Antonio Gloria

List of Publications by Year
in descending order

109 papers	3,103 citations	117625 34 h-index	175258 52 g-index
112 all docs	112 docs citations	112 times ranked	4568 citing authors

#	Article	IF	Citations
1	Alloys for Aeronautic Applications: State of the Art and Perspectives. Metals, 2019, 9, 662.	2.3	128
2	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
3	Additive manufacturing of wet-spun polymeric scaffolds for bone tissue engineering. Biomedical Microdevices, 2012, 14, 1115-1127.	2.8	118
4	Layer-by-Layer Self-Assembly of Chitosan and Poly(Î³-glutamic acid) into Polyelectrolyte Complexes. Biomacromolecules, 2011, 12, 4183-4195.	5.4	107
5	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
6	A comparison between mechanical properties of specimens 3D printed with virgin and recycled PLA. Procedia CIRP, 2019, 79, 143-146.	1.9	94
7	PLDLA/PCL-T Scaffold for Meniscus Tissue Engineering. BioResearch Open Access, 2013, 2, 138-147.	2.6	85
8	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
9	Three-dimensional printed bone scaffolds: The role of nano/micro-hydroxyapatite particles on the adhesion and differentiation of human mesenchymal stem cells. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2017, 231, 555-564.	1.8	82
10	3D additive-manufactured nanocomposite magnetic scaffolds: Effect of the application mode of a time-dependent magnetic field on hMSCs behavior. Bioactive Materials, 2017, 2, 138-145.	15.6	72
11	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
12	Rheological Characterization of Hyaluronic Acid Derivatives as Injectable Materials Toward Nucleus Pulposus Regeneration. Journal of Biomaterials Applications, 2012, 26, 745-759.	2.4	64
13	Dynamic-mechanical properties of a novel composite intervertebral disc prosthesis. Journal of Materials Science: Materials in Medicine, 2007, 18, 2159-2165.	3.6	63
14	Mechanical behavior of bulk direct composite versus block composite and lithium disilicate indirect Class II restorations by CAD-FEM modeling. Dental Materials, 2017, 33, 690-701.	3.5	63
15	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
16	Hydrogel-Based Platforms for the Regeneration of Osteochondral Tissue and Intervertebral Disc. Polymers, 2012, 4, 1590-1612.	4.5	57
17	CAD-FE modeling and analysis of class II restorations incorporating resin-composite, glass ionomer and glass ceramic materials. Dental Materials, 2017, 33, 1456-1465.	3.5	56
18	A Multi-component Fiber-reinforced PHEMA-based Hydrogel/HAPEX^{TM} Device for Customized Intervertebral Disc Prosthesis. Journal of Biomaterials Applications, 2011, 25, 795-810.	2.4	55

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19	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
20	Nanocomposites for Neurodegenerative Diseases: Hydrogel-Nanoparticle Combinations for a Challenging Drug Delivery. International Journal of Artificial Organs, 2011, 34, 1115-1127.	1.4	52
21	Effects of intraoral aging on surface properties of coated nickel-titanium archwires. Angle Orthodontist, 2014, 84, 665-672.	2.4	52
22	Bone Tissue Engineering: 3D PCL-based Nanocomposite Scaffolds with Tailored Properties. Procedia CIRP, 2016, 49, 51-54.	1.9	52
23	Hydrogels for nucleus replacementâ€"Facing the biomechanical challenge. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 14, 67-77.	3.1	51
24	In vitro and in silico investigations of disc nucleus replacement. Journal of the Royal Society Interface, 2012, 9, 1869-1879.	3.4	50
25	Synthesis and Characterization of Sintered Sr/Fe-Modified Hydroxyapatite Bioceramics for Bone Tissue Engineering Applications. ACS Biomaterials Science and Engineering, 2020, 6, 375-388.	5.2	49
26	Polymer-based composite scaffolds for tissue engineering. Journal of Applied Biomaterials and Biomechanics, 2010, 8, 57-67.	0.4	49
27	Multidisciplinary Perspectives for Alzheimer's and Parkinson's Diseases: Hydrogels for Protein Delivery and Cell-Based Drug Delivery as Therapeutic Strategies. International Journal of Artificial Organs, 2009, 32, 836-850.	1.4	48
28	Gallium-modified chitosan/poly(acrylic acid) bilayer coatings for improved titanium implant performances. Carbohydrate Polymers, 2017, 166, 348-357.	10.2	48
29	Mechanical behavior of endodontically restored canine teeth: Effects of ferrule, post material and shape. Dental Materials, 2017, 33, 1466-1472.	3.5	46
30	Further Theoretical Insight into the Mechanical Properties of Polycaprolactone Loaded with Organicâ€"Inorganic Hybrid Fillers. Materials, 2018, 11, 312.	2.9	45
31	The effects of cavity-margin-angles and bolus stiffness on the mechanical behavior of indirect resin composite class II restorations. Dental Materials, 2017, 33, e39-e47.	3.5	43
32	A Further Analysis on Ti6Al4V Lattice Structures Manufactured by Selective Laser Melting. Journal of Healthcare Engineering, 2019, 2019, 1-9.	1.9	42
33	The influence of poly(ester amide) on the structural and functional features of 3D additive manufactured poly(İµ-caprolactone) scaffolds. Materials Science and Engineering C, 2019, 98, 994-1004.	7.3	40
34	Combination Design of Time-Dependent Magnetic Field and Magnetic Nanocomposites to Guide Cell Behavior. Nanomaterials, 2020, 10, 577.	4.1	38
35	FE analysis of conceptual hybrid composite endodontic post designs in anterior teeth. Dental Materials, 2018, 34, 1063-1071.	3.5	33
36	Electrospun Scaffolds for Osteoblast Cells: Peptide-Induced Concentration-Dependent Improvements of Polycaprolactone. PLoS ONE, 2015, 10, e0137505.	2.5	32

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37	Design of Decorated Self-Assembling Peptide Hydrogels as Architecture for Mesenchymal Stem Cells. Materials, 2016, 9, 727.	2.9	32
38	Collagen density gradient on threeâ€dimensional printed poly(Îµâ€caprolactone) scaffolds for interface tissue engineering. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, 321-329.	2.7	32
39	Hydrogel-based delivery of Tat-fused protein Hsp70 protects dopaminergic cells in vitro and in a mouse model of Parkinsonâ€™s disease. NPG Asia Materials, 2019, 11, .	7.9	28
40	Experimental study on hydrodynamic performances of naval propellers to adopt new additive manufacturing processes. International Journal on Interactive Design and Manufacturing, 2018, 12, 1-14.	2.2	26
41	Design of 3D Additively Manufactured Hybrid Structures for Cranioplasty. Materials, 2021, 14, 181.	2.9	26
42	Glucosamine grafting on poly(Îµ-caprolactone): a novel glycated polyester as a substrate for tissue engineering. RSC Advances, 2013, 3, 6286.	3.6	25
43	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
44	Viscoelastic Properties of Rapid Prototyped Magnetic Nanocomposite Scaffolds for Osteochondral Tissue Regeneration. Procedia CIRP, 2016, 49, 76-82.	1.9	25
45	Stress distribution of bulk-fill resin composite in class II restorations. American Journal of Dentistry, 2017, 30, 227-232.	0.1	25
46	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
47	Galactose grafting on poly(Îµ-caprolactone) substrates for tissue engineering: a preliminary study. Carbohydrate Research, 2015, 405, 39-46.	2.3	24
48	Design and Analysis of 3D Customized Models of a Human Mandible. Procedia CIRP, 2016, 49, 199-202.	1.9	24
49	Bioactive chitosanâ€based scaffolds with improved properties induced by dextranâ€grafted nanoâ€maghemite and <scp>l</scp>â€arginine amino acid. Journal of Biomedical Materials Research - Part A, 2019, 107, 1244-1252.	4.0	24
50	Breast Cancer Cell Cultures on Electrospun Poly(Îµ-Caprolactone) as a Potential Tool for Preclinical Studies on Anticancer Treatments. Bioengineering, 2021, 8, 1.	3.5	22
51	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
52	Modification of PMMA Cements for Cranioplasty with Bioactive Glass and Copper Doped Tricalcium Phosphate Particles. Polymers, 2020, 12, 37.	4.5	19
53	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
54	Mechanical and Thermal Properties of Dental Composites Cured with CAD/CAM Assisted Solid-State Laser. Materials, 2018, 11, 504.	2.9	18

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55	Stress Distributions for Hybrid Composite Endodontic Post Designs with and without a Ferrule: FEA Study. Polymers, 2020, 12, 1836.	4.5	17
56	Design of Additively Manufactured Lattice Structures for Biomedical Applications. Journal of Healthcare Engineering, 2020, 2020, 1-3.	1.9	16
57	Synthesis and characterization of divinyl-fumarate poly-Îµ-caprolactone for scaffolds with controlled architectures. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, e523-e531.	2.7	15
58	Mechanical characterization and modeling of downwind sailcloth in fluid-structure interaction analysis. Ocean Engineering, 2018, 165, 488-504.	4.3	15
59	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
60	Effect of in Vitro Enzymatic Degradation on 3D Printed Poly(Îµ-Caprolactone) Scaffolds: Morphological, Chemical and Mechanical Properties. Journal of Applied Biomaterials and Functional Materials, 2017, 15, 185-195.	1.6	14
61	Strategies for the design of additively manufactured nanocomposite scaffolds for hard tissue regeneration. Acta IMEKO (2012), 2020, 9, 53.	0.7	14
62	Poly(âˆŠ-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
63	Theoretical Design of Multilayer Dental Posts Using CAD-Based Approach and Sol-Gel Chemistry. Materials, 2018, 11, 738.	2.9	13
64	Additive manufacturing and technical strategies for improving outcomes in breast reconstructive surgery. Acta IMEKO (2012), 2020, 9, 74.	0.7	12
65	3D fiber deposition technique to make multifunctional and tailor-made scaffolds for tissue engineering applications. Journal of Applied Biomaterials and Biomechanics, 2009, 7, 141-52.	0.4	12
66	Nipple Sparing Mastectomy as a Risk-Reducing Procedure for BRCA-Mutated Patients. Genes, 2021, 12, 253.	2.4	11
67	Novel concepts and strategies in skull base reconstruction after endoscopic endonasal surgery. Acta IMEKO (2012), 2020, 9, 67.	0.7	11
68	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
69	An analysis on the potential of diode-pumped solid-state lasers for dental materials. Materials Science and Engineering C, 2018, 92, 862-867.	7.3	10
70	A 3D Printed Composite Scaffold Loaded with Clodronate to Regenerate Osteoporotic Bone: In Vitro Characterization. Polymers, 2021, 13, 150.	4.5	10
71	Low-Velocity Impacts on a Polymeric Foam for the Passive Safety Improvement of Sports Fields: Meshless Approach and Experimental Validation. Applied Sciences (Switzerland), 2018, 8, 1174.	2.5	9
72	3D laser scanning in conjunction with surface texturing to evaluate shift and reduction of the tibiofemoral contact area after meniscectomy. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 88, 41-47.	3.1	9

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73	A Preliminary Evaluation of the Pro-Chondrogenic Potential of 3D-Bioprinted Poly(ester Urea) Scaffolds. Polymers, 2020, 12, 1478.	4.5	9
74	From 3D Hierarchical Scaffolds for Tissue Engineering to Advanced Hydrogel-Based and Complex Devices for in situ Cell or Drug Release. Procedia CIRP, 2016, 49, 72-75.	1.9	8
75	The axillary flap in oncoplastic resection of breast cancers located in the upper-outer quadrants: a new surgical technique. BMC Surgery, 2019, 18, 21.	1.3	8
76	Impact of Magnetic Stimulation on Periodontal Ligament Stem Cells. International Journal of Molecular Sciences, 2022, 23, 188.	4.1	8
77	Preparation of electrospun nanofibrous polycaprolactone scaffolds using nontoxic ethylene carbonate and glacial acetic acid solvent system. Journal of Applied Polymer Science, 2020, 137, 48387.	2.6	7
78	EAK Hydrogels Cross-Linked by Disulfide Bonds: Cys Number and Position Are Matched to Performances. ACS Biomaterials Science and Engineering, 2020, 6, 1154-1164.	5.2	7
79	Poly(Îµ-caprolactone) reinforced with sol-gel synthesized organic-inorganic hybrid fillers as composite substrates for tissue engineering. Journal of Applied Biomaterials and Biomechanics, 2010, 8, 146-52.	0.4	7
80	Skull base reconstruction after endoscopic endonasal surgery: new strategies for raising the dam. , 2019, , .		6
81	Reverse Engineering and Additive Manufacturing towards the design of 3D advanced scaffolds for hard tissue regeneration. , 2019, , .		6
82	Metal Posts and the Effect of Materialâ€“Shape Combination on the Mechanical Behavior of Endodontically Treated Anterior Teeth. Metals, 2019, 9, 125.	2.3	6
83	Effect of Topical Antiinflammatory Drugs on Mechanical Behavior of Rabbit Cornea. Journal of Applied Biomaterials and Functional Materials, 2017, 15, 142-148.	1.6	5
84	Analyzing the Role of Magnetic Features in Additive Manufactured Scaffolds for Enhanced Bone Tissue Regeneration. Macromolecular Symposia, 2021, 396, 2000314.	0.7	5
85	An Augmented Reality Approach to Remote Controlling Measurement Instruments for Educational Purposes During Pandemic Restrictions. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-20.	4.7	5
86	Magnetism in Dentistry: Review and Future Perspectives. Applied Sciences (Switzerland), 2022, 12, 95.	2.5	5
87	PCL and PCL/PLA <i>Scaffolds</i> for Bone Tissue Regeneration. Advanced Materials Research, 0, 683, 168-171.	0.3	4
88	Improving Outcomes in Breast Reconstruction: From Implant-based Techniques towards Tissue Regeneration. Procedia CIRP, 2016, 49, 23-27.	1.9	4
89	Improving Outcomes In Breast Reconstruction: From Implant-Based Techniques Towards Tissue Regeneration. Procedia CIRP, 2016, 49, 183-187.	1.9	4
90	Additive manufacturing and tissue engineering to improve outcomes in breast reconstructive surgery. , 2019, , .		4

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91	Design of Functional Polymer and Composite Scaffolds for the Regeneration of Bone, Menisci, Osteochondral and Peripheral Nervous Tissues. Advanced Materials Research, 2011, 324, 8-13.	0.3	3
92	Design of Additively Manufactured Lattice Structures for Tissue Regeneration. Materials Science Forum, 2018, 941, 2154-2159.	0.3	3
93	Optical characterizations of airless radial tire. , 2020, , .		3
94	Recent Patents on Light Curing of Dental Materials. Recent Patents on Biomedical Engineering, 2009, 2, 97-109.	0.5	3
95	Mechanical and Biological Characteristics of Electrospun PCL Meshes â€“ the Influence of Solvent Type and Concentration. Advanced Materials Research, 0, 683, 137-140.	0.3	2
96	Comparison of Commonly Used Sail Cloths through Photogrammetric Acquisitions, Experimental Tests and Numerical Aerodynamic Simulations. Procedia Manufacturing, 2017, 11, 1651-1658.	1.9	2
97	NMR Structure of the FIV gp36 C-terminal Heptad Repeat and Membrane-Proximal External Region. International Journal of Molecular Sciences, 2020, 21, 2037.	4.1	2
98	Effect of light curing and dark reaction phases on the thermomechanical properties of a Bis-GMA based dental restorative material. Journal of Applied Biomaterials and Biomechanics, 2009, 7, 132-40.	0.4	2
99	On the Suitability of Augmented Reality for Safe Experiments on Radioactive Materials in Physics Educational Applications. IEEE Access, 2022, 10, 54185-54196.	4.2	2
100	Sol-gel synthesis and characterization of SiO2/PEG hybrid materials containing quercetin as implants with antioxidant properties. AIP Conference Proceedings, 2016, , .	0.4	1
101	PEOT/PBT Polymeric Pastes to Fabricate Additive Manufactured Scaffolds for Tissue Engineering. Frontiers in Bioengineering and Biotechnology, 2021, 9, 704185.	4.1	1
102	A Further Investigation Toward the Design of Topology Optimized Solid-Lattice Hybrid Structures for Biomedical Applications. Lecture Notes in Mechanical Engineering, 2022, , 514-523.	0.4	1
103	Sol-gel silica-based nanocomposites containing a high PEG amount: Chemical characterization and study of biological properties. AIP Conference Proceedings, 2016, , .	0.4	0
104	Towards Adaptive Switches through implementation of visual feedback in assistive devices. , 2019, , .		0
105	Towards the development of interfaces for students with speech disorder and motor impairments. Procedia Manufacturing, 2019, 38, 455-463.	1.9	0
106	Integrated Design Strategy for Additively Manufactured Scaffolds in Tissue Engineering. Macromolecular Symposia, 2021, 395, 2000263.	0.7	0
107	Photoâ€Curing 3D Printing and Innovative Design of Porous Composite Structures for Biomedical Applications. Macromolecular Symposia, 2021, 395, 2000234.	0.7	0
108	Optimization Design Strategy for Additive Manufacturing Process to Develop 3D Magnetic Nanocomposite Scaffolds. Lecture Notes in Mechanical Engineering, 2020, , 948-958.	0.4	0

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109	A Preliminary Analysis of the Effects of Process Parameters on the Impact Resistance of 3D Printed PETG and HIPS. Lecture Notes in Mechanical Engineering, 2022, , 524-534.	0.4	0