Prasanthkumar Kavanal Prabhakaran

List of Publications by Year
in descending order

76 papers	2,624 citations	147801 31 h-index	197818 49 g-index
76 all docs	76 docs citations	76 times ranked	3409 citing authors

#	Article	IF	Citations
1	Facile Synthesis and Characterization of Fe/FeS Nanoparticles for Environmental Applications. ACS Applied Materials & Interfaces, 2011, 3, 1457-1462.	8.0	353
2	Remediation of Trichloroethylene by FeS-Coated Iron Nanoparticles in Simulated and Real Groundwater: Effects of Water Chemistry. Industrial & Engineering Chemistry Research, 2013, 52, 9343-9350.	3.7	134
3	Degradation of synthetic pollutants in real wastewater using laccase encapsulated in coreâ€“shell magnetic copper alginate beads. Bioresource Technology, 2016, 216, 203-210.	9.6	116
4	Degradation of polybrominated diphenyl ethers by a sequential treatment with nanoscale zero valent iron and aerobic biodegradation. Journal of Chemical Technology and Biotechnology, 2012, 87, 216-224.	3.2	93
5	Influence of exposure to perfluoroalkyl substances (PFASs) on the Korean general population: 10-year trend and health effects. Environment International, 2018, 113, 149-161.	10.0	90
6	Carboxymethyl cellulose coating decreases toxicity and oxidizing capacity of nanoscale zerovalent iron. Chemosphere, 2014, 104, 155-161.	8.2	85
7	Nano/bio treatment of polychlorinated biphenyls with evaluation of comparative toxicity. Journal of Hazardous Materials, 2015, 287, 335-341.	12.4	73
8	Effects of Zerovalent Iron Nanoparticles on Photosynthesis and Biochemical Adaptation of Soil-Grown Arabidopsis thaliana. Nanomaterials, 2019, 9, 1543.	4.1	70
9	Advanced oxidation and adsorptive bubble separation of dyes using MnO2-coated Fe3O4 nanocomposite. Water Research, 2019, 151, 413-422.	11.3	65
10	Matrix-specific distribution and compositional profiles of perfluoroalkyl substances (PFASs) in multimedia environments. Journal of Hazardous Materials, 2019, 364, 19-27.	12.4	59
11	Recent Developments in Microbial Biotransformation and Biodegradation of Dioxins. Journal of Molecular Microbiology and Biotechnology, 2008, 15, 152-171.	1.0	58
12	Fabrication of novel oxygen-releasing alginate beads as an efficient oxygen carrier for the enhancement of aerobic bioremediation of 1,4-dioxane contaminated groundwater. Bioresource Technology, 2014, 171, 59-65.	9.6	58
13	Transformation of hexabromocyclododecane in contaminated soil in association with microbial diversity. Journal of Hazardous Materials, 2017, 325, 82-89.	12.4	50
14	Relationship Between Serum Concentrations of Organochlorine Pesticides and Metabolic Syndrome Among Non-Diabetic Adults. Journal of Preventive Medicine and Public Health, 2010, 43, 1.	1.9	50
15	Self-Generation of Reactive Oxygen Species on Crystalline AgBiO₃ for the Oxidative Remediation of Organic Pollutants. ACS Applied Materials & Interfaces, 2017, 9, 28426-28432.	8.0	49
16	Partitioning Behavior of Heavy Metals and Persistent Organic Pollutants among Fetoâ€“Maternal Bloods and Tissues. Environmental Science & Technology, 2015, 49, 7411-7422.	10.0	48
17	Degradation of carbamazepine by singlet oxygen from sulfidized nanoscale zero-valent iron â€“ citric acid system. Chemical Engineering Journal, 2020, 382, 122828.	12.7	48
18	Tuning and Characterizing Nanocellulose Interface for Enhanced Removal of Dual-Sorbate (As^V and Cr^{VI}) from Water Matrices. ACS Sustainable Chemistry and Engineering, 2017, 5, 518-528.	6.7	47

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19	HBCD and TBBPA in human scalp hair: Evidence of internal exposure. Chemosphere, 2018, 207, 70-77.	8.2	46
20	Human exposure to HBCD and TBBPA via indoor dust in Korea: Estimation of external exposure and body burden. Science of the Total Environment, 2017, 593-594, 779-786.	8.0	43
21	Hexabromocyclododecane (HBCD) in the Korean food basket and estimation of dietary exposure. Environmental Pollution, 2016, 213, 268-277.	7.5	41
22	Matrix-specific distribution and diastereomeric profiles of hexabromocyclododecane (HBCD) in a multimedia environment: Air, soil, sludge, sediment, and fish. Environmental Pollution, 2017, 226, 515-522.	7.5	41
23	Impact of surface modification on the toxicity of zerovalent iron nanoparticles in aquatic and terrestrial organisms. Ecotoxicology and Environmental Safety, 2018, 163, 436-443.	6.0	37
24	Enhanced oxidative activity of zero-valent iron by citric acid complexation. Chemical Engineering Journal, 2019, 373, 891-901.	12.7	37
25	Occurrence of Legacy and New Persistent Organic Pollutants in Avian Tissues from King George Island, Antarctica. Environmental Science & Technology, 2015, 49, 13628-13638.	10.0	35
26	Large rate of uptake of atmospheric carbon dioxide by planted forest biomass in Korea. Global Biogeochemical Cycles, 2002, 16, 36-1-36-5.	4.9	34
27	Enhancing the reactivity of bimetallic Bi/Fe 0 by citric acid for remediation of polluted water. Journal of Hazardous Materials, 2016, 310, 135-142.	12.4	34
28	Occurrence of Dechlorane compounds and polybrominated diphenyl ethers (PBDEs) in the Korean general population. Environmental Pollution, 2016, 212, 330-336.	7.5	32
29	Zerovalent-Iron/Platinum Janus Micromotors with Spatially Separated Functionalities for Efficient Water Decontamination. ACS Applied Nano Materials, 2018, 1, 768-776.	5.0	32
30	Novel self-assembled bimetallic structure of Bi/Fe0: The oxidative and reductive degradation of hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX). Journal of Hazardous Materials, 2015, 286, 107-117.	12.4	31
31	Uptake, Distribution, and Transformation of Zerovalent Iron Nanoparticles in the Edible Plant Cucumis sativus. Environmental Science & Technology, 2018, 52, 10057-10066.	10.0	31
32	In situ chemical oxidation of contaminated groundwater using a sulfidized nanoscale zerovalent ironâ€“persulfate system: Insights from a box-type study. Chemosphere, 2020, 257, 127117.	8.2	31
33	Investigating Dechlorane Plus (DP) distribution and isomer specific adsorption behavior in size fractionated marine sediments. Science of the Total Environment, 2014, 481, 114-120.	8.0	30
34	Aerobic bacterial catabolism of persistent organic pollutants â€” potential impact of biotic and abiotic interaction. Current Opinion in Biotechnology, 2016, 38, 71-78.	6.6	30
35	Assessment of Dechlorane compounds in foodstuffs obtained from retail markets and estimates of dietary intake in Korean population. Journal of Hazardous Materials, 2014, 275, 19-25.	12.4	28
36	Ten-year time trend of dioxins in human serum obtained from metropolitan populations in Seoul, Korea. Science of the Total Environment, 2014, 470-471, 1338-1345.	8.0	26

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37	Diastereoisomer- and species-specific distribution of hexabromocyclododecane (HBCD) in fish and marine invertebrates. Journal of Hazardous Materials, 2015, 300, 114-120.	12.4	26
38	Enhanced removal of chromate from aqueous solution by sequential adsorptionâ€“reduction on mesoporous ironâ€“iron oxide nanocomposites. Journal of Nanoparticle Research, 2012, 14, 1.	1.9	24
39	Estimated dietary intake and risk assessment of polychlorinated dibenzo-p-dioxins and dibenzofurans and dioxin-like polychlorinated biphenyls from fish consumption in the Korean general population. Chemosphere, 2016, 146, 419-425.	8.2	22
40	Exposure of general population to PBDEs: A Progressive Total Diet Study in South Korea. Environmental Pollution, 2014, 195, 192-201.	7.5	20
41	Progressive risk assessment of polychlorinated biphenyls through a Total Diet Study in the Korean population. Environmental Pollution, 2015, 207, 403-412.	7.5	20
42	Polychlorinated naphthalenes (PCNs) in seafood: Estimation of dietary intake in Korean population. Science of the Total Environment, 2018, 624, 40-47.	8.0	18
43	Determinants of serum organochlorine pesticide and polychlorinated biphenyl levels in middle-aged Korean adults. Environmental Science and Pollution Research, 2018, 25, 249-259.	5.3	18
44	Urinary bisphenol A concentrations and the risk of obesity in Korean adults. Scientific Reports, 2021, 11, 1603.	3.3	18
45	An experimental and theoretical study of the kinetics and mechanism of hydroxyl radical reaction with 2-aminopyrimidine. RSC Advances, 2014, 4, 14157.	3.6	17
46	Superparamagnetic nalidixic acid grafted magnetite (Fe₃O₄/NA) for rapid and efficient mercury removal from water. RSC Advances, 2016, 6, 35825-35832.	3.6	17
47	Treatability of hexabromocyclododecane using Pd/Fe nanoparticles in the soil-plant system: Effects of humic acids. Science of the Total Environment, 2019, 689, 444-450.	8.0	17
48	Synthesis of metal sulfide-coated iron nanoparticles with enhanced surface reactivity and biocompatibility. RSC Advances, 2013, 3, 5338.	3.6	16
49	Predicting reductive debromination of polybrominated diphenyl ethers by nanoscale zerovalent iron and its implications for environmental risk assessment. Science of the Total Environment, 2014, 470-471, 1553-1557.	8.0	15
50	Influence of non-detect data-handling on toxic equivalency quantities of PCDD/Fs and dioxin-like PCBs: A case study of major fish species purchased in Korea. Environmental Pollution, 2016, 214, 532-538.	7.5	15
51	Photosensitized diastereoisomer-specific degradation of hexabromocyclododecane (HBCD) in the presence of humic acid in aquatic systems. Journal of Hazardous Materials, 2019, 369, 171-179.	12.4	15
52	Fragmentation of nanoplastics driven by plantâ€“microbe rhizosphere interaction during abiotic stress combination. Environmental Science: Nano, 2021, 8, 2802-2810.	4.3	15
53	Health risk assessment of exposure to organochlorine pesticides in the general population in Seoul, Korea over 12 years: A cross-sectional epidemiological study. Journal of Hazardous Materials, 2022, 424, 127381.	12.4	15
54	Dihydroxynaphthaleneâ€based mimicry of fungal melanogenesis for multifunctional coatings. Microbial Biotechnology, 2016, 9, 305-315.	4.2	14

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55	Electrochemical activation of hydrogen peroxide, persulfate, and free chlorine using sacrificial iron anodes for decentralized wastewater treatment. Journal of Hazardous Materials, 2022, 423, 127068.	12.4	14
56	Carbon-nitride-based micromotor driven by chromate-hydrogen peroxide redox system: Application for removal of sulfamethaxazole. Journal of Colloid and Interface Science, 2021, 597, 94-103.	9.4	13
57	Ligand-Assisted Sequential Redox Degradation of Tetrabromobisphenol A Using Bimetallic Zero-Valent Iron Nanoparticles. Industrial & Engineering Chemistry Research, 2018, 57, 17329-17337.	3.7	12
58	Determination of diapycnal diffusion rates in the upper thermocline in the North Atlantic Ocean using sulfur hexafluoride. Journal of Geophysical Research, 2005, 110, .	3.3	10
59	Contrasting reactions of hydrated electron and formate radical with 2-thio analogues of cytosine and uracil. Physical Chemistry Chemical Physics, 2016, 18, 28781-28790.	2.8	9
60	Passive air sampling of persistent organic pollutants in Korea. Toxicology and Environmental Health Sciences, 2009, 1, 75-82.	2.1	8
61	Insights into the Mechanism of Hydroxyl Radical Mediated Oxidations of 2-Aminopurine: A Computational and Sonochemical Product Analysis Study. Journal of Physical Chemistry B, 2020, 124, 6245-6256.	2.6	8
62	Anomalous reaction of oxide radical ion with 5-azacytosines: An experimental and theoretical study. Chemical Physics Letters, 2009, 467, 381-386.	2.6	7
63	Evaluation of toxicological biomarkers in secreted proteins of HepG2 cells exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin and their expressions in the plasma of rats and incineration workers. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2016, 1864, 584-593.	2.3	7
64	Levels of polybrominated diphenyl ethers in the Korean metropolitan population are declining: A trend from 2001 to 2013. Environmental Toxicology and Chemistry, 2018, 37, 2323-2330.	4.3	7
65	Factors associated with partitioning behavior of persistent organic pollutants in a feto-maternal system: A multiple linear regression approach. Chemosphere, 2021, 263, 128247.	8.2	7
66	Simultaneous removal of heavy metals and dyes in water using a MgO-coated Fe3O4 nanocomposite: Role of micro-mixing effect induced by bubble generation. Chemosphere, 2022, 294, 133788.	8.2	7
67	Internal distribution and fate of persistent organic contaminants (PCDD/Fs, DL-PCBs, HBCDs, TBBPA,) Tj ETQq1 1 0.784314 rgBT /Ove	7.5	6
68	Activation of hydrogen peroxide, persulfate, and free chlorine by steel anode for treatment of municipal and livestock wastewater: Unravelling the role of oxidants speciation. Water Research, 2022, 216, 118305.	11.3	6
69	A combined experimental and DFT approach on free radical induced oxidations of kynurenic acid. New Journal of Chemistry, 2020, 44, 18858-18866.	2.8	5
70	Experimental study of solute transport and extraction by a single root in soil. Plant and Soil, 2005, 269, 213-224.	3.7	3
71	A Catabolic Activity of Sphingomonas wittichii RW1 in the Biotransformation of Carbazole. Water, Air, and Soil Pollution, 2012, 223, 943-949.	2.4	3
72	Dietary exposure and potential human health risk of dioxins in South Korea: Application of deterministic and probabilistic methods. Chemosphere, 2022, 291, 133018.	8.2	3

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73	Enhancement of the reactivity of sulfidized nanoscale zero-valent iron-persulfate by ligand addition for the oxidative degradation of water pollutants. Materials Today: Proceedings, 2020, 33, 1389-1395.	1.8	1
74	Microbial Volatile Organic Compound (VOC)-Driven Dissolution and Surface Modification of Phosphorus-Containing Soil Minerals for Plant Nutrition: An Indirect Route for VOC-Based Plantâ€“Microbe Communications. Journal of Agricultural and Food Chemistry, 2021, 69, 14478-14487.	5.2	1
75	Rapid Dechlorination of Polychlorinated Dibenzo-p-dioxins by Nanosized and Bimetallic Zerovalent Iron. ACS Symposium Series, 2010, , 89-115.	0.5	0
76	Twenty-year trends and exposure assessment of polychlorinated dibenzodioxins and dibenzofurans in human serum from the Seoul citizens. Chemosphere, 2021, 273, 128558.	8.2	0