

# Sungjun Bae

## List of Publications by Year in descending order

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74  
papers

3,316  
citations

117453

34  
h-index

149479

56  
g-index

75  
all docs

75  
docs citations

75  
times ranked

3152  
citing authors

#	ARTICLE	IF	CITATIONS
1	Degradation of diclofenac by pyrite catalyzed Fenton oxidation. <i>Applied Catalysis B: Environmental</i> , 2013, 134-135, 93-102.	10.8	320
2	Effect of NaBH <sub>4</sub> on properties of nanoscale zero-valent iron and its catalytic activity for reduction of p -nitrophenol. <i>Applied Catalysis B: Environmental</i> , 2016, 182, 541-549.	10.8	229
3	Advances in Surface Passivation of Nanoscale Zerovalent Iron: A Critical Review. <i>Environmental Science &amp; Technology</i> , 2018, 52, 12010-12025.	4.6	225
4	Nitrite Reduction Mechanism on a Pd Surface. <i>Environmental Science &amp; Technology</i> , 2014, 48, 12768-12774.	4.6	188
5	Development of Pd-Cu/Hematite Catalyst for Selective Nitrate Reduction. <i>Environmental Science &amp; Technology</i> , 2014, 48, 9651-9658.	4.6	150
6	Degradation of trichloroethylene by Fenton reaction in pyrite suspension. <i>Journal of Hazardous Materials</i> , 2011, 185, 1355-1361.	6.5	143
7	Reactivity of Nanoscale Zero-Valent Iron in Unbuffered Systems: Effect of pH and Fe(II) Dissolution. <i>Environmental Science &amp; Technology</i> , 2015, 49, 10536-10543.	4.6	137
8	Nitrate reduction by maghemite supported Cu-Pd bimetallic catalyst. <i>Applied Catalysis B: Environmental</i> , 2012, 127, 148-158.	10.8	99
9	Advances in the catalytic reduction of nitrate by metallic catalysts for high efficiency and N <sub>2</sub> selectivity: A review. <i>Chemical Engineering Journal</i> , 2020, 384, 123252.	6.6	92
10	Competitive adsorption of pharmaceuticals in lake water and wastewater effluent by pristine and NaOH-activated biochars from spent coffee wastes: Contribution of hydrophobic and $\pi$ - $\pi$ interactions. <i>Environmental Pollution</i> , 2021, 270, 116244.	3.7	84
11	Influence of Riboflavin on Nanoscale Zero-Valent Iron Reactivity during the Degradation of Carbon Tetrachloride. <i>Environmental Science &amp; Technology</i> , 2014, 48, 2368-2376.	4.6	83
12	Catalytic Nitrate Removal in Continuous Bimetallic Cu-Pd/Nanoscale Zerovalent Iron System. <i>Industrial &amp; Engineering Chemistry Research</i> , 2015, 54, 6247-6257.	1.8	78
13	Inhibition of nZVI reactivity by magnetite during the reductive degradation of 1,1,1-TCA in nZVI/magnetite suspension. <i>Applied Catalysis B: Environmental</i> , 2010, 96, 10-17.	10.8	74
14	Novel bimetallic catalyst supported by red mud for enhanced nitrate reduction. <i>Chemical Engineering Journal</i> , 2018, 348, 877-887.	6.6	67
15	Degradation of pyrene in cetylpyridinium chloride-aided soil washing wastewater by pyrite Fenton reaction. <i>Chemical Engineering Journal</i> , 2014, 249, 34-41.	6.6	53
16	Molecular Identification of Cr(VI) Removal Mechanism on Vivianite Surface. <i>Environmental Science &amp; Technology</i> , 2018, 52, 10647-10656.	4.6	53
17	The effect of pH and zwitterionic buffers on catalytic nitrate reduction by TiO <sub>2</sub> -supported bimetallic catalyst. <i>Chemical Engineering Journal</i> , 2013, 232, 327-337.	6.6	51
18	Characterization of rare earth elements present in coal ash by sequential extraction. <i>Journal of Hazardous Materials</i> , 2021, 402, 123760.	6.5	50

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19	Advances in application of gâ€“C3N4â€“based materials for treatment of polluted water and wastewater via activation of oxidants and photoelectrocatalysis: A comprehensive review. <i>Chemosphere</i> , 2022, 286, 131737.	4.2	50
20	Degradation of 17Î±-ethinylestradiol by nano zero valent iron under different pH and dissolved oxygen levels. <i>Water Research</i> , 2017, 125, 32-41.	5.3	45
21	Surface modification of poly(vinyl alcohol) sponge by acrylic acid to immobilize Prussian blue for selective adsorption of aqueous cesium. <i>Chemosphere</i> , 2019, 226, 173-182.	4.2	44
22	Fenton oxidation of synthetic food dyes by Fe-embedded coffee biochar catalysts prepared at different pyrolysis temperatures: A mechanism study. <i>Chemical Engineering Journal</i> , 2021, 421, 129943.	6.6	44
23	Enhanced reductive degradation of carbon tetrachloride by biogenic vivianite and Fe(II). <i>Geochimica Et Cosmochimica Acta</i> , 2012, 85, 170-186.	1.6	43
24	Effects of vertical and horizontal configurations of different numbers of brush anodes on performance and electrochemistry of microbial fuel cells. <i>Journal of Cleaner Production</i> , 2020, 277, 124125.	4.6	43
25	Reductive dechlorination of trichloroethylene by polyvinylpyrrolidone stabilized nanoscale zerovalent iron particles with Ni. <i>Journal of Hazardous Materials</i> , 2017, 340, 399-406.	6.5	40
26	Biotransformation of lepidocrocite in the presence of quinones and flavins. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 114, 144-155.	1.6	39
27	Nitrate reduction on surface of Pd/Sn catalysts supported by coal fly ash-derived zeolites. <i>Journal of Hazardous Materials</i> , 2019, 374, 309-318.	6.5	39
28	Novel synthesis of nanoscale zerovalent iron from coal fly ash and its application in oxidative degradation of methyl orange by Fenton reaction. <i>Journal of Hazardous Materials</i> , 2019, 365, 751-758.	6.5	39
29	Degradation of off-gas toluene in continuous pyrite Fenton system. <i>Journal of Hazardous Materials</i> , 2014, 280, 31-37.	6.5	38
30	Highly efficient and magnetically recyclable Pd catalyst supported by iron-rich fly ash@fly ash-derived SiO <sub>2</sub> for reduction of p-nitrophenol. <i>Journal of Hazardous Materials</i> , 2019, 371, 72-82.	6.5	38
31	Prussian blue immobilized cellulosic filter for the removal of aqueous cesium. <i>Science of the Total Environment</i> , 2019, 670, 779-788.	3.9	37
32	Metal ion recovery from electro dialysis-concentrated plating wastewater via pilot-scale sequential electrowinning/chemical precipitation. <i>Journal of Cleaner Production</i> , 2022, 330, 129879.	4.6	37
33	Red mud-activated peroxy monosulfate process for the removal of fluoroquinolones in hospital wastewater. <i>Water Research</i> , 2020, 184, 116171.	5.3	35
34	Adsorption of cationic cetylpyridinium chloride on pyrite surface. <i>Journal of Industrial and Engineering Chemistry</i> , 2012, 18, 1482-1488.	2.9	34
35	Formation of Fe nanoparticles on water-washed coal fly ash for enhanced reduction of p-nitrophenol. <i>Chemosphere</i> , 2018, 202, 733-741.	4.2	30
36	Preparation of quasi-solid-state electrolytes using a coal fly ash derived zeolite-X and -A for dye-sensitized solar cells. <i>Journal of Industrial and Engineering Chemistry</i> , 2019, 71, 378-386.	2.9	25

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37	Immobilization of uranium(VI) in a cementitious matrix with nanoscale zerovalent iron (NZVI). <i>Chemosphere</i> , 2019, 215, 626-633.	4.2	22
38	Synergistic effect of Cu loading on Fe sites of fly ash for enhanced catalytic reduction of nitrophenol. <i>Science of the Total Environment</i> , 2020, 705, 134544.	3.9	22
39	Enhanced Degradation of TNT and RDX by Bio-reduced Iron Bearing Soil Minerals. <i>Advances in Environmental Research</i> , 2012, 1, 1-14.	0.3	22
40	Exploring reductive degradation of fluorinated pharmaceuticals using Al <sub>2</sub> O <sub>3</sub> -supported Pt-group metallic catalysts: Catalytic reactivity, reaction pathways, and toxicity assessment. <i>Water Research</i> , 2020, 185, 116242.	5.3	21
41	Immobilization and characterization of Fe(0) catalyst on NaOH-treated coal fly ash for catalytic reduction of p-nitrophenol. <i>Chemosphere</i> , 2018, 212, 1020-1029.	4.2	19
42	Effect of promoter and noble metals and suspension pH on catalytic nitrate reduction by bimetallic nanoscale Fe <sup>0</sup> catalysts. <i>Environmental Technology (United Kingdom)</i> , 2016, 37, 1077-1087.	1.2	18
43	Riboflavin-mediated RDX transformation in the presence of <i>Shewanella putrefaciens</i> CN32 and lepidocrocite. <i>Journal of Hazardous Materials</i> , 2014, 274, 24-31.	6.5	17
44	Exploring the complex removal behavior of natural organic matter upon N-doped reduced graphene oxide-activated persulfate via excitation-emission matrix combined with parallel factor analysis and size exclusion chromatography. <i>Chemical Engineering Journal</i> , 2018, 347, 252-262.	6.6	16
45	New Features and Uncovered Benefits of Polycrystalline Magnetite as Reusable Catalyst in Reductive Chemical Conversion. <i>Journal of Physical Chemistry C</i> , 2017, 121, 25195-25205.	1.5	15
46	Enhanced removal of antibiotics in hospital wastewater by Fe@ZnO activated persulfate oxidation. <i>Environmental Science: Water Research and Technology</i> , 2019, 5, 2193-2201.	1.2	15
47	Effect of groundwater ions (Ca <sup>2+</sup> , Na <sup>+</sup> , and HCO <sub>3</sub> <sup>âˆ’</sup> ) on removal of hexavalent chromium by Fe(II)-phosphate mineral. <i>Journal of Hazardous Materials</i> , 2020, 398, 122948.	6.5	15
48	Formation of surface mediated iron colloids during U(VI) and nZVI interaction. <i>Advances in Environmental Research</i> , 2013, 2, 167-177.	0.3	15
49	Theoretical and Experimental Studies of the Dechlorination Mechanism of Carbon Tetrachloride on a Vivianite Ferrous Phosphate Surface. <i>Journal of Physical Chemistry A</i> , 2015, 119, 5714-5722.	1.1	14
50	Synergistic effect of nano-sized mackinawite with cyano-cobalamin in cement slurries for reductive dechlorination of tetrachloroethylene. <i>Journal of Hazardous Materials</i> , 2016, 311, 1-10.	6.5	14
51	Fabrication of Ti/Ir-Ru electrode by spin coating method for electrochemical removal of copper. <i>Environmental Engineering Research</i> , 2019, 24, 646-653.	1.5	14
52	Reductive dechlorination of carbon tetrachloride by bioreduction of nontronite. <i>Journal of Hazardous Materials</i> , 2017, 334, 104-111.	6.5	13
53	Differential contribution of excitatory and inhibitory neurons in shaping neurovascular coupling in different epileptic neural states. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2021, 41, 1145-1161.	2.4	13
54	Degradation of carbon tetrachloride in modified Fenton reaction. <i>Korean Journal of Chemical Engineering</i> , 2012, 29, 769-774.	1.2	12

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55	Flavin mononucleotide mediated microbial fuel cell in the presence of <i>Shewanella putrefaciens</i> CN32 and iron-bearing mineral. <i>Biotechnology and Bioprocess Engineering</i> , 2015, 20, 894-900.	1.4	12
56	Development of biocatalysts immobilized on coal ash-derived Ni-zeolite for facilitating 4-chlorophenol degradation. <i>Bioresource Technology</i> , 2020, 307, 123201.	4.8	12
57	Surface modification of polypropylene non-woven filter by O <sub>2</sub> plasma/acrylic acid enhancing Prussian blue immobilization for aqueous cesium adsorption. <i>Applied Surface Science</i> , 2022, 590, 153101.	3.1	12
58	Particle size and interlayer anion effect on chromate adsorption by MgAl-layered double hydroxide. <i>Applied Clay Science</i> , 2022, 225, 106552.	2.6	12
59	Carbon-Neutrality in Wastewater Treatment Plants: Advanced Technologies for Efficient Operation and Energy/Resource Recovery. <i>Energies</i> , 2021, 14, 8514.	1.6	10
60	Upcycling of steel slag for manufacture of Prussian-blue-encapsulated pectin beads and its use for efficient removal of aqueous cesium. <i>Journal of Cleaner Production</i> , 2021, 319, 128786.	4.6	9
61	Highly fast and selective removal of nitrate in groundwater by bimetallic catalysts supported by fly ash-derived zeolite Na-X. <i>Environmental Science: Nano</i> , 2020, 7, 3360-3371.	2.2	8
62	Adsorption of Chromate Ions by Layered Double Hydroxide-Bentonite Nanocomposite for Groundwater Remediation. <i>Nanomaterials</i> , 2022, 12, 1384.	1.9	8
63	Enhanced denitrification of contaminated groundwater by novel bimetallic catalysts supported on kaolin-derived zeolite: effects of natural dissolved inorganic and organic matter. <i>Environmental Science: Nano</i> , 2020, 7, 3965-3978.	2.2	7
64	Support induced influence on the reactivity and selectivity of nitrate reduction by Sn-Pd bimetallic catalysts. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 103754.	3.3	7
65	The enhanced reduction of bromate by highly reactive and dispersive green nano-zerovalent iron (G-NZVI) synthesized with onion peel extract. <i>RSC Advances</i> , 2021, 11, 5008-5018.	1.7	7
66	Removal of nitrate by electrodialysis: effect of operation parameters. <i>Membrane Water Treatment</i> , 2017, 8, 201-210.	0.5	7
67	Development of magnetically separable Cu catalyst supported by pre-treated steel slag. <i>Korean Journal of Chemical Engineering</i> , 2019, 36, 1814-1825.	1.2	6
68	Adsorption capacity of the corrosion products of nanoscale zerovalent iron for emerging contaminants. <i>Environmental Science: Nano</i> , 2020, 7, 3773-3782.	2.2	6
69	Roll-to-roll production of a cellulose filter with immobilized Prussian blue for <sup>137</sup> Cs adsorption. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 104273.	3.3	5
70	The role of Fe dissolution in olivine-hydroxylamine-induced Fenton reaction for enhanced oxidative degradation of organic pollutant. <i>Chemosphere</i> , 2022, 306, 135557.	4.2	5
71	Current and future trends in adsorption for environmental separations. <i>Journal of Hazardous Materials</i> , 2022, 433, 128776.	6.5	3
72	Unveiling the positive effect of mineral induced natural organic matter (NOM) on catalyst properties and catalytic dechlorination performance: An experiment and DFT study. <i>Water Research</i> , 2022, 222, 118871.	5.3	3

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73	Selective reduction of highly concentrated nitrate by electrochemical method using a combination of Zn and Ti/Ir-Ru electrodes. , 0, 95, 186-191.		2
74	Quasi-Solid-State SiO <sub>2</sub> Electrolyte Prepared from Raw Fly Ash for Enhanced Solar Energy Conversion. Materials, 2022, 15, 3576.	1.3	1