

# Guanyi Chen

## List of Publications by Year in descending order

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123  
papers

4,987  
citations

81743

39  
h-index

106150

65  
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125  
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125  
docs citations

125  
times ranked

4513  
citing authors

#	ARTICLE	IF	CITATIONS
1	Remediation of antibiotic wastewater by coupled photocatalytic and persulfate oxidation system: A critical review. <i>Journal of Hazardous Materials</i> , 2021, 408, 124461.	6.5	246
2	Preparation and application of magnetic biochar in water treatment: A critical review. <i>Science of the Total Environment</i> , 2020, 711, 134847.	3.9	223
3	Contamination source apportionment and health risk assessment of heavy metals in soil around municipal solid waste incinerator: A case study in North China. <i>Science of the Total Environment</i> , 2018, 631-632, 348-357.	3.9	209
4	Correlation of Active Sites to Generated Reactive Species and Degradation Routes of Organics in Peroxymonosulfate Activation by Co-Loaded Carbon. <i>Environmental Science &amp; Technology</i> , 2021, 55, 16163-16174.	4.6	189
5	Ultrasonic-assisted production of biodiesel from transesterification of palm oil over ostrich eggshell-derived CaO catalysts. <i>Bioresource Technology</i> , 2014, 171, 428-432.	4.8	150
6	Environmental, energy, and economic analysis of integrated treatment of municipal solid waste and sewage sludge: A case study in China. <i>Science of the Total Environment</i> , 2019, 647, 1433-1443.	3.9	150
7	Catalytic membrane-based oxidation-filtration systems for organic wastewater purification: A review. <i>Journal of Hazardous Materials</i> , 2021, 414, 125478.	6.5	143
8	The fate of chlorine during MSW incineration: Vaporization, transformation, deposition, corrosion and remedies. <i>Progress in Energy and Combustion Science</i> , 2020, 76, 100789.	15.8	139
9	Chlorine characterization and thermal behavior in MSW and RDF. <i>Journal of Hazardous Materials</i> , 2010, 178, 489-498.	6.5	128
10	Performance of chemical chelating agent stabilization and cement solidification on heavy metals in MSWI fly ash: A comparative study. <i>Journal of Environmental Management</i> , 2019, 247, 169-177.	3.8	121
11	Biomass gasification-gas turbine combustion for power generation system model based on ASPEN PLUS. <i>Science of the Total Environment</i> , 2018, 628-629, 1278-1286.	3.9	107
12	Comparative investigation on catalytic ozonation of VOCs in different types over supported MnO catalysts. <i>Journal of Hazardous Materials</i> , 2020, 391, 122218.	6.5	106
13	Comparison of kinetic analysis methods in thermal decomposition of cattle manure by thermogravimetric analysis. <i>Bioresource Technology</i> , 2017, 243, 69-77.	4.8	86
14	Removal of Pharmaceutical and Personal Care Products (PPCPs) from Municipal Waste Water with Integrated Membrane Systems, MBR-RO/NF. <i>International Journal of Environmental Research and Public Health</i> , 2018, 15, 269.	1.2	86
15	The interactions of algae-activated sludge symbiotic system and its effects on wastewater treatment and lipid accumulation. <i>Bioresource Technology</i> , 2019, 292, 122017.	4.8	86
16	Enzymatic Conversion of Waste Cooking Oils Into Alternative Fuel-Biodiesel. <i>Applied Biochemistry and Biotechnology</i> , 2006, 132, 911-921.	1.4	80
17	Tunable active sites on biogas digestate derived biochar for sulfanilamide degradation by peroxydisulfate activation. <i>Journal of Hazardous Materials</i> , 2022, 421, 126794.	6.5	75
18	A review on the thermal treatment of heavy metal hyperaccumulator: Fates of heavy metals and generation of products. <i>Journal of Hazardous Materials</i> , 2021, 405, 123832.	6.5	74

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19	Air gasification of biogas-derived digestate in a downdraft fixed bed gasifier. <i>Waste Management</i> , 2017, 69, 162-169.	3.7	71
20	Hydrothermal liquefaction of low-lipid algae <i>Nannochloropsis</i> sp. and <i>Sargassum</i> sp.: Effect of feedstock composition and temperature. <i>Science of the Total Environment</i> , 2020, 712, 135677.	3.9	71
21	Landfill leachate treatment by persulphate related advanced oxidation technologies. <i>Journal of Hazardous Materials</i> , 2021, 418, 126355.	6.5	69
22	Co-pyrolysis of corn cob and waste cooking oil in a fixed bed. <i>Bioresource Technology</i> , 2014, 166, 500-507.	4.8	67
23	Conversion of plastic waste into fuels: A critical review. <i>Journal of Hazardous Materials</i> , 2022, 424, 127460.	6.5	64
24	Co/N co-doped carbonized wood sponge with 3D porous framework for efficient peroxymonosulfate activation: Performance and internal mechanism. <i>Journal of Hazardous Materials</i> , 2022, 421, 126735.	6.5	61
25	Optimizing the conditions for hydrothermal liquefaction of barley straw for bio-crude oil production using response surface methodology. <i>Science of the Total Environment</i> , 2018, 630, 560-569.	3.9	58
26	Hydrothermal carbonization of different wetland biomass wastes: Phosphorus reclamation and hydrochar production. <i>Waste Management</i> , 2020, 102, 106-113.	3.7	57
27	Plasma vitrification and heavy metals solidification of MSW and sewage sludge incineration fly ash. <i>Journal of Hazardous Materials</i> , 2021, 408, 124809.	6.5	57
28	Highly Selective Hydrodeoxygenation of Lignin to Naphthenes over Three-Dimensional Flower-like Ni <sub>2</sub> P Derived from Hydrotalcite. <i>ACS Catalysis</i> , 2022, 12, 1338-1356.	5.5	57
29	Supercritical water pyrolysis of sewage sludge. <i>Waste Management</i> , 2017, 59, 371-378.	3.7	55
30	Stabilization of heavy metals during co-pyrolysis of sewage sludge and excavated waste. <i>Waste Management</i> , 2020, 103, 268-275.	3.7	55
31	Comprehensive review on catalytic degradation of Cl-VOCs under the practical application conditions. <i>Critical Reviews in Environmental Science and Technology</i> , 2022, 52, 311-355.	6.6	54
32	Important contributions of non-fossil fuel nitrogen oxides emissions. <i>Nature Communications</i> , 2021, 12, 243.	5.8	54
33	Biomass molded fuel in China: Current status, policies and suggestions. <i>Science of the Total Environment</i> , 2020, 724, 138345.	3.9	53
34	Phytoremediation of Cd-contaminated farmland soil via various <i>Sedum alfredii</i> -oilseed rape cropping systems: Efficiency comparison and cost-benefit analysis. <i>Journal of Hazardous Materials</i> , 2021, 419, 126489.	6.5	53
35	Analysis of product distribution and characteristics in hydrothermal liquefaction of barley straw in subcritical and supercritical water. <i>Environmental Progress and Sustainable Energy</i> , 2014, 33, 737-743.	1.3	52
36	Sub-supercritical liquefaction of rice stalk for the production of bio-oil: Effect of solvents. <i>Bioresource Technology</i> , 2015, 198, 94-100.	4.8	51

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37	Comparison of adsorption properties for cadmium removal from aqueous solution by Enteromorpha prolifera biochar modified with different chemical reagents. Environmental Research, 2020, 186, 109502.	3.7	51
38	Zn(II), Pb(II), and Cd(II) adsorption from aqueous solution by magnetic silica gel: preparation, characterization, and adsorption. Environmental Science and Pollution Research, 2018, 25, 30938-30948.	2.7	47
39	Synergistic High-flux Oil-“Saltwater Separation and Membrane Desalination with Carbon Quantum Dots Functionalized Membrane. ACS Sustainable Chemistry and Engineering, 2019, 7, 13708-13716.	3.2	46
40	Biochar from constructed wetland biomass waste: A review of its potential and challenges. Chemosphere, 2022, 287, 132259.	4.2	42
41	Catalytic Cracking of Tar from Biomass Gasification over a HZSM-5-Supported Ni-MgO Catalyst. Energy & Fuels, 2015, 29, 7969-7974.	2.5	41
42	Active sites decoration on sewage sludge-red mud complex biochar for persulfate activation to degrade sulfanilamide. Journal of Colloid and Interface Science, 2022, 608, 1983-1998.	5.0	41
43	Transformation of Phosphorus in Wetland Biomass during Pyrolysis and Hydrothermal Treatment. ACS Sustainable Chemistry and Engineering, 2019, 7, 16520-16528.	3.2	40
44	Biomass to hydrogen-rich syngas via catalytic steam gasification of bio-oil/biochar slurry. Bioresource Technology, 2015, 198, 108-114.	4.8	38
45	Catalytic cracking of model compounds of bio-oil over HZSM-5 and the catalyst deactivation. Science of the Total Environment, 2018, 631-632, 1611-1622.	3.9	38
46	Enhancing the anaerobic digestion of corn stover by chemical pretreatment with the black liquor from the paper industry. Bioresource Technology, 2020, 306, 123090.	4.8	38
47	An investigation of an oxygen-enriched combustion of municipal solid waste on flue gas emission and combustion performance at a 8-MWth waste-to-energy plant. Waste Management, 2019, 96, 47-56.	3.7	37
48	Products distribution and pollutants releasing characteristics during pyrolysis of waste tires under different thermal process. Journal of Hazardous Materials, 2022, 424, 127351.	6.5	37
49	Insights into the Major Reaction Pathways of Vapor-Phase Hydrodeoxygenation of <i>m</i> -Cresol on a Pt/HBeta Catalyst. ChemCatChem, 2016, 8, 551-561.	1.8	33
50	Utilization of edible fungi residues towards synthesis of high-performance porous carbon for effective sorption of Cl-VOCs. Science of the Total Environment, 2020, 727, 138475.	3.9	33
51	Enhanced norfloxacin degradation by visible-light-driven Mn <sub>3</sub> O <sub>4</sub> /MnOOH photocatalysis under weak magnetic field. Science of the Total Environment, 2021, 761, 143268.	3.9	33
52	Factors influencing groundwater contamination near municipal solid waste landfill sites in the Qinghai-Tibetan plateau. Ecotoxicology and Environmental Safety, 2021, 211, 111913.	2.9	31
53	Steam gasification of acid-hydrolysis biomass CAHR for clean syngas production. Bioresource Technology, 2015, 179, 323-330.	4.8	30
54	Cr Doping MnO <sub>2</sub> Adsorbent Significantly Improving Hg <sup>0</sup> Removal and SO <sub>2</sub> Resistance from Coal-Fired Flue Gas and the Mechanism Investigation. Industrial & Engineering Chemistry Research, 2018, 57, 17245-17258.	1.8	29

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55	Fast characterization of biomass and waste by infrared spectra and machine learning models. <i>Journal of Hazardous Materials</i> , 2020, 387, 121723.	6.5	29
56	Investigation of chloride deposit formation in a 24MWe waste to energy plant. <i>Fuel</i> , 2015, 140, 317-327.	3.4	28
57	Preparation, characterization, and application of macroporous activated carbon (MAC) suitable for the BAC water treatment process. <i>Science of the Total Environment</i> , 2019, 647, 1359-1367.	3.9	28
58	Efficient degradation of bentazone via peroxymonosulfate activation by 1D/2D $\text{MnOOH-rGO}$ under simulated sunlight: Performance and mechanism insight. <i>Science of the Total Environment</i> , 2020, 741, 140492.	3.9	26
59	Effect of microaerobic microbial pretreatment on anaerobic digestion of a lignocellulosic substrate under controlled pH conditions. <i>Bioresource Technology</i> , 2021, 328, 124852.	4.8	26
60	Hydrothermal conversion of Cd/Zn hyperaccumulator ( <i>Sedum alfredii</i> ) for heavy metal separation and hydrochar production. <i>Journal of Hazardous Materials</i> , 2022, 423, 127122.	6.5	25
61	Photosynthetic hydrogen production by alginate immobilized bacterial consortium. <i>Bioresource Technology</i> , 2017, 236, 44-48.	4.8	24
62	Co-gasification of Acid Hydrolysis Residues and Sewage Sludge in a Downdraft Fixed Gasifier with CaO as an In-Bed Additive. <i>Energy &amp; Fuels</i> , 2018, 32, 5893-5900.	2.5	24
63	Progress in the aqueous-phase reforming of different biomass-derived alcohols for hydrogen production. <i>Journal of Zhejiang University: Science A</i> , 2015, 16, 491-506.	1.3	23
64	Hydrothermal Liquefaction of Sewage Sludge by Microwave Pretreatment. <i>Energy &amp; Fuels</i> , 2020, 34, 1145-1152.	2.5	23
65	Spillover effect of environmental investment: evidence from panel data at provincial level in China. <i>Frontiers of Environmental Science and Engineering</i> , 2012, 6, 412-420.	3.3	22
66	Methane production from the anaerobic digestion of substrates from corn stover: Differences between the stem bark, stem pith, and leaves. <i>Science of the Total Environment</i> , 2019, 694, 133641.	3.9	22
67	Co-precipitation Synthesized $\text{MnOx-CeO}_2$ Mixed Oxides for NO Oxidation and Enhanced Resistance to Low Concentration of $\text{SO}_2$ by Metal Addition. <i>Catalysts</i> , 2019, 9, 519.	1.6	21
68	Double-edged effects of polyvinyl chloride addition on heavy metal separation and biochar production during pyrolysis of Cd/Zn hyperaccumulator. <i>Journal of Hazardous Materials</i> , 2021, 416, 125793.	6.5	21
69	Iron cobalt and nitrogen co-doped carbonized wood sponge for peroxymonosulfate activation: Performance and internal temperature-dependent mechanism. <i>Journal of Colloid and Interface Science</i> , 2022, 619, 267-279.	5.0	21
70	Overcoming oral insulin delivery barriers: application of cell penetrating peptide and silica-based nanoporous composites. <i>Frontiers of Chemical Science and Engineering</i> , 2013, 7, 9-19.	2.3	20
71	Upgrading of Bio-Oil Model Compounds and Bio-Crude into Biofuel by Electrocatalysis: A Review. <i>ChemSusChem</i> , 2021, 14, 1037-1052.	3.6	20
72	Flue gas torrefaction of municipal solid waste: Fuel properties, combustion characterizations, and nitrogen /sulfur emissions. <i>Bioresource Technology</i> , 2022, 351, 126967.	4.8	20

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73	Hydrogen production by aqueous-phase reforming of ethylene glycol over a Ni/Zn/Al derived hydrotalcite catalyst. <i>RSC Advances</i> , 2015, 5, 60128-60134.	1.7	19
74	Interactions Between Microalgae and Microorganisms for Wastewater Remediation and Biofuel Production. <i>Waste and Biomass Valorization</i> , 2019, 10, 3907-3919.	1.8	19
75	Effects of reaction conditions on products and elements distribution via hydrothermal liquefaction of duckweed for wastewater treatment. <i>Bioresource Technology</i> , 2020, 317, 124033.	4.8	19
76	Study on corrosion kinetics of 310H in different simulated MSW combustion environment. The influence of SO <sub>2</sub> and H <sub>2</sub> O on NaCl assisted corrosion. <i>Corrosion Science</i> , 2019, 154, 254-267.	3.0	17
77	Co-Pyrolysis of Sewage Sludge and Wetland Biomass Waste for Biochar Production: Behaviors of Phosphorus and Heavy Metals. <i>International Journal of Environmental Research and Public Health</i> , 2022, 19, 2818.	1.2	16
78	A review on the production of P-enriched hydro/bio-char from solid waste: Transformation of P and applications of hydro/bio-char. <i>Chemosphere</i> , 2022, 301, 134646.	4.2	16
79	Simulation analysis and ternary diagram of municipal solid waste pyrolysis and gasification based on the equilibrium model. <i>Bioresource Technology</i> , 2017, 235, 371-379.	4.8	15
80	Hydrogen Production via Aqueous-Phase Reforming of Ethylene Glycol over a Nickel-iron Alloy Catalyst: Effect of Cobalt Addition. <i>Energy &amp; Fuels</i> , 2020, 34, 1153-1161.	2.5	15
81	Hydrogen-rich Syngas Production by DC Thermal Plasma Steam Gasification from Biomass and Plastic Mixtures. <i>Advanced Sustainable Systems</i> , 2020, 4, 2000026.	2.7	15
82	Comparative evaluation on municipal sewage sludge utilization processes for sustainable management in Tibet. <i>Science of the Total Environment</i> , 2021, 765, 142676.	3.9	15
83	Aquatic environment remediation by atomic layer deposition-based multi-functional materials: A review. <i>Journal of Hazardous Materials</i> , 2021, 402, 123513.	6.5	15
84	Full-scale experimental investigation of deposition and corrosion of pre-protector and 3rd superheater in a waste incineration plant. <i>Scientific Reports</i> , 2017, 7, 17549.	1.6	14
85	Distribution of Hg during sewage sludge and municipal solid waste Co-pyrolysis: Influence of multiple factors. <i>Waste Management</i> , 2020, 107, 276-284.	3.7	14
86	Theoretical and experimental study of gas-phase corrosion attack of Fe under simulated municipal solid waste combustion: Influence of KCl, SO <sub>2</sub> , HCl, and H <sub>2</sub> O vapour. <i>Applied Energy</i> , 2019, 247, 630-642.	5.1	12
87	Potential of yak dung-derived hydrochar as fertilizer: Mechanism and model of controlled release of nitrogen. <i>Science of the Total Environment</i> , 2021, 781, 146665.	3.9	12
88	Biodiesel production in a magnetically fluidized bed reactor using whole-cell biocatalysts immobilized within ferromagnetic oxide-polyvinyl alcohol composite beads. <i>Bioresource Technology</i> , 2022, 355, 127253.	4.8	12
89	Efficient synthesis of biofuel precursor with long carbon chains from fructose. <i>RSC Advances</i> , 2015, 5, 58784-58789.	1.7	11
90	Estimation and emissions from crop straw and animal dung in Tibet. <i>Science of the Total Environment</i> , 2018, 631-632, 1038-1045.	3.9	11

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91	Experimental and Kinetic Modeling Studies of Methyl 2-Furoate Pyrolysis at Atmospheric Pressure. <i>Energy &amp; Fuels</i> , 2019, 33, 4611-4620.	2.5	10
92	Enhancement of the denitrification efficiency over low-rank activated coke by doping with transition metal oxides. <i>Canadian Journal of Chemical Engineering</i> , 2020, 98, 1390-1397.	0.9	10
93	Coupling Anaerobic Digestion with Pyrolysis for Phosphorus-Enriched Biochar Production from Constructed Wetland Biomass. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 3972-3980.	3.2	10
94	Electrocatalytic performance of the carbon supported Pd-P catalyst for formic acid oxidation. <i>Journal of Fuel Chemistry and Technology</i> , 2013, 41, 1367-1370.	0.9	9
95	Chemical and thermal stability of N-heterocyclic ionic liquids in catalytic C-H activation reactions. <i>Magnetic Resonance in Chemistry</i> , 2014, 52, 673-679.	1.1	9
96	Catalytic Reforming: A Potentially Promising Method for Treating and Utilizing Wastewater from Biogas Plants. <i>Environmental Science &amp; Technology</i> , 2020, 54, 577-585.	4.6	9
97	The effect of Ru/C and MgCl <sub>2</sub> on the cleavage of inter- and intra-molecular linkages during cornstalk hydrolysis residue valorization. <i>Cellulose</i> , 2020, 27, 799-823.	2.4	9
98	Insoluble matrix proteins from shell waste for synthesis of visible-light response photocatalyst to mineralize indoor gaseous formaldehyde. <i>Journal of Hazardous Materials</i> , 2021, 415, 125649.	6.5	9
99	Hydrothermal carbonization of garden waste by pretreatment with anaerobic digestion to improve hydrochar performance and energy recovery. <i>Science of the Total Environment</i> , 2022, 807, 151014.	3.9	8
100	Hydrothermal Treatment of the Pristine and Contaminated Cd/Zn Hyperaccumulators for Bio-Oil Production and Heavy Metal Separation. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 603-612.	3.2	8
101	Isolation and characterization of microalgae for biodiesel production from seawater. <i>Bioresource Technology</i> , 2015, 184, 42-46.	4.8	7
102	Ultrasound-mediated targeted microbubbles: a new vehicle for cancer therapy. <i>Frontiers of Chemical Science and Engineering</i> , 2013, 7, 20-28.	2.3	6
103	Bibliometric Analysis of Current Status on Bioremediation of Petroleum Contaminated Soils during 2000-2019. <i>International Journal of Environmental Research and Public Health</i> , 2021, 18, 8859.	1.2	6
104	Aromatic Compounds Production from Sorbitol by Aqueous Catalytic Reforming. <i>Chinese Journal of Chemical Physics</i> , 2015, 28, 101-106.	0.6	5
105	Efficient removal of Cd <sup>2+</sup> ion from water by calcium alginate hydrogel filtration membrane. <i>Water Science and Technology</i> , 2017, 75, 2322-2330.	1.2	5
106	A Comprehensive Comparison Study: The Impacts of Gasifying Agents and Parameters on Chinese Herb Medicine Residue Gasification. <i>Waste and Biomass Valorization</i> , 2021, 12, 3059-3073.	1.8	5
107	Influence of temperature on formaldehyde emission parameters of solvent-based coatings. <i>Journal of Coatings Technology Research</i> , 2021, 18, 677-684.	1.2	4
108	BASIC: A Comprehensive Model for SO <sub>x</sub> Formation Mechanism and Optimization in Municipal Solid Waste (MSW) Combustion. <i>ACS Omega</i> , 2022, 7, 3860-3871.	1.6	4

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109	Experimental Study on the Thermal Storage Performance and Preparation of Glycerin Mixtures Used in the Phase Change Wall. , 2010, , .		3
110	Effects of Supports and Promoters on <i>in situ</i> Hydrogenation of <i>o</i> -Cresol over Ni-based Catalysts. Chinese Journal of Chemical Physics, 2014, 27, 697-703.	0.6	3
111	Analytical study of water turbine with fluctuating blades. , 2017, , .		3
112	Quantitative research on heavy metal removal of flue gas desulfurization-derived wastewater sludge by electrokinetic treatment. Journal of Hazardous Materials, 2021, 414, 125561.	6.5	3
113	Experimental and Comprehensive Evaluation of Vegetable Oils for Biomass Tar Absorption. ACS Omega, 2020, 5, 19579-19588.	1.6	2
114	Comparison of different optimization techniques for microwave-assisted biodiesel production. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2020, , 1-17.	1.2	2
115	Lignite-Activated Carbon Grafted PAA Combined with Conventional Drinking Water Treatment Processes for the Emergency Removal of Trace Pb(II) Pollution. Water, Air, and Soil Pollution, 2020, 231, 1.	1.1	2
116	Effect of nickel loading approaches on the structure and hydrodeoxygenation performance of Ni/Al-SBA-15. Cellulose, 2019, 26, 8301-8312.	2.4	1
117	Bioenergy and Environment. Waste and Biomass Valorization, 2019, 10, 3843-3843.	1.8	1
118	Simulation of water turbine with oscillating blades. , 2020, , .		1
119	Thermochemical Conversion Technology on Lignocellulosic Biomass to Liquid Fuel: A Critical Review. , 2011, , .		0
120	Second International Symposium on Biomass/Wastes Energy and Environment (BEE 2019), Tianjin, China, May 23â€“26, 2019. Energy & Fuels, 2020, 34, 1099-1100.	2.5	0
121	Aqueous-phase reforming of phenol over hydrotalcite-derived Ni/Zn/Al catalysts. IET Renewable Power Generation, 2019, 13, 1641-1646.	1.7	0
122	Pyrolysis of Tibetan Yak Dung for Producing Biochar Pertinent to Agro-environmental Application. Communications in Soil Science and Plant Analysis, 0, , 1-15.	0.6	0
123	Biorenewable Nanocomposite Materials for Wastewater Treatment. ACS Symposium Series, 0, , 281-311.	0.5	0