David H O'connor

List of Publications by Year
in descending order

63 papers	6,751 citations	76294 40 h-index	133188 59 g-index
63 all docs	63 docs citations	63 times ranked	6277 citing authors

#	Article	IF	Citations
1	Effect of pyrolysis temperature, heating rate, and residence time on rapeseed stem derived biochar. Journal of Cleaner Production, 2018, 174, 977-987.	4.6	513
2	Metal contamination and bioremediation of agricultural soils for food safety and sustainability. Nature Reviews Earth & Environment, 2020, 1, 366-381.	12.2	493
3	Biochar application for the remediation of heavy metal polluted land: A review of in situ field trials. Science of the Total Environment, 2018, 619-620, 815-826.	3.9	429
4	Integrated GIS and multivariate statistical analysis for regional scale assessment of heavy metal soil contamination: A critical review. Environmental Pollution, 2017, 231, 1188-1200.	3.7	348
5	A green biochar/iron oxide composite for methylene blue removal. Journal of Hazardous Materials, 2020, 384, 121286.	6.5	315
6	Microplastics undergo accelerated vertical migration in sand soil due to small size and wet-dry cycles. Environmental Pollution, 2019, 249, 527-534.	3.7	287
7	Mercury speciation, transformation, and transportation in soils, atmospheric flux, and implications for risk management: A critical review. Environment International, 2019, 126, 747-761.	4.8	278
8	Biochar Aging: Mechanisms, Physicochemical Changes, Assessment, And Implications for Field Applications. Environmental Science & Technology, 2020, 54, 14797-14814.	4.6	273
9	Assessment of sources of heavy metals in soil and dust at children's playgrounds in Beijing using GIS and multivariate statistical analysis. Environment International, 2019, 124, 320-328.	4.8	262
10	Remediation of mercury contaminated soil, water, and air: A review of emerging materials and innovative technologies. Environment International, 2020, 134, 105281.	4.8	228
11	Sulfur-modified rice husk biochar: A green method for the remediation of mercury contaminated soil. Science of the Total Environment, 2018, 621, 819-826.	3.9	206
12	Nature based solutions for contaminated land remediation and brownfield redevelopment in cities: A review. Science of the Total Environment, 2019, 663, 568-579.	3.9	201
13	New trends in biochar pyrolysis and modification strategies: feedstock, pyrolysis conditions, sustainability concerns and implications for soil amendment. Soil Use and Management, 2020, 36, 358-386.	2.6	200
14	Sustainable in situ remediation of recalcitrant organic pollutants in groundwater with controlled release materials: A review. Journal of Controlled Release, 2018, 283, 200-213.	4.8	189
15	Lead-based paint remains a major public health concern: A critical review of global production, trade, use, exposure, health risk, and implications. Environment International, 2018, 121, 85-101.	4.8	160
16	Groundwater depletion and contamination: Spatial distribution of groundwater resources sustainability in China. Science of the Total Environment, 2019, 672, 551-562.	3.9	143
17	Green synthesis of nanoparticles for the remediation of contaminated waters and soils: Constituents, synthesizing methods, and influencing factors. Journal of Cleaner Production, 2019, 226, 540-549.	4.6	139
18	Sustainable soil use and management: An interdisciplinary and systematic approach. Science of the Total Environment, 2020, 729, 138961.	3.9	138

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19	Solidification/Stabilization for Soil Remediation: An Old Technology with New Vitality. Environmental Science & Technology, 2019, 53, 11615-11617.	4.6	131
20	Environmental and socio-economic sustainability appraisal of contaminated land remediation strategies: A case study at a mega-site in China. Science of the Total Environment, 2018, 610-611, 391-401.	3.9	127
21	High efficiency removal of methylene blue using SDS surface-modified ZnFe2O4 nanoparticles. Journal of Colloid and Interface Science, 2017, 508, 39-48.	5.0	99
22	Lead contamination in Chinese surface soils: Source identification, spatial-temporal distribution and associated health risks. Critical Reviews in Environmental Science and Technology, 2019, 49, 1386-1423.	6.6	96
23	A Sustainability Assessment Framework for Agricultural Land Remediation in China. Land Degradation and Development, 2018, 29, 1005-1018.	1.8	91
24	One-pot green synthesis of bimetallic hollow palladium-platinum nanotubes for enhanced catalytic reduction of p-nitrophenol. Journal of Colloid and Interface Science, 2019, 539, 161-167.	5.0	90
25	Incorporating life cycle assessment with health risk assessment to select the â€˜greenestâ€™ cleanup level for Pb contaminated soil. Journal of Cleaner Production, 2017, 162, 1157-1168.	4.6	84
26	Green and Size-Specific Synthesis of Stable Feâ€“Cu Oxides as Earth-Abundant Adsorbents for Malachite Green Removal. ACS Sustainable Chemistry and Engineering, 2018, 6, 9229-9236.	3.2	79
27	Sulfur-modified biochar as a soil amendment to stabilize mercury pollution: An accelerated simulation of long-term aging effects. Environmental Pollution, 2020, 264, 114687.	3.7	71
28	The effects of iniquitous lead exposure on health. Nature Sustainability, 2020, 3, 77-79.	11.5	69
29	Possible application of stable isotope compositions for the identification of metal sources in soil. Journal of Hazardous Materials, 2021, 407, 124812.	6.5	69
30	Exogenous phosphorus treatment facilitates chelation-mediated cadmium detoxification in perennial ryegrass (Lolium perenne L.). Journal of Hazardous Materials, 2020, 389, 121849.	6.5	67
31	Spatial distribution of lead contamination in soil and equipment dust at children's playgrounds in Beijing, China. Environmental Pollution, 2019, 245, 363-370.	3.7	64
32	Effects of excessive impregnation, magnesium content, and pyrolysis temperature on MgO-coated watermelon rind biochar and its lead removal capacity. Environmental Research, 2020, 183, 109152.	3.7	60
33	Mapping soil pollution by using drone image recognition and machine learning at an arsenic-contaminated agricultural field. Environmental Pollution, 2021, 270, 116281.	3.7	57
34	Climate change mitigation potential of contaminated land redevelopment: A city-level assessment method. Journal of Cleaner Production, 2018, 171, 1396-1406.	4.6	55
35	Phytoremediation: Climate change resilience and sustainability assessment at a coastal brownfield redevelopment. Environment International, 2019, 130, 104945.	4.8	54
36	Risk evaluation of biochars produced from Cd-contaminated rice straw and optimization of its production for Cd removal. Chemosphere, 2019, 233, 149-156.	4.2	54

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37	Effect of immobilizing reagents on soil Cd and Pb lability under freeze-thaw cycles: Implications for sustainable agricultural management in seasonally frozen land. Environment International, 2020, 144, 106040.	4.8	54
38	Lead-based paint in children's toys sold on China's major online shopping platforms. Environmental Pollution, 2018, 241, 311-318.	3.7	50
39	Temporal effect of MgO reactivity on the stabilization of lead contaminated soil. Environment International, 2019, 131, 104990.	4.8	49
40	Blood lead levels among Chinese children: The shifting influence of industry, traffic, and e-waste over three decades. Environment International, 2020, 135, 105379.	4.8	47
41	The development of groundwater research in the past 40Âyears: A burgeoning trend in groundwater depletion and sustainable management. Journal of Hydrology, 2020, 587, 125006.	2.3	40
42	VIRS based detection in combination with machine learning for mapping soil pollution. Environmental Pollution, 2021, 268, 115845.	3.7	38
43	Influence of groundwater table fluctuation on the non-equilibrium transport of volatile organic contaminants in the vadose zone. Journal of Hydrology, 2020, 580, 124353.	2.3	36
44	The need to prioritize sustainable phosphateâ€based fertilizers. Soil Use and Management, 2020, 36, 351-354.	2.6	28
45	Targeting cleanups towards a more sustainable future. Environmental Sciences: Processes and Impacts, 2018, 20, 266-269.	1.7	24
46	Farmers' perceptions and adaptation behaviours concerning land degradation: A theoretical framework and a caseâ€study in the Qinghaiâ€"Tibetan Plateau of China. Land Degradation and Development, 2018, 29, 2460-2471.	1.8	23
47	Natural field freeze-thaw process leads to different performances of soil amendments towards Cd immobilization and enrichment. Science of the Total Environment, 2022, 831, 154880.	3.9	18
48	Strengthening social-environmental management at contaminated sites to bolster Green and Sustainable Remediation via a survey. Chemosphere, 2019, 225, 295-303.	4.2	15
49	A numerical model to optimize LNAPL remediation by multi-phase extraction. Science of the Total Environment, 2020, 718, 137309.	3.9	15
50	Comparing the Adoption of Contaminated Land Remediation Technologies in the United States, United Kingdom, and China. Remediation, 2014, 25, 33-51.	1.1	11
51	Green and sustainable remediation: concepts, principles, and pertaining research. , 2020, , 1-17.		11
52	Modeling the risk of U(VI) migration through an engineered barrier system at a proposed Chinese high-level radioactive waste repository. Science of the Total Environment, 2020, 707, 135472.	3.9	9
53	More haste, less speed in replenishing Chinaâ€™s groundwater. Nature, 2019, 569, 487-487.	13.7	8
54	Modeling the Diffusion of Contaminated Site Remediation Technologies. Water, Air, and Soil Pollution, 2014, 225, 1.	1.1	7

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55	High stress low-flow (HSLF) sampling: A newly proposed groundwater purge and sampling approach. Science of the Total Environment, 2019, 664, 127-132.	3.9	7
56	Sustainable remediation and revival of brownfields. Science of the Total Environment, 2020, 741, 140475.	3.9	7
57	DynSus: Dynamic sustainability assessment in groundwater remediation practice. Science of the Total Environment, 2022, 832, 154992.	3.9	7
58	Nature-Inspired and Sustainable Synthesis of Sulfur-Bearing Fe-Rich Nanoparticles. ACS Sustainable Chemistry and Engineering, 2020, 8, 15791-15808.	3.2	6
59	Vertical Barriers for Land Contamination Containment: A Review. International Journal of Environmental Research and Public Health, 2021, 18, 12643.	1.2	6
60	Sustainability assessment for remediation decision-making. , 2020, , 43-73.		5
61	The use of biochar for sustainable treatment of contaminated soils. , 2020, , 119-167.		5
62	Trade war threatens sustainability. Science, 2019, 364, 1242-1243.	6.0	4
63	Green and sustainable remediation: past, present, and future developments. , 2020, , 19-42.		2