photochemicalsyn-anti isomerization of a Schiff base: A two-dimensional description of a conical intersection in formalimine. <i>Theoretica Chimica Acta</i> , 1985, 68, 45-55.	0.8	53
60	Joint experimental and theoretical investigations of the reactivity of Au ₂ O ⁺ and Au ₃ O ⁺ (n=1-5) with carbon monoxide. <i>Journal of Chemical Physics</i> , 2006, 125, 204311.	3.0	53
61	Plötzliche Polarisation im zwitterionischen angeregten Zustand Z ₁ organischer Zwischenstufen - Photochemische Auswirkungen. <i>Angewandte Chemie</i> , 1975, 87, 599-601.	2.0	52
62	Time-Resolved Femtosecond Photoelectron Spectroscopy by Field-Induced Surface Hopping. <i>Journal of Physical Chemistry A</i> , 2011, 115, 3755-3765.	2.5	52
63	Ab Initio Adiabatic Dynamics Combined with Wigner Distribution Approach to Femtosecond Pump-Probe Negative Ion to Neutral to Positive Ion (NeNePo) Spectroscopy of Ag ₂ Au, Ag ₄ , and Au ₄ Clusters. <i>Journal of Physical Chemistry A</i> , 2001, 105, 8892-8905.	2.5	51
64	Silver cluster-biomolecule hybrids: from basics towards sensors. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 9282.	2.8	51
65	Ab initio configuration interaction study of mixed BeLi _k clusters (k=1-9). <i>Journal of Chemical Physics</i> , 1988, 89, 5794-5802.	3.0	50
66	Absorption Enhancement and Conformational Control of Peptides by Small Silver Clusters. <i>Physical Review Letters</i> , 2008, 101, 213001.	7.8	50
67	Structure and stability of lithium (Li ₄ and Li ₆) clusters. <i>The Journal of Physical Chemistry</i> , 1983, 87, 1096-1097.	2.9	49
68	Au ₁₀ (SG) ₁₀ : A Chiral Gold Catenane Nanocluster with Zero Confined Electrons. Optical Properties and First-Principles Theoretical Analysis. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 1979-1985.	4.6	49
69	Optimal Control of Ionization Processes in NaK: Comparison between Theory and Experiment. <i>Journal of Physical Chemistry A</i> , 2004, 108, 4175-4179.	2.5	48
70	Simulation of time resolved photoelectron spectra with Stieltjes imaging illustrated on ultrafast internal conversion in pyrazine. <i>Journal of Chemical Physics</i> , 2010, 132, 174301.	3.0	48
71	Ab initio CI study of chemical reactions of singlet and triplet imidogen (NH) radicals. <i>Journal of the American Chemical Society</i> , 1983, 105, 5547-5557.	13.7	46
72	Ab initio configuration interaction study of the electronic and geometric structure of small, mixed neutral and cationic MgNa _k and MgLi _k (k=2-8) clusters. <i>Journal of Chemical Physics</i> , 1989, 91, 4229-4241.	3.0	46

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73	Ab initio nonadiabatic dynamics involving conical intersection combined with Wigner distribution approach to ultrafast spectroscopy illustrated on Na ₃ F ₂ cluster. <i>Journal of Chemical Physics</i> , 2001, 114, 2123-2136.	3.0	45
74	Semiclassical calculations of the cross section for electron-impact ionization of. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1996, 29, 5175-5181.	1.5	43
75	Stereochemical effects in the quenching of Na*(3s ² 2P) by CO: Crossed beam experiment and ab initio CI potential energy surfaces. <i>Journal of Chemical Physics</i> , 1982, 77, 1908-1920.	3.0	42
76	Experimental and theoretical approach to the pseudorotating sodium cluster (Na ₃ (B)). <i>The Journal of Physical Chemistry</i> , 1993, 97, 12509-12515.	2.9	42
77	Ab initio nonadiabatic dynamics study of ultrafast radiationless decay over conical intersections illustrated on the Na ₃ F cluster. <i>Journal of Chemical Physics</i> , 2006, 125, 024303.	3.0	40
78	Ligand-core NLO-phores: a combined experimental and theoretical approach to the two-photon absorption and two-photon excited emission properties of small-ligated silver nanoclusters. <i>Nanoscale</i> , 2017, 9, 1221-1228.	5.6	40
79	Electronic states of cyclobutadiene heteroanalogs. Critical biradicaloids. <i>Journal of the American Chemical Society</i> , 1989, 111, 6140-6146.	13.7	39
80	Reactivity of stoichiometric titanium oxide cations. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 4243.	2.8	39
81	pH-Induced transformation of ligated Au ₂₅ to brighter Au ₂₃ nanoclusters. <i>Nanoscale</i> , 2018, 10, 11335-11341.	5.6	39
82	Nonadiabatic coupling between low lying singlet states of geometrically relaxed olefines: Ethylene and propylene. <i>Journal of Chemical Physics</i> , 1982, 76, 6018-6030.	3.0	38
83	Tuning Cluster Reactivity by Charge State and Composition: Experimental and Theoretical Investigation of CO Binding Energies to Ag _n Au _m ⁺ⁿ (n + m) Tj ETQq 12150.784314 rgBT	12.50	38
84	Doubly Charged Silver Clusters Stabilized by Tryptophan: Ag ₄ ²⁺ as an Optical Marker for Monitoring Particle Growth. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 878-881.	13.8	38
85	Predicting fluorescence quantum yields for molecules in solution: A critical assessment of the harmonic approximation and the choice of the lineshape function. <i>Journal of Chemical Physics</i> , 2020, 152, 054107.	3.0	35
86	A theoretical study of PdCONa and 6PdCONa ⁹⁺ complexes as a simple model of a promoted catalyst. <i>Journal of Catalysis</i> , 1988, 111, 409-417.	6.2	34
87	Ab initio Hartree-Fock molecular dynamics with parallel processing: application to small neutral and charged Lin clusters. <i>Chemical Physics Letters</i> , 1996, 250, 47-58.	2.6	34
88	Ab initio molecular dynamics study of solid- to liquidlike transitions in Li ₉ ⁺ , Li ₁₀ , and Li ₁₁ ⁺ clusters. <i>Journal of Chemical Physics</i> , 1997, 107, 6321-6334.	3.0	34
89	Ab initio gradient corrected density functional molecular dynamics: investigation of structural and dynamical properties of the Li ₈ cluster. <i>Chemical Physics Letters</i> , 1997, 279, 129-139.	2.6	34
90	New Strategy for Optimal Control of Femtosecond Pump-Dump Processes. <i>Journal of Physical Chemistry A</i> , 2002, 106, 10477-10481.	2.5	34

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91	Spectroscopy of isolated, mass-selected tryptophan-Ag ₃ complexes: A model for photoabsorption enhancement in nanoparticle-biomolecule hybrid systems. <i>Journal of Chemical Physics</i> , 2006, 125, 164326.	3.0	34
92	Structural and Optical Properties of Isolated Noble Metalâ€“Glutathione Complexes: Insight into the Chemistry of Liganded Nanoclusters. <i>Journal of Physical Chemistry C</i> , 2011, 115, 24549-24554.	3.1	34
93	Tuning Structural and Optical Properties of Thiolate-Protected Silver Clusters by Formation of a Silver Core with Confined Electrons. <i>Journal of Physical Chemistry C</i> , 2013, 117, 14824-14831.	3.1	34
94	Use of configuration selection methods to study the sudden polarization effect. <i>Journal of the American Chemical Society</i> , 1979, 101, 5917-5922.	13.7	33
95	Femtosecond Time-Resolved Geometry Relaxation and Ultrafast Intramolecular Energy Redistribution in Ag ₂ Au. <i>ChemPhysChem</i> , 2005, 6, 243-253.	2.1	33
96	UV Photodissociation of Proline-containing Peptide Ions: Insights from Molecular Dynamics. <i>Journal of the American Society for Mass Spectrometry</i> , 2015, 26, 432-443.	2.8	33
97	Selectivity Effects in Bimetallic Catalysis: Role of the Metal Sites in the Decomposition of Formic Acid into H ₂ and CO ₂ by the Coinage Metal Binuclear Complexes [dppmMMâ€“(H)] ⁺ . <i>ChemCatChem</i> , 2017, 9, 1298-1302.	3.7	33
98	A Mixed Quantumâ€“Classical Description of Excitation Energy Transfer in Supramolecular Complexes: FÃ¶rster Theory and beyond. <i>ChemPhysChem</i> , 2011, 12, 645-656.	2.1	32
99	Ab initio adiabatic dynamics involving excited states combined with Wigner distribution approach to ultrafast spectroscopy illustrated on alkali halide clusters. <i>Journal of Chemical Physics</i> , 2001, 114, 2106-2122.	3.0	31
100	Photoabsorption and photofragmentation of isolated cationic silver clusterâ€“tryptophan hybrid systems. <i>Journal of Chemical Physics</i> , 2007, 127, 134301.	3.0	31
101	Experimental and theoretical study of the absorption properties of thiolated diamondoids. <i>Journal of Chemical Physics</i> , 2010, 132, 144305.	3.0	31
102	Two-photon absorption of ligand-protected Ag ₁₅ nanoclusters. Towards a new class of nonlinear optics nanomaterials. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 12404-12408.	2.8	31
103	Ultrafast Dynamics of Small Clusters on the Time Scale of Nuclear Motion. <i>Journal of Physical Chemistry A</i> , 1998, 102, 4069-4074.	2.5	30
104	Multiple pathways in the photodynamics of a polar Å€-bond: A case study of silaethylene. <i>Chemical Physics Letters</i> , 2006, 418, 377-382.	2.6	30
105	The Origin of the Selectivity and Activity of Rutheniumâ€“Cluster Catalysts for Fuelâ€“Cell Feedâ€“Gas Purification: A Gasâ€“Phase Approach. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 5467-5471.	13.8	30
106	General properties of the electronic structure of alkali metal clusters and Ia-IIa mixed clusters. <i>Zeitschrift fÃ¼r Physik D-Atoms Molecules and Clusters</i> , 1989, 12, 307-314.	1.0	29
107	Optical Properties of Gas-Phase Tryptophan-Silver Cations: Charge Transfer from the Indole Ring to the Silver Atom. <i>ChemPhysChem</i> , 2006, 7, 524-528.	2.1	29
108	Optical and Structural Properties of Copperâ€“Oxytocin Dications in the Gas Phase. <i>Journal of Physical Chemistry B</i> , 2009, 113, 11293-11300.	2.6	29

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109	Geometrical relaxation in the excited singlet states of propylene. Tetrahedron, 1982, 38, 741-751.	1.9	28
110	Compact formulation of multiconfigurational response theory. Applications to small alkali metal clusters. Journal of Chemical Physics, 1993, 98, 3121-3140.	3.0	28
111	Composition dependent adsorption of multiple CO molecules on binary silver-gold clusters Ag _n Au _m (n + m = 5): theory and experiment. Physical Chemistry Chemical Physics, 2010, 12, 7865.	2.8	28
112	Field-induced surface hopping method for probing transition state nonadiabatic dynamics of Ag ₃ . Physical Chemistry Chemical Physics, 2011, 13, 8690.	2.8	28
113	Binding motifs of silver in prion octarepeat model peptides: a joint ion mobility, IR and UV spectroscopies, and theoretical approach. Physical Chemistry Chemical Physics, 2012, 14, 11433.	2.8	28
114	CO ₂ Methanation on Cu-Cluster Decorated Zirconia Supports with Different Morphology: A Combined Experimental In Situ GIXANES/GISAXS, Ex Situ XPS and Theoretical DFT Study. ACS Catalysis, 2021, 11, 6210-6224.	11.2	28
115	Approximate calculations of correlation energy using one-electron density-functional procedures: Application to Lin and Nan clusters. Journal of Chemical Physics, 1990, 92, 6645-6654.	3.0	27
116	Total electron impact ionization cross sections of free molecular radicals: the failure of the additivity rule revisited. International Journal of Mass Spectrometry and Ion Processes, 1993, 129, 43-48.	1.8	27
117	Theoretical Study of the Reactivity of Bismuth Oxide Cluster Cations with Ethene in the Presence of Molecular Oxygen. Journal of Physical Chemistry A, 2000, 104, 6983-6992.	2.5	27
118	Size-dependent dynamics in excited states of gold clusters: From oscillatory motion to photoinduced melting. Journal of Chemical Physics, 2007, 127, 164312.	3.0	27
119	Nanotechnology in Tumor Biomarker Detection: The Potential of Liganded Nanoclusters as Nonlinear Optical Contrast Agents for Molecular Diagnostics of Cancer. Cancers, 2021, 13, 4206.	3.7	27
120	ECP-CI study of electronic structure and geometry of small neutral and charged Ag _n clusters; Predictions and interpretation of measured properties. Zeitschrift für Physik D-Atoms Molecules and Clusters, 1993, 26, 287-289.	1.0	26
121	A DFT study of EPR parameters in Cu(II) complexes of the octarepeat region of the prion protein. Physical Chemistry Chemical Physics, 2008, 10, 4573.	2.8	26
122	Ab initio configuration interaction study of excited states of LiNa ₃ and Li ₂ Na ₂ clusters: Interpretation of absorption spectra. Journal of Chemical Physics, 1992, 96, 4934-4944.	3.0	25
123	Electronic properties and geometric structures of Li ₄ H and Li ₉ H from optical absorption spectra. Journal of Chemical Physics, 1995, 102, 2727-2736.	3.0	25
124	Gas-phase VUV photoionisation and photofragmentation of the silver deuteride nanocluster [Ag ₁₀ D ₈ L ₆] ²⁺ (L = bis(diphenylphosphino)methane). A joint experimental and theoretical study. Physical Chemistry Chemical Physics, 2015, 17, 25772-25777.	2.8	25
125	Interactions of CO with Au _n O _m (n ≤ 4). International Journal of Mass Spectrometry, 2006, 254, 163-167.	1.5	24
126	Structural and Photochemical Properties of Organosilver Reactive Intermediates MeAg ₂ ⁺ and PhAg ₂ ⁺ . Journal of Physical Chemistry A, 2011, 115, 9120-9127.	2.5	24

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127	How to Translate the $[LCu_{2}(H)]^{+}$ Catalysed Selective Decomposition of Formic Acid into H_{2} and CO_{2} from the Gas Phase into a Zeolite.. ChemCatChem, 2018, 10, 1173-1177.	3.7	24
128	Ligand shell size effects on one- and two-photon excitation fluorescence of zwitterion functionalized gold nanoclusters. Physical Chemistry Chemical Physics, 2019, 21, 23916-23921.	2.8	24
129	Ground and excited states properties of $Na_{4}F_{m=1}^{-3}$, $Li_{4}H$ and $Li_{4}H_{2}$ clusters. Zeitschrift für Physik D-Atoms Molecules and Clusters, 1993, 26, 192-194.	1.0	23
130	Laser pulse trains for controlling excited state dynamics of adenine in water. Physical Chemistry Chemical Physics, 2012, 14, 4687.	2.8	23
131	Structural and optical properties of small oxygen-doped- and pure-silver clusters. European Physical Journal D, 1999, 9, 183-187.	1.3	22
132	Ab initio CI study of the hydrogen abstraction by imidogen ($NH(a^{1}\Delta_{g})$). Journal of the American Chemical Society, 1984, 106, 4061-4062.	13.7	20
133	Ab initio three-dimensional quantum dynamics of Ag_{3} clusters in the NeNePo process. Chemical Physics Letters, 2000, 318, 256-262.	2.6	20
134	Observation and Theoretical Description of Periodic Geometric Rearrangement in Electronically Excited Nonstoichiometric Sodium-Fluoride Clusters. Physical Review Letters, 2002, 89, 213404.	7.8	20
135	DFT investigation of copper-peptide complexes related to the octarepeat domain of the prion protein. Inorganic Chemistry Communication, 2003, 6, 650-653.	3.9	20
136	Gas-Phase Synthesis and Intense Visible Absorption of Tryptophan-Gold Cations. Angewandte Chemie - International Edition, 2009, 48, 7829-7832.	13.8	20
137	Formation and Characterisation of the Silver Hydride Nanocluster Cation $[Ag_{3}H_{2}((Ph)_{2}P)_{2}CH_{2}]^{+}$ and Its Release of Hydrogen. Chemistry - A European Journal, 2014, 20, 16626-16633.	3.3	20
138	Reactivity-promoting criterion based on internal vibrational energy redistribution. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 10314-10317.	7.1	19
139	Gas-Phase Synthesis and Vibronic Action Spectroscopy of $Ag_{2}H^{+}$. Journal of Physical Chemistry Letters, 2011, 2, 548-552.	4.6	19
140	Gas-Phase Structural and Optical Properties of Homo- and Heterobimetallic Rhombic Dodecahedral Nanoclusters $[Ag_{14}(Cu_{n})_{12}X]^{+}$ ($X = Cl, Br, I$)	3.1	19
141	Ab initio predictions of optically allowed transitions in Na_{20} . Nature of excitations and influence of geometry. Chemical Physics Letters, 1993, 213, 522-526.	2.6	18
142	General properties of the Hartree-Fock problem demonstrated on the frontier orbital model. Theoretica Chimica Acta, 1975, 36, 149-161.	0.8	17
143	An ab initio configuration interaction study of the reaction between small lithium clusters (Li_{4} , Li_{6}) and H_{2} molecule. Journal of Chemical Physics, 1991, 94, 5533-5543.	3.0	17
144	Composition dependent selectivity in the coadsorption of $H_{2}O$ and CO on pure and binary silver-gold clusters. Chemical Physics Letters, 2013, 565, 74-79.	2.6	17

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145	Sub-100 nanometer silver doped goldâ€cysteine supramolecular assemblies with enhanced nonlinear optical properties. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 12091-12099.	2.8	17
146	Core-valence correlation potentials based on density functional theory. Applications to valence-electron-only calculations on Na and K diatomics. <i>Zeitschrift F�r Physik D-Atoms Molecules and Clusters</i> , 1989, 13, 355-361.	1.0	16
147	Ab-initio study of structural and optical properties of nonstoichiometric alkalimetal- oxides. <i>Zeitschrift F�r Physik D-Atoms Molecules and Clusters</i> , 1997, 40, 445-447.	1.0	16
148	Ab-initio study of optical response properties of nonstoichiometric lithium-hydride and sodium-fluoride clusters. <i>Chemical Physics</i> , 1997, 225, 173-187.	1.9	16
149	Theoretical determination of the absolute electron impact ionization cross-section function for silver clusters Ag _n (n=2â€7). <i>Journal of Chemical Physics</i> , 1999, 111, 1964-1971.	3.0	16
150	Isotope selective photoionization of NaK by optimal control: Theory and experiment. <i>Journal of Chemical Physics</i> , 2006, 125, 214310.	3.0	16
151	Synthesis and Spectroscopic Characterization of Diphenylargentate, [(C ₆ H ₅) ₂ Ag] ⁺ . <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 1197-1201.	4.6	16
152	Nonlinear Absorption Dynamics Using Fieldâ€Induced Surface Hopping: Zinc Porphyrin in Water. <i>ChemPhysChem</i> , 2013, 14, 1377-1386.	2.1	16
153	The nature of electronic excitations at the metalâ€bioorganic interface illustrated on histidineâ€silver hybrids. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 1257-1261.	2.8	16
154	Structural characterization and gas-phase studies of the [Ag ₁₀ H ₈ (L) ₆] ²⁺ nanocluster dication. <i>Nanoscale</i> , 2019, 11, 22880-22889.	5.6	16
155	Functionalized Au ₁₅ nanoclusters as luminescent probes for protein carbonylation detection. <i>Communications Chemistry</i> , 2021, 4, .	4.5	16
156	Optimal control of mode-selective femtochemistry in multidimensional systems. <i>Physical Review A</i> , 2007, 76, .	2.5	15
157	Absorption properties of cationic silver clusterâ€tryptophan complexes: A model for photoabsorption and photoemission enhancement in nanoparticleâ€biomolecule systems. <i>Chemical Physics</i> , 2008, 343, 372-380.	1.9	15
158	A harmonic approximation of intramolecular vibrations in a mixed quantumâ€classical methodology: Linear absorbance of a dissolved Pheophorbid-a molecule as an example. <i>Chemical Physics</i> , 2010, 377, 10-14.	1.9	15
159	Size Dependence of Non-Radiative Decay Rates in J-Aggregates. <i>Journal of Physical Chemistry A</i> , 2020, 124, 10143-10151.	2.5	14
160	An AB initio CI study on the possibility of the CO chemisorption on Alkali metal surfaces: Interaction of the CO molecule with a Li atom and with Li ₅ clusters modelling the chemisorption sites at the (100) surface of the bcc and fcc Li lattice. <i>Surface Science</i> , 1986, 165, 161-178.	1.9	13
161	Emissive properties of silver particles at silver oxide surface defects. <i>Applied Physics A: Materials Science and Processing</i> , 2006, 82, 117-123.	2.3	13
162	Ultrafast dynamics in atomic clusters: Analysis and control. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 10594-10599.	7.1	13

#	ARTICLE	IF	CITATIONS
163	Formation and characterization of thioglycolic acid-silver cluster complexes. Dalton Transactions, 2013, 42, 8328.	3.3	13
164	ESI/MS investigation of routes to the formation of silver hydride nanocluster dications $[Ag_x H_x^{2+}]$ and gas-phase unimolecular chemistry of $[Ag_{10} H_{16}]^{2+}$. International Journal of Mass Spectrometry, 2017, 413, 97-105.	1.5	13
165	General properties of the hartree-fock problem demonstrated on the frontier orbital model. Theoretica Chimica Acta, 1975, 36, 163-180.	0.8	12
166	The geometric structures and optical response properties of small NanMg clusters. Chemical Physics, 1994, 186, 275-287.	1.9	12
167	Ultrafast excited state dynamics of the Na ₃ F cluster: Quantum wave packet and classical trajectory calculations compared to experimental results. Journal of Chemical Physics, 2004, 121, 9906-9916.	3.0	12
168	Electronic Structure Similarities in Pb _x Sb _y and Sn _x Bi _y Clusters. Journal of Physical Chemistry A, 2011, 115, 10276-10280.	2.5	12
169	BLUF Hydrogen network dynamics and UV/Vis spectra: A combined molecular dynamics and quantum chemical study. Journal of Computational Chemistry, 2012, 33, 2233-2242.	3.3	12
170	Catenane Structures of Homoleptic Thioglycolic Acid-Protected Gold Nanoclusters Evidenced by Ion Mobility-Mass Spectrometry and DFT Calculations. Nanomaterials, 2019, 9, 457.	4.1	12
171	Different approaches for the calculation of electronic excited states of nonstoichiometric alkali halide clusters: The example of Na ₃ F. Journal of Chemical Physics, 2004, 121, 9898-9905.	3.0	11
172	Silver Cluster Chromophores for Absorption Enhancement of Peptides. Journal of Physical Chemistry A, 2009, 113, 3783-3788.	2.5	11
173	Water activation by small free ruthenium oxide clusters. Physical Chemistry Chemical Physics, 2014, 16, 26578-26583.	2.8	11
174	Models Facilitating the Design of a New Metal-Organic Framework Catalyst for the Selective Decomposition of Formic Acid into Hydrogen and Carbon Dioxide. ChemCatChem, 2019, 11, 2443-2448.	3.7	11
175	Size and ligand effects of gold nanoclusters in alteration of organellar state and translocation of transcription factors in human primary astrocytes. Nanoscale, 2021, 13, 3173-3183.	5.6	11
176	The quenching of Na*(3p) in collisions with N ₂ : A classical trajectory study. Journal of Chemical Physics, 1987, 86, 822-836.	3.0	10
177	Quantum molecular interpretation of absorption spectra of small alkali metal clusters. Zeitschrift für Physik D-Atoms Molecules and Clusters, 1991, 19, 37-41.	1.0	10
178	Nature of excitations in small alkali metal and other mixed clusters. Zeitschrift für Physik D-Atoms Molecules and Clusters, 1993, 26, 17-22.	1.0	10
179	Theoretical study of the absorption spectrum of the pseudorotating Na ₃ (B). Chemical Physics, 1997, 223, 1-14.	1.9	10
180	Theoretical study of femtosecond pump-probe signals of nonstoichiometric alkali halide clusters. European Physical Journal D, 1999, 9, 393-397.	1.3	10

#	ARTICLE	IF	CITATIONS
181	Open questions on proteins interacting with nanoclusters. <i>Communications Chemistry</i> , 2022, 5, .	4.5	10
182	Vibrational structure in the optical response of small Li-cluster ions. <i>Journal of Chemical Physics</i> , 2002, 117, 3711-3714.	3.0	9
183	Cluster properties in the regime in which each atom counts. <i>Computational Materials Science</i> , 2006, 35, 151-157.	3.0	9
184	Speciation of Copperâ€“Peptide Complexes in Water Solution Using DFTB and DFT Approaches: Case of the [Cu(HGGG)(Py)] Complex. <i>Journal of Physical Chemistry B</i> , 2012, 116, 6250-6260.	2.6	9
185	Abâ–initio molecular dynamics based on nonâ–local density functional procedure with Gaussian basis; study of structural and temperature behaviour of metallic clusters. <i>Zeitschrift FÃ¼r Physik D-Atoms Molecules and Clusters</i> , 1997, 40, 486-489.	1.0	8
186	The Gas-Phase Chemistry of cis-Diammineplatinum(II) Complexes: A Joint Experimental and Theoretical Study. <i>ChemPhysChem</i> , 2006, 7, 1779-1785.	2.1	8
187	Unique optical properties of silver cluster-biochromophore hybrids: Comparison with copper and gold. <i>Chemical Physics Letters</i> , 2011, 501, 211-214.	2.6	8
188	Binary Neutral Metal Oxide Clusters with Oxygen Radical Centers for Catalytic Oxidation Reactions: From Cluster Models Toward Surfaces. <i>Journal of Physical Chemistry C</i> , 2012, 116, 11570-11574.	3.1	8
189	Why Do Silver Trimers Intercalated in DNA Exhibit Unique Nonlinear Properties That Are Promising for Applications?. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 2584-2589.	4.6	8
190	Structure of the ligated Ag60 nanoparticle [{Cl@Ag12}@Ag48(dppm)12] (where) Tj ETQq0 0 0 rgBT /Overlock 10 Tf,50 382,7d (dppm=	1.3	7
191	Rationale Strategy to Tune the Optical Properties of Gold Catenane Nanoclusters by Doping with Silver Atoms. <i>Journal of Physical Chemistry C</i> , 2020, 124, 19368-19374.	3.1	7
192	Insights into the Impact of Gold Nanoclusters Au₁₀SG₁₀ on Human Microglia. <i>ACS Chemical Neuroscience</i> , 2022, 13, 464-476.	3.5	7
193	On the quenching mechanism of Na*(32P32) by CO: Surface-hopping trajectory calculations with ab initio CI potential energy surfaces. <i>Chemical Physics Letters</i> , 1985, 113, 264-270.	2.6	6
194	The pseudopotential-CI study of the interaction between ethylene and metal atoms, metal Oxides, and their cations (Me = Be, Mg, and Zn). <i>International Journal of Quantum Chemistry</i> , 1986, 29, 1535-1554.	2.0	6
195	Silver cluster induced absorption enhancement and conformation control of peptides. <i>European Physical Journal D</i> , 2009, 52, 203-206.	1.3	6
196	Theoretical study of structural and optical properties of small silver and gold clusters at defect centers of MgO. <i>Physica Status Solidi (B): Basic Research</i> , 2010, 247, 1099-1108.	1.5	6
197	Structure and reactivity of small particles: from clusters to aerosols. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 9252.	2.8	6
198	Theoretical design of new class of optical materials based on small noble metal nanocluster-biomolecule hybrids and its potential for medical applications. <i>Advances in Physics: X</i> , 2017, 2, 695-716.	4.1	6

#	ARTICLE	IF	CITATIONS
199	Insights into Interactions between Interleukin-6 and Dendritic Polyglycerols. <i>International Journal of Molecular Sciences</i> , 2021, 22, 2415.	4.1	6
200	Photostabilization of the ultracold Rb ₂ molecule by optimal control. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2006, 39, S1043-S1053.	1.5	5
201	Nature of the "sudden polarization" effect and its role in photochemistry. <i>International Journal of Quantum Chemistry</i> , 1978, 14, 357-369.	2.0	5
202	Investigating Reactive Superoxide Units Bound to Zirconium Oxide Cations. <i>Journal of Physical Chemistry C</i> , 2011, 115, 21559-21566.	3.1	5
203	Theoretical study of structural and optical properties of noble metal cluster "dipeptide hybrids at defect centers of MgO. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 9330.	2.8	5
204	Cation induced electrochromism in 2,4-dinitrophenylhydrazine (DNPH): Tuning optical properties of aromatic rings. <i>Chemical Physics Letters</i> , 2013, 570, 22-25.	2.6	5
205	Avoided crossing of molecular excited states and photochemistry: Butadiene and unprotonated Schiff base. <i>International Journal of Quantum Chemistry</i> , 1983, 23, 517-533.	2.0	4
206	Quantum mechanical treatment of stationary and dynamical properties of bound vibrational systems. Application to the relaxation dynamics of Ag ₅ after an electron photodetachment. <i>Chemical Physics Letters</i> , 1997, 272, 284-294.	2.6	4
207	Title is missing!. <i>European Physical Journal D</i> , 1998, 48, 637-658.	0.4	4
208	Exploring similarities in reactivity of superatom species: a combined theoretical and experimental investigation. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 1846.	2.8	4
209	Gas-Phase Synthesis and Structure of Wade-Type Ruthenium Carbonyl and Hydrido Carbonyl Clusters. <i>Journal of Physical Chemistry A</i> , 2014, 118, 8356-8359.	2.5	4
210	Liganded Silver and Gold Quantum Clusters: Background of Their Structural, Electronic, and Optical Properties. <i>SpringerBriefs in Materials</i> , 2018, , 5-20.	0.3	4
211	Analysis and control of small isolated molecular systems. , 2007, , 25-152.		4
212	Quantum Molecular Interpretation of Photodetachment and Photodepletion Spectra of Small Alkali Metal Clusters. <i>Zeitschrift Fur Physikalische Chemie</i> , 1990, 169, 35-50.	2.8	3
213	Theoretical approach for simulation of femtosecond spectra: New strategies for optimal control of complex systems. <i>International Journal of Quantum Chemistry</i> , 2004, 99, 408-420.	2.0	3
214	Analysis and Control of Ultrafast Dynamics in Clusters: Theory and Experiment. <i>Advances in Chemical Physics</i> , 2005, , 179-246.	0.3	3
215	Generation of Oxygen Radical Centers in Binary Neutral Metal Oxide Clusters for Catalytic Oxidation Reactions. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 2272-2272.	13.8	3
216	Phenyl argentate aggregates [Ag _n Ph _{n+1}] ⁺ (n = 2-8): Models for the self-assembly of atom-precise polynuclear organometallics. <i>Journal of Chemical Physics</i> , 2021, 154, 224301.	3.0	3

#	ARTICLE	IF	CITATIONS
235	Computational Evaluation of Optical Nonlinearities: Quantum Chemical Approaches. SpringerBriefs in Materials, 2018, , 29-38.	0.3	0
236	Selected Studied Cases. SpringerBriefs in Materials, 2018, , 63-75.	0.3	0
237	Concluding Remarks and Outlook. SpringerBriefs in Materials, 2018, , 77-82.	0.3	0
238	Determination of Properties of Close-Lying Excited States of Olefins. , 1983, , 241-260.		0