

Luigi Ambrosio

List of Publications by Citations

Source: <https://exaly.com/author-pdf/6399398/luigi-ambrosio-publications-by-citations.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

237
papers

8,593
citations

51
h-index

80
g-index

243
ext. papers

9,706
ext. citations

5.2
avg, IF

6.32
L-index

#	Paper	IF	Citations
237	Transport equation and Cauchy problem for BV vector fields. <i>Inventiones Mathematicae</i> , 2004 , 158, 227-260	260	379
236	Novel superabsorbent cellulose-based hydrogels crosslinked with citric acid. <i>Journal of Applied Polymer Science</i> , 2008 , 110, 2453-2460	2.9	293
235	The effect of matrix composition of 3D constructs on embryonic stem cell differentiation. <i>Biomaterials</i> , 2005 , 26, 6194-207	15.6	210
234	A multi-functional scaffold for tissue regeneration: the need to engineer a tissue analogue. <i>Biomaterials</i> , 2007 , 28, 5093-9	15.6	200
233	A novel poloxamers/hyaluronic acid in situ forming hydrogel for drug delivery: rheological, mucoadhesive and in vitro release properties. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2008 , 70, 199-206	5.7	188
232	Bioactive scaffolds for bone and ligament tissue. <i>Expert Review of Medical Devices</i> , 2007 , 4, 405-18	3.5	180
231	Polymeric hydrogels for burn wound care: Advanced skin wound dressings and regenerative templates. <i>Burns and Trauma</i> , 2014 , 2, 153-61		175
230	Polylactic acid fibre-reinforced polycaprolactone scaffolds for bone tissue engineering. <i>Biomaterials</i> , 2008 , 29, 3662-3670	15.6	154
229	Conductive PANi/PEGDA macroporous hydrogels for nerve regeneration. <i>Advanced Healthcare Materials</i> , 2013 , 2, 218-27	10.1	149
228	Rectifiable sets in metric and Banach spaces. <i>Mathematische Annalen</i> , 2000 , 318, 527-555	1	137
227	Currents in metric spaces. <i>Acta Mathematica</i> , 2000 , 185, 1-80	2.7	136
226	PCL microspheres based functional scaffolds by bottom-up approach with predefined microstructural properties and release profiles. <i>Biomaterials</i> , 2008 , 29, 4800-7	15.6	121
225	Metal-Based Antibacterial Substrates for Biomedical Applications. <i>Biomacromolecules</i> , 2015 , 16, 1873-856.9	6.9	117
224	Influence of gelatin cues in PCL electrospun membranes on nerve outgrowth. <i>Biomacromolecules</i> , 2010 , 11, 2238-46	6.9	111
223	New macroporous calcium phosphate glass ceramic for guided bone regeneration. <i>Biomaterials</i> , 2004 , 25, 4233-41	15.6	110
222	Additive manufacturing of wet-spun polymeric scaffolds for bone tissue engineering. <i>Biomedical Microdevices</i> , 2012 , 14, 1115-27	3.7	100
221	The role of reduced graphene oxide on chemical, mechanical and barrier properties of natural rubber composites. <i>Composites Science and Technology</i> , 2014 , 102, 74-81	8.6	98

220	Tissue engineering for total meniscal substitution: animal study in sheep model. <i>Tissue Engineering - Part A</i> , 2008 , 14, 1067-80	3.9	98
219	Towards the Design of 3D Fiber-Deposited Poly(ϵ -caprolactone)/Iron-Doped Hydroxyapatite Nanocomposite Magnetic Scaffolds for Bone Regeneration. <i>Journal of Biomedical Nanotechnology</i> , 2015 , 11, 1236-46	4	97
218	Layer-by-layer self-assembly of chitosan and poly(ϵ -glutamic acid) into polyelectrolyte complexes. <i>Biomacromolecules</i> , 2011 , 12, 4183-95	6.9	92
217	Tissue engineering for total meniscal substitution: animal study in sheep model--results at 12 months. <i>Tissue Engineering - Part A</i> , 2012 , 18, 1573-82	3.9	88
216	Tailoring assembly of reduced graphene oxide nanosheets to control gas barrier properties of natural rubber nanocomposites. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 2230-4	9.5	85
215	Collagen-low molecular weight hyaluronic acid semi-interpenetrating network loaded with gelatin microspheres for cell and growth factor delivery for nucleus pulposus regeneration. <i>Acta Biomaterialia</i> , 2015 , 20, 10-21	10.8	83
214	Gradient Flows of Probability Measures. <i>Handbook of Differential Equations: Evolutionary Equations</i> , 2007 , 3, 1-136		77
213	Some Fine Properties of Sets of Finite Perimeter in Ahlfors Regular Metric Measure Spaces. <i>Advances in Mathematics</i> , 2001 , 159, 51-67	1.3	76
212	Nanoparticle-Integrated Hydrogels as Multifunctional Composite Materials for Biomedical Applications. <i>Gels</i> , 2015 , 1, 162-178	4.2	74
211	PLDLA/PCL-T Scaffold for Meniscus Tissue Engineering. <i>BioResearch Open Access</i> , 2013 , 2, 138-47	2.4	74
210	Rheological and mechanical properties of acellular and cell-laden methacrylated gellan gum hydrogels. <i>Journal of Biomedical Materials Research - Part A</i> , 2013 , 101, 3438-46	5.4	74
209	The role of hydroxyapatite as solid signal on performance of PCL porous scaffolds for bone tissue regeneration. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2008 , 86, 548-57	3.5	73
208	Hyaluronic Acid Based Hydrogels for Regenerative Medicine Applications. <i>BioMed Research International</i> , 2015 , 2015, 871218	3	69
207	A new class of bioactive and biodegradable soybean-based bone fillers. <i>Biomacromolecules</i> , 2007 , 8, 2706-11		66
206	Atomic Force Microscopy: A Powerful Tool to Address Scaffold Design in Tissue Engineering. <i>Journal of Functional Biomaterials</i> , 2017 , 8,	4.8	65
205	The soybean isoflavone genistein induces differentiation of MG63 human osteosarcoma osteoblasts. <i>Journal of Nutrition</i> , 2006 , 136, 1166-70	4.1	65
204	Fine Properties of Sets of Finite Perimeter in Doubling Metric Measure Spaces. <i>Set-Valued and Variational Analysis</i> , 2002 , 10, 111-128		65
203	Viscoelastic properties of rabbit vocal folds after augmentation. <i>Otolaryngology - Head and Neck Surgery</i> , 2003 , 128, 401-6	5.5	65

202	Existence and stability for Fokker-Planck equations with log-concave reference measure. <i>Probability Theory and Related Fields</i> , 2009 , 145, 517-564	1.4	61
201	A 3D analysis of mechanically stressed dentin-adhesive-composite interfaces using X-ray micro-CT. <i>Biomaterials</i> , 2005 , 26, 257-70	15.6	61
200	Histomorphometric, ultrastructural and microhardness evaluation of the osseointegration of a nanostructured titanium oxide coating by metal-organic chemical vapour deposition: an in vivo study. <i>Biomaterials</i> , 2004 , 25, 5583-91	15.6	60
199	Injectable thermally responsive mucoadhesive gel for sustained protein delivery. <i>Biomacromolecules</i> , 2011 , 12, 28-33	6.9	59
198	Hybrid composite scaffolds prepared by sol-gel method for bone regeneration. <i>Composites Science and Technology</i> , 2010 , 70, 1861-1868	8.6	59
197	Structural and rheological characterization of hyaluronic acid-based scaffolds for adipose tissue engineering. <i>Biomaterials</i> , 2007 , 28, 4399-408	15.6	59
196	Structural and mechanical properties of UV-photo-cross-linked poly(N-vinyl-2-pyrrolidone) hydrogels. <i>Biomacromolecules</i> , 2008 , 9, 231-40	6.9	58
195	Rheological characterization of hyaluronic acid derivatives as injectable materials toward nucleus pulposus regeneration. <i>Journal of Biomaterials Applications</i> , 2012 , 26, 745-59	2.9	56
194	3D additive-manufactured nanocomposite magnetic scaffolds: Effect of the application mode of a time-dependent magnetic field on hMSCs behavior. <i>Bioactive Materials</i> , 2017 , 2, 138-145	16.7	55
193	Systematic Analysis of Injectable Materials and 3D Rapid Prototyped Magnetic Scaffolds: From CNS Applications to Soft and Hard Tissue Repair/Regeneration. <i>Procedia Engineering</i> , 2013 , 59, 233-239		55
192	Tuning size scale and crystallinity of PCL electrospun fibres via solvent permittivity to address hMSC response. <i>Macromolecular Bioscience</i> , 2011 , 11, 1694-705	5.5	55
191	Dynamic-mechanical properties of a novel composite intervertebral disc prosthesis. <i>Journal of Materials Science: Materials in Medicine</i> , 2007 , 18, 2159-65	4.5	55
190	3D fibre deposition and stereolithography techniques for the design of multifunctional nanocomposite magnetic scaffolds. <i>Journal of Materials Science: Materials in Medicine</i> , 2015 , 26, 250	4.5	53
189	A comparison of the performance of mono- and bi-component electrospun conduits in a rat sciatic model. <i>Biomaterials</i> , 2014 , 35, 8970-82	15.6	53
188	Soybean-based biomaterials: preparation, properties and tissue regeneration potential. <i>Expert Review of Medical Devices</i> , 2008 , 5, 349-58	3.5	51
187	A multi-component fiber-reinforced PHEMA-based hydrogel/HAPEX device for customized intervertebral disc prosthesis. <i>Journal of Biomaterials Applications</i> , 2011 , 25, 795-810	2.9	50
186	Electro-Active Polymers (EAPs): A Promising Route to Design Bio-Organic/Bioinspired Platforms with on Demand Functionalities. <i>Polymers</i> , 2016 , 8,	4.5	49
185	Borate cross-linked graphene oxide-chitosan as robust and high gas barrier films. <i>Nanoscale</i> , 2016 , 8, 10783-91	7.7	49

184	Optimization of fully aligned bioactive electrospun fibers for "in vitro" nerve guidance. <i>Journal of Materials Science: Materials in Medicine</i> , 2014 , 25, 2323-32	4.5	48
183	Novel polysaccharides-based viscoelastic formulations for ophthalmic surgery: rheological characterization. <i>Biomaterials</i> , 2006 , 27, 5134-42	15.6	48
182	Polymer-based composite scaffolds for tissue engineering. <i>Journal of Applied Biomaterials and Biomechanics</i> , 2010 , 8, 57-67		48
181	In vitro mineralization and bone osteogenesis in poly(ϵ -caprolactone)/gelatin nanofibers. <i>Journal of Biomedical Materials Research - Part A</i> , 2012 , 100, 3008-19	5.4	46
180	Multidisciplinary perspectives for Alzheimer's and Parkinson's diseases: hydrogels for protein delivery and cell-based drug delivery as therapeutic strategies. <i>International Journal of Artificial Organs</i> , 2009 , 32, 836-50	1.9	46
179	Intrinsic regular hypersurfaces in Heisenberg groups. <i>Journal of Geometric Analysis</i> , 2006 , 16, 187-232	0.9	46
178	Viscoelasticity of rabbit vocal folds after injection augmentation. <i>Laryngoscope</i> , 2004 , 114, 138-42	3.6	46
177	Polymer-based platforms by electric field-assisted techniques for tissue engineering and cancer therapy. <i>Expert Review of Medical Devices</i> , 2015 , 12, 113-29	3.5	45
176	Bone regeneration potential of a soybean-based filler: experimental study in a rabbit cancellous bone defects. <i>Journal of Materials Science: Materials in Medicine</i> , 2010 , 21, 615-26	4.5	45
175	Mineralization behavior with mesenchymal stromal cells in a biomimetic hyaluronic acid-based scaffold. <i>Biomaterials</i> , 2010 , 31, 3986-96	15.6	45
174	Hydrogel-Based Platforms for the Regeneration of Osteochondral Tissue and Intervertebral Disc. <i>Polymers</i> , 2012 , 4, 1590-1612	4.5	44
173	Bicomponent electrospun scaffolds to design extracellular matrix tissue analogs. <i>Expert Review of Medical Devices</i> , 2016 , 13, 83-102	3.5	43
172	Nanocomposites for neurodegenerative diseases: hydrogel-nanoparticle combinations for a challenging drug delivery. <i>International Journal of Artificial Organs</i> , 2011 , 34, 1115-27	1.9	43
171	Regeneration of Achilles' tendon: the role of dynamic stimulation for enhanced cell proliferation and mechanical properties. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2010 , 21, 1173-90	3.5	43
170	Exfoliated Black Phosphorus Promotes in Vitro Bone Regeneration and Suppresses Osteosarcoma Progression through Cancer-Related Inflammation Inhibition. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 9333-9342	9.5	42
169	Influence of electrospun fiber mesh size on hMSC oxygen metabolism in 3D collagen matrices: experimental and theoretical evidences. <i>Biotechnology and Bioengineering</i> , 2011 , 108, 1965-76	4.9	41
168	The influence of hydroxyapatite particles on in vitro degradation behavior of poly epsilon-caprolactone-based composite scaffolds. <i>Tissue Engineering - Part A</i> , 2009 , 15, 3655-68	3.9	41
167	Effects of polymer amount and processing conditions on the in vitro behaviour of hybrid titanium dioxide/polycaprolactone composites. <i>Biomaterials</i> , 2007 , 28, 2801-9	15.6	41

166	Polycaprolactone: Synthesis, Properties, and Applications 2017 , 1-36		40
165	Biomimetic strategies for bone repair and regeneration. <i>Journal of Functional Biomaterials</i> , 2012 , 3, 688-705	4.85	39
164	Poly(lactic acid)/titanium dioxide nanocomposite films: Influence of processing procedure on dispersion of titanium dioxide and photocatalytic activity. <i>Polymer Composites</i> , 2011 , 32, 519-528	3	39
163	Response of intestinal cells and macrophages to an orally administered cellulose-PEG based polymer as a potential treatment for intractable edemas. <i>Biomaterials</i> , 2005 , 26, 4101-10	15.6	39
162	Ibuprofen-loaded poly(trimethylene carbonate-co-ε-caprolactone) electrospun fibres for nerve regeneration. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2016 , 10, E154-66	4.4	38
161	Gelatin/nano-hydroxyapatite hydrogel scaffold prepared by sol-gel technology as filler to repair bone defects. <i>Journal of Biomedical Materials Research - Part A</i> , 2018 , 106, 2007-2019	5.4	38
160	Design of porous three-dimensional PDLLA/nano-hap composite scaffolds using stereolithography. <i>Journal of Applied Biomaterials and Functional Materials</i> , 2012 , 10, 249-58	1.8	38
159	Long-Lasting Efficacy of Coatings for Bronze Artwork Conservation: The Key Role of Layered Double Hydroxide Nanocarriers in Protecting Corrosion Inhibitors from Photodegradation. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 7380-7384	16.4	37
158	Effects on growth and osteogenic differentiation of mesenchymal stem cells by the strontium-added sol-gel hydroxyapatite gel materials. <i>Journal of Materials Science: Materials in Medicine</i> , 2015 , 26, 90	4.5	37
157	Self-hardening calcium deficient hydroxyapatite/gelatine foams for bone regeneration. <i>Journal of Materials Science: Materials in Medicine</i> , 2010 , 21, 863-9	4.5	37
156	Image processing and fractal box counting: user-assisted method for multi-scale porous scaffold characterization. <i>Journal of Materials Science: Materials in Medicine</i> , 2010 , 21, 3109-18	4.5	37
155	Induction of directional sprouting angiogenesis by matrix gradients. <i>Journal of Biomedical Materials Research - Part A</i> , 2007 , 80, 297-305	5.4	36
154	Behaviour of human mesenchymal stem cells on chemically synthesized HA-PCL scaffolds for hard tissue regeneration. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2016 , 10, E147-54	4.4	35
153	Macroporous alginate foams crosslinked with strontium for bone tissue engineering. <i>Carbohydrate Polymers</i> , 2018 , 202, 72-83	10.3	34
152	Additive electrospaying: a route to process electrospun scaffolds for controlled molecular release. <i>Polymers for Advanced Technologies</i> , 2015 , 26, 1359-1369	3.2	33
151	Proliferation and osteoblastic differentiation of hMSCs on cellulose-based hydrogels. <i>Journal of Applied Biomaterials and Functional Materials</i> , 2012 , 10, 302-7	1.8	33
150	A degradable soybean-based biomaterial used effectively as a bone filler in vivo in a rabbit. <i>Biomedical Materials (Bristol)</i> , 2010 , 5, 15008	3.5	33
149	The influence of Ni(II) on surface antigen expression in murine macrophages. <i>Biomaterials</i> , 2009 , 30, 1492-501	2.501	32

148	Gas-Barrier Hybrid Coatings by the Assembly of Novel Poly(vinyl alcohol) and Reduced Graphene Oxide Layers through Cross-Linking with Zirconium Adducts. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 22678-85	9.5	31
147	Syndiotactic Polystyrene Films with Sulfonated Amorphous Phase and Nanoporous Crystalline Phase. <i>Chemistry of Materials</i> , 2009 , 21, 3191-3196	9.6	31
146	Some New Well-Posedness Results for Continuity and Transport Equations, and Applications to the Chromatography System. <i>SIAM Journal on Mathematical Analysis</i> , 2009 , 41, 1890-1920	1.7	31
145	Cu-Releasing Bioactive Glass Coatings and Their in Vitro Properties. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 5812-5820	9.5	30
144	Antimicrobial Imidazolium Ionic Liquids for the Development of Minimal Invasive Calcium Phosphate-Based Bionanocomposites. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 42766-42776	9.5	29
143	Injectable Functional Biomaterials for Minimally Invasive Surgery. <i>Advanced Healthcare Materials</i> , 2020 , 9, e2000349	10.1	28
142	Spontaneous arrangement of a tumor targeting hyaluronic acid shell on irinotecan loaded PLGA nanoparticles. <i>Carbohydrate Polymers</i> , 2016 , 140, 400-7	10.3	28
141	Preparation and characterization of cellulose-based foams via microwave curing. <i>Interface Focus</i> , 2014 , 4, 20130053	3.9	28
140	Bioactivation Routes of Gelatin-Based Scaffolds to Enhance at Nanoscale Level Bone Tissue Regeneration. <i>Frontiers in Bioengineering and Biotechnology</i> , 2019 , 7, 27	5.8	27
139	MgCHA particles dispersion in porous PCL scaffolds: in vitro mineralization and in vivo bone formation. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2014 , 8, 291-303	4.4	27
138	Design of injectable organic-inorganic hybrid for bone tissue repair. <i>Journal of Biomedical Materials Research - Part A</i> , 2012 , 100, 2063-70	5.4	27
137	Cellulose-based porous scaffold for bone tissue engineering applications: Assessment of hMSC proliferation and differentiation. <i>Journal of Biomedical Materials Research - Part A</i> , 2016 , 104, 726-733	5.4	26
136	Novel finishing treatments of polyamide fabrics by electrofluidodynamic process to reduce microplastic release during washings. <i>Polymer Degradation and Stability</i> , 2019 , 165, 110-116	4.7	25
135	Collagen density gradient on three-dimensional printed poly(ϵ -caprolactone) scaffolds for interface tissue engineering. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2018 , 12, 321-329	4.4	25
134	Bioactivity and bone healing properties of biomimetic porous composite scaffold: in vitro and in vivo studies. <i>Journal of Biomedical Materials Research - Part A</i> , 2015 , 103, 2932-41	5.4	25
133	Bone Tissue Engineering: 3D PCL-based Nanocomposite Scaffolds with Tailored Properties. <i>Procedia CIRP</i> , 2016 , 49, 51-54	1.8	24
132	Semiclassical limit of quantum dynamics with rough potentials and well-posedness of transport equations with measure initial data. <i>Communications on Pure and Applied Mathematics</i> , 2011 , 64, 1199-1242	2.5	24
131	Effect of microencapsulated phase change materials on the thermo-mechanical properties of poly(methyl-methacrylate) based biomaterials. <i>Journal of Materials Science: Materials in Medicine</i> , 2006 , 17, 1219-26	4.5	24

130	Micro- and nanocarriers by electrofluidodynamic technologies for cell and molecular therapies. <i>Process Biochemistry</i> , 2016 , 51, 2143-2154	4.8	24
129	Design of functional textile coatings via non-conventional electrofluidodynamic processes. <i>Journal of Colloid and Interface Science</i> , 2019 , 541, 367-375	9.3	23
128	Galactose grafting on poly(ϵ -caprolactone) substrates for tissue engineering: a preliminary study. <i>Carbohydrate Research</i> , 2015 , 405, 39-46	2.9	23
127	Glucosamine grafting on poly(ϵ -caprolactone): a novel glycated polyester as a substrate for tissue engineering. <i>RSC Advances</i> , 2013 , 3, 6286	3.7	23
126	The biocompatibility of silver-containing Na ₂ O.CaO.2SiO ₂ glass prepared by sol-gel method: in vitro studies. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2010 , 92, 102-110	3.5	23
125	Mechanical and leakage behaviour of the dentin--adhesive interface. <i>Journal of Materials Science: Materials in Medicine</i> , 2004 , 15, 485-92	4.5	23
124	Injectable strontium-doped hydroxyapatite integrated with phosphoserine-tethered poly(epsilon-lysine) dendrons for osteoporotic bone defect repair. <i>Journal of Materials Chemistry B</i> , 2018 , 6, 7974-7984	7.3	23
123	Osteoinductive and anti-inflammatory properties of chitosan-based scaffolds for bone regeneration. <i>Materials Science and Engineering C</i> , 2019 , 105, 110046	8.3	22
122	Monolithic polymeric aerogels with VOCs sorbent nanoporous crystalline and water sorbent amorphous phases. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 1318-26	9.5	21
121	Electrospun polycaprolactone nanofibres decorated by drug loaded chitosan nano-reservoirs for antibacterial treatments. <i>Nanotechnology</i> , 2017 , 28, 505103	3.4	20
120	Hydrogel-based nanocomposites and mesenchymal stem cells: a promising synergistic strategy for neurodegenerative disorders therapy. <i>Scientific World Journal, The</i> , 2013 , 2013, 270260	2.2	20
119	Rectifiability of Sets of Finite Perimeter in Carnot Groups: Existence of a Tangent Hyperplane. <i>Journal of Geometric Analysis</i> , 2009 , 19, 509-540	0.9	20
118	Technical features and criteria in designing fiber-reinforced composite materials: from the aerospace and aeronautical field to biomedical applications. <i>Journal of Applied Biomaterials and Biomechanics</i> , 2011 , 9, 151-63		20
117	Poly(2-hydroxyethyl methacrylate)/Poly(caprolactone) Semi-Interpenetrating Polymer Networks. <i>Journal of Bioactive and Compatible Polymers</i> , 1988 , 3, 205-218	2	20
116	Polycaprolactone/fluoride substituted-hydroxyapatite (PCL/FHA) nanocomposite coatings prepared by in-situ sol-gel process for dental implant applications. <i>Progress in Organic Coatings</i> , 2020 , 147, 105873	4.8	20
115	5-Azacytidine-mediated hMSC behavior on electrospun scaffolds for skeletal muscle regeneration. <i>Journal of Biomedical Materials Research - Part A</i> , 2017 , 105, 2551-2561	5.4	19
114	Effect of surface fluorination of TiO ₂ particles on photocatalytic activity of a hybrid multilayer coating obtained by sol-gel method. <i>ACS Applied Materials & Interfaces</i> , 2012 , 4, 150-7	9.5	19
113	Biodegradable microparticles and nanoparticles by electrospraying techniques. <i>Journal of Applied Biomaterials and Functional Materials</i> , 2012 , 10, 191-6	1.8	19

112	Osteogenic differentiation and mineralization in fibre-reinforced tubular scaffolds: theoretical study and experimental evidences. <i>Journal of the Royal Society Interface</i> , 2012 , 9, 2201-12	4.1	19
111	Synthesis and characterization of soybean-based hydrogels with an intrinsic activity on cell differentiation. <i>Tissue Engineering - Part A</i> , 2012 , 18, 1932-9	3.9	19
110	Mechanical strength of tooth fragment reattachment. <i>Journal of Biomedical Materials Research Part B</i> , 2001 , 55, 629-36		19
109	Bioactive chitosan-based scaffolds with improved properties induced by dextran-grafted nano-maghemite and l-arginine amino acid. <i>Journal of Biomedical Materials Research - Part A</i> , 2019 , 107, 1244-1252	5.4	18
108	Viscoelastic Properties of Rapid Prototyped Magnetic Nanocomposite Scaffolds for Osteochondral Tissue Regeneration. <i>Procedia CIRP</i> , 2016 , 49, 76-82	1.8	18
107	Bio-safe processing of polylactic-co-caprolactone and polylactic acid blends to fabricate fibrous porous scaffolds for in vitro mesenchymal stem cells adhesion and proliferation. <i>Materials Science and Engineering C</i> , 2016 , 63, 512-21	8.3	18
106	Functional Biomolecule Delivery Systems and Bioengineering in Cartilage Regeneration. <i>Current Pharmaceutical Biotechnology</i> , 2019 , 20, 32-46	2.6	18
105	Hydrogel-based delivery of Tat-fused protein Hsp70 protects dopaminergic cells in vitro and in a mouse model of Parkinson disease. <i>NPG Asia Materials</i> , 2019 , 11,	10.3	18
104	Binary system thermodynamics to control pore architecture of PCL scaffold via temperature-driven phase separation process. <i>Journal of Biomaterials Applications</i> , 2012 , 27, 241-54	2.9	18
103	Calorimetric and thermomechanical properties of titanium-based orthodontic wires: DSC-DMA relationship to predict the elastic modulus. <i>Journal of Biomaterials Applications</i> , 2012 , 26, 829-44	2.9	18
102	In silico evaluation of a new composite disc substitute with a L3-L5 lumbar spine finite element model. <i>European Spine Journal</i> , 2012 , 21 Suppl 5, S675-87	2.7	18
101	Well-Posedness for a Class of Hyperbolic Systems of Conservation Laws in Several Space Dimensions. <i>Communications in Partial Differential Equations</i> , 2005 , 29, 1635-1651	1.6	18
100	Bioactive composites based on double network approach with tailored mechanical, physico-chemical, and biological features. <i>Journal of Biomedical Materials Research - Part A</i> , 2018 , 106, 3079-3089	5.4	18
99	In vivo lamellar bone formation in fibre coated MgCHA-PCL-composite scaffolds. <i>Journal of Materials Science: Materials in Medicine</i> , 2012 , 23, 117-28	4.5	17
98	The role of the surface on microglia function: implications for central nervous system tissue engineering. <i>Journal of the Royal Society Interface</i> , 2015 , 12,	4.1	17
97	Scanning Small- and Wide-Angle X-ray Scattering Microscopy Selectively Probes HA Content in Gelatin/Hydroxyapatite Scaffolds for Osteochondral Defect Repair. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 8728-36	9.5	17
96	A Combined Approach of Double Network Hydrogel and Nanocomposites Based on Hyaluronic Acid and Poly(ethylene glycol) Diacrylate Blend. <i>Materials</i> , 2018 , 11,	3.5	17
95	Ionic liquids as dynamic templating agents for sol-gel silica systems: synergistic anion and cation effect on the silica structured growth. <i>Journal of Sol-Gel Science and Technology</i> , 2015 , 76, 414-427	2.3	16

94	Design of electrospayed non-spherical poly (L-lactide-co-glicolide) microdevices for sustained drug delivery. <i>Journal of Materials Science: Materials in Medicine</i> , 2014 , 25, 383-90	4.5	16
93	High Amorphous Vinyl Alcohol-Silica Bionanocomposites: Tuning Interface Interactions with Ionic Liquids. <i>ACS Sustainable Chemistry and Engineering</i> , 2017 , 5, 1094-1105	8.3	16
92	Needle-like ion-doped hydroxyapatite crystals influence osteogenic properties of PCL composite scaffolds. <i>Biomedical Materials (Bristol)</i> , 2016 , 11, 015018	3.5	15
91	Graphene-based masterbatch obtained via modified polyvinyl alcohol liquid-shear exfoliation and its application in enhanced polymer composites. <i>Materials and Design</i> , 2017 , 134, 103-110	8.1	15
90	Reverse engineering of mandible and prosthetic framework: Effect of titanium implants in conjunction with titanium milled full arch bridge prostheses on the biomechanics of the mandible. <i>Journal of Biomechanics</i> , 2014 , 47, 3825-9	2.9	15
89	Preparation and physico-chemical characterisation of microporous polysaccharidic hydrogels. <i>Journal of Materials Science: Materials in Medicine</i> , 2004 , 15, 463-7	4.5	15
88	Synthesis and characterization of divinyl-fumarate poly- ϵ -caprolactone for scaffolds with controlled architectures. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2018 , 12, e523-e531	4.4	14
87	Human skin-derived keratinocytes and fibroblasts co-cultured on 3D poly ϵ -caprolactone scaffold support in vitro HSC differentiation into T-lineage committed cells. <i>International Immunology</i> , 2013 , 25, 703-14	4.9	14
86	Eumelanin Coated PLA Electrospun Micro Fibers as Bioinspired Cradle for SH-SY5Y Neuroblastoma Cells Growth and Maturation. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 40070-40076	9.5	14
85	Weak differentiability of BV functions on stratified groups. <i>Mathematische Zeitschrift</i> , 2003 , 245, 123-153	3.7	14
84	Mechanical behavior of bioactive poly(ethylene glycol) diacrylate matrices for biomedical application. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2020 , 110, 103885	4.1	13
83	Design of bioactive electrospun scaffolds for bone tissue engineering. <i>Journal of Applied Biomaterials and Functional Materials</i> , 2012 , 10, 223-8	1.8	13
82	Stimuli-responsive chitosan/poly (N-isopropylacrylamide) semi-interpenetrating polymer networks: effect of pH and temperature on their rheological and swelling properties. <i>Journal of Materials Science: Materials in Medicine</i> , 2016 , 27, 109	4.5	13
81	Structure-Property Relationships in Hydrogels 2009 , 9-20		12
80	Chitosan Microgels and Nanoparticles via Electrofluidodynamic Techniques for Biomedical Applications. <i>Gels</i> , 2016 , 2,	4.2	12
79	Poly(Epsilon-lysine) dendrons tethered with phosphoserine increase mesenchymal stem cell differentiation potential of calcium phosphate gels. <i>Tissue Engineering - Part A</i> , 2014 , 20, 474-85	3.9	11
78	Self-associating cellulose-graft-poly(ϵ -caprolactone) to design nanoparticles for drug release. <i>Materials Science and Engineering C</i> , 2020 , 108, 110385	8.3	11
77	Hydrogels for central nervous system therapeutic strategies. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2015 , 229, 905-16	1.7	10

76	Short-Term Degradation of Bi-Component Electrospun Fibers: Qualitative and Quantitative Evaluations via AFM Analysis. <i>Journal of Functional Biomaterials</i> , 2018 , 9,	4.8	10
75	Large defect-tailored composite scaffolds for in vivo bone regeneration. <i>Journal of Biomaterials Applications</i> , 2014 , 29, 715-27	2.9	10
74	Passage from Quantum to Classical Molecular Dynamics in the Presence of Coulomb Interactions. <i>Communications in Partial Differential Equations</i> , 2010 , 35, 1490-1515	1.6	10
73	Fractography analysis and fatigue strength of carbon fiber/RTM6 laminates. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010 , 527, 3609-3614	5.3	10
72	Biomechanical effects of titanium implants with full arch bridge rehabilitation on a synthetic model of the human jaw. <i>Acta Biomaterialia</i> , 2007 , 3, 121-6	10.8	10
71	Zn-substituted MgSiO nanoparticles-incorporated PCL-silk fibroin composite scaffold: A multifunctional platform towards bone tissue regeneration. <i>Materials Science and Engineering C</i> , 2021 , 127, 112242	8.3	10
70	Perimeter as relaxed Minkowski content in metric measure spaces. <i>Nonlinear Analysis: Theory, Methods & Applications</i> , 2017 , 153, 78-88	1.3	9
69	Improving surface and transport properties of macroporous hydrogels for bone regeneration. <i>Journal of Biomedical Materials Research - Part A</i> , 2015 , 103, 1095-105	5.4	9
68	Core/shell cellulose-based microspheres for oral administration of Ketoprofen Lysinate. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2018 , 106, 2636-2644	3.5	9
67	3D laser scanning in conjunction with surface texturing to evaluate shift and reduction of the tibiofemoral contact area after meniscectomy. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2018 , 88, 41-47	4.1	9
66	Well posedness of ODE and continuity equations with nonsmooth vector fields, and applications. <i>Revista Matemática Complutense</i> , 2017 , 30, 427-450	0.8	9
65	Optimization of Bicomponent Electrospun Fibers for Therapeutic Use: Post-Treatments to Improve Chemical and Biological Stability. <i>Journal of Functional Biomaterials</i> , 2017 , 8,	4.8	9
64	Development and analysis of semi-interpenetrating polymer networks for brain injection in neurodegenerative disorders. <i>International Journal of Artificial Organs</i> , 2013 , 36, 762-74	1.9	9
63	Semicrystalline proton-conductive membranes with sulfonated amorphous phases. <i>International Journal of Hydrogen Energy</i> , 2011 , 36, 8038-8044	6.7	9
62	Structural and functional properties of astrocytes on PCL based electrospun fibres. <i>Materials Science and Engineering C</i> , 2021 , 118, 111363	8.3	9
61	Composite biomaterials for bone repair 2019 , 273-299		8
60	Rigidity of the 1-Bakry Inequality and Sets of Finite Perimeter in RCD Spaces. <i>Geometric and Functional Analysis</i> , 2019 , 29, 949-1001	1.2	8
59	Electrospun PCL-Based Vascular Grafts: In Vitro Tests. <i>Nanomaterials</i> , 2021 , 11,	5.4	8

58	Tricalcium phosphate cement supplemented with boron nitride nanotubes with enhanced biological properties. <i>Materials Science and Engineering C</i> , 2020 , 114, 111044	8.3	7
57	Effect of inorganic and organic bioactive signals decoration on the biological performance of chitosan scaffolds for bone tissue engineering. <i>Journal of Materials Science: Materials in Medicine</i> , 2018 , 29, 62	4.5	7
56	Micro/Nanotexturing and Bioactivation Strategies to Design Composite Scaffolds and ECM-Like Analogues. <i>Macromolecular Symposia</i> , 2013 , 331-332, 65-70	0.8	7
55	In-Situ Synthesis and Characterization of Chitosan/Hydroxyapatite Nanocomposite Coatings to Improve the Bioactive Properties of Ti6Al4V Substrates. <i>Materials</i> , 2020 , 13,	3.5	7
54	Glial Interfaces: Advanced Materials and Devices to Uncover the Role of Astroglial Cells in Brain Function and Dysfunction. <i>Advanced Healthcare Materials</i> , 2021 , 10, e2001268	10.1	7
53	Poly(Ecaprolactone) reinforced with sol-gel synthesized organic-inorganic hybrid fillers as composite substrates for tissue engineering. <i>Journal of Applied Biomaterials and Biomechanics</i> , 2010 , 8, 146-52		7
52	Rectifiability of flat chains in Banach spaces with coefficients in Z_p . <i>Mathematische Zeitschrift</i> , 2011 , 268, 477-506	0.7	6
51	Locality of the perimeter in Carnot groups and chain rule. <i>Annali Di Matematica Pura Ed Applicata</i> , 2010 , 189, 661-678	0.8	6
50	Implicit constitutive equations in the modeling of bimodular materials: An application to biomaterials. <i>Computers and Mathematics With Applications</i> , 2007 , 53, 209-218	2.7	6
49	Complexation of Injectable Biphasic Calcium Phosphate with Phosphoserine-Presenting Dendrons with Enhanced Osteoregenerative Properties. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 37873-37884	9.5	6
48	Osteogenic and Anti-Inflammatory Behavior of Injectable Calcium Phosphate Loaded with Therapeutic Drugs. <i>Nanomaterials</i> , 2020 , 10,	5.4	6
47	Integrating Microstructured Electrospun Scaffolds in an Open Microfluidic System for Studies of Human Patient-Derived Primary Cells. <i>ACS Biomaterials Science and Engineering</i> , 2020 , 6, 3649-3663	5.5	5
46	Elastomagnetic NI-PDMS nanofibers via coaxial electrospinning. <i>Materials Research Express</i> , 2018 , 5, 085029	0.7	5
45	Thermoset composite hydrogels for bone/intervertebral disc interface. <i>Materials Letters</i> , 2013 , 110, 249-252	3.5	5
44	The Flow Associated to Weakly Differentiable Vector Fields: Recent Results and Open Problems. <i>The IMA Volumes in Mathematics and Its Applications</i> , 2011 , 181-193	0.5	5
43	Effect of N-acetyl cysteine on orthodontic primers cytotoxicity. <i>Dental Materials</i> , 2011 , 27, 180-6	5.7	5
42	Pure titanium particle loaded nanocomposites: study on the polymer/filler interface and hMSC biocompatibility. <i>Journal of Materials Science: Materials in Medicine</i> , 2016 , 27, 153	4.5	5
41	From 3D Hierarchical Scaffolds for Tissue Engineering to Advanced Hydrogel-Based and Complex Devices for in situ Cell or Drug Release. <i>Procedia CIRP</i> , 2016 , 49, 72-75	1.8	5

40	Regeneration of Mineralized Bone Tissue in Anisotropic Biomimetic Sponges. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020 , 8, 587	5.8	4
39	Fundamental Properties of Bioceramics and Biocomposites 2016 , 35-58		4
38	3D conduits for peripheral nerve regeneration 2018 , 329-349		4
37	Instructive proteins for tissue regeneration 2018 , 23-49		4
36	Bioinspired scaffolds for bone and neural tissue and interface engineering 2018 , 51-74		4
35	Manipulating co-continuous polymer blends to create PCL scaffolds with fully interconnected and anisotropic pore architecture. <i>Journal of Applied Biomaterials and Biomechanics</i> , 2011 , 9, 34-9		4
34	Hyaluronan-coated nanoparticles for active tumor targeting: Influence of polysaccharide molecular weight on cell uptake. <i>Colloids and Surfaces B: Biointerfaces</i> , 2021 , 210, 112240	6	4
33	Mono- and Bi-Phasic Cellulose Acetate Micro-Vectors for Anti-Inflammatory Drug Delivery. <i>Pharmaceutics</i> , 2019 , 11,	6.4	4
32	Alginate Processing Routes to Fabricate Bioinspired Platforms for Tissue Engineering and Drug Delivery. <i>Springer Series in Biomaterials Science and Engineering</i> , 2018 , 101-120	0.6	4
31	Degradation and early in vitro activity of healthy hepatocytes onto bicomponent electrospun fibers. <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> , 2018 , 67, 961-966	3	4
30	Effect of Hyaluronic Acid on the Differentiation of Mesenchymal Stem Cells into Mature Type II Pneumocytes. <i>Polymers</i> , 2021 , 13,	4.5	4
29	Investigating the Structure-Related Properties of Cellulose-Based Superabsorbent Hydrogels 2019 ,		3
28	Potential contact and intraocular lenses based on hydrophilic/hydrophobic sulfonated syndiotactic polystyrene membranes. <i>Journal of King Saud University - Science</i> , 2017 , 29, 487-493	3.6	3
27	Microwave-induced porosity and bioactivation of chitosan-PEGDA scaffolds: morphology, mechanical properties and osteogenic differentiation. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2017 , 11, 86-98	4.4	3
26	Design of Functional Polymer and Composite Scaffolds for the Regeneration of Bone, Menisci, Osteochondral and Peripheral Nervous Tissues. <i>Advanced Materials Research</i> , 2011 , 324, 8-13	0.5	3
25	Fluorescent Nanodiamonds Embedded in Poly-ε-Caprolactone Fibers as Biomedical Scaffolds. <i>ACS Applied Nano Materials</i> , 2020 , 3, 10814-10822	5.6	3
24	Chitosan/hydroxyapatite nanocomposite scaffolds to modulate osteogenic and inflammatory response. <i>Journal of Biomedical Materials Research - Part A</i> , 2021 ,	5.4	3
23	Innovative Biomaterials for the Treatment of Bone Cancer. <i>International Journal of Molecular Sciences</i> , 2021 , 22,	6.3	3

22	Exploring Process Technologies to Fabricate Fibrous Scaffolds and Bio-Textiles for Biomedical Applications. <i>Advances in Science and Technology</i> , 2016 , 100, 31-37	0.1	2
21	Effect of topical antiinflammatory drugs on mechanical behavior of rabbit cornea. <i>Journal of Applied Biomaterials and Functional Materials</i> , 2017 , 15, e142-e148	1.8	2
20	Electro fluido dynamic techniques to design instructive biomaterials for tissue engineering and drug delivery 2015 ,		2
19	Basic protocols to investigate hMSC behavior onto electrospun fibers. <i>Methods in Molecular Biology</i> , 2013 , 1058, 109-17	1.4	2
18	Polyaniline nano-needles into electrospun bio active fibres support astrocyte response.. <i>RSC Advances</i> , 2021 , 11, 11347-11355	3.7	2
17	Tangent Halfspaces to Sets of Finite Perimeter in Carnot Groups 2009 , 1-16		2
16	Existence and Uniqueness Results for the Continuity Equation and Applications to the Chromatography System. <i>The IMA Volumes in Mathematics and Its Applications</i> , 2011 , 195-204	0.5	2
15	Composite scaffolds for bone and osteochondral defects 2019 , 297-337		1
14	Fundamental Properties of Bioceramics and Biocomposites 2015 , 1-19		1
13	Scaffold Design for Bone Tissue Engineering: From Micrometric to Nanometric Level. <i>Springer Series in Biomaterials Science and Engineering</i> , 2013 , 1-16	0.6	1
12	Modeling of phase separation mechanism in polycaprolactone/dioxane binary systems. <i>Journal of Applied Biomaterials and Functional Materials</i> , 2012 , 10, 237-42	1.8	1
11	Evolution problems in spaces of probability measures. <i>Physica D: Nonlinear Phenomena</i> , 2010 , 239, 1446-1452	3.52	1
10	MSCs and Innovative Injectable Biomaterials in Dentistry. <i>Pancreatic Islet Biology</i> , 2017 , 43-61	0.4	1
9	Convergence of Wigner Transforms in a Semiclassical Limit. <i>Abel Symposia</i> , 2012 , 1-11	0.9	1
8	and biocompatibility and inflammation response of methacrylated and maleated hyaluronic acid for wound healing.. <i>RSC Advances</i> , 2020 , 10, 32183-32192	3.7	1
7	Progress and Perspectives in the Management of Wound Infections 2016 ,		1
6	2D exfoliated black phosphorus influences healthy and cancer prostate cell behaviors. <i>Scientific Reports</i> , 2021 , 11, 5856	4.9	0
5	Long-Lasting Efficacy of Coatings for Bronze Artwork Conservation: The Key Role of Layered Double Hydroxide Nanocarriers in Protecting Corrosion Inhibitors from Photodegradation. <i>Angewandte Chemie</i> , 2018 , 130, 7502-7506	3.6	

- 4 Additive electrospaying for scaffold functionalization **2018**, 179-203
- 3 Soft Tissue Repair and Regeneration: Composite Materials Toward the Design of Advanced Prostheses and Scaffolds **2012**, 1
- 2 Overview of scaffolds processing technologies **2022**, 215-262
- 1 Chemical and Physical Properties of Polymers for Biomedical Use **2015**, 67-90