

Talal Shahwan

List of Publications by Year in descending order

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Version: 2024-02-01

50
papers

3,192
citations

172443

29
h-index

223791

46
g-index

51
all docs

51
docs citations

51
times ranked

4002
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Green synthesis of iron nanoparticles and their application as a Fenton-like catalyst for the degradation of aqueous cationic and anionic dyes. <i>Chemical Engineering Journal</i> , 2011, 172, 258-266. | 12.7 | 671 |
| 2 | Synthesis and characterization of kaolinite-supported zero-valent iron nanoparticles and their application for the removal of aqueous Cu ²⁺ and Co ²⁺ ions. <i>Applied Clay Science</i> , 2009, 43, 172-181. | 5.2 | 301 |
| 3 | A radiotracer study of the adsorption behavior of aqueous Ba ²⁺ ions on nanoparticles of zero-valent iron. <i>Journal of Hazardous Materials</i> , 2007, 148, 761-767. | 12.4 | 216 |
| 4 | Application of zero-valent iron nanoparticles for the removal of aqueous Co ²⁺ ions under various experimental conditions. <i>Chemical Engineering Journal</i> , 2008, 144, 213-220. | 12.7 | 171 |
| 5 | Batch Removal of Aqueous Cu ²⁺ Ions Using Nanoparticles of Zero-Valent Iron: A Study of the Capacity and Mechanism of Uptake. <i>Industrial & Engineering Chemistry Research</i> , 2008, 47, 4758-4764. | 3.7 | 119 |
| 6 | Chitosan fiber-supported zero-valent iron nanoparticles as a novel sorbent for sequestration of inorganic arsenic. <i>RSC Advances</i> , 2013, 3, 7828. | 3.6 | 115 |
| 7 | Equilibrium, thermodynamic and kinetic studies for the biosorption of aqueous lead(II), cadmium(II) and nickel(II) ions on <i>Spirulina platensis</i> . <i>Journal of Hazardous Materials</i> , 2008, 154, 973-980. | 12.4 | 101 |
| 8 | Synthesis of amidoximated polyacrylonitrile fibers and its application for sorption of aqueous uranyl ions under continuous flow. <i>Chemical Engineering Journal</i> , 2012, 213, 41-49. | 12.7 | 99 |
| 9 | Thermodynamic parameters of Cs ⁺ sorption on natural clays. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2002, 253, 115-120. | 1.5 | 95 |
| 10 | Synthesis and characterization of bentonite/iron nanoparticles and their application as adsorbent of cobalt ions. <i>Applied Clay Science</i> , 2010, 47, 257-262. | 5.2 | 90 |
| 11 | Characterization of the uptake of aqueous Ni ²⁺ ions on nanoparticles of zero-valent iron (nZVI). <i>Desalination</i> , 2009, 249, 1048-1054. | 8.2 | 81 |
| 12 | Temperature effects in barium sorption on natural kaolinite and chlorite-illite clays. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2004, 260, 43-48. | 1.5 | 76 |
| 13 | Synthesis, characterization and application of a novel sorbent, glucamine-modified MCM-41, for the removal/preconcentration of boron from waters. <i>Analytica Chimica Acta</i> , 2005, 547, 31-41. | 5.4 | 73 |
| 14 | Sorption Efficiency of Chitosan Nanofibers toward Metal Ions at Low Concentrations. <i>Biomacromolecules</i> , 2010, 11, 3301-3308. | 5.4 | 70 |
| 15 | Morphosynthesis of CaCO ₃ at different reaction temperatures and the effects of PDDA, CTAB, and EDTA on the particle morphology and polymorph stability. <i>Powder Technology</i> , 2007, 178, 194-202. | 4.2 | 66 |
| 16 | Preconcentration and atomic spectrometric determination of rare earth elements (REEs) in natural water samples by inductively coupled plasma atomic emission spectrometry. <i>Analytica Chimica Acta</i> , 2005, 547, 42-49. | 5.4 | 56 |
| 17 | Removal of aqueous rare earth elements (REEs) using nano-iron based materials. <i>Journal of Industrial and Engineering Chemistry</i> , 2013, 19, 898-907. | 5.8 | 54 |
| 18 | Physicochemical characterization of the retardation of aqueous Cs ⁺ ions by natural kaolinite and clinoptilolite minerals. <i>Journal of Colloid and Interface Science</i> , 2005, 285, 9-17. | 9.4 | 53 |

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| 19 | A characterization study of some aspects of the adsorption of aqueous Co^{2+} ions on a natural bentonite clay. <i>Journal of Colloid and Interface Science</i> , 2006, 300, 447-452. | 9.4 | 47 |
| 20 | Incorporation of iron nanoparticles into clinoptilolite and its application for the removal of cationic and anionic dyes. <i>Journal of Industrial and Engineering Chemistry</i> , 2015, 21, 1143-1151. | 5.8 | 46 |
| 21 | Synthesis of aminopropyl triethoxysilane-functionalized silica and its application in speciation studies of vanadium(IV) and vanadium(V). <i>Chemical Engineering Journal</i> , 2011, 174, 76-85. | 12.7 | 43 |
| 22 | Preparation and characterization of alumina-supported iron nanoparticles and its application for the removal of aqueous Cu^{2+} ions. <i>Chemical Engineering Journal</i> , 2011, 168, 979-984. | 12.7 | 43 |
| 23 | AAS, XRPD, SEM/EDS, and FTIR characterization of Zn^{2+} retention by calcite, calcite-kaolinite, and calcite-clinoptilolite minerals. <i>Journal of Colloid and Interface Science</i> , 2005, 286, 471-478. | 9.4 | 41 |
| 24 | Synthesis, characterization and application of a novel mercapto- and amine-bifunctionalized silica for speciation/sorption of inorganic arsenic prior to inductively coupled plasma mass spectrometric determination. <i>Talanta</i> , 2011, 85, 1517-1525. | 5.5 | 40 |
| 25 | Biosorption of Cu(II) and Pb(II) ions from aqueous solution by natural spider silk. <i>Bioresource Technology</i> , 2011, 102, 8807-8813. | 9.6 | 38 |
| 26 | Sorption kinetics: Obtaining a pseudo-second order rate equation based on a mass balance approach. <i>Journal of Environmental Chemical Engineering</i> , 2014, 2, 1001-1006. | 6.7 | 36 |
| 27 | A comparative study of the removal of methylene blue by iron nanoparticles from water and water-ethanol solutions. <i>Journal of Molecular Liquids</i> , 2019, 273, 274-281. | 4.9 | 32 |
| 28 | Sorption of As(V) from waters using chitosan and chitosan-immobilized sodium silicate prior to atomic spectrometric determination. <i>Talanta</i> , 2010, 80, 1452-1460. | 5.5 | 31 |
| 29 | Modification of a montmorillonite-illite clay using alkaline hydrothermal treatment and its application for the removal of aqueous Cs^{+} ions. <i>Journal of Colloid and Interface Science</i> , 2006, 295, 303-309. | 9.4 | 30 |
| 30 | Lagergren equation: Can maximum loading of sorption replace equilibrium loading?. <i>Chemical Engineering Research and Design</i> , 2015, 96, 172-176. | 5.6 | 29 |
| 31 | Sorption studies of Cs^{+} and Ba^{2+} cations on magnesite. <i>Applied Radiation and Isotopes</i> , 1998, 49, 915-921. | 1.5 | 26 |
| 32 | Kinetic and thermodynamic investigations of strontium ions retention by natural kaolinite and clinoptilolite minerals. <i>Radiochimica Acta</i> , 2005, 93, 477-485. | 1.2 | 21 |
| 33 | Characterization of Sr^{2+} uptake on natural minerals of kaolinite and magnesite using XRPD, SEM/EDS, XPS, and DRIFT. <i>Radiochimica Acta</i> , 2005, 93, 225-232. | 1.2 | 21 |
| 34 | Retention of aqueous Ba^{2+} ions by calcite and aragonite over a wide range of concentrations: Characterization of the uptake capacity, and kinetics of sorption and precipitate formation. <i>Geochemical Journal</i> , 2007, 41, 379-389. | 1.0 | 18 |
| 35 | Effect of magnesium carbonate on the uptake of aqueous zinc and lead ions by natural kaolinite and clinoptilolite. <i>Applied Clay Science</i> , 2005, 30, 209-218. | 5.2 | 16 |
| 36 | Radiochemical study of Co^{2+} sorption on chlorite and kaolinite. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 1999, 241, 151-155. | 1.5 | 15 |

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|----|--|-----|-----------|
| 37 | Separation of trace antimony and arsenic prior to hydride generation atomic absorption spectrometric determination. <i>Analytica Chimica Acta</i> , 2005, 534, 293-300. | 5.4 | 15 |
| 38 | Synthesis of poly-2-hydroxyethyl methacrylate-montmorillonite nanocomposite via in situ atom transfer radical polymerization. <i>Journal of Materials Research</i> , 2008, 23, 3316-3322. | 2.6 | 14 |
| 39 | Critical insights into the limitations and interpretations of the determination of ^{67}Ga , ^{153}Sm , and ^{125}I of sorption of aqueous pollutants on different sorbents. <i>Colloids and Interface Science Communications</i> , 2021, 41, 100369. | 4.1 | 13 |
| 40 | TOF-SIMS study of Cs + sorption on natural kaolinite. <i>Science of the Total Environment</i> , 1999, 226, 255-260. | 8.0 | 12 |
| 41 | Sorption studies of Cs^+ , Ba^{2+} , and Co^{2+} ions on bentonite using radiotracer, ToF-SIMS, and XRD techniques. <i>Radiochimica Acta</i> , 2001, 89, 799-804. | 1.2 | 11 |
| 42 | Study of the scavenging behavior and structural changes accompanying the interaction of aqueous Pb^{2+} and Sr^{2+} ions with calcite. <i>Geochemical Journal</i> , 2005, 39, 317-326. | 1.0 | 10 |
| 43 | Trypsin-immobilized Silica: A Novel Adsorbent for V(IV) and V(V) Removal from Water. <i>Water Environment Research</i> , 2018, 90, 2056-2065. | 2.7 | 7 |
| 44 | Uptake of Ba^{2+} ions by natural bentonite and CaCO_3 : A radiotracer, EDXRF and PXRD study. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2002, 254, 563-568. | 1.5 | 6 |
| 45 | Use of electrospun fiber mats for the remediation of hypersaline geothermal brine. , 0, 62, 94-100. | | 6 |
| 46 | Comparative assessment of the decolorization of aqueous bromophenol blue using Fe nanoparticles and Fe-Ni bimetallic nanoparticles. , 0, 159, 346-355. | | 6 |
| 47 | Mefenamic acid stability and removal from wastewater using bentonite-supported nanoscale zero-valent iron and activated charcoal. , 0, 97, 175-183. | | 5 |
| 48 | ToF-SIMS depth profiling analysis of the uptake of Ba^{2+} and Co^{2+} ions by natural kaolinite clay. <i>Journal of Colloid and Interface Science</i> , 2004, 277, 23-28. | 9.4 | 4 |
| 49 | Surface spectroscopic studies of Cs^+ , and Ba^{2+} sorption on chlorite-illite mixed clay. <i>Radiochimica Acta</i> , 2000, 88, 681-686. | 1.2 | 3 |
| 50 | Amalgamation performances of gold-coated quartz wool, alumina, silica, sand and carbon fiber for the determination of inorganic mercury in waters by cold vapor atomic absorption spectrometry. <i>Journal of Analytical Chemistry</i> , 2017, 72, 551-556. | 0.9 | 0 |