Andrea M Bernardes

List of Publications by Year in descending order

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146 papers 6,366 citations

57631 44 h-index 74 g-index

153 all docs

153 docs citations

153 times ranked 5683 citing authors

#	Article	IF	CITATIONS
1	Recycling of batteries: a review of current processes and technologies. Journal of Power Sources, 2004, 130, 291-298.	4.0	475
2	Utilization of magnetic and electrostatic separation in the recycling of printed circuit boards scrap. Waste Management, 2005, 25, 67-74.	3.7	252
3	Recovery of copper from printed circuit boards scraps by mechanical processing and electrometallurgy. Journal of Hazardous Materials, 2006, 137, 1704-1709.	6.5	250
4	An overview on the current processes for the recycling of batteries. Journal of Power Sources, 2004, 135, 311-319.	4.0	234
5	A Lean & Green Model for a production cell. Journal of Cleaner Production, 2014, 85, 19-30.	4.6	225
6	Evaluation of gold and silver leaching from printed circuit board of cellphones. Waste Management, 2014, 34, 475-482.	3.7	165
7	Printed wiring boards for mobile phones: Characterization and recycling of copper. Waste Management, 2011, 31, 2536-2545.	3.7	160
8	Collection and recycling of electronic scrap: A worldwide overview and comparison with the Brazilian situation. Waste Management, 2012, 32, 1592-1610.	3.7	148
9	Recycling WEEE: Extraction and concentration of silver from waste crystalline silicon photovoltaic modules. Waste Management, 2016, 57, 220-225.	3.7	148
10	Hydrometallurgical processing of carbon steel EAF dust. Journal of Hazardous Materials, 2006, 135, 311-318.	6.5	134
11	Recovery of nickel and water from nickel electroplating wastewater by electrodialysis. Separation and Purification Technology, 2014, 129, 106-112.	3.9	124
12	Cadmium electroplating wastewater treatment using a laboratory-scale electrodialysis system. Separation and Purification Technology, 2004, 37, 247-255.	3.9	119
13	Water recovery from acid mine drainage by electrodialysis. Minerals Engineering, 2013, 40, 82-89.	1.8	119
14	Environmental and technical aspects of the utilisation of tannery sludge as a raw material for clay products. Journal of the European Ceramic Society, 2002, 22, 2251-2259.	2.8	113
15	Sulfuric acid recovery from acid mine drainage by means of electrodialysis. Desalination, 2014, 343, 120-127.	4.0	105
16	lon transport through homogeneous and heterogeneous ion-exchange membranes in single salt and multicomponent electrolyte solutions. Journal of Membrane Science, 2014, 466, 45-57.	4.1	102
17	Spent NiMH batteriesâ€"The role of selective precipitation in the recovery of valuable metals. Journal of Power Sources, 2009, 193, 914-923.	4.0	99
18	A critical review on SARS-CoV-2 infectivity in water and wastewater. What do we know?. Science of the Total Environment, 2021, 774, 145721.	3.9	97

#	Article	IF	CITATIONS
19	Using mechanical processing in recycling printed wiring boards. Jom, 2002, 54, 45-47.	0.9	86
20	Application of photoelectrochemical–electrodialysis treatment for the recovery and reuse of water from tannery effluents. Journal of Cleaner Production, 2008, 16, 605-611.	4.6	84
21	Degradation of the commercial surfactant nonylphenol ethoxylate by advanced oxidation processes. Journal of Hazardous Materials, 2015, 282, 241-248.	6.5	83
22	Waste electric and electronic equipment (WEEE) management: A study on the Brazilian recycling routes. Journal of Cleaner Production, 2018, 174, 7-16.	4.6	81
23	Waste electrical and electronic equipment (WEEE) management: An analysis on the australian e-waste recycling scheme. Journal of Cleaner Production, 2018, 197, 750-764.	4.6	79
24	Phosphorus recovery from low phosphate-containing solution by electrodialysis. Journal of Membrane Science, 2019, 573, 293-300.	4.1	67
25	Nanofiltration for the removal of norfloxacin from pharmaceutical effluent. Journal of Environmental Chemical Engineering, 2018, 6, 6147-6153.	3.3	66
26	Constructed floating wetland for the treatment of domestic sewage: A real-scale study. Journal of Environmental Chemical Engineering, 2018, 6, 5706-5711.	3.3	65
27	Spent NiMH batteries: Characterization and metal recovery through mechanical processing. Journal of Power Sources, 2006, 160, 1465-1470.	4.0	63
28	The effect of sanitary landfill leachate aging on the biological treatment and assessment of photoelectrooxidation as a pre-treatment process. Waste Management, 2015, 36, 177-183.	3.7	63
29	Microfiltration for the recovery of polyphenols from winery effluents. Separation and Purification Technology, 2015, 143, 12-18.	3.9	61
30	Sodium isopropyl xanthate degradation by advanced oxidation processes. Minerals Engineering, 2013, 45, 88-93.	1.8	59
31	Sequential pressure-driven membrane operations to recover and fractionate polyphenols and polysaccharides from second racking wine lees. Separation and Purification Technology, 2017, 173, 49-54.	3.9	59
32	Collection and recycling of portable batteries: a worldwide overview compared to the Brazilian situation. Journal of Power Sources, 2003, 124, 586-592.	4.0	54
33	Using p-Si/BDD anode for the electrochemical oxidation of norfloxacin. Journal of Electroanalytical Chemistry, 2019, 832, 112-120.	1.9	54
34	Ensuring best E-waste recycling practices in developed countries: An Australian example. Journal of Cleaner Production, 2019, 209, 846-854.	4.6	54
35	Recycling Waste Crystalline Silicon Photovoltaic Modules by Electrostatic Separation. Journal of Sustainable Metallurgy, 2018, 4, 176-186.	1.1	52
36	Pressure-driven membrane processes for the recovery of antioxidant compounds from winery effluents. Journal of Cleaner Production, 2017, 155, 172-178.	4.6	51

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37	Beneficiation of cobalt, copper and aluminum from wasted lithium-ion batteries by mechanical processing. International Journal of Mineral Processing, 2015, 145, 77-82.	2.6	50
38	Galvanic sludge metals recovery by pyrometallurgical and hydrometallurgical treatment. Journal of Hazardous Materials, 2006, 131, 210-216.	6.5	48
39	Toxicity elimination of landfill leachate by hybrid processing of advanced oxidation process and adsorption. Environmental Technology and Innovation, 2017, 8, 246-255.	3.0	47
40	Ecoâ€Friendly Electronics—A Comprehensive Review. Advanced Materials Technologies, 2022, 7, 2001263.	3.0	47
41	Concentration Polarization in Ultrafiltration/Nanofiltration for the Recovery of Polyphenols from Winery Wastewaters. Membranes, 2018, 8, 46.	1.4	46
42	The role of the anode material and water matrix in the electrochemical oxidation of norfloxacin. Chemosphere, 2018, 210, 615-623.	4.2	46
43	Development of polyurethane/polyaniline membranes for zinc recovery through electrodialysis. Desalination, 2005, 186, 199-206.	4.0	45
44	Closing the loop in the electroplating industry by electrodialysis. Journal of Cleaner Production, 2017, 155, 130-138.	4.6	45
45	Removal of cadmium and cyanide from aqueous solutions through electrodialysis. Journal of the Brazilian Chemical Society, 2003, 14, 610-615.	0.6	44
46	Nanofiltration for the Recovery of Low Molecular Weight Polysaccharides and Polyphenols from Winery Effluents. Separation Science and Technology, 2013, 48, 2524-2530.	1.3	44
47	Nitrate reduction of brines from water desalination plants by membrane electrolysis. Journal of Membrane Science, 2014, 451, 276-284.	4.1	42
48	Treatment of wastewaters from cyanide-free plating process by electrodialysis. Journal of Cleaner Production, 2015, 91, 241-250.	4.6	42
49	Advanced Electrochemical Oxidation Processes in the Treatment of Pharmaceutical Containing Water and Wastewater: a Review. Current Pollution Reports, 2021, 7, 146-159.	3.1	41
50	Evaluation of transition metals transport properties through a cation-exchange membrane by chronopotentiometry. Journal of Membrane Science, 2006, 284, 267-275.	4.1	40
51	Preparation and physical characterization of a sulfonated poly(styrene-co-divinylbenzene) and polypyrrole composite membrane. Materials Chemistry and Physics, 2001, 71, 131-136.	2.0	39
52	High-impact polystyrene/polyaniline membranes for acid solution treatment by electrodialysis: Preparation, evaluation, and chemical calculation. Journal of Colloid and Interface Science, 2008, 320, 52-61.	5.0	39
53	Electrochemical advanced oxidation of Atenolol at Nb/BDD thin film anode. Journal of Electroanalytical Chemistry, 2019, 844, 27-33.	1.9	39
54	Production of materials with alumina and ashes from incineration of chromium tanned leather shavings: Environmental and technical aspects. Journal of Hazardous Materials, 2006, 137, 1156-1164.	6. 5	38

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55	Increasing water recovery rate of membrane hybrid process on the petrochemical wastewater treatment. Chemical Engineering Research and Design, 2018, 117, 152-158.	2.7	38
56	Electrodialysis for the tertiary treatment of municipal wastewater: Efficiency of ion removal and ageing of ion exchange membranes. Journal of Environmental Chemical Engineering, 2018, 6, 5855-5869.	3.3	38
57	Ultrafiltration Based Process for the Recovery of Polysaccharides and Polyphenols from Winery Effluents. Separation Science and Technology, 2013, 48, 438-444.	1.3	37
58	Characterisation of electric arc furnace dust generated during plain carbon steel production. Ironmaking and Steelmaking, 2008, 35, 315-320.	1.1	35
59	Vitrification: An alternative to minimize environmental impact caused by leather industry wastes. Journal of Hazardous Materials, 2009, 165, 604-611.	6.5	35
60	Brazilian policy on battery disposal and its practical effects on battery recycling. Journal of Power Sources, 2004, 137, 134-139.	4.0	34
61	Influence of ligand exchange on the treatment of trivalent chromium solutions by electrodialysis. Electrochimica Acta, 2001, 47, 753-758.	2.6	33
62	Evaluation of the electrodialysis process for the treatment of metal finishing wastewater. Journal of the Brazilian Chemical Society, 2002, 13, 540-547.	0.6	32
63	Nanofiltration for the treatment of coke plant ammoniacal wastewaters. Separation and Purification Technology, 2011, 76, 303-307.	3.9	30
64	Investigation of ion-exchange membranes by means of chronopotentiometry: A comprehensive review on this highly informative and multipurpose technique. Advances in Colloid and Interface Science, 2021, 293, 102439.	7.0	30
65	Evaluation of environmental compatibility of EAFD using different leaching standards. Journal of Hazardous Materials, 2009, 166, 670-675.	6.5	29
66	Recovery of Nickel and Cobalt from Spent NiMH Batteries by Electrowinning. Chemical Engineering and Technology, 2012, 35, 2084-2092.	0.9	28
67	Treatment of molybdate solutions by electrodialysis: The effect of pH and current density on ions transport behavior. Separation and Purification Technology, 2016, 167, 32-36.	3.9	28
68	Controlled deposition of Pd and In on carbon fibers by sequential electroless plating for the catalytic reduction of nitrate in water. Catalysis Communications, 2016, 78, 59-63.	1.6	28
69	TiO2 thick films supported on stainless steel foams and their photoactivity in the nonylphenol ethoxylate mineralization. Chemical Engineering Journal, 2016, 283, 1264-1272.	6.6	28
70	Characterization and recovery of polymers from mobile phone scrap. Waste Management and Research, 2011, 29, 714-726.	2.2	27
71	Degradation and mineralization of erythromycin by heterogeneous photocatalysis using SnO2-doped TiO2 structured catalysts: Activity and stability. Chemosphere, 2021, 268, 128858.	4.2	27
72	Electrochemistry as a clean technology for the treatment of effluents: The application of electrodialysis. Metal Finishing, 2000, 98, 52-114.	0.1	26

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73	Electrodialysis applied to the treatment of an university sewage for water recovery. Journal of Environmental Chemical Engineering, 2019, 7, 102982.	3.3	26
74	Purification of spent chromium bath by membrane electrolysis. Journal of Hazardous Materials, 2008, 152, 960-967.	6.5	25
75	Parâmetros operacionais na remoção biológica de nitrogênio de águas por nitrificação e desnitrificação simultânea. Engenharia Sanitaria E Ambiental, 2016, 21, 29-42.	0.1	23
76	Metals recovery from galvanic sludge by sulfate roasting and thiosulfate leaching. Minerals Engineering, 2014, 60, 1-7.	1.8	22
77	Evaluation of changes on ion-selective membranes in contact with zinc-cyanide complexes. Journal of Membrane Science, 2006, 279, 140-147.	4.1	20
78	Treatment of solutions containing nonylphenol ethoxylate by photoelectrooxidation. Chemosphere, 2015, 119, S101-S108.	4.2	20
79	Chemical Composition Data of the Main Stages of Copper Production from Sulfide Minerals in Chile: A Review to Assist Circular Economy Studies. Minerals (Basel, Switzerland), 2022, 12, 250.	0.8	20
80	Integration of membrane bioreactor and advanced oxidation processes for water recovery in leather industry. Desalination and Water Treatment, 2015, 56, 1712-1721.	1.0	19
81	Experimental Design as a Tool for Optimizing and Predicting the Nanofiltration Performance by Treating Antibiotic-Containing Wastewater. Membranes, 2020, 10, 156.	1.4	19
82	Chronopotentiometric study on the effect of boric acid in the nickel transport properties through a cation-exchange membrane. Desalination, 2009, 249, 348-352.	4.0	18
83	CURRENT-VOLTAGE CURVES FOR TREATING EFFLUENT CONTAINING HEDP: DETERMINATION OF THE LIMITING CURRENT. Brazilian Journal of Chemical Engineering, 2015, 32, 831-836.	0.7	18
84	Electronic Waste: Generation and Management. Topics in Mining, Metallurgy and Materials Engineering, 2015, , 3-12.	1.4	18
85	Transport of zinc complexes through an anion exchange membrane. Desalination, 2008, 227, 241-252.	4.0	17
86	Chronopotentiometric study of the transport of phosphoric acid anions through an anion-exchange membrane under different pH values. Separation and Purification Technology, 2020, 238, 116421.	3.9	17
87	The effect of production method on the properties of high impact polystyrene and polyaniline membranes. Journal of Membrane Science, 2009, 330, 227-232.	4.1	16
88	Ultrafiltration/Nanofiltration for the Tertiary Treatment of Leather Industry Effluents. Environmental Science & Environmental	4.6	16
89	Coupling coagulation using tannin-based product with electrodialysis reversal to water treatment: A case study. Journal of Environmental Chemical Engineering, 2017, 5, 6008-6015.	3.3	16
90	Electrochemical enhanced photocatalysis to the 2,4,6 Tribromophenol flame retardant degradation. Journal of Catalysis, 2017, 351, 136-145.	3.1	15

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91	Influence of the co-ions on the transport of sulfate through anion exchange membranes. Journal of Membrane Science, 2017, 542, 320-328.	4.1	15
92	Comparison of different electrode materials for the nitrate electrocatalytic reduction in a dual-chamber cell. Journal of Environmental Chemical Engineering, 2020, 8, 104120.	3.3	15
93	Electrochemical nitrate reduction of brines: Improving selectivity to N2 by the use of Pd/activated carbon fiber catalyst. Chemosphere, 2021, 279, 130832.	4.2	15
94	Synthesis and characterization of TiO2 films onto AISI 304 metallic meshes and their application in the decomposition of the endocrine-disrupting alkylphenolic chemicals. Applied Surface Science, 2018, 457, 644-654.	3.1	14
95	Mineralization of erythromycin by UV-based and electro-oxidation processes. Journal of Water Process Engineering, 2020, 33, 101039.	2.6	14
96	Removal of anionic surfactants by nanofiltration. Desalination and Water Treatment, 2012, 44, 269-275.	1.0	13
97	Analysis of different current density conditions in the electrodialysis of zinc electroplating process solution. Separation Science and Technology, 2017, 52, 2079-2089.	1.3	13
98	Nitrate Reduction of Brines from Water Desalination Plants Employing a Low Metallic Charge Pd, In Catalyst and Formic Acid as Reducing Agent. Catalysis Letters, 2018, 148, 2572-2584.	1.4	13
99	Phytotoxicity and genotoxicity evaluation of 2,4,6-tribromophenol solution treated by UV-based oxidation processes. Environmental Pollution, 2019, 249, 354-361.	3.7	13
100	Characterization of an anion-exchange membrane subjected to phosphate and sulfate separation by electrodialysis at overlimiting current density condition. Journal of Membrane Science, 2021, 635, 119510.	4.1	13
101	Leaching of gold and silver from printed circuit board of mobile phones. Revista Escola De Minas, 2015, 68, 61-68.	0.1	12
102	Antibiotics mineralization by electrochemical and UV-based hybrid processes: evaluation of the synergistic effect. Environmental Technology (United Kingdom), 2019, 40, 3456-3466.	1.2	12
103	Wine lees from the 1st and 2nd rackings: valuable by-products. Journal of Food Science and Technology, 2019, 56, 1559-1566.	1.4	12
104	Atenolol removal by nanofiltration: a case-specific mass transfer correlation. Water Science and Technology, 2020, 81, 210-216.	1.2	12
105	What drives WEEE recycling? A comparative study concerning legislation, collection and recycling. Waste Management and Research, 2022, 40, 1527-1538.	2.2	12
106	Effect of operational parameters and Pd/In catalyst in the reduction of nitrate using copper electrode. Environmental Technology (United Kingdom), 2018, 39, 2835-2847.	1.2	11
107	Improving selectivity to dinitrogen using Palladium-Indium coated on activated carbon fibers: Preparation, characterization and application in water-phase nitrate reduction using formic acid as an alternative reductant source. Journal of Environmental Chemical Engineering, 2018, 6, 4764-4772.	3.3	11
108	Toxicity effects of nickel electroplating effluents treated by photoelectrooxidation in the industries of the Sinos River Basin. Brazilian Journal of Biology, 2015, 75, 17-24.	0.4	10

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109	Electrooxidation Using Nb/BDD as Post-Treatment of a Reverse Osmosis Concentrate in the Petrochemical Industry. International Journal of Environmental Research and Public Health, 2019, 16, 816.	1.2	10
110	Improved settings of a corona-electrostatic separator for copper concentration from waste printed circuit boards. Journal of Environmental Chemical Engineering, 2019, 7, 102896.	3.3	10
111	Membrane separation processes applied to the treatment of effluents from nanoceramic coating operations. Desalination and Water Treatment, 2015, 55, 28-38.	1.0	9
112	Evaluation of Neodymium and Praseodymium Leaching Efficiency from Post-consumer NdFeB Magnets. Journal of Sustainable Metallurgy, 2018, 4, 288-294.	1.1	9
113	Membrane Separation Process in Wastewater and Water Purification. Membranes, 2022, 12, 259.	1.4	9
114	The thermal treatment of galvanic sludges for environmental compatibility. Jom, 1996, 48, 59-62.	0.9	8
115	Electrodialysis in an Integrated NF/ED Process for Water Recovery in the Leather Industry. Separation Science and Technology, 2013, 48, 445-454.	1.3	8
116	The effect of the UV photon flux on the photoelectrocatalytic degradation of endocrine-disrupting alkylphenolic chemicals. Environmental Science and Pollution Research, 2016, 23, 19237-19245.	2.7	8
117	Study of the atenolol degradation using a Nb/BDD electrode in a filter-press reactor. Chemosphere, 2019, 236, 124318.	4.2	8
118	Superficial properties of activated carbon fiber catalysts produced by green synthesis and their application in water purification. Environmental Science and Pollution Research, 2020, 27, 40405-40420.	2.7	8
119	Synthesis and characterization of immobilized titanium-zirconium Sn-doped oxides onto metallic meshes and their photocatalytic activity for erythromycin mineralization. Chemical Engineering Journal, 2021, 414, 128891.	6.6	8
120	Degradation and inactivation of adenovirus in water by photo-electro-oxidation. Brazilian Journal of Biology, 2015, 75, 37-42.	0.4	7
121	EVALUATION OF DIRECT PHOTOLYSIS, ELECTROOXIDATION AND PHOTOELECTROOXIDATION FOR RHODAMINE-B DEGRADATION. Brazilian Journal of Chemical Engineering, 2018, 35, 957-968.	0.7	7
122	Use of a two-step process to denitrification of synthetic brines: electroreduction in a dual-chamber cell and catalytic reduction. Environmental Science and Pollution Research, 2020, 27, 1956-1968.	2.7	6
123	Mineralization of formic acid from catalytic nitrate reduction effluent by UV-based and electrochemical processes. Journal of Environmental Chemical Engineering, 2020, 8, 104127.	3.3	6
124	Degradation of carbendazim in aqueous solution by different settings of photochemical and electrochemical oxidation processes. Journal of Environmental Management, 2022, 310, 114805.	3.8	6
125	Electrostatic painting residues as an alternative raw material for red clay industry. Waste Management and Research, 2006, 24, 537-544.	2.2	5
126	Degradation of cyanotoxins (microcystin) in drinking water using photoelectrooxidation. Brazilian Journal of Biology, 2015, 75, 45-49.	0.4	5

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127	Carbon emissions and embodied energy as tools for evaluating environmental aspects of tap water and bottled water in Brazil. Desalination and Water Treatment, 2016, 57, 13020-13029.	1.0	5
128	Influence of rain events on the efficiency of a compact wastewater treatment plant: a case study on a university campus aiming water reuse for agriculture. Environmental Science and Pollution Research, 2020, 27, 41350-41360.	2.7	5
129	Membrane distillation treating a real petrochemical reverse osmosis concentrate: Influence of membrane characteristics on the process performance. Journal of Water Process Engineering, 2021, 39, 101722.	2.6	5
130	The Effect of pH on Atenolol/Nanofiltration Membranes Affinity. Membranes, 2021, 11, 689.	1.4	5
131	General Aspects of Membrane Separation Processes. , 2014, , 3-9.		4
132	Electrodialysis in Water Treatment. Topics in Mining, Metallurgy and Materials Engineering, 2014, , 63-75.	1.4	4
133	Sustainable Manufacturing: The Lean and Green Business Model. Measuring Operations Performance, 2015, , 131-161.	1.1	4
134	General Aspects of Electrodialysis. , 2014, , 11-23.		4
135	Removal of entrained organic matter in the copper electrolyte by ozonation. REM: International Engineering Journal, 2019, 72, 79-86.	0.2	3
136	Transport properties of tartrate ions through an anion-exchange membrane. Desalination, 2010, 263, 118-121.	4.0	2
137	Evaluation of Nanofiltration for the Treatment of Industrial Effluents Containing Anionic Surfactants. Procedia Engineering, 2012, 44, 1763-1764.	1.2	2
138	Electrodialysis Treatment of Nickel Wastewater. , 2014, , 133-144.		2
139	Removal of nitrates from copper-containing aqueous acidic leach solutions by electrodialysis. Mineral Processing and Extractive Metallurgy: Transactions of the Institute of Mining and Metallurgy, 2021, 130, 209-217.	0.1	2
140	UTILIZAÇÃO DE BIORREATOR À MEMBRANA PARA TRATAMENTO DE EFLUENTES. Holos, 0, 1, 13.	0.0	2
141	Tratamento de efluentes de eletrodeposição de nÃquel por fotoeletrooxidação. Revista Escola De Minas, 2012, 65, 349-356.	0.1	1
142	Electrochemical treatment of a graphitic forging lubricant effluent: The effect of chloride concentration and current density. Separation Science and Technology, 2016, 51, 126-134.	1.3	1
143	Membranes for Heavy Metals Removal. Environmental Chemistry for A Sustainable World, 2021, , 135-156.	0.3	1
144	Utilização de processos mecânicos e eletroquÃmicos para reciclagem de cobre de sucatas eletrônicas. Revista Escola De Minas, 2008, 61, 159-164.	0.1	0

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145	The role of pressure-driven membrane processes on the recovery of value-added compounds and valorization of lees and wastewaters in the wine industry. , 2022, , 305-326.		0
146	Evaluation of an electrochemical membrane reactor for the removal of \hat{l}^2 -blocker compound from water. Journal of Water Process Engineering, 2022, 47, 102830.	2.6	0