Shogo Kumagai

List of Publications by Year
in descending order

214	6,082	70961	123241
papers	citations	41 h-index	61 g-index

216	216	216	4430
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Hydrogen production from biomass and plastic mixtures by pyrolysis-gasification. International Journal of Hydrogen Energy, 2014, 39, 10883-10891.	3.8	210
2	Kinetics of Hydrolysis of Poly(ethylene terephthalate) Powder in Sulfuric Acid by a Modified Shrinking-Core Model. Industrial & Engineering Chemistry Research, 2001, 40, 75-79.	1.8	181
3	Pyrolysis of poly(ethylene terephthalate) in a fluidised bed plant. Polymer Degradation and Stability, 2004, 86, 499-504.	2.7	154
4	Kinetics of Hydrolysis of PET Powder in Nitric Acid by a Modified Shrinking-Core Model. Industrial & Engineering Chemistry Research, 1998, 37, 336-340.	1.8	146
5	Antitumour immunity regulated by aberrant ERBB family signalling. Nature Reviews Cancer, 2021, 21, 181-197.	12.8	141
6	Low-temperature catalytic upgrading of waste polyolefinic plastics into liquid fuels and waxes. Applied Catalysis B: Environmental, 2021, 285, 119805.	10.8	137
7	Pyrolysis of tetrabromobisphenol-A containing paper laminated printed circuit boards. Chemosphere, 2008, 71, 872-878.	4.2	121
8	Pyrolysis gases produced from individual and mixed PE, PP, PS, PVC, and PETâ€”Part I: Production and physical properties. Fuel, 2018, 221, 346-360.	3.4	106
9	Novel Niâ€“Mgâ€“Alâ€“Ca catalyst for enhanced hydrogen production for the pyrolysisâ€“gasification of a biomass/plastic mixture. Journal of Analytical and Applied Pyrolysis, 2015, 113, 15-21.	2.6	101
10	Recovery of indium from In2O3 and liquid crystal display powder via a chloride volatilization process using polyvinyl chloride. Thermochimica Acta, 2009, 493, 105-108.	1.2	97
11	Uptake of heavy metal ions from aqueous solution using Mgâ€“Al layered double hydroxides intercalated with citrate, malate, and tartrate. Separation and Purification Technology, 2008, 62, 330-336.	3.9	80
12	New method of treating dilute mineral acids using magnesiumâ€“aluminum oxide. Water Research, 2003, 37, 1545-1550.	5.3	71
13	Dechlorination of poly(vinyl chloride) using NaOH in ethylene glycol under atmospheric pressure. Polymer Degradation and Stability, 2008, 93, 1138-1141.	2.7	69
14	Chemical modification of poly(vinyl chloride) by nucleophilic substitution. Polymer Degradation and Stability, 2009, 94, 107-112.	2.7	69
15	Interactions of beech woodâ€“polyethylene mixtures during co-pyrolysis. Journal of Analytical and Applied Pyrolysis, 2016, 122, 531-540.	2.6	65
16	Thermal decomposition of individual and mixed plastics in the presence of CaO or Ca(OH)2. Journal of Analytical and Applied Pyrolysis, 2015, 113, 584-590.	2.6	64
17	Highly immunogenic cancer cells require activation of the WNT pathway for immunological escape. Science Immunology, 2021, 6, eabc6424.	5.6	64
18	Effects of metal oxides on the pyrolysis of poly(ethylene terephthalate). Journal of Analytical and Applied Pyrolysis, 2005, 73, 139-144.	2.6	62

#	Article	IF	Citations
19	Recyclable Mgâ€“Al layered double hydroxides for fluoride removal: Kinetic and equilibrium studies. Journal of Hazardous Materials, 2015, 300, 475-482.	6.5	62
20	Pyrolytic hydrolysis of polycarbonate in the presence of earth-alkali oxides and hydroxides. Polymer Degradation and Stability, 2009, 94, 1119-1124.	2.7	61
21	Feedstock Recycling <i>via</i> Waste Plastic Pyrolysis. Journal of the Japan Petroleum Institute, 2016, 59, 243-253.	0.4	61
22	Dechlorination behaviour of flexible poly(vinyl chloride) in NaOH/EG solution. Polymer Degradation and Stability, 2008, 93, 1822-1825.	2.7	58
23	Feedstock recycling of waste polymeric material. Journal of Material Cycles and Waste Management, 2011, 13, 265-282.	1.6	58
24	New Treatment Methods for Waste Water Containing Chloride Ion Using Magnesiumâ€“Aluminum Oxide. Chemistry Letters, 2000, 29, 1136-1137.	0.7	57
25	Aromatic hydrocarbon selectivity as a function of CaO basicity and aging during CaO-catalyzed PET pyrolysis using tandem Âµ-reactor-GC/MS. Chemical Engineering Journal, 2018, 332, 169-173.	6.6	57
26	Kinetic studies of the decomposition of flame retardant containing high-impact polystyrene. Polymer Degradation and Stability, 2010, 95, 1129-1137.	2.7	54
27	Preparation of Mgâ€“Al layered double hydroxide doped with Fe2+ and its application to Cr(VI) removal. Separation and Purification Technology, 2014, 122, 12-16.	3.9	54
28	Enhancement of bio-oil production via pyrolysis of wood biomass by pretreatment with H 2 SO 4. Bioresource Technology, 2015, 178, 76-82.	4.8	53
29	New Treatment Method for Dilute Hydrochloric Acid Using Magnesium-Aluminum Oxide. Bulletin of the Chemical Society of Japan, 2002, 75, 595-599.	2.0	49
30	A novel method to delaminate nitrate-intercalated Mg Al layered double hydroxides in water and application in heavy metals removal from waste water. Chemosphere, 2018, 203, 281-290.	4.2	49
31	Effect of temperature management on the hydrolytic degradation of PET in a calcium oxide filled tube reactor. Chemical Engineering Journal, 2011, 166, 523-528.	6.6	47
32	Thermal decomposition of tetrabromobisphenol-A containing printed circuit boards in the presence of calcium hydroxide. Journal of Material Cycles and Waste Management, 2017, 19, 282-293.	1.6	47
33	TGâ€“MS investigation of brominated products from the degradation of brominated flame retardants in high-impact polystyrene. Chemosphere, 2011, 85, 368-373.	4.2	46
34	Kinetic and equilibrium studies of urea adsorption onto activated carbon: Adsorption mechanism. Journal of Dispersion Science and Technology, 2017, 38, 1063-1066.	1.3	46
35	Elimination behavior of nitrogen oxides from a NO3â¯-intercalated Mgâ€“Al layered double hydroxide during thermal decomposition. Thermochimica Acta, 2010, 499, 106-110.	1.2	45
36	Pyrolysis of Mixed Plastics in a Fluidized Bed of Hard Burnt Lime. Industrial & Engineering Chemistry Research, 2011, 50, 5459-5466.	1.8	45

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37	Removal of antimonate ions from an aqueous solution by anion exchange with magnesiumâ€“aluminum layered double hydroxide and the formation of a brandholzite-like structure. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2012, 47, 1146-1151.	0.9	45
38	Adsorption of urea, creatinine, and uric acid onto spherical activated carbon. Separation and Purification Technology, 2020, 237, 116367.	3.9	45
39	Pyrolysis gases produced from individual and mixed PE, PP, PS, PVC, and PETâ€”Part II: Fuel characteristics. Fuel, 2018, 221, 361-373.	3.4	44
40	Steam Hydrolysis of Poly(bisphenol A carbonate) in a Fluidized Bed Reactor. Industrial & Engineering Chemistry Research, 2014, 53, 4215-4223.	1.8	43
41	Effects of hard- and soft-segment composition on pyrolysis characteristics of MDI, BD, and PTMG-based polyurethane elastomers. Journal of Analytical and Applied Pyrolysis, 2017, 126, 337-345.	2.6	43
42	Analysis of Two Stages Dehydrochlorination of Poly(vinyl chloride) Using TG-MS. Chemistry Letters, 2000, 29, 322-323.	0.7	42
43	Solubility parameters for determining optimal solvents for separating PVC from PVC-coated PET fibers. Journal of Material Cycles and Waste Management, 2017, 19, 612-622.	1.6	42
44	Chemical recycling of rigid-PVC by oxygen oxidation in NaOH solutions at elevated temperatures. Polymer Degradation and Stability, 2000, 67, 285-290.	2.7	41
45	Replacing conventional fuels in USA, Europe, and UK with plastic pyrolysis gases â€“ Part I: Experiments and graphical interchangeability methods. Energy Conversion and Management, 2016, 126, 1118-1127.	4.4	41
46	Tandem Î¼-reactor-GC/MS for online monitoring of aromatic hydrocarbon production via CaO-catalysed PET pyrolysis. Reaction Chemistry and Engineering, 2017, 2, 776-784.	1.9	41
47	Chemical modification of rigid poly(vinyl chloride) by the substitution with nucleophiles. Journal of Applied Polymer Science, 2010, 116, 36-44.	1.3	40
48	Kinetics of uptake of Cu2+ and Cd2+ by Mgâ€“Al layered double hydroxides intercalated with citrate, malate, and tartrate. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2010, 355, 172-177.	2.3	39
49	Treatment of hydrochloric acid with magnesiumâ€“aluminum oxide at ambient temperatures. Separation and Purification Technology, 2006, 51, 272-276.	3.9	38
50	Uptake of Sc3+ and La3+ from aqueous solution using ethylenediaminetetraacetate-intercalated Cuâ€“Al layered double hydroxide reconstructed from Cuâ€“Al oxide. Solid State Sciences, 2011, 13, 366-371.	1.5	38
51	Antibacterial effect of thiocyanate substituted poly(vinyl chloride). Journal of Polymer Research, 2011, 18, 945-947.	1.2	38
52	High-value products from the catalytic hydrolysis of polycarbonate waste. Polymer Journal, 2010, 42, 438-442.	1.3	37
53	Equilibrium and kinetics studies on As(V) and Sb(V) removal by Fe2+-doped Mgâ€“Al layered double hydroxides. Journal of Environmental Management, 2015, 151, 303-309.	3.8	37
54	Catalytic Pyrolysis of Poly(ethylene terephthalate) in the Presence of Metal Oxides for Aromatic Hydrocarbon Recovery Using Tandem Î¼-Reactor-GC/MS. Energy & Fuels, 2020, 34, 2492-2500.	2.5	37

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55	Chemical Recycling of Polycarbonate to Raw Materials by Thermal Decomposition with Calcium Hydroxide/Steam. Chemistry Letters, 2005, 34, 282-283.	0.7	36
56	Removal of HCl, SO2, and NO by treatment of acid gas with Mgâ€“Al oxide slurry. Chemosphere, 2011, 82, 587-591.	4.2	36
57	Removal of boron and fluoride in wastewater using Mg-Al layered double hydroxide and Mg-Al oxide. Journal of Environmental Management, 2017, 188, 58-63.	3.8	36
58	New treatment method for boron in aqueous solutions using Mgâ€“Al layered double hydroxide: Kinetics and equilibrium studies. Journal of Hazardous Materials, 2015, 293, 54-63.	6.5	35
59	A combined kinetic and thermodynamic approach for interpreting the complex interactions during chloride volatilization of heavy metals in municipal solid waste fly ash. Waste Management, 2019, 87, 204-217.	3.7	35
60	Simultaneous Recovery of Benzene-Rich Oil and Metals by Steam Pyrolysis of Metal-Poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	4.6	34
61	Ball Mill-Assisted Dechlorination of Flexible and Rigid Poly(vinyl chloride) in NaOH/EG Solution. Industrial & Engineering Chemistry Research, 2008, 47, 8619-8624.	1.8	33
62	Effects of steam on the thermal dehydrochlorination of poly(vinyl chloride) resin and flexible poly(vinyl chloride) under atmospheric pressure. Polymer Degradation and Stability, 2015, 117, 8-15.	2.7	33
63	Practical dechlorination of polyvinyl chloride wastes in NaOH/ethylene glycol using an up-scale ball mill reactor and validation by discrete element method simulations. Waste Management, 2019, 99, 31-41.	3.7	33
64	Dechlorination of poly(vinylidene chloride) in NaOH/ethylene glycol as a function of NaOH concentration, temperature, and solvent. Polymer Degradation and Stability, 2008, 93, 1979-1984.	2.7	32
65	Removal of hydrogen chloride from gaseous streams using magnesiumâ€“aluminum oxide. Chemosphere, 2008, 73, 844-847.	4.2	32
66	Adsorption of Cu2+ and Ni2+ by tripolyphosphate-crosslinked chitosan-modified montmorillonite. Journal of Solid State Chemistry, 2019, 277, 143-148.	1.4	32
67	Latest Trends and Challenges in Feedstock Recycling of Polyolefinic Plastics. Journal of the Japan Petroleum Institute, 2020, 63, 345-364.	0.4	32
68	High Selective Conversion of Poly(ethylene terephthalate) into Oil Using Ca(OH)2. Chemistry Letters, 2004, 33, 282-283.	0.7	30
69	Alkaline hydrolysis of PVC-coated PET fibers for simultaneous recycling of PET and PVC. Journal of Material Cycles and Waste Management, 2018, 20, 439-449.	1.6	30
70	Simultaneous recovery of H2-rich syngas and removal of HCN during pyrolytic recycling of polyurethane by Ni/Mg/Al catalysts. Chemical Engineering Journal, 2019, 361, 408-415.	6.6	30
71	Close Packing of Cellulose and Chitosan in Regenerated Cellulose Fibers Improves Carbon Yield and Structural Properties of Respective Carbon Fibers. Biomacromolecules, 2020, 21, 4326-4335.	2.6	30
72	Lactic acid as a substrate for fermentative hydrogen production. International Journal of Hydrogen Energy, 2012, 37, 16967-16973.	3.8	29

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73	Adsorption isotherms and kinetics of arsenic removal from aqueous solution by Mgâ€“Al layered double hydroxide intercalated with nitrate ions. Reaction Kinetics, Mechanisms and Catalysis, 2017, 120, 703-714.	0.8	29
74	Niâ€“Al layered double hydroxides modified with citrate, malate, and tartrate: Preparation by coprecipitation and uptake of Cu2+ from aqueous solution. Journal of Physics and Chemistry of Solids, 2011, 72, 846-851.	1.9	28
75	Preparation of Cuâ€“Al layered double hydroxide intercalated with ethylenediaminetetraacetate by coprecipitation and its uptake of rare earth ions from aqueous solution. Solid State Sciences, 2013, 17, 28-34.	1.5	28
76	A novel process for the removal of bromine from styrene polymers containing brominated flame retardant. Polymer Degradation and Stability, 2015, 112, 86-93.	2.7	28
77	Pyrolysis of sugarcane bagasse pretreated with sulfuric acid. Journal of the Energy Institute, 2019, 92, 1149-1157.	2.7	28
78	Beech Wood Pyrolysis in Polyethylene Melt as a Means of Enhancing Levoglucosan and Methoxyphenol Production. Scientific Reports, 2019, 9, 1955.	1.6	28
79	Temperature-dependent pyrolysis behavior of polyurethane elastomers with different hard- and soft-segment compositions. Journal of Analytical and Applied Pyrolysis, 2020, 145, 104754.	2.6	28
80	Impact of Common Plastics on Cellulose Pyrolysis. Energy & Fuels, 2019, 33, 6837-6841.	2.5	26
81	A new strategy for CO₂ utilization with waste plastics: conversion of hydrogen carbonate into formate using polyvinyl chloride in water. Green Chemistry, 2020, 22, 352-358.	4.6	26
82	Removal of antimonate ions and simultaneous formation of a brandholzite-like compound from magnesiumâ€“aluminum oxide. Separation and Purification Technology, 2011, 80, 235-239.	3.9	25
83	Pyrolysis versus hydrolysis behavior during steam decomposition of polyesters using ¹⁸O-labeled steam. RSC Advances, 2015, 5, 61828-61837.	1.7	25
84	Treatment of hydrochloric acid using Mgâ€“Al layered double hydroxide intercalated with carbonate. Journal of Industrial and Engineering Chemistry, 2016, 39, 21-26.	2.9	25
85	Effectiveness of Mgâ€“Al-layered double hydroxide for heavy metal removal from mine wastewater and sludge volume reduction. International Journal of Environmental Science and Technology, 2018, 15, 263-272.	1.8	25
86	Impact of brominated flame retardants on the thermal degradation of high-impact polystyrene. Polymer Degradation and Stability, 2013, 98, 306-315.	2.7	24
87	Latest Trends in Pyrolysis Gas Chromatography for Analytical and Applied Pyrolysis of Plastics. Analytical Sciences, 2021, 37, 145-157.	0.8	24
88	Preparation of Mgâ€“Al layered double hydroxides intercalated with alkyl sulfates and investigation of their capacity to take up N,N-dimethylaniline from aqueous solutions. Solid State Sciences, 2009, 11, 2060-2064.	1.5	23
89	Decomposition of Gaseous Terephthalic Acid in the Presence of CaO. Industrial & Engineering Chemistry Research, 2011, 50, 1831-1836.	1.8	23
90	Removal of toxic HCN and recovery of H2-rich syngas via catalytic reforming of product gas from gasification of polyimide over Ni/Mg/Al catalysts. Journal of Analytical and Applied Pyrolysis, 2017, 123, 330-339.	2.6	23

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91	Diagnosing chlorine industrial metabolism by evaluating the potential of chlorine recovery from polyvinyl chloride wastesâ€"A case study in Japan. Resources, Conservation and Recycling, 2018, 133, 354-361.	5.3	23
92	Removal of tetrafluoroborate ion from aqueous solution using magnesiumâ€"aluminum oxide produced by the thermal decomposition of a hydrotalcite-like compound. Chemosphere, 2007, 69, 832-835.	4.2	22
93	Treatment of gaseous hydrogen chloride using Mgâ^'Al layered double hydroxide intercalated with carbonate ion. Chemosphere, 2010, 81, 658-662.	4.2	22
94	Use of Mgâ€"Al oxide for boron removal from an aqueous solution in rotation: Kinetics and equilibrium studies. Journal of Environmental Management, 2016, 165, 280-285.	3.8	22
95	Separation of copper and polyvinyl chloride from thin waste electric cables: A combined PVC-swelling and centrifugal approach. Waste Management, 2019, 89, 27-36.	3.7	22
96	Dehydrochlorination behavior of polychloroprene during thermal degradation. Thermochimica Acta, 2008, 476, 28-32.	1.2	21
97	Metal recovery from wire scrap via a chloride volatilization process: Poly(vinyl chloride) derived chlorine as volatilization agent. Thermochimica Acta, 2013, 562, 65-69.	1.2	21
98	Lead removal from cathode ray tube glass by the action of calcium hydroxide and poly(vinyl chloride). Thermochimica Acta, 2014, 596, 49-55.	1.2	21
99	Kinetics and equilibrium studies on Mgâ€"Al oxide for removal of fluoride in aqueous solution and its use in recycling. Journal of Environmental Management, 2015, 156, 252-256.	3.8	21
100	Simultaneous recovery of high-purity copper and polyvinyl chloride from thin electric cables by plasticizer extraction and ball milling. RSC Advances, 2018, 8, 6893-6903.	1.7	21
101	Impacts of Pyrolytic Interactions during the Co-pyrolysis of Biomass/Plastic: Synergies in Lignocellulose-Polyethylene System. Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy, 2019, 98, 202-219.	0.2	21
102	Kinetics of the dehydrochlorination of poly(vinyl chloride) in the presence of NaOH and various diols as solvents. Polymer Degradation and Stability, 2009, 94, 1595-1597.	2.7	20
103	Electrodialysis for NaCl/EG solution using ion-exchange membranes. Journal of Material Cycles and Waste Management, 2013, 15, 111-114.	1.6	20
104	Replacing conventional fuels in USA, Europe, and UK with plastic pyrolysis gases â€" Part II: Multi-index interchangeability methods. Energy Conversion and Management, 2016, 126, 1128-1145.	4.4	20
105	Kinetic and equilibrium analyses of lactate adsorption by Cu-Al and Mg-Al layered double hydroxides (Cu-Al LDH and Mg-Al LDH) and Cu-Al and Mg-Al layered double oxides (Cu-Al LDO and Mg-Al LDO). Nano Structures Nano Objects, 2021, 25, 100656.	1.9	20
106	Efficient dehalogenation of automobile shredder residue in NaOH/ethylene glycol using a ball mill. Chemosphere, 2009, 74, 287-292.	4.2	19
107	Recovery of benzene-rich oil from the degradation of metal- and metal oxide-containing poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Ov	1.6	19
108	Deducing targets of emerging technologies based on ex ante life cycle thinking: Case study on a chlorine recovery process for polyvinyl chloride wastes. Resources, Conservation and Recycling, 2019, 151, 104500.	5.3	19

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109	Separation mechanism of polyvinyl chloride and copper components from swollen electric cables by mechanical agitation. Waste Management, 2019, 93, 54-62.	3.7	19
110	Enhancement of gasification and liquefaction during fast co-pyrolysis of cedar wood and polyethylene through control of synergistic interactions. Bioresource Technology Reports, 2020, 11, 100431.	1.5	19
111	Selective production of benzene and naphthalene from poly(butylene terephthalate) and poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Ove and Stability, 2006, 91, 1002-1009.	2.7	18
112	Dehydrochlorination of poly(vinyl chloride) with Ca(OH)2 in ethylene glycol and the effect of ball milling. Journal of Polymer Research, 2011, 18, 1687-1691.	1.2	18
113	Pyrolysis and hydrolysis behaviors during steam pyrolysis of polyimide. Journal of Analytical and Applied Pyrolysis, 2016, 120, 75-81.	2.6	18
114	Uptake of Ni2+ and Cu2+ by Znâ€“Al layered double hydroxide intercalated with carboxymethyl-modified cyclodextrin: Equilibrium and kinetic studies. Materials Chemistry and Physics, 2019, 233, 288-295.	2.0	18
115	Treatment of HCl gas by cyclic use of Mgâ€“Al layered double hydroxide intercalated with CO32-. Atmospheric Pollution Research, 2020, 11, 290-295.	1.8	18
116	Chemical modification of flexible and rigid poly(vinyl chloride) by nucleophilic substitution with thiocyanate using a phase-transfer catalyst. Materials Chemistry and Physics, 2010, 124, 163-167.	2.0	17
117	Uptake of Nd³⁺ and Sr²⁺ by Liâ€“Al layered double hydroxide intercalated with triethylenetetramine-hexaacetic acid: kinetic and equilibrium studies. RSC Advances, 2015, 5, 79447-79455.	1.7	17
118	Uptake of Nd 3+ and Sr 2+ by Li Al layered double hydroxides intercalated with ethylenediaminetetraacetate. Materials Chemistry and Physics, 2016, 177, 8-11.	2.0	17
119	Enhanced production of phenol and debromination by co-pyrolysis of the non-metallic fraction of printed circuit boards and waste tires. Green Chemistry, 2021, 23, 6392-6404.	4.6	17
120	Steam Pyrolysis of Polyimides: Effects of Steam on Raw Material Recovery. Environmental Science & Technology, 2015, 49, 13558-13565.	4.6	16
121	Effect of H2O2 on the treatment of NO and NO2 using a Mgâ€“Al oxide slurry. Chemosphere, 2015, 120, 378-382.	4.2	16
122	Validation of a deplasticizerâ€“ball milling method for separating Cu and PVC from thin electric cables: A simulation and experimental approach. Waste Management, 2018, 82, 220-230.	3.7	16
123	Uptake of heavy metal cations by chitosan-modified montmorillonite: Kinetics and equilibrium studies. Materials Chemistry and Physics, 2019, 236, 121784.	2.0	16
124	Evolution of carbon nanostructure during pyrolysis of homogeneous chitosan-cellulose composite fibers. Carbon, 2021, 185, 27-38.	5.4	16
125	Upgrading of poly(vinyl chloride) by chemical modifications using sodium sulfide. Journal of Material Cycles and Waste Management, 2010, 12, 264-270.	1.6	15
126	Improvement of the Benzene Yield During Pyrolysis of Terephthalic Acid Using a CaO Fixed-Bed Reactor. Industrial & Engineering Chemistry Research, 2011, 50, 6594-6600.	1.8	15

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127	Hydrolytic degradation of poly(ethylene terephthalate) in a pyrolytic two step process to obtain benzene rich oil. Journal of Applied Polymer Science, 2011, 120, 3687-3694.	1.3	15
128	Mechanism and kinetics of aqueous boron removal using MgO. Journal of Water Process Engineering, 2018, 26, 237-241.	2.6	15
129	Mgâ^'Al layered double hydroxide intercalated with CO32â€“ and its recyclability for treatment of SO2. Applied Clay Science, 2019, 183, 105349.	2.6	15
130	Heavy metal removal from municipal solid waste fly ash through chloride volatilization using poly(vinyl chloride) as chlorinating agent. Journal of Material Cycles and Waste Management, 2020, 22, 1270-1283.	1.6	15
131	Combining pyrolysisâ€“two-dimensional gas chromatographyâ€“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. Chemical Engineering Research and Design, 2020, 143, 91-100.	2.7	15
132	Facile method for treating Zn, Cd, and Pb in mining wastewater by the formation of Mgâ€“Al layered double hydroxide. International Journal of Environmental Science and Technology, 2020, 17, 3023-3032.	1.8	15
133	Prediction of pyrolyzate yields by response surface methodology: A case study of cellulose and polyethylene co-pyrolysis. Bioresource Technology, 2021, 337, 125435.	4.8	15
134	Effect of heating rate on the pyrolysis of high-impact polystyrene containing brominated flame retardants: fate of brominated flame retardants. Journal of Material Cycles and Waste Management, 2012, 14, 259-265.	1.6	14
135	Preparation of Znâ€“Al layered double hydroxide intercalated with triethylenetetramine-hexaacetic acid by coprecipitation: uptake of rare-earth metal ions from aqueous solutions. RSC Advances, 2014, 4, 45995-46001.	1.7	14
136	Removal of chloride from ethylene glycol solution using alumina/zeolite membrane as a physical boundary between the organic and aqueous phases. Journal of Material Cycles and Waste Management, 2013, 15, 404-408.	1.6	13
137	Selective phenol recovery via simultaneous hydrogenation/dealkylation of isopropyl- and isopropenyl-phenols employing an H2 generator combined with tandem micro-reactor GC/MS. Scientific Reports, 2018, 8, 13994.	1.6	13
138	Equilibrium and kinetic studies of Se(<scp>vi</scp>) removal by Mgâ€“Al layered double hydroxide doped with Fe²⁺. RSC Advances, 2014, 4, 61817-61822.	1.7	12
139	Treatment of NOx using recyclable CO32--intercalated Mgâ€“Al layered double hydroxide. Atmospheric Pollution Research, 2019, 10, 1866-1872.	1.8	12
140	Application of Mgâ€“Al layered double hydroxide for treating acidic mine wastewater: a novel approach to sludge reduction. Chemistry and Ecology, 2019, 35, 128-142.	0.6	12
141	Influence of CO2 gas on the rate and kinetics of HCl, SO2, and NO2 gas removal by Mg-Al layered double hydroxide intercalated with CO32â^'. Applied Clay Science, 2020, 195, 105725.	2.6	12
142	Impact of Ni/Mg/Al Catalyst Composition on Simultaneous H₂-Rich Syngas Recovery and Toxic HCN Removal through a Two-Step Polyurethane Pyrolysis and Steam Reforming Process. Industrial & Engineering Chemistry Research, 2020, 59, 9023-9033.	1.8	12
143	Adsorption of urea, creatinine, and uric acid from three solution types using spherical activated carbon and its recyclability. Chinese Journal of Chemical Engineering, 2020, 28, 2993-3001.	1.7	12
144	Mitigation of bromine-containing products during pyrolysis of polycarbonate-based tetrabromobisphenol A in the presence of copper(I) oxide. Journal of Hazardous Materials, 2021, 409, 124972.	6.5	12

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145	Investigation of the mechanism of Cu(II) removal using Mg-Al layered double hydroxide intercalated with carbonate: Equilibrium and pH studies and solid-state analyses. Inorganic Chemistry Communication, 2021, 132, 108839.	1.8	12
146	Chemical modification and dechlorination of polyvinyl chloride by substitution with thiocyanate as a nucleophile. Polymer Engineering and Science, 2010, 50, 69-75.	1.5	11
147	Simultaneous treatment of HClâ€“SO2â€“NOx gas with Mgâ€“Al layered double hydroxide intercalated with CO32â^' and its recycling process. International Journal of Environmental Science and Technology, 2020, 17, 1179-1184.	1.8	11
148	Synthesis of MnO2/Mg-Al layered double hydroxide and evaluation of its NO-removal performance. Journal of Alloys and Compounds, 2021, 867, 159038.	2.8	11
149	Dehydrochlorination Behavior of Agricultural PVC Polymer Films in Alkaline Solution at Elevated Temperatures.. Nippon Kagaku Kaishi / Chemical Society of Japan - Chemistry and Industrial Chemistry Journal, 1997, 1997, 64-68.	0.1	10
150	Effect of a phase-transfer catalyst on the chemical modification of poly(vinyl chloride) by substitution with thiocyanate as a nucleophile. Materials Chemistry and Physics, 2009, 118, 362-366.	2.0	10
151	Thermal decomposition behavior of Cuâ€“Al layered double hydroxide, and ethylenediaminetetraacetate-intercalated Cuâ€“Al layered double hydroxide reconstructed from Cuâ€“Al oxide for uptake of Y3+ from aqueous solution. Materials Research Bulletin, 2012, 47, 4216-4219.	2.7	10
152	Synthesis of Liâ€“Al layered double hydroxide intercalated with amino tris(methylene phosphonic acid) and kinetic and equilibrium studies of the uptake of Nd3+ and Sr2+ ions. Applied Surface Science, 2016, 366, 523-528.	3.1	10
153	Recycling of PVC pipes and fittings in Japan: proactive approach of industry to and its impacts on legal/technical frameworks. Journal of Material Cycles and Waste Management, 2017, 19, 21-31.	1.6	10
154	Identification of number and type of cations in water-soluble Cs+ and Na+ calix[4]arene-bis-crown-6 complexes by using ESI-TOF-MS. Chemosphere, 2018, 197, 181-184.	4.2	10
155	Degradation of PVC waste into a flexible polymer by chemical modification using DINP moieties. RSC Advances, 2019, 9, 28870-28875.	1.7	10
156	Removal of Mn and Cd contained in mine wastewater by Mgâ€“Al-layered double hydroxides. Journal of Material Cycles and Waste Management, 2019, 21, 1232-1241.	1.6	10
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