Bert F Sels

List of Publications by Year in Descending Order

203 papers	17,216 citations	67 h-index	128 g-index
229 ext. papers	20,515 ext. citations	13.4 avg, IF	7.1 L-index

#	Paper	IF	Citations
203	Kinetics of fatty acid ketonization in liquid phase with anatase and rutile TiO2 catalysts. *Applied Catalysis B: Environmental*, **2022**, 305, 121052	21.8	1
202	Identification and quantification of lignin monomers and oligomers from reductive catalytic fractionation of pine wood with GC GC FID/MS. *Green Chemistry*, **2022**, 24, 191-206	10	9
201	Lignin-First Monomers to Catechol: Rational Cleavage of C-O and C-C Bonds over Zeolites.. *ChemSusChem*, **2021**,	8.3	2
200	Expectations for Perspectives in ACS Sustainable Chemistry & Engineering. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 16528-16530	8.3	0
199	Optical encoding of luminescent carbon nanodots in confined spaces. *Chemical Communications*, **2021**, 57, 11952-11955	5.8	1
198	Fast and Selective Solvent-Free Branching of Unsaturated Fatty Acids with Hierarchical ZSM-5. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 4357-4362	8.3	1
197	Highly Dispersed Sn-beta Zeolites as Active Catalysts for Baeyer Villiger Oxidation: The Role of Mobile, In Situ Sn(II)O Species in Solid-State Stannation. *ACS Catalysis*, **2021**, 11, 5984-5998	13.1	7
196	Coordination and activation of nitrous oxide by iron zeolites. *Nature Catalysis*, **2021**, 4, 332-340	36.5	15
195	Spectroscopic Definition of a Highly Reactive Site in Cu-CHA for Selective Methane Oxidation: Tuning a Mono- Oxo Dicopper(II) Active Site for Reactivity. *Journal of the American Chemical Society*, **2021**, 143, 7531-7540	16.4	11
194	Metal Sulfide Photocatalysts for Lignocellulose Valorization. *Advanced Materials*, **2021**, e2007129	24	16
193	Guidelines for performing lignin-first biorefining. *Energy and Environmental Science*, **2021**, 14, 262-292	35.4	143
192	Catalytic advancements in carboxylic acid ketonization and its perspectives on biomass valorisation. *Applied Catalysis B: Environmental*, **2021**, 283, 119607	21.8	23
191	Toward Replacing Ethylene Oxide in a Sustainable World: Glycolaldehyde as a Bio-Based C2 Platform Molecule. *Angewandte Chemie*, **2021**, 133, 12312-12331	3.6	0
190	Toward Replacing Ethylene Oxide in a Sustainable World: Glycolaldehyde as a Bio-Based C Platform Molecule. *Angewandte Chemie - International Edition*, **2021**, 60, 12204-12223	16.4	10
189	Homogeneous and heterogeneous catalysts for hydrogenation of CO to methanol under mild conditions. *Chemical Society Reviews*, **2021**, 50, 4259-4298	58.5	46
188	Boosting PLA melt strength by controlling the chirality of co-monomer incorporation. *Chemical Science*, **2021**, 12, 5672-5681	9.4	7
187	Assessment of the environmental sustainability of solvent-less fatty acid ketonization to bio-based ketones for wax emulsion applications. *Green Chemistry*, **2021**, 23, 7137-7161	10	3

186	Low molecular weight and highly functional RCF lignin products as a full bisphenol a replacer in bio-based epoxy resins. *Chemical Communications*, **2021**, 57, 5642-5645	5.8	8
185	Efficient demethylation of aromatic methyl ethers with HCl in water. *Green Chemistry*, **2021**, 23, 1995-2009	10	7
184	How Trace Impurities Can Strongly Affect the Hydroconversion of Biobased 5-Hydroxymethylfurfural?. *ACS Catalysis*, **2021**, 11, 9204-9209	13.1	1
183	Cage effects control the mechanism of methane hydroxylation in zeolites. *Science*, **2021**, 373, 327-331	33.3	16
182	A Cooperative OSDA Blueprint for Highly Siliceous Faujasite Zeolite Catalysts with Enhanced Acidity Accessibility. *Angewandte Chemie - International Edition*, **2021**, 60, 24189-24197	16.4	2
181	Selective Formation of □Fe(II) Sites on Fe-Zeolites through One-Pot Synthesis. *Journal of the American Chemical Society*, **2021**, 143, 16243-16255	16.4	6
180	How Substituent Effects Influence the Thermodynamics and Kinetics of Gas-Phase Transesterification of Alkyl Lactates to Lactide using TiO2/SiO2. *Applied Catalysis B: Environmental*, **2021**, 300, 120747	21.8	0
179	A Cooperative OSDA Blueprint for Highly Siliceous Faujasite Zeolite Catalysts with Enhanced Acidity Accessibility. *Angewandte Chemie*, **2021**, 133, 24391	3.6	1
178	Lignin-Based Additives for Improved Thermo-Oxidative Stability of Biolubricants. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 12548-12559	8.3	8
177	The RCF biorefinery: Building on a chemical platform from lignin. *Advances in Inorganic Chemistry*, **2021**, 241-297	2.1	3
176	Enhancing lignin depolymerization via a dithionite-assisted organosolv fractionation of birch sawdust. *Green Chemistry*, **2021**, 23, 3268-3276	10	3
175	Heterogeneous catalysts for CO2 hydrogenation to formic acid/formate: from nanoscale to single atom. *Energy and Environmental Science*, **2021**, 14, 1247-1285	35.4	48
174	Aromatics Production from Lignocellulosic Biomass: Shape Selective Dealkylation of Lignin-Derived Phenolics over Hierarchical ZSM-5. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 8713-8722	8.3	20
173	Integrated techno-economic assessment of a biorefinery process: The high-end valorization of the lignocellulosic fraction in wood streams. *Journal of Cleaner Production*, **2020**, 266, 122022	10.3	20
172	A sustainable wood biorefinery for low-carbon footprint chemicals production. *Science*, **2020**, 367, 1385-1390	33.3	295
171	Complementing Vanillin and Cellulose Production by Oxidation of Lignocellulose with Stirring Control. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 2361-2374	8.3	28
170	Protection Strategies Enable Selective Conversion of Biomass. *Angewandte Chemie*, **2020**, 132, 11800-11862	3.6	5
169	The role of pretreatment in the catalytic valorization of cellulose. *Molecular Catalysis*, **2020**, 487, 110883	3.3	30

168	Catalytic Strategies Towards Lignin-Derived Chemicals. *Topics in Current Chemistry Collections*, **2020**, 129-168	1.8	6
167	Rücktitelbild: Brønsted Acid Catalyzed Tandem Defunctionalization of Biorenewable Ferulic acid and Derivates into Bio-Catechol (Angew. Chem. 8/2020). *Angewandte Chemie*, **2020**, 132, 3364-3364	3.6	
166	The Evolution of ACS Sustainable Chemistry & Engineering. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 1-1	8.3	2
165	Brønsted Acid Catalyzed Tandem Defunctionalization of Biorenewable Ferulic acid and Derivates into Bio-Catechol. *Angewandte Chemie*, **2020**, 132, 3087-3092	3.6	5
164	Brønsted Acid Catalyzed Tandem Defunctionalization of Biorenewable Ferulic acid and Derivates into Bio-Catechol. *Angewandte Chemie - International Edition*, **2020**, 59, 3063-3068	16.4	13
163	Synthesis–Structure–Activity Relations in Fe-CHA for CH4 Activation: Control of Al Distribution by Interzeolite Conversion. *Chemistry of Materials*, **2020**, 32, 273-285	9.6	28
162	Reductive catalytic fractionation of pine wood: elucidating and quantifying the molecular structures in the lignin oil. *Chemical Science*, **2020**, 11, 11498-11508	9.4	35
161	Towards Lignin-Derived Chemicals Using Atom-Efficient Catalytic Routes. *Trends in Chemistry*, **2020**, 2, 898-913	14.8	9
160	Perspective on Overcoming Scale-Up Hurdles for the Reductive Catalytic Fractionation of Lignocellulose Biomass. *Industrial & Engineering Chemistry Research*, **2020**, 59, 17035-17045	3.9	28
159	Advances in the synthesis, characterisation, and mechanistic understanding of active sites in Fe-zeolites for redox catalysts. *Dalton Transactions*, **2020**, 49, 14749-14757	4.3	7
158	State of the Art and Perspectives of Hierarchical Zeolites: Practical Overview of Synthesis Methods and Use in Catalysis. *Advanced Materials*, **2020**, 32, e2004690	24	58
157	Glycolaldehyde as a Bio-Based C2 Platform Chemical: Catalytic Reductive Amination of Vicinal Hydroxyl Aldehydes. *ACS Catalysis*, **2020**, 10, 391-404	13.1	18
156	Protection Strategies Enable Selective Conversion of Biomass. *Angewandte Chemie - International Edition*, **2020**, 59, 11704-11716	16.4	38
155	Substrate-Specificity of Candida rugosa Lipase and Its Industrial Application. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 15828-15844	8.3	28
154	Reductive catalytic fractionation of black locust bark. *Green Chemistry*, **2019**, 21, 5841-5851	10	26
153	From rational design of a new bimetallic MOF family with tunable linkers to OER catalysts. *Journal of Materials Chemistry A*, **2019**, 7, 1616-1628	13	85
152	Introducing curcumin biosynthesis in Arabidopsis enhances lignocellulosic biomass processing. *Nature Plants*, **2019**, 5, 225-237	11.5	30
151	Aerosol Route to TiO2–SiO2 Catalysts with Tailored Pore Architecture and High Epoxidation Activity. *Chemistry of Materials*, **2019**, 31, 1610-1619	9.6	32

150	Advances in porous and nanoscale catalysts for viable biomass conversion. *Chemical Society Reviews* , **2019**, 48, 2366-2421	58.5	281
149	Bio-based Aromatic Amines from Lignin-Derived Monomers. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 6906-6916	8.3	30
148	Regioselective synthesis, isomerisation, in vitro oestrogenic activity, and copolymerisation of bisguaiacol F (BGF) isomers. *Green Chemistry*, **2019**, 21, 6622-6633	10	14
147	Bio-Acrylates Production: Recent Catalytic Advances and Perspectives of the Use of Lactic Acid and Their Derivates. *ChemCatChem*, **2019**, 11, 180-201	5.2	22
146	Reductive catalytic fractionation: state of the art of the lignin-first biorefinery. *Current Opinion in Biotechnology*, **2019**, 56, 193-201	11.4	153
145	Silica□arbon Nanocomposite Acid Catalyst with Large Mesopore Interconnectivity by Vapor-Phase Assisted Hydrothermal Treatment. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 7859-7870	8.3	9
144	Branching-First: Synthesizing C□ Skeletal Branched Biobased Chemicals from Sugars. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 7940-7950	8.3	3
143	Catalytic Reductive Aminolysis of Reducing Sugars: Elucidation of Reaction Mechanism. *ACS Catalysis*, **2018**, 8, 4201-4212	13.1	9
142	Shape selectivity vapor-phase conversion of lignin-derived 4-ethylphenol to phenol and ethylene over acidic aluminosilicates: Impact of acid properties and pore constraint. *Applied Catalysis B: Environmental*, **2018**, 234, 117-129	21.8	54
141	Straightforward sustainability assessment of sugar-derived molecules from first-generation biomass. *Current Opinion in Green and Sustainable Chemistry*, **2018**, 10, 11-20	7.9	13
140	Catalytic Gas-Phase Production of Lactide from Renewable Alkyl Lactates. *Angewandte Chemie - International Edition*, **2018**, 57, 3074-3078	16.4	47
139	Promising bulk production of a potentially benign bisphenol A replacement from a hardwood lignin platform. *Green Chemistry*, **2018**, 20, 1050-1058	10	50
138	Vapor-phase assisted hydrothermal carbon from sucrose and its application in acid catalysis. *Green Chemistry*, **2018**, 20, 1345-1353	10	25
137	Iron and Copper Active Sites in Zeolites and Their Correlation to Metalloenzymes. *Chemical Reviews* , **2018**, 118, 2718-2768	68.1	181
136	Kinetics of homogeneous and heterogeneous reactions in the reductive aminolysis of glucose with dimethylamine. *Applied Catalysis B: Environmental*, **2018**, 227, 161-169	21.8	8
135	Chemicals from lignin: an interplay of lignocellulose fractionation, depolymerisation, and upgrading. *Chemical Society Reviews*, **2018**, 47, 852-908	58.5	1125
134	Structural characterization of a non-heme iron active site in zeolites that hydroxylates methane. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 4565-4570	11.5	42
133	Recrystallization on Alkaline Treated Zeolites in the Presence of Pore-Directing Agents. *Crystal Growth and Design*, **2018**, 18, 2010-2015	3.5	4

132	Catalytic Gas-Phase Production of Lactide from Renewable Alkyl Lactates. *Angewandte Chemie*, **2018**, 130, 3128-3132	3.6	13
131	Second-Sphere Effects on Methane Hydroxylation in Cu-Zeolites. *Journal of the American Chemical Society*, **2018**, 140, 9236-9243	16.4	32
130	Propylphenol to Phenol and Propylene over Acidic Zeolites: Role of Shape Selectivity and Presence of Steam. *ACS Catalysis*, **2018**, 8, 7861-7878	13.1	38
129	Catalytic lignocellulose biorefining in n-butanol/water: a one-pot approach toward phenolics, polyols, and cellulose. *Green Chemistry*, **2018**, 20, 4607-4619	10	71
128	Titania-Silica Catalysts for Lactide Production from Renewable Alkyl Lactates: Structure–Activity Relations. *ACS Catalysis*, **2018**, 8, 8130-8139	13.1	49
127	Catalytic Strategies Towards Lignin-Derived Chemicals. *Topics in Current Chemistry*, **2018**, 376, 36	7.2	49
126	Atomic scale reversible opto-structural switching of few atom luminescent silver clusters confined in LTA zeolites. *Nanoscale*, **2018**, 10, 11467-11476	7.7	31
125	Synthetic and Catalytic Potential of Amorphous Mesoporous Aluminosilicates Prepared by Postsynthetic Aluminations of Silica in Aqueous Media. *ChemCatChem*, **2018**, 10, 1385-1397	5.2	6
124	Mechanism of selective benzene hydroxylation catalyzed by iron-containing zeolites. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 12124-12129	11.5	8
123	Direct upstream integration of biogasoline production into current light straight run naphtha petrorefinery processes. *Nature Energy*, **2018**, 3, 969-977	62.3	45
122	Catalytic Gas-Phase Cyclization of Glycolate Esters: A Novel Route Toward Glycolide-Based Bioplastics. *ChemCatChem*, **2018**, 10, 5649-5655	5.2	8
121	Functionalised heterogeneous catalysts for sustainable biomass valorisation. *Chemical Society Reviews*, **2018**, 47, 8349-8402	58.5	332
120	Spectroscopic Identification of the □Fe/□O Active Site in Fe-CHA Zeolite for the Low-Temperature Activation of the Methane C-H Bond. *Journal of the American Chemical Society*, **2018**, 140, 12021-12032	16.4	50
119	Sulfonated mesoporous carbon and silica-carbon nanocomposites for biomass conversion. *Applied Catalysis B: Environmental*, **2018**, 236, 518-545	21.8	65
118	Perspective on Lignin Oxidation: Advances, Challenges, and Future Directions. *Topics in Current Chemistry*, **2018**, 376, 30	7.2	46
117	Tin triflate-catalyzed conversion of cellulose to valuable (□hydroxy-) esters. *Catalysis Today*, **2017**, 279, 339-344	5.3	39
116	Sustainable bisphenols from renewable softwood lignin feedstock for polycarbonates and cyanate ester resins. *Green Chemistry*, **2017**, 19, 2561-2570	10	70
115	Lignin-first biomass fractionation: the advent of active stabilisation strategies. *Energy and Environmental Science*, **2017**, 10, 1551-1557	35.4	357

114	Lewis acid catalysis on single site Sn centers incorporated into silica hosts. *Coordination Chemistry Reviews*, **2017**, 343, 220-255	23.2	52
113	Integrating lignin valorization and bio-ethanol production: on the role of Ni-Al2O3 catalyst pellets during lignin-first fractionation. *Green Chemistry*, **2017**, 19, 3313-3326	10	185
112	Zeolites as sustainable catalysts for the selective synthesis of renewable bisphenols from lignin-derived monomers. *ChemSusChem*, **2017**, 10, 2249-2257	8.3	26
111	Unconventional Pretreatment of Lignocellulose with Low-Temperature Plasma. *ChemSusChem*, **2017**, 10, 14-31	8.3	49
110	Acidic mesostructured silica-carbon nanocomposite catalysts for biofuels and chemicals synthesis from sugars in alcoholic solutions. *Applied Catalysis B: Environmental*, **2017**, 206, 74-88	21.8	33
109	Barriers and Chemistry in a Bottle: Mechanisms in Today□ Oxygen Barriers for Tomorrow□ Materials. *Applied Sciences (Switzerland)*, **2017**, 7, 665	2.6	24
108	Identification of □Fe in High-Silica Zeolites on the Basis of ab Initio Electronic Structure Calculations. *Inorganic Chemistry*, **2017**, 56, 10681-10690	5.1	16
107	Bio-based amines through sustainable heterogeneous catalysis. *Green Chemistry*, **2017**, 19, 5303-5331	10	130
106	Low-Temperature Reductive Aminolysis of Carbohydrates to Diamines and Aminoalcohols by Heterogeneous Catalysis. *Angewandte Chemie - International Edition*, **2017**, 56, 14540-14544	16.4	31
105	Low-Temperature Reductive Aminolysis of Carbohydrates to Diamines and Aminoalcohols by Heterogeneous Catalysis. *Angewandte Chemie*, **2017**, 129, 14732-14736	3.6	9
104	Heterogeneous catalysis for bio-based polyester monomers from cellulosic biomass: advances, challenges and prospects. *Green Chemistry*, **2017**, 19, 5012-5040	10	103
103	Scalable Synthesis of Acidic Mesostructured Silica□arbon Nanocomposite Catalysts by Rotary Evaporation. *ChemCatChem*, **2017**, 9, 65-69	5.2	5
102	Synthesis, characterisation, and catalytic evaluation of hierarchical faujasite zeolites: milestones, challenges, and future directions. *Chemical Society Reviews*, **2016**, 45, 3331-52	58.5	208
101	Alkylphenols to phenol and olefins by zeolite catalysis: a pathway to valorize raw and fossilized lignocellulose. *Green Chemistry*, **2016**, 18, 297-306	10	82
100	Opportunities of Immobilized Homogeneous Metathesis Complexes as Prominent Heterogeneous Catalysts. *ChemCatChem*, **2016**, 8, 3010-3030	5.2	36
99	Identifying Sn Site Heterogeneities Prevalent Among Sn-Beta Zeolites. *Helvetica Chimica Acta*, **2016**, 99, 916-927	2	32
98	The active site of low-temperature methane hydroxylation in iron-containing zeolites. *Nature*, **2016**, 536, 317-21	50.4	229
97	Compositional and structural feedstock requirements of a liquid phase cellulose-to-naphtha process in a carbon- and hydrogen-neutral biorefinery context. *Green Chemistry*, **2016**, 18, 5594-5606	10	19

96	Reductive splitting of hemicellulose with stable ruthenium-loaded USY zeolites. *Green Chemistry*, **2016**, 18, 5295-5304	10	22
95	Depolymerization of 1,4-polybutadiene by metathesis: high yield of large macrocyclic oligo(butadiene)s by ligand selectivity control. *Catalysis Science and Technology*, **2016**, 6, 7708-7717	5.5	12
94	Synthesis of Novel Renewable Polyesters and Polyamides with Olefin Metathesis. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 5943-5952	8.3	17
93	The importance of pretreatment and feedstock purity in the reductive splitting of (ligno)cellulose by metal supported USY zeolite. *Green Chemistry*, **2016**, 18, 2095-2105	10	33
92	Influence of Acidic (H3PO4) and Alkaline (NaOH) Additives on the Catalytic Reductive Fractionation of Lignocellulose. *ACS Catalysis*, **2016**, 6, 2055-2066	13.1	148
91	Potential and challenges of zeolite chemistry in the catalytic conversion of biomass. *Chemical Society Reviews*, **2016**, 45, 584-611	58.5	459
90	An Inner-/Outer-Sphere Stabilized Sn Active Site in □Zeolite: Spectroscopic Evidence and Kinetic Consequences. *ACS Catalysis*, **2016**, 6, 31-46	13.1	67
89	Molecular design of sulfonated hyperbranched poly(arylene oxindole)s for efficient cellulose conversion to levulinic acid. *Green Chemistry*, **2016**, 18, 1694-1705	10	47
88	Lactide Synthesis and Chirality Control for Polylactic acid Production. *ChemSusChem*, **2016**, 9, 907-21	8.3	76
87	Sn□zeolite catalyzed oxido-reduction cascade chemistry with biomass-derived molecules. *Chemical Communications*, **2016**, 52, 6712-5	5.8	30
86	Heterogeneous conjugation of vegetable oil with alkaline treated highly dispersed Ru/USY catalysts. *Applied Catalysis A: General*, **2016**, 526, 172-182	5.1	6
85	Selective Conversion of Lignin-Derivable 4-Alkylguaiacols to 4-Alkylcyclohexanols over Noble and Non-Noble-Metal Catalysts. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 5336-5346	8.3	45
84	Synergetic Effects of Alcohol/Water Mixing on the Catalytic Reductive Fractionation of Poplar Wood. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 6894-6904	8.3	97
83	Enhanced Acidity and Accessibility in Al-MCM-41 through Aluminum Activation. *Chemistry of Materials*, **2016**, 28, 7731-7743	9.6	26
82	Cooperative Catalysis for Multistep Biomass Conversion with Sn/Al Beta Zeolite. *ACS Catalysis*, **2015**, 5, 928-940	13.1	137
81	GREEN CHEMISTRY. Shape-selective zeolite catalysis for bioplastics production. *Science*, **2015**, 349, 78-80	33.3	205
80	Spectroscopic definition of the copper active sites in mordenite: selective methane oxidation. *Journal of the American Chemical Society*, **2015**, 137, 6383-92	16.4	194
79	Reductive lignocellulose fractionation into soluble lignin-derived phenolic monomers and dimers and processable carbohydrate pulps. *Energy and Environmental Science*, **2015**, 8, 1748-1763	35.4	515

78	Selective nickel-catalyzed conversion of model and lignin-derived phenolic compounds to cyclohexanone-based polymer building blocks. *ChemSusChem*, **2015**, 8, 1805-18	8.3	104
77	Review of catalytic systems and thermodynamics for the Guerbet condensation reaction and challenges for biomass valorization. *Catalysis Science and Technology*, **2015**, 5, 3876-3902	5.5	175
76	Confinement Effects in Lewis Acid-Catalyzed Sugar Conversion: Steering Toward Functional Polyester Building Blocks. *ACS Catalysis*, **2015**, 5, 5803-5811	13.1	52
75	Influence of bio-based solvents on the catalytic reductive fractionation of birch wood. *Green Chemistry*, **2015**, 17, 5035-5045	10	162
74	Alkane production from biomass: chemo-, bio- and integrated catalytic approaches. *Current Opinion in Chemical Biology*, **2015**, 29, 40-8	9.7	64
73	Post-synthesis Sn□An exploration of synthesis parameters and catalysis. *Journal of Catalysis*, **2015**, 330, 545-557	7.3	75
72	Ternary Ag/MgO-SiO2 catalysts for the conversion of ethanol into butadiene. *ChemSusChem*, **2015**, 8, 994-1008	8.3	119
71	Direct catalytic conversion of cellulose to liquid straight-chain alkanes. *Energy and Environmental Science*, **2015**, 8, 230-240	35.4	176
70	Catalyst Design by NH4OH Treatment of USY Zeolite. *Advanced Functional Materials*, **2015**, 25, 7130-7144	15.6	60
69	Alkali Activation of AOD Stainless Steel Slag Under Steam Curing Conditions. *Journal of the American Ceramic Society*, **2015**, 98, 3062-3074	3.8	11
68	An Eco-friendly Soft Template Synthesis of Mesostructured Silica-Carbon Nanocomposites for Acid Catalysis. *ChemCatChem*, **2015**, 7, 3047-3058	5.2	15
67	Tuning the lignin oil OH-content with Ru and Pd catalysts during lignin hydrogenolysis on birch wood. *Chemical Communications*, **2015**, 51, 13158-61	5.8	216
66	Potential of sustainable hierarchical zeolites in the valorization of □pinene. *ChemSusChem*, **2015**, 8, 1197-205	8.3	34
65	Thermally activated LTA(Li)□Ag zeolites with water-responsive photoluminescence properties. *Journal of Materials Chemistry C*, **2015**, 3, 11857-11867	7.1	51
64	Conceptual Frame Rationalizing the Self-Stabilization of H-USY Zeolites in Hot Liquid Water. *ACS Catalysis*, **2015**, 5, 754-768	13.1	58
63	Extra-small porous Sn-silicate nanoparticles as catalysts for the synthesis of lactates. *Journal of Catalysis*, **2014**, 314, 56-65	7.3	39
62	Top chemical opportunities from carbohydrate biomass: a chemist's view of the Biorefinery. *Topics in Current Chemistry*, **2014**, 353, 1-40		103
61	Optimization of the Synthesis Conditions of a DBD Plasma Reactor for the Synthesis of Hybrid Silica-Based Catalysts. *Plasma Processes and Polymers*, **2014**, 11, 464-471	3.4	5

60	X-ray irradiation-induced formation of luminescent silver clusters in nanoporous matrices. *Chemical Communications*, **2014**, 50, 1350-2	5.8	39
59	Conversion of sugars to ethylene glycol with nickel tungsten carbide in a fed-batch reactor: high productivity and reaction network elucidation. *Green Chemistry*, **2014**, 16, 695-707	10	125
58	Hierarchization of USY Zeolite by NH4OH. A Postsynthetic Process Investigated by NMR and XRD. *Journal of Physical Chemistry C*, **2014**, 118, 22573-22582	3.8	64
57	[Cu2O]2+ active site formation in Cu-ZSM-5: geometric and electronic structure requirements for N2O activation. *Journal of the American Chemical Society*, **2014**, 136, 3522-9	16.4	121
56	Regioselective synthesis of renewable bisphenols from 2,3-pentanedione and their application as plasticizers. *Green Chemistry*, **2014**, 16, 1999-2007	10	24
55	Will zeolite-based catalysis be as relevant in future biorefineries as in crude oil refineries?. *Angewandte Chemie - International Edition*, **2014**, 53, 8621-6	16.4	112
54	Review of old chemistry and new catalytic advances in the on-purpose synthesis of butadiene. *Chemical Society Reviews*, **2014**, 43, 7917-53	58.5	314
53	Spectroscopy and redox chemistry of copper in mordenite. *ChemPhysChem*, **2014**, 15, 91-9	3.2	63
52	Hydraulic Behavior of Mechanically and Chemically Activated Synthetic Merwinite. *Journal of the American Ceramic Society*, **2014**, 97, 3973-3981	3.8	10
51	Toward Functional Polyester Building Blocks from Renewable Glycolaldehyde with Sn Cascade Catalysis. *ACS Catalysis*, **2013**, 3, 1786-1800	13.1	80
50	Bridging racemic lactate esters with stereoselective polylactic acid using commercial lipase catalysis. *Green Chemistry*, **2013**, 15, 2817	10	26
49	Productive sugar isomerization with highly active Sn in dealuminated □eolites. *Green Chemistry*, **2013**, 15, 2777	10	195
48	Conversion of (ligno)cellulose feeds to isosorbide with heteropoly acids and Ru on carbon. *ChemSusChem*, **2013**, 6, 199-208	8.3	96
47	Determination and Optimization of the Luminescence External Quantum Efficiency of Silver-Clusters Zeolite Composites. *Journal of Physical Chemistry C*, **2013**, 117, 6998-7004	3.8	55
46	Lactic acid as a platform chemical in the biobased economy: the role of chemocatalysis. *Energy and Environmental Science*, **2013**, 6, 1415	35.4	532
45	Tailoring nanohybrids and nanocomposites for catalytic applications. *Green Chemistry*, **2013**, 15, 1398	10	75
44	Mechanistic Insight into the Conversion of Tetrose Sugars to Novel □-Hydroxy Acid Platform Molecules. *ChemCatChem*, **2013**, 5, 569-575	5.2	78
43	Conjugated linoleic acids and conjugated vegetable oils: From nutraceutical to bio-polymer. *European Journal of Lipid Science and Technology*, **2013**, 115, 717-720	3	14

42	Mechanistic Insights into the Kinetic and Regiochemical Control of the Thiol-Promoted Catalytic Synthesis of Diphenolic Acid. *ACS Catalysis*, **2012**, 2, 2700-2704	13.1	31
41	The Use of Non-Equilibrium Plasmas for the Synthesis of Heterogeneous Catalysts. *Plasma Processes and Polymers*, **2012**, 9, 750-760	3.4	33
40	Fast and selective sugar conversion to alkyl lactate and lactic acid with bifunctional carbon-silica catalysts. *Journal of the American Chemical Society*, **2012**, 134, 10089-101	16.4	292
39	Tuning the acid/metal balance of carbon nanofiber-supported nickel catalysts for hydrolytic hydrogenation of cellulose. *ChemSusChem*, **2012**, 5, 1549-58	8.3	114
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37	Effect of packing solid material on characteristics of helium dielectric barrier discharge at atmospheric pressure. *Physics of Plasmas*, **2011**, 18, 080702	2.1	54
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