

# Shogo Kumagai

## List of Publications by Citations

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212  
papers

4,117  
citations

33  
h-index

50  
g-index

216  
ext. papers

4,990  
ext. citations

5.5  
avg, IF

6.01  
L-index

#	Paper	IF	Citations
212	Hydrogen production from biomass and plastic mixtures by pyrolysis-gasification. <i>International Journal of Hydrogen Energy</i> , <b>2014</b> , 39, 10883-10891	6.7	138
211	Kinetics of Hydrolysis of Poly(ethylene terephthalate) Powder in Sulfuric Acid by a Modified Shrinking-Core Model. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2001</b> , 40, 75-79	3.9	130
210	Pyrolysis of poly(ethylene terephthalate) in a fluidised bed plant. <i>Polymer Degradation and Stability</i> , <b>2004</b> , 86, 499-504	4.7	108
209	Pyrolysis of tetrabromobisphenol-A containing paper laminated printed circuit boards. <i>Chemosphere</i> , <b>2008</b> , 71, 872-8	8.4	104
208	Kinetics of Hydrolysis of PET Powder in Nitric Acid by a Modified Shrinking-Core Model. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>1998</b> , 37, 336-340	3.9	103
207	Recovery of indium from In <sub>2</sub> O <sub>3</sub> and liquid crystal display powder via a chloride volatilization process using polyvinyl chloride. <i>Thermochimica Acta</i> , <b>2009</b> , 493, 105-108	2.9	86
206	Novel NiMgAlCa catalyst for enhanced hydrogen production for the pyrolysis-gasification of a biomass/plastic mixture. <i>Journal of Analytical and Applied Pyrolysis</i> , <b>2015</b> , 113, 15-21	6	73
205	Pyrolysis gases produced from individual and mixed PE, PP, PS, PVC, and PET Part I: Production and physical properties. <i>Fuel</i> , <b>2018</b> , 221, 346-360	7.1	68
204	New method of treating dilute mineral acids using magnesium-aluminum oxide. <i>Water Research</i> , <b>2003</b> , 37, 1545-50	12.5	67
203	Uptake of heavy metal ions from aqueous solution using MgAl layered double hydroxides intercalated with citrate, malate, and tartrate. <i>Separation and Purification Technology</i> , <b>2008</b> , 62, 330-336	8.3	66
202	Chemical modification of poly(vinyl chloride) by nucleophilic substitution. <i>Polymer Degradation and Stability</i> , <b>2009</b> , 94, 107-112	4.7	57
201	Dechlorination of poly(vinyl chloride) using NaOH in ethylene glycol under atmospheric pressure. <i>Polymer Degradation and Stability</i> , <b>2008</b> , 93, 1138-1141	4.7	55
200	Preparation of MgAl layered double hydroxide doped with Fe <sup>2+</sup> and its application to Cr(VI) removal. <i>Separation and Purification Technology</i> , <b>2014</b> , 122, 12-16	8.3	50
199	Kinetic studies of the decomposition of flame retardant containing high-impact polystyrene. <i>Polymer Degradation and Stability</i> , <b>2010</b> , 95, 1129-1137	4.7	50
198	New Treatment Methods for Waste Water Containing Chloride Ion Using Magnesium-Aluminum Oxide. <i>Chemistry Letters</i> , <b>2000</b> , 29, 1136-1137	1.7	49
197	Recyclable Mg-Al layered double hydroxides for fluoride removal: Kinetic and equilibrium studies. <i>Journal of Hazardous Materials</i> , <b>2015</b> , 300, 475-482	12.8	48
196	Feedstock recycling of waste polymeric material. <i>Journal of Material Cycles and Waste Management</i> , <b>2011</b> , 13, 265-282	3.4	48

195	Thermal decomposition of individual and mixed plastics in the presence of CaO or Ca(OH) <sub>2</sub> . <i>Journal of Analytical and Applied Pyrolysis</i> , <b>2015</b> , 113, 584-590	6	44
194	Interactions of beech wood-polyethylene mixtures during co-pyrolysis. <i>Journal of Analytical and Applied Pyrolysis</i> , <b>2016</b> , 122, 531-540	6	44
193	Pyrolytic hydrolysis of polycarbonate in the presence of earth-alkali oxides and hydroxides. <i>Polymer Degradation and Stability</i> , <b>2009</b> , 94, 1119-1124	4.7	43
192	Effects of metal oxides on the pyrolysis of poly(ethylene terephthalate). <i>Journal of Analytical and Applied Pyrolysis</i> , <b>2005</b> , 73, 139-144	6	43
191	Dechlorination behaviour of flexible poly(vinyl chloride) in NaOH/EG solution. <i>Polymer Degradation and Stability</i> , <b>2008</b> , 93, 1822-1825	4.7	42
190	New Treatment Method for Dilute Hydrochloric Acid Using Magnesium-Aluminum Oxide. <i>Bulletin of the Chemical Society of Japan</i> , <b>2002</b> , 75, 595-599	5.1	42
189	Enhancement of bio-oil production via pyrolysis of wood biomass by pretreatment with H <sub>2</sub> SO <sub>4</sub> . <i>Bioresource Technology</i> , <b>2015</b> , 178, 76-82	11	41
188	Feedstock Recycling via Waste Plastic Pyrolysis. <i>Journal of the Japan Petroleum Institute</i> , <b>2016</b> , 59, 243-253		40
187	Removal of antimonate ions from an aqueous solution by anion exchange with magnesium-aluminum layered double hydroxide and the formation of a brandholzite-like structure. <i>Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering</i> , <b>2012</b> , 47, 1146-51	2.3	39
186	TG-MS investigation of brominated products from the degradation of brominated flame retardants in high-impact polystyrene. <i>Chemosphere</i> , <b>2011</b> , 85, 368-73	8.4	39
185	Low-temperature catalytic upgrading of waste polyolefinic plastics into liquid fuels and waxes. <i>Applied Catalysis B: Environmental</i> , <b>2021</b> , 285, 119805	21.8	39
184	Elimination behavior of nitrogen oxides from a NO <sub>3</sub> <sup>-</sup> intercalated Mg <sub>2</sub> Al layered double hydroxide during thermal decomposition. <i>Thermochimica Acta</i> , <b>2010</b> , 499, 106-110	2.9	38
183	Analysis of Two Stages Dehydrochlorination of Poly(vinyl chloride) Using TG-MS. <i>Chemistry Letters</i> , <b>2000</b> , 29, 322-323	1.7	36
182	Removal of HCl, SO <sub>2</sub> and NO by treatment of acid gas with Mg-Al oxide slurry. <i>Chemosphere</i> , <b>2011</b> , 82, 587-91	8.4	34
181	Treatment of hydrochloric acid with magnesium-aluminum oxide at ambient temperatures. <i>Separation and Purification Technology</i> , <b>2006</b> , 51, 272-276	8.3	34
180	Chemical recycling of rigid-PVC by oxygen oxidation in NaOH solutions at elevated temperatures. <i>Polymer Degradation and Stability</i> , <b>2000</b> , 67, 285-290	4.7	34
179	Thermal decomposition of tetrabromobisphenol-A containing printed circuit boards in the presence of calcium hydroxide. <i>Journal of Material Cycles and Waste Management</i> , <b>2017</b> , 19, 282-293	3.4	33
178	Replacing conventional fuels in USA, Europe, and UK with plastic pyrolysis gases [Part I: Experiments and graphical interchangeability methods. <i>Energy Conversion and Management</i> , <b>2016</b> , 126, 1118-1127	10.6	33

177	A novel method to delaminate nitrate-intercalated MgAl layered double hydroxides in water and application in heavy metals removal from waste water. <i>Chemosphere</i> , <b>2018</b> , 203, 281-290	8.4	32
176	Steam Hydrolysis of Poly(bisphenol A carbonate) in a Fluidized Bed Reactor. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2014</b> , 53, 4215-4223	3.9	32
175	Uptake of Sc <sup>3+</sup> and La <sup>3+</sup> from aqueous solution using ethylenediaminetetraacetate-intercalated CuAl layered double hydroxide reconstructed from CuAl oxide. <i>Solid State Sciences</i> , <b>2011</b> , 13, 366-371	3.4	32
174	Pyrolysis of Mixed Plastics in a Fluidized Bed of Hard Burnt Lime. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2011</b> , 50, 5459-5466	3.9	32
173	Antitumour immunity regulated by aberrant ERBB family signalling. <i>Nature Reviews Cancer</i> , <b>2021</b> , 21, 181-197	31.3	32
172	Effect of temperature management on the hydrolytic degradation of PET in a calcium oxide filled tube reactor. <i>Chemical Engineering Journal</i> , <b>2011</b> , 166, 523-528	14.7	31
171	Kinetics of uptake of Cu <sup>2+</sup> and Cd <sup>2+</sup> by MgAl layered double hydroxides intercalated with citrate, malate, and tartrate. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2010</b> , 355, 172-177	5.1	31
170	Chemical Recycling of Polycarbonate to Raw Materials by Thermal Decomposition with Calcium Hydroxide/Steam. <i>Chemistry Letters</i> , <b>2005</b> , 34, 282-283	1.7	31
169	Removal of boron and fluoride in wastewater using Mg-Al layered double hydroxide and Mg-Al oxide. <i>Journal of Environmental Management</i> , <b>2017</b> , 188, 58-63	7.9	30
168	Effects of hard- and soft-segment composition on pyrolysis characteristics of MDI, BD, and PTMG-based polyurethane elastomers. <i>Journal of Analytical and Applied Pyrolysis</i> , <b>2017</b> , 126, 337-345	6	29
167	Pyrolysis gases produced from individual and mixed PE, PP, PS, PVC, and PET. Part II: Fuel characteristics. <i>Fuel</i> , <b>2018</b> , 221, 361-373	7.1	29
166	Simultaneous recovery of benzene-rich oil and metals by steam pyrolysis of metal-poly(ethylene terephthalate) composite waste. <i>Environmental Science &amp; Technology</i> , <b>2014</b> , 48, 3430-7	10.3	29
165	Antibacterial effect of thiocyanate substituted poly(vinyl chloride). <i>Journal of Polymer Research</i> , <b>2011</b> , 18, 945-947	2.7	29
164	Aromatic hydrocarbon selectivity as a function of CaO basicity and aging during CaO-catalyzed PET pyrolysis using tandem $\mu$ -reactor-GC/MS. <i>Chemical Engineering Journal</i> , <b>2018</b> , 332, 169-173	14.7	28
163	Equilibrium and kinetics studies on As(V) and Sb(V) removal by Fe <sup>2+</sup> -doped Mg-Al layered double hydroxides. <i>Journal of Environmental Management</i> , <b>2015</b> , 151, 303-9	7.9	28
162	Chemical modification of rigid poly(vinyl chloride) by the substitution with nucleophiles. <i>Journal of Applied Polymer Science</i> , <b>2010</b> , 116, 36-44	2.9	28
161	Removal of hydrogen chloride from gaseous streams using magnesium-aluminum oxide. <i>Chemosphere</i> , <b>2008</b> , 73, 844-7	8.4	28
160	New treatment method for boron in aqueous solutions using Mg-Al layered double hydroxide: Kinetics and equilibrium studies. <i>Journal of Hazardous Materials</i> , <b>2015</b> , 293, 54-63	12.8	27

159	High Selective Conversion of Poly(ethylene terephthalate) into Oil Using Ca(OH) <sub>2</sub> . <i>Chemistry Letters</i> , <b>2004</b> , 33, 282-283	1.7	27
158	Solubility parameters for determining optimal solvents for separating PVC from PVC-coated PET fibers. <i>Journal of Material Cycles and Waste Management</i> , <b>2017</b> , 19, 612-622	3.4	26
157	Preparation of Cu <sub>2</sub> Al layered double hydroxide intercalated with ethylenediaminetetraacetate by coprecipitation and its uptake of rare earth ions from aqueous solution. <i>Solid State Sciences</i> , <b>2013</b> , 17, 28-34	3.4	25
156	Kinetic and equilibrium studies of urea adsorption onto activated carbon: Adsorption mechanism. <i>Journal of Dispersion Science and Technology</i> , <b>2017</b> , 38, 1063-1066	1.5	25
155	Adsorption isotherms and kinetics of arsenic removal from aqueous solution by Mg <sub>2</sub> Al layered double hydroxide intercalated with nitrate ions. <i>Reaction Kinetics, Mechanisms and Catalysis</i> , <b>2017</b> , 120, 703-714	1.6	24
154	Tandem Reactor-GC/MS for online monitoring of aromatic hydrocarbon production via CaO-catalysed PET pyrolysis. <i>Reaction Chemistry and Engineering</i> , <b>2017</b> , 2, 776-784	4.9	24
153	High-value products from the catalytic hydrolysis of polycarbonate waste. <i>Polymer Journal</i> , <b>2010</b> , 42, 438-442	2.7	24
152	A novel process for the removal of bromine from styrene polymers containing brominated flame retardant. <i>Polymer Degradation and Stability</i> , <b>2015</b> , 112, 86-93	4.7	23
151	Ni <sub>2</sub> Al layered double hydroxides modified with citrate, malate, and tartrate: Preparation by coprecipitation and uptake of Cu <sup>2+</sup> from aqueous solution. <i>Journal of Physics and Chemistry of Solids</i> , <b>2011</b> , 72, 846-851	3.9	23
150	Ball Mill-Assisted Dechlorination of Flexible and Rigid Poly(vinyl chloride) in NaOH/EG Solution. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2008</b> , 47, 8619-8624	3.9	23
149	Adsorption of Cu <sup>2+</sup> and Ni <sup>2+</sup> by tripolyphosphate-crosslinked chitosan-modified montmorillonite. <i>Journal of Solid State Chemistry</i> , <b>2019</b> , 277, 143-148	3.3	22
148	Effects of steam on the thermal dehydrochlorination of poly(vinyl chloride) resin and flexible poly(vinyl chloride) under atmospheric pressure. <i>Polymer Degradation and Stability</i> , <b>2015</b> , 117, 8-15	4.7	21
147	Effectiveness of Mg <sub>2</sub> Al-layered double hydroxide for heavy metal removal from mine wastewater and sludge volume reduction. <i>International Journal of Environmental Science and Technology</i> , <b>2018</b> , 15, 263-272	3.3	21
146	Pyrolysis versus hydrolysis behavior during steam decomposition of polyesters using 18O-labeled steam. <i>RSC Advances</i> , <b>2015</b> , 5, 61828-61837	3.7	21
145	Lactic acid as a substrate for fermentative hydrogen production. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 16967-16973	6.7	21
144	Removal of antimonate ions and simultaneous formation of a brandholzite-like compound from magnesium-aluminum oxide. <i>Separation and Purification Technology</i> , <b>2011</b> , 80, 235-239	8.3	21
143	Adsorption of urea, creatinine, and uric acid onto spherical activated carbon. <i>Separation and Purification Technology</i> , <b>2020</b> , 237, 116367	8.3	21
142	Treatment of hydrochloric acid using Mg <sub>2</sub> Al layered double hydroxide intercalated with carbonate. <i>Journal of Industrial and Engineering Chemistry</i> , <b>2016</b> , 39, 21-26	6.3	21

141	Lead removal from cathode ray tube glass by the action of calcium hydroxide and poly(vinyl chloride). <i>Thermochimica Acta</i> , <b>2014</b> , 596, 49-55	2.9	20
140	Impact of brominated flame retardants on the thermal degradation of high-impact polystyrene. <i>Polymer Degradation and Stability</i> , <b>2013</b> , 98, 306-315	4.7	20
139	Decomposition of Gaseous Terephthalic Acid in the Presence of CaO. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2011</b> , 50, 1831-1836	3.9	20
138	Preparation of Mg/Al layered double hydroxides intercalated with alkyl sulfates and investigation of their capacity to take up N,N-dimethylaniline from aqueous solutions. <i>Solid State Sciences</i> , <b>2009</b> , 11, 2060-2064	3.4	20
137	Treatment of gaseous hydrogen chloride using Mg-Al layered double hydroxide intercalated with carbonate ion. <i>Chemosphere</i> , <b>2010</b> , 81, 658-62	8.4	20
136	Beech Wood Pyrolysis in Polyethylene Melt as a Means of Enhancing Levoglucosan and Methoxyphenol Production. <i>Scientific Reports</i> , <b>2019</b> , 9, 1955	4.9	20
135	Kinetics and equilibrium studies on Mg-Al oxide for removal of fluoride in aqueous solution and its use in recycling. <i>Journal of Environmental Management</i> , <b>2015</b> , 156, 252-6	7.9	19
134	Removal of toxic HCN and recovery of H <sub>2</sub> -rich syngas via catalytic reforming of product gas from gasification of polyimide over Ni/Mg/Al catalysts. <i>Journal of Analytical and Applied Pyrolysis</i> , <b>2017</b> , 123, 330-339	6	19
133	Dechlorination of poly(vinylidene chloride) in NaOH/ethylene glycol as a function of NaOH concentration, temperature, and solvent. <i>Polymer Degradation and Stability</i> , <b>2008</b> , 93, 1979-1984	4.7	19
132	Removal of tetrafluoroborate ion from aqueous solution using magnesium-aluminum oxide produced by the thermal decomposition of a hydrotalcite-like compound. <i>Chemosphere</i> , <b>2007</b> , 69, 832-5	8.4	19
131	Simultaneous recovery of H <sub>2</sub> -rich syngas and removal of HCN during pyrolytic recycling of polyurethane by Ni/Mg/Al catalysts. <i>Chemical Engineering Journal</i> , <b>2019</b> , 361, 408-415	14.7	19
130	A combined kinetic and thermodynamic approach for interpreting the complex interactions during chloride volatilization of heavy metals in municipal solid waste fly ash. <i>Waste Management</i> , <b>2019</b> , 87, 204-217	8.6	18
129	Efficient dehalogenation of automobile shredder residue in NaOH/ethylene glycol using a ball mill. <i>Chemosphere</i> , <b>2009</b> , 74, 287-92	8.4	17
128	Use of Mg-Al oxide for boron removal from an aqueous solution in rotation: Kinetics and equilibrium studies. <i>Journal of Environmental Management</i> , <b>2016</b> , 165, 280-285	7.9	16
127	Metal recovery from wire scrap via a chloride volatilization process: Poly(vinyl chloride) derived chlorine as volatilization agent. <i>Thermochimica Acta</i> , <b>2013</b> , 562, 65-69	2.9	16
126	Dehydrochlorination behavior of polychloroprene during thermal degradation. <i>Thermochimica Acta</i> , <b>2008</b> , 476, 28-32	2.9	16
125	Replacing conventional fuels in USA, Europe, and UK with plastic pyrolysis gases [Part II: Multi-index interchangeability methods. <i>Energy Conversion and Management</i> , <b>2016</b> , 126, 1128-1145	10.6	15
124	Pyrolysis of sugarcane bagasse pretreated with sulfuric acid. <i>Journal of the Energy Institute</i> , <b>2019</b> , 92, 1149-1157	5.7	15

123	Dehydrochlorination of poly(vinyl chloride) with Ca(OH) <sub>2</sub> in ethylene glycol and the effect of ball milling. <i>Journal of Polymer Research</i> , <b>2011</b> , 18, 1687-1691	2.7	15
122	Selective production of benzene and naphthalene from poly(butylene terephthalate) and poly(ethylene naphthalene-2,6-dicarboxylate) by pyrolysis in the presence of calcium hydroxide. <i>Polymer Degradation and Stability</i> , <b>2006</b> , 91, 1002-1009	4.7	15
121	Catalytic Pyrolysis of Poly(ethylene terephthalate) in the Presence of Metal Oxides for Aromatic Hydrocarbon Recovery Using Tandem Reactor-GC/MS. <i>Energy &amp; Fuels</i> , <b>2020</b> , 34, 2492-2500	4.1	15
120	Uptake of Nd <sup>3+</sup> and Sr <sup>2+</sup> by LiAl layered double hydroxide intercalated with triethylenetetramine-hexaacetic acid: kinetic and equilibrium studies. <i>RSC Advances</i> , <b>2015</b> , 5, 79447-79455	3.7	14
119	Recovery of benzene-rich oil from the degradation of metal- and metal oxide-containing poly(ethylene terephthalate) composites. <i>Journal of Material Cycles and Waste Management</i> , <b>2014</b> , 16, 282-290	3.4	14
118	Kinetics of the dehydrochlorination of poly(vinyl chloride) in the presence of NaOH and various diols as solvents. <i>Polymer Degradation and Stability</i> , <b>2009</b> , 94, 1595-1597	4.7	14
117	Chemical modification of flexible and rigid poly(vinyl chloride) by nucleophilic substitution with thiocyanate using a phase-transfer catalyst. <i>Materials Chemistry and Physics</i> , <b>2010</b> , 124, 163-167	4.4	14
116	Impacts of Pyrolytic Interactions during the Co-pyrolysis of Biomass/Plastic: Synergies in Lignocellulose-Polyethylene System. <i>Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy</i> , <b>2019</b> , 98, 202-219	0.5	14
115	Temperature-dependent pyrolysis behavior of polyurethane elastomers with different hard- and soft-segment compositions. <i>Journal of Analytical and Applied Pyrolysis</i> , <b>2020</b> , 145, 104754	6	14
114	Uptake of Nd <sup>3+</sup> and Sr <sup>2+</sup> by LiAl layered double hydroxides intercalated with ethylenediaminetetraacetate. <i>Materials Chemistry and Physics</i> , <b>2016</b> , 177, 8-11	4.4	14
113	Diagnosing chlorine industrial metabolism by evaluating the potential of chlorine recovery from polyvinyl chloride wastes: a case study in Japan. <i>Resources, Conservation and Recycling</i> , <b>2018</b> , 133, 354-361	11.9	14
112	Effect of H <sub>2</sub> O <sub>2</sub> on the treatment of NO and NO <sub>2</sub> using a Mg-Al oxide slurry. <i>Chemosphere</i> , <b>2015</b> , 120, 378-82	8.4	13
111	Enhancement of gasification and liquefaction during fast co-pyrolysis of cedar wood and polyethylene through control of synergistic interactions. <i>Bioresource Technology Reports</i> , <b>2020</b> , 11, 100431	4.1	13
110	Impact of Common Plastics on Cellulose Pyrolysis. <i>Energy &amp; Fuels</i> , <b>2019</b> , 33, 6837-6841	4.1	13
109	Preparation of ZnAl layered double hydroxide intercalated with triethylenetetramine-hexaacetic acid by coprecipitation: uptake of rare-earth metal ions from aqueous solutions. <i>RSC Advances</i> , <b>2014</b> , 4, 45995-46001	3.7	13
108	Upgrading of poly(vinyl chloride) by chemical modifications using sodium sulfide. <i>Journal of Material Cycles and Waste Management</i> , <b>2010</b> , 12, 264-270	3.4	13
107	Simultaneous recovery of high-purity copper and polyvinyl chloride from thin electric cables by plasticizer extraction and ball milling.. <i>RSC Advances</i> , <b>2018</b> , 8, 6893-6903	3.7	12
106	Alkaline hydrolysis of PVC-coated PET fibers for simultaneous recycling of PET and PVC. <i>Journal of Material Cycles and Waste Management</i> , <b>2018</b> , 20, 439-449	3.4	12

105	Pyrolysis and hydrolysis behaviors during steam pyrolysis of polyimide. <i>Journal of Analytical and Applied Pyrolysis</i> , <b>2016</b> , 120, 75-81	6	12
104	Uptake of heavy metal cations by chitosan-modified montmorillonite: Kinetics and equilibrium studies. <i>Materials Chemistry and Physics</i> , <b>2019</b> , 236, 121784	4.4	12
103	Steam Pyrolysis of Polyimides: Effects of Steam on Raw Material Recovery. <i>Environmental Science &amp; Technology</i> , <b>2015</b> , 49, 13558-65	10.3	12
102	Effect of heating rate on the pyrolysis of high-impact polystyrene containing brominated flame retardants: fate of brominated flame retardants. <i>Journal of Material Cycles and Waste Management</i> , <b>2012</b> , 14, 259-265	3.4	12
101	Hydrolytic degradation of poly(ethylene terephthalate) in a pyrolytic two step process to obtain benzene rich oil. <i>Journal of Applied Polymer Science</i> , <b>2011</b> , 120, 3687-3694	2.9	12
100	Improvement of the Benzene Yield During Pyrolysis of Terephthalic Acid Using a CaO Fixed-Bed Reactor. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2011</b> , 50, 6594-6600	3.9	12
99	Treatment of NO <sub>x</sub> using recyclable CO <sub>3</sub> <sup>2-</sup> -intercalated MgAl layered double hydroxide. <i>Atmospheric Pollution Research</i> , <b>2019</b> , 10, 1866-1872	4.5	11
98	Separation of copper and polyvinyl chloride from thin waste electric cables: A combined PVC-swelling and centrifugal approach. <i>Waste Management</i> , <b>2019</b> , 89, 27-36	8.6	11
97	Equilibrium and kinetic studies of Se(VI) removal by MgAl layered double hydroxide doped with Fe <sup>2+</sup> . <i>RSC Advances</i> , <b>2014</b> , 4, 61817-61822	3.7	11
96	Treatment of HCl gas by cyclic use of MgAl layered double hydroxide intercalated with CO <sub>3</sub> <sup>2-</sup> . <i>Atmospheric Pollution Research</i> , <b>2020</b> , 11, 290-295	4.5	11
95	MgAl layered double hydroxide intercalated with CO <sub>3</sub> <sup>2-</sup> and its recyclability for treatment of SO <sub>2</sub> . <i>Applied Clay Science</i> , <b>2019</b> , 183, 105349	5.2	11
94	Application of MgAl layered double hydroxide for treating acidic mine wastewater: a novel approach to sludge reduction. <i>Chemistry and Ecology</i> , <b>2019</b> , 35, 128-142	2.3	11
93	Validation of a deplasticizer-ball milling method for separating Cu and PVC from thin electric cables: A simulation and experimental approach. <i>Waste Management</i> , <b>2018</b> , 82, 220-230	8.6	11
92	Uptake of Ni <sup>2+</sup> and Cu <sup>2+</sup> by ZnAl layered double hydroxide intercalated with carboxymethyl-modified cyclodextrin: Equilibrium and kinetic studies. <i>Materials Chemistry and Physics</i> , <b>2019</b> , 233, 288-295	4.4	10
91	Synthesis of LiAl layered double hydroxide intercalated with amino tris(methylene phosphonic acid) and kinetic and equilibrium studies of the uptake of Nd <sup>3+</sup> and Sr <sup>2+</sup> ions. <i>Applied Surface Science</i> , <b>2016</b> , 366, 523-528	6.7	10
90	Removal of chloride from ethylene glycol solution using alumina/zeolite membrane as a physical boundary between the organic and aqueous phases. <i>Journal of Material Cycles and Waste Management</i> , <b>2013</b> , 15, 404-408	3.4	10
89	Electrodialysis for NaCl/EG solution using ion-exchange membranes. <i>Journal of Material Cycles and Waste Management</i> , <b>2013</b> , 15, 111-114	3.4	10
88	Dehydrochlorination Behavior of Agricultural PVC Polymer Films in Alkaline Solution at Elevated Temperatures.. <i>Nippon Kagaku Kaishi / Chemical Society of Japan - Chemistry and Industrial Chemistry Journal</i> , <b>1997</b> , 1997, 64-68		10



87	Close Packing of Cellulose and Chitosan in Regenerated Cellulose Fibers Improves Carbon Yield and Structural Properties of Respective Carbon Fibers. <i>Biomacromolecules</i> , <b>2020</b> , 21, 4326-4335	6.9	10
86	Practical dechlorination of polyvinyl chloride wastes in NaOH/ethylene glycol using an up-scale ball mill reactor and validation by discrete element method simulations. <i>Waste Management</i> , <b>2019</b> , 99, 31-41	8.6	9
85	Chemical modification and dechlorination of polyvinyl chloride by substitution with thiocyanate as a nucleophile. <i>Polymer Engineering and Science</i> , <b>2010</b> , 50, 69-75	2.3	9
84	Latest Trends and Challenges in Feedstock Recycling of Polyolefinic Plastics. <i>Journal of the Japan Petroleum Institute</i> , <b>2020</b> , 63, 345-364	1	9
83	Selective phenol recovery via simultaneous hydrogenation/dealkylation of isopropyl- and isopropenyl-phenols employing an H generator combined with tandem micro-reactor GC/MS. <i>Scientific Reports</i> , <b>2018</b> , 8, 13994	4.9	9
82	Removal of Mn and Cd contained in mine wastewater by Mg <sub>2</sub> Al-layered double hydroxides. <i>Journal of Material Cycles and Waste Management</i> , <b>2019</b> , 21, 1232-1241	3.4	8
81	Separation mechanism of polyvinyl chloride and copper components from swollen electric cables by mechanical agitation. <i>Waste Management</i> , <b>2019</b> , 93, 54-62	8.6	8
80	Combining pyrolysis two-dimensional gas chromatography time-of-flight mass spectrometry with hierarchical cluster analysis for rapid identification of pyrolytic interactions: Case study of co-pyrolysis of PVC and biomass components. <i>Chemical Engineering Research and Design</i> , <b>2020</b> , 143, 91-100	5.5	8
79	Facile method for treating Zn, Cd, and Pb in mining wastewater by the formation of Mg <sub>2</sub> Al layered double hydroxide. <i>International Journal of Environmental Science and Technology</i> , <b>2020</b> , 17, 3023-3032	3.3	8
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76	Simultaneous removal of SO <sub>2</sub> and NO <sub>2</sub> using a Mg-Al oxide slurry treatment. <i>Chemosphere</i> , <b>2013</b> , 93, 2889-93	8.4	8
75	Thermal decomposition behavior of Cu <sub>2</sub> Al layered double hydroxide, and ethylenediaminetetraacetate-intercalated Cu <sub>2</sub> Al layered double hydroxide reconstructed from Cu <sub>2</sub> Al oxide for uptake of Y <sup>3+</sup> from aqueous solution. <i>Materials Research Bulletin</i> , <b>2012</b> , 47, 4216-4219	5.1	8
74	Removal of SO <sub>2</sub> with a Mg-Al oxide slurry via reconstruction of a Mg-Al layered double hydroxide. <i>Chemosphere</i> , <b>2012</b> , 88, 250-4	8.4	8
73	A new strategy for CO <sub>2</sub> utilization with waste plastics: conversion of hydrogen carbonate into formate using polyvinyl chloride in water. <i>Green Chemistry</i> , <b>2020</b> , 22, 352-358	10	8
72	Simultaneous treatment of HCl/CO <sub>2</sub> /NO <sub>x</sub> gas with Mg <sub>2</sub> Al layered double hydroxide intercalated with CO <sub>3</sub> <sup>2-</sup> and its recycling process. <i>International Journal of Environmental Science and Technology</i> , <b>2020</b> , 17, 1179-1184	3.3	8
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70	Recycling of PVC pipes and fittings in Japan: proactive approach of industry to and its impacts on legal/technical frameworks. <i>Journal of Material Cycles and Waste Management</i> , <b>2017</b> , 19, 21-31	3.4	7

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68	Kinetic and equilibrium studies on the uptake of Nd <sup>3+</sup> and Sr <sup>2+</sup> by Li/Al layered double hydroxide intercalated with 1-hydroxyethane-1,1-diphosphonic acid. <i>Journal of Industrial and Engineering Chemistry</i> , <b>2016</b> , 36, 96-101	6.3	7
67	Catalytic Degradation of Poly(ethylene terephthalate) for Benzene-rich Oil Recovery Using Metal Hydroxides. <i>Chemistry Letters</i> , <b>2014</b> , 43, 637-639	1.7	7
66	Dechlorination of polyvinyl chloride in NaOH/ethylene glycol solution by microwave heating. <i>Journal of Material Cycles and Waste Management</i> , <b>2009</b> , 11, 19-22	3.4	7
65	Latest Trends in Pyrolysis Gas Chromatography for Analytical and Applied Pyrolysis of Plastics. <i>Analytical Sciences</i> , <b>2021</b> , 37, 145-157	1.7	7
64	Kinetics and equilibrium studies on the uptake of Nd <sup>3+</sup> by Zn/Al layered double hydroxide intercalated with triethylenetetramine-hexaacetic acid. <i>Materials Chemistry and Physics</i> , <b>2017</b> , 191, 96-98	4.4	6
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62	Treatment of NO by a combination of MnO <sub>2</sub> and a CO <sub>3</sub> <sup>2-</sup> intercalated Mg/Al layered double hydroxide. <i>SN Applied Sciences</i> , <b>2020</b> , 2, 1	1.8	6
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50	Effect of compatibility between solvent and poly(vinyl chloride) on dechlorination of poly(vinyl chloride). <i>Journal of Polymer Research</i> , <b>2010</b> , 17, 489-493	2.7	5
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46	Chemical modification of poly(vinyl chloride) using sodium trisulfide. <i>Journal of Polymer Research</i> , <b>2015</b> , 22, 1	2.7	4
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39	Adsorption of urea, creatinine, and uric acid from three solution types using spherical activated carbon and its recyclability. <i>Chinese Journal of Chemical Engineering</i> , <b>2020</b> , 28, 2993-3001	3.2	4
38	Prediction of pyrolyzate yields by response surface methodology: A case study of cellulose and polyethylene co-pyrolysis. <i>Bioresource Technology</i> , <b>2021</b> , 337, 125435	11	4
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32	Treatment of gaseous hydrochloric acid with magnesium–aluminum oxide using batch operation. <i>Desalination</i> , <b>2011</b> , 280, 424-427	10.3	3
31	Mitigation of bromine-containing products during pyrolysis of polycarbonate-based tetrabromobisphenol A in the presence of copper(I) oxide. <i>Journal of Hazardous Materials</i> , <b>2021</b> , 409, 124972	12.8	3
30	Synthesis of layered double hydroxide nanosheets in an aqueous solvent and their Ni <sup>2+</sup> uptake characteristics. <i>Applied Clay Science</i> , <b>2021</b> , 200, 105911	5.2	3
29	Desorption of Cl <sup>-</sup> from Mg–Al layered double hydroxide intercalated with Cl <sup>-</sup> using CO <sub>2</sub> gas and water. <i>Chinese Journal of Chemical Engineering</i> , <b>2021</b> , 29, 131-134	3.2	3
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24	Study of dynamics and mechanism of HCl, SO <sub>2</sub> , or NO removal by MnO <sub>2</sub> /Mg–Al layered double hydroxide. <i>Inorganic Chemistry Communication</i> , <b>2022</b> , 135, 109108	3.1	2
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22	Highly efficient recovery of high-purity Cu, PVC, and phthalate plasticizer from waste wire harnesses through PVC swelling and rod milling. <i>Reaction Chemistry and Engineering</i> , <b>2020</b> , 5, 1805-1813	4.9	2
21	Continuous treatment of abandoned mine wastewater containing As and Fe using Mg–Al layered double hydroxides with flocculation. <i>International Journal of Environmental Science and Technology</i> , <b>2021</b> , 18, 4037	3.3	2
20	Quantification of Cellulose Pyrolyzates via a Tube Reactor and a Pyrolyzer-Gas Chromatograph/Flame Ionization Detector-Based System. <i>ACS Omega</i> , <b>2021</b> , 6, 12022-12026	3.9	2
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18	One-pot wet ball-milling for waste wire-harness recycling. <i>Journal of Material Cycles and Waste Management</i> , <b>2021</b> , 23, 461-469	3.4	2
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13	Combined Experiment, Simulation, and Ex-ante LCA Approach for Sustainable Cl Recovery from NaCl/Ethylene Glycol by Electrodialysis. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2020</b> , 59, 20112-20122	2.9	1
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11	Lactate adsorption by layered double hydroxides in aqueous solution and cell culture medium. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2021</b> , 612, 125975	5.1	1
10	Removal of cesium ions from A-type zeolites using sodium tetrakis(4-fluorophenyl)borate and sodium tetraphenylborate. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , <b>2021</b> , 327, 337-344	1.5	1
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8	Machine learning-based discrete element reaction model for predicting the dechlorination of poly(vinyl chloride) in NaOH/ethylene glycol solvent with ball milling. <i>Chemical Engineering Journal Advances</i> , <b>2020</b> , 3, 100025	3.6	0
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