

Enrique Iglesia

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#	Paper	IF	Citations
326	Design, synthesis, and use of cobalt-based Fischer-Tropsch synthesis catalysts. <i>Applied Catalysis A: General</i> , 1997 , 161, 59-78	5.1	1179
325	Structure and Surface and Catalytic Properties of Mg-Al Basic Oxides. <i>Journal of Catalysis</i> , 1998 , 178, 499-510	7.3	879
324	Isotopic and kinetic assessment of the mechanism of reactions of CH ₄ with CO ₂ or H ₂ O to form synthesis gas and carbon on nickel catalysts. <i>Journal of Catalysis</i> , 2004 , 224, 370-383	7.3	669
323	Structure and Electronic Properties of Solid Acids Based on Tungsten Oxide Nanostructures. <i>Journal of Physical Chemistry B</i> , 1999 , 103, 630-640	3.4	542
322	Structure and Catalytic Properties of Supported Vanadium Oxides: Support Effects on Oxidative Dehydrogenation Reactions. <i>Journal of Catalysis</i> , 1999 , 181, 205-216	7.3	491
321	Fischer-Tropsch synthesis on cobalt and ruthenium. Metal dispersion and support effects on reaction rate and selectivity. <i>Journal of Catalysis</i> , 1992 , 137, 212-224	7.3	452
320	CO activation pathways and the mechanism of Fischer-Tropsch synthesis. <i>Journal of Catalysis</i> , 2010 , 272, 287-297	7.3	414
319	Structure and Reactivity of PdO _x /ZrO ₂ Catalysts for Methane Oxidation at Low Temperatures. <i>Journal of Catalysis</i> , 1998 , 179, 431-442	7.3	385
318	Structural and Catalytic Characterization of Solid Acids Based on Zirconia Modified by Tungsten Oxide. <i>Journal of Catalysis</i> , 1999 , 181, 57-72	7.3	360
317	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
316	Bimetallic Synergy in Cobalt Ruthenium Fischer-Tropsch Synthesis Catalysts. <i>Journal of Catalysis</i> , 1993 , 143, 345-368	7.3	336
315	Mechanism and Site Requirements for Activation and Chemical Conversion of Methane on Supported Pt Clusters and Turnover Rate Comparisons among Noble Metals. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 4094-4103	3.4	321
314	Structural requirements and reaction pathways in methane activation and chemical conversion catalyzed by rhodium. <i>Journal of Catalysis</i> , 2004 , 225, 116-127	7.3	316
313	Structure and Density of Active Zn Species in Zn/H-ZSM5 Propane Aromatization Catalysts. <i>Journal of Catalysis</i> , 1998 , 179, 192-202	7.3	303
312	Promoted Iron-Based Catalysts for the Fischer-Tropsch Synthesis: Design, Synthesis, Site Densities, and Catalytic Properties. <i>Journal of Catalysis</i> , 2002 , 206, 202-217	7.3	297
311	Transport-enhanced α -olefin readsorption pathways in Ru-catalyzed hydrocarbon synthesis. <i>Journal of Catalysis</i> , 1991 , 129, 238-256	7.3	274
310	Selective carbonylation of dimethyl ether to methyl acetate catalyzed by acidic zeolites. <i>Angewandte Chemie - International Edition</i> , 2006 , 45, 1617-20	16.4	273

309	Isomerization of Alkanes on Sulfated Zirconia: Promotion by Pt and by Adamantyl Hydride Transfer Species. <i>Journal of Catalysis</i> , 1993 , 144, 238-253	7.3	266
308	Formic acid dehydrogenation on au-based catalysts at near-ambient temperatures. <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 4800-3	16.4	265
307	Structure and Density of Mo and Acid Sites in Mo-Exchanged H-ZSM5 Catalysts for Nonoxidative Methane Conversion. <i>Journal of Physical Chemistry B</i> , 1999 , 103, 5787-5796	3.4	254
306	Effect of Catalyst Structure on Oxidative Dehydrogenation of Ethane and Propane on Alumina-Supported Vanadia. <i>Journal of Catalysis</i> , 2002 , 208, 139-149	7.3	253
305	Isotopic Tracer and Kinetic Studies of Oxidative Dehydrogenation Pathways on Vanadium Oxide Catalysts. <i>Journal of Catalysis</i> , 1999 , 186, 325-333	7.3	252
304	Specificity of sites within eight-membered ring zeolite channels for carbonylation of methyls to acetyls. <i>Journal of the American Chemical Society</i> , 2007 , 129, 4919-24	16.4	241
303	Kinetics and Mechanism of Oxidative Dehydrogenation of Propane on Vanadium, Molybdenum, and Tungsten Oxides. <i>Journal of Physical Chemistry B</i> , 2000 , 104, 1292-1299	3.4	236
302	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
301	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
300	Structure and Properties of Oxidative Dehydrogenation Catalysts Based on MoO ₃ /Al ₂ O ₃ . <i>Journal of Catalysis</i> , 2001 , 198, 232-242	7.3	231
299	Structure and properties of vanadium oxide-zirconia catalysts for propane oxidative dehydrogenation. <i>Journal of Catalysis</i> , 1998 , 177, 343-351	7.3	226
298	Selectivity Control and Catalyst Design in the Fischer-Tropsch Synthesis: Sites, Pellets, and Reactors. <i>Advances in Catalysis</i> , 1993 , 39, 221-302	2.4	225
297	Effects of Zn, Cu, and K Promoters on the Structure and on the Reduction, Carburization, and Catalytic Behavior of Iron-Based Fischer-Tropsch Synthesis Catalysts. <i>Catalysis Letters</i> , 2001 , 77, 197-205	2.8	223
296	The Relationship between the Electronic and Redox Properties of Dispersed Metal Oxides and Their Turnover Rates in Oxidative Dehydrogenation Reactions. <i>Journal of Catalysis</i> , 2002 , 209, 35-42	7.3	216
295	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
294	Genesis of Brønsted Acid Sites during Dehydration of 2-Butanol on Tungsten Oxide Catalysts. <i>Journal of Catalysis</i> , 2002 , 205, 44-57	7.3	206
293	Structure and function of metal cations in light alkane reactions catalyzed by modified H-ZSM5. <i>Catalysis Today</i> , 1996 , 31, 207-231	5.3	206
292	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

291	Methane Conversion to Aromatics on Mo/H-ZSM5: Structure of Molybdenum Species in Working Catalysts. <i>Journal of Physical Chemistry B</i> , 2001 , 105, 506-513	3.4	199
290	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
289	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
288	Solid acid catalysts based on supported tungsten oxides. <i>Topics in Catalysis</i> , 1998 , 6, 87-99	2.3	177
287	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
286	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
285	The effects of diffusion mechanism and void structure on transport rates and tortuosity factors in complex porous structures. <i>Chemical Engineering Science</i> , 2004 , 59, 2947-2960	4.4	167
284	Selective oxidation of methanol and ethanol on supported ruthenium oxide clusters at low temperatures. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 2155-63	3.4	162
283	The Effects of Silanation of External Acid Sites on the Structure and Catalytic Behavior of Mo/H-ZSM5. <i>Journal of Catalysis</i> , 2002 , 206, 14-22	7.3	159
282	The Strength of Brønsted Acid Sites in Microporous Aluminosilicates. <i>ACS Catalysis</i> , 2015 , 5, 5741-5755	13.1	158
281	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
280	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
279	Selective isomerization of alkanes on supported tungsten oxide acids. <i>Studies in Surface Science and Catalysis</i> , 1996 , 101, 533-542	1.8	155
278	Reaction Pathways and Rate-Determining Steps in Reactions of Alkanes on H-ZSM5 and Zn/H-ZSM5 Catalysts. <i>Journal of Catalysis</i> , 1999 , 182, 117-128	7.3	154
277	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
276	Effects of Support Composition and Pretreatment Conditions on the Structure of Vanadia Dispersed on SiO ₂ , Al ₂ O ₃ , TiO ₂ , ZrO ₂ , and HfO ₂ . <i>Journal of Physical Chemistry B</i> , 2000 , 104, 1516-1528	3.4	150
275	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
274	Raman and X-Ray Absorption Studies of Mo Species in Mo/H-ZSM5 Catalysts for Non-Oxidative CH ₄ Reactions. <i>Journal of Catalysis</i> , 2000 , 191, 373-383	7.3	148

273	Reaction Pathways and Site Requirements for the Activation and Chemical Conversion of Methane on Ru-Based Catalysts. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 7253-7262	3-4	144
272	Reactions of neopentane, methylcyclohexane, and 3,3-dimethylpentane on tungsten carbides: The effect of surface oxygen on reaction pathways. <i>Journal of Catalysis</i> , 1991 , 130, 86-105	7-3	143
271	Support effects on Brønsted acid site densities and alcohol dehydration turnover rates on tungsten oxide domains. <i>Journal of Catalysis</i> , 2004 , 227, 479-491	7-3	141
270	Kinetic coupling and hydrogen surface fugacities in heterogeneous catalysis: I. Alkane reactions on Te/NaX, H-ZSM5, and Ga/H-ZSM5. <i>Journal of Catalysis</i> , 1992 , 134, 549-571	7-3	135
269	Bifunctional reactions of alkanes on tungsten carbides modified by chemisorbed oxygen. <i>Journal of Catalysis</i> , 1991 , 131, 523-544	7-3	134
268	An Investigation of the Effects of Water on Rate and Selectivity for the Fischer-Tropsch Synthesis on Cobalt-Based Catalysts. <i>Journal of Catalysis</i> , 2002 , 211, 422-433	7-3	132
267	Structure and Properties of Zirconia-Supported Molybdenum Oxide Catalysts for Oxidative Dehydrogenation of Propane. <i>Journal of Catalysis</i> , 2000 , 189, 421-430	7-3	132
266	Kinetic Isotopic Effects in Oxidative Dehydrogenation of Propane on Vanadium Oxide Catalysts. <i>Journal of Catalysis</i> , 2000 , 192, 197-203	7-3	131
265	Structure and Site Evolution of Iron Oxide Catalyst Precursors during the Fischer-Tropsch Synthesis. <i>Journal of Physical Chemistry B</i> , 2001 , 105, 5743-5750	3-4	127
264	Control of Metal Dispersion and Structure by Changes in the Solid-State Chemistry of Supported Cobalt Fischer-Tropsch Catalysts. <i>Topics in Catalysis</i> , 2003 , 26, 101-109	2-3	126
263	Isotopic and Chemical Titration of Acid Sites in Tungsten Oxide Domains Supported on Zirconia. <i>Journal of Physical Chemistry B</i> , 2001 , 105, 1320-1330	3-4	126
262	Selective One-Step Synthesis of Dimethoxymethane via Methanol or Dimethyl Ether Oxidation on H ₃ +nVnMo ₁₂ -nPO ₄ Keggin Structures. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 10840-10847	3-4	125
261	Genesis of methane activation sites in Mo-exchanged H-ZSM-5 catalysts. <i>Microporous and Mesoporous Materials</i> , 2000 , 35-36, 495-509	5-3	124
260	Bifunctional Condensation Reactions of Alcohols on Basic Oxides Modified by Copper and Potassium. <i>Journal of Catalysis</i> , 1998 , 176, 155-172	7-3	123
259	Effects of molybdena on the catalytic properties of vanadia domains supported on alumina for oxidative dehydrogenation of propane. <i>Journal of Catalysis</i> , 2004 , 221, 491-499	7-3	122
258	Mechanistic consequences of composition in acid catalysis by polyoxometalate keggins clusters. <i>Journal of the American Chemical Society</i> , 2008 , 130, 10369-79	16.4	121
257	Primary and secondary reaction pathways in ruthenium-catalyzed hydrocarbon synthesis. <i>The Journal of Physical Chemistry</i> , 1991 , 95, 7795-7804		120
256	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

255	Synthesis of Zeolites via Interzeolite Transformations without Organic Structure-Directing Agents. <i>Chemistry of Materials</i> , 2015 , 27, 2056-2066	9.6	117
254	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
253	Synthesis, characterization, and catalytic function of novel highly dispersed tungsten oxide catalysts on mesoporous silica. <i>Journal of Catalysis</i> , 2006 , 239, 200-211	7.3	115
252	Spectroscopic and chemical characterization of active and inactive Cu species in NO decomposition catalysts based on Cu-ZSM5. <i>Physical Chemistry Chemical Physics</i> , 2002 , 4, 4590-4601	3.6	115
251	Solvation and acid strength effects on catalysis by faujasite zeolites. <i>Journal of Catalysis</i> , 2012 , 286, 214-233	7.3	111
250	Synthesis and hydrogen permeation properties of membranes based on dense SrCe _{0.95} Yb _{0.05} O _{3-δ} thin films. <i>Solid State Ionics</i> , 2002 , 148, 71-81	3.3	111
249	Synthesis, characterization, and catalytic properties of clean and oxygen-modified tungsten carbides. <i>Catalysis Today</i> , 1992 , 15, 307-337	5.3	110
248	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
247	Structural Characterization of Molybdenum Oxide Supported on Zirconia. <i>Journal of Physical Chemistry B</i> , 2000 , 104, 10059-10068	3.4	103
246	Ethane Oxidative Dehydrogenation Pathways on Vanadium Oxide Catalysts. <i>Journal of Physical Chemistry B</i> , 2002 , 106, 5421-5427	3.4	100
245	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
244	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
243	Catalytic activation and reforming of methane on supported palladium clusters. <i>Journal of Catalysis</i> , 2010 , 274, 52-63	7.3	99
242	Spectroscopic and Transient Kinetic Studies of Site Requirements in Iron-Catalyzed Fischer-Tropsch Synthesis. <i>Journal of Physical Chemistry B</i> , 2002 , 106, 85-91	3.4	99
241	Effects of Temperature on the Raman Spectra and Dispersed Oxides. <i>Journal of Physical Chemistry B</i> , 2001 , 105, 5144-5152	3.4	99
240	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
239	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
238	Entropy considerations in monomolecular cracking of alkanes on acidic zeolites. <i>Journal of Catalysis</i> , 2008 , 253, 221-224	7.3	96

237	Water-Assisted Tetragonal-to-Monoclinic Phase Transformation of ZrO ₂ at Low Temperatures. <i>Chemistry of Materials</i> , 2000 , 12, 2442-2447	9.6	95
236	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
235	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
234	Mechanistic interpretation of CO oxidation turnover rates on supported Au clusters. <i>Journal of Catalysis</i> , 2012 , 285, 92-102	7.3	93
233	Catalytic consequences of composition in polyoxometalate clusters with Keggin structure. <i>Angewandte Chemie - International Edition</i> , 2007 , 46, 7864-8	16.4	91
232	Pathways for CO ₂ Formation and Conversion During Fischer-Tropsch Synthesis on Iron-Based Catalysts. <i>Catalysis Letters</i> , 2002 , 80, 77-86	2.8	89
231	Synthesis of higher alcohols on copper catalysts supported on alkali-promoted basic oxides. <i>Applied Catalysis A: General</i> , 1998 , 169, 355-372	5.1	88
230	Kinetics and Mechanism of Steady-State Catalytic NO Decomposition Reactions on Cu-ZSM5. <i>Journal of Catalysis</i> , 2002 , 209, 75-86	7.3	88
229	Catalytic reaction rates in thermodynamically non-ideal systems. <i>Journal of Molecular Catalysis A</i> , 2000 , 163, 189-204		87
228	Effects of Hydration and Dehydration on the Structure of Silica-Supported Vanadia Species. <i>Langmuir</i> , 2000 , 16, 7162-7167	4	87
227	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
226	Structural and mechanistic requirements for methane activation and chemical conversion on supported iridium clusters. <i>Angewandte Chemie - International Edition</i> , 2004 , 43, 3685-8	16.4	85
225	Grafted metallocalixarenes as single-site surface organometallic catalysts. <i>Journal of the American Chemical Society</i> , 2004 , 126, 16478-86	16.4	85
224	Structural analysis of unpromoted Fe-based Fischer-Tropsch catalysts using X-ray absorption spectroscopy. <i>Applied Catalysis A: General</i> , 2001 , 219, 215-222	5.1	84
223	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
222	Alkali Effects on Molybdenum Oxide Catalysts for the Oxidative Dehydrogenation of Propane. <i>Journal of Catalysis</i> , 2000 , 195, 244-252	7.3	82
221	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
220	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

219	Kinetics and mechanism of cyclohexane oxidation on MnAPO-5 catalysts?. <i>Journal of Catalysis</i> , 2006 , 239, 390-401	7.3	80
218	Structure and Properties of Cobalt-Exchanged H-ZSM5 Catalysts for Dehydrogenation and Dehydrocyclization of Alkanes. <i>Journal of Physical Chemistry B</i> , 2001 , 105, 1176-1184	3.4	80
217	Oxidative dehydrogenation of propane over V ₂ O ₅ /MoO ₃ /Al ₂ O ₃ and V ₂ O ₅ /Cr ₂ O ₃ /Al ₂ O ₃ : structural characterization and catalytic function. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 8987-9000	3.4	79
216	Design and optimization of catalysts and membrane reactors for the non-oxidative conversion of methane. <i>Chemical Engineering Science</i> , 2002 , 57, 4595-4604	4.4	79
215	An Investigation of the Effects of Water on Rate and Selectivity for the Fischer-Tropsch Synthesis on Cobalt-Based Catalysts. <i>Journal of Catalysis</i> , 2002 , 211, 422-433	7.3	79
214	Oxidation of CO in H ₂ O mixtures catalyzed by platinum: alkali effects on rates and selectivity. <i>Journal of Catalysis</i> , 2005 , 233, 242-255	7.3	79
213	Effective diffusivities in catalyst pellets: new model porous structures and transport simulation techniques. <i>Journal of Catalysis</i> , 1991 , 129, 457-472	7.3	79
212	Selective synthesis of Olefins on Fe-Zn Fischer-Tropsch catalysts. <i>Topics in Catalysis</i> , 1995 , 2, 193-205	2.3	78
211	Functional assessment of the strength of solid acid catalysts. <i>Journal of Catalysis</i> , 2009 , 264, 54-66	7.3	77
210	Isotopic and kinetic assessment of the mechanism of methane reforming and decomposition reactions on supported iridium catalysts. <i>Physical Chemistry Chemical Physics</i> , 2004 , 6, 3754	3.6	77
209	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
208	Effects of Void Environment and Acid Strength on Alkene Oligomerization Selectivity. <i>ACS Catalysis</i> , 2016 , 6, 7059-7070	13.1	77
207	Formic Acid Dehydrogenation on Au-Based Catalysts at Near-Ambient Temperatures. <i>Angewandte Chemie</i> , 2009 , 121, 4894-4897	3.6	76
206	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
205	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
204	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
203	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
202	Kinetic-transport models of bimodal reaction sequences—Homogeneous and heterogeneous pathways in oxidative coupling of methane. <i>Chemical Engineering Science</i> , 1993 , 48, 2643-2661	4.4	74

201	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
200	Extent of Reduction of Vanadium Oxides during Catalytic Oxidation of Alkanes Measured by in-Situ UV-Visible Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 2345-2353	3.4	72
199	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
198	Non-oxidative catalytic conversion of methane with continuous hydrogen removal. <i>Studies in Surface Science and Catalysis</i> , 1998 , 403-410	1.8	71
197	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
196	Isobutanol and Methanol Synthesis on Copper Catalysts Supported on Modified Magnesium Oxide. <i>Journal of Catalysis</i> , 1997 , 171, 130-147	7.3	68
195	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
194	Stability, structure, and oxidation state of Mo/H-ZSM-5 catalysts during reactions of CH ₄ and CH ₄ /O ₂ mixtures. <i>Journal of Catalysis</i> , 2005 , 230, 173-185	7.3	67
193	Isotopic Studies of Methane Oxidation Pathways on PdO Catalysts. <i>Journal of Catalysis</i> , 1999 , 188, 132-139	7.3	67
192	Vanadyl tert-Butoxy Orthosilicate, OV[OSi(OtBu) ₃] ₃ : A Model for Isolated Vanadyl Sites on Silica and a Precursor to Vanadia/Silica Xerogels. <i>Chemistry of Materials</i> , 1999 , 11, 2966-2973	9.6	67
191	Reaction and Deactivation Pathways in Xylene Isomerization on Zirconia Modified by Tungsten Oxide. <i>Journal of Catalysis</i> , 2000 , 194, 175-187	7.3	66
190	Adsorption, desorption, and conversion of thiophene on H-ZSM5. <i>Langmuir</i> , 2004 , 20, 10982-91	4	65
189	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
188	Isotopic Tracer Studies of Reaction Pathways for Propane Oxidative Dehydrogenation on Molybdenum Oxide Catalysts. <i>Journal of Physical Chemistry B</i> , 2001 , 105, 646-653	3.4	63
187	Mechanism and site requirements for NO oxidation on Pd catalysts. <i>Journal of Catalysis</i> , 2010 , 272, 74-81	7.3	62
186	Selective catalytic oxidation of organosulfur compounds with tert-butyl hydroperoxide. <i>Chemistry - A European Journal</i> , 2006 , 12, 1960-7	4.8	62
185	Photoluminescence and Charge-Transfer Complexes of Calixarenes Grafted on TiO ₂ Nanoparticles. <i>Chemistry of Materials</i> , 2007 , 19, 4998-5005	9.6	62
184	RuO ₂ clusters within LTA zeolite cages: consequences of encapsulation on catalytic reactivity and selectivity. <i>Angewandte Chemie - International Edition</i> , 2007 , 46, 3697-700	16.4	61

183	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
182	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
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