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List of Publications by Citations

203 papers	7,586 citations	47 h-index	81 g-index
213 ext. papers	8,997 ext. citations	6.7 avg, IF	6.75 L-index

#	Paper	IF	Citations
203	Equilibrium, kinetics and breakthrough studies for adsorption of fluoride on activated alumina. *Separation and Purification Technology*, **2005**, 42, 265-271	8.3	418
202	Equilibrium, kinetics and thermodynamic studies for adsorption of As(III) on activated alumina. *Separation and Purification Technology*, **2004**, 36, 139-147	8.3	407
201	Removal of chromium from industrial waste by using eucalyptus bark. *Bioresource Technology*, **2006** , 97, 15-20	11	392
200	Hydrogen production from glycerol by reforming in supercritical water over Ru/Al2O3 catalyst. *Fuel* , **2008**, 87, 2956-2960	7.1	241
199	Investigations on the column performance of fluoride adsorption by activated alumina in a fixed-bed. *Chemical Engineering Journal*, **2004**, 98, 165-173	14.7	236
198	Characterization of North American Lignocellulosic Biomass and Biochars in Terms of their Candidacy for Alternate Renewable Fuels. *Bioenergy Research*, **2013**, 6, 663-677	3.1	224
197	Solidification/stabilization of arsenic containing solid wastes using portland cement, fly ash and polymeric materials. *Journal of Hazardous Materials*, **2006**, 131, 29-36	12.8	177
196	Evaluation of the physiochemical development of biochars obtained from pyrolysis of wheat straw, timothy grass and pinewood: Effects of heating rate. *Journal of Analytical and Applied Pyrolysis*, **2013**, 104, 485-493	6	167
195	Catalytic and mechanistic insights into the production of ethyl levulinate from biorenewable feedstocks. *Green Chemistry*, **2016**, 18, 4804-4823	10	162
194	Kinetic modeling of steam reforming of ethanol for the production of hydrogen over Co/Al2O3 catalyst. *Chemical Engineering Journal*, **2007**, 125, 139-147	14.7	150
193	Thermodynamic and breakthrough column studies for the selective sorption of chromium from industrial effluent on activated eucalyptus bark. *Bioresource Technology*, **2006**, 97, 1986-93	11	144
192	Catalytic conversion of methanol to gasoline range hydrocarbons. *Catalysis Today*, **2004**, 96, 155-160	5.3	139
191	Hydrogen Production from Glucose Using Ru/Al2O3 Catalyst in Supercritical Water. *Industrial & Engineering Chemistry Research*, **2007**, 46, 3574-3579	3.9	117
190	K-, CeO2-, and Mn-promoted Ni/Al2O3 catalysts for stable CO2 reforming of methane. *Applied Catalysis A: General*, **2005**, 290, 166-174	5.1	110
189	Perennial grass (Arundo donax L.) as a feedstock for thermo-chemical conversion to energy and materials. *Bioresource Technology*, **2015**, 188, 265-72	11	97
188	Catalytic oxidative steam reforming of bio-ethanol for hydrogen production over Rh promoted Ni/CeO2ZrO2 catalyst. *International Journal of Hydrogen Energy*, **2015**, 40, 2529-2544	6.7	96
187	Deep desulfurization of diesel fuel by selective adsorption over Ni/Al2O3 and Ni/ZSM-5 extrudates. *Fuel*, **2012**, 93, 86-91	7.1	95

186	Pretreatment of lignocellulosic biomass: A review on recent advances. *Bioresource Technology*, **2021**, 334, 125235	11	92
185	Renewable hydrogen generation by steam reforming of glycerol over zirconia promoted ceria supported catalyst. *Renewable Energy*, **2011**, 36, 3195-3202	8.1	86
184	Deep desulfurization of diesel via peroxide oxidation using phosphotungstic acid as phase transfer catalyst. *Fuel Processing Technology*, **2010**, 91, 1133-1138	7.2	83
183	Kinetic study of the catalytic carbon dioxide reforming of methane to synthesis gas over Ni-K/CeO2-Al2O3 catalyst. *Applied Catalysis A: General*, **2006**, 308, 119-127	5.1	81
182	Hydrolysis of cellulosic bamboo biomass into reducing sugars via a combined alkaline solution and ionic liquid pretreament steps. *Renewable Energy*, **2017**, 104, 177-184	8.1	80
181	Direct conversion of natural gas to higher hydrocarbons: A review. *Journal of Energy Chemistry*, **2013**, 22, 543-554	12	80
180	Synthesis of hydrogen and carbon nanotubes over copper promoted Ni/SiO2 catalyst by thermocatalytic decomposition of methane. *Journal of Natural Gas Science and Engineering*, **2013**, 13, 52-59	4.6	80
179	Experimental and modelling studies on fixed bed adsorption of As(III) ions from aqueous solution. *Separation and Purification Technology*, **2006**, 48, 288-296	8.3	80
178	H2 production by steam reforming of methanol over Cu/ZnO/Al2O3 catalysts: transient deactivation kinetics modeling. *Applied Catalysis A: General*, **2005**, 279, 155-164	5.1	79
177	Activity and stability enhancement of copper□alumina catalysts using cerium and zinc promoters for the selective production of hydrogen via steam reforming of methanol. *Journal of Power Sources*, **2006**, 159, 139-143	8.9	78
176	Adsorption of As(III) from Aqueous Solution onto Iron Oxide Impregnated Activated Alumina. *Water Quality Research Journal of Canada*, **2004**, 39, 258-266	1.7	77
175	Development and performance evaluation of an algal biofilm reactor for treatment of multiple wastewaters and characterization of biomass for diverse applications. *Bioresource Technology*, **2017**, 224, 276-284	11	75
174	Deactivation Studies over Ni□K/CeO2□Al2O3Catalyst for Dry Reforming of Methane. *Industrial & Engineering Chemistry Research*, **2007**, 46, 1731-1736	3.9	74
173	Hydrogen production by oxidative steam reforming of methanol using ceria promoted copper□alumina catalysts. *Fuel Processing Technology*, **2007**, 88, 825-832	7.2	70
172	Hydrogen Production from Ethanol by Reforming in Supercritical Water Using Ru/Al2O3 Catalyst. *Energy & Fuels*, **2007**, 21, 3541-3547	4.1	68
171	Novel technologies and conventional processes for recovery of metals from waste electrical and electronic equipment: Challenges & opportunities □A review. *Journal of Environmental Chemical Engineering*, **2018**, 6, 1288-1304	6.8	66
170	Ni□Cu□Zn/MCM-22 catalysts for simultaneous production of hydrogen and multiwall carbon nanotubes via thermo-catalytic decomposition of methane. *International Journal of Hydrogen Energy*, **2011**, 36, 13352-13360	6.7	66
169	Studies on mercury bioremediation by alginate immobilized mercury tolerant Bacillus cereus cells. *International Biodeterioration and Biodegradation*, **2012**, 71, 1-8	4.8	64

168	Intermediate pyrolysis of agro-industrial biomasses in bench-scale pyrolyser: Product yields and its characterization. *Bioresource Technology*, **2015**, 188, 258-64	11	61
167	Steam reforming of acetic acid for hydrogen production over bifunctional Ni□o catalysts. *Catalysis Today*, **2013**, 207, 36-43	5.3	61
166	Oxidative and non-oxidative steam reforming of crude bio-ethanol for hydrogen production over Rh promoted Ni/CeO 2 -ZrO 2 catalyst. *Applied Catalysis A: General*, **2015**, 499, 19-31	5.1	55
165	Kinetics and Mass Transfer Studies on the Adsorption of Arsenic onto Activated Alumina and Iron Oxide Impregnated Activated Alumina. *Water Quality Research Journal of Canada*, **2006**, 41, 147-156	1.7	55
164	Pyrolysis of n-heptane: kinetics and modeling. *Journal of Analytical and Applied Pyrolysis*, **1996**, 36, 103-120	6	55
163	Chelation technology: a promising green approach for resource management and waste minimization. *Environmental Sciences: Processes and Impacts*, **2015**, 17, 12-40	4.3	54
162	Experimental study and mechanistic kinetic modeling for selective production of hydrogen via catalytic steam reforming of methanol. *Chemical Engineering Science*, **2007**, 62, 5425-5435	4.4	53
161	Effect of heating/reheating of fats/oils, as used by Asian Indians, on trans fatty acid formation. *Food Chemistry*, **2016**, 212, 663-70	8.5	51
160	Characterization and Activity of K, CeO2, and Mn Promoted Ni/Al2O3 Catalysts for Carbon Dioxide Reforming of Methane. *Industrial & Engineering Chemistry Research*, **2006**, 45, 7435-7443	3.9	51
159	Greener approach for the extraction of copper metal from electronic waste. *Waste Management*, **2016**, 57, 102-112	8.6	50
158	Extraction of nickel from spent catalyst using fresh and recovered EDTA. *Journal of Hazardous Materials*, **2009**, 171, 253-61	12.8	49
157	Recovery of Nickel from Spent Industrial Catalysts Using Chelating Agents. *Industrial & Engineering Chemistry Research*, **2010**, 49, 2014-2024	3.9	47
156	A review of biochemical and thermochemical energy conversion routes of wastewater grown algal biomass. *Science of the Total Environment*, **2020**, 726, 137961	10.2	46
155	Liquid fuel production from syngas using bifunctional CuO□oO□r2O3 catalyst mixed with MFI zeolite. *Fuel Processing Technology*, **2011**, 92, 600-608	7.2	46
154	Synthesis of green fuels from biogenic waste through thermochemical route □The role of heterogeneous catalyst: A review. *Renewable and Sustainable Energy Reviews*, **2014**, 38, 131-153	16.2	45
153	Carbon dioxide absorption into monoethanolamine in a continuous film contactor. *Chemical Engineering Journal*, **2007**, 133, 229-237	14.7	44
152	Removal of arsenic and fluoride from aqueous solution by biomass based activated biochar: Optimization through response surface methodology. *Journal of Environmental Chemical Engineering*, **2017**, 5, 5528-5539	6.8	43
151	Kinetic Study of Steam Reforming of Ethanol on Ni-Based Ceria□irconia Catalyst. *Industrial & Engineering Chemistry Research*, **2013**, 52, 15763-15771	3.9	43

150	Selective production of hydrogen via oxidative steam reforming of methanol using CuZnCeAl oxide catalysts. *Chemical Engineering Science*, **2007**, 62, 5436-5443	4.4	42
149	Effect of support materials on the performance of Ni-based catalysts in tri-reforming of methane. *Fuel Processing Technology*, **2019**, 186, 40-52	7.2	41
148	Renewable hydrogen production by steam reforming of glycerol over Ni/CeO2 catalyst prepared by precipitation deposition method. *Korean Journal of Chemical Engineering*, **2011**, 28, 1859-1866	2.8	40
147	Metal Recovery from Hydroprocessing Spent Catalyst: A Green Chemical Engineering Approach. *Industrial & Engineering Chemistry Research*, **2013**, 52, 16724-16736	3.9	39
146	Hydrogen production from steam reforming of acetic acid over Cu-Zn supported calcium aluminate. *Bioresource Technology*, **2012**, 123, 558-65	11	38
145	Hydrogen production by steam reforming of model bio-oil using structured Ni/Al2O3 catalysts. *International Journal of Hydrogen Energy*, **2013**, 38, 921-933	6.7	37
144	Synergistic effect of ionic liquid and dilute sulphuric acid in the hydrolysis of microcrystalline cellulose. *Fuel Processing Technology*, **2016**, 148, 289-294	7.2	36
143	Pyrolysis and kinetic analyses of a perennial grass (Saccharum ravannae L.) from north-east India: Optimization through response surface methodology and product characterization. *Bioresource Technology*, **2018**, 253, 304-314	11	35
142	Influence of preparation method on performance of Cu(Zn)(Zr)-alumina catalysts for the hydrogen production via steam reforming of methanol. *Journal of Porous Materials*, **2006**, 13, 373-378	2.4	35
141	Integrated thermo-catalytic reforming of residual sugarcane bagasse in a laboratory scale reactor. *Fuel Processing Technology*, **2018**, 171, 277-286	7.2	34
140	Extraction of Nickel from Spent Catalyst Using Biodegradable Chelating Agent EDDS. *Industrial & Engineering Chemistry Research*, **2012**, 51, 10354-10363	3.9	34
139	Activity of Oxalic Acid Treated ZnO/CuO/HZSM-5 Catalyst for the Transformation of Methanol to Gasoline Range Hydrocarbons. *Industrial & Engineering Chemistry Research*, **2008**, 47, 2970-2975	3.9	33
138	Lignin Conversion: A Key to the Concept of Lignocellulosic Biomass-Based Integrated Biorefinery **2018**, 409-444		32
137	Environmentally friendly approach for the recovery of metallic fraction from waste printed circuit boards using pyrolysis and ultrasonication. *Waste Management*, **2020**, 118, 150-160	8.6	30
136	An ultra-light flexible aerogel-based on methane derived CNTs as a reinforcing agent in silica-CMC matrix for efficient oil adsorption. *Journal of Hazardous Materials*, **2019**, 375, 206-215	12.8	29
135	Direct conversion of methane with methanol toward higher hydrocarbon over Ga modified Mo/H-ZSM-5 catalyst. *Journal of Industrial and Engineering Chemistry*, **2014**, 20, 2364-2369	6.3	29
134	Kinetic modeling of oxidative steam reforming of methanol over Cu/ZnO/CeO2/Al2O3 catalyst. *Applied Catalysis A: General*, **2009**, 356, 189-200	5.1	29
133	Investigations on energy efficiency of biomethane/biocrude production from pilot scale wastewater grown algal biomass. *Applied Energy*, **2019**, 254, 113656	10.7	28

132	Eco-friendly recovery of metals from waste mobile printed circuit boards using low temperature roasting. *Journal of Hazardous Materials*, **2020**, 395, 122642	12.8	28
131	Methanol assisted methane conversion for higher hydrocarbon over bifunctional Zn-modified Mo/HZSM-5 catalyst. *Journal of Molecular Catalysis A*, **2015**, 398, 368-375		28
130	Catalytic Pyrolysis of n-Heptane: Kinetics and Modeling. *Industrial & Engineering Chemistry Research*, **1997**, 36, 2059-2065	3.9	28
129	CO-hydrogenation over silica supported iron based catalysts: Influence of potassium loading. *Applied Energy*, **2013**, 111, 267-276	10.7	27
128	Hydroisomerization of Long Chain n-Paraffins over Pt/ZSM-22: Influence of Si/Al Ratio. *Energy & Fuels*, **2015**, 29, 1066-1075	4.1	27
127	Insights into the metal salt catalyzed ethyl levulinate synthesis from biorenewable feedstocks. *Catalysis Today*, **2017**, 291, 187-194	5.3	26
126	Biomass-derived CO2 rich syngas conversion to higher hydrocarbon via Fischer-Tropsch process over Fe□o bimetallic catalyst. *International Journal of Hydrogen Energy*, **2019**, 44, 27741-27748	6.7	26
125	Catalytic wet oxidation of phenol in a trickle bed reactor. *Chemical Engineering Journal*, **2004**, 103, 51-57	14.7	26
124	Hydroisomerization of n-hexadecane over Pt/ZSM-22 framework: Effect of divalent cation exchange. *Journal of Molecular Catalysis A*, **2015**, 404-405, 47-56		25
123	Kinetic Study and Modeling of Homogeneous Thermocatalytic Decomposition of Methane over a Ni□u□n/Al2O3 Catalyst for the Production of Hydrogen and Bamboo-Shaped Carbon Nanotubes. *Industrial & Engineering Chemistry Research*, **2016**, 55, 11672-11680	3.9	25
122	Effect of K and CeO2 promoters on the activity of Co/SiO2 catalyst for liquid fuel production from syngas. *Applied Energy*, **2012**, 94, 385-394	10.7	25
121	Hydrogen generation from biomass materials: challenges and opportunities. *Wiley Interdisciplinary Reviews: Energy and Environment*, **2015**, 4, 139-155	4.7	24
120	Efficient utilization of potash alum as a green catalyst for production of furfural, 5-hydroxymethylfurfural and levulinic acid from mono-sugars. *RSC Advances*, **2017**, 7, 41973-41979	3.7	24
119	Catalytic pyrolysis of n-heptane on unpromoted and potassium promoted calcium aluminates. *Chemical Engineering Journal*, **2002**, 87, 219-225	14.7	24
118	Synthesis of C5+ hydrocarbons from low H2/CO ratio syngas over silica supported bimetallic Fe-Co catalyst. *Catalysis Today*, **2017**, 291, 133-145	5.3	23
117	Production and characterization of biocrude and biochar obtained from non-edible de-oiled seed cakes hydrothermal conversion. *Journal of Analytical and Applied Pyrolysis*, **2015**, 115, 77-86	6	23
116	Pyrolysis of methylcyclohexane: Kinetics and modelling. *Chemical Engineering Journal*, **1997**, 67, 123-129	14.7	23
115	Tuning the metal-support interaction of methane tri-reforming catalysts for industrial flue gas utilization. *International Journal of Hydrogen Energy*, **2020**, 45, 1911-1929	6.7	23

114	Understanding reaction kinetics, deprotonation and solvation of brønsted acidic protons in heteropolyacid catalyzed synthesis of biorenewable alkyl levulinates. *Chemical Engineering Journal*, **2020**, 400, 125916	14.7	22
113	CO-hydrogenation of syngas to fuel using silica supported Fe□Cu□K catalysts: Effects of active components. *Fuel Processing Technology*, **2014**, 118, 82-89	7.2	21
112	Mass transport correlation for CO2 absorption in aqueous monoethanolamine in a continuous film contactor. *Chemical Engineering and Processing: Process Intensification*, **2008**, 47, 920-928	3.7	21
111	Insights into Microwave-Assisted Synthesis of 5-Ethoxymethylfurfural and Ethyl Levulinate Using Tungsten Disulfide as a Catalyst. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 1721-1729	8.3	20
110	Synthesis of carbon nanotubes by thermo catalytic decomposition of methane over Cu and Zn promoted Ni/MCM-22 catalyst. *Journal of Environmental Chemical Engineering*, **2013**, 1, 746-754	6.8	19
109	Biosorption of Textile Dye by Aspergillus lentulus Pellets: Process Optimization and Cyclic Removal in Aerated Bioreactor. *Water, Air, and Soil Pollution*, **2014**, 225, 1	2.6	18
108	Depolymerization of microcrystalline cellulose to value added chemicals using sulfate ion promoted zirconia catalyst. *Bioresource Technology*, **2016**, 220, 394-400	11	18
107	Mechanistic Insights into the Activity of Mo-Carbide Clusters for Methane Dehydrogenation and Carbon□Carbon Coupling Reactions To Form Ethylene in Methane Dehydroaromatization. *Journal of Physical Chemistry C*, **2018**, 122, 11754-11764	3.8	18
106	Mass-Scale Algal Biomass Production Using Algal Biofilm Reactor and Conversion to Energy and Chemical Precursors by Hydropyrolysis. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 4234-4242	8.3	17
105	Promotional effects of Cu and Zn in hydrotalcite-derived methane tri-reforming catalyst. *Applied Surface Science*, **2020**, 515, 146010	6.7	17
104	Effect of different catalyst on the co-cracking of Jatropha oil, vacuum residue and high density polyethylene. *Fuel*, **2014**, 133, 96-105	7.1	17
103	Catalytic Activity of Copper Oxide Impregnated HZSM-5 in Methanol Conversion to Liquid Hydrocarbons. *Canadian Journal of Chemical Engineering*, **2008**, 83, 970-977	2.3	17
102	Synthesis and Characterization of Zirconia Supported Silicotungstic Acid for Ethyl Levulinate Production. *Industrial & Engineering Chemistry Research*, **2019**, 58, 16045-16054	3.9	16
101	Characterization of commercially important Asian bamboo species. *European Journal of Wood and Wood Products*, **2016**, 74, 137-139	2.1	16
100	MoS2□Nanosheets-Based Catalysts for Photocatalytic CO2 Reduction: A Review. *ACS Applied Nano Materials*, **2021**, 4, 8644-8667	5.6	16
99	Synergistic Effect of Fe□Co Bimetallic Catalyst on FTS and WGS Activity in the Fischer□Tropsch Process: A Kinetic Study. *Industrial & Engineering Chemistry Research*, **2017**, 56, 4659-4671	3.9	15
98	Hydrotalcite supported bimetallic (Ni-Cu) catalyst: A smart choice for one-pot conversion of biomass-derived platform chemicals to hydrogenated biofuels. *Fuel*, **2020**, 277, 118111	7.1	15
97	Hydroisomerization of n-hexadecane over Brønsted acid site tailored Pt/ZSM-12. *Journal of Porous Materials*, **2014**, 21, 849-857	2.4	15

96	Conceptual mechanism and kinetic studies of chelating agent assisted metal extraction process from spent catalyst. *Journal of Industrial and Engineering Chemistry*, **2015**, 27, 373-383	6.3	15
95	Catalytic pyrolysis of methylcyclohexane: kinetics and modeling. *Chemical Engineering Journal*, **1998**, 70, 47-54	14.7	15
94	Transformation of methanol to gasoline range hydrocarbons using HZSM-5 catalysts impregnated with copper oxide. *Korean Journal of Chemical Engineering*, **2005**, 22, 353-357	2.8	15
93	Exploration of a novel biorefinery based on sequential hydropyrolysis and anaerobic digestion of algal biofilm: a comprehensive characterization of products for energy and chemical production. *Sustainable Energy and Fuels*, **2020**, 4, 1481-1495	5.8	15
92	Insights into the Synthesis of Ethyl Levulinate under Microwave and Nonmicrowave Heating Conditions. *Industrial & Engineering Chemistry Research*, **2019**, 58, 16055-16064	3.9	14
91	Response Surface Modeling and Optimization of CO Hydrogenation for Higher Liquid Hydrocarbon Using Cu□o□r + ZSM-5 Bifunctional Catalyst. *Industrial & Engineering Chemistry Research*, **2012**, 51, 4843-4853	3.9	14
90	Investigating the role of oxygen vacancies and basic site density in tuning methanol selectivity over Cu/CeO2 catalyst during CO2 hydrogenation. *Fuel*, **2021**, 303, 121289	7.1	14
89	Comprehending the contemporary state of art in biogas enrichment and CO2 capture technologies via swing adsorption. *International Journal of Hydrogen Energy*, **2021**, 46, 6588-6612	6.7	13
88	The thermodynamics and biodegradability of chelating agents upon metal extraction. *Chemical Engineering Science*, **2015**, 137, 768-785	4.4	12
87	Mechanistic Kinetic Modeling of Oxidative Steam Reforming of Bioethanol for Hydrogen Production over Rh□i/CeO2□rO2 Catalyst. *Industrial & Engineering Chemistry Research*, **2016**, 55, 86-98	3.9	12
86	Detailed kinetics of Fischer Tropsch synthesis over Fe-Co bimetallic catalyst considering chain length dependent olefin desorption. *Fuel*, **2019**, 236, 1263-1272	7.1	12
85	Cross-Linked Porous Polymers as Heterogeneous Organocatalysts for Task-Specific Applications in Biomass Transformations, CO2 Fixation, and Asymmetric Reactions. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 12431-12460	8.3	12
84	Improving enzymatic digestibility of sugarcane bagasse from different varieties of sugarcane using deep eutectic solvent pretreatment. *Bioresource Technology*, **2021**, 337, 125480	11	12
83	High level xylitol production by Pichia fermentans using non-detoxified xylose-rich sugarcane bagasse and olive pits hydrolysates. *Bioresource Technology*, **2021**, 342, 126005	11	12
82	Modeling of sulphonation of tridecylbenzene in a falling film reactor. *Mathematical and Computer Modelling*, **2007**, 46, 1332-1344		11
81	Dissolution of brominated epoxy resin for environment friendly recovery of copper as cupric oxide nanoparticles from waste printed circuit boards using ammonium chloride roasting. *Journal of Cleaner Production*, **2021**, 291, 125928	10.3	11
80	Statistical Optimization of Process Variables for Methane Conversion over Zn-Mo/H-ZSM-5 Catalysts in the Presence of Methanol. *Energy Technology*, **2013**, 1, 157-165	3.5	10
79	Combined experimental and kinetic modeling studies for the conversion of gasoline range hydrocarbons from methanol over modified HZSM-5 catalyst. *Korean Journal of Chemical Engineering*, **2010**, 27, 1404-1411	2.8	10

78	Production of Hydrogen With Low Carbon Monoxide Formation Via Catalytic Steam Reforming of Methanol. *Journal of Fuel Cell Science and Technology*, **2006**, 3, 369-374		10
77	Integrated biorefinery processes for conversion of lignocellulosic biomass to value added materials: Paving a path towards circular economy. *Bioresource Technology*, **2022**, 343, 126151	11	10
76	Mesoporous Porphyrin-Silica Nanocomposite as Solid Acid Catalyst for High Yield Synthesis of HMF in Water. *Molecules*, **2021**, 26,	4.8	10
75	Boric acid treated HZSM-5 for improved catalyst activity in non-oxidative methane dehydroaromatization. *Catalysis Science and Technology*, **2020**, 10, 3857-3867	5.5	9
74	Model-fitting approach for methylene blue dye adsorption on Camelina and Sapindus seeds-derived adsorbents. *Adsorption Science and Technology*, **2016**, 34, 565-580	3.6	9
73	Selective hydroalkylation of benzene over palladium supported Y-Zeolite: Effect of metal acid balance. *Molecular Catalysis*, **2017**, 442, 27-38	3.3	9
72	Blue hydrogen and carbon nanotube production via direct catalytic decomposition of methane in fluidized bed reactor: Capture and extraction of carbon in the form of CNTs. *Energy Conversion and Management*, **2021**, 232, 113893	10.6	9
71	Instructive analysis of engineered carbon materials for potential application in water and wastewater treatment. *Science of the Total Environment*, **2021**, 793, 148583	10.2	9
70	Development of Self-Healing Cement Slurry through the Incorporation of Dual-Encapsulated Polyacrylamide for the Prevention of Water Ingress in Oil Well. *Materials*, **2020**, 13,	3.5	8
69	Noncatalytic and catalytic pyrolysis of toluene. *Canadian Journal of Chemical Engineering*, **1999**, 77, 150-155	1.5	8
68	Algal Biofilm Systems: An Answer to Algal Biofuel Dilemma **2017**, 77-96		8
67	Fractionation of coal through organo-separative refining for enhancing its potential for the CO2-gasification. *International Journal of Coal Science and Technology*, **2020**, 7, 504-515	4.5	8
66	Impact of heavy metal laden algal biomass on hydrothermal liquefaction and biorefinery approach. *Chemical Engineering Research and Design*, **2021**, 145, 141-149	5.5	8
65	Efficient recovery of Cu and Ni from WPCB via alkali leaching approach. *Journal of Environmental Management*, **2021**, 296, 113154	7.9	8
64	Development of green technology for extraction of nickel from spent catalyst and its optimization using response surface methodology. *Green Processing and Synthesis*, **2013**, 2,	3.9	7
63	Hydrotalcite-derived Ni-Zn-Mg-Al catalyst for Tri-reforming of methane: Effect of divalent to trivalent metal ratio and Ni loading. *Fuel Processing Technology*, **2020**, 210, 106559	7.2	7
62	Non-oxidative conversion of methane into higher hydrocarbons over Mo/MCM-22 catalyst. *Journal of Chemical Sciences*, **2017**, 129, 1705-1711	1.8	6
61	Controlling the Evolution of Active Molybdenum Carbide by Moderating the Acidity of Mo/HMCM-22 Catalyst in Methane Dehydroaromatization. *Catalysis Letters*, **2020**, 150, 3653-3666	2.8	6

60	Catalytic Steam Reforming of Model Oxygenates of Bio-oil for Hydrogen Production Over La Modified Ni/CeO2ZrO2 Catalyst. *Topics in Catalysis*, **2016**, 59, 1343-1353	2.3	6
59	Current perspective of innovative strategies for bioremediation of organic pollutants from wastewater. *Bioresource Technology*, **2022**, 344, 126305	11	6
58	An insight into the promotional effect on Fe-Co bimetallic catalyst in the Fischer Tropsch reaction: A DRIFTS study. *Fuel*, **2020**, 276, 118044	7.1	6
57	High yield synthesis of hexitols and ethylene glycol through one-pot hydrolytic hydrogenation of cellulose. *Fuel Processing Technology*, **2021**, 218, 106847	7.2	6
56	Chemical characterization and decay resistance analysis of smoke treated bamboo species. *European Journal of Wood and Wood Products*, **2016**, 74, 625-628	2.1	6
55	**2020**,		5
54	Recent Advances in Production of Biofuel and Commodity Chemicals from Algal Biomass **2017**, 393-419		5
53	Origin of MnO induced Cu0/Cu+ surface active centers for CO2 containing syngas conversion to DME via tandem catalysis. *Sustainable Energy and Fuels*, **2021**, 5, 2781-2801	5.8	5
52	High quality liquid fuel production from waste plastics via two-step cracking route in a bottom-up approach using bi-functional Fe/HZSM-5 catalyst. *Waste Management*, **2021**, 132, 151-161	8.6	5
51	Microwave mediated enhanced production of 5-hydroxymethylfurfural using choline chloride-based eutectic mixture as sustainable catalyst. *Renewable Energy*, **2021**, 177, 643-651	8.1	5
50	Topotactic transformation of homogeneous phosphotungastomolybdic acid materials to heterogeneous solid acid catalyst for carbohydrate conversion to alkyl methylfurfural and alkyl levulinate.. *RSC Advances*, **2020**, 10, 705-718	3.7	4
49	Renewable Hydrogen Generation by Steam Reforming of Acetic Acid over Cu-Zn-Ni Supported Calcium Aluminate Catalysts. *ACS Symposium Series*, **2012**, 111-137	0.4	4
48	Mechanistic Modelling of the Catalytic Pyrolysis of Methylcyclohexane. *Canadian Journal of Chemical Engineering*, **2008**, 81, 981-992	2.3	4
47	Insitu upgradation of biocrude vapor generated from non-edible oil cakes hydrothermal conversion over aluminated mesoporous catalysts. *Renewable Energy*, **2016**, 95, 43-52	8.1	4
46	Unravelling the reactivity of metastable molybdenum carbide nanoclusters in the C-H bond activation of methane, ethane and ethylene. *Nanoscale*, **2021**, 13, 4451-4466	7.7	4
45	Deep eutectic solvents: A greener approach towards biorefineries **2021**, 193-219		4
44	Tailoring the Physicochemical Properties of Mg Promoted Catalysts via One Pot Non-ionic Surfactant Assisted Co-precipitation Route for CO2 Co-feeding Syngas to Methanol. *Topics in Catalysis*, **2021**, 64, 395-413	2.3	4
43	Glycerol conversion over palladium- and alumina-impregnated KIT-6 for the production of gasoline range hydrocarbons. *Clean Technologies and Environmental Policy*, **2018**, 20, 751-757	4.3	4

42	Biorefinery solid cake waste to biocrude via hydrothermal treatment: optimization of process parameters using statistical approach. *Biomass Conversion and Biorefinery*, **2016**, 6, 79-90	2.3	3
41	Kinetic and Thermodynamic Studies of Ni(II) Adsorption onto Activated Carbon of Abelmoschus manihot from Aqueous Solutions. *Journal of Dispersion Science and Technology*, **2013**, 34, 923-931	1.5	3
40	Biomass, Conversion Routes and Products An Overview **2014**, 1-30		3
39	Gas Absorption with or without Chemical Reaction in a Falling Liquid Film. *Polymer-Plastics Technology and Engineering*, **2007**, 46, 957-964		3
38	Unfolding the role of molybdenum disulfide as a catalyst to produce platform chemicals from biorenewable resources. *Biomass Conversion and Biorefinery*, **2020**, 1	2.3	3
37	Biohydrometallurgy: A Sustainable Approach for Urban Mining of Metals and Metal Refining **2021**, 865-892		3
36	Statistical evaluation of cow-dung derived activated biochar for phenol adsorption: Adsorption isotherms, kinetics, and thermodynamic studies.. *Bioresource Technology*, **2022**, 127030	11	3
35	Unravelling synergetic interaction over tandem Cu-ZnO-ZrO2/hierarchical ZSM5 catalyst for CO2 hydrogenation to methanol and DME. *Fuel*, **2022**, 318, 123641	7.1	3
34	Efficient utilization of bimetallic catalyst in low (hbox {H}_{2}/hbox {CO}) environment syngas for liquid fuel production. *Journal of Chemical Sciences*, **2017**, 129, 1747-1754	1.8	2
33	Properties and Importance of Various Bamboo Species for Multi-Utility Applications **2019**, 251-283		2
32	Field investigations of selectively treated bamboo species. *European Journal of Wood and Wood Products*, **2016**, 74, 771-773	2.1	2
31	Investigations on the effect of reaction parameters over Fe/Cu/K catalyst for the production of selective range of liquid hydrocarbon. *Journal of Chemical Sciences*, **2018**, 130, 1	1.8	2
30	Microwave-assisted extraction of lignin from coconut coir using deep eutectic solvents and its valorization to aromatics.. *Bioresource Technology*, **2021**, 345, 126528	11	2
29	Overview of sustainable fuel and energy technologies **2021**, 3-25		2
28	Chronological perspective on fermentative-hydrogen from hypothesis in early nineteenth century to recent developments: a review. *Biomass Conversion and Biorefinery*,1	2.3	2
27	Efficient extraction of metals from thermally treated waste printed circuit boards using solid state chlorination: Statistical modeling and optimization. *Journal of Cleaner Production*, **2021**, 313, 127950	10.3	2
26	Exploration of heavy metal uptake potential of three algal strains/consortia in suspended and attached growth systems. *Journal of Water Process Engineering*, **2021**, 43, 102315	6.7	2
25	Insights into reductive depolymerization of Kraft lignin to produce aromatics in the presence of Pt/HZSM-23 catalyst. *Materials Science for Energy Technologies*, **2021**, 4, 341-348	5.2	2

24	Hydrogen Generation from Biomass Materials: Challenges and Opportunities93-108		2
23	Waste Handling and Pre-treatment **2020**, 15-38		1
22	An Oxalic-Acid-Treated Zno/Cuo/Hzsm-5 Catalyst With High Resistance To Coke Formation For The Conversion Of Methanol To Hydrocarbons. *International Journal of Green Energy*, **2014**, 11, 376-388	3	1
21	Co-pyrolysis characteristics and kinetics of electronic waste and macroalgae: A synergy study based on thermogravimetric analysis. *Algal Research*, **2022**, 61, 102601	5	1
20	Effect of work-function and morphology of heterostructure components on CO2 reduction photo-catalytic activity of MoS2-Cu2O heterostructure. *Chemical Engineering Journal*, **2022**, 433, 132709	14.7	1
19	Modeling of Gas Absorption with an Exothermic Reaction in a Falling Liquid Film. *Journal of Chemical Engineering of Japan*, **2006**, 39, 1229-1236	0.8	1
18	A novel crystalline nanoporous iron phosphonate based metal□organic framework as an efficient anode material for lithium ion batteries. *New Journal of Chemistry*, **2021**, 45, 15458-15468	3.6	1
17	CO2 Reduction to Methanol Using a Conjugated Organic□Inorganic Hybrid TiO2□C3N4 Nano-assembly **2021**, 6, 395		1
16	Steering the Aspects of MgO-Induced Structure Sensitivity in Cu-Based Catalysts for CO2-Rich Syngas Conversion to Dimethyl Ether: Cu/Zn Ratio and Lattice Parameters. *Energy & Fuels*, **2022**, 36, 2673-2687	4.1	1
15	Advancements in the field of electronic waste Recycling: Critical assessment of chemical route for generation of energy and valuable products coupled with metal recovery. *Separation and Purification Technology*, **2022**, 289, 120773	8.3	1
14	Unveiling the Potential of Water as a Co-solvent in Microwave-assisted Delignification of Sugarcane Bagasse using Ternary Deep Eutectic Solvents.. *Bioresource Technology*, **2022**, 127005	11	1
13	Recent Advances in the Valorization of Lignin: A Key Focus on Pretreatment, Characterization, and Catalytic Depolymerization Strategies for Future Biorefineries. *Advanced Sustainable Systems*, **2022**, 6, 2100299	5.9	1
12	Deciphering Mn modulated structure-activity interplay and rational statistical analysis for CO2 rich syngas hydrogenation to clean methanol. *Journal of Cleaner Production*, **2022**, 340, 130794	10.3	0
11	Synthesis and application of TiO2-supported phosphotungstic acid for ethyl levulinate production. *Materials Science for Energy Technologies*, **2022**, 5, 189-196	5.2	0
10	Catalytic production and application of bio-renewable butyl butyrate as jet fuel blend- A review.. *Journal of Environmental Management*, **2022**, 310, 114772	7.9	0
9	Valorization of Microcrystalline Cellulose Using Heterogeneous Protonated Zeolite Catalyst: An Experimental and Kinetics Approach. *Reactions*, **2022**, 3, 283-299	1.5	0
8	An environmentally benign closed-loop process for the selective recovery of valuable metals from industrial end-of-life lithium-ion batteries. *Chemical Engineering Journal*, **2022**, 137397	14.7	0
7	Scale-up Process for Metal Extraction from Solid Waste **2020**, 181-205		

List of Publications

6 Conventional Technologies for Metal Extraction from Waste **2020**, 39-70

5 Future Technology for Metal Extraction from Waste **2020**, 157-179

4 Perspectives in Carbon Oxides Conversion to Methanol/Dimethyl Ether: Distinctive Contribution of Heterogeneous and Photocatalysis **2021**, 557-597

3 Recent Advancements and Detailed Understanding of Kinetics for Synthesis Gas Conversion into Liquid Fuel **2021**, 459-501

2 Thermocatalytic Conversion of Natural Gas to Petrochemical Feedstocks Via Non-oxidative Methods: Theoretical and Experimental Approaches **2021**, 229-252

1 Novel Thermal Technologies: Trends and Prospects **2022**, 1-43