Vhahangwele Masindi

List of Publications by Citations

60 papers	1,376 citations	20 h-index	36 g-index
61 ext. papers	1,843 ext. citations	5.5 avg, IF	5.66 L-index

#	Paper	IF	Citations
60	An update on synthetic dyes adsorption onto clay based minerals: A state-of-art review. *Journal of Environmental Management*, **2017**, 191, 35-57	7.9	237
59	Environmental Contamination by Heavy Metals **2018**,		176
58	Innovative spherical biochar for pharmaceutical removal from water: Insight into adsorption mechanism. *Journal of Hazardous Materials*, **2020**, 394, 122255	12.8	119
57	The potential of ball-milled South African bentonite clay for attenuation of heavy metals from acidic wastewaters: Simultaneous sorption of Co 2+ , Cu 2+ , Ni 2+ , Pb 2+ , and Zn 2+ ions. *Journal of Environmental Chemical Engineering*, **2015**, 3, 2416-2425	6.8	54
56	Efficiency of ball milled South African bentonite clay for remediation of acid mine drainage. *Journal of Water Process Engineering*, **2015**, 8, 227-240	6.7	47
55	Defluoridation of groundwater using Fe3+-modified bentonite clay: optimization of adsorption conditions. *Desalination and Water Treatment*, **2015**, 53, 1578-1590		45
54	Assessing the sustainability of acid mine drainage (AMD) treatment in South Africa. *Science of the Total Environment*, **2018**, 635, 793-802	10.2	41
53	A novel technology for neutralizing acidity and attenuating toxic chemical species from acid mine drainage using cryptocrystalline magnesite tailings. *Journal of Water Process Engineering*, **2016**, 10, 67-77	6.7	40
52	Integrated treatment of acid mine drainage using BOF slag, lime/soda ash and reverse osmosis (RO): Implication for the production of drinking water. *Desalination*, **2017**, 424, 45-52	10.3	33
51	Defluoridation of drinking water using Al3+-modified bentonite clay: optimization of fluoride adsorption conditions. *Toxicological and Environmental Chemistry*, **2014**, 96, 1294-1309	1.4	33
50	Synthesis of magnetite from iron-rich mine water using sodium carbonate. *Journal of Environmental Chemical Engineering*, **2017**, 5, 2699-2707	6.8	29
49	Recovery of drinking water and valuable minerals from acid mine drainage using an integration of magnesite, lime, soda ash, CO2 and reverse osmosis treatment processes. *Journal of Environmental Chemical Engineering*, **2017**, 5, 3136-3142	6.8	28
48	Synthesis of cryptocrystalline magnesite–bentonite clay composite and its application for neutralization and attenuation of inorganic contaminants in acidic and metalliferous mine drainage. *Journal of Water Process Engineering*, **2017**, 15, 2-17	6.7	26
47	Fractional and step-wise recovery of chemical species from acid mine drainage using calcined cryptocrystalline magnesite nano-sheets: An experimental and geochemical modelling approach. *Journal of Environmental Chemical Engineering*, **2018**, 6, 1634-1650	6.8	26
46	Calcined magnesite as an adsorbent for cationic and anionic dyes: characterization, adsorption parameters, isotherms and kinetics study. *Heliyon*, **2018**, 4, e00838	3.6	26
45	Simultaneous removal of metal species from acidic aqueous solutions using cryptocrystalline magnesite/bentonite clay composite: an experimental and modelling approach. *Journal of Cleaner Production*, **2016**, 112, 1077-1085	10.3	25
44	Reclamation of water and the synthesis of gypsum and limestone from acid mine drainage treatment process using a combination of pre-treated magnesite nanosheets, lime, and CO2 bubbling. *Water Resources and Industry*, **2018**, 20, 1-14	4.5	22

43	Valorization of acid mine drainage (AMD): A simplified approach to reclaim drinking water and synthesize valuable minerals Pilot study. *Journal of Environmental Chemical Engineering*, **2019**, 7, 103082	6.8	21
42	Comparison of mine water neutralisation efficiencies of different alkaline generating agents. *Journal of Environmental Chemical Engineering*, **2017**, 5, 3903-3913	6.8	21
41	Application of magnesite Bentonite clay composite as an alternative technology for removal of arsenic from industrial effluents. *Toxicological and Environmental Chemistry*, **2014**, 96, 1435-1451	1.4	21
40	Fate of inorganic contaminants post treatment of acid mine drainage by cryptocrystalline magnesite: Complimenting experimental results with a geochemical model. *Journal of Environmental Chemical Engineering*, **2016**, 4, 4846-4856	6.8	20
39	Passive remediation of acid mine drainage using cryptocrystalline magnesite: A batch experimental and geochemical modelling approach. *Water S A*, **2015**, 41, 677	1.3	20
38	Fate of pollutants post treatment of acid mine drainage with basic oxygen furnace slag: Validation of experimental results with a geochemical model. *Journal of Cleaner Production*, **2018**, 172, 2899-2909	10.3	20
37	Preparation and characterisation of high performing magnesite-halloysite nanocomposite and its application in the removal of methylene blue dye. *Journal of Molecular Structure*, **2019**, 1184, 389-399	3.4	19
36	Beneficiation of acid mine drainage (AMD): A viable option for the synthesis of goethite, hematite, magnetite, and gypsum Gearing towards a circular economy concept. *Minerals Engineering*, **2020**, 148, 106204	4.9	19
35	Removal of arsenic from wastewaters by cryptocrystalline magnesite: complimenting experimental results with modelling. *Journal of Cleaner Production*, **2016**, 113, 318-324	10.3	18
34	Facile thermal activation of non-reactive cryptocrystalline magnesite and its application on the treatment of acid mine drainage. *Journal of Environmental Management*, **2019**, 236, 499-509	7.9	18
33	Kinetics and equilibrium studies for removal of fluoride from underground water using cryptocrystalline magnesite. *Journal of Water Reuse and Desalination*, **2015**, 5, 282-292	2.6	17
32	Advocating circular economy in wastewater treatment: Struvite formation and drinking water reclamation from real municipal effluents. *Journal of Environmental Chemical Engineering*, **2020**, 8, 103957	6.8	16
31	Effective removal of arsenate from wastewater using aluminium enriched ferric oxide-hydroxide recovered from authentic acid mine drainage. *Journal of Hazardous Materials*, **2021**, 414, 125491	12.8	13
30	Wastewater treatment valorisation by simultaneously removing and recovering phosphate and ammonia from municipal effluents using a mechano-thermo activated magnesite technology. *Journal of Environmental Management*, **2019**, 250, 109493	7.9	12
29	Groundwater contamination in sub-Saharan Africa: Implications for groundwater protection in developing countries. *Cleaner Engineering and Technology*, **2021**, 2, 100038	2.7	12
28	A comparative study on the synthesis of magnesium ferrite for the adsorption of metal ions: Insights into the essential role of crystallite size and surface hydroxyl groups. *Chemical Engineering Journal*, **2021**, 411, 128523	14.7	11
27	Synthesis of cryptocrystalline magnesite/bentonite clay composite and its application for removal of phosphate from municipal wastewaters. *Environmental Technology (United Kingdom)*, **2016**, 37, 603-12	2.6	10
26	Removal of boron from aqueous solution using magnesite and bentonite clay composite. *Desalination and Water Treatment*, **2016**, 57, 8754-8764		10

25	Environmental sustainability of municipal wastewater treatment through struvite precipitation: Influence of operational parameters. *Journal of Cleaner Production*, **2021**, 285, 124856	10.3	10
24	Emerging remediation potentiality of struvite developed from municipal wastewater for the treatment of acid mine drainage.. *Environmental Research*, **2022**, 210, 112944	7.9	8
23	Computational and experimental study for the desalination of petrochemical industrial effluents using direct contact membrane distillation. *Applied Water Science*, **2019**, 9, 1	5	6
22	Adsorption of phosphate from municipal effluents using cryptocrystalline magnesite: complementing laboratory results with geochemical modelling. *Desalination and Water Treatment*, **2015**, 1-13		6
21	Removal of boron from aqueous solution using cryptocrystalline magnesite. *Journal of Water Reuse and Desalination*, **2017**, 7, 205-213	2.6	5
20	Evaluation of the efficacy of halloysite nanotubes in the removal of acidic and basic dyes from aqueous solution. *Clay Minerals*, **2019**, 54, 197-207	1.3	5
19	Application of cryptocrystalline magnesite-bentonite clay hybrid for defluoridation of underground water resources: implication for point of use treatment. *Journal of Water Reuse and Desalination*, **2017**, 7, 338-352	2.6	4
18	Integrated treatment of acid mine drainage using cryptocrystalline magnesite and barium chloride. *Water Practice and Technology*, **2017**, 12, 727-736	0.9	3
17	Innovative Routes for Acid Mine Drainage (AMD) Valorization **2020**, 189-218		3
16	The performance of thermally activated and vibratory ball milled South African bentonite clay for the removal of chromium ions from aqueous solution. *Materials Today: Proceedings*, **2021**, 38, 964-974	1.4	3
15	Advanced application of BOF and SAF slags for the treatment of acid mine drainage (AMD): A comparative study. *Materials Today: Proceedings*, **2021**, 38, 934-941	1.4	3
14	Facile synthesis of halloysite-bentonite clay/magnesite nanocomposite and its application for the removal of chromium ions: Adsorption and precipitation process. *Materials Today: Proceedings*, **2021**, 38, 1088-1101	1.4	3
13	Simultaneous sorption of As, B, Cr, Mo and Se from coal fly ash leachates by Al3+-pillared bentonite clay: implication for the construction of activated geo-synthetic clay liner. *Water Practice and Technology*, **2017**, 12, 186-201	0.9	2
12	Dataset on physicochemical and microbial properties of raw water in four drinking water treatment plants based in South Africa. *Data in Brief*, **2020**, 31, 105822	1.2	2
11	The Treatment of Acid Mine Drainage Using Vertically Flowing Wetland: Insights into the Fate of Chemical Species. *Minerals (Basel, Switzerland)*, **2021**, 11, 477	2.4	2
10	Co-treatment of acid mine drainage and municipal wastewater effluents: Emphasis on the fate and partitioning of chemical contaminants. *Journal of Hazardous Materials*, **2022**, 421, 126677	12.8	2
9	Techno-Economic Analysis of the Reclamation of Drinking Water and Valuable Minerals from Acid Mine Drainage. *Minerals (Basel, Switzerland)*, **2021**, 11, 1352	2.4	1
8	Conversion of cryptocrystalline magnesite to MgO nanosheets: Insights into microstructural properties. *Materials Today: Proceedings*, **2021**, 38, 1077-1087	1.4	1

7	Systematic assessment of SARS-CoV-2 virus in wastewater, rivers and drinking water - A catchment-wide appraisal. *Science of the Total Environment*, **2021**, 800, 149298	10.2	1
6	Mechanisms and Approaches for the Removal of Heavy Metals from Acid Mine Drainage and Other Industrial Effluents. *Environmental Chemistry for A Sustainable World*, **2021**, 513-537	0.8	0
5	Recovery of phosphate from real municipal wastewater and its application for the production of phosphoric acid. *Journal of Environmental Chemical Engineering*, **2021**, 9, 106625	6.8	0
4	Effective treatment of acid mine drainage using a combination of MgO-nanoparticles and a series of constructed wetlands planted with Vetiveria zizanioides: A hybrid and stepwise approach.. *Journal of Environmental Management*, **2022**, 310, 114751	7.9	0
3	Recovery of Drinking Water and Nanosized Fe 2 O 3 Pigment from Iron Rich Acid Mine Water **2022**, 237-287		
2	Sources of Heavy Metals Pollution. *Environmental Chemistry for A Sustainable World*, **2021**, 419-454	0.8	
1	Evaluating the efficacy of thermo-mechano-activated cryptocrystalline magnesite nanosheets for the removal of chromium ions from wastewater. *Materials Today: Proceedings*, **2021**, 38, 1006-1017	1.4	