

# Improved longevity of nanoscale zero-valent iron with shell for the removal of Cr(VI) in sand columns

Environment International

133, 105249

DOI: [10.1016/j.envint.2019.105249](https://doi.org/10.1016/j.envint.2019.105249)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Investigating the artificial intelligence methods for determining performance of the NZVI permeable reactive barriers. <i>Groundwater for Sustainable Development</i> , 2021, 12, 100516.	2.3	10
2	Reduction of chlorinated hydrocarbons using nano zero-valent iron supported with an electric field. Characterization of electrochemical processes and thermodynamic stability. <i>Chemosphere</i> , 2021, 265, 128764.	4.2	10
3	A highly porous animal bone-derived char with a superiority of promoting nZVI for Cr(VI) sequestration in agricultural soils. <i>Journal of Environmental Sciences</i> , 2021, 104, 27-39.	3.2	47
4	Remediation of hexavalent chromium in column by green synthesized nanoscale zero-valent iron/nickel: Factors, migration model and numerical simulation. <i>Ecotoxicology and Environmental Safety</i> , 2021, 207, 111572.	2.9	35
5	Heterogeneously Porous Multiadsorbent Clay-Biochar Surface to Support Redox-Sensitive Nanoparticles: Applications of Novel Clay-Biochar Nanoscale Zerovalent Iron Nanotrident (C-BC-nZVI) in Continuous Water Filtration. <i>ACS ES&amp;T Water</i> , 2021, 1, 641-652.	2.3	11
6	Evaluation of the Effects of Nanomaterials on Rice ( <i>Oryza sativa</i> L.) Responses: Underlining the Benefits of Nanotechnology for Agricultural Applications. <i>ACS Agricultural Science and Technology</i> , 2021, 1, 44-54.	1.0	31
7	Metabolomic analysis reveals dose-dependent alteration of maize ( <i>Zea mays</i> L.) metabolites and mineral nutrient profiles upon exposure to zerovalent iron nanoparticles. <i>NanoImpact</i> , 2021, 23, 100336.	2.4	18
8	Simultaneous removal of typical flotation reagent 8-hydroxyquinoline and Cr(VI) through heterogeneous Fenton-like processes mediated by polydopamine functionalized ATP supported nZVI. <i>Journal of Hazardous Materials</i> , 2022, 424, 126698.	6.5	21
9	The sequestration of aqueous Cr(VI) by zero valent iron-based materials: From synthesis to practical application. <i>Journal of Cleaner Production</i> , 2021, 312, 127678.	4.6	49
10	Highly efficient nano-Fe/Cu bimetal-loaded mesoporous silica Fe/Cu-MCM-41 for the removal of Cr(VI): Kinetics, mechanism and performance. <i>Journal of Hazardous Materials</i> , 2021, 418, 126344.	6.5	25
11	Co-benefits of biochar-supported nanoscale zero-valent iron in simultaneously stabilizing soil heavy metals and reducing their bioaccessibility. <i>Journal of Hazardous Materials</i> , 2021, 418, 126292.	6.5	44
12	Nano zero valent iron encapsulated in graphene oxide for reducing uranium. <i>Chemosphere</i> , 2021, 278, 130229.	4.2	23
13	A review of reactive media within permeable reactive barriers for the removal of heavy metal(loid)s in groundwater: Current status and future prospects. <i>Journal of Cleaner Production</i> , 2021, 319, 128644.	4.6	54
14	Confining polyacrylic acid on the surface of nanoscale zero-valent iron by aluminum hydroxide for in-situ anti-passivation. <i>Journal of Hazardous Materials</i> , 2021, 420, 126649.	6.5	10
15	In situ remediation of Cr(VI) contaminated groundwater by ZVI-PRB and the corresponding indigenous microbial community responses: a field-scale study. <i>Science of the Total Environment</i> , 2022, 805, 150260.	3.9	42
16	Encapsulation of iron nanoparticles with magnesium hydroxide shell for remarkable removal of ciprofloxacin from contaminated water. <i>Journal of Colloid and Interface Science</i> , 2022, 605, 813-827.	5.0	70
17	Permeable reactive barrier of waste sludge from wine processing utilized to block a metallic mixture plume in a simulated aquifer. <i>Water Science and Technology</i> , 2021, 84, 2472-2485.	1.2	2
18	Novel analytical expressions for determining van der Waals interaction between a particle and air-water interface: Unexpected stronger van der Waals force than capillary force. <i>Journal of Colloid and Interface Science</i> , 2022, 610, 982-993.	5.0	6

#	ARTICLE	IF	CITATIONS
19	Field demonstration of on-site immobilization of arsenic and lead in soil using a ternary amending agent. <i>Journal of Hazardous Materials</i> , 2022, 426, 127791.	6.5	7
20	Impact of engineered nanomaterials on rice ( <i>Oryza sativa</i> L.): A critical review of current knowledge. <i>Environmental Pollution</i> , 2022, 297, 118738.	3.7	18
21	Facile Auto-Combustion Synthesis and Characterization of Stable Amorphous Nanoscale Zero-Valent Iron (nZVI). <i>International Journal of Self-Propagating High-Temperature Synthesis</i> , 2021, 30, 251-256.	0.2	1
22	Innovative and Biocompatible Approaches for Nanomaterial Production and Application. <i>Advances in Chemical and Materials Engineering Book Series</i> , 2022, , 1-26.	0.2	0
23	Multi-functional magnesium hydroxide coating for iron nanoparticles towards prolonged reactivity in Cr(VI) removal from aqueous solutions. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 107431.	3.3	41
24	Colloidal stabilities and deposition behaviors of chromium (hydr)oxides in the presence of dissolved organic matters: role of coprecipitation and adsorption. <i>Environmental Science: Nano</i> , 0, , .	2.2	2
25	Significant Mobility of Novel Heteroaggregates of Montmorillonite Microparticles with Nanoscale Zerovalent Irons in Saturated Porous Media. <i>Toxics</i> , 2022, 10, 332.	1.6	0
26	Strategies to enhance the reactivity of zero-valent iron for environmental remediation: A review. <i>Journal of Environmental Management</i> , 2022, 317, 115381.	3.8	21
27	Covalent and Non-covalent Functionalized Nanomaterials for Environmental Restoration. <i>Topics in Current Chemistry</i> , 2022, 380, .	3.0	11
28	Facile synthesis of lattice-defective and recyclable zirconium hydroxide coated nanoscale zero-valent iron for robust arsenite removal. <i>Separation and Purification Technology</i> , 2022, 302, 122085.	3.9	0
29	In situ formation of Ca(OH) <sub>2</sub> coating shell to extend the longevity of zero-valent iron biochar composite derived from Fe-rich sludge for aqueous phosphorus removal. <i>Science of the Total Environment</i> , 2023, 854, 158794.	3.9	7
30	Health Risk Assessment during In Situ Remediation of Cr(VI)-Contaminated Groundwater by Permeable Reactive Barriers: A Field-Scale Study. <i>International Journal of Environmental Research and Public Health</i> , 2022, 19, 13079.	1.2	11