

Shadi W. Hasan

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

113
papers

3,446
citations

27
h-index

56
g-index

116
ext. papers

4,440
ext. citations

7.4
avg, IF

6.18
L-index

| # | Paper | IF | Citations |
|-----|---|------|-----------|
| 113 | Supercritical Technology-Based Date Sugar Powder Production: Process Modeling and Simulation. <i>Processes</i> , 2022 , 10, 257 | 2.9 | 1 |
| 112 | An integrated algal membrane photobioreactor as a green-transition technology for the carbon capture and utilization. <i>Journal of Environmental Chemical Engineering</i> , 2022 , 10, 107344 | 6.8 | 0 |
| 111 | Highly permeable, environmentally-friendly, antifouling polylactic acid-hydroxyapatite/polydopamine (PLA-HAp/PDA) ultrafiltration membranes. <i>Journal of Cleaner Production</i> , 2022 , 330, 129871 | 10.3 | 1 |
| 110 | Surface-engineered polyethersulfone membranes with inherent Fe-Mn bimetallic oxides for improved permeability and antifouling capability. <i>Environmental Research</i> , 2022 , 204, 112390 | 7.9 | 1 |
| 109 | Recent advances in the biosensors application for the detection of bacteria and viruses in wastewater.. <i>Journal of Environmental Chemical Engineering</i> , 2022 , 10, 107070 | 6.8 | 0 |
| 108 | Asymmetrical ultrafiltration membranes based on polylactic acid for the removal of organic substances from wastewater. <i>Journal of Water Process Engineering</i> , 2022 , 45, 102510 | 6.7 | 2 |
| 107 | Mechanistic insights into the selective mass-transport and fabrication of holey graphene-based membranes for water purification applications. <i>Chemical Engineering Journal</i> , 2022 , 431, 134248 | 14.7 | 0 |
| 106 | Innovative encapsulated self-forming dynamic bio-membrane bioreactor (ESFDMBR) for efficient wastewater treatment and fouling control. <i>Science of the Total Environment</i> , 2022 , 805, 150296 | 10.2 | 3 |
| 105 | Enhanced water permeability and fouling resistance properties of ultrafiltration membranes incorporated with hydroxyapatite decorated orange-peel-derived activated carbon nanocomposites. <i>Chemosphere</i> , 2022 , 286, 131799 | 8.4 | 7 |
| 104 | Synthesis of polydopamine coated tungsten oxide@ poly(vinylidene fluoride-co-hexafluoropropylene) electrospun nanofibers as multifunctional membranes for water applications. <i>Chemical Engineering Journal</i> , 2022 , 427, 131021 | 14.7 | 12 |
| 103 | Highly selective heavy metal ions membranes combining sulfonated polyethersulfone and self-assembled manganese oxide nanosheets on positively functionalized graphene oxide nanosheets. <i>Chemical Engineering Journal</i> , 2022 , 428, 131267 | 14.7 | 10 |
| 102 | Electrochemical treatment of petroleum wastewater: standalone and integrated processes 2022 , 171-183 | | |
| 101 | An overview of microalgae biomass as a sustainable aquaculture feed ingredient: food security and circular economy.. <i>Bioengineered</i> , 2022 , 13, 9521-9547 | 5.7 | 1 |
| 100 | Development of green polylactic acid asymmetric ultrafiltration membranes for nutrient removal.. <i>Science of the Total Environment</i> , 2022 , 824, 153869 | 10.2 | 1 |
| 99 | Electrochemical membrane bioreactors for wastewater treatment 2022 , 163-194 | | |
| 98 | Recent developments in hazardous pollutants removal from wastewater and water reuse within a circular economy. <i>Npj Clean Water</i> , 2022 , 5, | 11.2 | 3 |
| 97 | Three-Dimensional Graphene/MWCNT-MnO ₂ Nanocomposites for High-Performance Capacitive Deionization (CDI) Application. <i>Journal of Electroanalytical Chemistry</i> , 2022 , 116318 | 4.1 | 2 |

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|----|---|------|----|
| 96 | Supercritical CO ₂ pretreatment of date fruit biomass for enhanced recovery of fruit sugars. <i>Sustainable Energy Technologies and Assessments</i> , 2022 , 52, 102231 | 4.7 | 0 |
| 95 | Optimization of an rGO-based biosensor for the sensitive detection of bovine serum albumin: Effect of electric field on detection capability.. <i>Chemosphere</i> , 2022 , 134700 | 8.4 | 0 |
| 94 | Enhanced water flux and bacterial resistance in cellulose acetate membranes with quaternary ammoniumpropylated polysilsesquioxane. <i>Chemosphere</i> , 2021 , 289, 133144 | 8.4 | 4 |
| 93 | Integrated electrochemical-adsorption process for the removal of trace heavy metals from wastewater. <i>Case Studies in Chemical and Environmental Engineering</i> , 2021 , 4, 100147 | 7.5 | 1 |
| 92 | Fabrication of novel polyethersulfone (PES) hybrid ultrafiltration membranes with superior permeability and antifouling properties using environmentally friendly sulfonated functionalized polydopamine nanofillers. <i>Separation and Purification Technology</i> , 2021 , 261, 118311 | 8.3 | 27 |
| 91 | Polyethersulfone hybrid ultrafiltration membranes fabricated with polydopamine modified ZnFe ₂ O ₄ nanocomposites: Applications in humic acid removal and oil/water emulsion separation. <i>Chemical Engineering Research and Design</i> , 2021 , 148, 813-824 | 5.5 | 20 |
| 90 | Supercritical carbon dioxide extraction of plant phytochemicals for biological and environmental applications - A review. <i>Chemosphere</i> , 2021 , 271, 129525 | 8.4 | 32 |
| 89 | Highly selective etherification of fructose and 5-hydroxymethylfurfural over a novel Pd-Ru/MXene catalyst for sustainable liquid fuel production. <i>International Journal of Energy Research</i> , 2021 , 45, 14680-14691 | 4.5 | 5 |
| 88 | Hybrid capacitive deionization of NaCl and toxic heavy metal ions using faradic electrodes of silver nanospheres decorated pomegranate peel-derived activated carbon. <i>Environmental Research</i> , 2021 , 197, 111110 | 7.9 | 11 |
| 87 | Preparation of TiO ₂ /SiO ₂ ceramic membranes via dip coating for the treatment of produced water. <i>Chemosphere</i> , 2021 , 273, 129684 | 8.4 | 13 |
| 86 | Emerging contaminants in the water bodies of the Middle East and North Africa (MENA): A critical review. <i>Science of the Total Environment</i> , 2021 , 754, 142177 | 10.2 | 26 |
| 85 | Polyvinylidene fluoride (PVDF)-Zirconium phosphate (ZrP) nanoparticles based mixed matrix membranes for removal of heavy metal ions. <i>Chemosphere</i> , 2021 , 267, 128896 | 8.4 | 25 |
| 84 | Designed assembly of Ni/MAX (TiAlC) and porous graphene-based asymmetric electrodes for capacitive deionization of multivalent ions. <i>Chemosphere</i> , 2021 , 266, 129048 | 8.4 | 10 |
| 83 | Detection and quantification of SARS-CoV-2 RNA in wastewater and treated effluents: Surveillance of COVID-19 epidemic in the United Arab Emirates. <i>Science of the Total Environment</i> , 2021 , 764, 142929 | 10.2 | 70 |
| 82 | Integrated and hybrid processes for oily wastewater treatment 2021 , 313-337 | | |
| 81 | Indoor versus outdoor transmission of SARS-COV-2: environmental factors in virus spread and underestimated sources of risk. <i>Euro-Mediterranean Journal for Environmental Integration</i> , 2021 , 6, 30 | 1.7 | 21 |
| 80 | Ozonation-assisted electro-membrane hybrid reactor for oily wastewater treatment: A methodological approach and synergy effects. <i>Journal of Cleaner Production</i> , 2021 , 289, 125764 | 10.3 | 15 |
| 79 | Detection and removal of waterborne enteric viruses from wastewater: A comprehensive review. <i>Journal of Environmental Chemical Engineering</i> , 2021 , 9, 105613 | 6.8 | 12 |

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|----|---|------|----|
| 78 | Wastewater treatment and fouling control in an electro algae-activated sludge membrane bioreactor. <i>Science of the Total Environment</i> , 2021 , 786, 147475 | 10.2 | 13 |
| 77 | Thin film composite forward osmosis membranes based on thermally treated PAN hydrophilized PVDF electrospun nanofiber substrates for improved performance. <i>Journal of Environmental Chemical Engineering</i> , 2021 , 9, 106240 | 6.8 | 3 |
| 76 | Membrane fouling mitigation techniques for oily wastewater: A short review. <i>Journal of Water Process Engineering</i> , 2021 , 43, 102293 | 6.7 | 10 |
| 75 | Polymerization of lactic acid produced from food waste by metal oxide-assisted dark fermentation. <i>Environmental Technology and Innovation</i> , 2021 , 24, 101862 | 7 | 4 |
| 74 | Valorization of groundnut shell via pyrolysis: Product distribution, thermodynamic analysis, kinetic estimation, and artificial neural network modeling. <i>Chemosphere</i> , 2021 , 283, 131162 | 8.4 | 12 |
| 73 | Impact of electrodes configuration in an electrokinetic cell for oil-water separation. <i>Case Studies in Chemical and Environmental Engineering</i> , 2021 , 4, 100135 | 7.5 | 0 |
| 72 | Surface tuned polyethersulfone membrane using an iron oxide functionalized halloysite nanocomposite for enhanced humic acid removal. <i>Environmental Research</i> , 2021 , 204, 112113 | 7.9 | 5 |
| 71 | Sustainable Treatment of Food Industry Wastewater Using Membrane Technology: A Short Review. <i>Water (Switzerland)</i> , 2021 , 13, 3450 | 3 | 6 |
| 70 | Preparation of novel polyvinylidene fluoride (PVDF)-Tin(IV) oxide (SnO ₂) ion exchange mixed matrix membranes for the removal of heavy metals from aqueous solutions. <i>Separation and Purification Technology</i> , 2020 , 250, 117250 | 8.3 | 36 |
| 69 | Technoprodutive evaluation of the energyless microbial-integrated diffusion dialysis technique for acid mine drainage valorization. <i>Environmental Science: Water Research and Technology</i> , 2020 , 6, 12174-1229 ¹ | 4.2 | 1 |
| 68 | Correlation between bacterial community structure and performance efficiency of a full-scale wastewater treatment plant. <i>Journal of Water Process Engineering</i> , 2020 , 37, 101472 | 6.7 | 24 |
| 67 | Influence of silica nanoparticles on the desalination performance of forward osmosis polybenzimidazole membranes. <i>Desalination</i> , 2020 , 491, 114441 | 10.3 | 11 |
| 66 | Novel polyethersulfone-functionalized graphene oxide (PES-fGO) mixed matrix membranes for wastewater treatment. <i>Separation and Purification Technology</i> , 2020 , 241, 116735 | 8.3 | 24 |
| 65 | Performance tests and removal mechanisms of aerated electrocoagulation in the treatment of oily wastewater. <i>Journal of Water Process Engineering</i> , 2020 , 36, 101290 | 6.7 | 20 |
| 64 | A conceptual framework modeling of functional microbial communities in wastewater treatment electro-bioreactors. <i>Water Science and Technology</i> , 2020 , 82, 3047-3061 | 2.2 | 0 |
| 63 | Advancements of Electrically Enhanced Membrane Bioreactor (eMBR) for Wastewater Treatment via Coupling with Novel Inorganic and Polymeric Mixed Matrix Membranes. <i>Advances in Science, Technology and Innovation</i> , 2020 , 469-472 | 0.3 | |
| 62 | Thin film deposition techniques for polymeric membranes—A review. <i>Journal of Membrane Science</i> , 2020 , 610, 118258 | 9.6 | 35 |
| 61 | Synthesis of polyethersulfone (PES)/GO-SiO ₂ mixed matrix membranes for oily wastewater treatment. <i>Water Science and Technology</i> , 2020 , 81, 1354-1364 | 2.2 | 16 |

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|----|---|------|----|
| 60 | Surface modification of anti-fouling novel cellulose/graphene oxide (GO) nanosheets (NS) microfiltration membranes for seawater desalination applications. <i>Journal of Chemical Technology and Biotechnology</i> , 2020 , 95, 1915-1925 | 3.5 | 19 |
| 59 | Development of Polyethersulfone/Zirconium phosphate (PES/ZrP) flat-sheet nanocomposite ultrafiltration membranes. <i>Chemical Engineering Research and Design</i> , 2020 , 161, 206-217 | 5.5 | 12 |
| 58 | A critical review on nanomaterials membrane bioreactor (NMs-MBR) for wastewater treatment. <i>Npj Clean Water</i> , 2020 , 3, | 11.2 | 25 |
| 57 | Impregnation of polyethylene membranes with 1-butyl-3-methylimidazolium dicyanamide ionic liquid for enhanced removal of Cd ²⁺ , Ni ²⁺ , and Zn ²⁺ from aqueous solutions. <i>Journal of Molecular Liquids</i> , 2020 , 318, 113981 | 6 | 3 |
| 56 | Oily wastewater treatment via phase-inverted polyethersulfone-maghemite (PES/Fe ₂ O ₃) composite membranes. <i>Journal of Water Process Engineering</i> , 2020 , 37, 101545 | 6.7 | 13 |
| 55 | Quorum sensing control and wastewater treatment in quorum quenching/ submerged membrane electro-bioreactor (SMEBR(QQ)) hybrid system. <i>Biomass and Bioenergy</i> , 2019 , 128, 105329 | 5.3 | 5 |
| 54 | Combined process of electrically-membrane bioreactor and TiO ₂ aerogel filtration for efficient wastewater treatment. <i>Journal of Water Process Engineering</i> , 2019 , 28, 107-114 | 6.7 | 10 |
| 53 | GO, SiO ₂ , and SnO ₂ nanomaterials as highly efficient adsorbents for Zn ²⁺ from industrial wastewater: A second stage treatment to electrically enhanced membrane bioreactor. <i>Journal of Water Process Engineering</i> , 2019 , 31, 100815 | 6.7 | 16 |
| 52 | 3D printing and surface imprinting technologies for water treatment: A review. <i>Journal of Water Process Engineering</i> , 2019 , 31, 100786 | 6.7 | 32 |
| 51 | Can machine language and artificial intelligence revolutionize process automation for water treatment and desalination?. <i>Desalination</i> , 2019 , 458, 84-96 | 10.3 | 67 |
| 50 | Full-Scale Membrane Distillation Systems and Performance Improvement Through Modeling 2019 , 105-140 | | 1 |
| 49 | Integrating Pressure Retarded Osmosis and Membrane Distillation 2019 , 351-363 | | |
| 48 | Synthesis of super hydrophilic cellulose-alpha zirconium phosphate ion exchange membrane via surface coating for the removal of heavy metals from wastewater. <i>Science of the Total Environment</i> , 2019 , 690, 167-180 | 10.2 | 46 |
| 47 | Are pharmaceuticals removal and membrane fouling in electromembrane bioreactor affected by current density?. <i>Science of the Total Environment</i> , 2019 , 692, 732-740 | 10.2 | 27 |
| 46 | Numerical modeling of an integrated OMBR-NF hybrid system for simultaneous wastewater reclamation and brine management. <i>Euro-Mediterranean Journal for Environmental Integration</i> , 2019 , 4, 1 | 1.7 | 2 |
| 45 | Membrane oscillation and slot (pore) blocking in oil/water separation. <i>Chemical Engineering Research and Design</i> , 2019 , 142, 111-120 | 5.5 | 12 |
| 44 | Synthesis of polybenzimidazole (PBI) forward osmosis (FO) membrane and computational fluid dynamics (CFD) modeling of concentration gradient across membrane surface. <i>Desalination</i> , 2019 , 452, 17-28 | 10.3 | 15 |
| 43 | Renewable Energy-Powered Membrane Systems for Water Desalination 2019 , 153-177 | | 2 |

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| 42 | Polymers for Membrane Filtration in Water Purification. <i>Springer Series on Polymer and Composite Materials</i> , 2019 , 167-190 | 0.9 | 11 |
| 41 | Impact of current density on the function and microbial community structure in electro-bioreactors. <i>Journal of Hazardous Materials</i> , 2019 , 368, 877-884 | 12.8 | 10 |
| 40 | Selectivity of Nanoporous MnO ₂ and TiO ₂ Membranes for Residual Contaminants in Treated Wastewater. <i>Chemical Engineering and Technology</i> , 2018 , 41, 413-420 | 2 | 8 |
| 39 | Novel graphene nanoplatelets-coated polyethylene membrane for the treatment of reject brine by pilot-scale direct contact membrane distillation: An optimization study. <i>Desalination</i> , 2018 , 441, 9-20 | 10.3 | 18 |
| 38 | Effect of hydraulic retention time on microbial community structure in wastewater treatment electro-bioreactors. <i>MicrobiologyOpen</i> , 2018 , 7, e00590 | 3.4 | 13 |
| 37 | Fabrication of blend polyvinylidene fluoride/chitosan membranes for enhanced flux and fouling resistance. <i>Separation and Purification Technology</i> , 2018 , 190, 68-76 | 8.3 | 38 |
| 36 | Assessment of Microbial Community Structure and Function in Serially Passaged Wastewater Electro-Bioreactor Sludge: An Approach to Enhance Sludge Settleability. <i>Scientific Reports</i> , 2018 , 8, 70134-9 | 4.9 | 18 |
| 35 | Photocatalytic ozonation under visible light for the remediation of water effluents and its integration with an electro-membrane bioreactor. <i>Chemosphere</i> , 2018 , 209, 534-541 | 8.4 | 24 |
| 34 | Novel thermosiphon-powered reverse osmosis: Techno-economic model for renewable energy and fresh water recovery. <i>Desalination</i> , 2018 , 435, 152-160 | 10.3 | 14 |
| 33 | Nucleophilic-functionalized Cyclodextrin-polyethersulfone structures from facile lamination process as nanoporous membrane active layers for wastewater post-treatment: Molecular implications. <i>Journal of Membrane Science</i> , 2018 , 563, 914-925 | 9.6 | 9 |
| 32 | Electrokinetic pretreatment of seawater to decrease the Ca ²⁺ , Mg ²⁺ , SO ₄ ²⁻ and bacteria contents in membrane desalination applications. <i>Desalination</i> , 2017 , 403, 107-116 | 10.3 | 7 |
| 31 | Brine management methods: Recent innovations and current status. <i>Desalination</i> , 2017 , 407, 1-23 | 10.3 | 154 |
| 30 | Introducing membrane specie permeability coefficient and economic assessment of polycomposite membrane bioreactor integrated with electric field. <i>Journal of Water Process Engineering</i> , 2017 , 19, 338-345 | 6.7 | 7 |
| 29 | Nanoporous hollow fiber polyethersulfone membranes for the removal of residual contaminants from treated wastewater effluent: Functional and molecular implications. <i>Separation and Purification Technology</i> , 2017 , 189, 20-31 | 8.3 | 18 |
| 28 | Fuzzy Logic-Based Model to Predict the Impact of Flow Rate and Turbidity on the Performance of Multimedia Filters. <i>Journal of Environmental Engineering, ASCE</i> , 2017 , 143, 04017065 | 2 | 0 |
| 27 | Biomimetic membranes: A critical review of recent progress. <i>Desalination</i> , 2017 , 420, 403-424 | 10.3 | 69 |
| 26 | Brine Management in Desalination Plants 2017 , 207-236 | | 3 |
| 25 | Molecular and ionic-scale chemical mechanisms behind the role of nitrocyyl group in the electrochemical removal of heavy metals from sludge. <i>Scientific Reports</i> , 2016 , 6, 31828 | 4.9 | 13 |

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| 24 | A critical review on recent polymeric and nano-enhanced membranes for reverse osmosis. <i>RSC Advances</i> , 2016 , 6, 8134-8163 | 3.7 | 94 |
| 23 | Leaching of PVP from PVDF/PVP blend membranes: impacts on membrane structure and fouling in membrane bioreactors. <i>Journal of Materials Science</i> , 2016 , 51, 4328-4341 | 4.3 | 41 |
| 22 | Recent advances in humidification dehumidification (HDH) desalination processes: Improved designs and productivity. <i>Renewable and Sustainable Energy Reviews</i> , 2016 , 57, 929-944 | 16.2 | 79 |
| 21 | Humidification-dehumidification desalination process driven by photovoltaic thermal energy recovery (PV-HDH) for small-scale sustainable water and power production. <i>Desalination</i> , 2016 , 377, 163-171 | 10.3 | 68 |
| 20 | Statistical Relationship Between Dissolved and Suspended Components in An Electrically-Enhanced Membrane Bioreactor for Municipal Wastewater Treatment 2016 , | | 2 |
| 19 | Rheological and physicochemical characterization of UAE crude oil. <i>Petroleum Science and Technology</i> , 2016 , 34, 659-664 | 1.4 | 5 |
| 18 | Experimental investigation and artificial neural networks ANNs modeling of electrically-enhanced membrane bioreactor for wastewater treatment. <i>Journal of Water Process Engineering</i> , 2016 , 11, 88-97 | 6.7 | 70 |
| 17 | Principles and applications of direct contact membrane distillation (DCMD): A comprehensive review. <i>Desalination</i> , 2016 , 398, 222-246 | 10.3 | 206 |
| 16 | Recent advancements in forward osmosis desalination: A review. <i>Chemical Engineering Journal</i> , 2015 , 281, 502-522 | 14.7 | 294 |
| 15 | Recent improvements in oily wastewater treatment: Progress, challenges, and future opportunities. <i>Journal of Environmental Sciences</i> , 2015 , 37, 15-30 | 6.4 | 202 |
| 14 | Theoretical investigation of the influence of operating conditions on the treatment performance of an electrically-induced membrane bioreactor. <i>Journal of Water Process Engineering</i> , 2015 , 6, 72-82 | 6.7 | 26 |
| 13 | Recent applications of nanomaterials in water desalination: A critical review and future opportunities. <i>Desalination</i> , 2015 , 367, 37-48 | 10.3 | 178 |
| 12 | Enhanced sludge properties and distribution study of sludge components in electrically-enhanced membrane bioreactor. <i>Journal of Environmental Management</i> , 2015 , 159, 78-85 | 7.9 | 40 |
| 11 | Numerical modeling of an electrically enhanced membrane bioreactor (MBER) treating medium-strength wastewater. <i>Journal of Environmental Management</i> , 2015 , 164, 1-9 | 7.9 | 19 |
| 10 | Impact of continuous and intermittent supply of electric field on the function and microbial community of wastewater treatment electro-bioreactors. <i>Electrochimica Acta</i> , 2015 , 181, 271-279 | 6.7 | 55 |
| 9 | A short review on reverse osmosis pretreatment technologies. <i>Desalination</i> , 2014 , 354, 30-38 | 10.3 | 202 |
| 8 | Start-up period investigation of pilot-scale submerged membrane electro-bioreactor (SMEBR) treating raw municipal wastewater. <i>Chemosphere</i> , 2014 , 97, 71-7 | 8.4 | 73 |
| 7 | Rheological properties of heavy & light crude oil mixtures for improving flowability. <i>Journal of Petroleum Science and Engineering</i> , 2012 , 81, 122-128 | 4.4 | 125 |

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| 6 | Correlations between trans-membrane pressure (TMP) and sludge properties in submerged membrane electro-bioreactor (SMEBR) and conventional membrane bioreactor (MBR). <i>Bioresource Technology</i> , 2012 , 120, 199-205 | 11 | 63 |
| 5 | Heavy crude oil viscosity reduction and rheology for pipeline transportation. <i>Fuel</i> , 2010 , 89, 1095-1100 | 7.1 | 282 |
| 4 | Fe and Zn removal from steel making industrial wastewater by electrically enhanced membrane bioreactor | 93, 9-21 | 7 |
| 3 | Effect of flow rate, draw solution concentration and temperature on the performance of TFC FO membrane, and the potential use of RO reject brine as a draw solution in FO-RO hybrid systems | 136, 65-71 | 12 |
| 2 | Self-forming Dynamic Membranes for Wastewater Treatment. <i>Separation and Purification Reviews</i> , 1-17 | 7.3 | 3 |
| 1 | An overview of biodegradable poly (lactic acid) production from fermentative lactic acid for biomedical and bioplastic applications. <i>Biomass Conversion and Biorefinery</i> , 1 | 2.3 | 3 |