Bruce C Gates

List of Publications by Year in Descending Order

208 papers	10,451 citations	53 h-index	95 g-index
218 ext. papers	12,010 ext. citations	9.1 avg, IF	6.88 L-index

#	Paper	IF	Citations
208	Atomically Dispersed Platinum in Surface and Subsurface Sites on MgO Have Contrasting Catalytic Properties for CO Oxidation.. *Journal of Physical Chemistry Letters*, **2022**, 3896-3903	6.4	2
207	A Theory-Guided X-ray Absorption Spectroscopy Approach for Identifying Active Sites in Atomically Dispersed Transition-Metal Catalysts. *Journal of the American Chemical Society*, **2021**, 143, 20144-20156	16.4	9
206	Elucidating and Tuning Catalytic Sites on Zirconium- and Aluminum-Containing Nodes of Stable Metal-Organic Frameworks. *Accounts of Chemical Research*, **2021**, 54, 1982-1991	24.3	10
205	Pair Sites on Nodes of Metal-Organic Framework hcp UiO-66 Catalyze -Butyl Alcohol Dehydration. *Journal of Physical Chemistry Letters*, **2021**, 12, 6085-6089	6.4	0
204	Beyond Radical Rebound: Methane Oxidation to Methanol Catalyzed by Iron Species in Metal-Organic Framework Nodes. *Journal of the American Chemical Society*, **2021**, 143, 12165-12174	16.4	11
203	Prototype Atomically Dispersed Supported Metal Catalysts: Iridium and Platinum. *Small*, **2021**, 17, e2004665	13.3	9
202	Characterization of a Metal□Organic Framework Zr6O8 Node-Supported Atomically Dispersed Iridium Catalyst for Ethylene Hydrogenation by X-ray Absorption Near-Edge Structure and Infrared Spectroscopies. *Journal of Physical Chemistry C*, **2021**, 125, 16995-17007	3.8	0
201	Pair sites on Al3O nodes of the metal-organic framework MIL-100: Cooperative roles of defect and structural vacancy sites in methanol dehydration catalysis. *Journal of Catalysis*, **2021**, 404, 128-128	7.3	3
200	Propane Dehydrogenation Catalyzed by Isolated Pt Atoms in ?SiOZn-OH Nests in Dealuminated Zeolite Beta. *Journal of the American Chemical Society*, **2021**,	16.4	19
199	Atomically Dispersed Ru on Manganese Oxide Catalyst Boosts Oxidative Cyanation. *ACS Catalysis*, **2020**, 10, 6299-6308	13.1	23
198	Core-shell structured catalysts for thermocatalytic, photocatalytic, and electrocatalytic conversion of CO. *Chemical Society Reviews*, **2020**, 49, 2937-3004	58.5	201
197	Isostructural Atomically Dispersed Rhodium Catalysts Supported on SAPO-37 and on HY Zeolite. *Journal of the American Chemical Society*, **2020**, 142, 11474-11485	16.4	10
196	Multimodal Synchrotron Approach: Research Needs and Scientific Vision. *Synchrotron Radiation News*, **2020**, 33, 44-47	0.6	1
195	Tuning Catalytic Sites on ZrO Metal-Organic Framework Nodes via Ligand and Defect Chemistry Probed with -Butyl Alcohol Dehydration to Isobutylene. *Journal of the American Chemical Society*, **2020**, 142, 8044-8056	16.4	45
194	Silica accelerates the selective hydrogenation of CO to methanol on cobalt catalysts. *Nature Communications*, **2020**, 11, 1033	17.4	47
193	Docking of tetra-methyl zirconium to the surface of silica: a well-defined pre-catalyst for conversion of CO to cyclic carbonates. *Chemical Communications*, **2020**, 56, 3528-3531	5.8	9
192	Tuning Zr12O22 Node Defects as Catalytic Sites in the Metal□Organic Framework hcp UiO-66. *ACS Catalysis*, **2020**, 10, 2906-2914	13.1	43

191	Unraveling the individual influences of supports and ionic liquid coatings on the catalytic properties of supported iridium complexes and iridium clusters. *Journal of Catalysis*, **2020**, 387, 186-195	7.3	10
190	Synthesis of Rh6(CO)16 in Supercages of Zeolite HY: Reaction Network and Kinetics of Formation from Mononuclear Rhodium Precursors via Rh4(CO)12 Facilitated by the Water Gas Shift Half-Reaction. *Journal of Physical Chemistry C*, **2020**, 124, 2513-2520	3.8	9
189	Synthesis and characterization of tetrairidium clusters in the metal organic framework UiO-67: Catalyst for ethylene hydrogenation. *Journal of Catalysis*, **2020**, 382, 165-172	7.3	18
188	Iridium Atoms Bonded to Crystalline Powder MgO: Characterization by Imaging and Spectroscopy. *Journal of Physical Chemistry C*, **2020**, 124, 459-468	3.8	6
187	Electronic Structure of Atomically Dispersed Supported Iridium Catalyst Controls Iridium Aggregation. *ACS Catalysis*, **2020**, 10, 12354-12358	13.1	5
186	Supported Metal Pair-Site Catalysts. *ACS Catalysis*, **2020**, 10, 9065-9085	13.1	37
185	Dialing in Catalytic Sites on Metal Organic Framework Nodes: MIL-53(Al) and MIL-68(Al) Probed with Methanol Dehydration Catalysis. *ACS Applied Materials & Interfaces*, **2020**, 12, 53537-53546	9.5	8
184	The Surface Chemistry of Metal Oxide Clusters: From Metal-Organic Frameworks to Minerals. *ACS Central Science*, **2020**, 6, 1523-1533	16.8	11
183	Dispersed Nickel Boosts Catalysis by Copper in CO2 Hydrogenation. *ACS Catalysis*, **2020**, 10, 9261-9270	13.1	23
182	Atomically Dispersed Metals on Well-Defined Supports including Zeolites and Metal-Organic Frameworks: Structure, Bonding, Reactivity, and Catalysis. *Chemical Reviews*, **2020**, 120, 11956-11985	68.1	50
181	MgO-Supported Iridium Metal Pair-Site Catalysts Are More Active and Resistant to CO Poisoning than Analogous Single-Site Catalysts for Ethylene Hydrogenation and Hydrogen–Deuterium Exchange. *ACS Catalysis*, **2019**, 9, 9545-9553	13.1	10
180	Controlling catalytic activity and selectivity for partial hydrogenation by tuning the environment around active sites in iridium complexes bonded to supports. *Chemical Science*, **2019**, 10, 2623-2632	9.4	28
179	Product Selectivity Controlled by Nanoporous Environments in Zeolite Crystals Enveloping Rhodium Nanoparticle Catalysts for CO Hydrogenation. *Journal of the American Chemical Society*, **2019**, 141, 8482-8488	16.4	132
178	Atomically Dispersed Supported Metal Catalysts: Seeing Is Believing. *Trends in Chemistry*, **2019**, 1, 99-110	14.8	38
177	Tuning the Properties of Zr6O8 Nodes in the Metal Organic Framework UiO-66 by Selection of Node-Bound Ligands and Linkers. *Chemistry of Materials*, **2019**, 31, 1655-1663	9.6	58
176	Bulky Calixarene Ligands Stabilize Supported Iridium Pair-Site Catalysts. *Journal of the American Chemical Society*, **2019**, 141, 4010-4015	16.4	26
175	Mechanistic Study of Hydroamination of Alkyne through Tantalum-Based Silica-Supported Surface Species. *ACS Catalysis*, **2019**, 9, 8719-8725	13.1	8
174	Atomically Dispersed Reduced Graphene Aerogel-Supported Iridium Catalyst with an Iridium Loading of 14.8 wt %. *ACS Catalysis*, **2019**, 9, 9905-9913	13.1	37

173	Spectroscopic Characterization of Peroxo Ligands Formed by Reaction of Dioxygen with Electron-Rich Iridium Clusters. *Inorganic Chemistry*, **2019**, 58, 14338-14348	5.1	2
172	Structure, Dynamics, and Reactivity for Light Alkane Oxidation of Fe(II) Sites Situated in the Nodes of a Metal-Organic Framework. *Journal of the American Chemical Society*, **2019**, 141, 18142-18151	16.4	49
171	Reversible Metal Aggregation and Redispersion Driven by the Catalytic Water Gas Shift Half-Reactions: Interconversion of Single-Site Rhodium Complexes and Tetrarhodium Clusters in Zeolite HY. *ACS Catalysis*, **2019**, 9, 3311-3321	13.1	21
170	Tungsten Catalyst Incorporating a Well-Defined Tetracoordinated Aluminum Surface Ligand for Selective Metathesis of Propane, [(?SiO)Si?)(?SiO)2AlO]W(?CtBu) (H)2]. *ChemCatChem*, **2019**, 11, 614-620	5.2	1
169	Catalysis by Metal Organic Frameworks: Perspective and Suggestions for Future Research. *ACS Catalysis*, **2019**, 9, 1779-1798	13.1	375
168	Structure and Dynamics of ZrO Metal-Organic Framework Node Surfaces Probed with Ethanol Dehydration as a Catalytic Test Reaction. *Journal of the American Chemical Society*, **2018**, 140, 3751-3759	16.4	108
167	Single-site catalyst promoters accelerate metal-catalyzed nitroarene hydrogenation. *Nature Communications*, **2018**, 9, 1362	17.4	111
166	Correction to Tuning Zr6 Metal-Organic Framework (MOF) Nodes as Catalyst Supports: Site Densities and Electron-Donor Properties Influence Molecular Iridium Complexes as Ethylene Conversion Catalysts *ACS Catalysis*, **2018**, 8, 2364-2364	13.1	3
165	A Silica-Supported Monoalkylated Tungsten Dioxo Complex Catalyst for Olefin Metathesis. *ACS Catalysis*, **2018**, 8, 2715-2729	13.1	26
164	Beating Heterogeneity of Single-Site Catalysts: MgO-Supported Iridium Complexes. *ACS Catalysis*, **2018**, 8, 3489-3498	13.1	54
163	Sinter-resistant metal nanoparticle catalysts achieved by immobilization within zeolite crystals via seed-directed growth. *Nature Catalysis*, **2018**, 1, 540-546	36.5	175
162	Supported cluster catalysts synthesized to be small, simple, selective, and stable. *Faraday Discussions*, **2018**, 208, 9-33	3.6	4
161	Weakly interacting solvation spheres surrounding a calixarene-protected tetrairidium carbonyl cluster: contrasting effects on reactivity of alkane solvent and silica support. *Dalton Transactions*, **2018**, 47, 13550-13558	4.3	5
160	The challenges of characterising nanoparticulate catalysts: general discussion. *Faraday Discussions*, **2018**, 208, 339-394	3.6	4
159	Stable Rhodium Pair Sites on MgO: Influence of Ligands and Rhodium Nuclearity on Catalysis of Ethylene Hydrogenation and HD Exchange in the Reaction of H2 with D2. *ACS Catalysis*, **2018**, 8, 482-487	13.1	22
158	Imine Metathesis Catalyzed by a Silica-Supported Hafnium Imido Complex. *ACS Catalysis*, **2018**, 8, 9440-9446	13.1	12
157	Tuning the properties of metal-organic framework nodes as supports of single-site iridium catalysts: node modification by atomic layer deposition of aluminium. *Faraday Discussions*, **2017**, 201, 195-206	3.6	24
156	Experimental investigation of upgrading of lignin-derived bio-oil component anisole catalyzed by carbon nanotube-supported molybdenum. *RSC Advances*, **2017**, 7, 10545-10556	3.7	27

155	A Pd@Zeolite Catalyst for Nitroarene Hydrogenation with High Product Selectivity by Sterically Controlled Adsorption in the Zeolite Micropores. *Angewandte Chemie - International Edition*, **2017**, 56, 9747-9751	16.4	184
154	A Pd@Zeolite Catalyst for Nitroarene Hydrogenation with High Product Selectivity by Sterically Controlled Adsorption in the Zeolite Micropores. *Angewandte Chemie*, **2017**, 129, 9879-9883	3.6	64
153	Dialing in single-site reactivity of a supported calixarene-protected tetrairidium cluster catalyst. *Chemical Science*, **2017**, 8, 4951-4960	9.4	15
152	Role of N-Heterocyclic Carbenes as Ligands in Iridium Carbonyl Clusters. *Journal of Physical Chemistry A*, **2017**, 121, 5029-5044	2.8	5
151	High-Energy-Resolution X-ray Absorption Spectroscopy for Identification of Reactive Surface Species on Supported Single-Site Iridium Catalysts. *Chemistry - A European Journal*, **2017**, 23, 14760-14768	4.8	28
150	From single-site tantalum complexes to nanoparticles of Ta N and TaO N supported on silica: elucidation of synthesis chemistry by dynamic nuclear polarization surface enhanced NMR spectroscopy and X-ray absorption spectroscopy. *Chemical Science*, **2017**, 8, 5650-5661	9.4	9
149	Molecular Rhodium Complexes Supported on the Metal-Oxide-Like Nodes of Metal Organic Frameworks and on Zeolite HY: Catalysts for Ethylene Hydrogenation and Dimerization. *ACS Applied Materials & Interfaces*, **2017**, 9, 33511-33520	9.5	55
148	Innentitelbild: A Pd@Zeolite Catalyst for Nitroarene Hydrogenation with High Product Selectivity by Sterically Controlled Adsorption in the Zeolite Micropores (Angew. Chem. 33/2017). *Angewandte Chemie*, **2017**, 129, 9756-9756	3.6	3
147	Heterogeneous catalysis: Uniformity begets selectivity. *Nature Materials*, **2017**, 16, 703-704	27	9
146	Single-Site Osmium Catalysts on MgO: Reactivity and Catalysis of CO Oxidation. *Chemistry - A European Journal*, **2017**, 23, 2532-2536	4.8	14
145	Supported Catalysts **2017**, 313-337		1
144	Atomically dispersed supported metal catalysts: perspectives and suggestions for future research. *Catalysis Science and Technology*, **2017**, 7, 4259-4275	5.5	175
143	Tuning the Selectivity of Single-Site Supported Metal Catalysts with Ionic Liquids. *ACS Catalysis*, **2017**, 7, 6969-6972	13.1	42
142	Beyond Ordered Materials: Understanding Catalytic Sites on Amorphous Solids. *ACS Catalysis*, **2017**, 7, 7543-7557	13.1	84
141	High-Energy-Resolution X-ray Absorption Spectroscopy for Identification of Reactive Surface Species on Supported Single-Site Iridium Catalysts. *Chemistry - A European Journal*, **2017**, 23, 14669-14669	4.8	
140	Experimental Investigation on Upgrading of Lignin-Derived Bio-Oils: Kinetic Analysis of Anisole Conversion on Sulfided CoMo/Al2O3 Catalyst. *International Journal of Chemical Kinetics*, **2016**, 48, 702-713	1.4	28
139	Homogeneity of Surface Sites in Supported Single-Site Metal Catalysts: Assessment with Band Widths of Metal Carbonyl Infrared Spectra. *Journal of Physical Chemistry Letters*, **2016**, 7, 3854-3860	6.4	78
138	Surface Metal Complexes and Their Applications **2016**, 773-808		1

137	Tuning the Surface Chemistry of Metal Organic Framework Nodes: Proton Topology of the Metal-Oxide-Like Zr Nodes of UiO-66 and NU-1000. *Journal of the American Chemical Society*, **2016**, 138, 15189-15196	16.4	119
136	Hydroprocessing of 4-methylanisole as a representative of lignin-derived bio-oils catalyzed by sulphided CoMo/Al2O3: A semi-quantitative reaction network. *Canadian Journal of Chemical Engineering*, **2016**, 94, 1524-1532	2.3	23
135	Tracking Rh Atoms in Zeolite HY: First Steps of Metal Cluster Formation and Influence of Metal Nuclearity on Catalysis of Ethylene Hydrogenation and Ethylene Dimerization. *Journal of Physical Chemistry Letters*, **2016**, 7, 2537-43	6.4	31
134	Controlling the hydrogenolysis of silica-supported tungsten pentamethyl leads to a class of highly electron deficient partially alkylated metal hydrides. *Chemical Science*, **2016**, 7, 1558-1568	9.4	45
133	Rhodium pair-sites on magnesium oxide: Synthesis, characterization, and catalysis of ethylene hydrogenation. *Journal of Catalysis*, **2016**, 338, 12-20	7.3	20
132	Toward Benchmarking in Catalysis Science: Best Practices, Challenges, and Opportunities. *ACS Catalysis*, **2016**, 6, 2590-2602	13.1	139
131	Tuning Zr6 Metal–Organic Framework (MOF) Nodes as Catalyst Supports: Site Densities and Electron-Donor Properties Influence Molecular Iridium Complexes as Ethylene Conversion Catalysts. *ACS Catalysis*, **2016**, 6, 235-247	13.1	128
130	Concluding remarks: progress toward the design of solid catalysts. *Faraday Discussions*, **2016**, 188, 591-607	3.6	6
129	Genesis of Delaminated-Zeolite Morphology: 3-D Characterization of Changes by STEM Tomography. *Journal of Physical Chemistry Letters*, **2015**, 6, 2598-602	6.4	5
128	Imaging individual lanthanum atoms in zeolite Y by scanning transmission electron microscopy: Evidence of lanthanum pair sites. *Microporous and Mesoporous Materials*, **2015**, 213, 95-99	5.3	6
127	Agglomerative Sintering of an Atomically Dispersed Ir1/Zeolite Y Catalyst: Compelling Evidence Against Ostwald Ripening but for Bimolecular and Autocatalytic Agglomeration Catalyst Sintering Steps. *ACS Catalysis*, **2015**, 5, 3514-3527	13.1	47
126	Molecular models of site-isolated cobalt, rhodium, and iridium catalysts supported on zeolites: Ligand bond dissociation energies. *Computational and Theoretical Chemistry*, **2015**, 1074, 58-72	2	11
125	Isostructural Zeolite-Supported Rhodium and Iridium Complexes: Tuning Catalytic Activity and Selectivity by Ligand Modification. *ACS Catalysis*, **2015**, 5, 5647-5656	13.1	49
124	Single-Site Zeolite-Anchored Organoiridium Carbonyl Complexes: Characterization of Structure and Reactivity by Spectroscopy and Computational Chemistry. *Chemistry - A European Journal*, **2015**, 21, 11825-35	5.8	20
123	Mononuclear iridium dinitrogen complexes bonded to zeolite HY. *Chemistry - A European Journal*, **2015**, 21, 631-40	5.8	10
122	Metal-organic framework nodes as nearly ideal supports for molecular catalysts: NU-1000- and UiO-66-supported iridium complexes. *Journal of the American Chemical Society*, **2015**, 137, 7391-6	16.4	192
121	Migration of Single Iridium Atoms and Tri-iridium Clusters on MgO Surfaces: Aberration-Corrected STEM Imaging and Ab Initio Calculations. *Journal of Physical Chemistry Letters*, **2015**, 6, 4675-9	6.4	10
120	Upgrading of Lignin-Derived Bio-oil Components Catalyzed by Pt/Al2O3: Kinetics and Reaction Pathways Characterizing Conversion of Cyclohexanone with H2. *Energy & Fuels*, **2015**, 29, 191-199	4.1	32

119	Selective molecular recognition by nanoscale environments in a supported iridium cluster catalyst. *Nature Nanotechnology*, **2014**, 9, 459-65	28.7	48
118	Formation of supported rhodium clusters from mononuclear rhodium complexes controlled by the support and ligands on rhodium. *Physical Chemistry Chemical Physics*, **2014**, 16, 1262-70	3.6	21
117	Beyond Relationships Between Homogeneous and Heterogeneous Catalysis. *Catalysis Letters*, **2014** , 144, 1785-1789	2.8	4
116	Molecular metal catalysts on supports: organometallic chemistry meets surface science. *Accounts of Chemical Research*, **2014**, 47, 2612-20	24.3	157
115	Iridium Complexes and Clusters in Dealuminated Zeolite HY: Distribution between Crystalline and Impurity Amorphous Regions. *ACS Catalysis*, **2014**, 4, 2662-2666	13.1	12
114	A single-site platinum CO oxidation catalyst in zeolite KLTL: microscopic and spectroscopic determination of the locations of the platinum atoms. *Angewandte Chemie - International Edition*, **2014**, 53, 8904-7	16.4	217
113	Upgrading of Anisole in a Dielectric Barrier Discharge Plasma Reactor. *Energy & Fuels*, **2014**, 28, 4545-4553	2.8	33
112	Upgrading of lignin-derived bio-oils by catalytic hydrodeoxygenation. *Energy and Environmental Science*, **2014**, 7, 103-129	35.4	627
111	Quantitative Z-contrast Imaging in Scanning Transmission Electron Microscopy of Zeolite-supported Metal Clusters and Single-metal-atom Complexes With Single-Atom Sensitivity. *Microscopy and Microanalysis*, **2014**, 20, 148-149	0.5	1
110	A Single-Site Platinum CO Oxidation Catalyst in Zeolite KLTL: Microscopic and Spectroscopic Determination of the Locations of the Platinum Atoms. *Angewandte Chemie*, **2014**, 126, 9050-9053	3.6	45
109	Quantitative Z-Contrast Imaging of Supported Metal Complexes and Clusters: A Gateway to Understanding Catalysis on the Atomic Scale. *ChemCatChem*, **2013**, 5, 2673-2683	5.2	11
108	Supported gold catalysts: new properties offered by nanometer and sub-nanometer structures. *Chemical Communications*, **2013**, 49, 7876-7	5.8	32
107	Surface-mediated synthesis of dimeric rhodium catalysts on MgO: tracking changes in the nuclearity and ligand environment of the catalytically active sites by X-ray absorption and infrared spectroscopies. *Chemistry - A European Journal*, **2013**, 19, 1235-45	4.8	35
106	Zeolite- and MgO-supported rhodium complexes and rhodium clusters: Tuning catalytic properties to control carbon–carbon vs. carbon–hydrogen bond formation reactions of ethene in the presence of H2. *Journal of Catalysis*, **2013**, 308, 201-212	7.3	30
105	Zeolite-supported bimetallic catalyst: controlling selectivity of rhodium complexes by nearby iridium complexes. *Catalysis Science and Technology*, **2013**, 3, 2199	5.5	9
104	Three-dimensional structural analysis of MgO-supported osmium clusters by electron microscopy with single-atom sensitivity. *Angewandte Chemie - International Edition*, **2013**, 52, 5262-5	16.4	12
103	Three-Dimensional Structural Analysis of MgO-Supported Osmium Clusters by Electron Microscopy with Single-Atom Sensitivity. *Angewandte Chemie*, **2013**, 125, 5370-5373	3.6	2
102	Conversion of 4-Methylanisole Catalyzed by Pt/γ-Al2O3 and by Pt/SiO2-Al2O3: Reaction Networks and Evidence of Oxygen Removal. *Catalysis Letters*, **2012**, 142, 7-15	2.8	37

101	Upgrading of Lignin-Derived Compounds: Reactions of Eugenol Catalyzed by HY Zeolite and by Pt/Al2O3. *Catalysis Letters*, **2012**, 142, 151-160	2.8	57
100	Selective Hydrodeoxygenation of Guaiacol Catalyzed by Platinum Supported on Magnesium Oxide. *Catalysis Letters*, **2012**, 142, 1190-1196	2.8	92
99	Sinter-Resistant Catalysts: Supported Iridium Nanoclusters with Intrinsically Limited Sizes. *Catalysis Letters*, **2012**, 142, 1445-1451	2.8	17
98	Atomically Resolved Site-Isolated Catalyst on MgO: Mononuclear Osmium Dicarbonyls formed from Os3(CO)12. *Journal of Physical Chemistry Letters*, **2012**, 3, 1865-71	6.4	19
97	Catalytic conversion of compounds representative of lignin-derived bio-oils: a reaction network for guaiacol, anisole, 4-methylanisole, and cyclohexanone conversion catalysed by Pt/Al2O3. *Catalysis Science and Technology*, **2012**, 2, 113-118	5.5	142
96	Tuning Catalytic Selectivity: Zeolite- and Magnesium Oxide-Supported Molecular Rhodium Catalysts for Hydrogenation of 1,3-Butadiene. *ACS Catalysis*, **2012**, 2, 2100-2113	13.1	59
95	Mononuclear Zeolite-Supported Iridium: Kinetic, Spectroscopic, Electron Microscopic, and Size-Selective Poisoning Evidence for an Atomically Dispersed True Catalyst at 22 °C. *ACS Catalysis*, **2012**, 2, 1947-1957	13.1	45
94	Site-Isolated Molecular Iridium Complex Catalyst Supported in the 1-Dimensional Channels of Zeolite HSSZ-53: Characterization by Spectroscopy and Aberration-Corrected Scanning Transmission Electron Microscopy. *ACS Catalysis*, **2012**, 2, 1002-1012	13.1	18
93	Hydrogen activation and metal hydride formation trigger cluster formation from supported iridium complexes. *Journal of the American Chemical Society*, **2012**, 134, 5022-5	16.4	40
92	Oxide- and zeolite-supported isostructural Ir(C2H4)2 complexes: molecular-level observations of electronic effects of supports as ligands. *Langmuir*, **2012**, 28, 12806-15	4	35
91	Imaging Isolated Gold Atom Catalytic Sites in Zeolite NaY. *Angewandte Chemie*, **2012**, 124, 5944-5948	3.6	33
90	A "smart" Catalyst: Sinter-Resistant Supported Iridium Clusters Visualized with Electron Microscopy. *Angewandte Chemie*, **2012**, 124, 6031-6036	3.6	15
89	Rücktitelbild: Imaging Isolated Gold Atom Catalytic Sites in Zeolite NaY (Angew. Chem. 24/2012). *Angewandte Chemie*, **2012**, 124, 6120-6120	3.6	
88	Imaging isolated gold atom catalytic sites in zeolite NaY. *Angewandte Chemie - International Edition*, **2012**, 51, 5842-6	16.4	140
87	A "smart" catalyst: sinter-resistant supported iridium clusters visualized with electron microscopy. *Angewandte Chemie - International Edition*, **2012**, 51, 5929-34	16.4	88
86	Back Cover: Imaging Isolated Gold Atom Catalytic Sites in Zeolite NaY (Angew. Chem. Int. Ed. 24/2012). *Angewandte Chemie - International Edition*, **2012**, 51, 6016-6016	16.4	
85	Atomically dispersed supported metal catalysts. *Annual Review of Chemical and Biomolecular Engineering*, **2012**, 3, 545-74	8.9	431
84	Catalytic Conversion of Furan to Gasoline-Range Aliphatic Hydrocarbons via Ring Opening and Decarbonylation Reactions Catalyzed by Pt/Al2O3. *Catalysis Letters*, **2012**, 142, 664-666	2.8	15

83	Structures and Stability of Irn(CO)m. *Molecular Physics*, **2012**, 110, 1977-1992	1.7	9
82	Supported molecular iridium catalysts: resolving effects of metal nuclearity and supports as ligands. *Journal of the American Chemical Society*, **2011**, 133, 16186-95	16.4	117
81	Catalytic Conversion of Guaiacol Catalyzed by Platinum Supported on Alumina: Reaction Network Including Hydrodeoxygenation Reactions. *Energy & Fuels*, **2011**, 25, 3417-3427	4.1	201
80	Conversion of Anisole Catalyzed by Platinum Supported on Alumina: The Reaction Network. *Energy & Fuels*, **2011**, 25, 4776-4785	4.1	64
79	Ir6 Clusters Compartmentalized in the Supercages of Zeolite NaY: Direct Imaging of a Catalyst with Aberration-Corrected Scanning Transmission Electron Microscopy. *ACS Catalysis*, **2011**, 1, 1613-1620	13.1	21
78	Tracking iridium atoms with electron microscopy: first steps of metal nanocluster formation in one-dimensional zeolite channels. *Nano Letters*, **2011**, 11, 5537-41	11.5	44
77	Prototype Supported Metal Cluster Catalysts: Ir4 and Ir6. *ChemCatChem*, **2011**, 3, 95-107	5.2	49
76	Catalytic Conversion of Anisole: Evidence of Oxygen Removal in Reactions with Hydrogen. *Catalysis Letters*, **2011**, 141, 817-820	2.8	60
75	Catalytic Reactions of Guaiacol: Reaction Network and Evidence of Oxygen Removal in Reactions with Hydrogen. *Catalysis Letters*, **2011**, 141, 779-783	2.8	109
74	Cyclohexanone Conversion Catalyzed by Pt/□Al2O3: Evidence of Oxygen Removal and Coupling Reactions. *Catalysis Letters*, **2011**, 141, 1072-1078	2.8	40
73	Triosmium clusters on a support: determination of structure by X-ray absorption spectroscopy and high-resolution microscopy. *Chemistry - A European Journal*, **2011**, 17, 1000-8	4.8	9
72	Zeolite- and MgO-Supported Molecular Iridium Complexes: Support and Ligand Effects in Catalysis of Ethene Hydrogenation and HD Exchange in the Conversion of H2+ D2. *ACS Catalysis*, **2011**, 1, 1549-1561	13.1	58
71	Direct imaging of single metal atoms and clusters in the pores of dealuminated HY zeolite. *Nature Nanotechnology*, **2010**, 5, 506-10	28.7	151
70	Essentially Molecular Metal Complexes Anchored to Zeolite □Synthesis and Characterization of Rhodium Complexes and Ruthenium Complexes Prepared from Rh(acac)(□-C2H4)2 and cis-Ru(acac)2(□-C2H4)2. *Journal of Physical Chemistry C*, **2010**, 114, 2685-2693	3.8	11
69	Metal clusters on supports: synthesis, structure, reactivity, and catalytic properties. *Chemical Communications*, **2010**, 46, 5997-6015	5.8	124
68	Formation of a Manganese Tricarbonyl on the MgO Surface from Mn2(CO)10: Characterization by Infrared, Electron Paramagnetic Resonance, and X-ray Absorption Spectroscopies. *Journal of Physical Chemistry C*, **2010**, 114, 17212-17221	3.8	5
67	Reactions of Highly Uniform Zeolite H-□Supported Rhodium Complexes: Transient Characterization by Infrared and X-ray Absorption Spectroscopies. *Journal of Physical Chemistry C*, **2010**, 114, 8405-8413	3.8	9
66	A site-isolated mononuclear iridium complex catalyst supported on MgO: Characterization by spectroscopy and aberration-corrected scanning transmission electron microscopy. *Journal of Catalysis*, **2010**, 269, 318-328	7.3	98

65	A zeolite-supported molecular ruthenium complex with eta6-C6H6 ligands: chemistry elucidated by using spectroscopy and density functional theory. *Chemistry - A European Journal*, **2010**, 16, 7427-36	4.8	7
64	Atomic Resolution of the Structure of a Metal Support Interface: Triosmium Clusters on MgO(110). *Angewandte Chemie*, **2010**, 122, 10287-10290	3.6	5
63	Atomic resolution of the structure of a metal-support interface: triosmium clusters on MgO(110). *Angewandte Chemie - International Edition*, **2010**, 49, 10089-92	16.4	24
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