

Enrique Iglesia

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

326
papers

28,144
citations

93
h-index

155
g-index

334
ext. papers

30,248
ext. citations

6.9
avg, IF

7.5
L-index

#	Paper	IF	Citations
326	The Fischer-Tropsch synthesis: A few enduring mechanistic conundrums revisited. <i>Journal of Catalysis</i> , 2022 , 405, 614-625	7.3	1
325	Binding and Exchange Reactions of Hydrogen Isotopes on Surfaces of Dispersed Pt Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2022 , 126, 3923-3938	3.8	1
324	Hydrogenation and CS bond activation pathways in thiophene and tetrahydrothiophene reactions on sulfur-passivated surfaces of Ru, Pt, and Re nanoparticles. <i>Applied Catalysis B: Environmental</i> , 2021 , 291, 119797	21.8	5
323	Mechanistic Connections between CO and CO Hydrogenation on Dispersed Ruthenium Nanoparticles. <i>Journal of the American Chemical Society</i> , 2021 , 143, 11582-11594	16.4	6
322	Unimolecular and bimolecular formic acid decomposition routes on dispersed Cu nanoparticles. <i>Journal of Catalysis</i> , 2021 , 404, 814-814	7.3	0
321	Parallel Alkane Dehydrogenation Routes on Brønsted Acid and Reaction-Derived Carbonaceous Active Sites in Zeolites. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 15839-15855	3.8	2
320	Reactivity descriptors in acid catalysis: acid strength, proton affinity and host-guest interactions. <i>Chemical Communications</i> , 2020 , 56, 7371-7398	5.8	10
319	Mechanistic insights and consequences of intrapore liquids in ethene, propene, and butene dimerization on isolated Ni ²⁺ sites grafted within aluminosilicate mesopores. <i>Journal of Catalysis</i> , 2020 , 389, 690-705	7.3	15
318	Elementary steps and site requirements in formic acid dehydration reactions on anatase and rutile TiO ₂ surfaces. <i>Journal of Catalysis</i> , 2020 , 383, 60-76	7.3	11
317	Reaction-Transport Selectivity Models and the Design of Fischer-Tropsch Catalysts 2020 , 199-258		3
316	Simulation Techniques for the Characterization of Structural and Transport Properties of Catalyst Pellets 2020 , 89-136		
315	Formic Acid Dehydration Rates and Elementary Steps on Lewis Acid-Base Site Pairs at Anatase and Rutile TiO ₂ Surfaces. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 20161-20174	3.8	4
314	Dynamics and Mechanism of Carbon Filament Formation during Methane Reforming on Supported Nickel Clusters. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 20143-20160	3.8	2
313	Reactivity and selectivity descriptors of dioxygen activation routes on metal oxides. <i>Journal of Catalysis</i> , 2019 , 377, 692-710	7.3	6
312	Hydrogen Chemisorption Isotherms on Platinum Particles at Catalytic Temperatures: Langmuir and Two-Dimensional Gas Models Revisited. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 8447-8462	3.8	18
311	Isomer sieving and the selective formation of terminal methyl isomers in reactions of linear alkanes on one-dimensional zeolites. <i>Journal of Catalysis</i> , 2019 , 377, 255-270	7.3	9
310	Selective conversion of acetone to isobutene and acetic acid on aluminosilicates: Kinetic coupling between acid-catalyzed and radical-mediated pathways. <i>Journal of Catalysis</i> , 2018 , 360, 66-80	7.3	22

309	Entropy-Driven High Reactivity of Formaldehyde in Nucleophilic Attack by Enolates on Oxide Surfaces. <i>Journal of the American Chemical Society</i> , 2018 , 140, 775-782	16.4	13
308	Synthetic strategies for the encapsulation of nanoparticles of Ni, Co, and Fe oxides within crystalline microporous aluminosilicates. <i>Microporous and Mesoporous Materials</i> , 2018 , 270, 10-23	5.3	23
307	Mechanism and site requirements for thiophene hydrodesulfurization on supported Re domains in metal or sulfide form. <i>Journal of Catalysis</i> , 2018 , 368, 411-426	7.3	14
306	First-principles theoretical assessment of catalysis by confinement: NO-O reactions within voids of molecular dimensions in siliceous crystalline frameworks. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 15725-15735	3.6	17
305	Dioxygen activation routes in Mars-van Krevelen redox cycles catalyzed by metal oxides. <i>Journal of Catalysis</i> , 2018 , 364, 228-247	7.3	22
304	Consequences of Acid Strength and Diffusional Constraints for Alkane Isomerization and C-C Scission Turnover Rates and Selectivities on Bifunctional Metal-Acid Catalysts. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 25475-25497	3.8	20
303	Effects of Charge, Size, and Shape of Transition States, Bound Intermediates, and Confining Voids in Reactions of Alkenes on Solid Acids. <i>ChemCatChem</i> , 2018 , 10, 4028-4037	5.2	16
302	Isomerization and C-C scission reactions of alkanes on bifunctional metal-acid catalysts: Consequences of confinement and diffusional constraints on reactivity and selectivity. <i>Journal of Catalysis</i> , 2018 , 368, 389-410	7.3	57
301	Elementary steps in acetone condensation reactions catalyzed by aluminosilicates with diverse void structures. <i>Journal of Catalysis</i> , 2017 , 346, 134-153	7.3	56
300	Catalytic routes to fuels from C and oxygenate molecules. <i>Faraday Discussions</i> , 2017 , 197, 9-39	3.6	15
299	Catalysis for Fuels: general discussion. <i>Faraday Discussions</i> , 2017 , 197, 165-205	3.6	4
298	Stability of bound species during alkene reactions on solid acids. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, E3900-E3908	11.5	35
297	Experimental and theoretical assessment of the mechanism and site requirements for ketonization of carboxylic acids on oxides. <i>Journal of Catalysis</i> , 2017 , 345, 183-206	7.3	74
296	Experimental and theoretical assessment of the mechanism of hydrogen transfer in alkane-alkene coupling on solid acids. <i>Journal of Catalysis</i> , 2017 , 354, 287-298	7.3	5
295	Dense CO Adlayers as Enablers of CO Hydrogenation Turnovers on Ru Surfaces. <i>Journal of the American Chemical Society</i> , 2017 , 139, 11789-11802	16.4	43
294	Experimental and Theoretical Evidence for the Reactivity of Bound Intermediates in Ketonization of Carboxylic Acids and Consequences of Acid-Base Properties of Oxide Catalysts. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 18030-18046	3.8	22
293	Synthesis of highly dispersed cobalt oxide clusters encapsulated within LTA zeolites. <i>Journal of Catalysis</i> , 2017 , 356, 173-185	7.3	23
292	Stabilization of active, selective, and regenerable Ni-based dimerization catalysts by condensation of ethene within ordered mesopores. <i>Journal of Catalysis</i> , 2017 , 352, 505-514	7.3	43

291	Catalytic diversity conferred by confinement of protons within porous aluminosilicates in Prins condensation reactions. <i>Journal of Catalysis</i> , 2017 , 352, 415-435	7.3	14
290	Theoretical insights into the sites and mechanisms for base catalyzed esterification and aldol condensation reactions over Cu. <i>Faraday Discussions</i> , 2017 , 197, 59-86	3.6	20
289	Substituent Effects and Molecular Descriptors of Reactivity in Condensation and Esterification Reactions of Oxygenates on Acid-Base Pairs at TiO ₂ and ZrO ₂ Surfaces. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 21589-21616	3.8	34
288	Synthesis of stable monodisperse AuPd, AuPt, and PdPt bimetallic clusters encapsulated within LTA-zeolites. <i>Journal of Catalysis</i> , 2016 , 342, 125-137	7.3	41
287	Mechanistic assessments of NO oxidation turnover rates and active site densities on WO ₃ -promoted CeO ₂ catalysts. <i>Journal of Catalysis</i> , 2016 , 342, 84-97	7.3	29
286	Synthesis of Bimetallic AuPt Clusters with Clean Surfaces via Sequential Displacement-Reduction Processes. <i>Chemistry of Materials</i> , 2016 , 28, 5872-5886	9.6	14
285	Toward More Complete Descriptors of Reactivity in Catalysis by Solid Acids. <i>ACS Catalysis</i> , 2016 , 6, 5386-5392	7.3	35
284	Reactivity and Selectivity Descriptors for the Activation of C-H Bonds in Hydrocarbons and Oxygenates on Metal Oxides. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 16741-16760	3.8	55
283	Catalysis on solid acids: Mechanism and catalyst descriptors in oligomerization reactions of light alkenes. <i>Journal of Catalysis</i> , 2016 , 344, 553-569	7.3	60
282	Displacement-reduction routes to PtPd clusters and mechanistic inferences for the synthesis of other bimetallic compositions. <i>Journal of Catalysis</i> , 2016 , 344, 389-400	7.3	10
281	Condensation and esterification reactions of alkanals, alkanones, and alkanols on TiO ₂ : Elementary steps, site requirements, and synergistic effects of bifunctional strategies. <i>Journal of Catalysis</i> , 2016 , 340, 302-320	7.3	70
280	Effects of Chain Length on the Mechanism and Rates of Metal-Catalyzed Hydrogenolysis of n-Alkanes. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 8125-8138	3.8	30
279	Dynamics and Thermodynamics of PdPdO Phase Transitions: Effects of Pd Cluster Size and Kinetic Implications for Catalytic Methane Combustion. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 1446-1460	3.8	83
278	Preferential activation of CO near hydrocarbon chains during Fischer-Tropsch synthesis on Ru. <i>Journal of Catalysis</i> , 2016 , 337, 91-101	7.3	46
277	Kinetic and Theoretical Insights into the Mechanism of Alkanol Dehydration on Solid Brønsted Acid Catalysts. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 3371-3389	3.8	33
276	Role of Branching on the Rate and Mechanism of C-C Cleavage in Alkanes on Metal Surfaces. <i>ACS Catalysis</i> , 2016 , 6, 469-482	13.1	28
275	Challenges and strategies in the encapsulation and stabilization of monodisperse Au clusters within zeolites. <i>Journal of Catalysis</i> , 2016 , 339, 195-208	7.3	77
274	Acid strength and metal-acid proximity effects on methylcyclohexane ring contraction turnover rates and selectivities. <i>Journal of Catalysis</i> , 2016 , 344, 817-830	7.3	20

273	Mechanism of Isobutanal/Isobutene Prins Condensation Reactions on Solid Brønsted Acids. <i>ACS Catalysis</i> , 2016 , 6, 7664-7684	13.1	17
272	Effects of Void Environment and Acid Strength on Alkene Oligomerization Selectivity. <i>ACS Catalysis</i> , 2016 , 6, 7059-7070	13.1	77
271	Synthesis of Zeolites via Interzeolite Transformations without Organic Structure-Directing Agents. <i>Chemistry of Materials</i> , 2015 , 27, 2056-2066	9.6	117
270	Prevalence of Bimolecular Routes in the Activation of Diatomic Molecules with Strong Chemical Bonds (O ₂ , NO, CO, N ₂) on Catalytic Surfaces. <i>Accounts of Chemical Research</i> , 2015 , 48, 1254-62	24.3	41
269	Kinetic and Mechanistic Assessment of Alkanol/Alkanal Decarbonylation and Deoxygenation Pathways on Metal Catalysts. <i>Journal of the American Chemical Society</i> , 2015 , 137, 11984-95	16.4	49
268	The Strength of Brønsted Acid Sites in Microporous Aluminosilicates. <i>ACS Catalysis</i> , 2015 , 5, 5741-5755	13.1	158
267	Mechanistic Details and Reactivity Descriptors in Oxidation and Acid Catalysis of Methanol. <i>ACS Catalysis</i> , 2015 , 5, 666-682	13.1	39
266	Catalytic Ring Opening of Cycloalkanes on Ir Clusters: Alkyl Substitution Effects on the Structure and Stability of C-C Bond Cleavage Transition States. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 2597-2613	3.8	29
265	Hydrothermal synthesis of LTA-encapsulated metal clusters and consequences for catalyst stability, reactivity, and selectivity. <i>Journal of Catalysis</i> , 2014 , 311, 458-468	7.3	99
264	Theoretical and kinetic assessment of the mechanism of ethane hydrogenolysis on metal surfaces saturated with chemisorbed hydrogen. <i>Journal of Catalysis</i> , 2014 , 311, 350-356	7.3	41
263	Methanol Oxidative Dehydrogenation on Oxide Catalysts: Molecular and Dissociative Routes and Hydrogen Addition Energies as Descriptors of Reactivity. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 26115-26129	3.8	33
262	Kinetic, spectroscopic, and theoretical assessment of associative and dissociative methanol dehydration routes in zeolites. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 12177-81	16.4	99
261	Ionic and covalent stabilization of intermediates and transition states in catalysis by solid acids. <i>Journal of the American Chemical Society</i> , 2014 , 136, 15229-47	16.4	39
260	Mechanistic Evidence for Sequential Displacement-Reduction Routes in the Synthesis of Pd/Au Clusters with Uniform Size and Clean Surfaces. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 7468-7479	3.8	36
259	Mechanistic interpretation of the effects of acid strength on alkane isomerization turnover rates and selectivity. <i>Journal of Catalysis</i> , 2014 , 319, 283-296	7.3	49
258	Encapsulation of metal clusters within MFI via interzeolite transformations and direct hydrothermal syntheses and catalytic consequences of their confinement. <i>Journal of the American Chemical Society</i> , 2014 , 136, 15280-90	16.4	158
257	Metal-catalyzed C-C bond cleavage in alkanes: effects of methyl substitution on transition-state structures and stability. <i>Journal of the American Chemical Society</i> , 2014 , 136, 9664-76	16.4	58
256	Implications of Transition State Confinement within Small Voids for Acid Catalysis. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 17787-17800	3.8	93

255	Catalytic NO activation and NO ₂ reaction pathways. <i>Journal of Catalysis</i> , 2014 , 319, 95-109	7.3	25
254	Acid strength and solvation in catalysis by MFI zeolites and effects of the identity, concentration and location of framework heteroatoms. <i>Journal of Catalysis</i> , 2014 , 312, 58-68	7.3	171
253	Kinetic, Spectroscopic, and Theoretical Assessment of Associative and Dissociative Methanol Dehydration Routes in Zeolites. <i>Angewandte Chemie</i> , 2014 , 126, 12373-12377	3.6	13
252	Transition-state enthalpy and entropy effects on reactivity and selectivity in hydrogenolysis of n-alkanes. <i>Journal of the American Chemical Society</i> , 2013 , 135, 18586-99	16.4	75
251	Catalysis by Confinement: Enthalpic Stabilization of NO Oxidation Transition States by Microporous and Mesoporous Siliceous Materials. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 20666-20674	3.8	32
250	Characterization and comparison of pore landscapes in crystalline porous materials. <i>Journal of Molecular Graphics and Modelling</i> , 2013 , 44, 208-19	2.8	80
249	From rays to structures: Representation and selection of void structures in zeolites using stochastic methods. <i>Microporous and Mesoporous Materials</i> , 2013 , 181, 208-216	5.3	10
248	The catalytic diversity of zeolites: confinement and solvation effects within voids of molecular dimensions. <i>Chemical Communications</i> , 2013 , 49, 3491-509	5.8	183
247	Structure sensitivity via decoration of low-coordination exposed metal atoms: CO oxidation catalysis on Pt clusters. <i>Journal of Catalysis</i> , 2013 , 301, 198-209	7.3	34
246	CO chemisorption and dissociation at high coverages during CO hydrogenation on Ru catalysts. <i>Journal of the American Chemical Society</i> , 2013 , 135, 6107-21	16.4	169
245	Consequences of metal-oxide interconversion for C-H bond activation during CH ₄ reactions on Pd catalysts. <i>Journal of the American Chemical Society</i> , 2013 , 135, 15425-42	16.4	199
244	Mechanistic Role of Water on the Rate and Selectivity of Fischer-Tropsch Synthesis on Ruthenium Catalysts. <i>Angewandte Chemie</i> , 2013 , 125, 12499-12504	3.6	12
243	Mechanistic role of water on the rate and selectivity of Fischer-Tropsch synthesis on ruthenium catalysts. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 12273-8	16.4	118
242	Acid strength and solvation effects on methylation, hydride transfer, and isomerization rates during catalytic homologation of C ₁ species. <i>Journal of Catalysis</i> , 2012 , 285, 19-30	7.3	49
241	Mechanistic interpretation of CO oxidation turnover rates on supported Au clusters. <i>Journal of Catalysis</i> , 2012 , 285, 92-102	7.3	93
240	Catalytic reactions of dioxygen with ethane and methane on platinum clusters: Mechanistic connections, site requirements, and consequences of chemisorbed oxygen. <i>Journal of Catalysis</i> , 2012 , 285, 260-272	7.3	57
239	Solvation and acid strength effects on catalysis by faujasite zeolites. <i>Journal of Catalysis</i> , 2012 , 286, 214-223	7.3	111
238	Synthesis and catalytic properties of metal clusters encapsulated within small-pore (SOD, GIS, ANA) zeolites. <i>Journal of the American Chemical Society</i> , 2012 , 134, 17688-95	16.4	189

237	The roles of entropy and enthalpy in stabilizing ion-pairs at transition states in zeolite acid catalysis. <i>Accounts of Chemical Research</i> , 2012 , 45, 229-38	24.3	156
236	Selective homogeneous and heterogeneous catalytic conversion of methanol/dimethyl ether to triptane. <i>Accounts of Chemical Research</i> , 2012 , 45, 653-62	24.3	30
235	Catalytic NO Oxidation Pathways and Redox Cycles on Dispersed Oxides of Rhodium and Cobalt. <i>ChemCatChem</i> , 2012 , 4, 1397-1404	5.2	27
234	NO _x Interactions with Dispersed BaO: Adsorption Kinetics, Chemisorbed Species, and Effects of Oxidation Catalyst Sites. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 6561-6570	3.8	21
233	Elementary Steps, the Role of Chemisorbed Oxygen, and the Effects of Cluster Size in Catalytic CH ₄ /O ₂ Reactions on Palladium. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 17845-17855	3.8	80
232	Silica-supported aminoxyls as reactive materials for NO _x removal. <i>Journal of Materials Chemistry</i> , 2011 , 21, 982-990		10
231	Catalytic hydrogenation of alkenes on acidic zeolites: Mechanistic connections to monomolecular alkane dehydrogenation reactions. <i>Journal of Catalysis</i> , 2011 , 277, 36-45	7.3	52
230	Mechanistic details of acid-catalyzed reactions and their role in the selective synthesis of triptane and isobutane from dimethyl ether. <i>Journal of Catalysis</i> , 2011 , 277, 173-195	7.3	71
229	Catalytic consequences of acid strength in the conversion of methanol to dimethyl ether. <i>Journal of Catalysis</i> , 2011 , 278, 78-93	7.3	153
228	Selectivity of chemisorbed oxygen in C-H bond activation and CO oxidation and kinetic consequences for CH ₄ /O ₂ catalysis on Pt and Rh clusters. <i>Journal of Catalysis</i> , 2011 , 283, 10-24	7.3	73
227	Reactivity of chemisorbed oxygen atoms and their catalytic consequences during CH ₄ -O ₂ catalysis on supported Pt clusters. <i>Journal of the American Chemical Society</i> , 2011 , 133, 15958-78	16.4	148
226	Catalytic Co-Homologation of Alkanes and Dimethyl Ether and Promotion by Adamantane as a Hydride Transfer Co-Catalyst. <i>ChemCatChem</i> , 2011 , 3, 704-718	5.2	23
225	Mechanism and Site Requirements of Thiophene Hydrodesulfurization Catalyzed by Supported Pt Clusters. <i>ChemCatChem</i> , 2011 , 3, 1166-1175	5.2	33
224	Catalytic Alkylation Routes via Carbonium-Ion-Like Transition States on Acidic Zeolites. <i>ChemCatChem</i> , 2011 , 3, 1134-1138	5.2	8
223	Formation of C-C and C-O bonds and oxygen removal in reactions of alkanediols, alkanols, and alkanals on copper catalysts. <i>Journal of the American Chemical Society</i> , 2011 , 133, 20384-98	16.4	42
222	Chemisorption of CO and mechanism of CO oxidation on supported platinum nanoclusters. <i>Journal of the American Chemical Society</i> , 2011 , 133, 4498-517	16.4	346
221	Kinetically Relevant Steps and H ₂ /D ₂ Isotope Effects in Fischer-Tropsch Synthesis on Fe and Co Catalysts. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 19761-19770	3.8	97
220	Mercaptosilane-assisted synthesis of metal clusters within zeolites and catalytic consequences of encapsulation. <i>Journal of the American Chemical Society</i> , 2010 , 132, 9129-37	16.4	234

219	Mechanism and site requirements for NO oxidation on Pd catalysts. <i>Journal of Catalysis</i> , 2010 , 272, 74-81	7.3	62
218	CO activation pathways and the mechanism of Fischer-Tropsch synthesis. <i>Journal of Catalysis</i> , 2010 , 272, 287-297	7.3	414
217	Thiophene hydrodesulfurization catalysis on supported Ru clusters: Mechanism and site requirements for hydrogenation and desulfurization pathways. <i>Journal of Catalysis</i> , 2010 , 273, 245-256	7.3	64
216	Catalytic activation and reforming of methane on supported palladium clusters. <i>Journal of Catalysis</i> , 2010 , 274, 52-63	7.3	99
215	Homogeneous oxidation reactions of propanediols at low temperatures. <i>ChemSusChem</i> , 2010 , 3, 1063-78	7.3	30
214	Effects of Partial Confinement on the Specificity of Monomolecular Alkane Reactions for Acid Sites in Side Pockets of Mordenite. <i>Angewandte Chemie</i> , 2010 , 122, 820-823	3.6	16
213	Effects of partial confinement on the specificity of monomolecular alkane reactions for acid sites in side pockets of mordenite. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 808-11	16.4	85
212	Functional assessment of the strength of solid acid catalysts. <i>Journal of Catalysis</i> , 2009 , 264, 54-66	7.3	77
211	Formic Acid Dehydrogenation on Au-Based Catalysts at Near-Ambient Temperatures. <i>Angewandte Chemie</i> , 2009 , 121, 4894-4897	3.6	76
210	Selective Homologation Routes to 2,2,3-Trimethylbutane on Solid Acids. <i>Angewandte Chemie</i> , 2009 , 121, 3872-3874	3.6	12
209	Formic acid dehydrogenation on au-based catalysts at near-ambient temperatures. <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 4800-3	16.4	265
208	Selective homologation routes to 2,2,3-trimethylbutane on solid acids. <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 3814-6	16.4	52
207	Copper deposition onto silicon by galvanic displacement: Effect of Cu complex formation in NH ₄ F solutions. <i>Electrochimica Acta</i> , 2009 , 54, 3270-3277	6.7	9
206	Role of C-H Bond Strength in the Rate and Selectivity of Oxidative Dehydrogenation of Alkanes. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 12380-12386	3.8	32
205	NO Oxidation Catalysis on Pt Clusters: Elementary Steps, Structural Requirements, and Synergistic Effects of NO ₂ Adsorption Sites. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 13331-13340	3.8	76
204	Catalytic consequences of spatial constraints and acid site location for monomolecular alkane activation on zeolites. <i>Journal of the American Chemical Society</i> , 2009 , 131, 1958-71	16.4	232
203	Mechanistic Aspects and Reaction Pathways for Oxidative Coupling of Methane on Mn/Na ₂ WO ₄ /SiO ₂ Catalysts. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 10131-10145	3.8	108
202	Consequences of acid strength for isomerization and elimination catalysis on solid acids. <i>Journal of the American Chemical Society</i> , 2009 , 131, 6554-65	16.4	115

201	Catalytic epoxidation of propene with H ₂ O-O ₂ reactants on Au/TiO ₂ . <i>Chemical Communications</i> , 2009 , 352-4	5.8	67
200	Correlating Acid Properties and Catalytic Function: A First-Principles Analysis of Alcohol Dehydration Pathways on Polyoxometalates. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 1872-1885	3.8	98
199	Mechanism and Site Requirements for Ethanol Oxidation on Vanadium Oxide Domains. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 2830-2836	3.8	94
198	Entropy considerations in monomolecular cracking of alkanes on acidic zeolites. <i>Journal of Catalysis</i> , 2008 , 253, 221-224	7.3	96
197	Catalytic dehydroisomerization of n-alkanes to isoalkenes. <i>Journal of Catalysis</i> , 2008 , 255, 134-137	7.3	16
196	Mechanistic consequences of composition in acid catalysis by polyoxometalate keggin clusters. <i>Journal of the American Chemical Society</i> , 2008 , 130, 10369-79	16.4	121
195	Pt/[Fe]ZSM-5 modified by Na and Cs cations: an active and selective catalyst for dehydrogenation of n-alkanes to n-alkenes. <i>Chemical Communications</i> , 2008 , 594-6	5.8	17
194	Structure and function of oxide nanostructures: catalytic consequences of size and composition. <i>Physical Chemistry Chemical Physics</i> , 2008 , 10, 5331-43	3.6	42
193	Isotopic and Kinetic Assessment of the Mechanism of CH ₃ OH/H ₂ O Catalysis on Supported Copper Clusters. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 17235-17243	3.8	19
192	Kinetics and Mechanism of Ethane Oxidation to Acetic Acid on Catalysts Based on Mo/V/Nb Oxides. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 15001-15008	3.8	17
191	Copper Deposition onto Silicon by Galvanic Displacement: Effect of Silicon Dissolution Rate. <i>Journal of the Electrochemical Society</i> , 2008 , 155, E70	3.9	29
190	Dynamics of Copper Deposition onto Silicon by Galvanic Displacement. <i>Journal of the Electrochemical Society</i> , 2008 , 155, D244	3.9	13
189	Rate and selectivity enhancements mediated by OH radicals in the oxidative coupling of methane catalyzed by Mn/Na ₂ WO ₄ /SiO ₂ . <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 7689-93	16.4	74
188	Rate and Selectivity Enhancements Mediated by OH Radicals in the Oxidative Coupling of Methane Catalyzed by Mn/Na ₂ WO ₄ /SiO ₂ . <i>Angewandte Chemie</i> , 2008 , 120, 7803-7807	3.6	20
187	Support and promoter effects in the selective oxidation of ethane to acetic acid catalyzed by Mo-V-Nb oxides. <i>Applied Catalysis A: General</i> , 2008 , 334, 339-347	5.1	43
186	A link between reactivity and local structure in acid catalysis on zeolites. <i>Accounts of Chemical Research</i> , 2008 , 41, 559-67	24.3	210
185	Bifunctional pathways mediated by Pt clusters and Al ₂ O ₃ in the catalytic combustion of dimethyl ether. <i>Chemical Communications</i> , 2007 , 2992-3	5.8	10
184	Catalytic oxidation of methanol on Pd metal and oxide clusters at near-ambient temperatures. <i>Physical Chemistry Chemical Physics</i> , 2007 , 9, 4902-6	3.6	54

183	Structural assessment and catalytic consequences of the oxygen coordination environment in grafted Ti-calixarenes. <i>Journal of the American Chemical Society</i> , 2007 , 129, 1122-31	16.4	60
182	Reactant Selectivity and Regiospecificity in the Catalytic Oxidation of Alkanes on Metal-Substituted Aluminophosphates. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 1402-1411	3.8	41
181	Structure of Zirconium-Exchanged H-ZSM5 Prepared by Vapor Exchange of ZrCl ₄ . <i>Chemistry of Materials</i> , 2007 , 19, 1877-1882	9.6	8
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