Luigi Ambrosio

List of Publications by Year
in descending order

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183	9,983	28274 55	43889 91
papers	citations	h-index	g-index

187	187	187	10405
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Transport equation and Cauchy problem for BV vector fields. Inventiones Mathematicae, 2004, 158, 227-260.	2.5	470
2	Novel superabsorbent celluloseâ€based hydrogels crosslinked with citric acid. Journal of Applied Polymer Science, 2008, 110, 2453-2460.	2.6	386
3	Metric measure spaces with Riemannian Ricci curvature bounded from below. Duke Mathematical Journal, 2014, 163, .	1.5	286
4	Calculus and heat flow in metric measure spaces and applications to spaces with Ricci bounds from below. Inventiones Mathematicae, 2014, 195, 289-391.	2.5	257
5	The effect of matrix composition of 3D constructs on embryonic stem cell differentiation. Biomaterials, 2005, 26, 6194-6207.	11.4	237
6	A multi-functional scaffold for tissue regeneration: The need to engineer a tissue analogue. Biomaterials, 2007, 28, 5093-5099.	11.4	232
7	A novel poloxamers/hyaluronic acid in situ forming hydrogel for drug delivery: Rheological, mucoadhesive and in vitro release properties. European Journal of Pharmaceutics and Biopharmaceutics, 2008, 70, 199-206.	4.3	228
8	Currents in metric spaces. Acta Mathematica, 2000, 185, 1-80.	3.9	223
9	Bioactive scaffolds for bone and ligament tissue. Expert Review of Medical Devices, 2007, 4, 405-418.	2.8	197
10	Polylactic acid fibre-reinforced polycaprolactone scaffolds for bone tissue engineering. Biomaterials, 2008, 29, 3662-3670.	11.4	184
11	Rectifiable sets in metric and Banach spaces. Mathematische Annalen, 2000, 318, 527-555.	1.4	182
12	Conductive PANi/PEGDA Macroporous Hydrogels For Nerve Regeneration. Advanced Healthcare Materials, 2013, 2, 218-227.	7.6	182
13	Bakryâ€“Ã‰mery curvature-dimension condition and Riemannian Ricci curvature bounds. Annals of Probability, 2015, 43, .	1.8	147
14	Metal-Based Antibacterial Substrates for Biomedical Applications. Biomacromolecules, 2015, 16, 1873-1885.	5.4	139
15	Influence of Gelatin Cues in PCL Electrospun Membranes on Nerve Outgrowth. Biomacromolecules, 2010, 11, 2238-2246.	5.4	134
16	PCL microspheres based functional scaffolds by bottom-up approach with predefined microstructural properties and release profiles. Biomaterials, 2008, 29, 4800-4807.	11.4	131
17	Riemannian Ricci curvature lower bounds in metric measure spaces with ?-finite measure. Transactions of the American Mathematical Society, 2015, 367, 4661-4701.	0.9	125
18	Towards the Design of 3D Fiber-Deposited Poly(-caprolactone)/Iron-Doped Hydroxyapatite Nanocomposite Magnetic Scaffolds for Bone Regeneration. Journal of Biomedical Nanotechnology, 2015, 11, 1236-1246.	1.1	125

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19	Additive manufacturing of wet-spun polymeric scaffolds for bone tissue engineering. Biomedical Microdevices, 2012, 14, 1115-1127.	2.8	118
20	New macroporous calcium phosphate glass ceramic for guided bone regeneration. Biomaterials, 2004, 25, 4233-4241.	11.4	116
21	The role of reduced graphene oxide on chemical, mechanical and barrier properties of natural rubber composites. Composites Science and Technology, 2014, 102, 74-81.	7.8	113
22	Tissue Engineering for Total Meniscal Substitution: Animal Study in Sheep Model. Tissue Engineering - Part A, 2008, 14, 1067-1080.	3.1	108
23	Layer-by-Layer Self-Assembly of Chitosan and Poly(Î³-glutamic acid) into Polyelectrolyte Complexes. Biomacromolecules, 2011, 12, 4183-4195.	5.4	107
24	Collagen-low molecular weight hyaluronic acid semi-interpenetrating network loaded with gelatin microspheres for cell and growth factor delivery for nucleus pulposus regeneration. Acta Biomaterialia, 2015, 20, 10-21.	8.3	105
25	Tailoring Assembly of Reduced Graphene Oxide Nanosheets to Control Gas Barrier Properties of Natural Rubber Nanocomposites. ACS Applied Materials & Interfaces, 2014, 6, 2230-2234.	8.0	103
26	A geometrical approach to monotone functions in $mathbb R^n$. Mathematische Zeitschrift, 1999, 230, 259-316.	0.9	99
27	Some Fine Properties of Sets of Finite Perimeter in Ahlfors Regular Metric Measure Spaces. Advances in Mathematics, 2001, 159, 51-67.	1.1	99
28	Tissue Engineering for Total Meniscal Substitution: Animal Study in Sheep Modelâ€"Results at 12 Months. Tissue Engineering - Part A, 2012, 18, 1573-1582.	3.1	99
29	Hyaluronic Acid Based Hydrogels for Regenerative Medicine Applications. BioMed Research International, 2015, 2015, 1-12.	1.9	94
30	Fine Properties of Sets of Finite Perimeter in Doubling Metric Measure Spaces. Set-Valued and Variational Analysis, 2002, 10, 111-128.	0.5	92
31	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
32	Equivalent definitions of BV space and of total variation on metric measure spaces. Journal of Functional Analysis, 2014, 266, 4150-4188.	1.4	83
33	The role of hydroxyapatite as solid signal on performance of PCL porous scaffolds for bone tissue regeneration. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2008, 86B, 548-557.	3.4	82
34	Continuity equations and ODE flows with non-smooth velocity. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 2014, 144, 1191-1244.	1.2	78
35	A New Class of Bioactive and Biodegradable Soybean-Based Bone Fillers. Biomacromolecules, 2007, 8, 2706-2711.	5.4	76
36	Histomorphometric, ultrastructural and microhardness evaluation of the osseointegration of a nanostructured titanium oxide coating by metal-organic chemical vapour deposition: an in vivo study. Biomaterials, 2004, 25, 5583-5591.	11.4	74

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37	Viscoelastic Properties of Rabbit Vocal Folds after Augmentation. Otolaryngology - Head and Neck Surgery, 2003, 128, 401-406.	1.9	71
38	A 3D analysis of mechanically stressed dentin?adhesive?composite interfaces using X-ray micro-CT. Biomaterials, 2005, 26, 257-270.	11.4	71
39	Injectable Thermally Responsive Mucoadhesive Gel for Sustained Protein Delivery. Biomacromolecules, 2011, 12, 28-33.	5.4	71
40	Hybrid composite scaffolds prepared by solâ€“gel method for bone regeneration. Composites Science and Technology, 2010, 70, 1861-1868.	7.8	70
41	Calculus of Variations and Nonlinear Partial Differential Equations. Lecture Notes in Mathematics, 2008, , .	0.2	70
42	Structural and Mechanical Properties of UV-Photo-Cross-Linked Poly(N-vinyl-2-pyrrolidone) Hydrogels. Biomacromolecules, 2008, 9, 231-240.	5.4	69
43	Tuning Size Scale and Crystallinity of PCL Electrospun Fibres via Solvent Permittivity to Address hMSC Response. Macromolecular Bioscience, 2011, 11, 1694-1705.	4.1	69
44	3D fibre deposition and stereolithography techniques for the design of multifunctional nanocomposite magnetic scaffolds. Journal of Materials Science: Materials in Medicine, 2015, 26, 250.	3.6	65
45	Transport Equation and Cauchy Problem for Non-Smooth Vector Fields. Lecture Notes in Mathematics, 2008, , 1-41.	0.2	64
46	Rheological Characterization of Hyaluronic Acid Derivatives as Injectable Materials Toward Nucleus Pulposus Regeneration. Journal of Biomaterials Applications, 2012, 26, 745-759.	2.4	64
47	A comparison of the performance of mono- and bi-component electrospun conduits in a rat sciatic model. Biomaterials, 2014, 35, 8970-8982.	11.4	64
48	Structural and rheological characterization of hyaluronic acid-based scaffolds for adipose tissue engineering. Biomaterials, 2007, 28, 4399-4408.	11.4	63
49	Dynamic-mechanical properties of a novel composite intervertebral disc prosthesis. Journal of Materials Science: Materials in Medicine, 2007, 18, 2159-2165.	3.6	63
50	Borate cross-linked graphene oxideâ€“chitosan as robust and high gas barrier films. Nanoscale, 2016, 8, 10783-10791.	5.6	62
51	Soybean-based biomaterials: preparation, properties and tissue regeneration potential. Expert Review of Medical Devices, 2008, 5, 349-358.	2.8	61
52	Systematic Analysis of Injectable Materials and 3D Rapid Prototyped Magnetic Scaffolds: From CNS Applications to Soft and Hard Tissue Repair/Regeneration. Procedia Engineering, 2013, 59, 233-239.	1.2	60
53	Electro-Active Polymers (EAPs): A Promising Route to Design Bio-Organic/Bioinspired Platforms with on Demand Functionalities. Polymers, 2016, 8, 185.	4.5	59
54	Hydrogel-Based Platforms for the Regeneration of Osteochondral Tissue and Intervertebral Disc. Polymers, 2012, 4, 1590-1612.	4.5	57

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55	Novel polysaccharides-based viscoelastic formulations for ophthalmic surgery: Rheological characterization. Biomaterials, 2006, 27, 5134-5142.	11.4	56
56	On flows associated to Sobolev vector fields in Wiener spaces: An approach Ã la DiPernaâ€“Lions. Journal of Functional Analysis, 2009, 256, 179-214.	1.4	56
57	A Multi-component Fiber-reinforced PHEMA-based Hydrogel/HAPEX‹sup›TM‹/sup› Device for Customized Intervertebral Disc Prosthesis. Journal of Biomaterials Applications, 2011, 25, 795-810.	2.4	55
58	‹i›In vitro‹/i› mineralization and bone osteogenesis in poly(Îµâ€caprolactone)/gelatin nanofibers. Journal of Biomedical Materials Research - Part A, 2012, 100A, 3008-3019.	4.0	55
59	Optimization of fully aligned bioactive electrospun fibers for â€œin vitroâ€•nerve guidance. Journal of Materials Science: Materials in Medicine, 2014, 25, 2323-2332.	3.6	54
60	Well-posedness of Lagrangian flows and continuity equations in metric measure spaces. Analysis and PDE, 2014, 7, 1179-1234.	1.4	54
61	Regeneration of Achilles' Tendon: The Role of Dynamic Stimulation for Enhanced Cell Proliferation and Mechanical Properties. Journal of Biomaterials Science, Polymer Edition, 2010, 21, 1173-1190.	3.5	53
62	Polymer-based platforms by electric field-assisted techniques for tissue engineering and cancer therapy. Expert Review of Medical Devices, 2015, 12, 113-129.	2.8	53
63	Nanocomposites for Neurodegenerative Diseases: Hydrogel-Nanoparticle Combinations for a Challenging Drug Delivery. International Journal of Artificial Organs, 2011, 34, 1115-1127.	1.4	52
64	Mineralization behavior with mesenchymal stromal cells in a biomimetic hyaluronic acid-based scaffold. Biomaterials, 2010, 31, 3986-3996.	11.4	50
65	Bicomponent electrospun scaffolds to design extracellular matrix tissue analogs. Expert Review of Medical Devices, 2016, 13, 83-102.	2.8	50
66	A PDE approach to a 2-dimensional matching problem. Probability Theory and Related Fields, 2019, 173, 433-477.	1.8	50
67	Bone regeneration potential of a soybean-based filler: experimental study in a rabbit cancellous bone defects. Journal of Materials Science: Materials in Medicine, 2010, 21, 615-626.	3.6	48
68	Ibuprofen-loaded poly(trimethylene carbonate-co-Îµ-caprolactone) electrospun fibres for nerve regeneration. Journal of Tissue Engineering and Regenerative Medicine, 2016, 10, E154-E166.	2.7	48
69	Influence of electrospun fiber mesh size on hMSC oxygen metabolism in 3D collagen matrices: Experimental and theoretical evidences. Biotechnology and Bioengineering, 2011, 108, 1965-1976.	3.3	47
70	Poly(lactic acid)/titanium dioxide nanocomposite films: Influence of processing procedure on dispersion of titanium dioxide and photocatalytic activity. Polymer Composites, 2011, 32, 519-528.	4.6	46
71	Design of Porous Three-Dimensional PDLLA/nano-hap Composite Scaffolds Using Stereolithography. Journal of Applied Biomaterials and Functional Materials, 2012, 10, 249-258.	1.6	46
72	Traces and fine properties of a BD class of vector fields and applications. Annales De La FacultÃ© Des Sciences De Toulouse, 2005, 14, 527-561.	0.3	46

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73	Effects of polymer amount and processing conditions on the in vitro behaviour of hybrid titanium dioxide/polycaprolactone composites. Biomaterials, 2007, 28, 2801-2809.	11.4	45
74	The Influence of Hydroxyapatite Particles on In Vitro Degradation Behavior of Poly É›-Caprolactoneâ€“Based Composite Scaffolds. Tissue Engineering - Part A, 2009, 15, 3655-3668.	3.1	45
75	Self-hardening calcium deficient hydroxyapatite/gelatine foams for bone regeneration. Journal of Materials Science: Materials in Medicine, 2010, 21, 863-869.	3.6	45
76	Additive electrospraying: a route to process electrospun scaffolds for controlled molecular release. Polymers for Advanced Technologies, 2015, 26, 1359-1369.	3.2	45
77	Effects on growth and osteogenic differentiation of mesenchymal stem cells by the strontium-added solâ€“gel hydroxyapatite gel materials. Journal of Materials Science: Materials in Medicine, 2015, 26, 90.	3.6	44
78	Induction of directional sprouting angiogenesis by matrix gradients. Journal of Biomedical Materials Research - Part A, 2007, 80A, 297-305.	4.0	43
79	Response of intestinal cells and macrophages to an orally administered cellulose-PEG based polymer as a potential treatment for intractable edemas. Biomaterials, 2005, 26, 4101-4110.	11.4	42
80	Preparation and characterization of cellulose-based foams via microwave curing. Interface Focus, 2014, 4, 20130053.	3.0	41
81	On a class of first order Hamiltonâ€“Jacobi equations in metric spaces. Journal of Differential Equations, 2014, 256, 2194-2245.	2.2	41
82	A degradable soybean-based biomaterial used effectively as a bone filler in vivo in a rabbit. Biomedical Materials (Bristol), 2010, 5, 015008.	3.3	40
83	Image processing and fractal box counting: user-assisted method for multi-scale porous scaffold characterization. Journal of Materials Science: Materials in Medicine, 2010, 21, 3109-3118.	3.6	39
84	Proliferation and Osteoblastic Differentiation of hMSCs on Cellulose-Based Hydrogels. Journal of Applied Biomaterials and Functional Materials, 2012, 10, 302-307.	1.6	39
85	Syndiotactic Polystyrene Films with Sulfonated Amorphous Phase and Nanoporous Crystalline Phase. Chemistry of Materials, 2009, 21, 3191-3196.	6.7	38
86	Spontaneous arrangement of a tumor targeting hyaluronic acid shell on irinotecan loaded PLGA nanoparticles. Carbohydrate Polymers, 2016, 140, 400-407.	10.2	37
87	Behaviour of human mesenchymal stem cells on chemically synthesized HA-PCL scaffolds for hard tissue regeneration. Journal of Tissue Engineering and Regenerative Medicine, 2016, 10, E147-E154.	2.7	36
88	Some New Well-Posedness Results for Continuity and Transport Equations, and Applications to the Chromatography System. SIAM Journal on Mathematical Analysis, 2009, 41, 1890-1920.	1.9	35
89	The influence of Ni(II) on surface antigen expression in murine macrophages. Biomaterials, 2009, 30, 1492-1501.	11.4	34
90	Existence of Eulerian Solutions to the Semigeostrophic Equations in Physical Space: The 2-Dimensional Periodic Case. Communications in Partial Differential Equations, 2012, 37, 2209-2227.	2.2	34

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91	Well-Posedness for a Class of Hyperbolic Systems of Conservation Laws in Several Space Dimensions. Communications in Partial Differential Equations, 2005, 29, 1635-1651.	2.2	33
92	Gas-Barrier Hybrid Coatings by the Assembly of Novel Poly(vinyl alcohol) and Reduced Graphene Oxide Layers through Cross-Linking with Zirconium Adducts. ACS Applied Materials & Interfaces, 2015, 7, 22678-22685.	8.0	33
93	Celluloseâ€based porous scaffold for bone tissue engineering applications: Assessment of h<scp>MSC</scp> proliferation and differentiation. Journal of Biomedical Materials Research - Part A, 2016, 104, 726-733.	4.0	32
94	CALCULUS, HEAT FLOW AND CURVATURE-DIMENSION BOUNDS IN METRIC MEASURE SPACES. , 2019, , .		31
95	MgCHA particles dispersion in porous PCL scaffolds:in vitromineralization andin vivobone formation. Journal of Tissue Engineering and Regenerative Medicine, 2014, 8, 291-303.	2.7	30
96	Rectifiability of Sets of Finite Perimeter in Carnot Groups: Existence of a Tangent Hyperplane. Journal of Geometric Analysis, 2009, 19, 509-540.	1.0	29
97	Mechanical and leakage behaviour of the dentin â€“ adhesive interface. Journal of Materials Science: Materials in Medicine, 2004, 15, 485-492.	3.6	28
98	Effect of microencapsulated phase change materials on the thermo-mechanical properties of poly(methyl-methacrylate) based biomaterials. Journal of Materials Science: Materials in Medicine, 2006, 17, 1219-1226.	3.6	28
99	Semiclassical limit of quantum dynamics with rough potentials and wellâ€posedness of transport equations with measure initial data. Communications on Pure and Applied Mathematics, 2011, 64, 1199-1242.	3.1	28
100	Design of injectable organicâ€“inorganic hybrid for bone tissue repair. Journal of Biomedical Materials Research - Part A, 2012, 100A, 2063-2070.	4.0	28
101	Monolithic Polymeric Aerogels with VOCs Sorbent Nanoporous Crystalline and Water Sorbent Amorphous Phases. ACS Applied Materials & Interfaces, 2015, 7, 1318-1326.	8.0	28
102	The role of the surface on microglia function: implications for central nervous system tissue engineering. Journal of the Royal Society Interface, 2015, 12, 20141224.	3.4	28
103	Bioactivity and bone healing properties of biomimetic porous composite scaffold: In vitro and in vivo studies. Journal of Biomedical Materials Research - Part A, 2015, 103, 2932-2941.	4.0	27
104	Electrofluidodynamics: exploring a new toolbox to design biomaterials for tissue regeneration and degeneration. Nanomedicine, 2016, 11, 1515-1518.	3.3	26
105	Biodegradable Microparticles and Nanoparticles by Electrospraying Techniques. Journal of Applied Biomaterials and Functional Materials, 2012, 10, 191-196.	1.6	25
106	Glucosamine grafting on poly(Îµ-caprolactone): a novel glycated polyester as a substrate for tissue engineering. RSC Advances, 2013, 3, 6286.	3.6	25
107	Hydrogel-Based Nanocomposites and Mesenchymal Stem Cells: A Promising Synergistic Strategy for Neurodegenerative Disorders Therapy. Scientific World Journal, The, 2013, 2013, 1-9.	2.1	25
108	New stability results for sequences of metric measure spaces with uniform Ricci bounds from below. , 2017, , 1-51.		25

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109	Poly(2-hydroxyethyl methacrylate)/Poly(caprolactone) Semi-Interpenetrating Polymer Networks. Journal of Bioactive and Compatible Polymers, 1988, 3, 205-218.	2.1	24
110	The biocompatibility of silverâ€containing Na₂OÂ·CaOÂ·2SiO₂ glass prepared by solâ€“gel method: In vitro studies. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2010, 92B, 102-110.	3.4	24
111	Technical features and criteria in designing fiber-reinforced composite materials: from the aerospace and aeronautical field to biomedical applications. Journal of Applied Biomaterials and Biomechanics, 2011, 9, 151-163.	0.4	24
112	Galactose grafting on poly(Îµ-caprolactone) substrates for tissue engineering: a preliminary study. Carbohydrate Research, 2015, 405, 39-46.	2.3	24
113	Title is missing!. International Mathematics Research Notices, 2003, 2003, 2205.	1.0	23
114	Design of electrospayed non-spherical poly (l-lactide-co-glicolide) microdevices for sustained drug delivery. Journal of Materials Science: Materials in Medicine, 2014, 25, 383-390.	3.6	23
115	Weak and strong convergence of derivations and stability of flows with respect to MGH convergence. Journal of Functional Analysis, 2017, 272, 1182-1229.	1.4	23
116	Short-time behavior of the heat kernel and Weylâ€™s law on $${{mathrm{RCD}}}^*(K,N)$$ RCD âˆ— (K , N) spaces. Annals of Global Analysis and Geometry, 2018, 53, 97-119.	0.6	23
117	Existence and Uniqueness of Maximal Regular Flows for Non-smooth Vector Fields. Archive for Rational Mechanics and Analysis, 2015, 218, 1043-1081.	2.4	22
118	Local spectral convergence in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" display="inline" overflow="scroll"><mml:msup><mml:mrow><mml:mstyle mathvariant="normal"><mml:mi>RCD</mml:mi></mml:mstyle></mml:mrow><mml:mrow><mml:mo>âˆ—</mml:mo></mml:mrow></mml:msup> Nonlinear Analysis: Theory, Methods & Applications, 2018, 177, 1-23.	1.1	22
119	A global existence result for the semigeostrophic equations in three dimensional convex domains. Discrete and Continuous Dynamical Systems, 2014, 34, 1251-1268.	0.9	22
120	Osteogenic differentiation and mineralization in fibre-reinforced tubular scaffolds: theoretical study and experimental evidences. Journal of the Royal Society Interface, 2012, 9, 2201-2212.	3.4	21
121	Binary system thermodynamics to control pore architecture of PCL scaffold via temperature-driven phase separation process. Journal of Biomaterials Applications, 2012, 27, 241-254.	2.4	21
122	In silico evaluation of a new composite disc substitute with a L3â€“L5 lumbar spine finite element model. European Spine Journal, 2012, 21, 675-687.	2.2	21
123	Synthesis and Characterization of Soybean-Based Hydrogels with an Intrinsic Activity on Cell Differentiation. Tissue Engineering - Part A, 2012, 18, 1932-1939.	3.1	20
124	Poly(Epsilon-Lysine) Dendrons Tethered with Phosphoserine Increase Mesenchymal Stem Cell Differentiation Potential of Calcium Phosphate Gels. Tissue Engineering - Part A, 2014, 20, 140116074603009.	3.1	20
125	Gaussian optimizers for entropic inequalities in quantum information. Journal of Mathematical Physics, 2018, 59, .	1.1	20
126	Calorimetric and Thermomechanical Properties of Titanium-Based Orthodontic Wires: DSCâ€“DMA Relationship to Predict the Elastic Modulus. Journal of Biomaterials Applications, 2012, 26, 829-844.	2.4	19

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127	Effect of Surface Fluorination of TiO₂ Particles on Photocatalitytic Activity of a Hybrid Multilayer Coating Obtained by Sol-Gel Method. ACS Applied Materials & Interfaces, 2012, 4, 150-157.	8.0	19
128	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. Materials Science and Engineering C, 2016, 63, 512-521.	7.3	19
129	Rigidity of the 1-Bakryâ€“Ã‰mery Inequality and Sets of Finite Perimeter in RCD Spaces. Geometric and Functional Analysis, 2019, 29, 949-1001.	1.8	19
130	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. Journal of Biomechanics, 2014, 47, 3825-3829.	2.1	18
131	Tensorization of Cheeger energies, the space <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:msup><mml:mrow><mml:mi>H</mml:mi></mml:mrow><mml:mrow><mml:mn>1</mml:mn><mml:mo>,</m and the area formula for graphs. Advances in Mathematics, 2015, 281, 1145-1177.	1.1	18
132	Ionic liquids as dynamic templating agents for solâ€“gel silica systems: synergistic anion and cation effect on the silica structured growth. Journal of Sol-Gel Science and Technology, 2015, 76, 414-427.	2.4	18
133	Scanning Small- and Wide-Angle X-ray Scattering Microscopy Selectively Probes HA Content in Gelatin/Hydroxyapatite Scaffolds for Osteochondral Defect Repair. ACS Applied Materials & Interfaces, 2016, 8, 8728-8736.	8.0	18
134	Preparation and physico-chemical characterisation of microporous polysaccharidic hydrogels. Journal of Materials Science: Materials in Medicine, 2004, 15, 463-467.	3.6	17
135	In vivo lamellar bone formation in fibre coated MgCHAâ€“PCL-composite scaffolds. Journal of Materials Science: Materials in Medicine, 2012, 23, 117-128.	3.6	17
136	Optimal transport, Cheeger energies and contractivity of dynamic transport distances in extended spaces. Nonlinear Analysis: Theory, Methods & Applications, 2016, 137, 77-134.	1.1	17
137	Stimuli-responsive chitosan/poly (N-isopropylacrylamide) semi-interpenetrating polymer networks: effect of pH and temperature on their rheological and swelling properties. Journal of Materials Science: Materials in Medicine, 2016, 27, 109.	3.6	17
138	Needle-like ion-doped hydroxyapatite crystals influence osteogenic properties of PCL composite scaffolds. Biomedical Materials (Bristol), 2016, 11, 015018.	3.3	17
139	Design of Bioactive Electrospun Scaffolds for Bone Tissue Engineering. Journal of Applied Biomaterials and Functional Materials, 2012, 10, 223-228.	1.6	15
140	Human skin-derived keratinocytes and fibroblasts co-cultured on 3D poly Îµ-caprolactone scaffold support in vitro HSC differentiation into T-lineage committed cells. International Immunology, 2013, 25, 703-714.	4.0	15
141	Very weak notions of differentiability. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 2007, 137, 447-455.	1.2	14
142	Hydrogels for central nervous system therapeutic strategies. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2015, 229, 905-916.	1.8	14
143	Poly(âˆ’Caprolactone) Reinforced with Sol-Gel Synthesized Organic-Inorganic Hybrid Fillers as Composite Substrates for Tissue Engineering. Journal of Applied Biomaterials and Biomechanics, 2010, 8, 146-152.	0.4	13
144	DC calculus. Mathematische Zeitschrift, 2018, 288, 1037-1080.	0.9	13

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145	Linear extension operators between spaces of Lipschitz maps and optimal transport. Journal Fur Die Reine Und Angewandte Mathematik, 2020, 2020, 1-21.	0.9	13
146	In vivo preclinical efficacy of a PDLLA/PGA porous copolymer for dental application. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2009, 88B, 349-357.	3.4	12
147	Fractography analysis and fatigue strength of carbon fiber/RTM6 laminates. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 3609-3614.	5.6	12
148	Passage from Quantum to Classical Molecular Dynamics in the Presence of Coulomb Interactions. Communications in Partial Differential Equations, 2010, 35, 1490-1515.	2.2	12
149	Heat Flow and Calculus on Metric Measure Spaces with Ricci Curvature Bounded Belowâ€"The Compact Case. Springer INdAM Series, 2013, , 63-115.	0.5	12
150	Well posedness of ODEâ€™s and continuity equations with nonsmooth vector fields, and applications. Revista Matematica Complutense, 2017, 30, 427-450.	1.2	12
151	Lusin-type approximation of Sobolev by Lipschitz functions, in Gaussian and RCD(K,âˆž) spaces. Advances in Mathematics, 2018, 339, 426-452.	1.1	12
152	Semicrystalline proton-conductive membranes with sulfonated amorphous phases. International Journal of Hydrogen Energy, 2011, 36, 8038-8044.	7.1	11
153	Large defect-tailored composite scaffolds for in vivo bone regeneration. Journal of Biomaterials Applications, 2014, 29, 715-727.	2.4	11
154	Improving surface and transport properties of macroporous hydrogels for bone regeneration. Journal of Biomedical Materials Research - Part A, 2015, 103, 1095-1105.	4.0	11
155	Weighted Sobolev spaces on metric measure spaces. Journal Fur Die Reine Und Angewandte Mathematik, 2019, 2019, 39-65.	0.9	11
156	Biomechanical effects of titanium implants with full arch bridge rehabilitation on a synthetic model of the human jaw. Acta Biomaterialia, 2007, 3, 121-126.	8.3	10
157	Development and Analysis of Semi-Interpenetrating Polymer Networks for Brain Injection in Neurodegenerative Disorders. International Journal of Artificial Organs, 2013, 36, 762-774.	1.4	10
158	Embedding of RCDâŽ(K,N) spaces in L2 via eigenfunctions. Journal of Functional Analysis, 2021, 280, 108968.	1.4	10
159	Almost everywhere well-posedness of continuity equations with measure initial data. Comptes Rendus Mathematique, 2010, 348, 249-252.	0.3	9
160	Spatially Inhomogeneous Evolutionary Games. Communications on Pure and Applied Mathematics, 2021, 74, 1353-1402.	3.1	9
161	Lecture notes on the DiPernaâ€"Lions theory in abstract measure spaces. Annales De La FacultÃ© Des Sciences De Toulouse, 2017, 26, 729-766.	0.3	9
162	Advanced Functional Polymers for Medicine. Macromolecular Bioscience, 2011, 11, 1621-1624.	4.1	8

#	Article	IF	Citations
163	Advanced functional polymers for medicine: Multifunctional biomaterials. Acta Biomaterialia, 2012, 8, 4199.	8.3	7
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