

G Pugazhenti

List of Publications by Year in descending order

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112
papers

3,759
citations

136885

32
h-index

149623

56
g-index

114
all docs

114
docs citations

114
times ranked

3640
citing authors

#	ARTICLE	IF	CITATIONS
1	Membrane bioreactor and integrated membrane bioreactor systems for micropollutant removal from wastewater: A review. <i>Journal of Water Process Engineering</i> , 2018, 26, 314-328.	2.6	202
2	Fabrication and properties of low cost ceramic microfiltration membranes for separation of oil and bacteria from its solution. <i>Journal of Membrane Science</i> , 2011, 379, 154-163.	4.1	178
3	Elaboration of novel tubular ceramic membrane from inexpensive raw materials by extrusion method and its performance in microfiltration of synthetic oily wastewater treatment. <i>Journal of Membrane Science</i> , 2015, 490, 92-102.	4.1	166
4	Adsorption of crystal violet dye from aqueous solution using mesoporous materials synthesized at room temperature. <i>Adsorption</i> , 2009, 15, 390-405.	1.4	137
5	A novel integrated biodegradation microfiltration system for sustainable wastewater treatment and energy recovery. <i>Journal of Hazardous Materials</i> , 2019, 365, 707-715.	6.5	114
6	Cross-flow microfiltration of oil-in-water emulsions using low cost ceramic membranes. <i>Desalination</i> , 2013, 320, 86-95.	4.0	108
7	Effect of graphene content on the properties of poly(lactic acid) nanocomposites. <i>RSC Advances</i> , 2015, 5, 28410-28423.	1.7	106
8	Biodiesel production potential of oleaginous <i>Rhodococcus opacus</i> grown on biomass gasification wastewater. <i>Renewable Energy</i> , 2017, 105, 400-406.	4.3	104
9	Credibility of polymeric and ceramic membrane filtration in the removal of bacteria and virus from water: A review. <i>Journal of Environmental Management</i> , 2020, 268, 110583.	3.8	98
10	Dairy wastewater treatment using a novel low cost tubular ceramic membrane and membrane fouling mechanism using pore blocking models. <i>Journal of Water Process Engineering</i> , 2016, 13, 168-175.	2.6	95
11	Integrated adsorption-membrane filtration process for antibiotic removal from aqueous solution. <i>Powder Technology</i> , 2017, 321, 259-269.	2.1	92
12	Biological treatment of wastewater containing a mixture of polycyclic aromatic hydrocarbons using the oleaginous bacterium <i>Rhodococcus opacus</i> . <i>Journal of Cleaner Production</i> , 2018, 196, 1282-1291.	4.6	89
13	Biological treatment of biomass gasification wastewater using hydrocarbonoclastic bacterium <i>Rhodococcus opacus</i> in an up-flow packed bed bioreactor with a novel waste-derived nano-biochar based bio-support material. <i>Journal of Cleaner Production</i> , 2020, 256, 120253.	4.6	87
14	Effect of TiO ₂ addition on the fabrication of ceramic membrane supports: A study on the separation of oil droplets and bovine serum albumin (BSA) from its solution. <i>Desalination</i> , 2011, 279, 104-114.	4.0	85
15	Preparation and characterization of environmentally safe and highly biodegradable microbial polyhydroxybutyrate (PHB) based graphene nanocomposites for potential food packaging applications. <i>International Journal of Biological Macromolecules</i> , 2020, 154, 866-877.	3.6	85
16	Separation of chromium (VI) using modified ultrafiltration charged carbon membrane and its mathematical modeling. <i>Journal of Membrane Science</i> , 2005, 254, 229-239.	4.1	76
17	Simultaneous heavy metal removal and anthracene biodegradation by the oleaginous bacteria <i>Rhodococcus opacus</i> . <i>3 Biotech</i> , 2017, 7, 37.	1.1	74
18	Fly ash based ceramic microfiltration membranes for oil-water emulsion treatment: Parametric optimization using response surface methodology. <i>Journal of Water Process Engineering</i> , 2016, 13, 27-43.	2.6	73

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19	Simultaneous polycyclic aromatic hydrocarbon degradation and lipid accumulation by <i>Rhodococcus opacus</i> for potential biodiesel production. <i>Journal of Water Process Engineering</i> , 2017, 17, 1-10.	2.6	60
20	Influence of Sintering Temperature on the Properties of Porous Ceramic Support Prepared by Uniaxial Dry Compaction Method Using Low-Cost Raw Materials for Membrane Applications. <i>Separation Science and Technology</i> , 2011, 46, 1241-1249.	1.3	51
21	Performance assessment of an analcime-C zeolite ceramic composite membrane by removal of Cr(VI) from aqueous solution. <i>RSC Advances</i> , 2015, 5, 6246-6254.	1.7	50
22	An Overview of Polymer-Clay Nanocomposites. , 2017, , 29-81.		50
23	Development of ceramic membranes from low-cost clays for the separation of oil-water emulsion. <i>Desalination and Water Treatment</i> , 2016, 57, 1927-1939.	1.0	46
24	Thermogravimetric Analysis for Characterization of Nanomaterials. , 2017, , 67-108.		45
25	Influence of organically modified NiAl layered double hydroxide (LDH) loading on the rheological properties of poly (methyl methacrylate) (PMMA)/LDH blend solution. <i>Powder Technology</i> , 2014, 256, 196-203.	2.1	44
26	Fabrication and characterization of Al_2O_3 -clay composite ultrafiltration membrane for the separation of electrolytes from its aqueous solution. <i>Journal of Membrane Science</i> , 2009, 340, 181-191.	4.1	41
27	Properties and thermal degradation kinetics of polystyrene/organoclay nanocomposites synthesized by solvent blending method: Effect of processing conditions and organoclay loading. <i>Journal of Applied Polymer Science</i> , 2011, 120, 1322-1336.	1.3	40
28	Cross flow microfiltration of oil-water emulsions using clay based ceramic membrane support and TiO_2 composite membrane. <i>Egyptian Journal of Petroleum</i> , 2017, 26, 679-694.	1.2	40
29	Preparation of NO_x modified PMMA-EGDM composite membrane for the recovery of chromium (VI). <i>European Polymer Journal</i> , 2003, 39, 2383-2391.	2.6	37
30	Synthesis and characterization of MCM-41-ceramic composite membrane for the separation of chromic acid from aqueous solution. <i>Journal of Membrane Science</i> , 2015, 475, 521-532.	4.1	37
31	Waste Litchi Peels for Cr(VI) Removal from Synthetic Wastewater in Batch and Continuous Systems: Sorbent Characterization, Regeneration and Reuse Study. <i>Journal of Environmental Engineering, ASCE</i> , 2016, 142, .	0.7	37
32	Treatment of poultry slaughterhouse wastewater using tubular microfiltration membrane with fly ash as key precursor. <i>Journal of Water Process Engineering</i> , 2020, 37, 101361.	2.6	37
33	Effect of Organommodified Ni-Al Layered Double Hydroxide (OLDH) on the Properties of Polypropylene (PP)/LDH Nanocomposites. <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> , 2012, 61, 931-948.	1.8	34
34	Utilization of ball clay adsorbents for the removal of crystal violet dye from aqueous solution. <i>Clean Technologies and Environmental Policy</i> , 2011, 13, 141-151.	2.1	33
35	Properties of polystyrene/organically modified layered double hydroxide nanocomposites synthesized by solvent blending method. <i>Journal of Applied Polymer Science</i> , 2011, 120, 2485-2495.	1.3	33
36	Properties of PMMA/clay nanocomposites prepared using various compatibilizers. <i>International Journal of Mechanical and Materials Engineering</i> , 2015, 10, .	1.1	33

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37	Cross flow ultrafiltration of Cr (VI) using MCM-41, MCM-48 and Faujasite (FAU) zeolite-ceramic composite membranes. <i>Chemosphere</i> , 2016, 153, 436-446.	4.2	33
38	Investigating the properties of poly (lactic acid)/exfoliated graphene based nanocomposites fabricated by versatile coating approach. <i>International Journal of Biological Macromolecules</i> , 2018, 113, 1080-1091.	3.6	33
39	Fabrication of zirconia composite membrane by in-situ hydrothermal technique and its application in separation of methyl orange. <i>Ecotoxicology and Environmental Safety</i> , 2015, 121, 73-79.	2.9	32
40	Anthracene Biodegradation by Oleaginous <i>Rhodococcus opacus</i> for Biodiesel Production and Its Characterization. <i>Polycyclic Aromatic Compounds</i> , 2019, 39, 207-219.	1.4	32
41	Novel shortcut biological nitrogen removal method using an algae-bacterial consortium in a photo-sequencing batch reactor: Process optimization and kinetic modelling. <i>Journal of Environmental Management</i> , 2019, 250, 109401.	3.8	31
42	Fabrication and characterization of sucrose palmitate reinforced poly(lactic acid) bionanocomposite films. <i>Journal of Applied Polymer Science</i> , 2015, 132, .	1.3	30
43	Influence of graphene on thermal degradation and crystallization kinetics behaviour of poly(lactic acid) Tj ETQq1 1 0.784314 rgBT/Overlook 1.2 28	1.2	28
44	Biomass assisted microfiltration of chromium(VI) using Baker's yeast by ceramic membrane prepared from low cost raw materials. <i>Desalination</i> , 2012, 285, 239-244.	4.0	27
45	Facile dispersion of exfoliated graphene/PLA nanocomposites via in situ polycondensation with a melt extrusion process and its rheological studies. <i>Journal of Applied Polymer Science</i> , 2018, 135, 46476.	1.3	26
46	Continuous bioreactor with cell recycle using tubular ceramic membrane for simultaneous wastewater treatment and bio-oil production by oleaginous <i>Rhodococcus opacus</i> . <i>Chemical Engineering Journal</i> , 2019, 367, 76-85.	6.6	26
47	Removal of Crystal Violet Dye from Aqueous Solution Using Calcined and Uncalcined Mixed Clay Adsorbents. <i>Separation Science and Technology</i> , 2009, 45, 94-104.	1.3	25
48	Quantum chemical and experimental insights for the ionic liquid facilitated thermal dehydrogenation of ethylene diamine bisborane. <i>RSC Advances</i> , 2015, 5, 85280-85290.	1.7	24
49	Preparation and characterization of TiO ₂ and β -Al ₂ O ₃ composite membranes for the separation of oil-in-water emulsions. <i>RSC Advances</i> , 2016, 6, 4877-4888.	1.7	24
50	Process intensification through waste fly ash conversion and application as ceramic membranes: A review. <i>Science of the Total Environment</i> , 2022, 808, 151968.	3.9	24
51	Performance of Low Cost Ceramic Microfiltration Membranes for the Treatment of Oil-in-water Emulsions. <i>Separation Science and Technology</i> , 2013, 48, 849-858.	1.3	23
52	Recovery of microalgae from its broth solution using kaolin based tubular ceramic membranes prepared with different binders. <i>Separation and Purification Technology</i> , 2020, 250, 117212.	3.9	22
53	A closed-loop biorefinery approach for polyhydroxybutyrate (PHB) production using sugars from carob pods as the sole raw material and downstream processing using the co-product lignin. <i>Bioresource Technology</i> , 2020, 307, 123247.	4.8	22
54	Influence of Processing Conditions on the Properties of Polystyrene (PS)/organomontmorillonite (OMMT) Nanocomposites Prepared via Solvent Blending Method. <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> , 2010, 60, 144-162.	1.8	21

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55	Experimental Insights into the Thermal Dehydrogenation of Ethylene Diamine Bisborane Using Allyl-Based Ionic Liquids. <i>Energy & Fuels</i> , 2017, 31, 5428-5440.	2.5	21
56	Bio-oil production from oleaginous microorganisms using hydrothermal liquefaction: A biorefinery approach. <i>Critical Reviews in Environmental Science and Technology</i> , 2022, 52, 356-394.	6.6	21
57	Structural and thermal properties of polystyrene/CoAl-layered double hydroxide nanocomposites prepared via solvent blending: effect of LDH loading. <i>Journal of Experimental Nanoscience</i> , 2013, 8, 19-31.	1.3	20
58	Processing and characterization of polystyrene nanocomposites based on CoAl layered double hydroxide. <i>Journal of Science: Advanced Materials and Devices</i> , 2016, 1, 351-361.	1.5	20
59	Effect of binder concentration on properties of low-cost fly ash-based tubular ceramic membrane and its application in separation of glycerol from biodiesel. <i>Journal of Cleaner Production</i> , 2021, 319, 128679.	4.6	20
60	Development of sulfonated poly(ether ether ketone)/zirconium titanium phosphate composite membranes for direct methanol fuel cell. <i>Journal of Applied Polymer Science</i> , 2012, 124, E45.	1.3	19
61	Investigation of structural, rheological and thermal properties of PMMA/ONi-Al LDH nanocomposites synthesized via solvent blending method: Effect of LDH loading. <i>Chinese Journal of Polymer Science (English Edition)</i> , 2016, 34, 739-754.	2.0	19
62	Exfoliated graphene-dispersed poly (lactic acid)-based nanocomposite sensors for ethanol detection. <i>Polymer Bulletin</i> , 2019, 76, 2367-2386.	1.7	19
63	Synthesis and characterization of exfoliated PMMA/CoAl LDH nanocomposites via solvent blending technique. <i>RSC Advances</i> , 2015, 5, 39810-39820.	1.7	17
64	Treatment of oil-in-water emulsion using tubular ceramic membrane acquired from locally available low-cost inorganic precursors. <i>Desalination and Water Treatment</i> , 2016, 57, 28056-28070.	1.0	16
65	Melt rheological behavior of PMMA nanocomposites reinforced with modified nanoclay. <i>Nanocomposites</i> , 2016, 2, 109-116.	2.2	15
66	Removal of chromium from synthetic wastewater using MFI zeolite membrane supported on inexpensive tubular ceramic substrate. <i>Journal of Water Reuse and Desalination</i> , 2017, 7, 365-377.	1.2	15
67	Techno-economic assessment of a sustainable and cost-effective bioprocess for large scale production of polyhydroxybutyrate. <i>Chemosphere</i> , 2021, 284, 131371.	4.2	15
68	Modelling and optimization of critical parameters by hybrid RSM-GA for the separation of BSA using a tubular configured MFI-type zeolite microfiltration membrane. <i>RSC Advances</i> , 2015, 5, 87645-87659.	1.7	14
69	Recovery of lignin from water and methanol using low-cost kaolin based tubular ceramic membrane. <i>Journal of Water Process Engineering</i> , 2020, 38, 101615.	2.6	14
70	Sustained drug release and bactericidal activity of a novel, highly biocompatible and biodegradable polymer nanocomposite loaded with norfloxacin for potential use in antibacterial therapy. <i>Journal of Drug Delivery Science and Technology</i> , 2020, 59, 101900.	1.4	14
71	Synthesis of ceramic membrane using inexpensive precursors and evaluation of its biocompatibility for hemofiltration application. <i>Separation and Purification Technology</i> , 2021, 256, 117814.	3.9	14
72	Non-isothermal crystallization kinetics of sucrose palmitate reinforced poly(lactic acid) bionanocomposites. <i>Polymer Bulletin</i> , 2016, 73, 21-38.	1.7	13

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73	Enhanced mechanical and thermal properties of polystyrene nanocomposites prepared using organo-functionalized Ni Al layered double hydroxide via melt intercalation technique. <i>Journal of Science: Advanced Materials and Devices</i> , 2017, 2, 245-254.	1.5	13
74	A novel ceramic membrane assembly for the separation of polyhydroxybutyrate (PHB) rich <i>Ralstonia eutropha</i> biomass from culture broth. <i>Chemical Engineering Research and Design</i> , 2019, 126, 106-118.	2.7	13
75	Separation of bovine serum albumin (BSA) using Al_2O_3 clay composite ultrafiltration membrane. <i>Journal of Chemical Technology and Biotechnology</i> , 2010, 85, 545-554.	1.6	12
76	Comparative Study of Ultrasound Stimulation and Conventional Heating Methods on the Preparation of Nanosized Al_2O_3 . <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 4710-4719.	1.8	12
77	Fabrication of poly(methyl methacrylate) (PMMA) nanocomposites with modified nanoclay by melt intercalation. <i>Composite Interfaces</i> , 2014, 21, 819-832.	1.3	12
78	Effect of nanoclay content on the structural, thermal properties and thermal degradation kinetics of PMMA/organoclay nanocomposites. <i>International Journal of Nano and Biomaterials</i> , 2014, 5, 27.	0.1	12
79	Preparation and characterization of hydrothermally engineered TiO_2 -fly ash composite membrane. <i>Frontiers of Chemical Science and Engineering</i> , 2017, 11, 266-279.	2.3	11
80	Theoretical and Experimental Pathways for the Dehydrogenation of Ethylene Diamine Bisborane by an Ammonium Based Ionic Liquid. <i>Journal of Solution Chemistry</i> , 2017, 46, 1230-1250.	0.6	11
81	Cu(II) removal by <i>Nostoc muscorum</i> and its effect on biomass growth and nitrate uptake: A photobioreactor study. <i>International Biodeterioration and Biodegradation</i> , 2017, 119, 111-117.	1.9	11
82	Bioelectricity production and shortcut nitrogen removal by microalgal-bacterial consortia using membrane photosynthetic microbial fuel cell. <i>Journal of Environmental Management</i> , 2022, 301, 113871.	3.8	11
83	Removal of trivalent metal ions from aqueous solution via cross-flow ultrafiltration system using zeolite membranes. <i>Journal of Water Reuse and Desalination</i> , 2017, 7, 66-76.	1.2	10
84	Sonication-assisted synthesis of polystyrene (PS)/organoclay nanocomposites: influence of clay content. <i>Applied Nanoscience (Switzerland)</i> , 2017, 7, 215-223.	1.6	10
85	Morphological, mechanical, and thermal features of PMMA nanocomposites containing two-dimensional Co-Al layered double hydroxide. <i>Journal of Applied Polymer Science</i> , 2018, 135, 45774.	1.3	10
86	Chromium (VI) separation from aqueous solution using anion exchange membrane. <i>AIChE Journal</i> , 2005, 51, 2001-2010.	1.8	8
87	Preparation, characterization, and performance evaluation of LTA zeolite ceramic composite membrane by separation of BSA from aqueous solution. <i>Separation Science and Technology</i> , 2017, 52, 767-777.	1.3	8
88	Synergistic effect of dual nanofillers (MWCNT and Ni-Al LDH) on the electrical and thermal characteristics of polystyrene nanocomposites. <i>Journal of Applied Polymer Science</i> , 2018, 135, 46513.	1.3	7
89	Applicability of Fe-CNC/GR/PLA composite as potential sensor for biomolecules. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 5984-5999.	1.1	7
90	A Simple Sonication Assisted Solvent Blending Route for Fabrication of Exfoliated Polystyrene (PS)/Clay Nanocomposites: Role of Various Clay Modifiers. <i>Materials Today: Proceedings</i> , 2018, 5, 13191-13210.	0.9	6

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91	Separation of Bacteria <i>Kocuria rhizophila</i> from Fermentation Broth by Cross-Flow Microfiltration Using Inexpensive Tubular Ceramic Membrane. <i>Arabian Journal for Science and Engineering</i> , 2022, 47, 5767-5776.	1.7	6
92	Effect of Concentration and Temperature on Rheological Behaviour of Polystyrene Solution. <i>Macromolecular Symposia</i> , 2016, 362, 87-100.	0.4	5
93	Fabrication and performance evaluation of Faujasite zeolite composite ultrafiltration membrane by separation of trivalent ions from aqueous solution. <i>Environmental Progress and Sustainable Energy</i> , 2016, 35, 1047-1054.	1.3	5
94	Removal of FeCl ₃ from aqueous solution by ultrafiltration using ordered mesoporous MCM-48 ceramic composite membrane. <i>Separation Science and Technology</i> , 2016, 51, 2038-2046.	1.3	5
95	Improvisation of polylactic acid (PLA)/exfoliated graphene (GR) nanocomposite for detection of metal ions (Cu ²⁺). <i>Composites Science and Technology</i> , 2021, 213, 108877.	3.8	5
96	Fabrication and properties of polyhydroxybutyrate/kaolin nanocomposites and evaluation of their biocompatibility for biomedical applications. <i>Journal of Applied Polymer Science</i> , 2022, 139, 51803.	1.3	5
97	Experimental study on fabrication, biocompatibility and mechanical characterization of polyhydroxybutyrate-ball clay bionanocomposites for bone tissue engineering. <i>International Journal of Biological Macromolecules</i> , 2022, 209, 1995-2008.	3.6	5
98	Influence of Organomodified Ni-Al Layered Double Hydroxide (LDH) Content on the Thermal Properties and Degradation Kinetics of Polystyrene (PS)/Ni-Al LDH Nanocomposites Prepared via Solvent Blending Method. <i>Advanced Materials Research</i> , 0, 747, 23-26.	0.3	4
99	Modeling and Simulation of Stirred Dead End Ultrafiltration Process Using the Aspen Engineering Suite. <i>Industrial & Engineering Chemistry Research</i> , 2009, 48, 4428-4439.	1.8	3
100	Characterization of Polystyrene (PS)/Organomodified Layered Double Hydroxide (OLDH) Nanocomposites Prepared by <i>In Situ</i> Polymerization. <i>Advanced Materials Research</i> , 2011, 410, 164-167.	0.3	3
101	Development and Characterization of a MCM-48 Ceramic Composite Membrane for the Removal of Cr(VI) from an Aqueous Solution. <i>Journal of Environmental Engineering, ASCE</i> , 2016, 142, .	0.7	3
102	Separation of BSA through FAU-type zeolite ceramic composite membrane formed on tubular ceramic support: Optimization of process parameters by hybrid response surface methodology and biobjective genetic algorithm. <i>Preparative Biochemistry and Biotechnology</i> , 2017, 47, 687-698.	1.0	3
103	Synthesis of zirconia-ceramic composite membrane employing a low-cost precursor and evaluation its performance for separation of microbially produced silver nanoparticles. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 107569.	3.3	3
104	Influence of Nanoclay on the Rheological Properties of PMMA/Organoclay Nanocomposites Prepared by Solvent Blending Technique. <i>Macromolecular Symposia</i> , 2016, 365, 104-111.	0.4	2
105	Properties of Polystyrene (PS)/Co-Al LDH Nanocomposites Prepared by Melt Intercalation. <i>Materials Today: Proceedings</i> , 2019, 9, 333-350.	0.9	2
106	A novel rotating wide gap annular bioreactor (Taylor-Couette type flow) for polyhydroxybutyrate production by <i>Ralstonia eutropha</i> using carob pod extract. <i>Journal of Environmental Management</i> , 2021, 299, 113591.	3.8	2
107	Chitosan production by <i>Penicillium citrinum</i> using paper mill wastewater and rice straw hydrolysate as low-cost substrates in a continuous stirred tank reactor. <i>Environmental Technology (United Kingdom)</i> , 2023, 44, 2254-2269.	1.2	2
108	Synthesis of ceramic tubular membrane from low-cost clay precursors for blood purification application as substitution to commercial dialysis membrane. <i>Journal of Chemical Technology and Biotechnology</i> , 0, , .	1.6	2

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109	Fabrication of circular shaped ceramic membrane using mixed clays by uniaxial compaction method for the treatment of oily wastewater. International Journal of Nano and Biomaterials, 2014, 5, 75.	0.1	1
110	Performance assessment of MCM-48 ceramic composite membrane by separation of AlCl ₃ from aqueous solution. Ecotoxicology and Environmental Safety, 2016, 134, 398-402.	2.9	1
111	Separation of bacteria Kocuria rhizophila BR-1 from its broth during synthesis of gold nanoparticles using ceramic membrane by shear-enhanced filtration process. Chemosphere, 2021, 281, 130761.	4.2	1
112	Removal of methyl orange from synthetic wastewater using analcime-C, MCM-41 and γ -Al ₂ O ₃ composite membranes. International Journal of Environmental Technology and Management, 2018, 21, 111.	0.1	0