Sheng-Gui He

List of Publications by Year in Descending Order

249 papers	6,392 citations	44 h-index	65 g-index
257 ext. papers	7,053 ext. citations	5.5 avg, IF	6.08 L-index

#	Paper	IF	Citations
249	CO self-promoted oxidation by gas-phase cluster anions IrVO4□*Chemical Physics Letters*, **2022**, 787, 139276	2.5	
248	Size-dependent reactivity of rhodium deuteride cluster anions RhD (n = 0-3) toward dinitrogen: The prominent role of □donation.. *Journal of Chemical Physics*, **2022**, 156, 064303	3.9	2
247	Conversion of Methane with Oxygen to Produce Hydrogen Catalyzed by Triatomic Rh Cluster Anion.. *Jacs Au*, **2022**, 2, 197-203		2
246	15 N/14N isotopic exchange in the dissociative adsorption of N2 on tantalum nitride cluster anions Ta3N3□*Chinese Journal of Chemical Physics*, **2022**, 35, 77-85	0.9	1
245	Conversion of CH Catalyzed by Gas Phase Ions Containing Metals.. *Chemistry - A European Journal*, **2022**, e202200062	4.8	
244	Recent Progress in Dinitrogen Activation by Gas-Phase Metal Species.. *Journal of Physical Chemistry Letters*, **2022**, 4159-4169	6.4	1
243	Dinitrogen Activation by Heteronuclear Metal Carbide Cluster Anions FeTaC: A 5d Early and 3d Late Transition Metal Strategy. *Journal of the American Chemical Society*, **2021**, 143, 19224-19231	16.4	11
242	A ship-lock-type reactor for ion-molecule reactions of mass-selected ions under high-pressure conditions. *Review of Scientific Instruments*, **2021**, 92, 104104	1.7	2
241	Global optimization of Tan clusters by deep neural network. *Chemical Physics Letters*, **2021**, 785, 139118	2.5	0
240	Activation of Carbon Dioxide by CoCD (= 0-4) Anions. *Journal of Physical Chemistry A*, **2021**, 125, 3710-3718	2.8	2
239	Gemeinsame katalytische Umsetzung von CH4 und CO2 durch Rhodium-Titanoxid-Anionen RhTiO2□*Angewandte Chemie*, **2021**, 133, 13907-13911	3.6	1
238	Rhodium chemistry: A gas phase cluster study. *Journal of Chemical Physics*, **2021**, 154, 180901	3.9	7
237	Catalytic Co-Conversion of CH and CO Mediated by Rhodium-Titanium Oxide Anions RhTiO. *Angewandte Chemie - International Edition*, **2021**, 60, 13788-13792	16.4	15
236	An IrVO Cluster Catalytically Oxidizes Four CO Molecules: Importance of Ir-V Multiple Bonding. *Journal of Physical Chemistry Letters*, **2021**, 12, 6519-6525	6.4	4
235	Study on the Reaction of Nanosized Yttrium Oxide Cluster Anions with n-Butane in the Gas Phase. *Acta Chimica Sinica*, **2021**, 79, 490	3.3	0
234	Photooxidation of Isoprene by Titanium Oxide Cluster Anions with Dimensions up to a Nanosize. *Journal of the American Chemical Society*, **2021**, 143, 3951-3958	16.4	2
233	Water Gas Shift Reaction Catalyzed by Rhodium-Manganese Oxide Cluster Anions. *Journal of Physical Chemistry Letters*, **2021**, 12, 8513-8520	6.4	1

232	Dual Iron Sites in Activation of N by Iron-Sulfur Cluster Anions FeS and FeS. *Journal of Physical Chemistry Letters*, **2021**, 12, 9269-9274	6.4	6
231	Metal-Dependent Selectivity on the Reactions of Carbon Dioxide with Diatomic Hydride Anions MH (M = Co, Ni, and Cu). *Journal of Physical Chemistry C*, **2020**, 124, 5928-5933	3.8	7
230	Methane activation by heteronuclear diatomic AuRh cation: comparison with homonuclear Au and Rh. *Physical Chemistry Chemical Physics*, **2020**, 22, 6231-6238	3.6	4
229	C C Coupling of Methane Mediated by Atomic Gold Cations under Multiple-Collision Conditions. *Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica*, **2020**, 36, 1904026-0	3.8	12
228	A Facile N?N Bond Cleavage by the Trinuclear Metal Center in Vanadium Carbide Cluster Anions VC. *Journal of the American Chemical Society*, **2020**, 142, 10747-10754	16.4	31
227	Activation of dinitrogen by gas-phase species *Chinese Journal of Chemical Physics*, **2020**, 33, 507-520	0.9	16
226	Recent research progress in the study of catalytic CO oxidation by gas phase atomic clusters. *Science China Materials*, **2020**, 63, 892-902	7.1	13
225	Catalytic CO Oxidation by O Mediated with Single Gold Atom Doped Titanium Oxide Cluster Anions AuTi O. *ChemPhysChem*, **2020**, 21, 2550-2556	3.2	4
224	Dinitrogen Activation and Functionalization by Heteronuclear Metal Cluster Anions FeVC at Room Temperature. *Journal of Physical Chemistry Letters*, **2020**, 11, 9990-9994	6.4	17
223	Photoassisted Selective Steam and Dry Reforming of Methane to Syngas Catalyzed by Rhodium-Vanadium Bimetallic Oxide Cluster Anions at Room Temperature. *Angewandte Chemie - International Edition*, **2020**, 59, 21216-21223	16.4	16
222	Reactivity of Iron Hydride Anions FeH (= 0-3) with Carbon Dioxide. *Journal of Physical Chemistry A*, **2020**, 124, 8414-8420	2.8	2
221	Reactivity of Neutral Tantalum Sulfide Clusters TaS (= 0-4) with N. *Journal of Physical Chemistry A*, **2020**, 124, 7749-7755	2.8	11
220	Photoassisted Selective Steam and Dry Reforming of Methane to Syngas Catalyzed by Rhodium Vanadium Bimetallic Oxide Cluster Anions at Room Temperature. *Angewandte Chemie*, **2020**, 132, 21402-21409	3.6	4
219	CO Oxidation Catalyzed by the Neutral Cluster IrAl2O8 with Iridium in a High Oxidation State of VI. *Journal of Physical Chemistry C*, **2020**, 124, 8869-8875	3.8	6
218	CO oxidation by neutral gold-vanadium oxide clusters *Chinese Journal of Chemical Physics*, **2019**, 32, 207-212	0.9	10
217	Sensitive Detection of Gas-Phase Glyoxal by Electron Attachment Reaction Ionization Mass Spectrometry. *Analytical Chemistry*, **2019**, 91, 12688-12695	7.8	4
216	Doping Effects on the Reactivity of the MVO5 (M = V Zn) Clusters in CO Oxidation Reaction. *Journal of Physical Chemistry C*, **2019**, 123, 14180-14186	3.8	6
215	Activity of Atomically Precise Titania Nanoparticles in CO Oxidation. *Angewandte Chemie - International Edition*, **2019**, 58, 8002-8006	16.4	14

214	Selective Generation of Free Hydrogen Atoms in the Reaction of Methane with Diatomic Gold Boride Cations. *Zeitschrift Fur Physikalische Chemie*, **2019**, 233, 785-797	3.1	2
213	C-N Coupling in N Fixation by the Ditantalum Carbide Cluster Anions TaC. *Inorganic Chemistry*, **2019**, 58, 4701-4705	5.1	29
212	Cooperative desorption of H2O and CO from photo-excited cobalt oxide clusters: The evidence of photo-catalytic coupling. *Chemical Physics Letters*, **2019**, 719, 72-77	2.5	1
211	Formaldehyde Generation in Photooxidation of Isoprene on Iron Oxide Nanoclusters. *Journal of Physical Chemistry C*, **2019**, 123, 5120-5127	3.8	5
210	Dinitrogen Fixation and Reduction by TaNH Cluster Anions at Room Temperature: Hydrogen-Assisted Enhancement of Reactivity. *Journal of the American Chemical Society*, **2019**, 141, 12592-12600	16.4	46
209	Catalytic CO Oxidation by Gas-Phase Metal Oxide Clusters. *Journal of Physical Chemistry A*, **2019**, 123, 9257-9267	2.8	28
208	Size-Dependent Association of Cobalt Deuteride Cluster Anions CoD (n = 0-4) with Dinitrogen. *Journal of the American Society for Mass Spectrometry*, **2019**, 30, 1956-1963	3.5	13
207	Size-Dependent Reactivity of Rhodium Cluster Anions toward Methane. *Journal of Physical Chemistry C*, **2019**, 123, 17035-17042	3.8	11
206	Side-on-End-on Coordination of Dinitrogen on a Polynuclear Vanadium Nitride Cluster Anion [V N]. *Chemistry - A European Journal*, **2019**, 25, 16523	4.8	15
205	Direct Conversion of Methane with Carbon Dioxide Mediated by RhVO3 Cluster Anions. *Angewandte Chemie*, **2019**, 131, 17447-17452	3.6	10
204	Direct Conversion of Methane with Carbon Dioxide Mediated by RhVO Cluster Anions. *Angewandte Chemie - International Edition*, **2019**, 58, 17287-17292	16.4	13
203	Oxidation of Isoprene by Neutral Iron Oxide Nanoclusters in the Gas Phase. *Journal of Physical Chemistry C*, **2019**, 123, 25949-25956	3.8	5
202	Thermal Activation of Methane by Diatomic Vanadium Boride Cations. *Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica*, **2019**, 35, 1014-1020	3.8	5
201	Catalytic CO Oxidation by Noble-Metal-Free NiVO Clusters: A CO Self-Promoted Mechanism. *Journal of Physical Chemistry Letters*, **2019**, 10, 1133-1138	6.4	18
200	An Eight-Atom Iridium-Aluminum Oxide Cluster IrAlO Catalytically Oxidizes Six CO Molecules. *Journal of Physical Chemistry Letters*, **2019**, 10, 7850-7855	6.4	6
199	Neutral Au-Doped Cluster Catalysts AuTiO for CO Oxidation by O. *Journal of the American Chemical Society*, **2019**, 141, 2027-2034	16.4	22
198	The HNO radical anion: A proposed intermediate in diazeniumdiolate synthesis using nitric oxide and alkoxides. *European Journal of Mass Spectrometry*, **2019**, 25, 82-85	1.1	2
197	Formation of Acetylene in the Reaction of Methane with Iron Carbide Cluster Anions FeC3 under High-Temperature Conditions. *Angewandte Chemie*, **2018**, 130, 2692-2696	3.6	8

196	Vacuum Ultraviolet Ionization-Induced Reaction of Neutral Au2Al2O3Clusters with Methane. *Journal of Physical Chemistry C*, **2018**, 122, 6159-6165	3.8	6
195	Catalytic CO Oxidation by O Mediated by Noble-Metal-Free Cluster Anions Cu VO. *Angewandte Chemie - International Edition*, **2018**, 57, 3349-3353	16.4	34
194	Formation of Acetylene in the Reaction of Methane with Iron Carbide Cluster Anions FeC under High-Temperature Conditions. *Angewandte Chemie - International Edition*, **2018**, 57, 2662-2666	16.4	24
193	Thermal activation of methane by vanadium boride cluster cations VB (n = 3-6). *Physical Chemistry Chemical Physics*, **2018**, 20, 4641-4645	3.6	13
192	A breakthrough in direct conversion of methane to oxygenates under mild conditions. *Science China Materials*, **2018**, 61, 1012-1014	7.1	4
191	Selective Conversion of Methane by Rh-Doped Aluminum Oxide Cluster Anions RhAlO: A Comparison with the Reactivity of PtAlO. *Journal of Physical Chemistry A*, **2018**, 122, 3950-3955	2.8	12
190	Reactivity of Tantalum Carbide Cluster Anions TaC (n = 1-4) with Dinitrogen. *Journal of Physical Chemistry A*, **2018**, 122, 3489-3495	2.8	17
189	Catalytic CO Oxidation by O2 Mediated by Noble-Metal-Free Cluster Anions Cu2VO3□□ *Angewandte Chemie*, **2018**, 130, 3407-3411	3.6	13
188	Noble-Metal-Free Single-Atom Catalysts CuAl4O7□□for CO Oxidation by O2. *Angewandte Chemie*, **2018**, 130, 11155-11159	3.6	11
187	Gas-Phase Reactions of Carbon Dioxide with Copper Hydride Anions Cu2H2□ Temperature-Dependent Transformation. *Journal of Physical Chemistry C*, **2018**, 122, 19379-19384	3.8	19
186	Reactions of sulfur and oxygen containing anions with nitrogen and oxygen atoms: A comparative study. *International Journal of Mass Spectrometry*, **2018**, 433, 1-6	1.9	5
185	Design and Application of a High-Temperature Linear Ion Trap Reactor. *Journal of the American Society for Mass Spectrometry*, **2018**, 29, 78-84	3.5	12
184	Consecutive Oxidation of Three H2 Molecules by a Gold-Vanadium Oxide Cluster Cation AuVO4 +. *Topics in Catalysis*, **2018**, 61, 28-34	2.3	5
183	H2 dissociation by Au1-doped closed-shell titanium oxide cluster anions□*Chinese Journal of Chemical Physics*, **2018**, 31, 457-462	0.9	3
182	Coupling of Methane and Carbon Dioxide Mediated by Diatomic Copper Boride Cations. *Angewandte Chemie*, **2018**, 130, 14330-14334	3.6	6
181	Methane Activation by Gas Phase Atomic Clusters. *Accounts of Chemical Research*, **2018**, 51, 2603-2610	24.3	70
180	Electron Attachment Reaction Ionization of Gas-Phase Methylglyoxal. *Analytical Chemistry*, **2018**, 90, 13467-13474	7.8	2
179	Mechanistic Variants in Methane Activation Mediated by Gold(I) Supported on Silicon Oxide Clusters. *Chemistry - A European Journal*, **2018**, 24, 17506-17512	4.8	6

178	Coupling of Methane and Carbon Dioxide Mediated by Diatomic Copper Boride Cations. *Angewandte Chemie - International Edition*, **2018**, 57, 14134-14138	16.4	19
177	Noble-Metal-Free Single-Atom Catalysts CuAl O for CO Oxidation by O. *Angewandte Chemie - International Edition*, **2018**, 57, 10989-10993	16.4	34
176	Methane Activation by Tantalum Carbide Cluster Anions TaC. *Journal of Physical Chemistry Letters*, **2017**, 8, 605-610	6.4	33
175	The Formation of Ti-H Species at Interface Is Lethal to the Efficiency of TiO-Based Dye-Sensitized Devices. *Journal of the American Chemical Society*, **2017**, 139, 2083-2089	16.4	41
174	Methane Activation Mediated by Dual Gold Atoms Doped in Aluminium Oxide Cluster Cations Au2Al2O3+. *ChemistrySelect*, **2017**, 2, 991-996	1.8	6
173	Formation of Gas-Phase Formate in Thermal Reactions of Carbon Dioxide with Diatomic Iron Hydride Anions. *Angewandte Chemie*, **2017**, 129, 4251-4255	3.6	9
172	Formation of Gas-Phase Formate in Thermal Reactions of Carbon Dioxide with Diatomic Iron Hydride Anions. *Angewandte Chemie - International Edition*, **2017**, 56, 4187-4191	16.4	39
171	Theoretical prediction of the synthesis of 2,3-dihydropyridines through Ir(III)-catalysed reaction of unsaturated oximes with alkenes. *RSC Advances*, **2017**, 7, 5649-5659	3.7	
170	H Oxidation Mediated by Au-Doped Vanadium Oxide Cluster Cation AuVO: A Comparative Study with AuCeO. *Journal of Physical Chemistry A*, **2017**, 121, 4069-4075	2.8	4
169	Titelbild: Formation of Gas-Phase Formate in Thermal Reactions of Carbon Dioxide with Diatomic Iron Hydride Anions (Angew. Chem. 15/2017). *Angewandte Chemie*, **2017**, 129, 4127-4127	3.6	
168	Does Each Atom Count in the Reactivity of Vanadia Nanoclusters?. *Journal of the American Chemical Society*, **2017**, 139, 342-347	16.4	18
167	Liberation of three dihydrogens from two ethene molecules as mediated by the tantalum nitride anion cluster TaN at room temperature. *Physical Chemistry Chemical Physics*, **2017**, 19, 3136-3142	3.6	6
166	Metal-mediated catalysis in the gas phase: A review. *Chinese Journal of Catalysis*, **2017**, 38, 1515-1527	11.3	24
165	Size-Dependent Reactivity of Nano-Sized Neutral Manganese Oxide Clusters toward Ethylene. *Chemistry - A European Journal*, **2017**, 23, 15820-15826	4.8	9
164	A VUV photoionization time-of-flight mass spectrometer for the formation, distribution, and reaction of nano-sized neutral metal oxide clusters. *International Journal of Mass Spectrometry*, **2017**, 422, 98-104	1.9	13
163	Chemical Ionization of Large Linear Alkanes and Small Oxidized Volatile Organic Compounds by the Reactions with Atomic Gold Cations. *Analytical Chemistry*, **2017**, 89, 9083-9090	7.8	7
162	Reactions of Sulfur- and Oxygen-Containing Anions with Hydrogen Atoms: A Comparative Study. *Journal of Physical Chemistry Letters*, **2017**, 8, 5725-5729	6.4	3
161	Formation, distribution, and photoreaction of nano-sized vanadium oxide cluster anions. *International Journal of Mass Spectrometry*, **2016**, 407, 62-68	1.9	16

160	Gold(III) Mediated Activation and Transformation of Methane on Au1-Doped Vanadium Oxide Cluster Cations AuV2O6(.). *Journal of the American Chemical Society*, **2016**, 138, 9437-43	16.4	39
159	A nine-atom rhodium-aluminum oxide cluster oxidizes five carbon monoxide molecules. *Nature Communications*, **2016**, 7, 11404	17.4	33
158	Activation of Methane and Ethane as Mediated by the Triatomic Anion HNbN□Electronic Structure Similarity with a Pt Atom. *Angewandte Chemie*, **2016**, 128, 5031-5035	3.6	9
157	Activation of Methane and Ethane as Mediated by the Triatomic Anion HNbN(-): Electronic Structure Similarity with a Pt Atom. *Angewandte Chemie - International Edition*, **2016**, 55, 4947-51	16.4	31
156	Gas-Phase Reactions of Atomic Gold Cations with Linear Alkanes (C2-C9). *Journal of Physical Chemistry A*, **2016**, 120, 4285-93	2.8	15
155	Consecutive H2 Oxidation Mediated by Au2VO4+ Clusters. *Journal of Physical Chemistry C*, **2016**, 120, 10452-10459	3.8	10
154	Reactions of metal cluster anions with inorganic and organic molecules in the gas phase. *Dalton Transactions*, **2016**, 45, 11471-95	4.3	33
153	Activation of Methane Promoted by Adsorption of CO on Mo2C2□Cluster Anions. *Angewandte Chemie*, **2016**, 128, 5854-5858	3.6	6
152	Generation of Hydroxyl Radicals in the Reaction of Dihydrogen with AuNbO Cluster Cations. *Chemistry - an Asian Journal*, **2016**, 11, 2730-2734	4.5	5
151	Dehydrogenation of propylene mediated by CeVO4+: An interesting example for the chemistry of binary Ce□ transition-metal oxide cluster cations. *International Journal of Mass Spectrometry*, **2016**, 401, 39-45	1.9	4
150	Methane Activation Mediated by a Series of Cerium-Vanadium Bimetallic Oxide Cluster Cations: Tuning Reactivity by Doping. *ChemPhysChem*, **2016**, 17, 1112-8	3.2	5
149	Activation of Methane Promoted by Adsorption of CO on Mo2 C2 (-) Cluster Anions. *Angewandte Chemie - International Edition*, **2016**, 55, 5760-4	16.4	24
148	Activation and Transformation of Ethane by Au2 VO3(+) Clusters with Closed-Shell Electronic Structures. *Chemistry - A European Journal*, **2016**, 22, 1825-30	4.8	9
147	Multiple CO Oxidation Promoted by Au2 Dimers in Au2 TiO4 (-) Cluster Anions. *Chemistry - A European Journal*, **2016**, 22, 9024-9	4.8	18
146	Oxidation of SO2 to SO3 by Cerium Oxide Cluster Cations Ce2O4(+) and Ce3O6(.). *Journal of Physical Chemistry A*, **2016**, 120, 3843-8	2.8	17
145	Methane activation by gold-doped titanium oxide cluster anions with closed-shell electronic structures. *Chemical Science*, **2016**, 7, 4730-4735	9.4	42
144	Thermal Methane Conversion to Syngas Mediated by Rh-Doped Aluminum Oxide Cluster Cations RhAlO. *Journal of the American Chemical Society*, **2016**, 138, 12854-12860	16.4	37
143	Photo-Induced Reaction of Ethene Bound to Vanadia Nanoparticles [(V2O5)nOC2H4□(n = 2□0)] in the Gas Phase. *Journal of Physical Chemistry C*, **2016**, 120, 17081-17086	3.8	5

142	Origin of the Different Reactivity of the Triatomic Anions HMoN and ZrNH toward Alkane: Compositions of the Active Orbitals. *Journal of Physical Chemistry A*, **2016**, 120, 7786-7791	2.8	4
141	Generation of free hydrogen atoms in thermal reaction of ethane with AuNbO3+ cluster cations. *International Journal of Mass Spectrometry*, **2015**, 381-382, 10-16	1.9	11
140	Methane Activation by Iron-Carbide Cluster Anions FeC6(-). *Journal of Physical Chemistry Letters*, **2015**, 6, 2287-91	6.4	36
139	Catalytic CO Oxidation on Single Pt-Atom Doped Aluminum Oxide Clusters: Electronegativity-Ladder Effect. *Journal of Physical Chemistry C*, **2015**, 119, 15414-15420	3.8	33
138	Stepwise Motion in a Multivalent [2](3)Catenane. *Journal of the American Chemical Society*, **2015**, 137, 9739-45	16.4	87
137	Gas-phase reaction of CeVO5(+) cluster ions with C2H4: the reactivity of cluster bonded peroxides. *Dalton Transactions*, **2015**, 44, 3128-35	4.3	9
136	Photoelectron imaging spectroscopy of MoC(-) and NbN(-) diatomic anions: A comparative study. *Journal of Chemical Physics*, **2015**, 142, 164301	3.9	23
135	Photoelectron Imaging Spectroscopy of AuC3H(-) Anions: Four Isomers. *Journal of Physical Chemistry A*, **2015**, 119, 11265-70	2.8	9
134	High reactivity of nanosized niobium oxide cluster cations in methane activation: A comparison with vanadium oxides. *Journal of Chemical Physics*, **2015**, 143, 124312	3.9	15
133	CO Oxidation Promoted by the Gold Dimer in Au_2VO_3 and Au_2VO_4 Clusters. *Angewandte Chemie*, **2015**, 127, 11886-11890	3.6	11
132	CO Oxidation Promoted by the Gold Dimer in Au2 VO3 (-) and Au2 VO4 (-) Clusters. *Angewandte Chemie - International Edition*, **2015**, 54, 11720-4	16.4	35
131	Thermal conversion of methane to formaldehyde promoted by gold in AuNbO3(+) cluster cations. *Chemistry - A European Journal*, **2015**, 21, 6957-61	4.8	33
130	C-H Bond Activation by Early Transition Metal Carbide Cluster Anion MoC3 (-). *Chemistry - A European Journal*, **2015**, 21, 17748-56	4.8	15
129	Photoelectron Imaging Spectroscopy of ZrO Diatomic Anion. *Chinese Journal of Chemical Physics*, **2015**, 28, 452-458	0.9	1
128	Methane activation by diatomic molybdenum carbide cations. *Chemistry - A European Journal*, **2014**, 20, 4163-9	4.8	28
127	Consecutive oxygen-for-sulfur exchange reactions between vanadium oxide cluster anions and hydrogen sulfide. *Journal of Physical Chemistry A*, **2014**, 118, 8106-14	2.8	8
126	Gas-phase reaction of CeV2O7+ with C2H4: activation of C-C and C-H bonds. *ChemPhysChem*, **2014**, 15, 4117-25	3.2	8
125	Thermal Dihydrogen Activation by a Closed-Shell AuCeO2(+) Cluster. *Journal of Physical Chemistry Letters*, **2014**, 5, 3890-4	6.4	39

124	Photoreaction Study of Methanol Adsorption Complexes on VO2(V2O5)n+ (n = 1–3) Clusters at 355 nm. *Journal of Physical Chemistry C*, **2014**, 118, 18488-18495	3.8	14
123	CO oxidation promoted by gold atoms supported on titanium oxide cluster anions. *Journal of the American Chemical Society*, **2014**, 136, 3617-23	16.4	108
122	Oxygen-sulfur exchange and the gas-phase reactivity of cobalt sulfide cluster anions with molecular oxygen. *Journal of Physical Chemistry A*, **2014**, 118, 8163-9	2.8	7
121	Hydrogen Atom Abstraction from CH4 by Nanosized Vanadium Oxide Cluster Cations. *Journal of Physical Chemistry C*, **2014**, 118, 24062-24071	3.8	19
120	Thermal Reactions of (V2O5)nO[−] (n = 1–3) Cluster Anions with Ethylene and Propylene: Oxygen Atom Transfer Versus Molecular Association. *Journal of Physical Chemistry C*, **2014**, 118, 14967-14976	3.8	92
119	CO oxidation catalyzed by single gold atoms supported on aluminum oxide clusters. *Journal of the American Chemical Society*, **2014**, 136, 14307-13	16.4	174
118	CO Oxidation Promoted by Gold Atoms Loosely Attached in AuFeO3(-) Cluster Anions. *Journal of Physical Chemistry Letters*, **2014**, 5, 1585-90	6.4	51
117	Reactivity of oxygen radical anions bound to scandia nanoparticles in the gas phase: C-H bond activation. *Chemistry - A European Journal*, **2014**, 20, 1167-75	4.8	18
116	Thermal methane activation by La(6)O(10)(-) cluster anions. *Chemistry - A European Journal*, **2014**, 20, 5580-3	4.8	27
115	Thermal Methane Conversion to Formaldehyde Promoted by Single Platinum Atoms in PtAl2O4[−] Cluster Anions. *Angewandte Chemie*, **2014**, 126, 9636-9640	3.6	36
114	Thermal methane conversion to formaldehyde promoted by single platinum atoms in PtAl2O4 (-) cluster anions. *Angewandte Chemie - International Edition*, **2014**, 53, 9482-6	16.4	99
113	Experimental and theoretical study of the reactions between MO2- (M = Fe, Co, Ni, Cu, and Zn) cluster anions and hydrogen sulfide. *Journal of Physical Chemistry A*, **2013**, 117, 8377-87	2.8	14
112	Reactions of Sc2O4[−] and La2O4[−] clusters with CO: A comparative study. *International Journal of Mass Spectrometry*, **2013**, 334, 1-7	1.9	12
111	Reactivity of Stoichiometric Lanthanum Oxide Cluster Cations in C–H Bond Activation. *Journal of Physical Chemistry C*, **2013**, 117, 17548-17556	3.8	19
110	Interaction of TiO+ with water: infrared photodissociation spectroscopy and density functional calculations. *Physical Chemistry Chemical Physics*, **2013**, 15, 17126-33	3.6	16
109	On the Origin of the Surprisingly Sluggish Redox Reaction of the N2O/CO Couple Mediated by [Y2O2]+. and [YAlO2]+. Cluster Ions in the Gas Phase. *Angewandte Chemie*, **2013**, 125, 1264-1268	3.6	22
108	On the origin of the surprisingly sluggish redox reaction of the N2O/CO couple mediated by [Y2O2]+ and [YAlO2]+ cluster ions in the gas phase. *Angewandte Chemie - International Edition*, **2013**, 52, 1226-30	16.4	55
107	Reactions of V4O10+ cluster ions with simple inorganic and organic molecules. *International Journal of Mass Spectrometry*, **2013**, 354-355, 105-112	1.9	73

106	Reactivity of atomic oxygen radical anions bound to titania and zirconia nanoparticles in the gas phase: low-temperature oxidation of carbon monoxide. *Journal of the American Chemical Society*, **2013**, 135, 2991-8	16.4	68
105	C-H bond activation by aluminum oxide cluster anions, an experimental and theoretical study. *Dalton Transactions*, **2013**, 42, 11205-11	4.3	16
104	Collision-induced dissociation and infrared photodissociation studies of methane adsorption on V5O12(+) and V5O13(+) clusters. *Journal of Physical Chemistry A*, **2013**, 117, 2961-70	2.8	15
103	Activation of Multiple C?H Bonds Promoted by Gold in AuNbO3+ Clusters. *Angewandte Chemie*, **2013**, 125, 2504-2508	3.6	22
102	Fabrication and optical properties of pyrene-Eu hybrid materials. *Journal of Nanoscience and Nanotechnology*, **2013**, 13, 819-23	1.3	1
101	Experimental and Theoretical Study of Reactions between Manganese Oxide Cluster Cations and Hydrogen Sulfide. *Chinese Journal of Chemical Physics*, **2013**, 26, 679-679	0.9	5
100	Activation of multiple C-H bonds promoted by gold in AuNbO(3)(+) clusters. *Angewandte Chemie - International Edition*, **2013**, 52, 2444-8	16.4	48
99	C□H bond activation by nanosized scandium oxide clusters in gas-phase. *International Journal of Mass Spectrometry*, **2012**, 310, 57-64	1.9	93
98	C-H bond activation by oxygen-centered radicals over atomic clusters. *Accounts of Chemical Research*, **2012**, 45, 382-90	24.3	229
97	Density-functional global optimization of (La2O3)n clusters. *Journal of Chemical Physics*, **2012**, 137, 214311	3.9	46
96	Interaction of vanadium oxide cluster anions with water: an experimental and theoretical study on reactivity and mechanism. *Dalton Transactions*, **2012**, 41, 5562-70	4.3	22
95	Experimental and theoretical study of the reactions between vanadium oxide cluster cations and water. *Journal of Physical Chemistry A*, **2012**, 116, 2049-54	2.8	36
94	Synthesis and charge-transporting properties of electron-deficient CN2□luorene based D□A copolymers. *Polymer Chemistry*, **2012**, 3, 2170	4.9	24
93	Experimental and Theoretical Study of the Reactions between Vanadium Oxide Cluster Cations and Hydrogen Sulfide. *Journal of Physical Chemistry C*, **2012**, 116, 9043-9048	3.8	17
92	Experimental and Theoretical Study of the Reactions between Manganese Oxide Cluster Anions and Hydrogen Sulfide. *Journal of Physical Chemistry C*, **2012**, 116, 24184-24192	3.8	23
91	Zur Reaktion von YAlO3.+ mit Methan bei Raumtemperatur: Dotierung macht Y2O3.+ reaktiver und Al2O3.+ selektiver. *Angewandte Chemie*, **2012**, 124, 6093-6096	3.6	30
90	Thermal reactions of YAlO3+□with methane: increasing the reactivity of Y2O3+□and the selectivity of Al2O3+□by doping. *Angewandte Chemie - International Edition*, **2012**, 51, 5991-4	16.4	62
89	Reactivity control of C-H bond activation over vanadium-silver bimetallic oxide cluster cations. *Chemistry - A European Journal*, **2012**, 18, 10998-1006	4.8	22

88	Structures and reactivity of oxygen-rich scandium cluster anions ScO(3-5)-. *ChemPhysChem*, **2012**, 13, 1282-8	3.2	29
87	Electronic structure and reactivity of a biradical cluster: Sc3O6(-). *Physical Chemistry Chemical Physics*, **2011**, 13, 10084-90	3.6	32
86	Experimental and theoretical study of hydrogen atom abstraction from n-butane by lanthanum oxide cluster anions. *Journal of Physical Chemistry A*, **2011**, 115, 10245-50	2.8	30
85	Experimental and Theoretical Study of the Reactions between Cerium Oxide Cluster Anions and Carbon Monoxide: Size-Dependent Reactivity of CenO2n+1 (n = 1 1). *Journal of Physical Chemistry C*, **2011**, 115, 13329-13337	3.8	71
84	Nearly monodispersed perylene nanotablets: easy fabrication and unique optical properties. *Journal of Nanoscience and Nanotechnology*, **2011**, 11, 10696-700	1.3	
83	Double-oxygen-atom transfer in reactions of Ce(m)O(2m)(+) (m=2-6) with C2H2. *ChemPhysChem*, **2011**, 12, 2110-7	3.2	25
82	Inside Cover: Double-Oxygen-Atom Transfer in Reactions of CemO2m+ (m=2) with C2H2 (ChemPhysChem 11/2011). *ChemPhysChem*, **2011**, 12, 2046-2046	3.2	1
81	C H activation on aluminum-vanadium bimetallic oxide cluster anions. *Chemistry - A European Journal*, **2011**, 17, 3449-57	4.8	52
80	Methane activation by yttrium-doped vanadium oxide cluster cations: local charge effects. *Chemistry - A European Journal*, **2011**, 17, 11728-33	4.8	64
79	Characterization and reactivity of oxygen-centred radicals over transition metal oxide clusters. *Physical Chemistry Chemical Physics*, **2011**, 13, 1925-38	3.6	149
78	Collision-induced dissociation and density functional theory studies of CO adsorption over zirconium oxide cluster ions: oxidative and nonoxidative adsorption. *Journal of Physical Chemistry A*, **2011**, 115, 5238-46	2.8	49
77	Self-assembled hollow nanospheres strongly enhance photoluminescence. *Journal of the American Chemical Society*, **2011**, 133, 11022-5	16.4	59
76	Ratiometric fluorescent sensor based on inhibition of resonance for detection of cadmium in aqueous solution and living cells. *Inorganic Chemistry*, **2011**, 50, 3680-90	5.1	114
75	Classification of VxOyq Clusters by = 2y+q x. *Chinese Journal of Chemical Physics*, **2011**, 24, 586-596	0.9	19
74	Experimental and Theoretical Study of Hydrogen Atom Abstraction from C2H6 and C4H10 by Zirconium Oxide Clusters Anions. *Chinese Journal of Chemical Physics*, **2010**, 23, 133-137	0.9	20
73	Hydrogen-atom abstraction from methane by stoichiometric early transition metal oxide cluster cations. *Chemical Communications*, **2010**, 46, 1736-8	5.8	93
72	Characterization of mononuclear oxygen-centered radical (O(-*)) in Zr(2)O(8)(-) cluster. *Journal of Physical Chemistry A*, **2010**, 114, 10024-7	2.8	32
71	Experimental and Theoretical Study of the Reactions between Vanadium ilicon Heteronuclear Oxide Cluster Anions with n-Butane. *Journal of Physical Chemistry C*, **2010**, 114, 12271-12279	3.8	71

70	Active sites of stoichiometric cerium oxide cations (CemO2m+) probed by reactions with carbon monoxide and small hydrocarbon molecules. *Physical Chemistry Chemical Physics*, **2010**, 12, 3984-97	3.6	123
69	Methane activation by V3PO10(Ⅲ) and V4O10(Ⅲ) clusters: a comparative study. *Physical Chemistry Chemical Physics*, **2010**, 12, 12223-8	3.6	82
68	Theoretical Investigation of the Selective Oxidation of Methanol to Formaldehyde on Vanadium Oxide Species Supported on Silica: Umbrella Model. *Journal of Physical Chemistry C*, **2010**, 114, 3161-3169	3.8	26
67	Transition metal oxide clusters with character of oxygen-centered radical: a DFT study. *Theoretical Chemistry Accounts*, **2010**, 127, 449-465	1.9	113
66	Room-temperature methane activation by a bimetallic oxide cluster . *Chemical Physics Letters*, **2010** , 489, 25-29	2.5	91
65	Interfacial molecular assemblies of metalloporphyrins with two trans or one axial ligands. *ChemPhysChem*, **2010**, 11, 722-9	3.2	10
64	A theoretical study on the mechanism of C(2)H(4) oxidation over a neutral V(3)O(8) cluster. *ChemPhysChem*, **2010**, 11, 1718-25	3.2	23
63	Hydrogen-atom abstraction from methane by stoichiometric vanadium-silicon heteronuclear oxide cluster cations. *Chemistry - A European Journal*, **2010**, 16, 11463-70	4.8	82
62	Inside Cover: Hydrogen-Atom Abstraction from Methane by Stoichiometric VanadiumSilicon Heteronuclear Oxide Cluster Cations (Chem. Eur. J. 37/2010). *Chemistry - A European Journal*, **2010**, 16, 11194-11194	4.8	
61	Density functional study on cage and noncage (Fe2O3)n clusters. *Journal of Chemical Physics*, **2009**, 130, 014303	3.9	42
60	Heavy atom nitroxyl radicals. II: Spectroscopic detection of H(2)As=O, the prototypical arsenyl free radical. *Journal of Chemical Physics*, **2009**, 131, 114311	3.9	12
59	Experimental and Theoretical Study of Hydrogen Atom Abstraction from Ethylene by Stoichiometric Zirconium Oxide Clusters. *Chinese Journal of Chemical Physics*, **2009**, 22, 635-641	0.9	13
58	Theoretical study of partial oxidation of ethylene by vanadium trioxide cluster cation. *Science Bulletin*, **2009**, 54, 2814-2821	10.6	10
57	Reaction between sulfur dioxide and iron oxide cationic clusters. *Science Bulletin*, **2009**, 54, 4017-4020		7
56	Formation, distribution, and structures of oxygen-rich iron and cobalt oxide clusters. *International Journal of Mass Spectrometry*, **2009**, 281, 72-78	1.9	63
55	C=C bond cleavage on neutral VO3(V2O5)n clusters. *Journal of the American Chemical Society*, **2009**, 131, 1057-66	16.4	68
54	Ground state structures of Fe(2)O(4-6)(+) clusters probed by reactions with N(2). *Journal of Physical Chemistry A*, **2009**, 113, 5302-9	2.8	44
53	Theoretical study of intermolecular interactions in meso-tetraphenylporphyrin diacid dimer (H4TPPCl2)2. *Physical Chemistry Chemical Physics*, **2009**, 11, 2543-52	3.6	11

52	Partial oxidation of propylene catalyzed by VO3 clusters: a density functional theory study. *Journal of Physical Chemistry A*, **2008**, 112, 5984-93	2.8	44
51	Experimental and theoretical study of the reactions between small neutral iron oxide clusters and carbon monoxide. *Journal of the American Chemical Society*, **2008**, 130, 15879-88	16.4	145
50	Acetylene cyclotrimerization catalyzed by TiO2 and VO2 in the gas phase: a DFT study. *Journal of Physical Chemistry A*, **2008**, 112, 3731-41	2.8	34
49	Reactions of sulfur dioxide with neutral vanadium oxide clusters in the gas phase. II. Experimental study employing single-photon ionization. *Journal of Physical Chemistry A*, **2008**, 112, 11067-77	2.8	47
48	Experimental and theoretical study of the reactions between neutral vanadium oxide clusters and ethane, ethylene, and acetylene. *Journal of the American Chemical Society*, **2008**, 130, 1932-43	16.4	134
47	Experimental and theoretical studies of the reaction between cationic vanadium oxide clusters and acetylene. *Science Bulletin*, **2008**, 53, 3829-3838	10.6	10
46	Ab initio and DFT Study of the Structural Properties and Thermochemistry of CH3S(O)2OONO2 Atmospheric Molecule and CH3S(O)2OO□Radical. *Chinese Journal of Chemistry*, **2008**, 26, 998-1004	4.9	2
45	RT3: A Windows program for the Renner□eller analysis of states of triatomic molecules. *Computer Physics Communications*, **2008**, 178, 676-684	4.2	10
44	Formation, detection, and stability studies of neutral vanadium sulfide clusters. *Journal of Chemical Physics*, **2007**, 126, 194315	3.9	28
43	Laser spectroscopy and dynamics of the jet-cooled AsH2 free radical. *Journal of Chemical Physics*, **2007**, 126, 154312	3.9	13
42	Reaction of Cationic Vanadium Oxide Clusters with Ethylene in a Flow Tube Reactor. *Chinese Journal of Chemical Physics*, **2007**, 20, 412-418	0.9	16
41	The molecular structure and a Renner-Teller analysis of the ground and first excited electronic states of the jet-cooled CS2 + molecular ion. *Journal of Chemical Physics*, **2006**, 124, 084312	3.9	13
40	A family of new boron-containing free radicals. *Journal of the American Chemical Society*, **2005**, 127, 10814-5	16.4	10
39	A laser spectroscopic study of the X2pi(g), A2pi(u), and B2sigma+ states of BS2: Renner-Teller, spin-orbit, and K-resonance effects. *Journal of Chemical Physics*, **2005**, 122, 194314	3.9	6
38	Renner-Teller vibronic analysis for a tetra-atomic molecule. I. The effective Hamiltonian and matrix elements. *Journal of Chemical Physics*, **2005**, 123, 014316	3.9	14
37	Renner-Teller vibronic analysis for a tetra-atomic molecule. II. The ground state of the HCCS free radical. *Journal of Chemical Physics*, **2005**, 123, 014317	3.9	17
36	The laser-induced fluorescence spectrum, Renner-Teller effect, and molecular quantum beats in the A (2)Pi(i)-X (2)Pi(i) transition of the jet-cooled HCCSe free radical. *Journal of Chemical Physics*, **2004**, 121, 5801-11	3.9	6
35	Is the HCCS radical linear in the excited state?. *Journal of Chemical Physics*, **2004**, 120, 8544-54	3.9	11

34	Persistence rewarded: successful observation of the B 2Sigmau+-X 2Pig electronic transition of jet-cooled BS2. *Journal of Chemical Physics*, **2004**, 120, 4258-62	3.9	8
33	High-resolution spectrum of the , and 3+4(A2) bands of the PH3 molecule: assignments and preliminary analysis. *Journal of Quantitative Spectroscopy and Radiative Transfer*, **2004**, 83, 599-618	2.1	9
32	Rovibrational analysis of the absorption spectrum of HDO between 10 110 and 12 215 cm1. *Physical Chemistry Chemical Physics*, **2004**, 6, 910-918	3.6	17
31	A stimulated emission pumping study of the first excited singlet state of germylidene (H2C=Ge). *Journal of Chemical Physics*, **2004**, 121, 257-64	3.9	31
30	An ab initio anharmonic force field of SiHCl3. *Molecular Physics*, **2003**, 101, 1165-1170	1.7	1
29	The electronic spectroscopy and molecular structure of the HPCl free radical: A potential III–V semiconductor growth intermediate. *Journal of Chemical Physics*, **2003**, 119, 2037-2046	3.9	8
28	A study of the molecular structure and Renner–Teller effect in the 2 2X 2g electronic spectrum of jet-cooled boron disulfide, BS2. *Journal of Chemical Physics*, **2003**, 119, 2047-2056	3.9	11
27	The Renner-Teller effect and Sears resonances in the ground state of the GeCH and GeCD free radicals. *Journal of Chemical Physics*, **2003**, 119, 10115-10124	3.9	15
26	High-Resolution Fourier-Transform Intracavity Laser Absorption Spectroscopy of D2O in the Region of the 41+3 Band. *Journal of Molecular Spectroscopy*, **2002**, 212, 89-95	1.3	50
25	On the Study of Resonance Interactions and Splittings in the PH3 Molecule: 1, 3, 2+4, and 24 Bands. *Journal of Molecular Spectroscopy*, **2002**, 215, 295-308	1.3	33
24	Absolute local mode vibrational band intensities of AsH3. *Chemical Physics Letters*, **2002**, 352, 435-440	2.5	1
23	Calculation of the SiH stretching–bending overtones in SiHCl3 employing ab initio potential energy and dipole moment surfaces. *Journal of Chemical Physics*, **2002**, 116, 105	3.9	3
22	Study of the stretching vibrational band intensities of XH4 molecules employing four-dimensional ab initio (X=C and Sn) and effective (X=C and Si) dipole moment surfaces. *Journal of Chemical Physics*, **2002**, 117, 10073-10080	3.9	3
21	Laser spectroscopy of LaS: Hyperfine structure in the B 2X 2 (0,0) band. *Journal of Chemical Physics*, **2002**, 117, 5764-5769	3.9	8
20	High-Resolution Fourier Transform Spectrum of HDO in the Region 6140–7040 cm1. *Journal of Molecular Spectroscopy*, **2001**, 208, 224-235	1.3	64
19	High-Resolution Rotational Analysis of Deuterated Hypochlorous Acid: Ground State, (100), and (020) Vibrational States. *Journal of Molecular Spectroscopy*, **2001**, 209, 105-115	1.3	5
18	High-Resolution Rotational Analysis of the Lowest DO Overtone Bands of Deuterated Hypochlorous Acid: 21 and 31. *Journal of Molecular Spectroscopy*, **2001**, 209, 233-241	1.3	
17	High-Resolution Fourier Transform Spectrum of D2O in the Region Near 0.97 m. *Journal of Molecular Spectroscopy*, **2001**, 210, 18-27	1.3	45

16	Four-dimensional dipole moment surfaces and local mode vibrational band intensities of GeH4. *Chemical Physics Letters*, **2001**, 349, 131-136	2.5	4
15	The stretching vibrational overtone spectra of PH3: Local mode vibrational analysis, dipole moment surfaces from density functional theory and band intensities. *Journal of Chemical Physics*, **2001**, 114, 7018-7026	3.9	26
14	The SiH stretching□bending overtone polyads of SiHF3: Assignments, band intensities, internal coordinate force field, and ab initio dipole moment surfaces. *Journal of Chemical Physics*, **2001**, 115, 1378-1391	3.9	15
13	High resolution vibration-rotation spectrum of the D2O molecule in the region near the 2□1 + □2 + □3 absorption band. *Molecular Physics*, **2001**, 99, 931-937	1.7	43
12	Band strengths for CH stretching polyads of CHBr3 calculated by use of a two-dimensional electric dipole moment surface from density functional theory. *Journal of Chemical Physics*, **2001**, 114, 8905-8912	3.9	8
11	The vibrational overtones of SiH4 isotopomers: experimental wavenumbers, assignment, ab initio dipole moment surfaces and intensities. *Physical Chemistry Chemical Physics*, **2001**, 3, 3506-3517	3.6	14
10	Study of the Perpendicular Band Intensities of the CH Chromophore in CHCl3, CHBr3, and CHI3 with Three-Dimensional Dipole Moment Surface from Density Functional Calculations. *Journal of Physical Chemistry A*, **2001**, 105, 8428-8433	2.8	4
9	Overtones of the SiH Stretching□Bending Polyad in SiHD3: Internal Coordinate Force Field, ab initio Dipole Moment Surfaces, and Band Intensities. *Journal of Physical Chemistry A*, **2001**, 105, 6065-6072	2.8	8
8	Overtone spectrum and the Fermi resonance of the SiH chromophore in SiHCl3. *Molecular Physics*, **2001**, 99, 1669-1678	1.7	5
7	High-Resolution Study of the First Hexad of D(2)O. *Journal of Molecular Spectroscopy*, **2000**, 200, 25-33	1.3	49
6	High-Resolution Fourier Transform Spectrum of the D(2)O Molecule in the Region of the Second Triad of Interacting Vibrational States. *Journal of Molecular Spectroscopy*, **2000**, 200, 34-39	1.3	51
5	High-Resolution Study of Strongly Interacting Vibrational Bands of HDO in the Region 7600-8100 cm(-1). *Journal of Molecular Spectroscopy*, **2000**, 203, 228-234	1.3	62
4	High-Resolution Study of the (v(1) + 12v(2) + v(3) = 3) Polyad of Strongly Interacting Vibrational Bands of D(2)O. *Journal of Molecular Spectroscopy*, **2000**, 204, 216-225	1.3	49
3	Calculating relative intensities for CH stretching polyads of CHI3 with ab initio dipole moment surface. *Chemical Physics Letters*, **2000**, 332, 569-575	2.5	7
2	The ab initio calculated dipole moment surface and overtone relative intensities of CH chromophore in CHCl3. *Journal of Chemical Physics*, **2000**, 112, 7484-7489	3.9	10
1	Fourier-transform intra-cavity laser absorption spectroscopy of HOD □OD=5 overtone. *Physical Chemistry Chemical Physics*, **1999**, 1, 3727-3730	3.6	35