Diego Mantovani

List of Publications by Year
in descending order

355 papers	15,780 citations	23500 58 h-index	22764 112 g-index
362 all docs	362 docs citations	362 times ranked	16902 citing authors

#	Article	IF	Citations
1	Antibacterial Coatings: Challenges, Perspectives, and Opportunities. Trends in Biotechnology, 2015, 33, 637-652.	4.9	599
2	Developments in metallic biodegradable stentsâ˜†. Acta Biomaterialia, 2010, 6, 1693-1697.	4.1	509
3	Biodegradable Metals for Cardiovascular Stent Application: Interests and New Opportunities. International Journal of Molecular Sciences, 2011, 12, 4250-4270.	1.8	487
4	Preparation of ready-to-use, storable and reconstituted type I collagen from rat tail tendon for tissue engineering applications. Nature Protocols, 2006, 1, 2753-2758.	5.5	446
5	Functional Human Corneal Equivalents Constructed from Cell Lines. Science, 1999, 286, 2169-2172.	6.0	432
6	Shape Memory Materials for Biomedical Applications. Advanced Engineering Materials, 2002, 4, 91-104.	1.6	392
7	Small-diameter vascular tissue engineering. Nature Reviews Cardiology, 2013, 10, 410-421.	6.1	386
8	Long-term clinical study and multiscale analysis of in vivo biodegradation mechanism of Mg alloy. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 716-721.	3.3	337
9	Novel Zn-based alloys for biodegradable stent applications: Design, development and in vitro degradation. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 60, 581-602.	1.5	316
10	Osteoconduction and osteoinduction of low-temperature 3D printed bioceramic implants. Biomaterials, 2008, 29, 944-953.	5.7	311
11	The stimulation of angiogenesis and collagen deposition by copper. Biomaterials, 2010, 31, 824-831.	5.7	304
12	Feâ€"Mn alloys for metallic biodegradable stents: Degradation and cell viability studiesâ˜†. Acta Biomaterialia, 2010, 6, 1852-1860.	4.1	291
13	Current status and outlook on the clinical translation of biodegradable metals. Materials Today, 2019, 23, 57-71.	8.3	271
14	Ironâ€"manganese: new class of metallic degradable biomaterials prepared by powder metallurgy. Powder Metallurgy, 2008, 51, 38-45.	0.9	233
15	Collagen-based wound dressing: Effects of hyaluronic acid and firponectin on wound healing. Biomaterials, 1986, 7, 3-8.	5.7	231
16	Design of a pseudo-physiological test bench specific to the development of biodegradable metallic biomaterials. Acta Biomaterialia, 2008, 4, 284-295.	4.1	221
17	Angiogenesis in Calcium Phosphate Scaffolds by Inorganic Copper Ion Release. Tissue Engineering - Part A, 2009, 15, 1601-1609.	1.6	204
18	Fabrication, mechanical properties and in vitro degradation behavior of newly developed Zn Ag alloys for degradable implant applications. Materials Science and Engineering C, 2017, 77, 1170-1181.	3.8	197

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19	Collagen Fiber Formation in Repair Tissue: Development of Strength and Toughness. Collagen and Related Research, 1985, 5, 481-492.	2.2	192
20	Collagen-based wound dressings: Control of the pore structure and morphology. Journal of Biomedical Materials Research Part B, 1986, 20, 1219-1228.	3.0	181
21	Shape memory alloys: Properties and biomedical applications. Jom, 2000, 52, 36-44.	0.9	180
22	Tailoring Mechanical Properties of Collagen-Based Scaffolds for Vascular Tissue Engineering: The Effects of pH, Temperature and Ionic Strength on Gelation. Polymers, 2010, 2, 664-680.	2.0	169
23	Biological performances of collagen-based scaffolds for vascular tissue engineering. Biomaterials, 2005, 26, 7410-7417.	5.7	168
24	Electroformed pure iron as a new biomaterial for degradable stents: In vitro degradation and preliminary cell viability studiesâ˜†. Acta Biomaterialia, 2010, 6, 1843-1851.	4.1	160
25	Mutant huntingtin is present in neuronal grafts in huntington disease patients. Annals of Neurology, 2014, 76, 31-42.	2.8	158
26	Bioreactors for Tissue Engineering: Focus on Mechanical Constraints. A Comparative Review. Tissue Engineering, 2006, 12, 2367-2383.	4.9	153
27	Degradable metallic biomaterials: Design and development of Feâ€"Mn alloys for stents. Journal of Biomedical Materials Research - Part A, 2010, 93A, 1-11.	2.1	151
28	Compliant electrospun silk fibroin tubes for small vessel bypass grafting. Acta Biomaterialia, 2010, 6, 4019-4026.	4.1	147
29	Electroformed iron as new biomaterial for degradable stents: Development process and structureâ€"properties relationshipâ˜†. Acta Biomaterialia, 2010, 6, 1726-1735.	4.1	141
30	Chemical stability of polyether urethanes versus polycarbonate urethanes. , 1997, 36, 550-559.		139
31	Direct Printing of Bioceramic Implants with Spatially Localized Angiogenic Factors. Advanced Materials, 2007, 19, 795-800.	11.1	132
32	Assessing the biocompatibility of degradable metallic materials: State-of-the-art and focus on the potential of genetic regulationâ˜†. Acta Biomaterialia, 2010, 6, 1800-1807.	4.1	130
33	Collagen-Based Tissue Engineering Strategies for Vascular Medicine. Frontiers in Bioengineering and Biotechnology, 2019, 7, 166.	2.0	119
34	Effects of fibroblasts and basic fibroblast growth factor on facilitation of dermal wound healing by type I collagen matrices. Journal of Biomedical Materials Research Part B, 1991, 25, 683-696.	3.0	117
35	Ammonia RFâ˜'Plasma on PTFE Surfaces: Chemical Characterization of the Species Created on the Surface by Vaporâ˜'Phase Chemical Derivatization. Journal of Physical Chemistry B, 2001, 105, 12490-12497.	1.2	117
36	Macromolecular Biomaterials for Scaffold-Based Vascular Tissue Engineering. Macromolecular Bioscience, 2007, 7, 701-718.	2.1	108

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37	Fibroblast growth on a porous collagen sponge containing hyaluronic acid and fibronectin. Biomaterials, 1987, 8, 195-200.	5.7	107
38	A genome-wide shRNA screen identifies <i>GAS1</i> as a novel melanoma metastasis suppressor gene. Genes and Development, 2008, 22, 2932-2940.	2.7	105
39	A Collagen-Based Scaffold for a Tissue Engineered Human Cornea: Physical and Physiological Properties. International Journal of Artificial Organs, 2003, 26, 764-773.	0.7	104
40	Non-Viral in Vitro Gene Delivery: It is Now Time to Set the Bar!. Pharmaceutics, 2020, 12, 183.	2.0	104
41	Artificial Human Corneas. Cornea, 2002, 21, S54-S61.	0.9	102
42	Development of an optimized electrochemical process for subsequent coating of 316 stainless steel for stent applications. Journal of Materials Science: Materials in Medicine, 2006, 17, 647-657.	1.7	96
43	Brushiteâ€“collagen composites for bone regeneration. Acta Biomaterialia, 2008, 4, 1315-1321.	4.1	94
44	The mechanical characterization of blood vessels and their substitutes in the continuous quest for physiological-relevant performances. A critical review. Materials Today Bio, 2021, 10, 100106.	2.6	91
45	A study of atmospheric pressure plasma discharges for surface functionalization of PTFE used in biomedical applications. Journal Physics D: Applied Physics, 2006, 39, 3461-3469.	1.3	90
46	Cellularizing hydrogel-based scaffolds to repair bone tissue: How to create a physiologically relevant micro-environment?. Journal of Tissue Engineering, 2017, 8, 204173141771207.	2.3	90
47	Improving arterial prosthesis neo-endothelialization: Application of a proactive VEGF construct onto PTFE surfaces. Biomaterials, 2005, 26, 7402-7409.	5.7	89
48	Size matters for in vitro gene delivery: investigating the relationships among complexation protocol, transfection medium, size and sedimentation. Scientific Reports, 2017, 7, 44134.	1.6	88
49	Directional migration of endothelial cells towards angiogenesis using polymer fibres in a 3D co-culture system. Journal of Tissue Engineering and Regenerative Medicine, 2010, 4, 524-531.	1.3	85
50	Reduced graphene oxide growth on 316L stainless steel for medical applications. Nanoscale, 2014, 6, 8664-8670.	2.8	76
51	Heparin-fibroblast growth factorfibrin complex: in vitro and in vivo applications to collagen-based materials. Biomaterials, 1994, 15, 665-672.	5.7	75
52	Characterization of film failures by bismuth electrodepositionâ€"Application to thin deformed fluorocarbon films for stent applications. Electrochimica Acta, 2010, 55, 1042-1050.	2.6	74
53	Polydopamine as an intermediate layer for silver and hydroxyapatite immobilisation on metallic biomaterials surface. Materials Science and Engineering C, 2013, 33, 4715-4724.	3.8	73
54	Biodegradable Magnesium Alloys Promote Angioâ€Osteogenesis to Enhance Bone Repair. Advanced Science, 2020, 7, 2000800.	5.6	72

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55	Collagen Biomineralization In Vivo by Sustained Release of Inorganic Phosphate Ions. Advanced Materials, 2010, 22, 1858-1862.	11.1	70
56	Preparation of Ready-to-use, Stockable and Reconstituted Collagen. Macromolecular Bioscience, 2005, 5, 821-828.	2.1	69
57	Collagenâ€Reinforced Electrospun Silk Fibroin Tubular Construct as Small Calibre Vascular Graft. Macromolecular Bioscience, 2012, 12, 1566-1574.	2.1	65
58	Process of prototyping coronary stents from biodegradable Feâ€"Mn alloys. Acta Biomaterialia, 2013, 9, 8585-8592.	4.1	65
59	Phosphorylation of chitosan to improve osteoinduction of chitosan/xanthan-based scaffolds for periosteal tissue engineering. International Journal of Biological Macromolecules, 2020, 143, 619-632.	3.6	61
60	Experimental data confirm numerical modeling of the degradation process of magnesium alloys stents. Acta Biomaterialia, 2013, 9, 8730-8739.	4.1	60
61	Design of a Perfusion Bioreactor Specific to the Regeneration of Vascular Tissues Under Mechanical Stresses. Artificial Organs, 2005, 29, 906-912.	1.0	59
62	Evidence of antibacterial activity on titanium surfaces through nanotextures. Applied Surface Science, 2014, 308, 275-284.	3.1	59
63	Fucoidan in a 3D scaffold interacts with vascular endothelial growth factor and promotes neovascularization in mice. Drug Delivery and Translational Research, 2015, 5, 187-197.	3.0	58
64	Influence of cross-rolling on the micro-texture and biodegradation of pure iron as biodegradable material for medical implants. Acta Biomaterialia, 2015, 17, 68-77.	4.1	57
65	Comparison of Atmospheric-Pressure Plasma versus Low-Pressure RF Plasma for Surface Functionalization of PTFE for Biomedical Applications. Plasma Processes and Polymers, 2006, 3, 506-515.	1.6	56
66	Development of Degradable Fe-35Mn Alloy for Biomedical Application. Advanced Materials Research, 2007, 15-17, 107-112.	0.3	56
67	The influence of UV irradiation on surface composition of collagen/PVP blended films. Applied Surface Science, 2006, 253, 1970-1977.	3.1	55
68	Long-term stability of hydrogenated DLC coatings: Effects of aging on the structural, chemical and mechanical properties. Diamond and Related Materials, 2014, 48, 65-72.	1.8	54
69	Effect of grain sizes on mechanical properties and biodegradation behavior of pure iron for cardiovascular stent application. Biomatter, 2016, 6, e959874.	2.6	53
70	Behaviour of fibroblasts and epidermal cells cultivated on analogues of extracellular matrix. Biomaterials, 1988, 9, 91-96.	5.7	52
71	Immobilized liposome layers for drug delivery applications: inhibition of angiogenesis. Journal of Controlled Release, 2002, 80, 179-195.	4.8	52
72	Effect of electrodeposition current density on the microstructure and the degradation of electroformed iron for degradable stents. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2011, 176, 1812-1822.	1.7	52

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73	Preparation and Characterization of a Scaffold for Vascular Tissue Engineering by Direct-Assembling of Collagen and Cells in a Cylindrical Geometry. Macromolecular Bioscience, 2007, 7, 719-726.	2.1	51
74	In vitro Biological Performances of Phosphorylcholine-Grafted ePTFE Prostheses through RFGD Plasma Techniques. Macromolecular Bioscience, 2005, 5, 829-839.	2.1	50
75	In vitro degradation behavior of Feâ€“20Mnâ€“1.2C alloy in three different pseudo-physiological solutions. Materials Science and Engineering C, 2016, 61, 564-573.	3.8	50
76	Blood protein adsorption on sulfonated chitosan and Îº-carrageenan films. Colloids and Surfaces B: Biointerfaces, 2013, 111, 719-725.	2.5	49
77	Turbidimetric and morphological studies of type I collagen fibre self assembly in vitro and the influence of fibronectin. International Journal of Biological Macromolecules, 1985, 7, 135-140.	3.6	47
78	Fibronectin promotes elastin deposition, elasticity and mechanical strength in cellularised collagen-based scaffolds. Biomaterials, 2018, 180, 130-142.	5.7	47
79	Osteoblast-derived survival factors protect PC-3 human prostate cancer cells from adriamycin apoptosis. Urology, 1998, 52, 341-347.	0.5	46
80	Denatured collagen as support for a FGF-2 delivery system: physicochemical characterizations and in vitro release kinetics and bioactivity. Biomaterials, 2004, 25, 3761-3772.	5.7	46
81	On the Effects of UVâ€€ and pH on the Mechanical Behavior, Molecular Conformation and Cell Viability of Collagenâ€Based Scaffold for Vascular Tissue Engineering. Macromolecular Bioscience, 2010, 10, 307-316.	2.1	45
82	Plasma functionalization of poly(vinyl alcohol) hydrogel for cell adhesion enhancement. Biomatter, 2013, 3, .	2.6	45
83	Oxidized bacterial cellulose membrane as support for enzyme immobilization: properties and morphological features. Cellulose, 2020, 27, 3055-3083.	2.4	45
84	Unraveling the role of mechanical stimulation on smooth muscle cells: A comparative study between 2D and 3D models. Biotechnology and Bioengineering, 2016, 113, 2254-2263.	1.7	44
85	Antibacterial properties of chitosan-based coatings are affected by spacer-length and molecular weight. Applied Surface Science, 2018, 445, 478-487.	3.1	44
86	Extracellular matrix analogs as carriers for growth factors:In vitro fibroblast behavior. Journal of Biomedical Materials Research Part B, 1993, 27, 389-397.	3.0	42
87	Sulfonated chitosan and dopamine based coatings for metallic implants in contact with blood. Materials Science and Engineering C, 2017, 72, 682-691.	3.8	42
88	Antibacterial Coatings Based on Chitosan for Pharmaceutical and Biomedical Applications. Current Pharmaceutical Design, 2018, 24, 866-885.	0.9	42
89	Investigation of Corrosion Behaviour of Magnesium Alloy AM60B-F under Pseudo-Physiological Conditions. Materials Science Forum, 2003, 426-432, 521-526.	0.3	41
90	Newly identified interfibrillar collagen crosslinking suppresses cell proliferation and remodelling. Biomaterials, 2015, 54, 126-135.	5.7	41

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91	Removal of electrostatic artifacts in magnetic force microscopy by controlled magnetization of the tip: application to superparamagnetic nanoparticles. Scientific Reports, 2016, 6, 26293.	1.6	41
92	Mechanically-enhanced polysaccharide-based scaffolds for tissue engineering of soft tissues. Materials Science and Engineering C, 2019, 94, 364-375.	3.8	41
93	Silver-based antibacterial strategies for healthcare-associated infections: Processes, challenges, and regulations. An integrated review. Nanomedicine: Nanotechnology, Biology, and Medicine, 2020, 24, 102142.	1.7	41
94	Biological molecule-impregnated polyester: an in vivo angiogenesis study. Biomaterials, 1996, 17, 1659-1665.	5.7	40
95	Collagen-Poly(N-Isopropylacrylamide)???Based Membranes for Corneal Stroma Scaffolds. Cornea, 2003, 22, S81-S88.	0.9	39
96	Degradation Behaviour of Metallic Biomaterials for Degradable Stents. Advanced Materials Research, 2007, 15-17, 113-118.	0.3	39
97	Controlled Distribution and Clustering of Silver in Ag-DLC Nanocomposite Coatings Using a Hybrid Plasma Approach. ACS Applied Materials & Interfaces, 2016, 8, 21020-21027.	4.0	39
98	Surface modifications of 316 stainless steel for the improvement of its interface properties with RFGD-deposited fluorocarbon coating. Surface and Coatings Technology, 2005, 197, 278-287.	2.2	38
99	In Vitro Bioactivity Assessment of Metallic Magnesium. Key Engineering Materials, 2006, 309-311, 453-456.	0.4	38
100	Biodegradable Metal Stents: A Focused Review on Materials and Clinical Studies. Journal of Biomaterials and Tissue Engineering, 2014, 4, 868-874.	0.0	38
101	Chemical and Morphological Characterization of Ultra-Thin Fluorocarbon Plasma-Polymer Deposition on 316 Stainless Steel Substrates: A First Step Toward the Improvement of the Long-Term Safety of Coated-Stents. Plasma Processes and Polymers, 2005, 2, 424-440.	1.6	37
102	Three-dimensional type I collagen gel system for the study of osteoblastic metastases produced by metastatic prostate cancer. Journal of Bone and Mineral Research, 1994, 9, 1823-1832.	3.1	37
103	Effects of extracellular matrix proteins on the growth of haematopoietic progenitor cells. Biomedical Materials (Bristol), 2011, 6, 055011.	1.7	37
104	A new composite hydrogel combining the biological properties of collagen with the mechanical properties of a supramolecular scaffold for bone tissue engineering. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, e1489-e1500.	1.3	37
105	Porosity and biological properties of polyethylene glycol-conjugated collagen materials. Journal of Biomaterials Science, Polymer Edition, 1995, 6, 715-728.	1.9	36
106	Protein tyrosine phosphatase inhibition induces anti-tumor activity: Evidence of Cdk2/p27kip1 and Cdk2/SHP-1 complex formation in human ovarian cancer cells. Cancer Letters, 2008, 262, 265-275.	3.2	36
107	Development and characterization of silver containing calcium phosphate coatings on pure iron foam intended for bone scaffold applications. Materials and Design, 2018, 148, 124-134.	3.3	36
108	Wettability of cross-linked collagenous biomaterials: In vitro study. Biomaterials, 1992, 13, 612-616.	5.7	34

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109	Bioactive Polymer Fibers to Direct Endothelial Cell Growth in a Three-Dimensional Environment. Biomacromolecules, 2007, 8, 864-873.	2.6	34
110	On the long term antibacterial features of silver-doped diamondlike carbon coatings deposited via a hybrid plasma process. Biointerphases, 2014, 9, 029013.	0.6	34
111	Enhancing the functionality of cotton fabric by physical and chemical pre-treatments: A comparative study. Carbohydrate Polymers, 2016, 147, 28-36.	5.1	34
112	Coronary stent CD31-mimetic coating favours endothelialization and reduces local inflammation and neointimal development <i>in vivo</i>. European Heart Journal, 2021, 42, 1760-1769.	1.0	34
113	Chemotherapy Cytotoxicity of Human MCF-7 and MDA-MB 231 Breast Cancer Cells Is Altered by Osteoblast-Derived Growth Factors. Molecular Medicine, 1999, 5, 86-97.	1.9	33
114	RCAS1 is associated with ductal breast cancer progression. Biochemical and Biophysical Research Communications, 2002, 293, 1544-1549.	1.0	33
115	Study of the adhesion of thin plasma fluorocarbon coatings resisting plastic deformation for stent applications. Journal Physics D: Applied Physics, 2008, 41, 045310.	1.3	32
116	Comparative evaluation and optimization of off-the-shelf cationic polymers for gene delivery purposes. Polymer Chemistry, 2015, 6, 6325-6339.	1.9	32
117	The use of multiple pseudo-physiological solutions to simulate the degradation behavior of pure iron as a metallic resorbable implant: a surface-characterization study. Physical Chemistry Chemical Physics, 2016, 18, 19637-19646.	1.3	32
118	Comparative study on complexes formed by chitosan and different polyanions: Potential of chitosan-pectin biomaterials as scaffolds in tissue engineering. International Journal of Biological Macromolecules, 2019, 132, 178-189.	3.6	32
119	Study on the stability of plasma-polymerized fluorocarbon ultra-thin coatings on stainless steel in water. Surface and Coatings Technology, 2008, 202, 4884-4891.	2.2	31
120	X-ray Photoelectron Emission Microscopy and Time-of-Flight Secondary Ion Mass Spectrometry Analysis of Ultrathin Fluoropolymer Coatings for Stent Applications. Langmuir, 2008, 24, 7897-7905.	1.6	30
121	Computational modeling of adherent cell growth in a hollow-fiber membrane bioreactor for large-scale 3-D bone tissue engineering. Journal of Artificial Organs, 2012, 15, 250-265.	0.4	30
122	Treatment of 4-chlorobenzoic acid by plasma-based advanced oxidation processes. Chemical Engineering and Processing: Process Intensification, 2013, 72, 82-89.	1.8	30
123	Irradiated mesenchymal stem cells improve the ex vivo expansion of hematopoietic progenitors by partly mimicking the bone marrow endosteal environment. Journal of Immunological Methods, 2011, 370, 93-103.	0.6	29
124	Wound healing using a collagen matrix: Effect ofDC electrical stimulation. Journal of Biomedical Materials Research Part B, 1988, 22, 191-206.	3.0	28
125	Methods to Investigate the Adhesion of Soft Nanoâ€Coatings on Metal Substrates â€“ Application to Polymerâ€Coated Stents. Macromolecular Materials and Engineering, 2009, 294, 11-19.	1.7	28
126	Plasma polymerized allylamine films deposited on 316L stainless steel for cardiovascular stent coatings. Surface and Coatings Technology, 2010, 205, 2461-2468.	2.2	28

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127	Human Elastinâ€Based Recombinant Biopolymers Improve Mesenchymal Stem Cell Differentiation. Macromolecular Bioscience, 2012, 12, 1546-1554.	2.1	28
128	Intestinal and Multivisceral Transplantation Immunosuppression Protocolsâ€"Literature Review. Transplantation Proceedings, 2012, 44, 2445-2448.	0.3	28
129	Effect of Poly-L-Lysine coating on titanium osseointegration: from characterization to in vivo studies. Journal of Oral Implantology, 2015, 41, 626-631.	0.4	28
130	In vitro evaluation of anti-calcification and anti-coagulation on sulfonated chitosan and carrageenan surfaces. Materials Science and Engineering C, 2016, 59, 241-248.	3.8	27
131	Single nanoparticles magnetization curves by controlled tip magnetization magnetic force microscopy. Nanoscale, 2017, 9, 18000-18011.	2.8	27
132	Effects of a Pseudophysiological Environment on the Elastic and Viscoelastic Properties of Collagen Gels. International Journal of Biomaterials, 2012, 2012, 1-9.	1.1	26
133	On the potential for fibronectin/phosphorylcholine coatings on PTFE substrates to jointly modulate endothelial cell adhesion and hemocompatibility properties. Biomatter, 2015, 5, e979679.	2.6	26
134	CO2-rich atmosphere strongly affects the degradation of Fe-21Mn-1C for biodegradable metallic implants. Materials Letters, 2016, 181, 362-366.	1.3	26
135	Prolonged delivery of BMP-2 by a non-polymer hydrogel for bone defect regeneration. Drug Delivery and Translational Research, 2018, 8, 178-190.	3.0	26
136	In vitro angiogenesis in fibrin matrices containing fibronectin or hyaluronic acid. Cell Biology International Reports, 1992, 16, 1251-1263.	0.7	25
137	Poly(Ethylene Glycol)-Serum Albumin Hydrogel as Matrix for Enzyme Immobilization: Biomedical Applications. Artificial Cells, Blood Substitutes, and Biotechnology, 1995, 23, 587-595.	0.9	25
138	Mechanical and Biological Performances of New Scaffolds Made of Collagen Hydrogels and Fibroin Microfibers for Vascular Tissue Engineering. Macromolecular Bioscience, 2012, 12, 1253-1264.	2.1	25
139	Synergistic control of sex hormones by 17Î²-HSD type 7: a novel target for estrogen-dependent breast cancer. Journal of Molecular Cell Biology, 2015, 7, 568-579.	1.5	25
140	Prediction of circumferential compliance and burst strength of polymeric vascular grafts. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 79, 332-340.	1.5	25
141	In vivo evaluation of hydrophobic and fibrillar microporous polyetherurethane urea graft. Biomaterials, 1989, 10, 521-531.	5.7	24
142	In vitro contraction rate of collagen in sponge-shape matrices. Journal of Biomaterials Science, Polymer Edition, 1992, 3, 301-313.	1.9	24
143	Chemical inactivators as sterilization agents for bovine collagen materials. , 1997, 37, 212-221.		24
144	Biomimetic coating of crossâ€linked gelatin to improve mechanical and biological properties of electrospun PET: A promising approach for small caliber vascular graft applications. Journal of Biomedical Materials Research - Part A, 2017, 105, 2405-2415.	2.1	24

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145	Synthesis, mechanical properties and corrosion behavior of powder metallurgy processed Fe/Mg2Si composites for biodegradable implant applications. Materials Science and Engineering C, 2017, 81, 511-521.	3.8	24
146	VascugraftÂ® microporous polyesterurethane arterial prosthesis as a thoraco-abdominal bypass in dogs. Biomaterials, 1996, 17, 1289-1300.	5.7	24
147	Promotion of Angiogenesis in Tissue Engineering: Developing Multicellular Matrices with Multiple Capacities. International Journal of Artificial Organs, 2006, 29, 1148-1157.	0.7	23
148	Fetal development, mechanobiology and optimal control processes can improve vascular tissue regeneration in bioreactors: An integrative review. Medical Engineering and Physics, 2012, 34, 269-278.	0.8	23
149	In vitro exposure of a novel polyesterurethane graft to enzymes: a study of the biostability of the VascugraftÂ® arterial prosthesis. Biomaterials, 1994, 15, 1129-1144.	5.7	22
150	Endothelial cells exposed to erythrocytes under shear stress: An in vitro study. Biomaterials, 1998, 19, 1925-1934.	5.7	22
151	Toward High-Performance Coatings for Biomedical Devices: Study on Plasma-Deposited Fluorocarbon Films and Ageing in PBS. Materials, 2010, 3, 1515-1532.	1.3	22
152	Influence of the 316 L Stainless Steel Interface on the Stability and Barrier Properties of Plasma Fluorocarbon Films. ACS Applied Materials & Interfaces, 2011, 3, 2323-2331.	4.0	22
153	Ammonia RF-Plasma Treatment of Tubular ePTFE Vascular Prostheses. Plasmas and Polymers, 1999, 4, 207-228.	1.5	21
154	On the Growth of Fluorocarbon Thin Films Deposited on Plasmaâ€Etched 316L Stainless Steel. Plasma Processes and Polymers, 2010, 7, 309-317.	1.6	21
155	siRNA-Mediated Down-Regulation of P-glycoprotein in a Xenograft Tumor Model in NOD-SCID Mice. Pharmaceutical Research, 2011, 28, 2516-2529.	1.7	21
156	Insulin-like growth factor binding protein-2 and neurotrophin 3 synergize together to promote the expansion of hematopoietic cells ex vivo. Cytokine, 2012, 58, 327-331.	1.4	21
157	<scp>BSA</scp> and Fibrinogen Adsorption on Chitosan/Îºâ€‹<scp>C</scp>arrageenan Polyelectrolyte Complexes. Macromolecular Bioscience, 2013, 13, 1072-1083.	2.1	21
158	Experimental issues in magnetic force microscopy of nanoparticles. AIP Conference Proceedings, 2015, , .	0.3	21
159	Degradation behavior of biodegradable Fe35Mn alloy stents. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2015, 103, 572-577.	1.6	21
160	Laser surface structuring affects polymer deposition, coating homogeneity, and degradation rate of Mg alloys. Materials Letters, 2015, 160, 359-362.	1.3	21
161	Relationship Between Mechanical Properties and Collagen Structure of Closed and Open Wounds. Journal of Biomechanical Engineering, 1988, 110, 352-356.	0.6	20
162	A Costâ€Effective Culture System for the In Vitro Assembly, Maturation, and Stimulation of Advanced Multilayered Multiculture Tubular Tissue Models. Biotechnology Journal, 2018, 13, 1700359.	1.8	20

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163	Real-Time Study of the Adsorption and Grafting Process of Biomolecules by Means of Bloch Surface Wave Biosensors. ACS Applied Materials & Interfaces, 2018, 10, 33611-33618.	4.0	20
164	Heparin-Modified Collagen Gels for Controlled Release of Pleiotrophin: Potential for Vascular Applications. Frontiers in Bioengineering and Biotechnology, 2019, 7, 74.	2.0	20
165	Understanding the effect of the reinforcement addition on corrosion behavior of Fe/Mg2Si composites for biodegradable implant applications. Materials Chemistry and Physics, 2019, 223, 771-778.	2.0	20
166	Spontaneous and Biomimetic Apatite Formation on Pure Magnesium. Materials Science Forum, 2007, 539-543, 589-594.	0.3	19
167	Combined effect of Laponite and polymer molecular weight on the cell-interactive properties of synthetic PEO-based hydrogels. Reactive and Functional Polymers, 2019, 136, 95-106.	2.0	19
168	Development of photo-crosslinkable collagen hydrogel building blocks for vascular tissue engineering applications: A superior alternative to methacrylated gelatin?. Materials Science and Engineering C, 2021, 130, 112460.	3.8	19
169	Impregnated Polyester Arterial Prostheses: Performance and Prospects. Annals of Vascular Surgery, 1999, 13, 509-523.	0.4	18
170	Biocompatibility and Light Transmission of Liposomal Lenses. Optometry and Vision Science, 2007, 84, 954-961.	0.6	18
171	Effect of Sterilization on Nonâ€woven Polyethylene Terephthalate Fiber Structures for Vascular Grafts. Macromolecular Bioscience, 2011, 11, 13-21.	2.1	18
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