

Grzegorz Boczkaj

List of Publications by Year in descending order

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Version: 2024-02-01

111
papers

6,648
citations

76196

40
h-index

64668

79
g-index

112
all docs

112
docs citations

112
times ranked

4276
citing authors

#	ARTICLE	IF	CITATIONS
1	Deep eutectic solvents – A new platform in membrane fabrication and membrane-assisted technologies. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 106414.	3.3	26
2	Chitin and derivative chitosan-based structures – Preparation strategies aided by deep eutectic solvents: A review. <i>Carbohydrate Polymers</i> , 2022, 275, 118702.	5.1	123
3	Chemical analysis of low carbon content coals and their applications as dye adsorbent. <i>Chemosphere</i> , 2022, 287, 132286.	4.2	12
4	Characterization of diatomaceous earth coated with nitrated asphaltenes as superior adsorbent for removal of VOCs from gas phase in fixed bed column. <i>Chemical Engineering Journal</i> , 2022, 427, 130653.	6.6	13
5	Enhanced solar light photocatalytic performance of Fe-ZnO in the presence of H ₂ O ₂ , S ₂ O ₈ ²⁻ , and HSO ₅ ⁻ for degradation of chlorpyrifos from agricultural wastes: Toxicities investigation. <i>Chemosphere</i> , 2022, 287, 132331.	4.2	19
6	Advanced oxidation processes (AOPs) based wastewater treatment - unexpected nitration side reactions - a serious environmental issue: A review. <i>Chemical Engineering Journal</i> , 2022, 430, 133002.	6.6	237
7	Recent advances in hydrodynamic cavitation-based pretreatments of lignocellulosic biomass for valorization. <i>Bioresource Technology</i> , 2022, 345, 126251.	4.8	43
8	Towards azeotropic MeOH-MTBE separation using pervaporation chitosan-based deep eutectic solvent membranes. <i>Separation and Purification Technology</i> , 2022, 281, 119979.	3.9	69
9	Deep eutectic solvents microbial toxicity: Current state of art and critical evaluation of testing methods. <i>Journal of Hazardous Materials</i> , 2022, 425, 127963.	6.5	64
10	Synthesis of bimetallic Co-Pt/cellulose nanocomposites for catalytic reduction of p-nitrophenol. <i>Reaction Chemistry and Engineering</i> , 2022, 7, 641-652.	1.9	8
11	Synergistic effects of hybrid advanced oxidation processes (AOPs) based on hydrodynamic cavitation phenomenon – A review. <i>Chemical Engineering Journal</i> , 2022, 432, 134191.	6.6	117
12	Deep eutectic solvent (DES) with silver nanoparticles (Ag-NPs) based assay for analysis of lead (II) in edible oils. <i>Food Chemistry</i> , 2022, 379, 132085.	4.2	30
13	Selecting wells for an optimal design of groundwater monitoring network based on monitoring priority map: A Kish Island case study. <i>Water Resources and Industry</i> , 2022, 27, 100172.	1.9	7
14	Determination of phenylbutazone, sulfamethazine, carbendazim and linuron using a novel pine bark biosorbent for solid-phase extraction (SPE) with high-performance liquid chromatography (HPLC). <i>Instrumentation Science and Technology</i> , 2022, 50, 507-519.	0.9	5
15	Desulfurization of raw naphtha cuts using hybrid systems based on acoustic cavitation and advanced oxidation processes (AOPs). <i>Chemical Engineering Journal</i> , 2022, 439, 135354.	6.6	16
16	A comprehensive review on current and emerging technologies toward the valorization of bio-based wastes and by products from foods. <i>Comprehensive Reviews in Food Science and Food Safety</i> , 2022, 21, 46-105.	5.9	42
17	Cavitation-Based Processes for Water and Wastewater Treatment. <i>Handbook of Environmental Chemistry</i> , 2022, , 331-377.	0.2	1
18	Photolysis for the Removal and Transformation of Pesticide Residues During Food Processing: A State-of-the-Art Minireview. <i>Frontiers in Nutrition</i> , 2022, 9, .	1.6	5

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19	Metal-Organic Frameworks-Based Sensors for the Detection of Toxins in Food: A Critical Mini-Review on the Applications and Mechanisms. <i>Frontiers in Bioengineering and Biotechnology</i> , 2022, 10, .	2.0	2
20	Hybrid cross-linked chitosan/protonated-proline:glucose DES membranes with superior pervaporation performance for ethanol dehydration. <i>Journal of Molecular Liquids</i> , 2022, 360, 119499.	2.3	22
21	Microbial fuel cell applications for removal of petroleum hydrocarbon pollutants: A review. <i>Water Resources and Industry</i> , 2022, 28, 100178.	1.9	15
22	Degradation of tetracycline antibiotic utilizing light driven-activated oxone in the presence of g-C ₃ N ₄ /ZnFe LDH binary heterojunction nanocomposite. <i>Chemosphere</i> , 2022, 303, 135201.	4.2	8
23	Thermally activated persulfate-based Advanced Oxidation Processes – recent progress and challenges in mineralization of persistent organic chemicals: a review. <i>Current Opinion in Chemical Engineering</i> , 2022, 37, 100839.	3.8	25
24	Ultrasound-assisted deep eutectic solvent-based liquid-liquid microextraction for simultaneous determination of Ni (II) and Zn (II) in food samples. <i>Food Chemistry</i> , 2022, 393, 133384.	4.2	33
25	Cavitation based cleaner technologies for biodiesel production and processing of hydrocarbon streams: A perspective on key fundamentals, missing process data and economic feasibility – A review. <i>Ultrasonics Sonochemistry</i> , 2022, 88, 106081.	3.8	18
26	A natural deep eutectic solvent - protonated L-proline-xylitol - based stationary phase for gas chromatography. <i>Journal of Chromatography A</i> , 2022, 1676, 463238.	1.8	27
27	Cannabinoids: Challenges, opportunities and current techniques towards its extraction and purification for edibles. <i>Food Bioscience</i> , 2022, 49, 101835.	2.0	5
28	New Simple and Robust Method for Determination of Polarity of Deep Eutectic Solvents (DESs) by Means of Contact Angle Measurement. <i>Molecules</i> , 2022, 27, 4198.	1.7	6
29	Degradation of 1,4-dioxane by sono-activated persulfates for water and wastewater treatment applications. <i>Water Resources and Industry</i> , 2022, 28, 100183.	1.9	11
30	Preconcentration and Analytical Methods for Determination of Methyl Tert-Butyl Ether and Other Fuel Oxygenates and Their Degradation Products in Environment: A Review. <i>Critical Reviews in Analytical Chemistry</i> , 2021, 51, 1-27.	1.8	2
31	First deep eutectic solvent-based (DES) stationary phase for gas chromatography and future perspectives for DES application in separation techniques. <i>Journal of Chromatography A</i> , 2021, 1635, 461701.	1.8	53
32	Combination of hydrodynamic cavitation and SR-AOPs for simultaneous degradation of BTEX in water. <i>Chemical Engineering Journal</i> , 2021, 417, 128081.	6.6	86
33	Recent advancements in LC-MS based analysis of biotoxins: Present and future challenges. <i>Mass Spectrometry Reviews</i> , 2021, , .	2.8	14
34	Pervaporation Zeolite-Based Composite Membranes for Solvent Separations. <i>Molecules</i> , 2021, 26, 1242.	1.7	21
35	Effect of the cavitation generation unit structure on the performance of an advanced hydrodynamic cavitation reactor for process intensifications. <i>Chemical Engineering Journal</i> , 2021, 412, 128600.	6.6	92
36	Disinfection characteristics of an advanced rotational hydrodynamic cavitation reactor in pilot scale. <i>Ultrasonics Sonochemistry</i> , 2021, 73, 105543.	3.8	17

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37	Numerical investigation on distribution characteristics of oxidation air in a lime slurry desulfurization system with rotary jet agitators. <i>Chemical Engineering and Processing: Process Intensification</i> , 2021, 163, 108372.	1.8	6
38	S-scheme heterojunction Bi ₂ O ₃ -ZnO/Bentonite clay composite with enhanced photocatalytic performance. <i>Sustainable Energy Technologies and Assessments</i> , 2021, 45, 101194.	1.7	34
39	Evaluation and start-up of an electro-Fenton-sequencing batch reactor for dairy wastewater treatment. <i>Water Resources and Industry</i> , 2021, 25, 100149.	1.9	16
40	Deep eutectic solvents based assay for extraction and determination of zinc in fish and eel samples using FAAS. <i>Journal of Molecular Liquids</i> , 2021, 333, 115930.	2.3	50
41	Novel "acid tuned" deep eutectic solvents based on protonated L-proline. <i>Journal of Molecular Liquids</i> , 2021, 333, 115965.	2.3	25
42	Deep eutectic solvent based method for analysis of Niclosamide in pharmaceutical and wastewater samples "A green analytical chemistry approach. <i>Journal of Molecular Liquids</i> , 2021, 335, 116142.	2.3	36
43	Latest Insights on Novel Deep Eutectic Solvents (DES) for Sustainable Extraction of Phenolic Compounds from Natural Sources. <i>Molecules</i> , 2021, 26, 5037.	1.7	51
44	Ultrasound-assisted wet-impregnation of Ag-Co nanoparticles on cellulose nanofibers: Enhanced catalytic hydrogenation of 4-nitrophenol. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105719.	3.3	17
45	Multi-objective optimization of the cavitation generation unit structure of an advanced rotational hydrodynamic cavitation reactor. <i>Ultrasonics Sonochemistry</i> , 2021, 80, 105771.	3.8	35
46	Network design for surface water quality monitoring in a road construction project using Gamma Test theory. <i>Water Resources and Industry</i> , 2021, 26, 100162.	1.9	6
47	Enabling simultaneous redox transformation of toxic chromium(VI) and arsenic(III) in aqueous media "A review. <i>Journal of Hazardous Materials</i> , 2021, 417, 126041.	6.5	34
48	Novel strategies to enhance hydrodynamic cavitation in a circular venturi using RANS numerical simulations. <i>Water Research</i> , 2021, 204, 117559.	5.3	17
49	Hybrid metal and non-metal activation of Oxone by magnetite nanostructures co-immobilized with nano-carbon black to degrade tetracycline: Fenton and electrochemical enhancement with bio-assay. <i>Separation and Purification Technology</i> , 2021, 274, 119055.	3.9	12
50	A review on recent advances in the application of biosurfactants in wastewater treatment. <i>Sustainable Energy Technologies and Assessments</i> , 2021, 48, 101576.	1.7	19
51	Chromium-based metal organic framework for pipette tip micro-solid phase extraction: an effective approach for determination of methyl and propyl parabens in wastewater and shampoo samples. <i>BMC Chemistry</i> , 2021, 15, 60.	1.6	7
52	Application of cyanated asphaltenes in gas-phase adsorption processes for removal of volatile organic compounds. <i>Chemical Papers</i> , 2020, 74, 995-1008.	1.0	5
53	3D mesoporous γ -Co(OH) ₂ nanosheets electrodeposited on nickel foam: A new generation of macroscopic cobalt-based hybrid for peroxymonosulfate activation. <i>Chemical Engineering Journal</i> , 2020, 380, 122447.	6.6	127
54	Synergistic effect of TiO ₂ photocatalytic advanced oxidation processes in the treatment of refinery effluents. <i>Chemical Engineering Journal</i> , 2020, 391, 123488.	6.6	117

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55	Advanced oxidation processes for the treatment of contaminants of emerging concern. , 2020, , 299-365.		13
56	Synthesis of eosin modified TiO ₂ film with co-exposed {001} and {101} facets for photocatalytic degradation of para-aminobenzoic acid and solar H ₂ production. Applied Catalysis B: Environmental, 2020, 265, 118557.	10.8	106
57	Membrane technologies assisting plant-based and agro-food by-products processing: A comprehensive review. Trends in Food Science and Technology, 2020, 95, 219-232.	7.8	143
58	Determination of phenol biodegradation pathways in three psychrotolerant yeasts, <i>Candida subhashii</i> A011, <i>Candida oregonensis</i> B021 and <i>Schizoblastosporion starkeyi-henricii</i> L012, isolated from Rucianka peatland. Enzyme and Microbial Technology, 2020, 141, 109663.	1.6	21
59	Solvent dependency of carbon dioxide Henry's constant in aqueous solutions of choline chloride-ethylene glycol based deep eutectic solvent. Journal of Molecular Liquids, 2020, 319, 114173.	2.3	29
60	Activation of peroxymonosulfate using carbon black nano-spheres/calcium alginate hydrogel matrix for degradation of acetaminophen: Fe ₃ O ₄ co-immobilization and microbial community response. Journal of Industrial and Engineering Chemistry, 2020, 91, 240-251.	2.9	27
61	Bismuth-Doped Nano Zerovalent Iron: A Novel Catalyst for Chloramphenicol Degradation and Hydrogen Production. ACS Omega, 2020, 5, 30610-30624.	1.6	24
62	Ultrafast degradation of brilliant cresyl blue under hydrodynamic cavitation based advanced oxidation processes (AOPs). Water Resources and Industry, 2020, 24, 100134.	1.9	76
63	Carbon Nanomaterials From Metal-Organic Frameworks: A New Material Horizon for CO ₂ Reduction. Frontiers in Chemistry, 2020, 8, 573797.	1.8	17
64	Ultrasound-assisted heterogeneous activation of persulfate and peroxymonosulfate by asphaltenes for the degradation of BTEX in water. Journal of Hazardous Materials, 2020, 397, 122804.	6.5	154
65	Hierarchical MnO ₂ nanoflowers blooming on 3D nickel foam: A novel micro-macro catalyst for peroxymonosulfate activation. Journal of Colloid and Interface Science, 2020, 571, 142-154.	5.0	94
66	A comprehensive assessment of environmental pollution by means of heavy metal analysis for oysters' reefs at Hab River Delta, Balochistan, Pakistan. Marine Pollution Bulletin, 2020, 153, 110970.	2.3	31
67	Hydrodynamic cavitation based advanced oxidation processes: Studies on specific effects of inorganic acids on the degradation effectiveness of organic pollutants. Journal of Molecular Liquids, 2020, 307, 113002.	2.3	116
68	Techno-economic evaluation of a natural deep eutectic solvent-based biorefinery: Exploring different design scenarios. Biofuels, Bioproducts and Biorefining, 2020, 14, 746-763.	1.9	37
69	Stone cutting industry waste-supported zinc oxide nanostructures for ultrasonic assisted decomposition of an anti-inflammatory non-steroidal pharmaceutical compound. Ultrasonics Sonochemistry, 2019, 58, 104669.	3.8	47
70	Deep eutectic solvents based highly efficient extractive desulfurization of fuels "Eco-friendly approach. Journal of Molecular Liquids, 2019, 296, 111916.	2.3	98
71	Effective degradation of sulfide ions and organic sulfides in cavitation-based advanced oxidation processes (AOPs). Ultrasonics Sonochemistry, 2019, 58, 104610.	3.8	67
72	Highly effective asphaltene-derived adsorbents for gas phase removal of volatile organic compounds. Separation and Purification Technology, 2019, 224, 315-321.	3.9	23

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73	Integrated photocatalytic advanced oxidation system (TiO ₂ /UV/O ₃ /H ₂ O ₂) for degradation of volatile organic compounds. Separation and Purification Technology, 2019, 224, 1-14.	3.9	137
74	Sonocatalytic degradation of tetracycline antibiotic using zinc oxide nanostructures loaded on nano-cellulose from waste straw as nanosonocatalyst. Ultrasonics Sonochemistry, 2019, 55, 117-124.	3.8	141
75	Combination of air-dispersion cathode with sacrificial iron anode generating Fe ²⁺ +Fe ³⁺ +2O ₄ nanostructures to degrade paracetamol under ultrasonic irradiation. Journal of Molecular Liquids, 2019, 284, 536-546.	2.3	58
76	Methods of assaying volatile oxygenated organic compounds in effluent samples by gas chromatography – A review. Journal of Chromatography A, 2019, 1592, 143-160.	1.8	62
77	Pilot scale degradation study of 16 selected volatile organic compounds by hydroxyl and sulfate radical based advanced oxidation processes. Journal of Cleaner Production, 2019, 208, 54-64.	4.6	150
78	Method for the simultaneous determination of monoaromatic and polycyclic aromatic hydrocarbons in industrial effluents using dispersive liquid – liquid microextraction with gas chromatography – mass spectrometry. Journal of Separation Science, 2018, 41, 2360-2367.	1.3	37
79	An improved scalable method of isolating asphaltenes. Journal of Petroleum Science and Engineering, 2018, 167, 608-614.	2.1	21
80	Highly effective degradation of selected groups of organic compounds by cavitation based AOPs under basic pH conditions. Ultrasonics Sonochemistry, 2018, 45, 257-266.	3.8	84
81	Effective method of treatment of industrial effluents under basic pH conditions using acoustic cavitation – A comprehensive comparison with hydrodynamic cavitation processes. Chemical Engineering and Processing: Process Intensification, 2018, 128, 103-113.	1.8	85
82	Wastewater treatment by means of advanced oxidation processes based on cavitation – A review. Chemical Engineering Journal, 2018, 338, 599-627.	6.6	550
83	Sample preparation procedure using extraction and derivatization of carboxylic acids from aqueous samples by means of deep eutectic solvents for gas chromatographic-mass spectrometric analysis. Journal of Chromatography A, 2018, 1555, 10-19.	1.8	70
84	Comparison of Ozonation and Evaporation as Treatment Methods of Recycled Water for Bioethanol Fermentation Process. Waste and Biomass Valorization, 2018, 9, 1141-1149.	1.8	3
85	Effective method of treatment of effluents from production of bitumens under basic pH conditions using hydrodynamic cavitation aided by external oxidants. Ultrasonics Sonochemistry, 2018, 40, 969-979.	3.8	114
86	Treatment of bitumen post oxidative effluents by sulfate radicals based advanced oxidation processes (S-AOPs) under alkaline pH conditions. Journal of Cleaner Production, 2018, 195, 374-384.	4.6	157
87	Hydrophobic deep eutectic solvents as “green” extraction media for polycyclic aromatic hydrocarbons in aqueous samples. Journal of Chromatography A, 2018, 1570, 28-37.	1.8	240
88	Solar light driven degradation of norfloxacin using as-synthesized Bi ³⁺ and Fe ²⁺ co-doped ZnO with the addition of HSO ₅ ⁻ : Toxicities and degradation pathways investigation. Chemical Engineering Journal, 2018, 351, 841-855.	6.6	209
89	New procedure for the examination of the degradation of volatile organonitrogen compounds during the treatment of industrial effluents. Journal of Separation Science, 2017, 40, 1301-1309.	1.3	23
90	Studies on Treatment of Bitumen Effluents by Means of Advanced Oxidation Processes (AOPs) in Basic pH Conditions. Lecture Notes in Civil Engineering, 2017, , 331-336.	0.3	2

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91	Isolation and Characterization of Phenol-Degrading Psychrotolerant Yeasts. <i>Water, Air, and Soil Pollution</i> , 2017, 228, 210.	1.1	28
92	Wastewater treatment by means of advanced oxidation processes at basic pH conditions: A review. <i>Chemical Engineering Journal</i> , 2017, 320, 608-633.	6.6	838
93	Method for the determination of carboxylic acids in industrial effluents using dispersive liquid-liquid microextraction with injection port derivatization gas chromatography-mass spectrometry. <i>Journal of Chromatography A</i> , 2017, 1517, 26-34.	1.8	27
94	Study of Different Advanced Oxidation Processes for Wastewater Treatment from Petroleum Bitumen Production at Basic pH. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 8806-8814.	1.8	77
95	Studies of the separation performance of silanized silica gel for simulated distillation. <i>Journal of Separation Science</i> , 2016, 39, 748-755.	1.3	3
96	Application of dispersive liquid-liquid microextraction and gas chromatography with mass spectrometry for the determination of oxygenated volatile organic compounds in effluents from the production of petroleum bitumen. <i>Journal of Separation Science</i> , 2016, 39, 2604-2615.	1.3	41
97	New procedure for the control of the treatment of industrial effluents to remove volatile organosulfur compounds. <i>Journal of Separation Science</i> , 2016, 39, 3946-3956.	1.3	26
98	Study on a Polish peat bog "Rucianka" as a source of yeast strains capable of effective phenol biodegradation. <i>New Biotechnology</i> , 2016, 33, S143.	2.4	0
99	Novel stationary phases based on asphaltenes for gas chromatography. <i>Journal of Separation Science</i> , 2016, 39, 2527-2536.	1.3	19
100	Application of dynamic headspace and gas chromatography coupled to mass spectrometry (DHS-GC-MS) for the determination of oxygenated volatile organic compounds in refinery effluents. <i>Analytical Methods</i> , 2016, 8, 3570-3577.	1.3	39
101	Determination of modifier contents in polymer-modified bitumens and in samples collected from the roads using high-performance gel permeation/size-exclusion chromatography. <i>Road Materials and Pavement Design</i> , 2016, 17, 547-562.	2.0	17
102	Agregacja, koagulacja i wytrącanie sił™ asfaltu ze strumieni procesowych "przeł...d literatury. Tá;p Ch... Y Há»c Dá»± PhÁ²ng = <i>Journal of Preventive Medicine</i> , 2016, 72, 294-299.	0.0	1
103	Size-exclusion chromatography for the determination of the boiling point distribution of high-boiling petroleum fractions. <i>Journal of Separation Science</i> , 2015, 38, 741-748.	1.3	9
104	Investigation of volatile low molecular weight compounds formed during continuous reclaiming of ground tire rubber. <i>Polymer Degradation and Stability</i> , 2015, 119, 113-120.	2.7	77
105	New Procedures for Control of Industrial Effluents Treatment Processes. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 1503-1514.	1.8	38
106	Characteristics of volatile organic compounds emission profiles from hot road bitumens. <i>Chemosphere</i> , 2014, 107, 23-30.	4.2	93
107	Application of normal-phase high-performance liquid chromatography followed by gas chromatography for analytics of diesel fuel additives. <i>Analytical and Bioanalytical Chemistry</i> , 2013, 405, 6095-6103.	1.9	17
108	Research on the separation properties of empty-column gas chromatography (EC-GC) and conditions for simulated distillation (SIMDIS). <i>Analytical and Bioanalytical Chemistry</i> , 2013, 405, 8377-8382.	1.9	24

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109	A new procedure for the determination of distillation temperature distribution of high-boiling petroleum products and fractions. <i>Analytical and Bioanalytical Chemistry</i> , 2011, 399, 3253-3260.	1.9	27
110	Sample preparation procedure for the determination of polycyclic aromatic hydrocarbons in petroleum vacuum residue and bitumen. <i>Analytical and Bioanalytical Chemistry</i> , 2011, 401, 1059-1069.	1.9	38
111	Process Control and Investigation of Oxidation Kinetics of Postoxidative Effluents Using Gas Chromatography with Pulsed Flame Photometric Detection (GC-PFPD). <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 12654-12662.	1.8	34