

Krishna G Bhattacharyya

List of Publications by Year in descending order

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100
papers

9,578
citations

57719

44
h-index

37183

96
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107
all docs

107
docs citations

107
times ranked

9587
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Adsorption of a few heavy metals on natural and modified kaolinite and montmorillonite: A review. <i>Advances in Colloid and Interface Science</i> , 2008, 140, 114-131. | 7.0 | 1,198 |
| 2 | Adsorption of methylene blue on kaolinite. <i>Applied Clay Science</i> , 2002, 20, 295-300. | 2.6 | 686 |
| 3 | Kinetics of adsorption of metal ions on inorganic materials: A review. <i>Advances in Colloid and Interface Science</i> , 2011, 162, 39-58. | 7.0 | 654 |
| 4 | Kinetics and thermodynamics of Methylene Blue adsorption on Neem () leaf powder. <i>Dyes and Pigments</i> , 2005, 65, 51-59. | 2.0 | 628 |
| 5 | <i>Azadirachta indica</i> leaf powder as an effective biosorbent for dyes: a case study with aqueous Congo Red solutions. <i>Journal of Environmental Management</i> , 2004, 71, 217-229. | 3.8 | 368 |
| 6 | Adsorption of Ni(II) on clays. <i>Journal of Colloid and Interface Science</i> , 2006, 295, 21-32. | 5.0 | 303 |
| 7 | Immobilization of Pb(II), Cd(II) and Ni(II) ions on kaolinite and montmorillonite surfaces from aqueous medium. <i>Journal of Environmental Management</i> , 2008, 87, 46-58. | 3.8 | 278 |
| 8 | Adsorption characteristics of the dye, Brilliant Green, on Neem leaf powder. <i>Dyes and Pigments</i> , 2003, 57, 211-222. | 2.0 | 273 |
| 9 | Kaolinite, montmorillonite, and their modified derivatives as adsorbents for removal of Cu(II) from aqueous solution. <i>Separation and Purification Technology</i> , 2006, 50, 388-397. | 3.9 | 252 |
| 10 | Adsorption of heavy metals on kaolinite and montmorillonite: a review. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 6698. | 1.3 | 236 |
| 11 | Adsorption of Cr(VI) in layered double hydroxides. <i>Applied Clay Science</i> , 1998, 13, 21-34. | 2.6 | 216 |
| 12 | Adsorption of Pb(II) from aqueous solution by <i>Azadirachta indica</i> (Neem) leaf powder. <i>Journal of Hazardous Materials</i> , 2004, 113, 97-109. | 6.5 | 205 |
| 13 | Nanomaterials as versatile adsorbents for heavy metal ions in water: a review. <i>Environmental Science and Pollution Research</i> , 2019, 26, 6245-6278. | 2.7 | 200 |
| 14 | Adsorption of Chromium(VI) from Water by Clays. <i>Industrial & Engineering Chemistry Research</i> , 2006, 45, 7232-7240. | 1.8 | 194 |
| 15 | Influence of acid activation on adsorption of Ni(II) and Cu(II) on kaolinite and montmorillonite: Kinetic and thermodynamic study. <i>Chemical Engineering Journal</i> , 2008, 136, 1-13. | 6.6 | 190 |
| 16 | Adsorptive accumulation of Cd(II), Co(II), Cu(II), Pb(II), and Ni(II) from water on montmorillonite: Influence of acid activation. <i>Journal of Colloid and Interface Science</i> , 2007, 310, 411-424. | 5.0 | 186 |
| 17 | Interaction of metal ions with clays: I. A case study with Pb(II). <i>Applied Clay Science</i> , 2005, 30, 199-208. | 2.6 | 159 |
| 18 | Removal of Cd(II) from aqueous solution by kaolinite, montmorillonite and their poly(oxo zirconium) and tetrabutylammonium derivatives. <i>Journal of Hazardous Materials</i> , 2006, 128, 247-257. | 6.5 | 156 |

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|----|---|-----|-----------|
| 19 | Pb(II) uptake by kaolinite and montmorillonite in aqueous medium: Influence of acid activation of the clays. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2006, 277, 191-200. | 2.3 | 154 |
| 20 | Kaolinite and montmorillonite as adsorbents for Fe(III), Co(II) and Ni(II) in aqueous medium. <i>Applied Clay Science</i> , 2008, 41, 1-9. | 2.6 | 153 |
| 21 | Removal of Cu(II) by natural and acid-activated clays: An insight of adsorption isotherm, kinetic and thermodynamics. <i>Desalination</i> , 2011, 272, 66-75. | 4.0 | 135 |
| 22 | Adsorption of Chromium (VI) on Azadirachta Indica (Neem) Leaf Powder. <i>Adsorption</i> , 2005, 10, 327-338. | 1.4 | 120 |
| 23 | Adsorption of metal ions by clays and inorganic solids. <i>RSC Advances</i> , 2014, 4, 28537-28586. | 1.7 | 101 |
| 24 | Adsorption of Fe(III) from water by natural and acid activated clays: Studies on equilibrium isotherm, kinetics and thermodynamics of interactions. <i>Adsorption</i> , 2006, 12, 185-204. | 1.4 | 98 |
| 25 | Interactions of the dye, Rhodamine B with kaolinite and montmorillonite in water. <i>Applied Clay Science</i> , 2014, 99, 7-17. | 2.6 | 93 |
| 26 | Azadirachta indica (Neem) leaf powder as a biosorbent for removal of Cd(II) from aqueous medium. <i>Journal of Hazardous Materials</i> , 2005, 125, 102-112. | 6.5 | 92 |
| 27 | Adsorption of Fe(III), Co(II) and Ni(II) on ZrO ₂ -kaolinite and ZrO ₂ -montmorillonite surfaces in aqueous medium. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2008, 317, 71-79. | 2.3 | 90 |
| 28 | Hydrogenation of phenol over supported platinum and palladium catalysts. <i>Applied Catalysis A: General</i> , 1993, 96, 229-239. | 2.2 | 89 |
| 29 | Catalytic wet oxidation of 2-chlorophenol, 2,4-dichlorophenol and 2,4,6-trichlorophenol in water with Mn(II)-MCM41. <i>Chemical Engineering Journal</i> , 2008, 139, 575-588. | 6.6 | 89 |
| 30 | Metal speciation in Jhanji River sediments. <i>Science of the Total Environment</i> , 1996, 193, 1-12. | 3.9 | 75 |
| 31 | Total concentrations, fractionation and mobility of heavy metals in soils of urban area of Guwahati, India. <i>Environmental Monitoring and Assessment</i> , 2011, 173, 221-240. | 1.3 | 73 |
| 32 | Removal of hazardous basic dyes from aqueous solution by adsorption onto kaolinite and acid-treated kaolinite: kinetics, isotherm and mechanistic study. <i>SN Applied Sciences</i> , 2019, 1, 1. | 1.5 | 71 |
| 33 | Oxidation of Rhodamine B in aqueous medium in ambient conditions with raw and acid-activated MnO ₂ , NiO, ZnO as catalysts. <i>Journal of Molecular Catalysis A</i> , 2014, 391, 121-129. | 4.8 | 67 |
| 34 | Influence of Acid Activation of Kaolinite and Montmorillonite on Adsorptive Removal of Cd(II) from Water. <i>Industrial & Engineering Chemistry Research</i> , 2007, 46, 3734-3742. | 1.8 | 65 |
| 35 | HZSM-5 catalysed conversion of aqueous ethanol to hydrocarbons. <i>Applied Catalysis A: General</i> , 1997, 148, 357-371. | 2.2 | 57 |
| 36 | Biosorption of fluoride on Neem (Azadirachta indica) leaf powder. <i>Journal of Environmental Chemical Engineering</i> , 2015, 3, 662-669. | 3.3 | 57 |

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|----|--|-----|-----------|
| 37 | Calcined tetrabutylammonium kaolinite and montmorillonite and adsorption of Fe(II), Co(II) and Ni(II) from solution. <i>Applied Clay Science</i> , 2009, 46, 216-221. | 2.6 | 56 |
| 38 | Al-MCM-41 catalysed alkylation of phenol with methanol. <i>Journal of Molecular Catalysis A</i> , 2003, 197, 255-262. | 4.8 | 54 |
| 39 | Characterization of a Novel Polymeric Biofloculant Produced from Bacterial Utilization of n-Hexadecane and Its Application in Removal of Heavy Metals. <i>Frontiers in Microbiology</i> , 2017, 8, 170. | 1.5 | 52 |
| 40 | Wet oxidative method for removal of 2,4,6-trichlorophenol in water using Fe(III), Co(II), Ni(II) supported MCM41 catalysts. <i>Journal of Hazardous Materials</i> , 2008, 150, 728-736. | 6.5 | 50 |
| 41 | Fe(III)-, Co(II)- and Ni(II)-impregnated MCM41 for wet oxidative destruction of 2,4-dichlorophenol in water. <i>Catalysis Today</i> , 2009, 141, 225-233. | 2.2 | 49 |
| 42 | Cu(II)-kaolinite and Cu(II)-montmorillonite as catalysts for wet oxidative degradation of 2-chlorophenol, 4-chlorophenol and 2,4-dichlorophenol. <i>Chemical Engineering Journal</i> , 2013, 233, 88-97. | 6.6 | 49 |
| 43 | Biosorption of Commercial Dyes on <i>Azadirachta indica</i> Leaf Powder: A Case Study with a Basic Dye Rhodamine B. <i>Industrial & Engineering Chemistry Research</i> , 2008, 47, 5433-5440. | 1.8 | 47 |
| 44 | XPS study of mica surfaces. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1993, 63, 289-306. | 0.8 | 45 |
| 45 | Methylene Blue Adsorption on Natural and Modified Clays. <i>Separation Science and Technology</i> , 2011, 46, 1602-1614. | 1.3 | 43 |
| 46 | Montmorillonite and modified montmorillonite as adsorbents for removal of water soluble organic dyes: A review on current status of the art. <i>Inorganic Chemistry Communication</i> , 2022, 143, 109686. | 1.8 | 40 |
| 47 | Adsorption of Co(II) from Aqueous Medium on Natural and Acid Activated Kaolinite and Montmorillonite. <i>Separation Science and Technology</i> , 2007, 42, 3391-3418. | 1.3 | 38 |
| 48 | Production of a non-cytotoxic biofloculant by a bacterium utilizing a petroleum hydrocarbon source and its application in heavy metal removal. <i>RSC Advances</i> , 2015, 5, 66037-66046. | 1.7 | 38 |
| 49 | Multivariate statistical evaluation of heavy metals in the surface water sources of Jia Bharali river basin, North Brahmaputra plain, India. <i>Applied Water Science</i> , 2017, 7, 2577-2586. | 2.8 | 37 |
| 50 | Utilization of <i>Euryale ferox</i> Salisbury seed shell for removal of basic fuchsin dye from water: equilibrium and kinetics investigation. <i>RSC Advances</i> , 2017, 7, 27248-27259. | 1.7 | 36 |
| 51 | Adsorption of carbon dioxide on mica surfaces. <i>Langmuir</i> , 1989, 5, 1155-1162. | 1.6 | 33 |
| 52 | Adsorptive Accumulation of Cd(II), Co(II), Cu(II), Pb(II) and Ni(II) Ions from Water onto Kaolinite: Influence of Acid Activation. <i>Adsorption Science and Technology</i> , 2009, 27, 47-68. | 1.5 | 32 |
| 53 | Kinetics of Aqueous Cu(II) Biosorption onto <i>Thevetia peruviana</i> Leaf Powder. <i>ACS Omega</i> , 2020, 5, 13489-13502. | 1.6 | 29 |
| 54 | Modification of Soil Quality Near a Pulp and Paper Mill. <i>Water, Air, and Soil Pollution</i> , 2003, 146, 319-333. | 1.1 | 24 |

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|----|--|-----|-----------|
| 55 | Using Mn(II)-MCM41 as an Environment-Friendly Catalyst to Oxidize Phenol, 2-Chlorophenol, and 2-Nitrophenol in Aqueous Solution. <i>Industrial & Engineering Chemistry Research</i> , 2008, 47, 1370-1379. | 1.8 | 24 |
| 56 | Impact of urbanization on the quality of water in a natural reservoir: a case study with the Deepor Beel in Guwahati city, India. <i>Water and Environment Journal</i> , 2010, 24, 83-96. | 1.0 | 24 |
| 57 | Azadirachta indica leaf powder as a biosorbent for Ni(II) in aqueous medium. <i>Journal of Hazardous Materials</i> , 2009, 165, 271-278. | 6.5 | 24 |
| 58 | Developing a biosorbent from Aegle Marmelos leaves for removal of methylene blue from water. <i>International Journal of Environmental Science and Technology</i> , 2017, 14, 341-352. | 1.8 | 24 |
| 59 | Acetylation of phenol with Al-MCM-41. <i>Catalysis Communications</i> , 2001, 2, 105-111. | 1.6 | 23 |
| 60 | Estimation of uranium in groundwater and assessment of age-dependent radiation dose in Nalbari district of Assam, India. <i>SN Applied Sciences</i> , 2021, 3, 1. | 1.5 | 22 |
| 61 | 1-Hexene isomerization and n-hexane cracking over HMCM-22. <i>Applied Catalysis A: General</i> , 2001, 213, 239-245. | 2.2 | 20 |
| 62 | Using coal fly ash as a support for Mn(II), Co(II) and Ni(II) and utilizing the materials as novel oxidation catalysts for 4-chlorophenol mineralization. <i>Journal of Environmental Management</i> , 2015, 150, 479-488. | 3.8 | 20 |
| 63 | Correlation of soil organic carbon and nutrients (NPK) to soil mineralogy, texture, aggregation, and land use pattern. <i>Environmental Monitoring and Assessment</i> , 2015, 187, 735. | 1.3 | 20 |
| 64 | Uptake of Ni(II) Ions from Aqueous Solution by Kaolinite and Montmorillonite: Influence of Acid Activation of the Clays. <i>Separation Science and Technology</i> , 2008, 43, 3221-3250. | 1.3 | 18 |
| 65 | Kinetics, equilibrium isotherms and thermodynamics of adsorption of Congo red onto natural and acid-treated kaolinite and montmorillonite. <i>Desalination and Water Treatment</i> , 2015, 53, 530-542. | 1.0 | 18 |
| 66 | Mobility and bioavailability of Cd, Co, Cr, Cu, Mn and Zn in surface runoff sediments in the urban catchment area of Guwahati, India. <i>Applied Water Science</i> , 2018, 8, 1. | 2.8 | 17 |
| 67 | Catalytic Destruction of 4-Chlorophenol in Water. <i>Clean - Soil, Air, Water</i> , 2008, 36, 488-497. | 0.7 | 16 |
| 68 | Assessment of water quality in and around Jia-Bharali river basin, North Brahmaputra Plain, India, using multivariate statistical technique. <i>Applied Water Science</i> , 2018, 8, 1. | 2.8 | 16 |
| 69 | Investigation of groundwater and soil quality near to a municipal waste disposal site in Silchar, Assam, India. <i>International Journal of Energy and Water Resources</i> , 2022, 6, 37-47. | 1.3 | 13 |
| 70 | Adsorption of ammonia on mica surfaces. <i>Langmuir</i> , 1992, 8, 2284-2289. | 1.6 | 12 |
| 71 | Oxidation of 4-Nitrophenol in water over Fe(III), Co(II), and Ni(II) impregnated MCM41 catalysts. <i>Journal of Chemical Technology and Biotechnology</i> , 2008, 83, 1353-1363. | 1.6 | 10 |
| 72 | Impact of pulp and paper mill effluents and solid wastes on soil mineralogical and physicochemical properties. <i>Environmental Monitoring and Assessment</i> , 2015, 187, 98. | 1.3 | 10 |

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|----|--|-----|-----------|
| 73 | Adsorption of Monoazo Dyes (Crocein Orange G and Procion Red MX5B) from Water Using Raw and Acid-Treated Montmorillonite K10: Insight into Kinetics, Isotherm, and Thermodynamic Parameters. <i>Water, Air, and Soil Pollution</i> , 2018, 229, 1. | 1.1 | 10 |
| 74 | Use of Cu(II)-incorporated zeolite Y for decolourization of dyes in water: a case study with aqueous methylene blue and Congo red. <i>SN Applied Sciences</i> , 2019, 1, 1. | 1.5 | 9 |
| 75 | Novel synthesis of active metal oxide surface from a self-organising system of inorganic solids. <i>Materials Letters</i> , 2000, 46, 105-108. | 1.3 | 8 |
| 76 | Empirical Modeling of Electron Transport in Fe/Ti Layered Double Hydroxide Using Exponential, Gaussian and Mixed Gauss-Exponential Distribution. <i>ACS Omega</i> , 2019, 4, 10599-10609. | 1.6 | 8 |
| 77 | Adsorptive Interaction of Certain Beta-lactam Antibiotics in Aqueous Solution. Interpretation by Frontier Orbital Theory.. <i>Journal of Chemical Engineering of Japan</i> , 2000, 33, 303-307. | 0.3 | 8 |
| 78 | Use of Raw and Acid-Treated MnO ₂ as Catalysts for Oxidation of Dyes in Water: A Case Study with Aqueous Methylene Blue. <i>Chemical Engineering Communications</i> , 2015, 202, 1657-1667. | 1.5 | 6 |
| 79 | A comparison of neutralization efficiency of chemicals with respect to acidic Kopili River water. <i>Applied Water Science</i> , 2017, 7, 2209-2214. | 2.8 | 6 |
| 80 | Oxidative degradation of Congo red using zeolite Y as a support for Co(II), Ni(II) and Cu(II) ions. <i>SN Applied Sciences</i> , 2019, 1, 1. | 1.5 | 6 |
| 81 | Using Aqueous Kaolinite Suspension as a Medium for Removing Phosphate from Water. <i>Adsorption Science and Technology</i> , 2012, 30, 533-547. | 1.5 | 5 |
| 82 | Toxic Trace Metals in the Surface Water Sources of Jia-Bharali river basin, North Brahmaputra Plain, India-A Hydrochemical Elucidation. <i>Water Resources</i> , 2019, 46, 117-127. | 0.3 | 5 |
| 83 | Sequential treatment of paper mill effluent with modified Fenton oxidation and bioflocculation. <i>Environment, Development and Sustainability</i> , 2020, 22, 5425-5442. | 2.7 | 5 |
| 84 | Oxidative Degradation of Orange II Dye in Water with Raw and Acid-Treated ZnO, and MnO ₂ . <i>Clean - Soil, Air, Water</i> , 2013, 41, 984-991. | 0.7 | 4 |
| 85 | Dissolved trace metals in the shallow aquifers of the Jia Bharali River Basin, North Brahmaputra Plain. <i>Journal of the Geological Society of India</i> , 2013, 82, 162-168. | 0.5 | 4 |
| 86 | <i>Plumeria alba</i> (white frangipani) leaf powder as a biomass-based adsorbent for removal of methylene blue in water. <i>Separation Science and Technology</i> , 2022, 57, 2718-2734. | 1.3 | 4 |
| 87 | Interactions of Pb(II), Cd(II) and Cr(VI) with Neem (<i>Azadirachta indica</i>) leaf powder: kinetics and thermodynamics. <i>International Journal of Environment and Pollution</i> , 2008, 34, 374. | 0.2 | 3 |
| 88 | Adsorption of Cu(II) Ions onto a Cellulosic Biosorbent, <i>Azadirachta Indica</i> Leaf Powder: Application in Water Treatment. <i>Adsorption Science and Technology</i> , 2010, 28, 869-883. | 1.5 | 3 |
| 89 | Ecotoxicological risk assessment of trace metals in humid subtropical soil. <i>Ecotoxicology</i> , 2015, 24, 1858-1868. | 1.1 | 3 |
| 90 | Oil exploration activities: assessment of hazardous impacts on "Golden silk"™ cultivation. <i>Environmental Monitoring and Assessment</i> , 2017, 189, 62. | 1.3 | 3 |

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|-----|---|-----|-----------|
| 91 | Removal of fluoride from spiked water in the batch or static mode and also in the column or dynamic mode. <i>Desalination and Water Treatment</i> , 2016, 57, 19010-19024. | 1.0 | 2 |
| 92 | Sorption Dynamics and Process Development for Removal of Copper from Aqueous Solution Using a Biosorbent Based on Mango Tree Leaves. , 2011, , . | | 1 |
| 93 | Liquid Crystalline Behaviors of Polycholesterylmethacrylate and Poly(Cholesterylmethacrylate) Tj ETQq1 1 0.784314 rgBT /Overlock 10 52, 236-242. | 1.9 | 1 |
| 94 | Dissolved arsenic in the shallow alluvial aquifers in North Brahmaputra Plain, India: a case study in and around lower Jia Bharali River basin. <i>Applied Water Science</i> , 2017, 7, 2967-2974. | 2.8 | 1 |
| 95 | Hydrochemical and Multivariate Statistical Evaluation of Heavy Metals in Shallow Alluvial Aquifers of North Brahmaputra Plain, India. <i>Water Resources</i> , 2018, 45, 966-974. | 0.3 | 1 |
| 96 | Biosorption of Cd(II), Pb(II), and Ni(II) onMagnifera indicaLeaf Powder: An Equilibrium Study. , 2011, , . | | 0 |
| 97 | Biosorption of Acid Blue 25 onAzadirachta indica(NEEM) Leaf Powder. , 2011, , . | | 0 |
| 98 | Effects of a Giant Pulp and Paper Mill on the Pollutant Accumulating Capacity of the Soil with Special Reference to its Carbon Sequestering Potential. <i>Water, Air, and Soil Pollution</i> , 2015, 226, 1. | 1.1 | 0 |
| 99 | Shallow alluvial aquifers for drinking and agricultural purposes: a case study from Jia Bharali River Basin, North Brahmaputra Plain, India. <i>Sustainable Water Resources Management</i> , 2019, 5, 989-1007. | 1.0 | 0 |
| 100 | Wet Air Oxidation of Phenol on Oxides of Fe(III), Mn(IV), Ti(IV) and Goethite. <i>Current Catalysis</i> , 2022, 11, 71-81. | 0.5 | 0 |