Lorenzo Moroni

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85 9,310 50 277 h-index g-index citations papers 6.68 316 8.5 11,331 L-index avg, IF ext. citations ext. papers

| # | Paper | IF | Citations |
|-----|---|---------------|-----------|
| 277 | Cationic polymers and their therapeutic potential. <i>Chemical Society Reviews</i> , 2012 , 41, 7147-94 | 58.5 | 490 |
| 276 | 3D fiber-deposited scaffolds for tissue engineering: influence of pores geometry and architecture on dynamic mechanical properties. <i>Biomaterials</i> , 2006 , 27, 974-85 | 15.6 | 395 |
| 275 | Biofabrication: reappraising the definition of an evolving field. <i>Biofabrication</i> , 2016 , 8, 013001 | 10.5 | 387 |
| 274 | Biofabrication strategies for 3D in vitro models and regenerative medicine. <i>Nature Reviews Materials</i> , 2018 , 3, 21-37 | 73.3 | 317 |
| 273 | Biofabrication: A Guide to Technology and Terminology. <i>Trends in Biotechnology</i> , 2018 , 36, 384-402 | 15.1 | 309 |
| 272 | Fiber diameter and texture of electrospun PEOT/PBT scaffolds influence human mesenchymal stem cell proliferation and morphology, and the release of incorporated compounds. <i>Biomaterials</i> , 2006 , 27, 4911-22 | 15.6 | 207 |
| 271 | Chitosan/poly(epsilon-caprolactone) blend scaffolds for cartilage repair. <i>Biomaterials</i> , 2011 , 32, 1068-7 | 915.6 | 182 |
| 270 | Differential response of adult and embryonic mesenchymal progenitor cells to mechanical compression in hydrogels. <i>Stem Cells</i> , 2007 , 25, 2730-8 | 5.8 | 179 |
| 269 | Integrating novel technologies to fabricate smart scaffolds. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2008 , 19, 543-72 | 3.5 | 168 |
| 268 | 3D Fiber-Deposited Electrospun Integrated Scaffolds Enhance Cartilage Tissue Formation. <i>Advanced Functional Materials</i> , 2008 , 18, 53-60 | 15.6 | 167 |
| 267 | Evaluation of photocrosslinked Lutrol hydrogel for tissue printing applications. <i>Biomacromolecules</i> , 2009 , 10, 1689-96 | 6.9 | 162 |
| 266 | The bioprinting roadmap. <i>Biofabrication</i> , 2020 , 12, 022002 | 10.5 | 137 |
| 265 | Endothelial differentiation of mesenchymal stromal cells. <i>PLoS ONE</i> , 2012 , 7, e46842 | 3.7 | 136 |
| 264 | Chitosan scaffolds containing hyaluronic acid for cartilage tissue engineering. <i>Tissue Engineering - Part C: Methods</i> , 2011 , 17, 717-30 | 2.9 | 125 |
| 263 | Fabrication of three-dimensional bioplotted hydrogel scaffolds for islets of Langerhans transplantation. <i>Biofabrication</i> , 2015 , 7, 025009 | 10.5 | 107 |
| 262 | Electrospinning for drug delivery applications: A review. <i>Journal of Controlled Release</i> , 2021 , 334, 463-4 | 84 1.7 | 107 |
| 261 | Hydrogels that listen to cells: a review of cell-responsive strategies in biomaterial design for tissue regeneration. <i>Materials Horizons</i> , 2017 , 4, 1020-1040 | 14.4 | 106 |

| 260 | Gradients in pore size enhance the osteogenic differentiation of human mesenchymal stromal cells in three-dimensional scaffolds. <i>Scientific Reports</i> , 2016 , 6, 22898 | 4.9 | 105 |
|-----|--|-------------|-----|
| 259 | Thiol-Ene Alginate Hydrogels as Versatile Bioinks for Bioprinting. <i>Biomacromolecules</i> , 2018 , 19, 3390-340 | 00 9 | 103 |
| 258 | Biomimetics of the Extracellular Matrix: An Integrated Three-Dimensional Fiber-Hydrogel Composite for Cartilage Tissue Engineering. <i>Smart Structures and Systems</i> , 2011 , 7, 213-222 | | 101 |
| 257 | Fabrication, characterization and cellular compatibility of poly(hydroxy alkanoate) composite nanofibrous scaffolds for nerve tissue engineering. <i>PLoS ONE</i> , 2013 , 8, e57157 | 3.7 | 95 |
| 256 | Layer-by-layer tissue microfabrication supports cell proliferation in vitro and in vivo. <i>Tissue Engineering - Part C: Methods</i> , 2012 , 18, 62-70 | 2.9 | 88 |
| 255 | Bioprinting: From Tissue and Organ Development to Models. <i>Chemical Reviews</i> , 2020 , 120, 10547-10607 | 68.1 | 86 |
| 254 | Towards 4D printed scaffolds for tissue engineering: exploiting 3D shape memory polymers to deliver time-controlled stimulus on cultured cells. <i>Biofabrication</i> , 2017 , 9, 031001 | 10.5 | 83 |
| 253 | The osteochondral interface as a gradient tissue: from development to the fabrication of gradient scaffolds for regenerative medicine. <i>Birth Defects Research Part C: Embryo Today Reviews</i> , 2015 , 105, 34-52 | | 81 |
| 252 | Three-dimensional fiber-deposited PEOT/PBT copolymer scaffolds for tissue engineering: influence of porosity, molecular network mesh size, and swelling in aqueous media on dynamic mechanical properties. <i>Journal of Biomedical Materials Research - Part A</i> , 2005 , 75, 957-65 | 5.4 | 79 |
| 251 | Myoblast differentiation of human mesenchymal stem cells on graphene oxide and electrospun graphene oxide-polymer composite fibrous meshes: importance of graphene oxide conductivity and dielectric constant on their biocompatibility. <i>Biofabrication</i> , 2015 , 7, 015009 | 10.5 | 75 |
| 250 | Dynamic Bioinks to Advance Bioprinting. Advanced Healthcare Materials, 2020, 9, e1901798 | 10.1 | 73 |
| 249 | Polymer hollow fiber three-dimensional matrices with controllable cavity and shell thickness. <i>Biomaterials</i> , 2006 , 27, 5918-26 | 15.6 | 72 |
| 248 | Influencing chondrogenic differentiation of human mesenchymal stromal cells in scaffolds displaying a structural gradient in pore size. <i>Acta Biomaterialia</i> , 2016 , 36, 210-9 | 10.8 | 71 |
| 247 | Direct Writing Electrospinning of Scaffolds with Multidimensional Fiber Architecture for Hierarchical Tissue Engineering. <i>ACS Applied Materials & Discrete </i> | 9.5 | 68 |
| 246 | Polymer brush coatings regulating cell behavior: passive interfaces turn into active. <i>Acta Biomaterialia</i> , 2014 , 10, 2367-78 | 10.8 | 66 |
| 245 | Surface modification of electrospun fibre meshes by oxygen plasma for bone regeneration. <i>Biofabrication</i> , 2013 , 5, 015006 | 10.5 | 65 |
| 244 | Biomimetic Architectures for Peripheral Nerve Repair: A Review of Biofabrication Strategies. <i>Advanced Healthcare Materials</i> , 2018 , 7, e1701164 | 10.1 | 64 |
| 243 | Tailoring surface nanoroughness of electrospun scaffolds for skeletal tissue engineering. <i>Acta Biomaterialia</i> , 2017 , 59, 82-93 | 10.8 | 64 |

| 242 | Human mesenchymal stem cells: a bank perspective on the isolation, characterization and potential of alternative sources for the regeneration of musculoskeletal tissues. <i>Journal of Cellular Physiology</i> , 2013 , 228, 680-7 | 7 | 63 |
|-----|---|------|----|
| 241 | Biomaterials engineered for integration. <i>Materials Today</i> , 2008 , 11, 44-51 | 21.8 | 62 |
| 240 | Towards an in vitro model mimicking the foreign body response: tailoring the surface properties of biomaterials to modulate extracellular matrix. <i>Scientific Reports</i> , 2014 , 4, 6325 | 4.9 | 60 |
| 239 | Development and evaluation of in vivo tissue engineered blood vessels in a porcine model. <i>Biomaterials</i> , 2016 , 75, 82-90 | 15.6 | 58 |
| 238 | Biofunctionalized pectin hydrogels as 3D cellular microenvironments. <i>Journal of Materials Chemistry B</i> , 2015 , 3, 2096-2108 | 7.3 | 58 |
| 237 | Engineered micro-objects as scaffolding elements in cellular building blocks for bottom-up tissue engineering approaches. <i>Advanced Materials</i> , 2014 , 26, 2592-9 | 24 | 56 |
| 236 | Amphiphilic beads as depots for sustained drug release integrated into fibrillar scaffolds. <i>Journal of Controlled Release</i> , 2014 , 187, 66-73 | 11.7 | 56 |
| 235 | Conductive hydrogel based on chitosan-aniline pentamer/gelatin/agarose significantly promoted motor neuron-like cells differentiation of human olfactory ecto-mesenchymal stem cells. <i>Materials Science and Engineering C</i> , 2019 , 101, 243-253 | 8.3 | 55 |
| 234 | Triphasic scaffolds for the regeneration of the bone-ligament interface. <i>Biofabrication</i> , 2016 , 8, 015009 | 10.5 | 55 |
| 233 | Extracellular matrix and tissue engineering applications. <i>Journal of Materials Chemistry</i> , 2009 , 19, 5474 | | 54 |
| 232 | Poly(N-isopropylacrylamide)Boly(ferrocenylsilane) dual-responsive hydrogels: synthesis, characterization and antimicrobial applications. <i>Polymer Chemistry</i> , 2013 , 4, 337-342 | 4.9 | 52 |
| 231 | Multiscale fabrication of biomimetic scaffolds for tympanic membrane tissue engineering. <i>Biofabrication</i> , 2015 , 7, 025005 | 10.5 | 51 |
| 230 | Peptide functionalized polyhydroxyalkanoate nanofibrous scaffolds enhance Schwann cells activity. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2014 , 10, 1559-69 | 6 | 51 |
| 229 | Critical factors in the design of growth factor releasing scaffolds for cartilage tissue engineering. <i>Expert Opinion on Drug Delivery</i> , 2008 , 5, 543-66 | 8 | 51 |
| 228 | Bioprinting Vasculature: Materials, Cells and Emergent Techniques. <i>Materials</i> , 2019 , 12, | 3.5 | 50 |
| 227 | Influence of the nanofiber chemistry and orientation of biodegradable poly(butylene succinate)-based scaffolds on osteoblast differentiation for bone tissue regeneration. <i>Nanoscale</i> , 2018 , 10, 8689-8703 | 7.7 | 50 |
| 226 | Critical Steps toward a tissue-engineered cartilage implant using embryonic stem cells. <i>Tissue Engineering - Part A</i> , 2008 , 14, 135-47 | 3.9 | 49 |
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| 224 | Toward mimicking the bone structure: design of novel hierarchical scaffolds with a tailored radial porosity gradient. <i>Biofabrication</i> , 2016 , 8, 045007 | 10.5 | 47 |
|-----|--|-------------|----|
| 223 | Influence of the solvent type on the morphology and mechanical properties of electrospun PLLA yarns. <i>Biofabrication</i> , 2013 , 5, 035014 | 10.5 | 46 |
| 222 | Design of biphasic polymeric 3-dimensional fiber deposited scaffolds for cartilage tissue engineering applications. <i>Tissue Engineering</i> , 2007 , 13, 361-71 | | 46 |
| 221 | Flexible Yttrium-Stabilized Zirconia Nanofibers Offer Bioactive Cues for Osteogenic Differentiation of Human Mesenchymal Stromal Cells. <i>ACS Nano</i> , 2016 , 10, 5789-99 | 16.7 | 45 |
| 220 | Microwell scaffolds for the extrahepatic transplantation of islets of Langerhans. <i>PLoS ONE</i> , 2013 , 8, e64 | <i>37</i> 2 | 44 |
| 219 | Fabrication of bioactive composite scaffolds by electrospinning for bone regeneration. <i>Macromolecular Bioscience</i> , 2010 , 10, 1365-73 | 5.5 | 44 |
| 218 | Tuning Cell Differentiation into a 3D Scaffold Presenting a Pore Shape Gradient for Osteochondral Regeneration. <i>Advanced Healthcare Materials</i> , 2016 , 5, 1753-63 | 10.1 | 44 |
| 217 | Viscoelastic Oxidized Alginates with Reversible Imine Type Crosslinks: Self-Healing, Injectable, and Bioprintable Hydrogels. <i>Gels</i> , 2018 , 4, | 4.2 | 44 |
| 216 | A biocomposite of collagen nanofibers and nanohydroxyapatite for bone regeneration. <i>Biofabrication</i> , 2014 , 6, 035015 | 10.5 | 43 |
| 215 | Comparison of alternative mesenchymal stem cell sources for cell banking and musculoskeletal advanced therapies. <i>Journal of Cellular Biochemistry</i> , 2011 , 112, 1418-30 | 4.7 | 42 |
| 214 | Integration of hollow fiber membranes improves nutrient supply in three-dimensional tissue constructs. <i>Acta Biomaterialia</i> , 2011 , 7, 3312-24 | 10.8 | 42 |
| 213 | Dynamic mechanical properties of 3D fiber-deposited PEOT/PBT scaffolds: an experimental and numerical analysis. <i>Journal of Biomedical Materials Research - Part A</i> , 2006 , 78, 605-14 | 5.4 | 42 |
| 212 | Hybrid Polycaprolactone/Alginate Scaffolds Functionalized with VEGF to Promote de Novo Vessel Formation for the Transplantation of Islets of Langerhans. <i>Advanced Healthcare Materials</i> , 2016 , 5, 1606 | 10.1 -16 | 41 |
| 211 | A fast process for imprinting micro and nano patterns on electrospun fiber meshes at physiological temperatures. <i>Small</i> , 2013 , 9, 3405-9 | 11 | 39 |
| 210 | Combinatorial approaches to controlling cell behaviour and tissue formation in 3D via rapid-prototyping and smart scaffold design. <i>Combinatorial Chemistry and High Throughput Screening</i> , 2009 , 12, 562-79 | 1.3 | 38 |
| 209 | Influence of internal pore architecture on biological and mechanical properties of three-dimensional fiber deposited scaffolds for bone regeneration. <i>Journal of Biomedical Materials Research - Part A</i> , 2016 , 104, 991-1001 | 5.4 | 38 |
| 208 | Hybrid and Composite Scaffolds Based on Extracellular Matrices for Cartilage Tissue Engineering. <i>Tissue Engineering - Part B: Reviews</i> , 2019 , 25, 202-224 | 7.9 | 36 |
| 207 | The influence of process parameters on the properties of electrospun PLLA yarns studied by the response surface methodology. <i>Journal of Applied Polymer Science</i> , 2015 , 132, n/a-n/a | 2.9 | 36 |

| 206 | Surface energy and stiffness discrete gradients in additive manufactured scaffolds for osteochondral regeneration. <i>Biofabrication</i> , 2016 , 8, 015014 | 10.5 | 36 |
|-----|--|------|----|
| 205 | Covalent Binding of Bone Morphogenetic Protein-2 and Transforming Growth Factor-B to 3D Plotted Scaffolds for Osteochondral Tissue Regeneration. <i>Biotechnology Journal</i> , 2017 , 12, 1700072 | 5.6 | 36 |
| 204 | Tuning the conformation and mechanical properties of silk fibroin hydrogels. <i>European Polymer Journal</i> , 2020 , 134, 109842 | 5.2 | 35 |
| 203 | The effect of scaffold-cell entrapment capacity and physico-chemical properties on cartilage regeneration. <i>Biomaterials</i> , 2013 , 34, 4259-65 | 15.6 | 35 |
| 202 | Easily synthesized novel biodegradable copolyesters with adjustable properties for biomedical applications. <i>Soft Matter</i> , 2012 , 8, 5466 | 3.6 | 35 |
| 201 | Combining technologies to create bioactive hybrid scaffolds for bone tissue engineering. <i>Biomatter</i> , 2013 , 3, | | 35 |
| 200 | Mimicking natural cell environments: design, fabrication and application of bio-chemical gradients on polymeric biomaterial substrates. <i>Journal of Materials Chemistry B</i> , 2016 , 4, 4244-4257 | 7.3 | 35 |
| 199 | Utilizing the Foreign Body Response to Grow Tissue Engineered Blood Vessels in Vivo. <i>Journal of Cardiovascular Translational Research</i> , 2017 , 10, 167-179 | 3.3 | 34 |
| 198 | Modulating Alginate Hydrogels for Improved Biological Performance as Cellular 3D Microenvironments. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020 , 8, 665 | 5.8 | 34 |
| 197 | Creeping proteins in microporous structures: polymer brush-assisted fabrication of 3D gradients for tissue engineering. <i>Advanced Healthcare Materials</i> , 2015 , 4, 1169-74 | 10.1 | 33 |
| 196 | Ciprofloxacin-loaded polymeric nanoparticles incorporated electrospun fibers for drug delivery in tissue engineering applications. <i>Drug Delivery and Translational Research</i> , 2020 , 10, 706-720 | 6.2 | 33 |
| 195 | Stem-Cell Clinging by a Thread: AFM Measure of Polymer-Brush Lateral Deformation. <i>Advanced Materials Interfaces</i> , 2016 , 3, 1500456 | 4.6 | 33 |
| 194 | Surface modifications by gas plasma control osteogenic differentiation of MC3T3-E1 cells. <i>Acta Biomaterialia</i> , 2012 , 8, 2969-77 | 10.8 | 33 |
| 193 | Label-free Raman monitoring of extracellular matrix formation in three-dimensional polymeric scaffolds. <i>Journal of the Royal Society Interface</i> , 2013 , 10, 20130464 | 4.1 | 33 |
| 192 | Micropatterned hot-embossed polymeric surfaces influence cell proliferation and alignment. Journal of Biomedical Materials Research - Part A, 2009, 88, 644-53 | 5.4 | 33 |
| 191 | Interfacing polymeric scaffolds with primary pancreatic ductal adenocarcinoma cells to develop 3D cancer models. <i>Biomatter</i> , 2014 , 4, e955386 | | 32 |
| 190 | Primary chondrocytes enhance cartilage tissue formation upon co-culture with a range of cell types. <i>Soft Matter</i> , 2010 , 6, 5080 | 3.6 | 32 |
| 189 | Anatomical 3D fiber-deposited scaffolds for tissue engineering: designing a neotrachea. <i>Tissue Engineering</i> , 2007 , 13, 2483-93 | | 32 |

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| 188 | Nanoroughness, Surface Chemistry, and Drug Delivery Control by Atmospheric Plasma Jet on Implantable Devices. <i>ACS Applied Materials & Devices</i> , 2018 , 10, 39512-39523 | 9.5 | 32 |
|-----|--|------|----|
| 187 | PEOT/PBT Guides Enhance Nerve Regeneration in Long Gap Defects. <i>Advanced Healthcare Materials</i> , 2017 , 6, 1600298 | 10.1 | 31 |
| 186 | Increased cell seeding efficiency in bioplotted three-dimensional PEOT/PBT scaffolds. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2016 , 10, 679-89 | 4.4 | 30 |
| 185 | Bio-Fabrication: Convergence of 3D Bioprinting and Nano-Biomaterials in Tissue Engineering and Regenerative Medicine. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020 , 8, 326 | 5.8 | 30 |
| 184 | Topography of calcium phosphate ceramics regulates primary cilia length and TGF receptor recruitment associated with osteogenesis. <i>Acta Biomaterialia</i> , 2017 , 57, 487-497 | 10.8 | 29 |
| 183 | Influence of Solution Properties and Process Parameters on the Formation and Morphology of YSZ and NiO Ceramic Nanofibers by Electrospinning. <i>Nanomaterials</i> , 2017 , 7, | 5.4 | 29 |
| 182 | Regenerating articular tissue by converging technologies. <i>PLoS ONE</i> , 2008 , 3, e3032 | 3.7 | 29 |
| 181 | Cancer tissue engineering?new perspectives in understanding the biology of solid tumours?a critical review 2013 , 1, | | 29 |
| 180 | Acrylic Acid Plasma Coated 3D Scaffolds for Cartilage tissue engineering applications. <i>Scientific Reports</i> , 2018 , 8, 3830 | 4.9 | 28 |
| 179 | Influence of Additive Manufactured Scaffold Architecture on the Distribution of Surface Strains and Fluid Flow Shear Stresses and Expected Osteochondral Cell Differentiation. <i>Frontiers in Bioengineering and Biotechnology</i> , 2017 , 5, 6 | 5.8 | 28 |
| 178 | Degradable amorphous scaffolds with enhanced mechanical properties and homogeneous cell distribution produced by a three-dimensional fiber deposition method. <i>Journal of Biomedical Materials Research - Part A</i> , 2012 , 100, 2739-49 | 5.4 | 28 |
| 177 | Monolithic and assembled polymer-ceramic composites for bone regeneration. <i>Acta Biomaterialia</i> , 2013 , 9, 5708-17 | 10.8 | 27 |
| 176 | In vivo screening of extracellular matrix components produced under multiple experimental conditions implanted in one animal. <i>Integrative Biology (United Kingdom)</i> , 2013 , 5, 889-98 | 3.7 | 27 |
| 175 | Additive manufactured polymeric 3D scaffolds with tailored surface topography influence mesenchymal stromal cells activity. <i>Biofabrication</i> , 2016 , 8, 025012 | 10.5 | 27 |
| 174 | Self-assembly of electrospun nanofibers into gradient honeycomb structures. <i>Materials and Design</i> , 2019 , 168, 107614 | 8.1 | 26 |
| 173 | A combinatorial approach towards the design of nanofibrous scaffolds for chondrogenesis. <i>Scientific Reports</i> , 2015 , 5, 14804 | 4.9 | 25 |
| 172 | Thin polymer brush decouples biomaterial micro-/nanotopology and stem cell adhesion. <i>Langmuir</i> , 2013 , 29, 13843-52 | 4 | 25 |
| 171 | Influence of PCL molecular weight on mesenchymal stromal cell differentiation. <i>RSC Advances</i> , 2015 , 5, 54510-54516 | 3.7 | 24 |

| 170 | Tailoring chemical and physical properties of fibrous scaffolds from block copolyesters containing ether and thio-ether linkages for skeletal differentiation of human mesenchymal stromal cells. <i>Biomaterials</i> , 2016 , 76, 261-72 | 15.6 | 24 |
|-----|--|------------------|----|
| 169 | Mesenchymal stromal cell-derived extracellular matrix influences gene expression of chondrocytes. <i>Biofabrication</i> , 2013 , 5, 025003 | 10.5 | 24 |
| 168 | Tissue Engineering and Regenerative Medicine 2019: The Role of Biofabrication-A Year in Review. Tissue Engineering - Part C: Methods, 2020 , 26, 91-106 | 2.9 | 24 |
| 167 | Leveling Up Hydrogels: Hybrid Systems in Tissue Engineering. <i>Trends in Biotechnology</i> , 2020 , 38, 292-31. | 5 15.1 | 24 |
| 166 | Micro-fabricated scaffolds lead to efficient remission of diabetes in mice. <i>Biomaterials</i> , 2017 , 135, 10-22 | 2 15.6 | 23 |
| 165 | Evaluation of Cartilage Repair by Mesenchymal Stem Cells Seeded on a PEOT/PBT Scaffold in an Osteochondral Defect. <i>Annals of Biomedical Engineering</i> , 2015 , 43, 2069-82 | 4.7 | 23 |
| 164 | Improving cell distribution on 3D additive manufactured scaffolds through engineered seeding media density and viscosity. <i>Acta Biomaterialia</i> , 2020 , 101, 183-195 | 10.8 | 23 |
| 163 | Tailoring the foreign body response for in situ vascular tissue engineering. <i>Tissue Engineering - Part C: Methods</i> , 2015 , 21, 436-46 | 2.9 | 21 |
| 162 | Tissue engineering of the tympanic membrane using electrospun PEOT/PBT copolymer scaffolds: A morphological in vitro study. <i>Hearing, Balance and Communication</i> , 2015 , 13, 133-147 | 0.7 | 21 |
| 161 | Stability and Cell Adhesion Properties of Poly(N-isopropylacrylamide) Brushes with Variable Grafting Densities. <i>Australian Journal of Chemistry</i> , 2011 , 64, 1261 | 1.2 | 21 |
| 160 | Biofabrication of Hepatic Constructs by 3D Bioprinting of a Cell-Laden Thermogel: An Effective Tool to Assess Drug-Induced Hepatotoxic Response. <i>Advanced Healthcare Materials</i> , 2020 , 9, e2001163 | 10.1 | 21 |
| 159 | Patterning Vasculature: The Role of Biofabrication to Achieve an Integrated Multicellular Ecosystem. <i>ACS Biomaterials Science and Engineering</i> , 2016 , 2, 1694-1709 | 5.5 | 21 |
| 158 | Layered PEGDA hydrogel for islet of Langerhans encapsulation and improvement of vascularization. <i>Journal of Materials Science: Materials in Medicine</i> , 2017 , 28, 195 | 4.5 | 20 |
| 157 | Finite Element Analysis of Meniscal Anatomical 3D Scaffolds: Implications for Tissue Engineering. <i>Open Biomedical Engineering Journal</i> , 2007 , 1, 23-34 | 0.9 | 20 |
| 156 | Adapted chondrogenic differentiation of human mesenchymal stem cells via controlled release of TGF-II from poly(ethylene oxide)-terephtalate/poly(butylene terepthalate) multiblock scaffolds. Journal of Biomedical Materials Research - Part A, 2015, 103, 371-83 | 5.4 | 19 |
| 155 | Chondrocytes Cocultured with Stromal Vascular Fraction of Adipose Tissue Present More Intense Chondrogenic Characteristics Than with Adipose Stem Cells. <i>Tissue Engineering - Part A</i> , 2016 , 22, 336-46 | 8 ^{3.9} | 19 |
| 154 | The Use of Finite Element Analyses to Design and Fabricate Three-Dimensional Scaffolds for Skeletal Tissue Engineering. <i>Frontiers in Bioengineering and Biotechnology</i> , 2017 , 5, 30 | 5.8 | 19 |
| 153 | Poly(caprolactone-co-trimethylenecarbonate) urethane acrylate resins for digital light processing of bioresorbable tissue engineering implants. <i>Biomaterials Science</i> , 2019 , 7, 4984-4989 | 7.4 | 19 |

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| 152 | Plug and play: combining materials and technologies to improve bone regenerative strategies. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2015 , 9, 745-59 | 4.4 | 18 | |
|-----|--|----------------------|----|--|
| 151 | 3D additive manufactured composite scaffolds with antibiotic-loaded lamellar fillers for bone infection prevention and tissue regeneration. <i>Bioactive Materials</i> , 2021 , 6, 1073-1082 | 16.7 | 18 | |
| 150 | Glycosaminoglycan-Inspired Biomaterials for the Development of Bioactive Hydrogel Networks. <i>Molecules</i> , 2020 , 25, | 4.8 | 17 | |
| 149 | Geometric constraints of endothelial cell migration on electrospun fibres. <i>Scientific Reports</i> , 2018 , 8, 6386 | 4.9 | 17 | |
| 148 | Glycosaminoglycan functionalization of electrospun scaffolds enhances Schwann cell activity. <i>Acta Biomaterialia</i> , 2019 , 96, 188-202 | 10.8 | 17 | |
| 147 | High content imaging in the screening of biomaterial-induced MSC behavior. <i>Biomaterials</i> , 2013 , 34, 149 | 08 -5 565 | 17 | |
| 146 | 3D-printed bioactive scaffolds from nanosilicates and PEOT/PBT for bone tissue engineering. <i>International Journal of Energy Production and Management</i> , 2019 , 6, 29-37 | 5.3 | 17 | |
| 145 | Steering cell behavior through mechanobiology in 3D: A regenerative medicine perspective. <i>Biomaterials</i> , 2021 , 268, 120572 | 15.6 | 17 | |
| 144 | Biological activity of human mesenchymal stromal cells on polymeric electrospun scaffolds. <i>Biomaterials Science</i> , 2019 , 7, 1088-1100 | 7.4 | 16 | |
| 143 | A novel method for engineering autologous non-thrombogenic in situ tissue-engineered blood vessels for arteriovenous grafting. <i>Biomaterials</i> , 2020 , 229, 119577 | 15.6 | 16 | |
| 142 | Additive manufacturing of an elastic poly(ester)urethane for cartilage tissue engineering. <i>Acta Biomaterialia</i> , 2020 , 102, 192-204 | 10.8 | 16 | |
| 141 | Soft-molecular imprinted electrospun scaffolds to mimic specific biological tissues. <i>Biofabrication</i> , 2018 , 10, 045005 | 10.5 | 15 | |
| 140 | Multimaterial, heterogeneous, and multicellular three-dimensional bioprinting. <i>MRS Bulletin</i> , 2017 , 42, 578-584 | 3.2 | 15 | |
| 139 | Distribution and Viability of Fetal and Adult Human Bone Marrow Stromal Cells in a Biaxial Rotating Vessel Bioreactor after Seeding on Polymeric 3D Additive Manufactured Scaffolds. <i>Frontiers in Bioengineering and Biotechnology</i> , 2015 , 3, 169 | 5.8 | 15 | |
| 138 | Fabrication of multi-well chips for spheroid cultures and implantable constructs through rapid prototyping techniques. <i>Biotechnology and Bioengineering</i> , 2015 , 112, 1457-71 | 4.9 | 15 | |
| 137 | Modeling mechanical signals on the surface of DCT and CAD based rapid prototype scaffold models to predict (early stage) tissue development. <i>Biotechnology and Bioengineering</i> , 2014 , 111, 1864-75 | 4.9 | 15 | |
| 136 | Degradable polymers for tissue engineering 2008 , 193-221 | | 15 | |
| 135 | Fabrication of hybrid scaffolds obtained from combinations of PCL with gelatin or collagen via electrospinning for skeletal muscle tissue engineering. <i>Journal of Biomedical Materials Research - Part A</i> , 2021 , 109, 1600-1612 | 5.4 | 15 | |

| 134 | Janus 3D printed dynamic scaffolds for nanovibration-driven bone regeneration. <i>Nature Communications</i> , 2021 , 12, 1031 | 17.4 | 15 |
|-----|--|------------------|----|
| 133 | Multivalency Enables Dynamic Supramolecular Host-Guest Hydrogel Formation. <i>Biomacromolecules</i> , 2020 , 21, 2208-2217 | 6.9 | 14 |
| 132 | Methods of Monitoring Cell Fate and Tissue Growth in Three-Dimensional Scaffold-Based Strategies for In Vitro Tissue Engineering. <i>Tissue Engineering - Part B: Reviews</i> , 2016 , 22, 265-83 | 7.9 | 14 |
| 131 | 3D screening device for the evaluation of cell response to different electrospun microtopographies. <i>Acta Biomaterialia</i> , 2017 , 55, 310-322 | 10.8 | 13 |
| 130 | Chondrogenesis of human adipose-derived mesenchymal stromal cells on the [devitalized costal cartilage matrix/poly(vinyl alcohol)/fibrin] hybrid scaffolds. <i>European Polymer Journal</i> , 2019 , 118, 528-5 | 4 ^{5.2} | 13 |
| 129 | Schwann cells promote endothelial cell migration. <i>Cell Adhesion and Migration</i> , 2015 , 9, 441-51 | 3.2 | 13 |
| 128 | Strategies to Improve Nanofibrous Scaffolds for Vascular Tissue Engineering. <i>Nanomaterials</i> , 2020 , 10, | 5.4 | 13 |
| 127 | Intra-articular delivery of glucosamine for treatment of experimental osteoarthritis created by a medial meniscectomy in a rat model. <i>Journal of Orthopaedic Research</i> , 2014 , 32, 302-9 | 3.8 | 13 |
| 126 | Fabrication of nanofibrous scaffolds for tissue engineering applications 2013 , 158-183 | | 13 |
| 125 | A quantitative method to analyse F-actin distribution in cells. <i>MethodsX</i> , 2019 , 6, 2562-2569 | 1.9 | 12 |
| 124 | A three-dimensional biomimetic peripheral nerve model for drug testing and disease modelling. <i>Biomaterials</i> , 2020 , 257, 120230 | 15.6 | 12 |
| 123 | A hybrid additive manufacturing platform to create bulk and surface composition gradients on scaffolds for tissue regeneration. <i>Nature Communications</i> , 2021 , 12, 500 | 17.4 | 12 |
| 122 | Cells responding to surface structure of calcium phosphate ceramics for bone regeneration. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2017 , 11, 3273-3283 | 4.4 | 11 |
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| 96 | Tissue engineering lan introduction 2008, xii-xxxvi | | 7 |
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LIST OF PUBLICATIONS

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