Songhu Yuan

List of Publications by Year
in descending order

76 papers	3,727 citations	126907 33 h-index	133252 59 g-index
77 all docs	77 docs citations	77 times ranked	2912 citing authors

#	Article	IF	Citations
1	Production of Abundant Hydroxyl Radicals from Oxygenation of Subsurface Sediments. Environmental Science & Technology, 2016, 50, 214-221.	10.0	286
2	Electrolytic Manipulation of Persulfate Reactivity by Iron Electrodes for Trichloroethylene Degradation in Groundwater. Environmental Science & Technology, 2014, 48, 656-663.	10.0	224
3	Mechanisms of hydroxyl radical production from abiotic oxidation of pyrite under acidic conditions. Geochimica Et Cosmochimica Acta, 2016, 172, 444-457.	3.9	198
4	Pd-Catalytic In Situ Generation of H₂O₂ from H₂ and O₂ Produced by Water Electrolysis for the Efficient Electro-Fenton Degradation of Rhodamine B. Environmental Science & Technology, 2011, 45, 8514-8520.	10.0	192
5	Oxidizing Impact Induced by Mackinawite (FeS) Nanoparticles at Oxic Conditions due to Production of Hydroxyl Radicals. Environmental Science & Technology, 2016, 50, 11646-11653.	10.0	168
6	An integrated catalyst of Pd supported on magnetic Fe3O4 nanoparticles: Simultaneous production of H2O2 and Fe2+ for efficient electro-Fenton degradation of organic contaminants. Water Research, 2014, 48, 190-199.	11.3	129
7	Mechanisms of electron transfer from structrual Fe(II) in reduced nontronite to oxygen for production of hydroxyl radicals. Geochimica Et Cosmochimica Acta, 2018, 223, 422-436.	3.9	118
8	Electrocatalytic activity of Pd-loaded Ti/TiO2 nanotubes cathode for TCE reduction in groundwater. Water Research, 2013, 47, 3573-3582.	11.3	113
9	Formation, Aggregation, and Deposition Dynamics of NOM-Iron Colloids at Anoxicâ€“Oxic Interfaces. Environmental Science & Technology, 2017, 51, 12235-12245.	10.0	105
10	Contaminant Degradation by â€¢OH during Sediment Oxygenation: Dependence on Fe(II) Species. Environmental Science & Technology, 2020, 54, 2975-2984.	10.0	101
11	Production of hydroxyl radicals from abiotic oxidation of pyrite by oxygen under circumneutral conditions in the presence of low-molecular-weight organic acids. Geochimica Et Cosmochimica Acta, 2017, 218, 153-166.	3.9	100
12	Efficient Degradation of TCE in Groundwater Using Pd and Electro-generated H₂ and O₂: A Shift in Pathway from Hydrodechlorination to Oxidation in the Presence of Ferrous Ions. Environmental Science & Technology, 2012, 46, 3398-3405.	10.0	99
13	Efficient degradation of contaminants of emerging concerns by a new electro-Fenton process with Ti/MMO cathode. Chemosphere, 2013, 93, 2796-2804.	8.2	89
14	Oxidation of trichloroethylene by the hydroxyl radicals produced from oxygenation of reduced nontronite. Water Research, 2017, 113, 72-79.	11.3	85
15	Microbial reduction and precipitation of vanadium (V) in groundwater by immobilized mixed anaerobic culture. Bioresource Technology, 2015, 192, 410-417.	9.6	79
16	Oxidative Degradation of Organic Contaminants by FeS in the Presence of O₂. Environmental Science & Technology, 2020, 54, 4091-4101.	10.0	76
17	Efficient reduction of Cr(VI) in groundwater by a hybrid electro-Pd process. Water Research, 2014, 48, 326-334.	11.3	73
18	Formation and Transport of Cr(III)-NOM-Fe Colloids upon Reaction of Cr(VI) with NOM-Fe(II) Colloids at Anoxicâ€“Oxic Interfaces. Environmental Science & Technology, 2020, 54, 4256-4266.	10.0	73

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19	Mechanisms of hydroxyl radicals production from pyrite oxidation by hydrogen peroxide: Surface versus aqueous reactions. Geochimica Et Cosmochimica Acta, 2018, 238, 394-410.	3.9	66
20	Effect of reduced humic acid on the transport of ferrihydrite nanoparticles under anoxic conditions. Water Research, 2017, 109, 347-357.	11.3	61
21	Geochemical Stability of Dissolved Mn(III) in the Presence of Pyrophosphate as a Model Ligand: Complexation and Disproportionation. Environmental Science & Technology, 2019, 53, 5768-5777.	10.0	57
22	Electrochemically Induced Oxidative Precipitation of Fe(II) for As(III) Oxidation and Removal in Synthetic Groundwater. Environmental Science & Technology, 2014, 48, 5145-5153.	10.0	55
23	Oxidizing Capacity of Iron Electrocoagulation Systems for Refractory Organic Contaminant Transformation. Environmental Science & Technology, 2019, 53, 12629-12638.	10.0	55
24	A three-electrode column for Pd-catalytic oxidation of TCE in groundwater with automatic pH-regulation and resistance to reduced sulfur compound foiling. Water Research, 2013, 47, 269-278.	11.3	51
25	Effect of Coexisting Fe(III) (oxyhydr)oxides on Cr(VI) Reduction by Fe(II)-Bearing Clay Minerals. Environmental Science & Technology, 2019, 53, 13767-13775.	10.0	49
26	Electrochemically Induced Dual Reactive Barriers for Transformation of TCE and Mixture of Contaminants in Groundwater. Environmental Science & Technology, 2012, 46, 12003-12011.	10.0	42
27	Production of Hydroxyl radicals from oxygenation of simulated AMD due to CaCO3-induced pH increase. Water Research, 2017, 111, 118-126.	11.3	40
28	Water Table Fluctuations Regulate Hydrogen Peroxide Production and Distribution in Unconfined Aquifers. Environmental Science & Technology, 2020, 54, 4942-4951.	10.0	40
29	Integration of water collection and purification on cactus- and beetle-inspired eco-friendly superwettable materials. Water Research, 2021, 206, 117759.	11.3	40
30	Abiotic degradation of methyl parathion by manganese dioxide: Kinetics and transformation pathway. Chemosphere, 2016, 150, 90-96.	8.2	37
31	Regulation of Electrochemically Generated Ferrous Ions from an Iron Cathode for Pd-Catalytic Transformation of MTBE in Groundwater. Environmental Science & Technology, 2013, 47, 7918-7926.	10.0	36
32	A New Mechanism in Electrochemical Process for Arsenic Oxidation: Production of H₂O₂ from Anodic O₂ Reduction on the Cathode under Automatically Developed Alkaline Conditions. Environmental Science & Technology, 2015, 49, 5689-5696.	10.0	36
33	Impact of Fe(II) oxidation in the presence of iron-reducing bacteria on subsequent Fe(III) bio-reduction. Science of the Total Environment, 2018, 639, 1007-1014.	8.0	34
34	Iron-Anode Enhanced Sand Filter for Arsenic Removal from Tube Well Water. Environmental Science & Technology, 2017, 51, 889-896.	10.0	33
35	Interplay between iron species transformation and hydroxyl radicals production in soils and sediments during anoxic-oxic cycles. Geoderma, 2020, 370, 114351.	5.1	32
36	Ligand-Enhanced Electron Utilization for Trichloroethylene Degradation by ^{Â·}OH during Sediment Oxygenation. Environmental Science & Technology, 2021, 55, 7044-7051.	10.0	32

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37	Impact of Redox Reactions on Colloid Transport in Saturated Porous Media: An Example of Ferrihydrite Colloids Transport in the Presence of Sulfide. Environmental Science & Technology, 2016, 50, 10968-10977.	10.0	31
38	Citrate-enhanced release of arsenic during pyrite oxidation at circumneutral conditions. Water Research, 2017, 109, 245-252.	11.3	31
39	Electrogeneration of H2 for Pd-catalytic hydrodechlorination of 2,4-dichlorophenol in groundwater. Chemosphere, 2012, 87, 1097-1104.	8.2	28
40	Cu-catalytic generation of reactive oxidizing species from H2 and O2 produced by water electrolysis for electro-fenton degradation of organic contaminants. Chemical Engineering Journal, 2013, 233, 117-123.	12.7	28
41	Transformation and removal of arsenic in groundwater by sequential anodic oxidation and electrocoagulation. Journal of Contaminant Hydrology, 2014, 164, 299-307.	3.3	28
42	Responses of the Microbial Community Structure in Fe(II)-Bearing Sediments to Oxygenation: The Role of Reactive Oxygen Species. ACS Earth and Space Chemistry, 2019, 3, 738-747.	2.7	27
43	Real-time evaluation of natural organic matter deposition processes onto model environmental surfaces. Water Research, 2018, 129, 231-239.	11.3	26
44	Electrochemical transformation of trichloroethylene in aqueous solution by electrode polarity reversal. Water Research, 2014, 67, 267-275.	11.3	25
45	Production of hydroxyl radicals from Fe(II) oxygenation induced by groundwater table fluctuations in a sand column. Science of the Total Environment, 2017, 584-585, 41-47.	8.0	25
46	Destabilization of emulsions by natural minerals. Journal of Hazardous Materials, 2011, 192, 1882-1885.	12.4	23
47	Anoxic storage regenerates reactive Fe(II) in reduced nontronite with short-term oxidation. Geochimica Et Cosmochimica Acta, 2019, 257, 96-109.	3.9	23
48	Effect of in situ generated iron oxyhydroxide coatings on FeS oxygenation and resultant hydroxyl radical production for contaminant degradation. Chemical Engineering Journal, 2020, 394, 124961.	12.7	22
49	Electrochemically induced oxidative removal of As(III) from groundwater in a dual-anode sand column. Journal of Hazardous Materials, 2016, 305, 41-50.	12.4	20
50	Oxygenation of acid sulfate soils stimulates CO2 emission: Roles of acidic dissolution and hydroxyl radical oxidation. Chemical Geology, 2020, 533, 119437.	3.3	20
51	Benzene promotes microbial Fe(III) reduction and flavins secretion. Geochimica Et Cosmochimica Acta, 2019, 264, 92-104.	3.9	19
52	Cr(VI) Formation from Cr_{<i>x</i>}Fe_{1â€“<i>x</i>}(OH)₃ Induced by Mn(II) Oxidation on the Surface of Cr_{<i>x</i>}Fe_{1â€“<i>x</i>}(OH)₃. ACS Earth and Space Chemistry, 2020, 4, 1558-1564.	2.7	19
53	Sulfide drives hydroxyl radicals production in oxic ferric oxyhydroxides environments. Chemosphere, 2019, 234, 450-460.	8.2	15
54	Reduced nontronite-activated H2O2 for contaminants degradation: The beneficial role of clayed fractions in ISCO treatments. Journal of Hazardous Materials, 2020, 386, 121945.	12.4	15

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55	Electrolytic groundwater circulation well for trichloroethylene degradation in a simulated aquifer. Science China Technological Sciences, 2021, 64, 251-260.	4.0	15
56	Arsenic oxidation and immobilization in acid mine drainage in karst areas. Science of the Total Environment, 2020, 727, 138629.	8.0	14
57	Glucose oxidase modified Fenton reactions for in-situ ROS generation and potential application in groundwater remediation. Chemosphere, 2020, 253, 126648.	8.2	14
58	Mechanistic Insight into Humic Acid-Enhanced Hydroxyl Radical Production from Fe(II)-Bearing Clay Mineral Oxygenation. Environmental Science & Technology, 2021, 55, 13366-13375.	10.0	14
59	Hydrodechlorination of TCE in a circulated electrolytic column at high flow rate. Chemosphere, 2016, 144, 59-64.	8.2	13
60	Attenuation of Fe(III)-reducing bacteria during table fluctuation of groundwater containing Fe2+. Science of the Total Environment, 2019, 694, 133660.	8.0	13
61	Oxidation of Fe(II) by Flavins under Anoxic Conditions. Environmental Science & Technology, 2020, 54, 11622-11630.	10.0	13
62	Effect of dam on iron species distribution and transformation in riparian zones. Journal of Hydrology, 2022, 610, 127869.	5.4	12
63	Field tests of in-well electrolysis removal of arsenic from high phosphate and iron groundwater. Science of the Total Environment, 2018, 644, 1630-1640.	8.0	11
64	Model-based analysis of dissolved oxygen supply to aquifers within riparian zones during river level fluctuations: Dynamics and influencing factors. Journal of Hydrology, 2021, 598, 126460.	5.4	10
65	Pd-catalytic hydrodechlorination of chlorinated hydrocarbons in groundwater using H2 produced by a dual-anode system. Water Research, 2015, 86, 74-81.	11.3	9
66	Optimization Strategies for in Situ Groundwater Remediation by a Vertical Circulation Well Based on Particleâ€Tracking and Nodeâ€Dependent Finite Difference Methods. Water Resources Research, 2020, 56, e2020WR027396.	4.2	8
67	Effects of Reduced Sulfur Compounds on Pd-Catalytic Hydrodechlorination of Trichloroethylene in Groundwater by Cathodic H₂under Electrochemically Induced Oxidizing Conditions. Environmental Science & Technology, 2013, 47, 130904143021003.	10.0	7
68	Response to Comment on â€œElectrolytic Manipulation of Persulfate Reactivity by Iron Electrodes for TCE Degradation in Groundwaterâ€• Environmental Science & Technology, 2014, 48, 4632-4633.	10.0	7
69	Distribution of Arsenite-Oxidizing Bacteria and its Correlation with Temperature in Hot Springs of the Tibetan-Yunnan Geothermal Zone in Western China. Geomicrobiology Journal, 2015, 32, 482-493.	2.0	7
70	Fe(II) oxygenation inhibits bacterial Mn(II) oxidation by P. putida MnB1 in groundwater under O2-perturbed conditions. Journal of Hazardous Materials, 2022, 435, 128972.	12.4	6
71	Response to Comment on â€œProduction of Abundant Hydroxyl Radicals from Oxygenation of Subsurface Sedimentsâ€• Environmental Science & Technology, 2016, 50, 4890-4891.	10.0	5
72	Groundwater Circulation Enhanced Electrobioremediation of 1,2-Dichloroethane in a Simulated Heterogeneous Aquifer. Environmental Engineering Science, 2022, 39, 606-615.	1.6	5

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73	Adsorption Mechanism of Humic Acid on Cu/Fe Bimetallic Particles and Its Influence on the Reduction of Nitrobenzene in Groundwater. Water, Air, and Soil Pollution, 2014, 225, 1.	2.4	4
74	Redox transformation of structural iron in nontronite induced by quinones under anoxic conditions. Science of the Total Environment, 2021, 801, 149637.	8.0	3
75	Effects of riboflavin and desferrioxamine B on Fe(II) oxidation by O2. Fundamental Research, 2022, 2, 208-217.	3.3	3
76	Hydroxylamine promoted Fe(III) reduction in H2O2/soil systems for phenol degradation. Environmental Science and Pollution Research, 2022, 29, 30285-30296.	5.3	3