

Stanisław Wacławek

List of Publications by Year in descending order

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88
papers

3,629
citations

172207
29
h-index

138251
58
g-index

89
all docs

89
docs citations

89
times ranked

3468
citing authors

#	ARTICLE	IF	CITATIONS
1	Chemistry of persulfates in water and wastewater treatment: A review. <i>Chemical Engineering Journal</i> , 2017, 330, 44-62.	6.6	1,320
2	Simple spectrophotometric determination of monopersulfate. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2015, 149, 928-933.	2.0	121
3	Limitations and prospects of sulfate-radical based advanced oxidation processes. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 103849.	3.3	116
4	Insights into paracetamol degradation in aqueous solutions by ultrasound-assisted heterogeneous electro-Fenton process: Key operating parameters, mineralization and toxicity assessment. <i>Separation and Purification Technology</i> , 2021, 266, 118533.	3.9	113
5	Tree gum-based renewable materials: Sustainable applications in nanotechnology, biomedical and environmental fields. <i>Biotechnology Advances</i> , 2018, 36, 1984-2016.	6.0	106
6	Electrochemical activation of peroxides for treatment of contaminated water with landfill leachate: Efficacy, toxicity and biodegradability evaluation. <i>Chemosphere</i> , 2021, 279, 130610.	4.2	95
7	Chemical oxidation and reduction of hexachlorocyclohexanes: A review. <i>Water Research</i> , 2019, 162, 302-319.	5.3	81
8	Chitosan/Gelatin/Silver Nanoparticles Composites Films for Biodegradable Food Packaging Applications. <i>Polymers</i> , 2021, 13, 1680.	2.0	77
9	Green Synthesis of High Temperature Stable Anatase Titanium Dioxide Nanoparticles Using Gum Kondagogu: Characterization and Solar Driven Photocatalytic Degradation of Organic Dye. <i>Nanomaterials</i> , 2018, 8, 1002.	1.9	68
10	Microscopic Techniques for the Analysis of Micro and Nanostructures of Biopolymers and Their Derivatives. <i>Polymers</i> , 2020, 12, 512.	2.0	59
11	Major Advances and Challenges in Heterogeneous Catalysis for Environmental Applications: A Review. <i>Ecological Chemistry and Engineering S</i> , 2018, 25, 9-34.	0.3	58
12	Electrospun fibers based on Arabic, karaya and kondagogu gums. <i>International Journal of Biological Macromolecules</i> , 2016, 91, 299-309.	3.6	54
13	A novel approach for simultaneous improvement of dewaterability, post-digestion liquor properties and toluene removal from anaerobically digested sludge. <i>Chemical Engineering Journal</i> , 2016, 291, 192-198.	6.6	51
14	Comparative investigation of acetaminophen degradation in aqueous solution by UV/Chlorine and UV/H ₂ O ₂ processes: Kinetics and toxicity assessment, process feasibility and products identification. <i>Chemosphere</i> , 2021, 285, 131455.	4.2	48
15	Advances in biogenically synthesized shaped metal- and carbon-based nanoarchitectures and their medicinal applications. <i>Advances in Colloid and Interface Science</i> , 2020, 283, 102236.	7.0	46
16	Remediation of hexachlorocyclohexanes by electrochemically activated persulfates. <i>Environmental Science and Pollution Research</i> , 2016, 23, 765-773.	2.7	44
17	Gum karaya (<i>Sterculia urens</i>) stabilized zero-valent iron nanoparticles: characterization and applications for the removal of chromium and volatile organic pollutants from water. <i>RSC Advances</i> , 2017, 7, 13997-14009.	1.7	44
18	Hierarchically Porous Bio-Based Sustainable Conjugate Sponge for Highly Selective Oil/Organic Solvent Absorption. <i>Advanced Functional Materials</i> , 2021, 31, 2100640.	7.8	43

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19	A poly(3-hydroxybutyrate)-chitosan polymer conjugate for the synthesis of safer gold nanoparticles and their applications. <i>Green Chemistry</i> , 2018, 20, 4975-4982.	4.6	40
20	Production of electrospun nanofibers based on graphene oxide/gum Arabic. <i>International Journal of Biological Macromolecules</i> , 2019, 124, 396-402.	3.6	40
21	Electrospun fibers based on carbohydrate gum polymers and their multifaceted applications. <i>Carbohydrate Polymers</i> , 2020, 247, 116705.	5.1	39
22	Eco-Friendly and Economic, Adsorptive Removal of Cationic and Anionic Dyes by Bio-Based Karaya Gum-Chitosan Sponge. <i>Polymers</i> , 2021, 13, 251.	2.0	38
23	Bioplastic Fibers from Gum Arabic for Greener Food Wrapping Applications. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 5900-5911.	3.2	37
24	Electrospun fibers based on botanical, seaweed, microbial, and animal sourced biomacromolecules and their multidimensional applications. <i>International Journal of Biological Macromolecules</i> , 2021, 171, 130-149.	3.6	35
25	Cinnamomum tamala Leaf Extract Stabilized Zinc Oxide Nanoparticles: A Promising Photocatalyst for Methylene Blue Degradation. <i>Nanomaterials</i> , 2021, 11, 1558.	1.9	34
26	Tree Gum-Graphene Oxide Nanocomposite Films as Gas Barriers. <i>ACS Applied Nano Materials</i> , 2020, 3, 633-640.	2.4	33
27	Recycling non-food-grade tree gum wastes into nanoporous carbon for sustainable energy harvesting. <i>Green Chemistry</i> , 2020, 22, 1198-1208.	4.6	33
28	Biomacromolecule assembly based on gum kondagogu-sodium alginate composites and their expediency in flexible packaging films. <i>International Journal of Biological Macromolecules</i> , 2021, 177, 526-534.	3.6	33
29	Green synthesis of gold nanoparticles using Artemisia dracunculus extract: control of the shape and size by varying synthesis conditions. <i>Environmental Science and Pollution Research</i> , 2018, 25, 24210-24219.	2.7	32
30	Disintegration of Wastewater Activated Sludge (WAS) for Improved Biogas Production. <i>Energies</i> , 2019, 12, 21.	1.6	31
31	Green Synthesis: Nanoparticles and Nanofibres Based on Tree Gums for Environmental Applications. <i>Ecological Chemistry and Engineering S</i> , 2016, 23, 533-557.	0.3	30
32	Sustainable and safer nanoclay composites for multifaceted applications. <i>Green Chemistry</i> , 2022, 24, 3081-3114.	4.6	28
33	Synthesis of Ag nanoparticles by a chitosan-poly(3-hydroxybutyrate) polymer conjugate and their superb catalytic activity. <i>Carbohydrate Polymers</i> , 2020, 232, 115806.	5.1	27
34	Surface modification of zero-valent iron nanoparticles with β -cyclodextrin for 4-nitrophenol conversion. <i>Journal of Colloid and Interface Science</i> , 2021, 586, 655-662.	5.0	26
35	Modification of nZVI with a bio-conjugate containing amine and carbonyl functional groups for catalytic activation of persulfate. <i>Separation and Purification Technology</i> , 2021, 257, 117880.	3.9	26
36	Enhanced degradation of sulfamethoxazole by a modified nano zero-valent iron with a β -cyclodextrin polymer: Mechanism and toxicity evaluation. <i>Science of the Total Environment</i> , 2022, 817, 152888.	3.9	26

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37	Remediation of hexachlorocyclohexanes by cobalt-mediated activation of peroxymonosulfate. <i>Desalination and Water Treatment</i> , 2016, 57, 26274-26279.	1.0	23
38	Alkenyl succinic anhydride modified tree-gum kondagogu: A bio-based material with potential for food packaging. <i>Carbohydrate Polymers</i> , 2021, 266, 118126.	5.1	22
39	Gum Kondagogu/Reduced Graphene Oxide Framed Platinum Nanoparticles and Their Catalytic Role. <i>Molecules</i> , 2019, 24, 3643.	1.7	21
40	Electrospun membrane composed of poly[acrylonitrile-co-(methyl acrylate)-co-(itaconic acid)] terpolymer and ZVI nanoparticles and its application for the removal of arsenic from water. <i>RSC Advances</i> , 2016, 6, 110288-110300.	1.7	20
41	UV-Catalyzed Persulfate Oxidation of an Anthraquinone Based Dye. <i>Catalysts</i> , 2020, 10, 456.	1.6	20
42	The impact of peroxydisulphate and peroxymonosulphate on disintegration and settleability of activated sludge. <i>Environmental Technology (United Kingdom)</i> , 2016, 37, 1296-1304.	1.2	19
43	The Impact of Oxone on Disintegration and Dewaterability of Waste Activated Sludge. <i>Water Environment Research</i> , 2016, 88, 152-157.	1.3	18
44	Laser-synthesized Ag/TiO nanoparticles to integrate catalytic pollutant degradation and antifouling enhancement in nanofibrous membranes for oil-water separation. <i>Applied Surface Science</i> , 2021, 564, 150471.	3.1	17
45	Do We Still Need a Laboratory to Study Advanced Oxidation Processes? A Review of the Modelling of Radical Reactions used for Water Treatment. <i>Ecological Chemistry and Engineering S</i> , 2021, 28, 11-28.	0.3	16
46	A comparative study of the degradation efficiency of chlorinated organic compounds by bimetallic zero-valent iron nanoparticles. <i>Environmental Science: Water Research and Technology</i> , 2021, 8, 162-172.	1.2	16
47	Making waves: Defining advanced reduction technologies from the perspective of water treatment. <i>Water Research</i> , 2022, 212, 118101.	5.3	16
48	Mesophilic-thermophilic fermentation process of waste activated sludge after hybrid disintegration. <i>Ecological Chemistry and Engineering S</i> , 2014, 21, 125-136.	0.3	15
49	Use of Various Zero Valent Irons for Degradation of Chlorinated Ethenes and Ethanes. <i>Ecological Chemistry and Engineering S</i> , 2015, 22, 577-587.	0.3	15
50	Chemical Degradation of PCDD/F in Contaminated Sediment. <i>Ecological Chemistry and Engineering S</i> , 2016, 23, 473-482.	0.3	15
51	Impact of peroxydisulphate on disintegration and sedimentation properties of municipal wastewater activated sludge. <i>Chemical Papers</i> , 2015, 69, .	1.0	14
52	Microwave-assisted sustainable co-digestion of sewage sludge and rapeseed cakes. <i>Energy Conversion and Management</i> , 2019, 199, 112012.	4.4	14
53	Stabilization of Iron (Micro)Particles with Polyhydroxybutyrate for In Situ Remediation Applications. <i>Applied Sciences (Switzerland)</i> , 2016, 6, 417.	1.3	13
54	PVDF nanofibrous membranes modified via laser-synthesized Ag nanoparticles for a cleaner oily water separation. <i>Applied Surface Science</i> , 2020, 526, 146575.	3.1	13

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55	Benchtop ¹⁹ F NMR spectroscopy as a practical tool for testing of remedial technologies for the degradation of perfluorooctanoic acid, a persistent organic pollutant. <i>Magnetic Resonance in Chemistry</i> , 2020, 58, 1160-1167.	1.1	13
56	Influence of catalyst zeta potential on the activation of persulfate. <i>Chemical Communications</i> , 2021, 57, 7814-7817.	2.2	13
57	Atmospheric Chemistry and Climate in the Anthropocene / Chemia Atmosferyczna i Klimat W Antropocenie. <i>Chemistry, Didactics, Ecology, Metrology</i> , 2014, 19, 9-28.	0.1	13
58	Impact of Alkalization of Surplus Activated Sludge on Biogas Production. <i>Ecological Chemistry and Engineering S</i> , 2013, 20, 343-351.	0.3	12
59	Laser-assisted synthesis of Fe-Cu oxide nanocrystals. <i>Applied Surface Science</i> , 2019, 469, 1007-1015.	3.1	11
60	TiO ₂ immobilised on biopolymer nanofibers for the removal of bisphenol A and diclofenac from water. <i>Ecological Chemistry and Engineering S</i> , 2017, 24, 417-429.	0.3	10
61	A new method for assessment of the sludge disintegration degree with the use of differential centrifugal sedimentation. <i>Environmental Technology (United Kingdom)</i> , 2019, 40, 3086-3093.	1.2	10
62	A Polymeric Composite Material (rGO/PANI) for Acid Blue 129 Adsorption. <i>Polymers</i> , 2020, 12, 1051.	2.0	10
63	Waste-activated sludge disruption by dry ice: bench scale study and evaluation of heat phase transformations. <i>Environmental Science and Pollution Research</i> , 2019, 26, 26488-26499.	2.7	9
64	The Use of a Biopolymer Conjugate for an Eco-Friendly One-Pot Synthesis of Palladium-Platinum Alloys. <i>Polymers</i> , 2019, 11, 1948.	2.0	9
65	Synergetic disintegration of waste activated sludge: improvement of the anaerobic digestion and hygienization of sludge. <i>Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering</i> , 2018, 53, 1067-1074.	0.9	8
66	The Application of Active Biomonitoring with the Use of Mosses to Identify Polycyclic Aromatic Hydrocarbons in an Atmospheric Aerosol. <i>Molecules</i> , 2021, 26, 7258.	1.7	8
67	Interfacial layer formation during high-temperature deposition of Sm-Co magnetic thin films on Si (100) substrates. <i>Intermetallics</i> , 2019, 106, 36-47.	1.8	7
68	Synthesis, Characterization and Physicochemical Properties of Biogenic Silver Nanoparticle-Encapsulated Chitosan Bionanocomposites. <i>Polymers</i> , 2022, 14, 463.	2.0	7
69	Selective spectrophotometric determination of peroxydisulfate based on a by-product formation. <i>Sensors and Actuators B: Chemical</i> , 2021, 344, 130214.	4.0	6
70	Development of ZnO Nanoflake Type Structures Using Silk Fibres as Template for Water Pollutants Remediation. <i>Polymers</i> , 2020, 12, 1151.	2.0	6
71	The Development and Challenges of Oxidative Abatement for Contaminants of Emerging Concern. , 2020, , 131-152.		5
72	Enhancement of stability and reactivity of nanosized zero-valent iron with polyhydroxybutyrate. , 0, 69, 302-307.		5

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73	Pd decorated Co@Ni nanowires as a highly efficient catalyst for direct ethanol fuel cells. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 41279-41293.	3.8	5
74	Dialdehyde Modified Tree Gum Karaya: A Sustainable Green Crosslinker for Gelatin-Based Edible Films. <i>Advanced Sustainable Systems</i> , 2022, 6, .	2.7	4
75	Improvement of the thermophilic anaerobic digestion and hygienisation of waste activated sludge by synergistic pretreatment. <i>Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering</i> , 2019, 54, 694-700.	0.9	3
76	Greener Catalysis for Environmental Applications. <i>Catalysts</i> , 2021, 11, 585.	1.6	3
77	Is Active Moss Biomonitoring Comparable to Air Filter Standard Sampling?. <i>International Journal of Environmental Research and Public Health</i> , 2022, 19, 4706.	1.2	3
78	SYNERGISTIC EFFECT OF NANO ZERO-VALENT IRON AND CYCLODEXTRINS: A NANO-STRUCTURE FOR WATER PURIFICATION. , 2020, , .		2
79	Chemical Oxidation of Polycyclic Aromatic Hydrocarbons in Water By Ferrates(VI). <i>Ecological Chemistry and Engineering S</i> , 2020, 27, 529-542.	0.3	2
80	Effect of CoSi ₂ interfacial layer on the magnetic properties of Si CoSi ₂ Sm-Co thin films. <i>Journal of Magnetism and Magnetic Materials</i> , 2020, 493, 165716.	1.0	1
81	Other Chemical Reductive Methods. <i>Applied Environmental Science and Engineering for A Sustainable Future</i> , 2020, , 53-64.	0.2	1
82	Radical Reactions and Their Application for Water Treatment. <i>Applied Environmental Science and Engineering for A Sustainable Future</i> , 2020, , 203-219.	0.2	1
83	Developing functional carbon nitride materials for efficient peroxydisulfate activation: From interface catalysis to irradiation synergy. , 2022, 1, 21-33.		1
84	Commemorative Issue in Honor of Professor Gerhard Ertl on the Occasion of His 85th Birthday. <i>Catalysts</i> , 2022, 12, 624.	1.6	1
85	Alkalization as a method of preliminary hydrolysis of waste activated sludge before the anaerobic digestion process. <i>Polish Journal of Materials and Environmental Engineering</i> , 0, 1(21), 16-26.	0.0	0
86	High Barrier, Biodegradable Nanocomposite Films Based on Clay-Coated and Chemically Modified Gum Kondagogu. <i>Macromolecular Materials and Engineering</i> , 0, , 2200008.	1.7	0
87	<i>Aegle marmelos</i> Leaf Extract Based Synthesis of Nanoiron and Nanoiron+Au Particles for Degradation of Methylene Blue. <i>Ecological Chemistry and Engineering S</i> , 2022, 29, 7-14.	0.3	0
88	Activation of Peroxydisulfate by Bimetallic Nano Zero-Valent Iron for Waste-Activated Sludge Disintegration. <i>Catalysts</i> , 2022, 12, 590.	1.6	0