

Jeehyeong Khim

List of Publications by Year in descending order

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109
papers

3,177
citations

117453

34
h-index

174990

52
g-index

110
all docs

110
docs citations

110
times ranked

3484
citing authors

#	ARTICLE	IF	CITATIONS
1	Nitrate reduction by zero-valent iron under different pH regimes. <i>Applied Geochemistry</i> , 2004, 19, 335-342.	1.4	211
2	Synergistic effect of sono-photocatalytic process for the degradation of organic pollutants using CuO-TiO ₂ /rGO. <i>Ultrasonics Sonochemistry</i> , 2019, 50, 218-223.	3.8	147
3	A review on heterogeneous sonocatalyst for treatment of organic pollutants in aqueous phase based on catalytic mechanism. <i>Ultrasonics Sonochemistry</i> , 2018, 45, 29-49.	3.8	126
4	Physiochemical properties of digested sewage sludge with ultrasonic treatment. <i>Ultrasonics Sonochemistry</i> , 2007, 14, 281-285.	3.8	110
5	Hydrodynamic cavitation and activated persulfate oxidation for degradation of bisphenol A: Kinetics and mechanism. <i>Chemical Engineering Journal</i> , 2018, 338, 323-332.	6.6	90
6	Activation of peroxodisulfate and peroxymonosulfate by ultrasound with different frequencies: Impact on ibuprofen removal efficient, cost estimation and energy analysis. <i>Chemical Engineering Journal</i> , 2021, 413, 127487.	6.6	90
7	Geometric Optimization of Sonoreactors for the Enhancement of Sonochemical Activity. <i>Journal of Physical Chemistry C</i> , 2011, 115, 4096-4103.	1.5	84
8	Investigation of acoustic cavitation energy in a large-scale sonoreactor. <i>Ultrasonics Sonochemistry</i> , 2009, 16, 552-556.	3.8	80
9	Occurrence of micropollutants in four major rivers in Korea. <i>Science of the Total Environment</i> , 2014, 491-492, 138-147.	3.9	74
10	Application of solid-phase extraction coupled with freezing-lipid filtration clean-up for the determination of endocrine-disrupting phenols in fish. <i>Analytica Chimica Acta</i> , 2007, 603, 67-75.	2.6	70
11	Uniform core-shell structured magnetic mesoporous TiO ₂ nanospheres as a highly efficient and stable sonocatalyst for the degradation of bisphenol-A. <i>Journal of Materials Chemistry A</i> , 2015, 3, 6492-6500.	5.2	70
12	Sonolysis of chlorinated compounds in aqueous solution. <i>Ultrasonics Sonochemistry</i> , 2007, 14, 93-98.	3.8	69
13	Frequency effects on the sonochemical degradation of chlorinated compounds. <i>Ultrasonics Sonochemistry</i> , 2011, 18, 460-465.	3.8	68
14	A review on sonoelectrochemical technology as an upcoming alternative for pollutant degradation. <i>Ultrasonics Sonochemistry</i> , 2015, 27, 210-234.	3.8	66
15	Application of Box-Behnken design with response surface methodology for modeling and optimizing ultrasonic oxidation of arsenite with H ₂ O ₂ . <i>Open Chemistry</i> , 2014, 12, 164-172.	1.0	64
16	Effect of water content on transient nonequilibrium NAPL-gas mass transfer during soil vapor extraction. <i>Journal of Contaminant Hydrology</i> , 2002, 54, 1-18.	1.6	63
17	Potential application of sludge produced from coal mine drainage treatment for removing Zn(II) in an aqueous phase. <i>Environmental Geochemistry and Health</i> , 2011, 33, 103-112.	1.8	57
18	Comparison of Ultrasonic and Conventional Mechanical Soil-Washing Processes for Diesel-Contaminated Sand. <i>Industrial & Engineering Chemistry Research</i> , 2011, 50, 2400-2407.	1.8	53

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19	Ultrasonically enhanced electrochemical oxidation of ibuprofen. <i>Ultrasonics Sonochemistry</i> , 2015, 22, 429-436.	3.8	52
20	Acoustic emission spectra and sonochemical activity in a 36 kHz sonoreactor. <i>Ultrasonics Sonochemistry</i> , 2012, 19, 16-21.	3.8	45
21	Significant diethyl phthalate (DEP) degradation by combined advanced oxidation process in aqueous solution. <i>Journal of Environmental Management</i> , 2012, 101, 104-110.	3.8	45
22	Photocatalyst separation from aqueous dispersion using graphene oxide/TiO ₂ nanocomposites. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2013, 433, 230-239.	2.3	45
23	Comparison of calorimetric energy and cavitation energy for the removal of bisphenol-A: The effects of frequency and liquid height. <i>Chemical Engineering Journal</i> , 2012, 183, 39-45.	6.6	44
24	Comparison of energy consumptions between ultrasonic, mechanical, and combined soil washing processes. <i>Ultrasonics Sonochemistry</i> , 2012, 19, 395-398.	3.8	42
25	Sonophotolytic diethyl phthalate (DEP) degradation with UVC or VUV irradiation. <i>Ultrasonics Sonochemistry</i> , 2012, 19, 1094-1098.	3.8	41
26	A continuous pilot-scale system using coal-mine drainage sludge to treat acid mine drainage contaminated with high concentrations of Pb, Zn, and other heavy metals. <i>Journal of Hazardous Materials</i> , 2012, 215-216, 122-128.	6.5	41
27	Enhanced sonocatalytic treatment of ibuprofen by mechanical mixing and reusable magnetic core titanium dioxide. <i>Chemical Engineering Journal</i> , 2015, 264, 522-530.	6.6	41
28	Modeling metal-sediment interaction processes: Parameter sensitivity assessment and uncertainty analysis. <i>Environmental Modelling and Software</i> , 2016, 80, 159-174.	1.9	41
29	The effects of hydrogen peroxide on the sonochemical degradation of phenol and bisphenol A. <i>Ultrasonics Sonochemistry</i> , 2014, 21, 1976-1981.	3.8	40
30	Stabilization of Pb ²⁺ and Cu ²⁺ contaminated firing range soil using calcined oyster shells and waste cow bones. <i>Chemosphere</i> , 2013, 91, 1349-1354.	4.2	37
31	Ordered mesoporous C/TiO ₂ composites as advanced sonocatalysts. <i>Journal of Materials Chemistry A</i> , 2014, 2, 16452-16458.	5.2	37
32	Development of modified mesoporous carbon (CMK-3) for improved adsorption of bisphenol-A. <i>Chemosphere</i> , 2020, 238, 124559.	4.2	37
33	Attenuation of UV Light in Large-Scale Sonophotocatalytic Reactors: The Effects of Ultrasound Irradiation and TiO ₂ Concentration. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 232-239.	1.8	36
34	Evaluation of stabilizing materials for immobilization of toxic heavy metals in contaminated agricultural soils in China. <i>Journal of Cleaner Production</i> , 2018, 193, 748-758.	4.6	36
35	Effect of Ultrasound on Surfactant-Aided Soil Washing. <i>Japanese Journal of Applied Physics</i> , 2007, 46, 4775.	0.8	35
36	Hybrid reactor based on hydrodynamic cavitation, ozonation, and persulfate oxidation for oxalic acid decomposition during rare-earth extraction processes. <i>Ultrasonics Sonochemistry</i> , 2019, 52, 326-335.	3.8	34

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37	Degradation of polychlorinated dibenzo-p-dioxins and dibenzofurans in real-field soil by an integrated visible-light photocatalysis and solvent migration system with p-n heterojunction BiVO ₄ /Bi ₂ O ₃ . <i>Journal of Hazardous Materials</i> , 2018, 344, 1116-1125.	6.5	33
38	BiVO ₄ /Bi ₂ O ₃ heterojunction deposited on graphene for an enhanced visible-light photocatalytic activity. <i>Journal of Alloys and Compounds</i> , 2017, 706, 7-15.	2.8	32
39	Development and application of Fe ₃ O ₄ @Pd nanospheres as catalyst for electrochemical-heterogeneous Fenton process. <i>Chemical Engineering Journal</i> , 2016, 284, 1165-1173.	6.6	31
40	Degradation of triclosan in the combined reaction of Fe ²⁺ and UV-C: Comparison with the Fenton and photolytic reactions. <i>Environmental Progress and Sustainable Energy</i> , 2010, 29, 415-420.	1.3	29
41	Synergistic sonoelectrochemical removal of substituted phenols: Implications of ultrasonic parameters and physicochemical properties. <i>Ultrasonics Sonochemistry</i> , 2015, 24, 172-177.	3.8	29
42	Addition of Chlorinated Compounds in the Sonochemical Degradation of 2-Chlorophenol. <i>Japanese Journal of Applied Physics</i> , 2008, 47, 4123-4126.	0.8	25
43	Enhancement in mineralization of a number of natural refractory organic compounds by the combined process of sonolysis and ozonolysis (US/O ₃). <i>Ultrasonics Sonochemistry</i> , 2011, 18, 773-780.	3.8	25
44	Peat moss-derived biochar for sonocatalytic applications. <i>Ultrasonics Sonochemistry</i> , 2018, 42, 26-30.	3.8	25
45	Kinetic and thermodynamic studies of the adsorption of heavy metals on to a new adsorbent: coal mine drainage sludge. <i>Environmental Technology (United Kingdom)</i> , 2010, 31, 1203-1211.	1.2	23
46	Kinetic and mechanism studies of the adsorption of lead onto waste cow bone powder (WCBP) surfaces. <i>Environmental Geochemistry and Health</i> , 2011, 33, 81-89.	1.8	21
47	Magnetic Pd@Fe ₃ O ₄ composite nanostructure as recoverable catalyst for sonoelectrohybrid degradation of Ibuprofen. <i>Ultrasonics Sonochemistry</i> , 2017, 34, 262-272.	3.8	21
48	Passive treatment of arsenic and heavy metals contaminated circumneutral mine drainage using granular polyurethane impregnated by coal mine drainage sludge. <i>Journal of Cleaner Production</i> , 2018, 186, 282-292.	4.6	21
49	Enhancement of sonochemical oxidation reactions using air sparging in a 36-kHz sonoreactor. <i>Ultrasonics Sonochemistry</i> , 2019, 51, 412-418.	3.8	21
50	Development of new cleanup method of polychlorinated dibenzo-p-dioxins/dibenzofurans in fish by freezing-lipid filtration. <i>Analytica Chimica Acta</i> , 2006, 576, 31-36.	2.6	20
51	Synthesis, characterization and sonocatalytic applications of nano-structured carbon based TiO ₂ catalysts. <i>Ultrasonics Sonochemistry</i> , 2018, 43, 193-200.	3.8	20
52	Peat moss-derived biochars as effective sorbents for VOCs™ removal in groundwater. <i>Environmental Geochemistry and Health</i> , 2019, 41, 1637-1646.	1.8	19
53	Improving sono-activated persulfate oxidation using mechanical mixing in a 35-kHz ultrasonic reactor: Persulfate activation mechanism and its application. <i>Ultrasonics Sonochemistry</i> , 2021, 72, 105412.	3.8	19
54	Analysis of the Ultrasonic Cavitation Energy in a Pilot-Scale Sonoreactor. <i>Japanese Journal of Applied Physics</i> , 2008, 47, 4119.	0.8	18

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55	Preparation and characterization of magnetic-core titanium dioxide: Implications for photocatalytic removal of ibuprofen. <i>Journal of Molecular Catalysis A</i> , 2014, 390, 178-186.	4.8	18
56	Facile synthesis of uniform yolk-shell structured magnetic mesoporous silica as an advanced photo-Fenton-like catalyst for degrading rhodamine B. <i>RSC Advances</i> , 2015, 5, 96201-96204.	1.7	18
57	Application of pea-like yolk-shell structured Fe ₃ O ₄ @TiO ₂ nanosheets for photocatalytic and photo-Fenton oxidation of bisphenol-A. <i>RSC Advances</i> , 2019, 9, 22153-22160.	1.7	18
58	Effect of Annealing Environments on Self-Organized TiO ₂ Nanotubes for Efficient Photocatalytic Applications. <i>Journal of Nanoscience and Nanotechnology</i> , 2012, 12, 8908-8912.	0.9	17
59	Application of persulfate with hydrodynamic cavitation and ferrous in the decomposition of pentachlorophenol. <i>Ultrasonics Sonochemistry</i> , 2020, 66, 105106.	3.8	17
60	Reaction of activated carbon zerovalent iron with pentachlorophenol under anaerobic conditions. <i>Journal of Cleaner Production</i> , 2021, 297, 126748.	4.6	17
61	The physico-chemical properties and leaching behaviors of phosphatic clay for immobilizing heavy metals. <i>Chemosphere</i> , 2008, 70, 1141-1145.	4.2	15
62	A novel sequential process for remediating rare-earth wastewater. <i>Chemosphere</i> , 2016, 144, 2081-2090.	4.2	15
63	Significant enhancement of bromate removal in drinking water: Implications for the mechanism of sonocatalytic reduction. <i>Chemical Engineering Journal</i> , 2017, 317, 404-412.	6.6	14
64	Effect of Ultrasonic Frequency and Power Density for Degradation of Dichloroacetonitrile by Sonolytic Ozonation. <i>Japanese Journal of Applied Physics</i> , 2012, 51, 07GD07.	0.8	14
65	Arsenic adsorption on two types of powdered and beaded coal mine drainage sludge adsorbent. <i>Chemosphere</i> , 2021, 272, 129560.	4.2	13
66	Sonochemical Oxidation of Arsenite in Aqueous Phase. <i>Japanese Journal of Applied Physics</i> , 2011, 50, 07HE13.	0.8	12
67	Arsenite removal using a pilot system of ultrasound and ultraviolet followed by microfiltration. <i>Ultrasonics Sonochemistry</i> , 2014, 21, 1527-1534.	3.8	12
68	Distribution of electrical energy consumption for the efficient degradation control of THMs mixture in sonophotolytic process. <i>Ultrasonics Sonochemistry</i> , 2014, 21, 1982-1987.	3.8	11
69	Application of nanofiltration pretreatment to remove divalent ions for economical seawater reverse osmosis desalination. <i>Desalination and Water Treatment</i> , 0, , 1-10.	1.0	10
70	Mesoporous TiO ₂ encapsulating a visible-light responsive upconversion agent for enhanced sonocatalytic degradation of bisphenol-A. <i>RSC Advances</i> , 2016, 6, 37434-37442.	1.7	9
71	Treatment of polychlorinated dibenzo-p-dioxins and dibenzofurans contaminated soil using S ₂ O ₈ ²⁻ with ferrous ion and heat as activating methods. <i>Chemical Engineering Journal</i> , 2020, 384, 123299.	6.6	9
72	Ultrasonically Enhanced Diesel Removal from Soil. <i>Japanese Journal of Applied Physics</i> , 2007, 46, 4912.	0.8	8

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73	Sonophotocatalytic Destruction of Chloroform: Comparison of Processes and Synergistic Effects. Japanese Journal of Applied Physics, 2011, 50, 07HE10.	0.8	8
74	Degradation of Diethyl Phthalate by Sono-Fenton Process and its Dependence on the Power Density. Japanese Journal of Applied Physics, 2011, 50, 07HE09.	0.8	8
75	Synthesis of Copper Hydroxide and Oxide Nanostructures via Anodization Technique for Efficient Photocatalytic Application. Journal of Nanoscience and Nanotechnology, 2012, 12, 8396-8400.	0.9	8
76	Catalytic assistance of ultrasound for manganese removal by waste oyster shells. Journal of Environmental Management, 2013, 115, 235-240.	3.8	8
77	Investigation of sonochemical activities at a frequency of 334 kHz: The effect of geometric parameters of sonoreactor. Ultrasonics Sonochemistry, 2014, 21, 1504-1511.	3.8	8
78	Demonstration and evaluation of potential configuration options for shale-wastewater treatment plant by combining several unit processes. Journal of Cleaner Production, 2019, 232, 867-876.	4.6	8
79	Rare earth real wastewater treatment by pilot scale using new concept continuous treatment process. Chemosphere, 2021, 279, 130523.	4.2	8
80	Sonophotocatalytic Destruction of Chloroform: Comparison of Processes and Synergistic Effects. Japanese Journal of Applied Physics, 2011, 50, 07HE10.	0.8	8
81	Performance of a Membrane Diffuser Bioreactor for the Removal of Gaseous Toluene. Environmental Engineering Science, 2007, 24, 927-936.	0.8	7
82	A bioactive foam reactor for the removal of volatile organic compounds: system performance and model development. Bioprocess and Biosystems Engineering, 2007, 30, 439-446.	1.7	7
83	Remediation of Diesel-Contaminated Soil Using Supercritical Carbon Dioxide and Ultrasound. Japanese Journal of Applied Physics, 2008, 47, 4314.	0.8	7
84	Effect of Bulk Temperature and Frequency on the Sonolytic Degradation of 1,4-Dioxane with Fe ⁰ . Industrial & Engineering Chemistry Research, 2011, 50, 5394-5400.	1.8	7
85	Ordered mesoporous carbon-silica frameworks confined magnetic mesoporous TiO ₂ as an efficient catalyst under acoustic cavitation energy. Journal of Materiomics, 2020, 6, 45-53.	2.8	7
86	Arsenite Oxidation and Treatment by Ultrasound/Iron in Aqueous Solutions. Japanese Journal of Applied Physics, 2011, 50, 07HE08.	0.8	7
87	Arsenic adsorption study in acid mine drainage using fixed bed column by novel beaded adsorbent. Chemosphere, 2022, 291, 132894.	4.2	7
88	Synthesis Mechanism and Thermal Optimization of an Economical Mesoporous Material Using Silica: Implications for the Effective Removal or Delivery of Ibuprofen. PLoS ONE, 2015, 10, e0130253.	1.1	6
89	Evaluation of the recyclability of construction and demolition waste fines as a garden substrate and soil amendment agent: a case study from the Republic of Korea. Journal of Material Cycles and Waste Management, 2020, 22, 479-487.	1.6	6
90	Characteristics of phosphorus containing waste-bones. Materials Letters, 2007, 61, 677-679.	1.3	5

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91	Sonochemical Oxidation of Cyanide Using Potassium Peroxydisulfate as an Oxidizing Agent. Japanese Journal of Applied Physics, 2012, 51, 07GD13.	0.8	5
92	A Full-Scale Successive Alkalinity-Producing Passive System (SAPPS) for the Treatment of Acid Mine Drainage. Water, Air, and Soil Pollution, 2013, 224, 1.	1.1	5
93	Fine-structured oxide ceramics from a novel replication method. Ceramics International, 2016, 42, 10872-10878.	2.3	5
94	Evaluation of stabilizing material and stabilization efficiency through comparative study of toxic heavy metal transfer between corn and peanut grown in stabilized field soil. Environmental Pollution, 2021, 275, 116617.	3.7	4
95	Quantification of perfluorooctanoic acid decomposition mechanism applying negative voltage to anode during photoelectrochemical process. Chemosphere, 2021, 284, 131311.	4.2	4
96	Degradation of Diethyl Phthalate by Sono-Fenton Process and its Dependence on the Power Density. Japanese Journal of Applied Physics, 2011, 50, 07HE09.	0.8	4
97	Assessment of waters and sediments impacted by drainage at the Young Dong coal mine site, South Korea. Environmental Science and Pollution Research, 2012, 19, 19-30.	2.7	3
98	Assessing soil and groundwater contamination in a metropolitan redevelopment project. Environmental Monitoring and Assessment, 2013, 185, 6855-6865.	1.3	3
99	Evaluation of self-oxidation and selectivity of iron-based reductant in anaerobic pentachlorophenol contaminated soil. Journal of Hazardous Materials, 2022, 424, 127322.	6.5	3
100	Facile synthesis of uniform magnetic graphitic carbon for an efficient adsorption of pentachlorophenol. RSC Advances, 2017, 7, 35012-35015.	1.7	2
101	Mechanistic investigations in sonochemical degradation of trihalomethanes in presence of non-porous and mesoporous silica nanospheres. Journal of Water Process Engineering, 2018, 24, 26-34.	2.6	2
102	Effects of Power Density and TiO ₂ Dose in the Sonocatalytic Degradation of Diethyl Phthalate Using High Frequency. Japanese Journal of Applied Physics, 2012, 51, 07GD09.	0.8	2
103	Evaluation of anode materials in sonoelectrochemistry processes: Kinetic, mechanism, and cost estimation. Chemosphere, 2022, 306, 135547.	4.2	2
104	Effect of Ultrasound on Rate of Flow through Porous Media. Japanese Journal of Applied Physics, 2004, 43, L1482-L1484.	0.8	1
105	Stabilization of Heavy Metal Contaminated Paddy Soils. Korean Society of Hazard Mitigation, 2012, 12, 287-292.	0.1	1
106	The Effect of Irradiation Distance/Volume on Sonochemical Oxidation of Arsenite. Daehan Hwan'gyeong Gonghag Hoeji, 2012, 34, 247-253.	0.4	1
107	Addition of Sonochemical Reactor to the Solar Photocatalytic Compound Parabolic Concentrators System. Japanese Journal of Applied Physics, 2011, 50, 07HE14.	0.8	0
108	Addition of Sonochemical Reactor to the Solar Photocatalytic Compound Parabolic Concentrators System. Japanese Journal of Applied Physics, 2011, 50, 07HE14.	0.8	0

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109	The Study of Ibuprofen Degradation Properties by Combination of Wave Energy (Ultrasound,) Tj ETQq1 1 0.784314 rgBT /Ovgrlock 10 T	0.9	0