## Marcella Trombetta

List of Publications by Year in descending order

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105 papers 5,269 citations

43 h-index 70 g-index

108 all docs

108 docs citations

108 times ranked

7925 citing authors

#	Article	IF	CITATIONS
1	Current trends in the design of scaffolds for computer-aided tissue engineering. Acta Biomaterialia, 2014, 10, 580-594.	4.1	369
2	Microfluidic-enhanced 3D bioprinting of aligned myoblast-laden hydrogels leads to functionally organized myofibers inÂvitro and inÁvivo. Biomaterials, 2017, 131, 98-110.	5.7	252
3	FT-IR Studies on Light Olefin Skeletal Isomerization Catalysis. Journal of Catalysis, 1998, 179, 581-596.	3.1	188
4	Pluronic F127 Hydrogel Characterization and Biofabrication in Cellularized Constructs for Tissue Engineering Applications. Procedia CIRP, 2016, 49, 125-132.	1.0	179
5	Characterization and composition of commercial V2O5&z.sbndWO3&z.sbndTiO2 SCR catalysts. Applied Catalysis B: Environmental, 1996, 10, 299-311.	10.8	161
6	Classification of M1/M2-polarized human macrophages by label-free hyperspectral reflectance confocal microscopy and multivariate analysis. Scientific Reports, 2017, 7, 8965.	1.6	158
7	An FT-IR study of the internal and external surfaces of HZSM5 zeolite. Applied Catalysis A: General, 2000, 192, 125-136.	2.2	133
8	Investigating Nonalcoholic Fatty Liver Disease in a Liver-on-a-Chip Microfluidic Device. PLoS ONE, 2016, 11, e0159729.	1.1	131
9	Combined additive manufacturing approaches in tissue engineering. Acta Biomaterialia, 2015, 24, 1-11.	4.1	115
10	Poly-l-Lactic Acid/Hydroxyapatite Electrospun Nanocomposites Induce Chondrogenic Differentiation of Human MSC. Annals of Biomedical Engineering, 2009, 37, 1376-1389.	1.3	107
11	Electrospinning of PCL/PVP blends for tissue engineering scaffolds. Journal of Materials Science: Materials in Medicine, 2013, 24, 1425-1442.	1.7	107
12	A study of the surface acidity of acid-treated montmorillonite clay catalysts. Journal of Molecular Catalysis A, 2001, 168, 247-256.	4.8	106
13	An investigation of the surface acidity of mesoporous Al-containing MCM-41 and of the external surface of ferrierite through pivalonitrile adsorption. Applied Catalysis A: General, 1999, 182, 225-235.	2.2	97
14	Polyurethane-based scaffolds for myocardial tissue engineering. Interface Focus, 2014, 4, 20130045.	1.5	95
15	A Simple New Route to Covalent Organic/Inorganic Hybrid Proton Exchange Polymeric Membranes. Chemistry of Materials, 2006, 18, 69-75.	3.2	87
16	IR study of alkene allylic activation on magnesium ferrite and alumina catalysts. Journal of the Chemical Society, Faraday Transactions, 1996, 92, 4687.	1.7	85
17	Engineering muscle cell alignment through 3D bioprinting. Journal of Biomedical Materials Research - Part A, 2017, 105, 2582-2588.	2.1	84
18	Naturally derived proteins and glycosaminoglycan scaffolds for tissue engineering applications. Materials Science and Engineering C, 2017, 78, 1277-1299.	3.8	82

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19	FT-IR Studies on Light Olefin Skeletal Isomerization Catalysis. Journal of Catalysis, 1997, 168, 334-348.	3.1	81
20	Fabrication of bioactive glass–ceramic foams mimicking human bone portions for regenerative medicine. Acta Biomaterialia, 2008, 4, 362-369.	4.1	80
21	Characterization of age-related changes of tendon stem cells from adult human tendons. Knee Surgery, Sports Traumatology, Arthroscopy, 2014, 22, 2856-2866.	2.3	79
22	Surface acidity modifications induced by thermal treatments and acid leaching on microcrystalline H-BEA zeolite. A FTIR, XRD and MAS-NMR study. Physical Chemistry Chemical Physics, 2000, 2, 3529-3537.	1.3	76
23	Old Myths, New Concerns: the Long-Term Effects of Ascending Aorta Replacement with Dacron Grafts. Not All That Clitters Is Gold. Journal of Cardiovascular Translational Research, 2016, 9, 334-342.	1.1	76
24	Characterization of alumina–titania mixed oxide supports. Microporous and Mesoporous Materials, 1998, 23, 265-275.	2.2	75
25	A covalent organic/inorganic hybrid proton exchange polymeric membrane: synthesis and characterization. Polymer, 2005, 46, 1754-1758.	1.8	70
26	Correlation between porous texture and cell seeding efficiency of gas foaming and microfluidic foaming scaffolds. Materials Science and Engineering C, 2016, 62, 668-677.	3.8	70
27	Solid acid catalysts from clays. Applied Catalysis A: General, 2000, 193, 55-69.	2.2	69
28	FTIR study of the interaction of some branched aliphatic molecules with the external and internal sites of H-ZSM5 zeolite. Physical Chemistry Chemical Physics, 2000, 2, 3341-3348.	1.3	66
29	Bioactive electrospun scaffold for annulus fibrosus repair and regeneration. European Spine Journal, 2012, 21, 20-26.	1.0	65
30	Graded porous polyurethane foam: A potential scaffold for oro-maxillary bone regeneration. Materials Science and Engineering C, 2015, 51, 329-335.	3.8	64
31	Electrospun scaffolds for bone tissue engineering. Musculoskeletal Surgery, 2011, 95, 69-80.	0.7	62
32	Combining Type I Interferons and 5-Aza-2′-Deoxycitidine to Improve Anti-Tumor Response against Melanoma. Journal of Investigative Dermatology, 2017, 137, 159-169.	0.3	60
33	Engineering Muscle Networks in 3D Gelatin Methacryloyl Hydrogels: Influence of Mechanical Stiffness and Geometrical Confinement. Frontiers in Bioengineering and Biotechnology, 2017, 5, 22.	2.0	60
34	Biomechanical Characterization at the Cell Scale: Present and Prospects. Frontiers in Physiology, 2018, 9, 1449.	1.3	59
35	A study of the external and internal sites of MFI-type zeolitic materials through the FT-IR investigation of the adsorption of nitriles. Applied Catalysis A: General, 2001, 216, 59-71.	2.2	58
36	Drug releasing systems in cardiovascular tissue engineering. Journal of Cellular and Molecular Medicine, 2009, 13, 422-439.	1.6	58

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37	SPEEK/PPSU-based organic–inorganic membranes: proton conducting electrolytes in anhydrous and wet environments. Journal of Membrane Science, 2006, 279, 186-191.	4.1	56
38	FT-IR Studies on Light Olefin Skeletal Isomerization Catalysis. Journal of Catalysis, 1997, 168, 349-363.	3.1	55
39	Biological response of human mesenchymal stromal cells to titanium grade 4 implants coated with PCL/ZrO2 hybrid materials synthesized by sol–gel route: in vitro evaluation. Materials Science and Engineering C, 2014, 45, 395-401.	3.8	55
40	Load-Adaptive Scaffold Architecturing: A Bioinspired Approach to the Design of Porous Additively Manufactured Scaffolds with Optimized Mechanical Properties. Annals of Biomedical Engineering, 2012, 40, 966-975.	1.3	53
41	Ammonia Adsorption and Oxidation on Cu/Mg/Al Mixed Oxide Catalysts PreparedviaHydrotalcite-Type Precursors. Langmuir, 1997, 13, 4628-4637.	1.6	51
42	Scaffold-Based Delivery of a Clinically Relevant Anti-Angiogenic Drug Promotes the Formation of <i>In Vivo</i> Stable Cartilage. Tissue Engineering - Part A, 2013, 19, 1960-1971.	1.6	47
43	Simple fabrication technique for multilayered stratified composite scaffolds suitable for interface tissue engineering. Materials Science & Diplemering A: Structural Materials: Properties, Microstructure and Processing, 2012, 557, 54-58.	2.6	42
44	Biofabrication of Hepatic Constructs by 3D Bioprinting of a Cellâ€Laden Thermogel: An Effective Tool to Assess Drugâ€Induced Hepatotoxic Response. Advanced Healthcare Materials, 2020, 9, e2001163.	3.9	41
45	An FT-IR study of the adsorption of aromatic hydrocarbons and of 2,6-lutidine on H-FER and H-ZSM-5 zeolites. Applied Catalysis A: General, 2001, 220, 181-190.	2.2	40
46	Comparative Study of Different Techniques for the Sterilization of Poly-L-lactide Electrospun Microfibers: Effectiveness vs. Material Degradation. International Journal of Artificial Organs, 2010, 33, 76-85.	0.7	40
47	Surface functionalization of polyurethane scaffolds mimicking the myocardial microenvironment to support cardiac primitive cells. PLoS ONE, 2018, 13, e0199896.	1.1	38
48	Electrospun Nanomaterials Implementing Antibacterial Inorganic Nanophases. Applied Sciences (Switzerland), 2018, 8, 1643.	1.3	37
49	An FT-IR study of the reactivity of hydrocarbons on the acid sites of HZSM5 zeolite. Applied Catalysis A: General, 2000, 198, 81-93.	2.2	35
50	Combination of biochemical and mechanical cues for tendon tissue engineering. Journal of Cellular and Molecular Medicine, 2017, 21, 2711-2719.	1.6	35
51	SPPSU-based hybrid proton conducting polymeric electrolytes for intermediate temperature PEMFCs. Journal of Power Sources, 2007, 167, 79-83.	4.0	34
52	Electrospun Hydroxyapatite-Functionalized PLLA Scaffold: Potential Applications in Sternal Bone Healing. Annals of Biomedical Engineering, 2011, 39, 1882-1890.	1.3	33
53	Implantation of a Poly-l-Lactide GCSF-Functionalized Scaffold in a Model of Chronic Myocardial Infarction. Journal of Cardiovascular Translational Research, 2017, 10, 47-65.	1.1	33
54	Heparin-releasing scaffold for stem cells: a differentiating device for vascular aims. Regenerative Medicine, 2010, 5, 645-657.	0.8	32

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55	Electric Field Assisted Microfluidic Platform for Generation of Tailorable Porous Microbeads as Cell Carriers for Tissue Engineering. Advanced Functional Materials, 2018, 28, 1800874.	7.8	32
56	The role of extracellular matrix in age-related conduction disorders: a forgotten player?. Journal of Geriatric Cardiology, 2015, 12, 76-82.	0.2	32
57	Preliminary in Vivo Evaluation of a Hybrid Armored Vascular Graft Combining Electrospinning and Additive Manufacturing Techniques. Drug Target Insights, 2016, 10s1, DTI.S35202.	0.9	31
58	A G-CSF functionalized scaffold for stem cells seeding: a differentiating device for cardiac purposes. Journal of Cellular and Molecular Medicine, 2011, 15, 1096-1108.	1.6	29
59	Cells and extracellular matrix interplay in cardiac valve disease: because age matters. Basic Research in Cardiology, 2016, 111, 16.	2.5	29
60	CytoMatrix for a reliable and simple characterization of lung cancer stem cells from malignant pleural effusions. Journal of Cellular Physiology, 2020, 235, 1877-1887.	2.0	29
61	Characterization of Silica-Containing Aluminum Hydroxide and Oxide Aerogels. Journal of Colloid and Interface Science, 1997, 190, 416-426.	5.0	26
62	MESNA for chemically assisted tissue dissection. Expert Opinion on Investigational Drugs, 2010, 19, 699-707.	1.9	26
63	Tissue engineering and microRNAs: future perspectives in regenerative medicine. Expert Opinion on Biological Therapy, 2015, 15, 1601-1622.	1.4	25
64	Preoperative Assessment of TERT Promoter Mutation on Thyroid Core Needle Biopsies Supports Diagnosis of Malignancy and Addresses Surgical Strategy. Hormone and Metabolic Research, 2016, 48, 157-162.	0.7	25
65	The effect of post-mastectomy radiation therapy on breast implants: Unveiling biomaterial alterations with potential implications on capsular contracture. Materials Science and Engineering C, 2015, 57, 338-343.	3.8	23
66	As to the reasons of the high activity of a commercial pentasil-type zeolite in the vapor-phase Fries rearrangement. Applied Catalysis A: General, 2004, 257, 85-95.	2.2	22
67	ATR–FTIR and NMR spectroscopic studies on the structure of polymeric gel electrolytes for biomedical applications. Polymer, 2005, 46, 4670-4675.	1.8	22
68	Graphene-laden hydrogels: A strategy for thermally triggered drug delivery. Materials Science and Engineering C, 2021, 118, 111353.	3.8	22
69	Conversion and hydroconversion of hydrocarbons on zeolite-based catalysts: an FT-IR study. Catalysis Today, 2001, 65, 285-292.	2.2	21
70	Electrospinning of hydroxyapatite–chitosan nanofibers for tissue engineering applications. Asia-Pacific Journal of Chemical Engineering, 2014, 9, 407-414.	0.8	20
71	A primer of statistical methods for correlating parameters and properties of electrospun poly( <scp>I</scp> -lactide) scaffolds for tissue engineering-PART 1: Design of experiments. Journal of Biomedical Materials Research - Part A, 2015, 103, 91-102.	2.1	20
72	Proton Conducting Hybrid Membranes Based on Aromatic Polymers Blends for Direct Methanol Fuel Cell Applications. Fuel Cells, 2009, 9, 387-393.	1.5	17

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73	A primer of statistical methods for correlating parameters and properties of electrospun poly(l-lactide) scaffolds for tissue engineering-PART 2: Regression. Journal of Biomedical Materials Research - Part A, 2015, 103, 103-114.	2.1	16
74	Functionalization of poly( $\hat{l}\mu$ -caprolactone) surface with lactose-modified chitosan via alkaline hydrolysis: ToF-SIMS characterization. Biointerphases, 2016, 11, 02A323.	0.6	14
75	The long-term follow-up of large-diameter Dacron® vascular grafts in surgical practice: a review. Journal of Cardiovascular Surgery, 2019, 60, 501-513.	0.3	14
76	Hybrid organic/inorganic materials for photonic applications via assembling of nanostructured molecular units. Journal of Sol-Gel Science and Technology, 2008, 48, 217-223.	1.1	13
77	A G-CSF functionalized PLLA scaffold for wound repair: An in vitro preliminary study. , 2010, 2010, 843-6.		12
78	Electrospinning and microfluidics. , 2018, , 139-155.		12
79	Quercetin and hydroxytyrosol as modulators of hepatic steatosis: A NAFLDâ€onâ€aâ€chip study. Biotechnology and Bioengineering, 2021, 118, 142-152.	1.7	12
80	Nano-encapsulation of hydroxytyrosol into formulated nanogels improves therapeutic effects against hepatic steatosis: An in vitro study. Materials Science and Engineering C, 2021, 124, 112080.	3.8	12
81	Preparation and characterisation of histidine– and iron–histidine–α-zirconium phosphate intercalation compounds. Catalytic behaviour of the iron derivatives in oxidation reactions with H2O2. Journal of Materials Chemistry, 2003, 13, 834-840.	6.7	11
82	Tuning Structural Changes in Glucose Oxidase for Enzyme Fuel Cell Applications. ACS Applied Materials & Samp; Interfaces, 2015, 7, 28311-28318.	4.0	11
83	Comparative study of different techniques for the sterilization of poly-L-lactide electrospun microfibers: effectiveness vs. material degradation. International Journal of Artificial Organs, 2010, 33, 76-85.	0.7	11
84	EGFR/ErbB Inhibition Promotes OPC Maturation up to Axon Engagement by Co-Regulating PIP2 and MBP. Cells, 2019, 8, 844.	1.8	10
85	Protonâ€conducting electrolytes based on silylated and sulfonated polyetheretherketone: Synthesis and characterization. Journal of Polymer Science Part A, 2010, 48, 2178-2186.	2.5	9
86	ATR-FTIR spectroscopic study of the effect of ceramic addition in novel ionoconductor gels for biomedical applications in space. Journal of the European Ceramic Society, 2004, 24, 1153-1156.	2.8	8
87	Dermal Filler Complications from Unknown Biomaterials. Plastic and Reconstructive Surgery, 2013, 131, 597e-603e.	0.7	8
88	Computationally Informed Design of a Multi-Axial Actuated Microfluidic Chip Device. Scientific Reports, 2017, 7, 5489.	1.6	8
89	Enhanced Medical and Community Face Masks with Antimicrobial Properties: A Systematic Review. Journal of Clinical Medicine, 2021, 10, 4066.	1.0	8
90	Hybrid Siloxane-Based Nano Building Blocks for Optical Applications: Optimization of the Synthetic Procedures by Spectroscopic Analysis. Journal of Sol-Gel Science and Technology, 2005, 35, 151-157.	1.1	7

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91	Siloxane-Based Nanobuilding Blocks by Reaction Between Silanediol and Trifunctional Silicon Alkoxides. Journal of Sol-Gel Science and Technology, 2004, 32, 57-61.	1.1	6
92	Textured and Smooth Breast Implants: Is There a Difference in the Chemical Structure of Silicone?. Annals of Plastic Surgery, 2009, 63, 373-377.	0.5	6
93	A Soft Zwitterionic Hydrogel as Potential Coating on a Polyimide Surface to Reduce Foreign Body Reaction to Intraneural Electrodes. Molecules, 2022, 27, 3126.	1.7	6
94	Development of a New Bioartificial Liver Using a Porcine Autologous Biomatrix as Hepatocyte Support. ASAIO Journal, 2002, 48, 592-597.	0.9	5
95	In Situ Electrostimulation Drives a Regenerative Shift in the Zone of Infarcted Myocardium. Cell Transplantation, 2013, 22, 493-503.	1.2	5
96	Energy Harvesting: Electric Field Assisted Microfluidic Platform for Generation of Tailorable Porous Microbeads as Cell Carriers for Tissue Engineering (Adv. Funct. Mater. 20/2018). Advanced Functional Materials, 2018, 28, 1870133.	7.8	4
97	Protecting the Food Supply Chain from Terrorist Attack. International Federation for Information Processing, 2010, , 157-167.	0.4	3
98	A biomimetic three-layered compartmented scaffold for vascular tissue engineering. , 2010, 2010, 839-42.		2
99	Computer-aided tissue engineering for bone regeneration. , 2012, , .		2
100	Morphological and Molecular Assessment in Thyroid Cytology Using Cell-Capturing Scaffolds. Hormone and Metabolic Research, 2020, 52, 803-808.	0.7	2
101	Optimization Approaches for the Design of Additively Manufactured Scaffolds. Computational Methods in Applied Sciences (Springer), 2014, , 113-128.	0.1	2
102	Functionalized ORMOSIL-Based Hybrid Membranes for Polymer Electrolyte Membrane Fuel Cells. Materials Research Society Symposia Proceedings, 2005, 885, 1.	0.1	0
103	Crosslinked Organic/Inorganic Hybrid Proton Exchange Polymeric Membranes. Materials Research Society Symposia Proceedings, 2005, 885, 1.	0.1	0
104	Muscle Reconstruction and Regeneration Using Biodegradable Scaffolds., 2010,,.		0
105	Additive manufacturing of biomaterials. Advances in Chemical Engineering, 2021, , 233-260.	0.5	O