

Carlos Eduardo Borba

List of Publications by Year in descending order

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Version: 2024-02-01

60
papers

1,632
citations

331538

21
h-index

315616

38
g-index

60
all docs

60
docs citations

60
times ranked

1895
citing authors

#	ARTICLE	IF	CITATIONS
1	Adsorption of atrazine from aqueous systems on chemically activated biochar produced from corn straw. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 107039.	3.3	19
2	Tetracycline adsorption by tilapia fish bone-based biochar: Mass transfer assessment and fixed-bed data prediction by hybrid statistical-phenomenological modeling. <i>Journal of Cleaner Production</i> , 2021, 279, 123775.	4.6	33
3	Green synthesis of templated carbon porous materials from simple raw materials. <i>Materials Advances</i> , 2021, 2, 403-412.	2.6	7
4	Mathematical modeling of low-pressure H ₂ S adsorption by babassu biochar in fixed bed column. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105042.	3.3	10
5	Dibenzothiophene adsorption onto carbon-based adsorbent produced from the coconut shell: Effect of the functional groups density and textural properties on kinetics and equilibrium. <i>Fuel</i> , 2021, 292, 120354.	3.4	13
6	Effect of production temperature in biochar properties from bamboo culm and its influences on atrazine adsorption from aqueous systems. <i>Journal of Molecular Liquids</i> , 2021, 343, 117667.	2.3	37
7	Tilapia scales: characterization and study of Cu(II) removal by ion exchange with Ca(II). <i>Separation Science and Technology</i> , 2020, 55, 186-198.	1.3	4
8	Ciprofloxacin desorption from gel type ion exchange resin: Desorption modeling in batch system and fixed bed column. <i>Separation and Purification Technology</i> , 2020, 230, 115857.	3.9	24
9	Biosorption of direct black dye by cassava root husks: Kinetics, equilibrium, thermodynamics and mechanism assessment. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 103533.	3.3	28
10	Use of the β -Cyclodextrin Additive as a Good Alternative for the Substitution of Environmentally Harmful Additives in Industrial Dyeing Processes. <i>Fibers and Polymers</i> , 2020, 21, 1266-1274.	1.1	5
11	New insights into the improvement of electrocoagulation performance on the basis of a time-integrated performance index: The pivotal role of electrical conductivity. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 103902.	3.3	5
12	A mathematical approach based on the Nernst-Planck equation for the total electric voltage demanded by the electrocoagulation process: Effects of a time-dependent electrical conductivity. <i>Chemical Engineering Science</i> , 2020, 220, 115626.	1.9	8
13	Computational fluid dynamics applied for the improvement of a flat-plate photobioreactor towards high-density microalgae cultures. <i>Biochemical Engineering Journal</i> , 2019, 151, 107257.	1.8	16
14	Towards a design of a pressure swing adsorption unit for small scale biogas upgrading at. <i>Energy Procedia</i> , 2019, 158, 848-853.	1.8	19
15	Evaluation of simplified pressure swing adsorption cycles for bio-methane production. <i>Adsorption</i> , 2019, 25, 783-793.	1.4	22
16	Si-MCM-41 obtained from different sources of silica and its application as support for nickel catalysts used in dry reforming of methane. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 32003-32018.	3.8	32
17	Complex mathematical analysis of photobioreactor system. <i>Engineering in Life Sciences</i> , 2019, 19, 844-859.	2.0	12
18	Phosphorus adsorption in Fe-loaded activated carbon: Two-site monolayer equilibrium model and phenomenological kinetic description. <i>Chemical Engineering Journal</i> , 2019, 361, 751-763.	6.6	57

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19	Modified activated carbon as a promising adsorbent for quinoline removal. <i>Microporous and Mesoporous Materials</i> , 2019, 277, 208-216.	2.2	43
20	Evaluation of hybrid neutralization/biosorption process for zinc ions removal from automotive battery effluent by dolomite and fish scales. <i>Environmental Technology (United Kingdom)</i> , 2019, 40, 2373-2388.	1.2	11
21	A comprehensive evaluation of heavy metals removal from battery industry wastewaters by applying bio-residue, mineral and commercial adsorbent materials. <i>Journal of Materials Science</i> , 2018, 53, 7976-7995.	1.7	28
22	Desirability function applied to the optimization of the Photoperoxi-Electrocoagulation process conditions in the treatment of tannery industrial wastewater. <i>Journal of Water Process Engineering</i> , 2018, 23, 207-216.	2.6	21
23	Hydrolysis of crambe oil by enzymatic catalysis: An evaluation of the operational conditions. <i>Biocatalysis and Biotransformation</i> , 2018, 36, 422-435.	1.1	2
24	Phenomenological modeling of reactive dye adsorption onto fish scales surface in the presence of electrolyte and surfactant mixtures. <i>Environmental Technology (United Kingdom)</i> , 2018, 39, 2467-2483.	1.2	16
25	Methane storage in activated carbon at low pressure under different temperatures and flow rates of charge. <i>Journal of Cleaner Production</i> , 2018, 172, 921-926.	4.6	26
26	Oil Extraction from <i>Rana catesbeiana</i> by Supercritical Carbon Dioxide and Mechanical Pressing. <i>JAOCs, Journal of the American Oil Chemists' Society</i> , 2018, 95, 1575-1585.	0.8	1
27	Armazenamento de metano à pressão reduzida em carvão ativado sob diferentes condições de temperatura e vazão de carga. <i>Revista Materia</i> , 2018, 22, .	0.1	0
28	Pressure Swing Adsorption for Biogas Upgrading with Carbon Molecular Sieve. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 8057-8067.	1.8	68
29	Efficiency maximization of fixed-bed adsorption by applying hybrid statistical-phenomenological modeling. <i>Separation and Purification Technology</i> , 2018, 207, 477-488.	3.9	23
30	Multi-component mathematical model based on mass transfer coefficients for prediction of the Zn and Cd ions biosorption data by <i>E. densa</i> in a continuous system. <i>Journal of Environmental Chemical Engineering</i> , 2018, 6, 5141-5149.	3.3	9
31	Use of castor bean seeds as lipase source for hydrolysis of crambe oil. <i>Industrial Crops and Products</i> , 2018, 124, 254-264.	2.5	14
32	Kinetic, equilibrium and thermodynamic phenomenological modeling of reactive dye adsorption onto polymeric adsorbent. <i>Chemical Engineering Journal</i> , 2017, 307, 466-475.	6.6	159
33	Potential of <i>Salvinia auriculata</i> biomass as biosorbent of the Cr(III): directed chemical treatment, modeling and sorption mechanism study. <i>Environmental Technology (United Kingdom)</i> , 2017, 38, 1474-1488.	1.2	9
34	A systems approach for CO ₂ fixation from flue gas by microalgae—Theory review. <i>Process Biochemistry</i> , 2016, 51, 1817-1832.	1.8	45
35	Optimization of multiple-effect evaporation in the pulp and paper industry using response surface methodology. <i>Applied Thermal Engineering</i> , 2016, 95, 18-23.	3.0	27
36	Monolayer and multilayer adsorption phenomenological model: Kinetics, equilibrium and thermodynamics. <i>Chemical Engineering Journal</i> , 2016, 284, 1328-1341.	6.6	136

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37	ADSORPTION OF THE DYE REACTIVE BLUE 5G IN RETORTED SHALE. Brazilian Journal of Chemical Engineering, 2015, 32, 269-281.	0.7	6
38	Assessment of the banana pseudostem as a low-cost biosorbent for the removal of reactive blue 5G dye. Environmental Technology (United Kingdom), 2015, 36, 2892-2902.	1.2	27
39	Characterization of Oreochromis niloticus fish scales and assessment of their potential on the adsorption of reactive blue 5G dye. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 482, 693-701.	2.3	59
40	Prediction of ion exchange equilibrium of Cu^{2+} - Na^{+} - Zn^{2+} ternary system using artificial neural networks. Adsorption, 2015, 21, 17-23.	1.4	1
41	AVALIAÇÃO DO EFEITO DA TEMPERATURA, PH E GRANULOMETRIA DO ADSORVENTE NA ADSORÇÃO DO CORANTE AZUL REATIVO 5G. Engevista, 2015, 17, 59.	0.1	6
42	Determination of the mass transfer limiting step of dye adsorption onto commercial adsorbent by using mathematical models. Environmental Technology (United Kingdom), 2014, 35, 2356-2364.	1.2	50
43	Nickel(II) and zinc(II) removal using Amberlite IR-120 resin: Ion exchange equilibrium and kinetics. Chemical Engineering Journal, 2013, 221, 426-435.	6.6	59
44	Thin and thick target PIXE analyses to assess the mechanism of Cu^{2+} removal by Egeria densa. Applied Radiation and Isotopes, 2013, 82, 1-6.	0.7	4
45	Assessment of metal sorption mechanisms by aquatic macrophytes using PIXE analysis. Journal of Hazardous Materials, 2013, 261, 148-154.	6.5	10
46	Comparison of Phenomenological and Hybrid Models in the Description of the Ion Exchange Process in a Fixed-Bed Column. Separation Science and Technology, 2013, 48, 1102-1110.	1.3	2
47	Remoção dos metais pesados Cd(II), Cu(II) e Zn(II) pelo processo de biossorção utilizando a macrofito Eichhornia crassipes. Revista Escola De Minas, 2013, 66, 355-362.	0.1	10
48	Optimization of the Iron Electro-Coagulation Process of Cr, Ni, Cu, and Zn Galvanization By-Products by Using Response Surface Methodology. Separation Science and Technology, 2012, 47, 688-699.	1.3	19
49	Mathematical modeling of a ternary Cu^{2+} - Zn^{2+} - Na^{+} ion exchange system in a fixed-bed column using Amberlite IR 120. Chemical Engineering Journal, 2012, 189-190, 49-56.	6.6	15
50	Mass Transfer Mechanism of Ion Exchange in Fixed Bed Columns. Journal of Chemical & Engineering Data, 2011, 56, 375-382.	1.0	20
51	Adsorption of Zn(II) and Cd(II) ions in batch system by using the Eichhornia crassipes. Water Science and Technology, 2011, 64, 1857-1863.	1.2	10
52	Application of the mass action law to describe ion exchange equilibrium in a fixed-bed column. Chemical Engineering Journal, 2011, 172, 312-320.	6.6	31
53	UTILIZAÇÃO DA MACROFITO EGERIA Densa NA BIOSORÇÃO DO CORANTE REATIVO 5G. Engevista, 2011, 13, 0.1		6
54	Copper Biosorption by Biomass of Marine Alga: Study of Equilibrium and Kinetics in Batch System and Adsorption/Desorption Cycles in Fixed Bed Column. Water, Air, and Soil Pollution, 2010, 213, 15-26.	1.1	18

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55	Evaluation of trace element levels in muscles, liver and gonad of fish species from São Francisco River of the Paraná Brazilian state by using SR-TXRF technique. Applied Radiation and Isotopes, 2010, 68, 2202-2207.	0.7	19
56	Ion Exchange Equilibrium Prediction for the System $Cu^{2+}/Zn^{2+}/Na^{+}$. Journal of Chemical & Engineering Data, 2010, 55, 1333-1341.	1.0	15
57	Prediction of the copper (II) ions dynamic removal from a medium by using mathematical models with analytical solution. Journal of Hazardous Materials, 2008, 152, 366-372.	6.5	54
58	Removal of nickel(II) ions from aqueous solution by biosorption in a fixed bed column: Experimental and theoretical breakthrough curves. Biochemical Engineering Journal, 2006, 30, 184-191.	1.8	202
59	Biosorption of the reactive blue 5G dye in a fixed bed column packed with orange bagasse: experimental and mathematical modelling. Separation Science and Technology, 0, , 150527095459001.	1.3	0
60	ESTUDO DA CINETICA E DO EQUILÍBRIO DE ADSORÇÃO DO CORANTE AZUL REATIVO 5G UTILIZANDO ESCAMA DE PEIXE COMO ADSORVENTE. , 0, , .		0