Abir Al-Tabbaa

List of Publications by Year
in descending order

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74 papers	3,776 citations	109137 35 h-index	128067 60 g-index
74 all docs	74 docs citations	74 times ranked	3089 citing authors

#	Article	IF	Citations
1	The first microcapsule-based self-healing cementâ€“bentonite cut-off wall materials. Geotechnique, 2023, 73, 105-114.	2.2	3
2	SEBS-Polymer-Modified Slagâ€“Cementâ€“Bentonite for Resilient Slurry Walls. Sustainability, 2022, 14, 2093.	1.6	1
3	Use of superabsorbent polymer in soil-cement subsurface barriers for enhanced heavy metal sorption and self-healing. Science of the Total Environment, 2022, 831, 154708.	3.9	9
4	Carbon Nanofibers Grown in CaO for Self-Sensing in Mortar. Materials, 2022, 15, 4951.	1.3	6
5	Crack-resistant cementâ€“bentonite cut-off wall materials incorporating superabsorbent polymers. Canadian Geotechnical Journal, 2021, 58, 800-810.	1.4	13
6	Spectroscopic and Modeling Investigation of Sorption of Pb(II) to ZSM-5 Zeolites. ACS ES&T Water, 2021, 1, 108-116.	2.3	7
7	A novel membrane emulsification technique for microencapsulation in self-healing concrete: development and proof of concept. Engineering Research Express, 2021, 3, 025015.	0.8	5
8	Evaluation of Methodologies for Assessing Self-Healing Performance of Concrete with Mineral Expansive Agents: An Interlaboratory Study. Materials, 2021, 14, 2024.	1.3	29
9	Stiffness and Strength of Stabilized Organic Soilsâ€”Part II/II: Parametric Analysis and Modeling with Machine Learning. Geosciences (Switzerland), 2021, 11, 218.	1.0	5
10	Stiffness and Strength of Stabilized Organic Soilsâ€”Part I/II: Experimental Database and Statistical Description for Machine Learning Modelling. Geosciences (Switzerland), 2021, 11, 243.	1.0	7
11	First UK Commercial Deployment of Microcapsule-Based Self-Healing Reinforced Concrete. Journal of Materials in Civil Engineering, 2021, 33, .	1.3	7
12	Assessing the influence of pore structure formation on heavy metal immobilization through image-based CFD. Chemosphere, 2021, 275, 129997.	4.2	0
13	MgO-GGBS Binderâ€“Stabilized/Solidified PAE-Contaminated Soil: Strength and Leachability in Early Stage. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2021, 147, .	1.5	9
14	Lead (Pb) sorption to hydrophobic and hydrophilic zeolites in the presence and absence of MTBE. Journal of Hazardous Materials, 2021, 420, 126528.	6.5	11
15	Soil Mix Cutoff Wall Materials with Microcapsule-Based Self-Healing Grout. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2021, 147, .	1.5	8
16	High throughput production of microcapsules using microfluidics for self-healing of cementitious materials. Lab on A Chip, 2021, 21, 4652-4659.	3.1	6
17	GMCs stabilized/solidified Pb/Zn contaminated soil under different curing temperature: Physical and microstructural properties. Chemosphere, 2020, 239, 124738.	4.2	29
18	Addressing the need for standardization of test methods for self-healing concrete: an inter-laboratory study on concrete with macrocapsules. Science and Technology of Advanced Materials, 2020, 21, 661-682.	2.8	50

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19	Organic Contaminant-Triggered Self-Healing Soil Mix Cut-Off Wall Materials Incorporating Oil Sorbents. Materials, 2020, 13, 5802.	1.3	4
20	Development and Application of Novel Sodium Silicate Microcapsule-Based Self-Healing Oil Well Cement. Materials, 2020, 13, 456.	1.3	38
21	Effect of Natural Graphite Fineness on the Performance and Electrical Conductivity of Cement Paste Mixes for Self-Sensing Structures. Materials, 2020, 13, 5833.	1.3	17
22	GMCs stabilized/solidified Pb/Zn contaminated soil under different curing temperature: leachability and durability. Environmental Science and Pollution Research, 2019, 26, 26963-26971.	2.7	16
23	First UK field application and performance of microcapsule-based self-healing concrete. Construction and Building Materials, 2019, 208, 669-685.	3.2	132
24	Taking a microfluidic approach to the production of self-healing construction materials. Metal Powder Report, 2019, 74, 121-125.	0.3	2
25	Feasibility of Using 3D Printed Polyvinyl Alcohol (PVA) for Creating Self-Healing Vascular Tunnels in Cement System. Materials, 2019, 12, 3872.	1.3	22
26	Adsorption of methyl tert-butyl ether (MTBE) onto ZSM-5 zeolite: Fixed-bed column tests, breakthrough curve modelling and regeneration. Chemosphere, 2019, 220, 422-431.	4.2	55
27	Autogenous self-healing of cement with expansive minerals-II: Impact of age and the role of optimised expansive minerals in healing performance. Construction and Building Materials, 2019, 194, 266-275.	3.2	62
28	Kinetic and equilibrium modelling of MTBE (methyl tert-butyl ether) adsorption on ZSM-5 zeolite: Batch and column studies. Journal of Hazardous Materials, 2018, 347, 461-469.	6.5	52
29	An environmental evaluation of food waste downstream management options: a hybrid LCA approach. International Journal of Recycling of Organic Waste in Agriculture, 2018, 7, 217-229.	2.0	39
30	An evaluation of stabilised/solidified contaminated model soil using PC-based and MgO-based binders under semi-dynamic leaching conditions. Environmental Science and Pollution Research, 2018, 25, 16050-16060.	2.7	13
31	Comparison of nickel adsorption on biochars produced from mixed softwood and Miscanthus straw. Environmental Science and Pollution Research, 2018, 25, 14626-14635.	2.7	30
32	Autogenous self-healing of cement with expansive minerals-I: Impact in early age crack healing. Construction and Building Materials, 2018, 192, 768-784.	3.2	84
33	Biomimetic cementitious construction materials for next-generation infrastructure. Proceedings of the Institution of Civil Engineers - Smart Infrastructure and Construction, 2018, 171, 67-76.	1.1	13
34	A Review of Selfâ€Healing Concrete for Damage Management of Structures. Advanced Materials Interfaces, 2018, 5, 1800074.	1.9	412
35	Microfluidic fabrication of microcapsules tailored for self-healing in cementitious materials. Construction and Building Materials, 2018, 184, 713-722.	3.2	71
36	Environmental and health impacts of using food waste as animal feed: a comparative analysis of food waste management options. Journal of Cleaner Production, 2017, 140, 871-880.	4.6	284

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37	Characteristics and mechanisms of nickel adsorption on biochars produced from wheat straw pellets and rice husk. Environmental Science and Pollution Research, 2017, 24, 12809-12819.	2.7	145
38	Qualitative and quantitative characterisation of adsorption mechanisms of lead on four biochars. Science of the Total Environment, 2017, 609, 1401-1410.	3.9	151
39	A holistic approach to the environmental evaluation of food waste prevention. Waste Management, 2017, 59, 442-450.	3.7	71
40	Evaluation of Sulfate Resistance of Calcined Dolomite Activated Ground Granulated Blast Furnace Slag. Journal of Materials in Civil Engineering, 2016, 28, .	1.3	13
41	Salisbury biochar did not affect the mobility or speciation of lead in kaolin in a short-term laboratory study. Journal of Hazardous Materials, 2016, 316, 214-220.	6.5	32
42	The UK waste inputâ€“output table: Linking waste generation to the UK economy. Waste Management and Research, 2016, 34, 1089-1094.	2.2	35
43	Three-year performance of in-situ mass stabilised contaminated site soils using MgO-bearing binders. Journal of Hazardous Materials, 2016, 318, 302-307.	6.5	47
44	Mechanism of reactive magnesia â€“ ground granulated blastfurnace slag (GGBS) soil stabilization. Canadian Geotechnical Journal, 2016, 53, 773-782.	1.4	87
45	Long-term impact of biochar on the immobilisation of nickel (II) and zinc (II) and the revegetation of a contaminated site. Science of the Total Environment, 2016, 542, 771-776.	3.9	120
46	Three-year performance of in-situ solidified/stabilised soil using novel MgO-bearing binders. Chemosphere, 2016, 144, 681-688.	4.2	89
47	Property changes of reactive magnesiaâ€“stabilized soil subjected to forced carbonation. Canadian Geotechnical Journal, 2016, 53, 314-325.	1.4	60
48	Time-dependent performance of soil mix technology stabilized/solidified contaminated site soils. Journal of Hazardous Materials, 2015, 286, 503-508.	6.5	45
49	Sorption of lead by Salisbury biochar produced from British broadleaf hardwood. Bioresource Technology, 2015, 193, 553-556.	4.8	100
50	Effects of Different Reactive MgOs on the Hydration of MgO-Activated GGBS Paste. Journal of Materials in Civil Engineering, 2015, 27, .	1.3	58
51	The performance of blended conventional and novel binders in the in-situ stabilisation/solidification of a contaminated site soil. Journal of Hazardous Materials, 2015, 285, 46-52.	6.5	82
52	Characterisation of different commercial reactive magnesia. Advances in Cement Research, 2014, 26, 101-113.	0.7	113
53	Comparing the Adoption of Contaminated Land Remediation Technologies in the United States, United Kingdom, and China. Remediation, 2014, 25, 33-51.	1.1	11
54	Properties of Two Model Soils Stabilized with Different Blends and Contents of GGBS, MgO, Lime, and PC. Journal of Materials in Civil Engineering, 2014, 26, 267-274.	1.3	119

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55	Strength correlations of cement-mixed soils using data mapping. Proceedings of the Institution of Civil Engineers: Ground Improvement, 2014, 167, 60-68.	0.7	3
56	Evaluation of novel reactive MgO activated slag binder for the immobilisation of lead and zinc. Chemosphere, 2014, 117, 285-294.	4.2	95
57	Modeling the Diffusion of Contaminated Site Remediation Technologies. Water, Air, and Soil Pollution, 2014, 225, 1.	1.1	7
58	Assessing effects of site characteristics on remediation secondary life cycle impact with a generalised framework. Journal of Environmental Planning and Management, 2014, 57, 1083-1100.	2.4	37
59	Leachability and heavy metal speciation of 17-year old stabilised/solidified contaminated site soils. Journal of Hazardous Materials, 2014, 278, 144-151.	6.5	96
60	The adoption of sustainable remediation behaviour in the US and UK: A cross country comparison and determinant analysis. Science of the Total Environment, 2014, 490, 905-913.	3.9	44
61	Carbonating magnesia for soil stabilization. Canadian Geotechnical Journal, 2013, 50, 899-905.	1.4	100
62	Thermogravimetric study on the hydration of reactive magnesia and silica mixture at room temperature. Thermochimica Acta, 2013, 566, 162-168.	1.2	116
63	Preliminary Laboratory-Scale Model Auger Installation and Testing of Carbonated Soil-MgO Columns. Geotechnical Testing Journal, 2013, 36, 384-393.	0.5	42
64	Scaled-up commercial production of reactive magnesia cement pressed masonry units. Part II: Performance. Proceedings of Institution of Civil Engineers: Construction Materials, 2012, 165, 225-243.	0.7	41
65	Scaled-up commercial production of reactive magnesium cement pressed masonry units. Part I: Production. Proceedings of Institution of Civil Engineers: Construction Materials, 2012, 165, 211-223.	0.7	37
66	Shale gas can be a double-edged sword for climate change. Nature Climate Change, 2012, 2, 385-387.	8.1	22
67	Monsoon rainfall extreme indices and tendencies from 1954â€“2003 in Kerala, India. Climatic Change, 2011, 106, 407-419.	1.7	15
68	Utilisation of Magnesium Phosphate Cements to Facilitate Biodegradation within a Stabilised/Solidified Contaminated Soil. Water, Air, and Soil Pollution, 2011, 216, 411-427.	1.1	27
69	Assessing seasonal precipitation trends in India using parametric and non-parametric statistical techniques. Theoretical and Applied Climatology, 2011, 103, 1-11.	1.3	77
70	Regional changes of the severities of meteorological droughts and floods in India. Journal of Chinese Geography, 2011, 21, 195-206.	1.5	10
71	Metal Retention Experiments for the Design of Soilâ€Mix Technology Permeable Reactive Barriers. Clean - Soil, Air, Water, 2011, 39, 844-852.	0.7	9
72	Long-term changes and variability of monthly extreme temperatures in India. Theoretical and Applied Climatology, 2010, 100, 45-56.	1.3	63

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73	Suitability of different erosivity models used in RUSLE2 for the South West Indian region. The Environmentalist, 2009, 29, 405-410.	0.7	3
74	Laboratory Strength Correlations for Cement-Treated Peat. , 2004, , 1403.		3