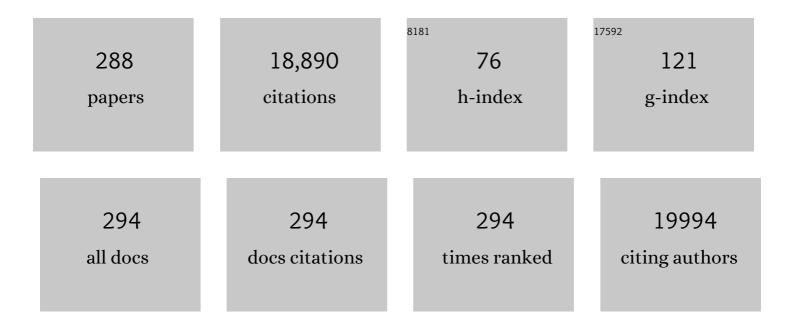
Mariana B Oliveira

List of Publications by Year in descending order

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| # | Article | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Molecular Interactions Driving the Layer-by-Layer Assembly of Multilayers. Chemical Reviews, 2014, 114, 8883-8942. | 47.7 | 697 |
| 2 | Three-dimensional plotted scaffolds with controlled pore size gradients: Effect of scaffold geometry on mechanical performance and cell seeding efficiency. Acta Biomaterialia, 2011, 7, 1009-1018. | 8.3 | 487 |
| 3 | Natural polymers for the microencapsulation of cells. Journal of the Royal Society Interface, 2014, 11, 20140817. | 3.4 | 480 |
| 4 | Polymer/bioactive glass nanocomposites for biomedical applications: A review. Composites Science and Technology, 2010, 70, 1764-1776. | 7.8 | 451 |
| 5 | Novel hydroxyapatite/chitosan bilayered scaffold for osteochondral tissue-engineering applications: Scaffold design and its performance when seeded with goat bone marrow stromal cells. Biomaterials, 2006, 27, 6123-6137. | 11.4 | 411 |
| 6 | Genipinâ€crossâ€linked collagen/chitosan biomimetic scaffolds for articular cartilage tissue engineering applications. Journal of Biomedical Materials Research - Part A, 2010, 95A, 465-475. | 4.0 | 291 |
| 7 | Smart thermoresponsive coatings and surfaces for tissue engineering: switching cell-material boundaries. Trends in Biotechnology, 2007, 25, 577-583. | 9.3 | 289 |
| 8 | Controlling Cell Behavior Through the Design of Polymer Surfaces. Small, 2010, 6, 2208-2220. | 10.0 | 289 |
| 9 | Macro/microporous silk fibroin scaffolds with potential for articular cartilage and meniscus tissue engineering applications. Acta Biomaterialia, 2012, 8, 289-301. | 8.3 | 276 |
| 10 | Polyelectrolyte multilayered assemblies in biomedical technologies. Chemical Society Reviews, 2014, 43, 3453. | 38.1 | 262 |
| 11 | Bone physiology as inspiration for tissue regenerative therapies. Biomaterials, 2018, 185, 240-275. | 11.4 | 259 |
| 12 | Novel Genipin-Cross-Linked Chitosan/Silk Fibroin Sponges for Cartilage Engineering Strategies. Biomacromolecules, 2008, 9, 2764-2774. | 5.4 | 240 |
| 13 | Stimuliâ€Responsive Nanocomposite Hydrogels for Biomedical Applications. Advanced Functional Materials, 2021, 31, 2005941. | 14.9 | 234 |
| 14 | Chitosan/bioactive glass nanoparticle composite membranes for periodontal regeneration. Acta Biomaterialia, 2012, 8, 4173-4180. | 8.3 | 209 |
| 15 | Marine Origin Polysaccharides in Drug Delivery Systems. Marine Drugs, 2016, 14, 34. | 4.6 | 205 |
| 16 | Chitosan/Poly(É›-caprolactone) blend scaffolds for cartilage repair. Biomaterials, 2011, 32, 1068-1079. | 11.4 | 204 |
| 17 | Biomimetic design of materials and biomaterials inspired by the structure of nacre. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2009, 367, 1587-1605. | 3.4 | 193 |
| 18 | lonic liquids in the processing and chemical modification of chitin and chitosan for biomedical applications. Green Chemistry, 2017, 19, 1208-1220. | 9.0 | 190 |

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| 19 | Bioinspired Degradable Substrates with Extreme Wettability Properties. Advanced Materials, 2009, 21, 1830-1834. | 21.0 | 174 |
| 20 | Carrageenan-Based Hydrogels for the Controlled Delivery of PDGF-BB in Bone Tissue Engineering Applications. Biomacromolecules, 2009, 10, 1392-1401. | 5.4 | 165 |
| 21 | Drug Release of pH/Temperature-Responsive Calcium Alginate/Poly(N-isopropylacrylamide) Semi-IPN Beads. Macromolecular Bioscience, 2006, 6, 358-363. | 4.1 | 150 |
| 22 | Development of bioactive and biodegradable chitosan-based injectable systems containing bioactive glass nanoparticles. Acta Biomaterialia, 2009, 5, 115-123. | 8.3 | 150 |
| 23 | Chitosan Scaffolds Containing Hyaluronic Acid for Cartilage Tissue Engineering. Tissue Engineering - Part C: Methods, 2011, 17, 717-730. | 2.1 | 149 |
| 24 | Preparation and in vitro characterization of scaffolds of poly(l-lactic acid) containing bioactive glass ceramic nanoparticles. Acta Biomaterialia, 2008, 4, 1297-1306. | 8.3 | 148 |
| 25 | Bioinspired Ultratough Hydrogel with Fast Recovery, Selfâ€Healing, Injectability and Cytocompatibility. Advanced Materials, 2017, 29, 1700759. | 21.0 | 148 |
| 26 | Preparation and <i>in vitro</i> characterization of novel bioactive glass ceramic nanoparticles. Journal of Biomedical Materials Research - Part A, 2009, 88A, 304-313. | 4.0 | 144 |
| 27 | Interactions between cells or proteins and surfaces exhibiting extreme wettabilities. Soft Matter, 2013, 9, 2985. | 2.7 | 143 |
| 28 | Gellan Gum Injectable Hydrogels for Cartilage Tissue Engineering Applications: <i>In Vitro</i> Studies and Preliminary <i>In Vivo</i> Evaluation. Tissue Engineering - Part A, 2010, 16, 343-353. | 3.1 | 142 |
| 29 | Polymerâ€based microparticles in tissue engineering and regenerative medicine. Biotechnology Progress, 2011, 27, 897-912. | 2.6 | 140 |
| 30 | Bilayered silk/silk-nanoCaP scaffolds for osteochondral tissue engineering: In vitro and in vivo assessment of biological performance. Acta Biomaterialia, 2015, 12, 227-241. | 8.3 | 140 |
| 31 | The osteogenic differentiation of rat bone marrow stromal cells cultured with dexamethasone-loaded carboxymethylchitosan/poly(amidoamine) dendrimer nanoparticles. Biomaterials, 2009, 30, 804-813. | 11.4 | 131 |
| 32 | Free-Standing Polyelectrolyte Membranes Made of Chitosan and Alginate. Biomacromolecules, 2013, 14, 1653-1660. | 5.4 | 131 |
| 33 | Extremely strong and tough hydrogels as prospective candidates for tissue repair – A review. European Polymer Journal, 2015, 72, 344-364. | 5.4 | 129 |
| 34 | Advanced Bottomâ€Up Engineering of Living Architectures. Advanced Materials, 2020, 32, e1903975. | 21.0 | 127 |
| 35 | Preparation and characterization of bioactive glass nanoparticles prepared by sol–gel for biomedical applications. Nanotechnology, 2011, 22, 494014. | 2.6 | 124 |
| 36 | Mineralized structures in nature: Examples and inspirations for the design of new composite materials and biomaterials. Composites Science and Technology, 2010, 70, 1777-1788. | 7.8 | 123 |

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| 37 | Cell interactions with superhydrophilic and superhydrophobic surfaces. Journal of Adhesion Science and Technology, 2014, 28, 843-863. | 2.6 | 123 |
| 38 | Chitosan coated alginate beads containing poly(<i>N</i> â€isopropylacrylamide) for dualâ€stimuliâ€responsive drug release. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2008, 84B, 595-603. | 3.4 | 118 |
| 39 | Green processing of porous chitin structures for biomedical applications combining ionic liquids and supercritical fluid technology. Acta Biomaterialia, 2011, 7, 1166-1172. | 8.3 | 114 |
| 40 | Preparation of chitosan scaffolds loaded with dexamethasone for tissue engineering applications using supercritical fluid technology. European Polymer Journal, 2009, 45, 141-148. | 5.4 | 111 |
| 41 | Controlled Release Strategies for Bone, Cartilage, and Osteochondral Engineering—Part II: Challenges on the Evolution from Single to Multiple Bioactive Factor Delivery. Tissue Engineering - Part B: Reviews, 2013, 19, 327-352. | 4.8 | 108 |
| 42 | Extraction and physico-chemical characterization of a versatile biodegradable polysaccharide obtained from green algae. Carbohydrate Research, 2010, 345, 2194-2200. | 2.3 | 106 |
| 43 | Layerâ€byâ€Layer Assembly of Lightâ€Responsive Polymeric Multilayer Systems. Advanced Functional Materials, 2014, 24, 5624-5648. | 14.9 | 106 |
| 44 | Nanostructured 3D Constructs Based on Chitosan and Chondroitin Sulphate Multilayers for Cartilage Tissue Engineering. PLoS ONE, 2013, 8, e55451. | 2.5 | 105 |
| 45 | Two-Dimensional Open Microfluidic Devices by Tuning the Wettability on Patterned Superhydrophobic Polymeric Surface. Applied Physics Express, 2010, 3, 085205. | 2.4 | 103 |
| 46 | Development and Characterization of a Novel Hybrid Tissue Engineering–Based Scaffold for Spinal Cord Injury Repair. Tissue Engineering - Part A, 2010, 16, 45-54. | 3.1 | 103 |
| 47 | Wettability Influences Cell Behavior on Superhydrophobic Surfaces with Different Topographies. Biointerphases, 2012, 7, 46. | 1.6 | 103 |
| 48 | Potential applications of natural origin polymer-based systems in soft tissue regeneration. Critical Reviews in Biotechnology, 2010, 30, 200-221. | 9.0 | 102 |
| 49 | Strategic Advances in Formation of Cellâ€inâ€Shell Structures: From Syntheses to Applications. Advanced Materials, 2018, 30, e1706063. | 21.0 | 102 |
| 50 | Stimuli-responsive chitosan-starch injectable hydrogels combined with encapsulated adipose-derived stromal cells for articular cartilage regeneration. Soft Matter, 2010, 6, 5184. | 2.7 | 100 |
| 51 | Chemical modification of bioinspired superhydrophobic polystyrene surfaces to control cell attachment/proliferation. Soft Matter, 2011, 7, 8932. | 2.7 | 100 |
| 52 | Biomimetic Extracellular Environment Based on Natural Origin Polyelectrolyte Multilayers. Small, 2016, 12, 4308-4342. | 10.0 | 100 |
| 53 | High-throughput evaluation of interactions between biomaterials, proteins and cells using patterned superhydrophobic substrates. Soft Matter, 2011, 7, 4147. | 2.7 | 99 |
| 54 | Production methodologies of polymeric and hydrogel particles for drug delivery applications. Expert Opinion on Drug Delivery, 2012, 9, 231-248. | 5.0 | 98 |

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| 55 | Chitosan membranes containing micro or nano-size bioactive glass particles: evolution of biomineralization followed by in situ dynamic mechanical analysis. Journal of the Mechanical Behavior of Biomedical Materials, 2013, 20, 173-183. | 3.1 | 98 |
| 56 | Layerâ€byâ€Layer Assembly of Chitosan and Recombinant Biopolymers into Biomimetic Coatings with Multiple Stimuliâ€Responsive Properties. Small, 2011, 7, 2640-2649. | 10.0 | 97 |
| 57 | Chondrogenic potential of injectable <i>κ</i> -carrageenan hydrogel with encapsulated adipose stem cells for cartilage tissue-engineering applications. Journal of Tissue Engineering and Regenerative Medicine, 2015, 9, 550-563. | 2.7 | 97 |
| 58 | Viscoelastic Properties of Chitosan with Different Hydration Degrees as Studied by Dynamic Mechanical Analysis. Macromolecular Bioscience, 2008, 8, 69-76. | 4.1 | 96 |
| 59 | Synthesis of Temperature-Responsive Dextran-MA/PNIPAAm Particles for Controlled Drug Delivery Using Superhydrophobic Surfaces. Pharmaceutical Research, 2011, 28, 1294-1305. | 3.5 | 96 |
| 60 | Bioinspired superhydrophobic poly(<scp>L</scp> â€lactic acid) surfaces control bone marrow derived cells adhesion and proliferation. Journal of Biomedical Materials Research - Part A, 2009, 91A, 480-488. | 4.0 | 94 |
| 61 | The use of ionic liquids in the processing of chitosan/silk hydrogels for biomedical applications. Green Chemistry, 2012, 14, 1463. | 9.0 | 93 |
| 62 | Superhydrophobic Chips for Cell Spheroids High-Throughput Generation and Drug Screening. ACS Applied Materials & amp; Interfaces, 2014, 6, 9488-9495. | 8.0 | 91 |
| 63 | Coating Strategies Using Layerâ€byâ€layer Deposition for Cell Encapsulation. Chemistry - an Asian Journal, 2016, 11, 1753-1764. | 3.3 | 90 |
| 64 | Bioinspired methodology to fabricate hydrogel spheres for multi-applications using superhydrophobic substrates. Soft Matter, 2010, 6, 5868. | 2.7 | 88 |
| 65 | Chitosan-chondroitin sulphate nanoparticles for controlled delivery of platelet lysates in bone regenerative medicine. Journal of Tissue Engineering and Regenerative Medicine, 2012, 6, s47-s59. | 2.7 | 88 |
| 66 | Tailored Freestanding Multilayered Membranes Based on Chitosan and Alginate. Biomacromolecules, 2014, 15, 3817-3826. | 5.4 | 88 |
| 67 | Development of Gellan Gum-Based Microparticles/Hydrogel Matrices for Application in the Intervertebral Disc Regeneration. Tissue Engineering - Part C: Methods, 2011, 17, 961-972. | 2.1 | 87 |
| 68 | Bioplotting of a bioactive alginate dialdehyde-gelatin composite hydrogel containing bioactive glass nanoparticles. Biofabrication, 2016, 8, 035005. | 7.1 | 86 |
| 69 | Rheological and mechanical properties of acellular and cellâ€laden methacrylated gellan gum hydrogels. Journal of Biomedical Materials Research - Part A, 2013, 101, 3438-3446. | 4.0 | 84 |
| 70 | Stimuli-responsive nanocarriers for delivery of bone therapeutics – Barriers and progresses. Journal of Controlled Release, 2018, 273, 51-67. | 9.9 | 84 |
| 71 | Stimuliâ€Responsive Thin Coatings Using Elastinâ€Like Polymers for Biomedical Applications. Advanced Functional Materials, 2009, 19, 3210-3218. | 14.9 | 83 |
| 72 | Fabrication of Hydrogel Particles of Defined Shapes Using Superhydrophobicâ€Hydrophilic Micropatterns. Advanced Materials, 2016, 28, 7613-7619. | 21.0 | 83 |

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| 73 | Dexamethasone-loaded scaffolds prepared by supercritical-assisted phase inversion. Acta Biomaterialia, 2009, 5, 2054-2062. | 8.3 | 82 |
| 74 | Micro/nano-structured superhydrophobic surfaces in the biomedical field: part II: applications overview. Nanomedicine, 2015, 10, 271-297. | 3.3 | 81 |
| 75 | Silk hydrogels from non-mulberry and mulberry silkworm cocoons processed with ionic liquids. Acta Biomaterialia, 2013, 9, 8972-8982. | 8.3 | 79 |
| 76 | Preparation of starch-based scaffolds for tissue engineering by supercritical immersion precipitation. Journal of Supercritical Fluids, 2009, 49, 279-285. | 3.2 | 76 |
| 77 | Multilayered Hierarchical Capsules Providing Cell Adhesion Sites. Biomacromolecules, 2013, 14, 743-751. | 5.4 | 75 |
| 78 | Macroporous hydroxyapatite scaffolds for bone tissue engineering applications: Physicochemical characterization and assessment of rat bone marrow stromal cell viability. Journal of Biomedical Materials Research - Part A, 2009, 91A, 175-186. | 4.0 | 73 |
| 79 | Chitosan/bioactive glass nanoparticles scaffolds with shape memory properties. Carbohydrate Polymers, 2015, 123, 39-45. | 10.2 | 72 |
| 80 | In-air production of 3D co-culture tumor spheroid hydrogels for expedited drug screening. Acta Biomaterialia, 2019, 94, 392-409. | 8.3 | 72 |
| 81 | Microparticles in Contact with Cells: From Carriers to Multifunctional Tissue Modulators. Trends in Biotechnology, 2019, 37, 1011-1028. | 9.3 | 72 |
| 82 | Genipinâ€Modified Silkâ€Fibroin Nanometric Nets. Macromolecular Bioscience, 2008, 8, 766-774. | 4.1 | 71 |
| 83 | Engineering Biomolecular Microenvironments for Cell Instructive Biomaterials. Advanced Healthcare Materials, 2014, 3, 797-810. | 7.6 | 71 |
| 84 | A novel hanging spherical drop system for the generation of cellular spheroids and high throughput combinatorial drug screening. Biomaterials Science, 2015, 3, 581-585. | 5.4 | 70 |
| 85 | Magnetic composite biomaterials for tissue engineering. Biomaterials Science, 2014, 2, 812-818. | 5.4 | 67 |
| 86 | Drug nano-reservoirs synthesized using layer-by-layer technologies. Biotechnology Advances, 2015, 33, 1310-1326. | 11.7 | 67 |
| 87 | Chitosan microparticles as injectable scaffolds for tissue engineering. Journal of Tissue Engineering and Regenerative Medicine, 2008, 2, 378-380. | 2.7 | 65 |
| 88 | New biotextiles for tissue engineering: Development, characterization and in vitro cellular viability. Acta Biomaterialia, 2013, 9, 8167-8181. | 8.3 | 65 |
| 89 | Cell Surface Engineering to Control Cellular Interactions. ChemNanoMat, 2016, 2, 376-384. | 2.8 | 65 |
| 90 | Iron Gall Ink Revisited: In Situ Oxidation of Fe(II)–Tannin Complex for Fluidicâ€Interface Engineering. Advanced Materials, 2018, 30, e1805091. | 21.0 | 65 |

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| 91 | Functionalized superhydrophobic biomimetic chitosan-based films. Carbohydrate Polymers, 2010, 81, 140-144. | 10.2 | 64 |
| 92 | Recent Progress on Polysaccharide-Based Hydrogels for Controlled Delivery of Therapeutic Biomolecules. ACS Biomaterials Science and Engineering, 2021, 7, 4102-4127. | 5.2 | 64 |
| 93 | Superhydrophobic Surfaces Engineered Using Diatomaceous Earth. ACS Applied Materials & Interfaces, 2013, 5, 4202-4208. | 8.0 | 63 |
| 94 | Micro-/nano-structured superhydrophobic surfaces in the biomedical field: part I: basic concepts and biomimetic approaches. Nanomedicine, 2015, 10, 103-119. | 3.3 | 63 |
| 95 | Photo-Cross-Linked Laminarin-Based Hydrogels for Biomedical Applications. Biomacromolecules, 2016, 17, 1602-1609. | 5.4 | 63 |
| 96 | Chitosan/Chondroitin Sulfate Membranes Produced by Polyelectrolyte Complexation for Cartilage Engineering. Biomacromolecules, 2016, 17, 2178-2188. | 5.4 | 62 |
| 97 | Semipermeable Capsules Wrapping a Multifunctional and Self-regulated Co-culture Microenvironment for Osteogenic Differentiation. Scientific Reports, 2016, 6, 21883. | 3.3 | 62 |
| 98 | Multi-layer pre-vascularized magnetic cell sheets for bone regeneration. Biomaterials, 2020, 231, 119664. | 11.4 | 62 |
| 99 | Dynamic mechanical behavior of starch-based scaffolds in dry and physiologically simulated conditions: Effect of porosity and pore size. Acta Biomaterialia, 2008, 4, 950-959. | 8.3 | 60 |
| 100 | Chitosan/bioactive glass nanoparticles composites for biomedical applications. Biomedical Materials (Bristol), 2012, 7, 054104. | 3.3 | 60 |
| 101 | Bioactive macro/micro porous silk fibroin/nano-sized calcium phosphate scaffolds with potential for bone-tissue-engineering applications. Nanomedicine, 2013, 8, 359-378. | 3.3 | 60 |
| 102 | Modification of paper using polyhydroxybutyrate to obtain biomimetic superhydrophobic substrates. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 416, 51-55. | 4.7 | 59 |
| 103 | Role of superhydrophobicity in the biological activity of fibronectin at the cell–material interface. Soft Matter, 2011, 7, 10803. | 2.7 | 58 |
| 104 | Biomimetic Miniaturized Platform Able to Sustain Arrays of Liquid Droplets for Highâ€Throughput Combinatorial Tests. Advanced Functional Materials, 2014, 24, 5096-5103. | 14.9 | 58 |
| 105 | pH Responsiveness of Multilayered Films and Membranes Made of Polysaccharides. Langmuir, 2015, 31, 11318-11328. | 3.5 | 58 |
| 106 | Monoâ€dispersed bioactive glass nanospheres: Preparation and effects on biomechanics of mammalian cells. Journal of Biomedical Materials Research - Part A, 2010, 95A, 747-754. | 4.0 | 57 |
| 107 | From nano- to macro-scale: nanotechnology approaches for spatially controlled delivery of bioactive factors for bone and cartilage engineering. Nanomedicine, 2012, 7, 1045-1066. | 3.3 | 57 |
| 108 | Liquified chitosan–alginate multilayer capsules incorporating poly(<scp> </scp> -lactic acid) microparticles as cell carriers. Soft Matter, 2013, 9, 2125-2130. | 2.7 | 57 |

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| 109 | Myoconductive and osteoinductive free-standing polysaccharide membranes. Acta Biomaterialia, 2015, 15, 139-149. | 8.3 | 57 |
| 110 | Surface Engineered Carboxymethylchitosan/Poly(amidoamine) Dendrimer Nanoparticles for Intracellular Targeting. Advanced Functional Materials, 2008, 18, 1840-1853. | 14.9 | 56 |
| 111 | Recent advances on open fluidic systems for biomedical applications: A review. Materials Science and Engineering C, 2019, 97, 851-863. | 7.3 | 56 |
| 112 | Perspectives on: Supercritical Fluid Technology for 3D Tissue Engineering Scaffold Applications. Journal of Bioactive and Compatible Polymers, 2009, 24, 385-400. | 2.1 | 55 |
| 113 | Multifunctional Compartmentalized Capsules with a Hierarchical Organization from the Nano to the Macro Scales. Biomacromolecules, 2013, 14, 2403-2410. | 5.4 | 55 |
| 114 | Adhesive free-standing multilayer films containing sulfated levan for biomedical applications. Acta Biomaterialia, 2018, 69, 183-195. | 8.3 | 55 |
| 115 | Strontium-Doped Bioactive Glass Nanoparticles in Osteogenic Commitment. ACS Applied Materials & amp; Interfaces, 2018, 10, 23311-23320. | 8.0 | 55 |
| 116 | Thermoresponsive poly(<i>N</i> â€isopropylacrylamide)â€ <i>g</i> â€methylcellulose hydrogel as a threeâ€dimensional extracellular matrix for cartilageâ€engineered applications. Journal of Biomedical Materials Research - Part A, 2011, 98A, 596-603. | 4.0 | 54 |
| 117 | New Thermo-responsive Hydrogels Based on Poly (N-isopropylacrylamide)/ Hyaluronic Acid Semi-interpenetrated Polymer Networks: Swelling Properties and Drug Release Studies. Journal of Bioactive and Compatible Polymers, 2010, 25, 169-184. | 2.1 | 53 |
| 118 | Compact Saloplastic Membranes of Natural Polysaccharides for Soft Tissue Engineering. Chemistry of Materials, 2015, 27, 7490-7502. | 6.7 | 53 |
| 119 | Nanoengineering Hybrid Supramolecular Multilayered Biomaterials Using Polysaccharides and Selfâ€Assembling Peptide Amphiphiles. Advanced Functional Materials, 2017, 27, 1605122. | 14.9 | 53 |
| 120 | Nanostructured self-assembled films containing chitosan fabricated at neutral pH. Carbohydrate Polymers, 2010, 80, 570-573. | 10.2 | 52 |
| 121 | Layerâ€Byâ€Layer Technique for Producing Porous Nanostructured 3D Constructs Using Moldable Freeform Assembly of Spherical Templates. Small, 2010, 6, 2644-2648. | 10.0 | 52 |
| 122 | Fabrication and characterization of Eri silk fibers-based sponges for biomedical application. Acta Biomaterialia, 2016, 32, 178-189. | 8.3 | 52 |
| 123 | Pectin-coated chitosan microgels crosslinked on superhydrophobic surfaces for 5-fluorouracil encapsulation. Carbohydrate Polymers, 2013, 98, 331-340. | 10.2 | 51 |
| 124 | Combinatorial cell–3D biomaterials cytocompatibility screening for tissue engineering using bioinspired superhydrophobic substrates. Integrative Biology (United Kingdom), 2012, 4, 318. | 1.3 | 50 |
| 125 | Gellan gumâ€hydroxyapatite composite spongyâ€ŀike hydrogels for bone tissue engineering. Journal of Biomedical Materials Research - Part A, 2018, 106, 479-490. | 4.0 | 50 |
| 126 | Poly(<i>N</i> â€isopropylacrylamide) surfaceâ€grafted chitosan membranes as a new substrate for cell sheet engineering and manipulation. Biotechnology and Bioengineering, 2008, 101, 1321-1331. | 3.3 | 49 |

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| 127 | Patterned superhydrophobic paper for microfluidic devices obtained by writing and printing. Cellulose, 2013, 20, 2185-2190. | 4.9 | 49 |
| 128 | High-throughput screening for integrative biomaterials design: exploring advances and new trends. Trends in Biotechnology, 2014, 32, 627-636. | 9.3 | 49 |
| 129 | Towards the design of 3D multiscale instructive tissue engineering constructs: Current approaches and trends. Biotechnology Advances, 2015, 33, 842-855. | 11.7 | 49 |
| 130 | Highâ€Throughput Topographic, Mechanical, and Biological Screening of Multilayer Films Containing Musselâ€Inspired Biopolymers. Advanced Functional Materials, 2016, 26, 2745-2755. | 14.9 | 49 |
| 131 | Freeform 3D printing using a continuous viscoelastic supporting matrix. Biofabrication, 2020, 12, 035017. | 7.1 | 49 |
| 132 | Unleashing the potential of supercritical fluids for polymer processing in tissue engineering and regenerative medicine. Journal of Supercritical Fluids, 2013, 79, 177-185. | 3.2 | 48 |
| 133 | Nanostructured Hollow Tubes Based on Chitosan and Alginate Multilayers. Advanced Healthcare Materials, 2014, 3, 433-440. | 7.6 | 48 |
| 134 | Layer-by-layer assembled cell instructive nanocoatings containing platelet lysate. Biomaterials, 2015, 48, 56-65. | 11.4 | 48 |
| 135 | GelMA/bioactive silica nanocomposite bioinks for stem cell osteogenic differentiation. Biofabrication, 2021, 13, 035012. | 7.1 | 48 |
| 136 | Autonomous osteogenic differentiation of hASCs encapsulated in methacrylated gellan-gum hydrogels. Acta Biomaterialia, 2016, 41, 119-132. | 8.3 | 47 |
| 137 | Injectable Biomaterials for Dental Tissue Regeneration. International Journal of Molecular Sciences, 2020, 21, 3442. | 4.1 | 47 |
| 138 | Proteins and Their Peptide Motifs in Acellular Apatite Mineralization of Scaffolds for Tissue Engineering. Tissue Engineering - Part B: Reviews, 2008, 14, 433-445. | 4.8 | 46 |
| 139 | Biomimetic Methodology to Produce Polymeric Multilayered Particles for Biotechnological and Biomedical Applications. Small, 2013, 9, 2487-2492. | 10.0 | 46 |
| 140 | Design and functionalization of chitin-based microsphere scaffolds. Green Chemistry, 2013, 15, 3252. | 9.0 | 45 |
| 141 | Microengineered Multicomponent Hydrogel Fibers: Combining Polyelectrolyte Complexation and Microfluidics. ACS Biomaterials Science and Engineering, 2017, 3, 1322-1331. | 5.2 | 45 |
| 142 | Viscoelastic properties of bone: Mechanical spectroscopy studies on a chicken model. Materials Science and Engineering C, 2005, 25, 145-152. | 7.3 | 44 |
| 143 | Dual Responsive Nanostructured Surfaces for Biomedical Applications. Langmuir, 2011, 27, 8415-8423. | 3.5 | 44 |
| 144 | Micropatterning of Bioactive Glass Nanoparticles on Chitosan Membranes for Spatial Controlled Biomineralization. Langmuir, 2012, 28, 6970-6977. | 3.5 | 43 |

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| 145 | Magnetic Force-Based Tissue Engineering and Regenerative Medicine. Journal of Biomedical Nanotechnology, 2013, 9, 1129-1136. | 1.1 | 43 |
| 146 | Natural assembly of platelet lysate-loaded nanocarriers into enriched 3D hydrogels for cartilage regeneration. Acta Biomaterialia, 2015, 19, 56-65. | 8.3 | 42 |
| 147 | Chitosan–alginate multilayered films with gradients of physicochemical cues. Journal of Materials Chemistry B, 2015, 3, 4555-4568. | 5.8 | 42 |
| 148 | Surface Micro―and Nanoengineering: Applications of Layerâ€by‣ayer Technology as a Versatile Tool to Control Cellular Behavior. Small, 2019, 15, e1901228. | 10.0 | 42 |
| 149 | Differentiation of mesenchymal stem cells in chitosan scaffolds with double micro and macroporosity. Journal of Biomedical Materials Research - Part A, 2010, 95A, 1182-1193. | 4.0 | 41 |
| 150 | Surfaceâ€Tensionâ€Driven Gradient Generation in a Fluid Stripe for Benchâ€Top and Microwell Applications. Small, 2011, 7, 892-901. | 10.0 | 41 |
| 151 | Combinatorial Onâ€Chip Study of Miniaturized 3D Porous Scaffolds Using a Patterned Superhydrophobic Platform. Small, 2013, 9, 768-778. | 10.0 | 41 |
| 152 | Fucoidan Hydrogels Photo-Cross-Linked with Visible Radiation As Matrices for Cell Culture. ACS Biomaterials Science and Engineering, 2016, 2, 1151-1161. | 5.2 | 41 |
| 153 | Proteinaceous Hydrogels for Bioengineering Advanced 3D Tumor Models. Advanced Science, 2021, 8, 2003129. | 11.2 | 41 |
| 154 | Functionalized Microparticles Producing Scaffolds in Combination with Cells. Advanced Functional Materials, 2014, 24, 1391-1400. | 14.9 | 39 |
| 155 | Cell Encapsulation Systems Toward Modular Tissue Regeneration: From Immunoisolation to Multifunctional Devices. Advanced Functional Materials, 2020, 30, 1908061. | 14.9 | 39 |
| 156 | Novel Methodology Based on Biomimetic Superhydrophobic Substrates to Immobilize Cells and Proteins in Hydrogel Spheres for Applications in Bone Regeneration. Tissue Engineering - Part A, 2013, 19, 1175-1187. | 3.1 | 38 |
| 157 | Photopolymerizable Platelet Lysate Hydrogels for Customizable 3D Cell Culture Platforms. Advanced Healthcare Materials, 2018, 7, e1800849. | 7.6 | 38 |
| 158 | Injectable gellan-gum/hydroxyapatite-based bilayered hydrogel composites for osteochondral tissue regeneration. Applied Materials Today, 2018, 12, 309-321. | 4.3 | 38 |
| 159 | Processing of novel bioactive polymeric matrixes for tissue engineering using supercritical fluid technology. Materials Science and Engineering C, 2009, 29, 2110-2115. | 7.3 | 37 |
| 160 | Nanostructured and thermoresponsive recombinant biopolymer-based microcapsules for the delivery of active molecules. Nanomedicine: Nanotechnology, Biology, and Medicine, 2013, 9, 895-902. | 3.3 | 37 |
| 161 | Microfluidic Production of Perfluorocarbon-Alginate Core–Shell Microparticles for Ultrasound Therapeutic Applications. Langmuir, 2014, 30, 12391-12399. | 3.5 | 37 |
| 162 | 3D-bioprinted cancer-on-a-chip: level-up organotypic in vitro models. Trends in Biotechnology, 2022, 40, 432-447. | 9.3 | 36 |

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