## Didilia Ileana Mendoza Castillo

List of Publications by Year in descending order

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49 papers 2,106 citations

218592 26 h-index 254106 43 g-index

51 all docs

51 docs citations

51 times ranked

2155 citing authors

| #  | Article  | IF           | Citations |
|----|--|--------------|-----------|
| 1  | Competitive adsorption of dyes and heavy metals on zeolitic structures. Journal of Environmental Management, 2013, 116, 213-221.   | 3.8          | 202       |
| 2  | Adsorption Processes for Water Treatment and Purification., 2017,,.  |              | 159       |
| 3  | A novel route for preparation of chemically activated carbon from pistachio wood for highly efficient Pb(II) sorption. Journal of Environmental Management, 2019, 236, 34-44.  | 3.8          | 134       |
| 4  | Synthesis and adsorption properties of activated carbons from biomass of Prunus domestica and Jacaranda mimosifolia for the removal of heavy metals and dyes from water. Industrial Crops and Products, 2013, 42, 315-323.                         | 2.5          | 132       |
| 5  | Understanding the adsorption of Pb2+, Hg2+ and Zn2+ from aqueous solution on a lignocellulosic biomass char using advanced statistical physics models and density functional theory simulations. Chemical Engineering Journal, 2019, 365, 305-316. | 6.6          | 94        |
| 6  | Assessment of naproxen adsorption on bone char in aqueous solutions using batch and fixed-bed processes. Journal of Molecular Liquids, 2015, 209, 187-195.   | 2.3          | 88        |
| 7  | A new synthesis route for bone chars using CO2 atmosphere and their application as fluoride adsorbents. Microporous and Mesoporous Materials, 2015, 209, 38-44.  | 2.2          | 66        |
| 8  | Improving the Adsorption of Heavy Metals from Water Using Commercial Carbons Modified with Egg Shell Wastes. Industrial & Engineering Chemistry Research, 2011, 50, 9354-9362.   | 1.8          | 63        |
| 9  | Physico-chemical characterization of metal-doped bone chars and their adsorption behavior for water defluoridation. Applied Surface Science, 2015, 355, 748-760.   | 3.1          | 62        |
| 10 | Relevance of anionic dye properties on water decolorization performance using bone char:<br>Adsorption kinetics, isotherms and breakthrough curves. Journal of Molecular Liquids, 2016, 219, 425-434.  | 2.3          | 54        |
| 11 | Fluoride adsorption properties of cerium-containing bone char. Journal of Fluorine Chemistry, 2017, 197, 63-73.  | 0.9          | 54        |
| 12 | Synthesis and characterization of nanostructured calcium oxides supported onto biochar and their application as catalysts for biodiesel production. Renewable Energy, 2020, 160, 52-66.  | 4.3          | 53        |
| 13 | Role of the pericarp of Carya illinoinensis as biosorbent and as precursor of activated carbon for the removal of lead and acid blue 25 in aqueous solutions. Journal of Analytical and Applied Pyrolysis, 2011, 92, 143-151.                      | 2.6          | 51        |
| 14 | Breakthrough curve modeling of liquid-phase adsorption of fluoride ions on aluminum-doped bone char using micro-columns: Effectiveness of data fitting approaches. Journal of Molecular Liquids, 2015, 208, 114-121.                               | 2.3          | 50        |
| 15 | Valorization of agri-food industry wastes to prepare adsorbents for heavy metal removal from water.<br>Journal of Environmental Chemical Engineering, 2020, 8, 104067.   | 3 <b>.</b> 3 | 48        |
| 16 | A new statistical physics model for the ternary adsorption of Cu2+, Cd2+ and Zn2+ ions on bone char: Experimental investigation and simulations. Chemical Engineering Journal, 2018, 343, 544-553.   | 6.6          | 47        |
| 17 | Application of a heterogeneous physical model for the adsorption of Cd2+, Ni2+, Zn2+ and Cu2+ ions on flamboyant pods functionalized with citric acid. Chemical Engineering Journal, 2021, 417, 127975.  | 6.6          | 47        |
| 18 | Preparation of an avocado seed hydrochar and its application as heavy metal adsorbent: Properties and advanced statistical physics modeling. Chemical Engineering Journal, 2021, 419, 129472.  | 6.6          | 44        |

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|----|--|-------------|-----------|
| 19 | Tailoring the adsorption behavior of bone char for heavy metal removal from aqueous solution. Adsorption Science and Technology, 2016, 34, 368-387.  | 1.5         | 42        |
| 20 | Preparation of a new adsorbent for the removal of arsenic and its simulation with artificial neural network-based adsorption models. Journal of Environmental Chemical Engineering, 2020, 8, 103928.             | <b>3.</b> 3 | 42        |
| 21 | Antagonistic binary adsorption of heavy metals using stratified bone char columns. Journal of Molecular Liquids, 2017, 241, 334-346.   | 2.3         | 38        |
| 22 | A survey of multi-component sorption models for the competitive removal of heavy metal ions using bush mango and flamboyant biomasses. Journal of Molecular Liquids, 2016, 224, 1041-1054.                       | 2.3         | 37        |
| 23 | Sorption of heavy metal ions from aqueous solution using acid-treated avocado kernel seeds and its FTIR spectroscopy characterization. Journal of Molecular Liquids, 2016, 215, 555-564.                         | 2.3         | 37        |
| 24 | Insights and pitfalls of artificial neural network modeling of competitive multi-metallic adsorption data. Journal of Molecular Liquids, 2018, 251, 15-27.   | 2.3         | 33        |
| 25 | Water defluoridation with avocado-based adsorbents: Synthesis, physicochemical characterization and thermodynamic studies. Journal of Molecular Liquids, 2018, 254, 188-197.                                     | 2.3         | 31        |
| 26 | Artificial neural network-based surrogate modeling of multi-component dynamic adsorption of heavy metals with a biochar. Journal of Environmental Chemical Engineering, 2018, 6, 5389-5400.                      | 3.3         | 30        |
| 27 | Physicochemical analysis of multilayer adsorption mechanism of anionic dyes on lignocellulosic biomasses via statistical physics and density functional theory. Journal of Molecular Liquids, 2021, 322, 114511. | 2.3         | 29        |
| 28 | Fluoride adsorption from aqueous solution using a protonated clinoptilolite and its modeling with artificial neural network-based equations. Journal of Fluorine Chemistry, 2017, 204, 98-106.                   | 0.9         | 28        |
| 29 | Lanthanum- and cerium-based functionalization of chars and activated carbons for the adsorption of fluoride and arsenic ions. International Journal of Environmental Science and Technology, 2020, 17, 115-128.  | 1.8         | 26        |
| 30 | Chemical modification of Byrsonima crassifolia with citric acid for the competitive sorption of heavy metals from water. International Journal of Environmental Science and Technology, 2015, 12, 2867-2880.     | 1.8         | 25        |
| 31 | Neural Network Modeling of Heavy Metal Sorption on Lignocellulosic Biomasses: Effect of Metallic Ion Properties and Sorbent Characteristics. Industrial & Engineering Chemistry Research, 2015, 54, 443-453.     | 1.8         | 24        |
| 32 | Removal of heavy metals and arsenic from aqueous solution using textile wastes from denim industry. International Journal of Environmental Science and Technology, 2015, 12, 1657-1668.                          | 1.8         | 24        |
| 33 | Residual Mexican biomasses for bioenergy and fine chemical production: correlation between composition and specific applications. Biomass Conversion and Biorefinery, 2021, 11, 619-631.                         | 2.9         | 21        |
| 34 | Recycling of Tetra pak wastes via pyrolysis: Characterization of solid products and application of the resulting char in the adsorption of mercury from water. Journal of Cleaner Production, 2021, 291, 125219. | 4.6         | 21        |
| 35 | Physicochemical assessment of anionic dye adsorption on bone char using a multilayer statistical physics model. Environmental Science and Pollution Research, 2021, 28, 67248-67255.                             | 2.7         | 20        |
| 36 | Synthesis of denim waste-based adsorbents and their application in water defluoridation. Journal of Molecular Liquids, 2016, 221, 469-478.   | 2.3         | 18        |

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|----|---|-----|-----------|
| 37 | Preparation of a Hybrid Membrane from Whey Protein Fibrils and Activated Carbon to Remove Mercury and Chromium from Water. Membranes, 2020, 10, 386.  | 1.4 | 18        |
| 38 | Recovery of grape waste for the preparation of adsorbents for water treatment: Mercury removal. Journal of Environmental Chemical Engineering, 2020, 8, 103738.   | 3.3 | 17        |
| 39 | Adsorption in Water Treatment. , 2019, , .  |     | 16        |
| 40 | Kinetics, Thermodynamics, and Competitive Adsorption of Heavy Metals from Water Using Orange Biomass. Water Environment Research, 2018, 90, 2114-2125.  | 1.3 | 12        |
| 41 | On the importance of surface chemistry and composition of Bone char for the sorption of heavy metals from aqueous solution. Desalination and Water Treatment, 0, , 1-12.  | 1.0 | 11        |
| 42 | A Review of the Modeling of Adsorption of Organic and Inorganic Pollutants from Water Using Artificial Neural Networks. Adsorption Science and Technology, 2022, 2022, .  | 1.5 | 11        |
| 43 | Dynamic fuzzy neural network for simulating the fixed-bed adsorption of cadmium, nickel, and zinc on bone char. International Journal of Environmental Science and Technology, 2018, 15, 915-926.                                   | 1.8 | 7         |
| 44 | ADSORPTION OF DENTAL CLINIC POLLUTANTS USING BONE CHAR: ADSORBENT PREPARATION, ASSESSMENT AND MECHANISM ANALYSIS. Chemical Engineering Research and Design, 2022, , .   | 2.7 | 7         |
| 45 | A novel CO2 activation at room temperature to prepare an engineered lanthanum-based adsorbent for a sustainable arsenic removal from water. Chemical Engineering Research and Design, 2022, 185, 239-252.                           | 2.7 | 6         |
| 46 | Adsorption of zinc ions on bone char using helical coil-packed bed columns and its mass transfer modeling. Desalination and Water Treatment, 2016, 57, 24200-24209.   | 1.0 | 5         |
| 47 | Functionalization and activation of carbon-based catalysts with KOH and calcium and their application in transesterification to produce biodiesel: Optimization of catalytic properties and kinetic study. Fuel, 2022, 310, 122066. | 3.4 | 5         |
| 48 | Optimization of flamboyant-based catalysts functionalized with calcium for fatty acid methyl esters production via transesterification. Fuel, 2021, 302, 121125.  | 3.4 | 4         |
| 49 | Sustainable Downstream Separation of Itaconic Acid Using Carbon-Based Adsorbents. Adsorption Science and Technology, 2022, 2022, .  | 1.5 | 1         |