# Binghong Luo

List of Publications by Year
in descending order



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|---|---|---|---|
| 56 papers | 1,578 citations | 279798 23 h-index | 330143 37 g-index |
| 56 all docs | 56 docs citations | 56 times ranked | 1957 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | 3D bioprinting of gellan gum and poly (ethylene glycol) diacrylate based hydrogels to produce human-scale constructs with high-fidelity. Materials and Design, 2018, 160, 486-495. | 7.0 | 115 |
| 2 | Liquid Crystalline Behaviors of Chitin Nanocrystals and Their Reinforcing Effect on Natural Rubber. ACS Sustainable Chemistry and Engineering, 2018, 6, 325-336. | 6.7 | 79 |
| 3 | The improvement of mechanical performance and water-response of carboxylated SBR by chitin nanocrystals. European Polymer Journal, 2015, 68, 190-206. | 5.4 | 68 |
| 4 | Antibacterial activity and cytocompatibility of chitooligosaccharide-modified polyurethane membrane via polydopamine adhesive layer. Carbohydrate Polymers, 2017, 156, 235-243. | 10.2 | 61 |
| 5 | Tough and highly stretchable polyacrylamide nanocomposite hydrogels with chitin nanocrystals. International Journal of Biological Macromolecules, 2015, 78, 23-31. | 7.5 | 58 |
| 6 | Enhanced mechanical properties and cytocompatibility of electrospun poly( l -lactide) composite fiber membranes assisted by polydopamine-coated halloysite nanotubes. Applied Surface Science, 2016, 369, 82-91. | 6.1 | 56 |
| 7 | Electrospun composite nanofiber membrane of poly( l -lactide) and surface grafted chitin whiskers: Fabrication, mechanical properties and cytocompatibility. Carbohydrate Polymers, 2016, 147, 216-225. | 10.2 | 55 |
| 8 | The design, fabrication and evaluation of 3D printed gHNTs/gMgO whiskers/PLLA composite scaffold with honeycomb microstructure for bone tissue engineering. Composites Part B: Engineering, 2020, 192, 108001. | 12.0 | 55 |
| 9 | 3D poly (L-lactide)/chitosan micro/nano fibrous scaffolds functionalized with quercetin-polydopamine for enhanced osteogenic and anti-inflammatory activities. Chemical Engineering Journal, 2020, 391, 123524. | 12.7 | 50 |
| 10 | Icariin immobilized electrospinning poly(l-lactide) fibrous membranes via polydopamine adhesive coating with enhanced cytocompatibility and osteogenic activity. Materials Science and Engineering C, 2017, 79, 399-409. | 7.3 | 49 |
| 11 | Superamphiphobic Surfaces with Self-Cleaning and Antifouling Properties by Functionalized Chitin Nanocrystals. ACS Sustainable Chemistry and Engineering, 2020, 8, 6690-6699. | 6.7 | 47 |
| 12 | Fabrication and Evaluation of 3D Printed Poly(<scp>l</scp>-lactide) Scaffold Functionalized with Quercetin-Polydopamine for Bone Tissue Engineering. ACS Biomaterials Science and Engineering, 2019, 5, 2506-2518. | 5.2 | 44 |
| 13 | Stress-relaxing double-network hydrogel for chondrogenic differentiation of stem cells. Materials Science and Engineering C, 2020, 107, 110333. | 7.3 | 43 |
| 14 | Construction of biomimetic artificial intervertebral disc scaffold via 3D printing and electrospinning. Materials Science and Engineering C, 2021, 128, 112310. | 7.3 | 38 |
| 15 | Mechanical properties and osteogenic activity of poly(l-lactide) fibrous membrane synergistically enhanced by chitosan nanofibers and polydopamine layer. Materials Science and Engineering C, 2017, 81, 280-290. | 7.3 | 36 |
| 16 | Strengthening and toughening of poly(L-lactide) composites by surface modified MgO whiskers. Applied Surface Science, 2015, 332, 215-223. | 6.1 | 35 |
| 17 | Nanocomposites of poly( l -lactide) and surface-modified chitin whiskers with improved mechanical properties and cytocompatibility. European Polymer Journal, 2016, 81, 266-283. | 5.4 | 35 |
| 18 | Functional polyhedral oligomeric silsesquioxane reinforced poly(lactic acid) nanocomposites for biomedical applications. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 90, 604-614. | 3.1 | 35 |

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|---|---|---|---|
| 19 | Biomimetic mineralisation of eggshell membrane featuring natural nanofiber network structure for improving its osteogenic activity. Colloids and Surfaces B: Biointerfaces, 2019, 179, 299-308. | 5.0 | 33 |
| 20 | Sulfonated chitosan and phosphorylated chitosan coated polylactide membrane by polydopamine-assisting for the growth and osteogenic differentiation of MC3T3-E1s. Carbohydrate Polymers, 2020, 229, 115517. | 10.2 | 31 |
| 21 | Sustained release of plasmid DNA from PLLA/POSS nanofibers for angiogenic therapy. Chemical Engineering Journal, 2019, 365, 270-281. | 12.7 | 30 |
| 22 | Chitin Nanocrystals as an Eco-friendly and Strong Anisotropic Adhesive. ACS Applied Materials & Interfaces, 2021, 13, 11356-11368. | 8.0 | 30 |
| 23 | Fabrication and evaluation of a chitin whisker/poly(<scp>l</scp>-lactide) composite scaffold by the direct trisolvent-ink writing method for bone tissue engineering. Nanoscale, 2020, 12, 18225-18239. | 5.6 | 29 |
| 24 | In vitro degradation and cytocompatibility of g-MgO whiskers/PLLA composites. Journal of Materials Science, 2017, 52, 2329-2344. | 3.7 | 25 |
| 25 | Synergistic reinforcing and toughening of poly( l -lactide) composites with surface-modified MgO and chitin whiskers. Composites Science and Technology, 2016, 133, 128-135. | 7.8 | 23 |
| 26 | Liquid crystalline and rheological properties of chitin whiskers with different chemical structures and chargeability. International Journal of Biological Macromolecules, 2020, 157, 24-35. | 7.5 | 22 |
| 27 | Rapid synthesis and characterization of chitosanâ€‹gâ€‹poly(<scp>D,L</scp>â€‹lactide) copolymers with hydroxyethyl chitosan as a macroinitiator under microwave irradiation. Journal of Applied Polymer Science, 2012, 125, E125. | 2.6 | 21 |
| 28 | Enhancement of growth and osteogenic differentiation of MC3T3-E1 cells via facile surface functionalization of polylactide membrane with chitooligosaccharide based on polydopamine adhesive coating. Applied Surface Science, 2016, 360, 858-865. | 6.1 | 21 |
| 29 | Hyaluronic Acid Modified Halloysite Nanotubes Decorated with ZIF-8 Nanoparticles as Dual Chemo- and Photothermal Anticancer Agents. ACS Applied Nano Materials, 2022, 5, 5813-5825. | 5.0 | 21 |
| 30 | Well-ordered chitin whiskers layer with high stability on the surface of poly(d,l-lactide) film for enhancing mechanical and osteogenic properties. Carbohydrate Polymers, 2019, 212, 277-288. | 10.2 | 20 |
| 31 | Preparation of HAp whiskers with or without Mg ions and their effects on the mechanical properties and osteogenic activity of poly(,-lactide). Composites Part B: Engineering, 2020, 196, 108137. | 12.0 | 20 |
| 32 | 3D printed gellan gum/graphene oxide scaffold for tumor therapy and bone reconstruction. Composites Science and Technology, 2021, 208, 108763. | 7.8 | 19 |
| 33 | Deferoxamine immobilized poly(D,L-lactide) membrane via polydopamine adhesive coating: The influence on mouse embryo osteoblast precursor cells and human umbilical vein endothelial cells. Materials Science and Engineering C, 2017, 70, 701-709. | 7.3 | 18 |
| 34 | The liquid crystalline order, rheology and their correlation in chitin whiskers suspensions. Carbohydrate Polymers, 2019, 209, 92-100. | 10.2 | 18 |
| 35 | Polyethylene glycol grafted chitin nanocrystals enhanced, stretchable, freezing-tolerant ionic conductive organohydrogel for strain sensors. Composites Part A: Applied Science and Manufacturing, 2022, 155, 106813. | 7.6 | 18 |
| 36 | Crosslinked carboxylated SBR composites reinforced with chitin nanocrystals. Journal of Polymer Research, 2016, 23, 1. | 2.4 | 17 |

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|---|---|---|---|
| 37 | Preparation of Icariin and Deferoxamine Functionalized Poly(<scp>l</scp>-lactide)/chitosan Micro/Nanofibrous Membranes with Synergistic Enhanced Osteogenesis and Angiogenesis. ACS Applied Bio Materials, 2018, 1, 389-402. | 4.6 | 16 |
| 38 | Biomineralization guided by polydopamine-modifed poly(L-lactide) fibrous membrane for promoted osteoconductive activity. Biomedical Materials (Bristol), 2019, 14, 055005. | 3.3 | 16 |
| 39 | Enzymatic Degradation of Nanosized Chitin Whiskers with Different Degrees of Deacetylation. ACS Biomaterials Science and Engineering, 2019, 5, 5316-5326. | 5.2 | 16 |
| 40 | Engineering collagen fiber templates with oriented nanoarchitecture and concerns on osteoblast behaviors. International Journal of Biological Macromolecules, 2021, 185, 77-86. | 7.5 | 15 |
| 41 | Facile fabrication of hydrophobic paper by HDTMS modified chitin nanocrystals coating for food packaging. Food Hydrocolloids, 2022, 133, 107915. | 10.7 | 15 |
| 42 | Surface modification of halloysite nanotubes with <scp>l</scp>â€lactic acid: An effective route to highâ€performance poly(<scp>l</scp>â€lactide) composites. Journal of Applied Polymer Science, 2015, 132, . | 2.6 | 14 |
| 43 | Customized composite intervertebral disc scaffolds by integrated 3D bioprinting for therapeutic implantation. Composites Part A: Applied Science and Manufacturing, 2021, 147, 106468. | 7.6 | 14 |
| 44 | Anisotropic and robust hydrogels combined osteogenic and angiogenic activity as artificial periosteum. Composites Part B: Engineering, 2022, 233, 109627. | 12.0 | 13 |
| 45 | A multifunctional coaxial fiber membrane loaded with dual drugs for guided tissue regeneration. Journal of Biomaterials Applications, 2020, 34, 1041-1051. | 2.4 | 12 |
| 46 | Creating Ultrastrong and Osteogenic Chitin Nanocomposite Hydrogels via Chitin Whiskers with Different Surface Chemistries. ACS Sustainable Chemistry and Engineering, 2020, 8, 17487-17499. | 6.7 | 11 |
| 47 | Bio-inspired liquid crystal gel with adjustable viscoelasticity to modulate cell behaviors and fate. Composites Part B: Engineering, 2022, 234, 109704. | 12.0 | 11 |
| 48 | Fabrication, antibacterial activity and cytocompatibility of quaternary ammonium chitooligosaccharide functionalized polyurethane membrane via polydopamine adhesive layer. Materials Science and Engineering C, 2018, 93, 319-331. | 7.3 | 9 |
| 49 | Dual-Cross-linked Liquid Crystal Hydrogels with Controllable Viscoelasticity for Regulating Cell Behaviors. ACS Applied Materials & Interfaces, 2022, 14, 21966-21977. | 8.0 | 9 |
| 50 | Synergistic effect of functionalized poly( -lactide) with surface-modified MgO and chitin whiskers on osteogenesis in vivo and in vitro. Materials Science and Engineering C, 2019, 103, 109851. | 7.3 | 8 |
| 51 | Facile Method to Create Poly(<scp>d</scp>,<scp>l</scp>-lactide) Composite Membranes with Sequential Chitin Whisker Layers for Tunable Strength and Cell Adhesion. ACS Sustainable Chemistry and Engineering, 2021, 9, 4440-4452. | 6.7 | 7 |
| 52 | Protein adsorption on the poly(L-lactic acid) surface modified by chitosan and its derivatives. Science Bulletin, 2009, 54, 3167-3173. | 1.7 | 5 |
| 53 | Synergistic Effect of Surface-Modified MgO and Chitin Whiskers on the Hydrolytic Degradation Behavior of Injection Molding Poly(<scp>l</scp>-lactic acid). ACS Biomaterials Science and Engineering, 2019, 5, 2942-2952. | 5.2 | 4 |
| 54 | Mechanical and nonisothermal cold crystallization behaviors of injection molded surfaceâ€modified chitin whiskers/poly(<scp>l</scp>â€lactide) composites. Polymer Composites, 2021, 42, 6635-6647. | 4.6 | 4 |

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|---|---|---|---|
| 55 | Purification of Alginate for Tissue Engineering. , 2009, , . | | 2 |
| 56 | Effect of MgO whiskers on thermal behavior and mechanical properties of injection molded poly(Lâ€lactide). Polymer Composites, 2018, 39, E1807. | 4.6 | 2 |