

George W Huber

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225
papers

35,410
citations

78
h-index

187
g-index

255
ext. papers

39,116
ext. citations

11.7
avg, IF

7.74
L-index

#	Paper	IF	Citations
225	Synthesis of transportation fuels from biomass: chemistry, catalysts, and engineering. <i>Chemical Reviews</i> , 2006 , 106, 4044-98	68.1	5998
224	Liquid-phase catalytic processing of biomass-derived oxygenated hydrocarbons to fuels and chemicals. <i>Angewandte Chemie - International Edition</i> , 2007 , 46, 7164-83	16.4	1944
223	Catalytic Transformation of Lignin for the Production of Chemicals and Fuels. <i>Chemical Reviews</i> , 2015 , 115, 11559-624	68.1	1600
222	Production of liquid alkanes by aqueous-phase processing of biomass-derived carbohydrates. <i>Science</i> , 2005 , 308, 1446-50	33.3	1353
221	Synergies between bio- and oil refineries for the production of fuels from biomass. <i>Angewandte Chemie - International Edition</i> , 2007 , 46, 7184-201	16.4	1103
220	Renewable chemical commodity feedstocks from integrated catalytic processing of pyrolysis oils. <i>Science</i> , 2010 , 330, 1222-7	33.3	867
219	Raney Ni-Sn catalyst for H ₂ production from biomass-derived hydrocarbons. <i>Science</i> , 2003 , 300, 2075-7	33.3	791
218	Investigation into the shape selectivity of zeolite catalysts for biomass conversion. <i>Journal of Catalysis</i> , 2011 , 279, 257-268	7.3	776
217	A review of catalytic issues and process conditions for renewable hydrogen and alkanes by aqueous-phase reforming of oxygenated hydrocarbons over supported metal catalysts. <i>Applied Catalysis B: Environmental</i> , 2005 , 56, 171-186	21.8	769
216	Aromatic Production from Catalytic Fast Pyrolysis of Biomass-Derived Feedstocks. <i>Topics in Catalysis</i> , 2009 , 52, 241-252	2.3	545
215	An overview of aqueous-phase catalytic processes for production of hydrogen and alkanes in a biorefinery. <i>Catalysis Today</i> , 2006 , 111, 119-132	5.3	545
214	Catalyst Design with Atomic Layer Deposition. <i>ACS Catalysis</i> , 2015 , 5, 1804-1825	13.1	483
213	Renewable alkanes by aqueous-phase reforming of biomass-derived oxygenates. <i>Angewandte Chemie - International Edition</i> , 2004 , 43, 1549-51	16.4	473
212	Processing biomass in conventional oil refineries: Production of high quality diesel by hydrotreating vegetable oils in heavy vacuum oil mixtures. <i>Applied Catalysis A: General</i> , 2007 , 329, 120-129	5.1	468
211	Kinetics and Mechanism of Cellulose Pyrolysis. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 20097-20107	3.8	451
210	Green gasoline by catalytic fast pyrolysis of solid biomass derived compounds. <i>ChemSusChem</i> , 2008 , 1, 397-400	8.3	449
209	Processing biomass-derived oxygenates in the oil refinery: Catalytic cracking (FCC) reaction pathways and role of catalyst. <i>Journal of Catalysis</i> , 2007 , 247, 307-327	7.3	443

208	Production of green aromatics and olefins by catalytic fast pyrolysis of wood sawdust. <i>Energy and Environmental Science</i> , 2011 , 4, 145-161	35.4	427
207	Catalytic conversion of biomass-derived feedstocks into olefins and aromatics with ZSM-5: the hydrogen to carbon effective ratio. <i>Energy and Environmental Science</i> , 2011 , 4, 2297	35.4	376
206	Biomass to chemicals: Catalytic conversion of glycerol/water mixtures into acrolein, reaction network. <i>Journal of Catalysis</i> , 2008 , 257, 163-171	7.3	374
205	Aqueous-phase reforming of ethylene glycol on silica-supported metal catalysts. <i>Applied Catalysis B: Environmental</i> , 2003 , 43, 13-26	21.8	371
204	The critical role of heterogeneous catalysis in lignocellulosic biomass conversion. <i>Energy and Environmental Science</i> , 2009 , 2, 68-80	35.4	364
203	Catalytic fast pyrolysis of glucose with HZSM-5: The combined homogeneous and heterogeneous reactions. <i>Journal of Catalysis</i> , 2010 , 270, 110-124	7.3	349
202	Design of solid acid catalysts for aqueous-phase dehydration of carbohydrates: The role of Lewis and Brønsted acid sites. <i>Journal of Catalysis</i> , 2011 , 279, 174-182	7.3	339
201	Kinetics of furfural production by dehydration of xylose in a biphasic reactor with microwave heating. <i>Green Chemistry</i> , 2010 , 12, 1423	10	311
200	Aqueous-phase reforming of oxygenated hydrocarbons over Sn-modified Ni catalysts. <i>Journal of Catalysis</i> , 2004 , 222, 180-191	7.3	309
199	Optimizing the aromatic yield and distribution from catalytic fast pyrolysis of biomass over ZSM-5. <i>Applied Catalysis A: General</i> , 2012 , 423-424, 154-161	5.1	302
198	Production of renewable jet fuel range alkanes and commodity chemicals from integrated catalytic processing of biomass. <i>Energy and Environmental Science</i> , 2014 , 7, 1500-1523	35.4	295
197	Production of levulinic acid from cellulose by hydrothermal decomposition combined with aqueous phase dehydration with a solid acid catalyst. <i>Energy and Environmental Science</i> , 2012 , 5, 7559	35.4	294
196	Aqueous-phase hydrodeoxygenation of sorbitol with Pt/SiO ₂ /Al ₂ O ₃ : Identification of reaction intermediates. <i>Journal of Catalysis</i> , 2010 , 270, 48-59	7.3	293
195	Production of jet and diesel fuel range alkanes from waste hemicellulose-derived aqueous solutions. <i>Green Chemistry</i> , 2010 , 12, 1933	10	289
194	Aqueous-phase reforming of methanol and ethylene glycol over alumina-supported platinum catalysts. <i>Journal of Catalysis</i> , 2003 , 215, 344-352	7.3	289
193	Production of renewable aromatic compounds by catalytic fast pyrolysis of lignocellulosic biomass with bifunctional Ga/ZSM-5 catalysts. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 1387-90	16.4	288
192	Catalytic oxidation of carbohydrates into organic acids and furan chemicals. <i>Chemical Society Reviews</i> , 2018 , 47, 1351-1390	58.5	287
191	Production of furfural and carboxylic acids from waste aqueous hemicellulose solutions from the pulp and paper and cellulosic ethanol industries. <i>Energy and Environmental Science</i> , 2011 , 4, 2193	35.4	271

190	Aqueous-phase reforming of ethylene glycol over supported Pt and Pd bimetallic catalysts. <i>Applied Catalysis B: Environmental</i> , 2006 , 62, 226-235	21.8	262
189	Production of targeted aromatics by using Diels-Alder classes of reactions with furans and olefins over ZSM-5. <i>Green Chemistry</i> , 2012 , 14, 3114	10	259
188	Single-reactor process for sequential aldol-condensation and hydrogenation of biomass-derived compounds in water. <i>Applied Catalysis B: Environmental</i> , 2006 , 66, 111-118	21.8	247
187	Chemistry of Furan Conversion into Aromatics and Olefins over HZSM-5: A Model Biomass Conversion Reaction. <i>ACS Catalysis</i> , 2011 , 1, 611-628	13.1	246
186	A general framework for the assessment of solar fuel technologies. <i>Energy and Environmental Science</i> , 2015 , 8, 126-157	35.4	242
185	Recent advances in hydrodeoxygenation of biomass-derived oxygenates over heterogeneous catalysts. <i>Green Chemistry</i> , 2019 , 21, 3715-3743	10	233
184	The pyrolysis chemistry of a EO-4 type oligomeric lignin model compound. <i>Green Chemistry</i> , 2013 , 15, 125-136	10	229
183	Aqueous-Phase Reforming of Ethylene Glycol Over Supported Platinum Catalysts. <i>Catalysis Letters</i> , 2003 , 88, 1-8	2.8	226
182	Production of hydrogen, alkanes and polyols by aqueous phase processing of wood-derived pyrolysis oils. <i>Green Chemistry</i> , 2009 , 11, 1433	10	206
181	Electrochemical Oxidation of 5-Hydroxymethylfurfural with NiFe Layered Double Hydroxide (LDH) Nanosheet Catalysts. <i>ACS Catalysis</i> , 2018 , 8, 5533-5541	13.1	202
180	Production of p-xylene from biomass by catalytic fast pyrolysis using ZSM-5 catalysts with reduced pore openings. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 11097-100	16.4	178
179	Catalytic fast pyrolysis of wood and alcohol mixtures in a fluidized bed reactor. <i>Green Chemistry</i> , 2012 , 14, 98-110	10	169
178	A distributed activation energy model for the pyrolysis of lignocellulosic biomass. <i>Green Chemistry</i> , 2013 , 15, 1331	10	169
177	Production of renewable petroleum refinery diesel and jet fuel feedstocks from hemicellulose sugar streams. <i>Energy and Environmental Science</i> , 2013 , 6, 205-216	35.4	165
176	Conversion of glucose into levulinic acid with solid metal(IV) phosphate catalysts. <i>Journal of Catalysis</i> , 2013 , 304, 123-134	7.3	161
175	Kinetics and reaction engineering of levulinic acid production from aqueous glucose solutions. <i>ChemSusChem</i> , 2012 , 5, 1280-90	8.3	149
174	Experimental and DFT studies of the conversion of ethanol and acetic acid on PtSn-based catalysts. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 2074-85	3.4	144
173	Depolymerization of lignocellulosic biomass to fuel precursors: maximizing carbon efficiency by combining hydrolysis with pyrolysis. <i>Energy and Environmental Science</i> , 2010 , 3, 358	35.4	142

172	Catalytic fast pyrolysis of lignocellulosic biomass in a process development unit with continual catalyst addition and removal. <i>Chemical Engineering Science</i> , 2014 , 108, 33-46	4.4	138
171	Dehydration of cellulose to levoglucosenone using polar aprotic solvents. <i>Energy and Environmental Science</i> , 2015 , 8, 1808-1815	35.4	136
170	Highly active and stable PtRuSn/C catalyst for electrooxidations of ethylene glycol and glycerol. <i>Applied Catalysis B: Environmental</i> , 2011 , 101, 366-375	21.8	134
169	Liquid phase aldol condensation reactions with MgO/ZrO ₂ and shape-selective nitrogen-substituted NaY. <i>Applied Catalysis A: General</i> , 2011 , 392, 57-68	5.1	127
168	Production of Renewable Aromatic Compounds by Catalytic Fast Pyrolysis of Lignocellulosic Biomass with Bifunctional Ga/ZSM-5 Catalysts. <i>Angewandte Chemie</i> , 2012 , 124, 1416-1419	3.6	124
167	Hydrodeoxygenation of the aqueous fraction of bio-oil with Ru/C and Pt/C catalysts. <i>Applied Catalysis B: Environmental</i> , 2015 , 165, 446-456	21.8	113
166	Aqueous-phase hydrodeoxygenation of sorbitol: A comparative study of Pt/Zr phosphate and PtReOx/C. <i>Journal of Catalysis</i> , 2013 , 304, 72-85	7.3	108
165	Mechanistic Insights from Isotopic Studies of Glucose Conversion to Aromatics Over ZSM-5. <i>ChemCatChem</i> , 2009 , 1, 107-110	5.2	106
164	Role of the Cu-ZrO ₂ Interfacial Sites for Conversion of Ethanol to Ethyl Acetate and Synthesis of Methanol from CO ₂ and H ₂ . <i>ACS Catalysis</i> , 2016 , 6, 7040-7050	13.1	106
163	Ab initio dynamics of cellulose pyrolysis: nascent decomposition pathways at 327 and 600 °C. <i>Journal of the American Chemical Society</i> , 2012 , 134, 14958-72	16.4	105
162	Renewable gasoline from aqueous phase hydrodeoxygenation of aqueous sugar solutions prepared by hydrolysis of maple wood. <i>Green Chemistry</i> , 2011 , 13, 91-101	10	105
161	Aqueous-Phase Hydrogenation of Acetic Acid over Transition Metal Catalysts. <i>ChemCatChem</i> , 2010 , 2, 1420-1424	5.2	105
160	Effect of Sn addition to Pt/CeO ₂ /Al ₂ O ₃ and Pt/Al ₂ O ₃ catalysts: An XPS, ¹¹⁹ Sn Mössbauer and microcalorimetry study. <i>Journal of Catalysis</i> , 2006 , 241, 378-388	7.3	104
159	Renewable high-octane gasoline by aqueous-phase hydrodeoxygenation of C ₁ and C ₂ carbohydrates over Pt/Zirconium phosphate catalysts. <i>ChemSusChem</i> , 2010 , 3, 1154-7	8.3	103
158	Plasmon-enhanced photoelectrochemical water splitting with size-controllable gold nanodot arrays. <i>ACS Nano</i> , 2014 , 8, 10756-65	16.7	102
157	Enhanced stability of cobalt catalysts by atomic layer deposition for aqueous-phase reactions. <i>Energy and Environmental Science</i> , 2014 , 7, 1657	35.4	99
156	Aqueous-phase hydrogenation and hydrodeoxygenation of biomass-derived oxygenates with bimetallic catalysts. <i>Green Chemistry</i> , 2014 , 16, 708	10	99
155	Renewable Alkanes by Aqueous-Phase Reforming of Biomass-Derived Oxygenates. <i>Angewandte Chemie</i> , 2004 , 116, 1575-1577	3.6	95

154	Efficient electrochemical production of glucaric acid and H ₂ via glucose electrolysis. <i>Nature Communications</i> , 2020 , 11, 265	17.4	93
153	Kinetics and reaction chemistry for slow pyrolysis of enzymatic hydrolysis lignin and organosolv extracted lignin derived from maplewood. <i>Green Chemistry</i> , 2012 , 14, 428-439	10	91
152	Production of levoglucosenone and 5-hydroxymethylfurfural from cellulose in polar aprotic solvent/water mixtures. <i>Green Chemistry</i> , 2017 , 19, 3642-3653	10	90
151	Selective Conversion of Cellulose to Hydroxymethylfurfural in Polar Aprotic Solvents. <i>ChemCatChem</i> , 2014 , 6, 2229-2234	5.2	90
150	Stabilizing cobalt catalysts for aqueous-phase reactions by strong metal-support interaction. <i>Journal of Catalysis</i> , 2015 , 330, 19-27	7.3	87
149	Universal kinetic solvent effects in acid-catalyzed reactions of biomass-derived oxygenates. <i>Energy and Environmental Science</i> , 2018 , 11, 617-628	35.4	85
148	The electrocatalytic hydrogenation of furanic compounds in a continuous electrocatalytic membrane reactor. <i>Green Chemistry</i> , 2013 , 15, 1869	10	83
147	Highly selective transformation of glycerol to dihydroxyacetone without using oxidants by a PtSb/C-catalyzed electrooxidation process. <i>Green Chemistry</i> , 2016 , 18, 2877-2887	10	78
146	Plasmon-enhanced reverse water gas shift reaction over oxide supported Au catalysts. <i>Catalysis Science and Technology</i> , 2015 , 5, 2590-2601	5.5	77
145	C-C bond formation reactions for biomass-derived molecules. <i>ChemSusChem</i> , 2010 , 3, 1158-61	8.3	77
144	Electrocatalytic Oxidation of Glycerol to Formic Acid by CuCo ₂ O ₄ Spinel Oxide Nanostructure Catalysts. <i>ACS Catalysis</i> , 2020 , 10, 6741-6752	13.1	77
143	Chemicals from Biomass: Combining Ring-Opening Tautomerization and Hydrogenation Reactions to Produce 1,5-Pentanediol from Furfural. <i>ChemSusChem</i> , 2017 , 10, 1351-1355	8.3	75
142	Conversion of Furfural to 1,5-Pentanediol: Process Synthesis and Analysis. <i>ACS Sustainable Chemistry and Engineering</i> , 2017 , 5, 4699-4706	8.3	75
141	Simulating infrared spectra and hydrogen bonding in cellulose I β at elevated temperatures. <i>Journal of Chemical Physics</i> , 2011 , 135, 134506	3.9	75
140	Methane Conversion to Ethylene and Aromatics on PtSn Catalysts. <i>ACS Catalysis</i> , 2017 , 7, 2088-2100	13.1	73
139	Separation of acetic acid from the aqueous fraction of fast pyrolysis bio-oils using nanofiltration and reverse osmosis membranes. <i>Journal of Membrane Science</i> , 2011 , 378, 495-502	9.6	73
138	Reverse Water-Gas Shift on Interfacial Sites Formed by Deposition of Oxidized Molybdenum Moieties onto Gold Nanoparticles. <i>Journal of the American Chemical Society</i> , 2015 , 137, 10317-25	16.4	72
137	Vapor phase butanal self-condensation over unsupported and supported alkaline earth metal oxides. <i>Journal of Catalysis</i> , 2012 , 286, 248-259	7.3	72

136	Chemistries and processes for the conversion of ethanol into middle-distillate fuels. <i>Nature Reviews Chemistry</i> , 2019 , 3, 223-249	34.6	71
135	The intrinsic kinetics and heats of reactions for cellulose pyrolysis and char formation. <i>ChemSusChem</i> , 2010 , 3, 1162-5	8.3	71
134	Synthesis of 1,6-Hexanediol from Cellulose Derived Tetrahydrofuran-Dimethanol with Pt-WO _x /TiO ₂ Catalysts. <i>ACS Catalysis</i> , 2018 , 8, 1427-1439	13.1	68
133	Renewable N-Heterocycles Production by Thermocatalytic Conversion and Ammonization of Biomass over ZSM-5. <i>ACS Sustainable Chemistry and Engineering</i> , 2015 , 3, 2890-2899	8.3	63
132	Role of acid sites and selectivity correlation in solvent free liquid phase dehydration of sorbitol to isosorbide. <i>Applied Catalysis A: General</i> , 2015 , 492, 252-261	5.1	62
131	Identification and thermochemical analysis of high-lignin feedstocks for biofuel and biochemical production. <i>Biotechnology for Biofuels</i> , 2011 , 4, 43	7.8	61
130	Recycling of multilayer plastic packaging materials by solvent-targeted recovery and precipitation. <i>Science Advances</i> , 2020 , 6,	14.3	61
129	Low temperature hydrogenation of pyrolytic lignin over Ru/TiO ₂ : 2D HSQC and 13C NMR study of reactants and products. <i>Green Chemistry</i> , 2016 , 18, 271-281	10	59
128	Functionality and molecular weight distribution of red oak lignin before and after pyrolysis and hydrogenation. <i>Green Chemistry</i> , 2017 , 19, 1378-1389	10	59
127	High-throughput screening of monometallic catalysts for aqueous-phase hydrogenation of biomass-derived oxygenates. <i>Applied Catalysis B: Environmental</i> , 2013 , 140-141, 98-107	21.8	59
126	Global bioenergy potential from high-lignin agricultural residue. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 4014-9	11.5	58
125	A General Framework for the Evaluation of Direct Nonoxidative Methane Conversion Strategies. <i>Joule</i> , 2018 , 2, 349-365	27.8	56
124	Hydrodeoxygenation of Pyrolysis Oils. <i>Energy Technology</i> , 2017 , 5, 80-93	3.5	55
123	Low-temperature oligomerization of 1-butene with H-ferrierite. <i>Journal of Catalysis</i> , 2015 , 323, 33-44	7.3	55
122	Efficient electrooxidation of biomass-derived glycerol over a graphene-supported PtRu electrocatalyst. <i>Electrochemistry Communications</i> , 2011 , 13, 890-893	5.1	55
121	Grassoline at the pump. <i>Scientific American</i> , 2009 , 301, 52-9	0.5	52
120	The effects of contact time and coking on the catalytic fast pyrolysis of cellulose. <i>Green Chemistry</i> , 2017 , 19, 286-297	10	50
119	Oxygenated commodity chemicals from chemo-catalytic conversion of biomass derived heterocycles. <i>AIChE Journal</i> , 2018 , 64, 1910-1922	3.6	50

118	The Chemistry and Kinetics of Polyethylene Pyrolysis: A Process to Produce Fuels and Chemicals. <i>ChemSusChem</i> , 2020 , 13, 1764-1774	8.3	48
117	Synthesis of Jet-Fuel Range Cycloalkanes from the Mixtures of Cyclopentanone and Butanal. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 11825-11837	3.9	48
116	Improving economics of lignocellulosic biofuels: An integrated strategy for coproducing 1,5-pentanediol and ethanol. <i>Applied Energy</i> , 2018 , 213, 585-594	10.7	48
115	Hydrogenation of levoglucosenone to renewable chemicals. <i>Green Chemistry</i> , 2017 , 19, 1278-1285	10	47
114	The effects of ZSM-5 mesoporosity and morphology on the catalytic fast pyrolysis of furan. <i>Green Chemistry</i> , 2017 , 19, 3549-3557	10	46
113	Selective glycerol oxidation by electrocatalytic dehydrogenation. <i>ChemSusChem</i> , 2014 , 7, 1051-6	8.3	46
112	Supercritical methanol depolymerization and hydrodeoxygenation of lignin and biomass over reduced copper porous metal oxides. <i>Green Chemistry</i> , 2019 , 21, 2988-3005	10	45
111	New catalytic strategies for diols production from lignocellulosic biomass. <i>Faraday Discussions</i> , 2017 , 202, 247-267	3.6	44
110	Production of aromatics by catalytic fast pyrolysis of cellulose in a bubbling fluidized bed reactor. <i>AIChE Journal</i> , 2014 , 60, 1320-1335	3.6	44
109	Catalysts for Emerging Energy Applications. <i>MRS Bulletin</i> , 2008 , 33, 429-435	3.2	44
108	Removal of char particles from fast pyrolysis bio-oil by microfiltration. <i>Journal of Membrane Science</i> , 2010 , 363, 120-127	9.6	43
107	Synthesis Gas Conversion over Rh-Based Catalysts Promoted by Fe and Mn. <i>ACS Catalysis</i> , 2017 , 7, 4550-4563	4.3	42
106	Enhanced Activity and Stability of TiO ₂ -Coated Cobalt/Carbon Catalysts for Electrochemical Water Oxidation. <i>ACS Catalysis</i> , 2015 , 5, 3463-3469	13.1	42
105	Effects of hydrogen and water on the activity and selectivity of acetic acid hydrogenation on ruthenium. <i>Green Chemistry</i> , 2014 , 16, 911-924	10	41
104	Coproducing Value-Added Chemicals and Hydrogen with Electrocatalytic Glycerol Oxidation Technology: Experimental and Techno-Economic Investigations. <i>ACS Sustainable Chemistry and Engineering</i> , 2017 , 5, 6626-6634	8.3	41
103	Conceptual process design: A systematic method to evaluate and develop renewable energy technologies. <i>AIChE Journal</i> , 2011 , 57, 2292-2301	3.6	41
102	Techno-economic and environmental evaluation of producing chemicals and drop-in aviation biofuels via aqueous phase processing. <i>Energy and Environmental Science</i> , 2018 , 11, 2085-2101	35.4	41
101	Electrocatalytic reduction of acetone in a proton-exchange-membrane reactor: a model reaction for the electrocatalytic reduction of biomass. <i>ChemSusChem</i> , 2012 , 5, 2410-20	8.3	39

100	Direct production of indoles via thermo-catalytic conversion of bio-derived furans with ammonia over zeolites. <i>Green Chemistry</i> , 2015 , 17, 1281-1290	10	38
99	Highly improved oxygen reduction performance over Pt/C-dispersed nanowire network catalysts. <i>Electrochemistry Communications</i> , 2010 , 12, 32-35	5.1	37
98	Hydrogenation of ϵ -Butyrolactone to 1,4-Butanediol over CuCo/TiO ₂ Bimetallic Catalysts. <i>ACS Catalysis</i> , 2017 , 7, 8429-8440	13.1	36
97	Catalysis Center for Energy Innovation for Biomass Processing: Research Strategies and Goals. <i>Catalysis Letters</i> , 2010 , 140, 77-84	2.8	36
96	Production of p-Xylene from Biomass by Catalytic Fast Pyrolysis Using ZSM-5 Catalysts with Reduced Pore Openings. <i>Angewandte Chemie</i> , 2012 , 124, 11259-11262	3.6	35
95	Fundamental catalytic challenges to design improved biomass conversion technologies. <i>Journal of Catalysis</i> , 2019 , 369, 518-525	7.3	35
94	Measurement of intrinsic catalytic activity of Pt monometallic and Pt-MoO _x interfacial sites over visible light enhanced PtMoO _x /SiO ₂ catalyst in reverse water gas shift reaction. <i>Journal of Catalysis</i> , 2016 , 344, 784-794	7.3	34
93	Synthesis of biomass-derived feedstocks for the polymers and fuels industries from 5-(hydroxymethyl)furfural (HMF) and acetone. <i>Green Chemistry</i> , 2019 , 21, 5532-5540	10	33
92	Dual-bed catalyst system for the direct synthesis of high density aviation fuel with cyclopentanone from lignocellulose. <i>AIChE Journal</i> , 2016 , 62, 2754-2761	3.6	33
91	A machine learning framework for the analysis and prediction of catalytic activity from experimental data. <i>Applied Catalysis B: Environmental</i> , 2020 , 263, 118257	21.8	33
90	Production of Alcohols from Cellulose by Supercritical Methanol Depolymerization and Hydrodeoxygenation. <i>ACS Sustainable Chemistry and Engineering</i> , 2018 , 6, 4330-4344	8.3	32
89	Hydrothermal Stability of Co/SiO ₂ Fischer-Tropsch Synthesis Catalysts. <i>Studies in Surface Science and Catalysis</i> , 2001 , 139, 423-430	1.8	32
88	The role of Pt-Fe _x O _y interfacial sites for CO oxidation. <i>Journal of Catalysis</i> , 2018 , 358, 19-26	7.3	32
87	Intrinsic activity of interfacial sites for Pt-Fe and Pt-Mo catalysts in the hydrogenation of carbonyl groups. <i>Applied Catalysis B: Environmental</i> , 2018 , 231, 182-190	21.8	31
86	Catalysts synthesized by selective deposition of Fe onto Pt for the water-gas shift reaction. <i>Applied Catalysis B: Environmental</i> , 2018 , 222, 182-190	21.8	29
85	Modeling aqueous-phase hydrodeoxygenation of sorbitol over Pt/SiO ₂ -Al ₂ O ₃ . <i>RSC Advances</i> , 2013 , 3, 23769	3.7	29
84	Ethylene Dimerization and Oligomerization to 1-Butene and Higher Olefins with Chromium-Promoted Cobalt on Carbon Catalyst. <i>ACS Catalysis</i> , 2018 , 8, 2488-2497	13.1	27
83	Kinetics of Levoglucosenone Isomerization. <i>ChemSusChem</i> , 2017 , 10, 129-138	8.3	27

82	Hydrothermally stable regenerable catalytic supports for aqueous-phase conversion of biomass. <i>Catalysis Today</i> , 2014 , 234, 66-74	5.3	26
81	Microwave-assisted fast conversion of lignin model compounds and organosolv lignin over methyltrioxorhenium in ionic liquids. <i>RSC Advances</i> , 2015 , 5, 84967-84973	3.7	25
80	Ring Opening of Biomass-Derived Cyclic Ethers to Dienes over Silica/Alumina. <i>ACS Catalysis</i> , 2017 , 7, 5248-5256	13.1	25
79	Principles of Heterogeneous Catalysis 2008 ,		25
78	The effect of steam on the catalytic fast pyrolysis of cellulose. <i>Green Chemistry</i> , 2015 , 17, 2912-2923	10	24
77	Production of monosaccharides and whey protein from acid whey waste streams in the dairy industry. <i>Green Chemistry</i> , 2018 , 20, 1824-1834	10	23
76	Catalytic dehydration of levoglucosan to levoglucosenone using Brønsted solid acid catalysts in tetrahydrofuran. <i>Green Chemistry</i> , 2019 , 21, 4988-4999	10	23
75	The stability of direct carbon fuel cells with molten Sb and SbBi alloy anodes. <i>AIChE Journal</i> , 2013 , 59, 3342-3348	3.6	23
74	DFT study of nitrated zeolites: Mechanism of nitrogen substitution in HY and silicalite. <i>Journal of Catalysis</i> , 2010 , 269, 53-63	7.3	23
73	Effect of Mixed-Solvent Environments on the Selectivity of Acid-Catalyzed Dehydration Reactions. <i>ACS Catalysis</i> , 2020 , 10, 1679-1691	13.1	23
72	Production of 1,6-hexanediol from tetrahydropyran-2-methanol by dehydration/hydration and hydrogenation. <i>Green Chemistry</i> , 2017 , 19, 1390-1398	10	22
71	Synthesis Gas Conversion over Rh/Mo Catalysts Prepared by Atomic Layer Deposition. <i>ACS Catalysis</i> , 2019 , 9, 1810-1819	13.1	22
70	Selective Cellulose Hydrogenolysis to Ethanol Using Ni@C Combined with Phosphoric Acid Catalysts. <i>ChemSusChem</i> , 2019 , 12, 3977-3987	8.3	21
69	Low temperature aqueous phase hydrogenation of the light oxygenate fraction of bio-oil over supported ruthenium catalysts. <i>Green Chemistry</i> , 2017 , 19, 3252-3262	10	20
68	Intrinsic kinetics of plasmon-enhanced reverse water gas shift on Au and Au/Mo interfacial sites supported on silica. <i>Applied Catalysis A: General</i> , 2016 , 521, 182-189	5.1	20
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