Alexander Marcus Seifalian

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/2960077/publications.pdf

Version: 2024-02-01

509 papers 30,434 citations

81 h-index 145 g-index

528 all docs

528 docs citations

times ranked

528

35184 citing authors

#	Article	IF	CITATIONS
1	Nanosilver as a new generation of nanoproduct in biomedical applications. Trends in Biotechnology, 2010, 28, 580-588.	4.9	1,213
2	Liposomes and nanoparticles: nanosized vehicles for drug delivery in cancer. Trends in Pharmacological Sciences, 2009, 30, 592-599.	4.0	1,097
3	Biological applications of quantum dots. Biomaterials, 2007, 28, 4717-4732.	5.7	952
4	Properties of the amniotic membrane for potential use in tissue engineering., 2008, 7, 88-99.		604
5	Conductive Polymers: Opportunities and Challenges in Biomedical Applications. Chemical Reviews, 2018, 118, 6766-6843.	23.0	579
6	Toxicology and clinical potential of nanoparticles. Nano Today, 2011, 6, 585-607.	6.2	558
7	REVIEW: Ischemia–Reperfusion Injury of the Intestine and Protective Strategies Against Injury. Digestive Diseases and Sciences, 2004, 49, 1359-1377.	1.1	552
8	Current status of prosthetic bypass grafts: A review. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2005, 74B, 570-581.	1.6	463
9	Stem-cell-based, tissue engineered tracheal replacement in a child: a 2-year follow-up study. Lancet, The, 2012, 380, 994-1000.	6.3	421
10	Polyhedral Oligomeric Silsesquioxane Nanocomposites:  The Next Generation Material for Biomedical Applications. Accounts of Chemical Research, 2005, 38, 879-884.	7.6	398
11	The Mechanical Behavior of Vascular Grafts: A Review. Journal of Biomaterials Applications, 2001, 15, 241-278.	1.2	342
12	The roles of tissue engineering and vascularisation in the development of micro-vascular networks: a review. Biomaterials, 2005, 26, 1857-1875.	5.7	341
13	Biofunctionalization of Biomaterials for Accelerated in Situ Endothelialization: A Review. Biomacromolecules, 2008, 9, 2969-2979.	2.6	319
14	Remote Ischemic Preconditioning: A Novel Protective Method From Ischemia Reperfusion Injury—A Review. Journal of Surgical Research, 2008, 150, 304-330.	0.8	302
15	Liver ischemia/reperfusion injury: Processes in inflammatory networks-A review. Liver Transplantation, 2010, 16, 1016-1032.	1.3	296
16	The Mechanical Properties of Infrainguinal Vascular Bypass Grafts: Their Role in Influencing Patency. European Journal of Vascular and Endovascular Surgery, 2006, 31, 627-636.	0.8	259
17	A Nanocage for Nanomedicine: Polyhedral Oligomeric Silsesquioxane (POSS). Macromolecular Rapid Communications, 2011, 32, 1032-1046.	2.0	246
18	Skin regeneration scaffolds: a multimodal bottom-up approach. Trends in Biotechnology, 2012, 30, 638-648.	4.9	242

#	Article	IF	CITATIONS
19	A new era of cancer treatment: carbon nanotubes as drug delivery tools. International Journal of Nanomedicine, 2011, 6, 2963.	3.3	219
20	Compliance properties of conduits used in vascular reconstruction. British Journal of Surgery, 2002, 87, 1516-1524.	0.1	218
21	Improving the Clinical Patency of Prosthetic Vascular and Coronary Bypass Grafts: The Role of Seeding and Tissue Engineering. Artificial Organs, 2002, 26, 307-320.	1.0	204
22	Exosomes as nano-theranostic delivery platforms for gene therapy. Advanced Drug Delivery Reviews, 2013, 65, 357-367.	6.6	196
23	Polymeric heart valves: new materials, emerging hopes. Trends in Biotechnology, 2009, 27, 359-367.	4.9	194
24	The contemporary role of antioxidant therapy in attenuating liver ischemia-reperfusion injury: A review. Liver Transplantation, 2005, 11, 1031-1047.	1.3	193
25	A rat decellularized small bowel scaffold that preserves villus-crypt architecture for intestinal regeneration. Biomaterials, 2012, 33, 3401-3410.	5.7	188
26	Biomaterials and scaffold design: key to tissue-engineering cartilage. Biotechnology and Applied Biochemistry, 2007, 46, 73.	1.4	186
27	Oxygen-Generating Biomaterials: A New, Viable Paradigm for Tissue Engineering?. Trends in Biotechnology, 2016, 34, 1010-1021.	4.9	186
28	The Antithrombogenic Potential of a Polyhedral Oligomeric Silsesquioxane (POSS) Nanocomposite. Biomacromolecules, 2006, 7, 215-223.	2.6	185
29	Topical haemostatic agents. British Journal of Surgery, 2008, 95, 1197-1225.	0.1	184
30	The degradative resistance of polyhedral oligomeric silsesquioxane nanocore integrated polyurethanes: An in vitro study. Biomaterials, 2006, 27, 1971-1979.	5.7	180
31	Immunomodulatory effect of a decellularized skeletal muscle scaffold in a discordant xenotransplantation model. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 14360-14365.	3.3	176
32	Impairment of Hepatic Microcirculation in Fatty Liver. Microcirculation, 2003, 10, 447-456.	1.0	170
33	Nitric Oxide: A Guardian for Vascular Grafts?. Chemical Reviews, 2011, 111, 5742-5767.	23.0	157
34	Advancing cartilage tissue engineering: the application of stem cell technology. Current Opinion in Biotechnology, 2005, 16, 503-509.	3.3	156
35	Biocompatibility and nanostructured materials: applications in nanomedicine. Artificial Cells, Nanomedicine and Biotechnology, 2017, 45, 833-842.	1.9	155
36	Fluorescence nanoparticles "quantum dots―as drug delivery system and their toxicity: a review. Journal of Drug Targeting, 2011, 19, 475-486.	2.1	153

#	Article	IF	Citations
37	A review of the carotid and femoral intima-media thickness as an indicator of the presence of peripheral vascular disease and cardiovascular risk factors. Cardiovascular Research, 2002, 54, 528-538.	1.8	148
38	Anticoagulant and Antiplatelet Agents:Â Their Clinical and Device Application(s) Together with Usages to Engineer Surfaces. Biomacromolecules, 2004, 5, 798-813.	2.6	148
39	A novel nanocomposite polymer for development of synthetic heart valve leaflets. Acta Biomaterialia, 2009, 5, 2409-2417.	4.1	148
40	Quantum dots and their potential biomedical applications in photosensitization for photodynamic therapy. Nanomedicine, 2009, 4, 353-363.	1.7	148
41	THE EFFECT OF GRADED STEATOSIS ON FLOW IN THE HEPATIC PARENCHYMAL MICROCIRCULATION 1,2. Transplantation, 1999, 68, 780-784.	0.5	147
42	Addressing thrombogenicity in vascular graft construction. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2007, 82B, 100-108.	1.6	146
43	Nitric Oxide Donors for Cardiovascular Implant Applications. Small, 2013, 9, 22-35.	5.2	146
44	Modern surgical management of peripheral nerve gap. Journal of Plastic, Reconstructive and Aesthetic Surgery, 2010, 63, 1941-1948.	0.5	141
45	Oral microbial biofilms: an update. European Journal of Clinical Microbiology and Infectious Diseases, 2019, 38, 2005-2019.	1.3	141
46	Advances in regenerative therapies for spinal cord injury: a biomaterials approach. Neural Regeneration Research, 2015, 10, 726.	1.6	134
47	In vivo biostability of a poly(carbonate-urea)urethane graft. Biomaterials, 2003, 24, 2549-2557.	5.7	133
48	Carbon nanotubes leading the way forward in new generation 3D tissue engineering. Biotechnology Advances, 2014, 32, 1000-1014.	6.0	131
49	The application of exosomes as a nanoscale cancer vaccine. International Journal of Nanomedicine, 2010, 5, 889.	3.3	128
50	Achieving the ideal properties for vascular bypass grafts using a tissue engineered approach: a review. Medical and Biological Engineering and Computing, 2007, 45, 327-336.	1.6	127
51	New prostheses for use in bypass grafts with special emphasis on polyurethanes. Vascular, 2002, 10, 191-197.	0.5	126
52	In vivo demonstration of impaired microcirculation in steatotic human liver grafts. Liver Transplantation, 1998, 4, 71-77.	1.9	122
53	Development of a hybrid cardiovascular graft using a tissue engineering approach 1. FASEB Journal, 2002, 16, 791-796.	0.2	122
54	The regenerative role of adiposeâ€derived stem cells (<scp>ADSC</scp>) in plastic and reconstructive surgery. International Wound Journal, 2017, 14, 112-124.	1.3	121

#	Article	IF	CITATIONS
55	Protection of the Liver by Ischemic Preconditioning: A Review of Mechanisms and Clinical Applications. Digestive Surgery, 2003, 20, 383-396.	0.6	115
56	Semiconductor quantum dots as fluorescent probes for <i>in vitro</i> and <i>in vivo</i> bio-molecular and cellular imaging. Nano Reviews, 2010, 1, 5161.	3.7	113
57	Tissue engineering of blood vessels. British Journal of Surgery, 2006, 93, 282-290.	0.1	111
58	Protocols and Mechanisms for Remote Ischemic Preconditioning: A Novel Method for Reducing Ischemia Reperfusion Injury. Transplantation, 2007, 84, 445-458.	0.5	111
59	The role of the insulin-like growth factor system in colorectal cancer: review of current knowledge. International Journal of Colorectal Disease, 2005, 20, 203-220.	1.0	110
60	Role of stem cells in cancer therapy and cancer stem cells: a review. Cancer Cell International, 2007, 7, 9.	1.8	110
61	Quantum dots and carbon nanotubes in oncology: a review on emerging theranostic applications in nanomedicine. Nanomedicine, 2011, 6, 1101-1114.	1.7	106
62	Nerve Conduits for Peripheral Nerve Surgery. Plastic and Reconstructive Surgery, 2014, 133, 1420-1430.	0.7	106
63	Adipose-derived stem cells for clinical applications: a review. Cell Proliferation, 2011, 44, 86-98.	2.4	104
64	The use of animal models in developing the discipline of cardiovascular tissue engineering: a review. Biomaterials, 2004, 25, 1627-1637.	5.7	102
65	Tissue Engineering of Vascular Bypass Grafts: Role of Endothelial Cell Extraction. European Journal of Vascular and Endovascular Surgery, 2001, 21, 193-201.	0.8	98
66	Silsesquioxane Nanocomposites as Tissue Implants. Plastic and Reconstructive Surgery, 2007, 119, 1653-1662.	0.7	98
67	Will Nanotechnology Bring New Hope for Gene Delivery?. Trends in Biotechnology, 2017, 35, 434-451.	4.9	97
68	Silk fibroin/amniotic membrane 3D bi-layered artificial skin. Biomedical Materials (Bristol), 2018, 13, 035003.	1.7	97
69	Surface Modification of Biomaterials: A Quest for Blood Compatibility. International Journal of Biomaterials, 2012, 2012, 1-8.	1.1	94
70	Improving the patency of vascular bypass grafts: The role of suture materials and surgical techniques on reducing anastomotic compliance mismatch. European Journal of Vascular and Endovascular Surgery, 2003, 25, 287-295.	0.8	93
71	Comparison of laser doppler perfusion imaging, laser doppler flowmetry, and thermographic imaging for assessment of blood flow in human skin. European Journal of Vascular Surgery, 1994, 8, 65-69.	0.9	91
72	Interactions between endothelial cells and a poly(carbonate-silsesquioxane-bridge-urea)urethane. Biomaterials, 2005, 26, 6271-6279.	5.7	91

#	Article	IF	CITATIONS
73	Remote ischaemic preconditioning of the hind limb reduces experimental liver warm ischaemia–reperfusion injury. British Journal of Surgery, 2006, 93, 762-768.	0.1	91
74	The anti-calcification potential of a silsesquioxane nanocomposite polymer under in vitro conditions: Potential material for synthetic leaflet heart valvear. Acta Biomaterialia, 2010, 6, 4249-4260.	4.1	90
75	Control of stem cell fate by engineering their micro and nanoenvironment. World Journal of Stem Cells, 2015, 7, 37.	1.3	90
76	Apoptosis and colorectal cancer: implications for therapy. Trends in Molecular Medicine, 2009, 15, 225-233.	3.5	89
77	Osteogenic potential of stem cellsâ€seeded bioactive nanocomposite scaffolds: A comparative study between human mesenchymal stem cells derived from bone, umbilical cord Wharton's jelly, and adipose tissue. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2018, 106, 61-72.	1.6	89
78	Cardiovascular tissue engineering: state of the art. Pathologie Et Biologie, 2005, 53, 599-612.	2.2	88
79	Electroconductive polyurethane/graphene nanocomposite for biomedical applications. Composites Part B: Engineering, 2019, 168, 421-431.	5.9	87
80	Current developments and future prospects for heart valve replacement therapy. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2009, 88B, 290-303.	1.6	86
81	Small calibre polyhedral oligomeric silsesquioxane nanocomposite cardiovascular grafts: Influence of porosity on the structure, haemocompatibility and mechanical properties. Acta Biomaterialia, 2011, 7, 3857-3867.	4.1	86
82	Manufacturing and hydrodynamic assessment of a novel aortic valve made of a new nanocomposite polymer. Journal of Biomechanics, 2012, 45, 1205-1211.	0.9	85
83	Exosomes as Immunotheranostic Nanoparticles. Clinical Therapeutics, 2014, 36, 820-829.	1.1	84
84	Polyhedral oligomeric silsequioxane–polyurethane nanocomposite microvessels for an artificial capillary bed. Biomaterials, 2006, 27, 4618-4626.	5.7	82
85	Tissue Engineering. Plastic and Reconstructive Surgery, 2012, 129, 1123-1137.	0.7	82
86	The Effect of Short-Term Treatment with Simvastatin on Renal Function in Patients with Peripheral Arterial Disease. Angiology, 2004, 55, 53-62.	0.8	81
87	Shear-stress preconditioning and tissue-engineering-based paradigms for generating arterial substitutes. Biotechnology and Applied Biochemistry, 2004, 39, 151.	1.4	81
88	Intima-media thickness of elastic and muscular arteries of young women with polycystic ovaries. Atherosclerosis, 2004, 175, 353-359.	0.4	81
89	Stem cell tracking using iron oxide nanoparticles. International Journal of Nanomedicine, 2014, 9, 1641.	3.3	81
90	Chitosan-Intercalated Montmorillonite/Poly(vinyl alcohol) Nanofibers as a Platform to Guide Neuronlike Differentiation of Human Dental Pulp Stem Cells. ACS Applied Materials & Dental Pulp Stem Cells. ACS Account & Dental Pulp Stem Cells. ACS	4.0	81

#	Article	IF	CITATIONS
91	Cellular engineering of vascular bypass grafts: Role of chemical coatings for enhancing endothelial cell attachment. Medical and Biological Engineering and Computing, 2001, 39, 609-618.	1.6	80
92	In vitro stability of a novel compliant poly(carbonate-urea)urethane to oxidative and hydrolytic stress. Journal of Biomedical Materials Research Part B, 2002, 59, 207-218.	3.0	78
93	Clinical Potential of Quantum Dots. Journal of Biomedicine and Biotechnology, 2007, 2007, 1-10.	3.0	78
94	Tissueâ€Engineered Heart Valve: Future of Cardiac Surgery. World Journal of Surgery, 2012, 36, 1581-1591.	0.8	77
95	Personalized development of human organs using 3D printing technology. Medical Hypotheses, 2016, 87, 30-33.	0.8	77
96	The Endothelialization of Polyhedral Oligomeric Silsesquioxane Nanocomposites: An In Vitro Study. Cell Biochemistry and Biophysics, 2006, 45, 129-136.	0.9	76
97	Evolution of covered stents in the contemporary era: clinical application, materials and manufacturing strategies using nanotechnology. Biotechnology Advances, 2013, 31, 524-542.	6.0	76
98	The nitric oxide pathway – evidence and mechanisms for protection against liver ischaemia reperfusion injury. Liver International, 2012, 32, 531-543.	1.9	75
99	Trachea transplantation: from laboratory to patient. Journal of Tissue Engineering and Regenerative Medicine, 2015, 9, 357-367.	1.3	75
100	Optimization of chondrocyte isolation and characterization for large-scale cartilage tissue engineering. Journal of Surgical Research, 2013, 181, 41-48.	0.8	74
101	Arterial Elastic Properties and Cardiovascular Risk/Event. European Journal of Vascular and Endovascular Surgery, 2002, 24, 383-397.	0.8	72
102	Development of a Costâ€Effective and Simple Protocol for Decellularization and Preservation of Human Amniotic Membrane as a Soft Tissue Replacement and Delivery System for Bone Marrow Stromal Cells. Advanced Healthcare Materials, 2015, 4, 918-926.	3.9	72
103	The Early Effect of Lipid-lowering Treatment on Carotid and Femoral Intima Media Thickness (IMT). European Journal of Vascular and Endovascular Surgery, 2002, 23, 358-364.	0.8	71
104	Advances in peripheral nervous system regenerative therapeutic strategies: A biomaterials approach. Materials Science and Engineering C, 2016, 65, 425-432.	3.8	71
105	Impaired Carotid Viscoelastic Properties in Women With Polycystic Ovaries. Circulation, 2002, 106, 81-85.	1.6	70
106	Nanocomposite Containing Bioactive Peptides Promote Endothelialisation by Circulating Progenitor Cells: An In vitro Evaluation. European Journal of Vascular and Endovascular Surgery, 2006, 32, 76-83.	0.8	69
107	3D Protein-Based Bilayer Artificial Skin for the Guided Scarless Healing of Third-Degree Burn Wounds in Vivo. Biomacromolecules, 2018, 19, 2409-2422.	2.6	68
108	Bacteriophage Based Biosensors: Trends, Outcomes and Challenges. Nanomaterials, 2020, 10, 501.	1.9	68

#	Article	IF	CITATIONS
109	An Assessment of Covalent Grafting of RGD Peptides to the Surface of a Compliant Poly(Carbonate-Urea)Urethane Vascular Conduit versus Conventional Biological Coatings: Its Role in Enhancing Cellular Retention. Tissue Engineering, 2002, 8, 673-680.	4.9	67
110	Targeted Drug Delivery Based on Gold Nanoparticle Derivatives. Current Pharmaceutical Design, 2017, 23, 2918-2929.	0.9	67
111	In vivo femoropopliteal arterial wall compliance in subjects with and without lower limb vascular disease. Journal of Vascular Surgery, 1999, 30, 936-945.	0.6	66
112	Experimental study of liver dysfunction evaluated by direct indocyanine green clearance using near infrared spectroscopy. British Journal of Surgery, 2002, 86, 1005-1011.	0.1	66
113	Cardiovascular application of polyhedral oligomeric silsesquioxane nanomaterials: a glimpse into prospective horizons. International Journal of Nanomedicine, 2011, 6, 775.	3.3	66
114	Role of prosthetic conduits in coronary artery bypass grafting. European Journal of Cardio-thoracic Surgery, 2011, 40, 394-8.	0.6	66
115	The performance of a small-calibre graft for vascular reconstructions in a senescent sheep model. Biomaterials, 2014, 35, 9033-9040.	5.7	66
116	The Potential Application of Green-Synthesized Metal Nanoparticles in Dentistry: A Comprehensive Review. Bioinorganic Chemistry and Applications, 2022, 2022, 1-27.	1.8	66
117	Advancing vascular tissue engineering: the role of stem cell technology. Trends in Biotechnology, 2005, 23, 461-467.	4.9	65
118	Current Trends in the Application of Nanoparticles in Drug Delivery. Current Medicinal Chemistry, 2011, 18, 1067-1078.	1.2	65
119	Toxicology of chemically modified graphene-based materials for medical application. Archives of Toxicology, 2014, 88, 1987-2012.	1.9	65
120	Decellularized human amniotic membrane: how viable is it as a delivery system for human adipose tissueâ€derived stromal cells?. Cell Proliferation, 2016, 49, 115-121.	2.4	65
121	Novel Electrohydrodynamic Printing of Nanocomposite Biopolymer Scaffolds. Journal of Bioactive and Compatible Polymers, 2007, 22, 265-280.	0.8	64
122	Design and development of nanocomposite scaffolds for auricular reconstruction. Nanomedicine: Nanotechnology, Biology, and Medicine, 2014, 10, 235-246.	1.7	64
123	In situ Endothelialization: Bioengineering Considerations to Translation. Small, 2015, 11, 6248-6264.	5.2	64
124	Scarring, stem cells, scaffolds and skin repair. Journal of Tissue Engineering and Regenerative Medicine, 2015, 9, 649-668.	1.3	64
125	Graphene Oxide: Opportunities and Challenges in Biomedicine. Nanomaterials, 2021, 11, 1083.	1.9	64
126	Recent advances in artificial nerve conduit design: Strategies for the delivery of luminal fillers. Journal of Controlled Release, 2011, 156, 2-10.	4.8	63

#	Article	IF	Citations
127	Three-dimensional biomaterial degradation â€" Material choice, design and extrinsic factor considerations. Biotechnology Advances, 2014, 32, 984-999.	6.0	62
128	Mechanism of Anosmia Caused by Symptoms of COVID-19 and Emerging Treatments. ACS Chemical Neuroscience, 2021, 12, 3795-3805.	1.7	62
129	Emerging treatment strategies in wound care. International Wound Journal, 2022, 19, 1934-1954.	1.3	61
130	Inception to actualization: Next generation coronary stent coatings incorporating nanotechnology. Journal of Biotechnology, 2013, 164, 151-170.	1.9	60
131	Endometrial stem cells in regenerative medicine. Journal of Biological Engineering, 2014, 8, 20.	2.0	60
132	Polyurethane-Polycaprolactone Blend Patches: Scaffold Characterization and Cardiomyoblast Adhesion, Proliferation, and Function. ACS Biomaterials Science and Engineering, 2018, 4, 4299-4310.	2.6	60
133	Stem Cells and Cancer: An Overview. Stem Cell Reviews and Reports, 2007, 3, 249-255.	5.6	59
134	Conjugation of quantum dots on carbon nanotubes for medical diagnosis and treatment. International Journal of Nanomedicine, 2013, 8, 941.	3.3	59
135	Fabrication and <i>in vivo </i> evaluation of an osteoblast-conditioned nano-hydroxyapatite/gelatin composite scaffold for bone tissue regeneration. Journal of Biomedical Materials Research - Part A, 2016, 104, 2001-2010.	2.1	59
136	Organic nanocarriers for cancer drug delivery. Current Opinion in Pharmacology, 2012, 12, 414-419.	1.7	58
137	Fluorescence Lifetime Imaging and FRETâ€Induced Intracellular Redistribution of Tatâ€Conjugated Quantum Dot Nanoparticles through Interaction with a Phthalocyanine Photosensitiser. Small, 2014, 10, 782-792.	5.2	58
138	In vivo toxicological evaluation of graphene oxide nanoplatelets for clinical application. International Journal of Nanomedicine, 2018, Volume 13, 4757-4769.	3.3	58
139	Development of a new lacrimal drainage conduit using POSS nanocomposite. Biotechnology and Applied Biochemistry, 2011, 58, 363-370.	1.4	57
140	Chondrogenic differentiation of adipose tissue-derived stem cells within nanocaged POSS-PCU scaffolds: A new tool for nanomedicine. Nanomedicine: Nanotechnology, Biology, and Medicine, 2014, 10, 279-289.	1.7	57
141	Obesity and Arterial Compliance Alterations. Current Vascular Pharmacology, 2010, 8, 155-168.	0.8	56
142	Role of endothelial nitric oxide synthase in remote ischemic preconditioning of the mouse liver. Liver Transplantation, 2011, 17, 610-619.	1.3	56
143	Hearts beating through decellularized scaffolds: whole-organ engineering for cardiac regeneration and transplantation. Critical Reviews in Biotechnology, 2016, 36, 705-715.	5.1	56
144	Chemical group-dependent plasma polymerisation preferentially directs adipose stem cell differentiation towards osteogenic or chondrogenic lineages. Acta Biomaterialia, 2017, 50, 450-461.	4.1	56

#	Article	IF	Citations
145	Nanoparticles in wound healing from hope to promise from promise to routine. Frontiers in Bioscience - Landmark, 2018, 23, 1038-1059.	3.0	56
146	Current herbal medicine as an alternative treatment in dentistry: In vitro, in vivo and clinical studies. European Journal of Pharmacology, 2020, 889, 173665.	1.7	56
147	Continuous infusion of N-acetylcysteine reduces liver warm ischaemia–reperfusion injury. British Journal of Surgery, 2004, 91, 1330-1339.	0.1	55
148	Artificial nerve conduits in peripheralâ€nerve repair. Biotechnology and Applied Biochemistry, 2005, 41, 193-200.	1.4	55
149	A Review of Methods Currently Used for Assessment of In vivo Endothelial Function. European Journal of Vascular and Endovascular Surgery, 2005, 29, 269-276.	0.8	54
150	Optical Techniques in the Assessment of Peripheral Arterial Disease. Current Vascular Pharmacology, 2007, 5, 53-59.	0.8	54
151	Surface modification of a POSS-nanocomposite material to enhance cellular integration of a synthetic bioscaffold. Biomaterials, 2016, 83, 283-293.	5.7	54
152	Engineered skin graft with stromal vascular fraction cells encapsulated in fibrin–collagen hydrogel: A clinical study for diabetic wound healing. Journal of Tissue Engineering and Regenerative Medicine, 2020, 14, 424-440.	1.3	54
153	Effect of prolonged pulsatile shear stress in vitro on endothelial cell seeded PTFE and compliant polyurethane vascular grafts. European Journal of Vascular and Endovascular Surgery, 1998, 15, 147-154.	0.8	53
154	A Hybrid Compliant Vascular Graft Seeded with Microvascular Endothelial Cells Extracted from Human Omentum. Artificial Organs, 2001, 25, 974-982.	1.0	53
155	The relationship of hepatic tissue oxygenation with nitric oxide metabolism in ischemic preconditioning of the liver. FASEB Journal, 2002, 16, 1654-1656.	0.2	53
156	Effect of ischemic preconditioning on hepatic microcirculation and function in a rat model of ischemia reperfusion injury. Liver Transplantation, 2002, 8, 1182-1191.	1.3	53
157	Biomechanical Characterization of Human Soft Tissues Using Indentation and Tensile Testing. Journal of Visualized Experiments, 2016, , .	0.2	53
158	Hydrogels as Emerging Materials for Cornea Wound Healing. Small, 2021, 17, e2006335.	5.2	52
159	Magnetic beads (Dynabeadâ,,¢) toxicity to endothelial cells at high bead concentration: Implication for tissue engineering of vascular prosthesis. Cell Biology and Toxicology, 2003, 19, 265-272.	2.4	51
160	The role of nitric oxide in the modulation of hepatic microcirculation and tissue oxygenation in an experimental model of hepatic steatosis. Microvascular Research, 2005, 70, 129-136.	1.1	51
161	Functionalization of single-walled carbon nanotubes and their binding to cancer cells. International Journal of Nanomedicine, 2012, 7, 905.	3.3	51
162	Biochemical engineering nerve conduits using peptide amphiphiles. Journal of Controlled Release, 2012, 163, 342-352.	4.8	51

#	Article	IF	Citations
163	Effects of sterilization treatments on bulk and surface properties of nanocomposite biomaterials., 2013, 101, 1182-1190.		51
164	Accelerating in Situ Endothelialisation of Cardiovascular Bypass Grafts. International Journal of Molecular Sciences, 2015, 16, 597-627.	1.8	51
165	Translational Regenerative Therapies for Chronic Spinal Cord Injury. International Journal of Molecular Sciences, 2018, 19, 1776.	1.8	51
166	Near-infrared quantum dots for HER2 localization and imaging of cancer cells. International Journal of Nanomedicine, 2014, 9, 1323.	3.3	50
167	A comparison of para-anastomotic compliance profiles after vascular anastomosis: Nonpenetrating clips versus standard sutures. Journal of Vascular Surgery, 2001, 33, 812-820.	0.6	49
168	Nitric oxide synthase distribution and expression with ischemic preconditioning of the rat liver. FASEB Journal, 2005, 19, 1155-1157.	0.2	49
169	A registration framework for the comparison of mammogram sequences. IEEE Transactions on Medical Imaging, 2005, 24, 782-790.	5.4	49
170	Statins and Peripheral Arterial Disease: Potential Mechanisms and Clinical Benefits. Annals of Vascular Surgery, 2006, 20, 696-705.	0.4	49
171	Endometrial stem cell differentiation into smooth muscle cell: a novel approach for bladder tissue engineering in women. BJU International, 2013, 112, 854-863.	1.3	49
172	Biomimetic modified clinical-grade POSS-PCU nanocomposite polymer for bypass graft applications: A preliminary assessment of endothelial cell adhesion and haemocompatibility. Materials Science and Engineering C, 2015, 46, 400-408.	3.8	49
173	Bimetallic nickel-ferrite nanorod particles: greener synthesis using rosemary and its biomedical efficiency. Artificial Cells, Nanomedicine and Biotechnology, 2020, 48, 242-251.	1.9	49
174	A mathematical analysis on the biological zero problem in laser Doppler flowmetry. IEEE Transactions on Biomedical Engineering, 1998, 45, 354-364.	2.5	48
175	Improving endothelial cell retention for single stage seeding of prosthetic grafts: Use of polymer sequences of arginine-glycine-aspartate. European Journal of Vascular and Endovascular Surgery, 2003, 25, 325-329.	0.8	48
176	Engineering of bypass conduits to improve patency. Cell Proliferation, 2004, 37, 351-366.	2.4	48
177	Development of cardiovascular bypass grafts: endothelialization and applications of nanotechnology. Expert Review of Cardiovascular Therapy, 2008, 6, 1259-1277.	0.6	48
178	Tissue engineering of a hybrid bypass graft for coronary and lower limb bypass surgery. FASEB Journal, 2008, 22, 2084-2089.	0.2	48
179	Luminal Surface Engineering, â€~Micro and Nanopatterning': Potential for Self Endothelialising Vascular Grafts?. European Journal of Vascular and Endovascular Surgery, 2014, 47, 566-576.	0.8	48
180	Biomechanical Characterisation of the Human Auricular Cartilages; Implications for Tissue Engineering. Annals of Biomedical Engineering, 2016, 44, 3460-3467.	1.3	47

#	Article	IF	Citations
181	Fabrication and properties of developed collagen/strontium-doped Bioglass scaffolds for bone tissue engineering. Journal of Materials Research and Technology, 2020, 9, 14799-14817.	2.6	47
182	Emerging Application of Magnetic Nanoparticles for Diagnosis and Treatment of Cancer. Polymers, 2021, 13, 4146.	2.0	47
183	Thermo-mechanical analysis of a compliant poly(carbonate-urea)urethane after exposure to hydrolytic, oxidative, peroxidative and biological solutions. Biomaterials, 2002, 23, 2231-2240.	5.7	46
184	Effect of Inspired Oxygen on Portal and Hepatic Oxygenation: Effective Arterialization of Portal Blood by Hyperoxia. Cell Transplantation, 2004, 13, 801-808.	1.2	46
185	Vascular risk factors in South Asians. International Journal of Cardiology, 2008, 128, 5-16.	0.8	46
186	Manufacture of small calibre quadruple lamina vascular bypass grafts using a novel automated extrusion-phase-inversion method and nanocomposite polymer. Journal of Biomechanics, 2009, 42, 722-730.	0.9	46
187	Conductive carbon nanofibers incorporated into collagen bio-scaffold assists myocardial injury repair. International Journal of Biological Macromolecules, 2020, 163, 1136-1146.	3.6	46
188	Inhibition of neointimal formation and hyperplasia in vein grafts by external stent/sheath. Vascular Medicine, 2010, 15, 287-297.	0.8	45
189	Application of plasma surface modification techniques to improve hemocompatibility of vascular grafts: A review. Biotechnology and Applied Biochemistry, 2011, 58, 311-327.	1.4	45
190	Polymeric coating of surface modified nitinol stent with POSS-nanocomposite polymer. Colloids and Surfaces B: Biointerfaces, 2011, 86, 93-105.	2.5	45
191	Gold Revolution—Gold Nanoparticles for Modern Medicine and Surgery. Journal of Nanoscience and Nanotechnology, 2011, 11, 3740-3748.	0.9	45
192	Enhancing the electrical conductivity of a hybrid POSS–PCL/graphene nanocomposite polymer. Journal of Colloid and Interface Science, 2014, 435, 145-155.	5.0	45
193	Polycystic ovary syndrome, diabetes and cardiovascular disease: risks and risk factors. Journal of Obstetrics and Gynaecology, 2004, 24, 613-621.	0.4	44
194	Nitric oxide is an essential mediator of the protective effects of remote ischaemic preconditioning in a mouse model of liver ischaemia/reperfusion injury. Clinical Science, 2011, 121, 257-266.	1.8	44
195	N-Acetylcysteine ameliorates the late phase of liver ischaemia/reperfusion injury in the rabbit with hepatic steatosis. Clinical Science, 2005, 109, 465-473.	1.8	43
196	Effect of remote ischemic preconditioning on hepatic microcirculation and function in a rat model of hepatic ischemia reperfusion injury. Hpb, 2009, 11 , $108-117$.	0.1	43
197	Adipogenic differentiation of adipose-derived stem cells in 3-dimensional spheroid cultures (microtissue): Implications for the reconstructive surgeon. Journal of Plastic, Reconstructive and Aesthetic Surgery, 2014, 67, 1726-1734.	0.5	43
198	A new algorithm for deriving pulsatile blood flow waveforms tested using simulated dynamic angiographic data. Neuroradiology, 1989, 31, 263-269.	1.1	42

#	Article	IF	CITATIONS
199	Polycystic ovaries. British Journal of Radiology, 2002, 75, 9-16.	1.0	42
200	In situ endothelialisation potential of a biofunctionalised nanocomposite biomaterial-based small diameter bypass graft. Bio-Medical Materials and Engineering, 2009, 19, 317-331.	0.4	42
201	An Anti-CD34 Antibody-Functionalized Clinical-Grade POSS-PCU Nanocomposite Polymer for Cardiovascular Stent Coating Applications: A Preliminary Assessment of Endothelial Progenitor Cell Capture and Hemocompatibility. PLoS ONE, 2013, 8, e77112.	1.1	41
202	Role of nanotopography in the development of tissue engineered 3D organs and tissues using mesenchymal stem cells. World Journal of Stem Cells, 2015, 7, 266.	1.3	41
203	Relaxivity and toxicological properties of manganese oxide nanoparticles for MRI applications. RSC Advances, 2016, 6, 45462-45474.	1.7	41
204	Thermo-responsive chitosan hydrogel for healing of full-thickness wounds infected with XDR bacteria isolated from burn patients: In vitro and in vivo animal model. International Journal of Biological Macromolecules, 2020, 164, 4475-4486.	3.6	41
205	Biocompatible and Biomaterials Application in Drug Delivery System in Oral Cavity. Evidence-based Complementary and Alternative Medicine, 2021, 2021, 1-12.	0.5	41
206	Optimal Endothelialisation of a New Compliant Poly(Carbonate-Urea)Urethane Vascular Graft with Effect of Physiological Shear Stress. European Journal of Vascular and Endovascular Surgery, 2000, 20, 342-352.	0.8	40
207	Microvascular dysfunction in women with polycystic ovary syndrome. Human Reproduction, 2005, 20, 3219-3224.	0.4	40
208	The Role of Thiols in Liver Ischemia-Reperfusion Injury. Current Pharmaceutical Design, 2006, 12, 2891-2901.	0.9	40
209	Surface structural conformations of fibrinogen polypeptides for improved biocompatibility. Biomaterials, 2010, 31, 3781-3792.	5.7	40
210	Effect of remote ischemic preconditioning on liver ischemia/reperfusion injury using a new mouse model. Liver Transplantation, 2011, 17, 70-82.	1.3	40
211	Tissue engineering vascular grafts a fortiori: looking back and going forward. Expert Opinion on Biological Therapy, 2015, 15, 231-244.	1.4	40
212	pHâ€Activatable MnOâ€Based Fluorescence and Magnetic Resonance Bimodal Nanoprobe for Cancer Imaging. Advanced Healthcare Materials, 2016, 5, 721-729.	3.9	40
213	Superior mesenteric artery blood flow in man measured with intra-arterial Doppler catheters. Journal of Hepatology, 1993, 17, 20-27.	1.8	39
214	Assessment of hepatic ischaemia reperfusion injury by measuring intracellular tissue oxygenation using near infrared spectroscopy. Liver, 2001, 21, 37-44.	0.1	39
215	Pretreatment with insulin-like growth factor I protects skeletal muscle cells against oxidative damage via PI3K/Akt and ERK1/2 MAPK pathways. Laboratory Investigation, 2010, 90, 391-401.	1.7	39
216	The one-pot synthesis of core/shell/shell CdTe/CdSe/ZnSe quantum dots in aqueous media for in vivo deep tissue imaging. Journal of Materials Chemistry, 2011, 21, 2877.	6.7	39

#	Article	IF	CITATIONS
217	Surface modification of POSSâ€nanocomposite biomaterials using reactive oxygen plasma treatment for cardiovascular surgical implant applications. Biotechnology and Applied Biochemistry, 2011, 58, 147-161.	1.4	39
218	Surface modification of a polyhedral oligomeric silsesquioxane poly(carbonate-urea) urethane (POSS-PCU) nanocomposite polymer as a stent coating for enhanced capture of endothelial progenitor cells. Biointerphases, 2013, 8, 23.	0.6	39
219	Quantum dot nanoparticle for optimization of breast cancer diagnostics and therapy in a clinical setting. Nanomedicine: Nanotechnology, Biology, and Medicine, 2016, 12, 1581-1592.	1.7	39
220	The current markers of cancer stem cell in oral cancers. Life Sciences, 2020, 249, 117483.	2.0	39
221	Impaired carotid and femoral viscoelastic properties and elevated intima–media thickness in peripheral vascular disease. Atherosclerosis, 2002, 164, 113-120.	0.4	38
222	Current Natural Bioactive Materials in Bone and Tooth Regeneration in dentistry: A Comprehensive Overview. Journal of Materials Research and Technology, 2021, 13, 2078-2078.	2.6	38
223	Tissue Engineering of Small IntestineCurrent Status. Biomacromolecules, 2006, 7, 2701-2709.	2.6	37
224	Quantification of Reactive Oxygen Species Generation by Photoexcitation of PEGylated Quantum Dots. Small, 2014, 10, 5106-5115.	5.2	37
225	Enhancing tissue integration and angiogenesis of a novel nanocomposite polymer using plasma surface polymerisation, an in vitro and in vivo study. Biomaterials Science, 2016, 4, 145-158.	2.6	37
226	Vitreous cryopreservation maintains the viscoelastic property of human vascular grafts. FASEB Journal, 2006, 20, 874-881.	0.2	36
227	Vascular dysfunction during pregnancy in women with polycystic ovary syndrome. Human Reproduction, 2007, 22, 1532-1539.	0.4	36
228	A new biodegradable nanocomposite based on polyhedral oligomeric silsesquioxane nanocages: cytocompatibility and investigation into electrohydrodynamic jet fabrication techniques for tissue-engineered scaffolds. Biotechnology and Applied Biochemistry, 2009, 52, 1.	1.4	36
229	<i>In vitro</i> small intestinal epithelial cell growth on a nanocomposite polycaprolactone scaffold. Biotechnology and Applied Biochemistry, 2009, 54, 221-229.	1.4	36
230	A silver nanocomposite biomaterial for bloodâ€contacting implants. Journal of Biomedical Materials Research - Part A, 2012, 100A, 2348-2357.	2.1	36
231	Poly(methyl methacrylate) bone cement, its rise, growth, downfall and future. Polymer International, 2021, 70, 1182-1201.	1.6	36
232	Ultra-low percolation threshold POSS-PCL/graphene electrically conductive polymer: Neural tissue engineering nanocomposites for neurosurgery. Materials Science and Engineering C, 2019, 104, 109915.	3.8	35
233	Stem cells for spinal cord injuries bearing translational potential. Neural Regeneration Research, 2018, 13, 35.	1.6	35
234	Interfacial adsorption of fibrinogen and its inhibition by RGD peptide: a combined physical study. Journal of Physics Condensed Matter, 2004, 16, S2483-S2491.	0.7	34

#	Article	IF	Citations
235	Assessment of the potential of progenitor stem cells extracted from human peripheral blood for seeding a novel vascular graft material. Cell Proliferation, 2008, 41, 321-335.	2.4	34
236	Inhibition of the p38 MAPK pathway sensitises human colon cancer cells to 5-fluorouracil treatment. International Journal of Oncology, 2011, 38, 1695-702.	1.4	34
237	Self-assembly of PbS hollow sphere quantum dots via gas–bubble technique for early cancer diagnosis. Journal of Luminescence, 2013, 133, 188-193.	1.5	34
238	Personalized In Vitro Cancer Modeling â€" Fantasy or Reality?. Translational Oncology, 2014, 7, 657-664.	1.7	34
239	Differentiation of human endometrial stem cells into urothelial cells on a three-dimensional nanofibrous silk-collagen scaffold: an autologous cell resource for reconstruction of the urinary bladder wall. Journal of Tissue Engineering and Regenerative Medicine, 2015, 9, 1268-1276.	1.3	34
240	Investigating the Application of Liposomes as Drug Delivery Systems for the Diagnosis and Treatment of Cancer. International Journal of Biomaterials, 2021, 2021, 1-16.	1.1	34
241	Magnetic Nanoparticles: New Perspectives in Drug Delivery. Current Pharmaceutical Design, 2017, 23, 2908-2917.	0.9	34
242	Human Adipose-Derived Stem Cells with Great Therapeutic Potential. Current Stem Cell Research and Therapy, 2019, 14, 532-548.	0.6	34
243	Changes in tissue oxygenation of the porcine liver measured by near-infrared spectroscopy. Liver Transplantation, 1999, 5, 219-226.	1.9	33
244	Effect of graded hypoxia on hepatic tissue oxygenation measured by near infrared spectroscopy. Journal of Hepatology, 1999, 31, 71-76.	1.8	33
245	Effect of graded hypoxia on the rat hepatic tissue oxygenation and energy metabolism monitored by nearâ€infrared and31P nuclear magnetic resonance spectroscopy. FASEB Journal, 2001, 15, 2642-2648.	0.2	33
246	Novel approaches to the measurement of arterial blood flow from dynamic digital X-ray images. IEEE Transactions on Medical Imaging, 2005, 24, 500-513.	5.4	33
247	Ischemic preconditioning of small bowel mitigates the late phase of reperfusion injury: heme oxygenase mediates cytoprotection. American Journal of Surgery, 2010, 199, 223-231.	0.9	33
248	Nanotopography and Plasma Treatment: Redesigning the Surface for Vascular Graft Endothelialisation. European Journal of Vascular and Endovascular Surgery, 2015, 49, 335-343.	0.8	33
249	Chimeric Antigen Receptor Based Therapy as a Potential Approach in Autoimmune Diseases: How Close Are We to the Treatment?. Frontiers in Immunology, 2020, 11, 603237.	2.2	33
250	Biology of insulin-like growth factor binding protein-4 and its role in cancer (review). International Journal of Oncology, 2006, 28, 1317-25.	1.4	33
251	A new technique for measuring the cell growth and metabolism of endothelial cells seeded on vascular prostheses. Journal of Biomedical Materials Research Part B, 2001, 55, 637-644.	3.0	32
252	Surface functionalization and grafting of heparin and/or RGD by an aqueous-based process to a poly(carbonate-urea)urethane cardiovascular graft for cellular engineering applications. Journal of Biomedical Materials Research Part B, 2003, 66A, 688-697.	3.0	32

#	Article	IF	CITATIONS
253	Protective Effects of Ischemic Preconditioning on the Intestinal Mucosal Microcirculation Following Ischemia–Reperfusion of the Intestine. Microcirculation, 2005, 12, 615-625.	1.0	32
254	Ischaemic preconditioning improves microvascular perfusion and oxygenation following reperfusion injury of the intestine. British Journal of Surgery, 2005, 92, 1169-1176.	0.1	32
255	Biology of insulin-like growth factor binding protein-4 and its role in cancer (review). International Journal of Oncology, 2006, 28, 1317.	1.4	32
256	Prospective Assessment of Lower-Extremity Peripheral Arterial Disease in Diabetic Patients Using a Novel Automated Optical Device. Angiology, 2007, 58, 579-585.	0.8	32
257	Effect of liver blood flow and function on hepatic indocyanine green clearance measured directly in a cirrhotic animal model. British Journal of Surgery, 2002, 87, 568-574.	0.1	31
258	Role of cyclooxygenase-2 in the angiogenesis of colorectal cancer. International Journal of Colorectal Disease, 2004, 19, 1-11.	1.0	31
259	Effect of ischaemic preconditioning on hepatic oxygenation, microcirculation and function in a rat model of moderate hepatic steatosis. Clinical Science, 2005, 108, 55-63.	1.8	31
260	<i>In situ</i> endothelialization of intravascular stents from progenitor stem cells coated with nanocomposite and functionalized biomolecules. Biotechnology and Applied Biochemistry, 2011, 58, 2-13.	1.4	31
261	Nerve regeneration with aid of nanotechnology and cellular engineering. Biotechnology and Applied Biochemistry, 2011, 58, 288-300.	1.4	31
262	Conjugation with RGD Peptides and Incorporation of Vascular Endothelial Growth Factor Are Equally Efficient for Biofunctionalization of Tissue-Engineered Vascular Grafts. International Journal of Molecular Sciences, 2016, 17, 1920.	1.8	31
263	Lung tissue engineering: An update. Journal of Cellular Physiology, 2019, 234, 19256-19270.	2.0	31
264	A New Nanocomposite Copolymer Based On Functionalised Graphene Oxide for Development of Heart Valves. Scientific Reports, 2020, 10, 5271.	1.6	31
265	Adipose derived stem cells and platelet rich plasma improve the tissue integration and angiogenesis of biodegradable scaffolds for soft tissue regeneration. Molecular Biology Reports, 2020, 47, 2005-2013.	1.0	31
266	UV surface modification of a new nanocomposite polymer to improve cytocompatibility. Journal of Biomaterials Science, Polymer Edition, 2007, 18, 453-468.	1.9	30
267	The Use of Adipose Stem Cells in Cranial Facial Surgery. Stem Cell Reviews and Reports, 2014, 10, 671-685.	5.6	30
268	Transdermal Delivery of Functional Collagen Via Polyvinylpyrrolidone Microneedles. Annals of Biomedical Engineering, 2015, 43, 2978-2990.	1.3	30
269	Novel POSS–PCU Nanocomposite Material as a Biocompatible Coating for Quantum Dots. Bioconjugate Chemistry, 2015, 26, 2384-2396.	1.8	30
270	Measurement of Hepatic Tissue Hypoxia Using Near Infrared Spectroscopy: Comparison with Hepatic Vein Oxygen Partial Pressure. European Surgical Research, 2000, 32, 207-214.	0.6	29

#	Article	IF	CITATIONS
271	Differentiation of primary and secondary Raynaud's disease by carotid arterial stiffness. European Journal of Vascular and Endovascular Surgery, 2003, 25, 336-341.	0.8	29
272	A mammographic image analysis method to detect and measure changes in breast density. European Journal of Radiology, 2004, 52, 276-282.	1.2	29
273	AAA Stent–Grafts: Past Problems and Future Prospects. Annals of Biomedical Engineering, 2010, 38, 1259-1275.	1.3	29
274	The role of immunophilin ligands in nerve regeneration. Regenerative Medicine, 2011, 6, 635-652.	0.8	29
275	Systematic review: the applications of nanotechnology in gastroenterology. Alimentary Pharmacology and Therapeutics, 2012, 36, 213-221.	1.9	29
276	Investigation of Schwann cell behaviour on RGD-functionalised bioabsorbable nanocomposite for peripheral nerve regeneration. New Biotechnology, 2014, 31, 203-213.	2.4	29
277	Pyrrolidine dithiocarbamate reduces ischemia-reperfusion injury of the small intestine. World Journal of Gastroenterology, 2005, 11, 7308.	1.4	29
278	Cellular Engineering of Conduits for Coronary and Lower Limb Bypass Surgery: Role of Cell Attachment Peptides and Pre-conditioning in Optimising Smooth Muscle Cells (SMC) Adherence to Compliant Poly(carbonate–urea)urethane (MyoLink™) Scaffolds. European Journal of Vascular and Endovascular Surgery, 2004, 27, 608-616.	0.8	28
279	Integrins: A Method of Early Intervention in the Treatment of Colorectal Liver Metastases. Current Pharmaceutical Design, 2008, 14, 296-305.	0.9	28
280	<i>In vivo</i> study of a model tissueâ€engineered smallâ€diameter vascular bypass graft. Biotechnology and Applied Biochemistry, 2011, 58, 14-24.	1.4	28
281	In Vitro Hydrodynamic Assessment of a New Transcatheter Heart Valve Concept (the TRISKELE). Journal of Cardiovascular Translational Research, 2017, 10, 104-115.	1.1	28
282	The role of nanotechnology in current COVID-19 outbreak. Heliyon, 2021, 7, e06841.	1.4	28
283	A novel POSS-coated quantum dot for biological application. International Journal of Nanomedicine, 2012, 7, 3915.	3.3	27
284	The application of POSS nanostructures in cartilage tissue engineering: the chondrocyte response to nanoscale geometry. Journal of Tissue Engineering and Regenerative Medicine, 2015, 9, E27-E38.	1.3	27
285	Next generation covered stents made from nanocomposite materials: A complete assessment of uniformity, integrity and biomechanical properties. Nanomedicine: Nanotechnology, Biology, and Medicine, 2016, 12, 1-12.	1.7	27
286	Review paper: Principles and Applications of Surface Analytical Techniques at the Vascular Interface. Journal of Biomaterials Applications, 2006, 21, 5-32.	1.2	26
287	Degradation studies on biodegradable nanocomposite based on polycaprolactone/polycarbonate (80:20%) polyhedral oligomeric silsesquioxane. Journal of Biomedical Materials Research - Part A, 2009, 91A, 834-844.	2.1	26
288	Synergistic photothermal ablative effects of functionalizing carbon nanotubes with a POSS-PCU nanocomposite polymer. Journal of Nanobiotechnology, 2012, 10, 34.	4.2	26

#	Article	IF	Citations
289	Nitric oxide-eluting nanocomposite for cardiovascular implants. Journal of Materials Science: Materials in Medicine, 2014, 25, 917-929.	1.7	26
290	Emerging roles of exosomal miRNAs in breast cancer drug resistance. IUBMB Life, 2019, 71, 1672-1684.	1.5	26
291	The Current Strategies in Controlling Oral Diseases by Herbal and Chemical Materials. Evidence-based Complementary and Alternative Medicine, 2021, 2021, 1-22.	0.5	26
292	Measurement of Liver Blood Flow: A Review. HPB Surgery, 1991, 4, 171-186.	2.2	25
293	Hepatic Indocyanine Green Uptake and Excretion in a Rabbit Model of Steatosis. European Surgical Research, 2001, 33, 193-201.	0.6	25
294	A model to study total hepatic ischemia–reperfusion injury. Transplantation Proceedings, 2004, 36, 2586-2589.	0.3	25
295	Is there an alternative to systemic anticoagulation, as related to interventional biomedical devices?. Expert Review of Medical Devices, 2006, 3, 245-261.	1.4	25
296	Dynamic protein adsorption at the polyurethane copolymer/water interface. Biomedical Materials (Bristol), 2008, 3, 034123.	1.7	25
297	Next generation stent coatings: convergence of biotechnology and nanotechnology. Trends in Biotechnology, 2012, 30, 406-409.	4.9	25
298	Nanohydroxyapatite Effect on the Degradation, Osteoconduction and Mechanical Properties of Polymeric Bone Tissue Engineered Scaffolds. The Open Orthopaedics Journal, 2016, 10, 900-919.	0.1	25
299	Development of mechano-responsive polymeric scaffolds using functionalized silica nano-fillers for the control of cellular functions. Nanomedicine: Nanotechnology, Biology, and Medicine, 2016, 12, 1725-1733.	1.7	25
300	Validation of a quantitative radiographic technique to estimate pulsatile blood flow waveforms using digital subtraction angiographic data. Journal of Biomedical Engineering, 1991, 13, 225-233.	0.7	24
301	Functional blocking of specific integrins inhibit colonic cancer migration. Clinical and Experimental Metastasis, 2009, 26, 769-780.	1.7	24
302	Tendon Reconstruction with Tissue Engineering Approach—A Review. Journal of Biomedical Nanotechnology, 2015, 11, 1495-1523.	0.5	24
303	Critical parameter of burst pressure measurement in development of bypass grafts is highly dependent on methodology used. Journal of Vascular Surgery, 2006, 44, 846-852.	0.6	23
304	Formation and role of plasma S-nitrosothiols in liver ischemia-reperfusion injury. Free Radical Biology and Medicine, 2007, 42, 882-892.	1.3	23
305	A novel cell therapy for stress urinary incontinence, shortâ€ŧerm outcome. Neurourology and Urodynamics, 2013, 32, 377-382.	0.8	23
306	Validation of Volume Blood Flow Measurements Using Three-Dimensional Distance-Concentration Functions Derived from Digital X-Ray Angiograms. Investigative Radiology, 1994, 29, 434-442.	3.5	22

#	Article	IF	CITATIONS
307	Extraction of cells for single-stage seeding of vascular-bypass grafts. Biotechnology and Applied Biochemistry, 2003, 38, 35.	1.4	22
308	Incorporation of a lauric acid-conjugated GRGDS peptide directly into the matrix of a poly(carbonate-urea)urethane polymer for use in cardiovascular bypass graft applications. Journal of Biomedical Materials Research - Part A, 2006, 79A, 606-617.	2.1	22
309	Advancing nasal reconstructive surgery: the application of tissue engineering technology. Journal of Tissue Engineering and Regenerative Medicine, 2012, 6, 757-768.	1.3	22
310	Orchestrating Cell/Material Interactions For Tissue Engineering of Surgical Implants. Macromolecular Bioscience, 2012, 12, 1010-1021.	2.1	22
311	Evaluation of Sterilisation Techniques for Regenerative Medicine Scaffolds Fabricated with Polyurethane Nonbiodegradable and Bioabsorbable Nanocomposite Materials. International Journal of Biomaterials, 2018, 2018, 1-14.	1.1	22
312	Vitamin E at a high dose as an antiâ€ferroptosis drug and not just a supplement for COVIDâ€19 treatment. Biotechnology and Applied Biochemistry, 2022, 69, 1058-1060.	1.4	22
313	Electrohydrodynamic Jetting Behaviour of Polyhedral Oligomeric Silsesquioxane Nanocomposite. Journal of Biomaterials Applications, 2009, 23, 293-309.	1.2	21
314	Nanotechnology and its applications in surgery. British Journal of Surgery, 2010, 97, 463-465.	0.1	21
315	Cyclooxygenase/lipoxygenase shunting lowers the anti-cancer effect of cyclooxygenase-2 inhibition in colorectal cancer cells. World Journal of Surgical Oncology, 2012, 10, 200.	0.8	21
316	Remote preconditioning improves hepatic oxygenation after ischaemia reperfusion injury. Transplant International, 2012, 25, 783-791.	0.8	21
317	Surface and mechanical analysis of explanted Poly Implant ProsthÃ"se silicone breast implants. British Journal of Surgery, 2013, 100, 761-767.	0.1	21
318	A polyhedral oligomeric silsesquioxane–based bilayered dermal scaffold seeded with adipose tissue–derived stem cells: inÂvitro assessment of biomechanical properties. Journal of Surgical Research, 2014, 188, 361-372.	0.8	21
319	An arsenal of magnetic nanoparticles; perspectives in the treatment of cancer. Nanomedicine, 2016, 11, 2215-2232.	1.7	21
320	Nanotechnology and regenerative therapeutics in plastic surgery: The next frontier. Journal of Plastic, Reconstructive and Aesthetic Surgery, 2016, 69, 1-13.	0.5	21
321	Comparison of the antibacterial effects of a short cationic peptide and 1% silver bioactive glass against extensively drug-resistant bacteria, Pseudomonas aeruginosa and Acinetobacter baumannii, isolated from burn patients. Amino Acids, 2018, 50, 1617-1628.	1.2	21
322	Nanotechnology and bio-functionalisation for peripheral nerve regeneration. Neural Regeneration Research, 2015, 10, 1191.	1.6	21
323	Chemotherapeutic effects of Apigenin in breast cancer: Preclinical evidence and molecular mechanisms; enhanced bioavailability by nanoparticles. Biotechnology Reports (Amsterdam,) Tj ETQq1 1 0.7843	3142:gBT /0 	Ov erl ock 10 T
324	Quantitating Therapeutic Disruption of Tumor Blood Flow with Intravital Video Microscopy: Table 1 Cancer Research, 2006, 66, 11517-11519.	0.4	20

#	Article	IF	CITATIONS
325	The role of established and emerging risk factors in peripheral vascular graft occlusion. Expert Opinion on Pharmacotherapy, 2007, 8, 901-911.	0.9	20
326	Channelrhodopsins: visual regeneration and neural activation by a light switch. New Biotechnology, 2013, 30, 461-474.	2.4	20
327	Treatment of life-threatening wounds with a combination of allogenic platelet-rich plasma, fibrin glue and collagen matrix, and a literature review. Experimental and Therapeutic Medicine, 2014, 8, 423-429.	0.8	20
328	Argon plasma modification promotes adipose derived stem cells osteogenic and chondrogenic differentiation on nanocomposite polyurethane scaffolds; implications for skeletal tissue engineering. Materials Science and Engineering C, 2019, 105, 110085.	3.8	20
329	Can Tissue Engineering Bring Hope to the Development of Human Tympanic Membrane?. Tissue Engineering - Part B: Reviews, 2021, 27, 572-589.	2.5	20
330	Single stage cell seeding of small diameter prosthetic cardiovascular grafts. Clinical Hemorheology and Microcirculation, 2005, 33, 209-26.	0.9	20
331	Endothelial Progenitor Cells and Their Potential Clinical Applications in Peripheral Arterial Disease. Endothelium: Journal of Endothelial Cell Research, 2005, 12, 243-250.	1.7	19
332	Glycine maintains mitochondrial activity and bile composition following warm liver ischemiaâ€reperfusion injury. Journal of Gastroenterology and Hepatology (Australia), 2011, 26, 194-200.	1.4	19
333	Remote ischaemic preconditioning versus no remote ischaemic preconditioning for vascular and endovascular surgical procedures. The Cochrane Library, 2011, , CD008472.	1.5	19
334	Modulation of microcirculatory changes in the late phase of hepatic ischaemia–reperfusion injury by remote ischaemic preconditioning. Hpb, 2012, 14, 87-97.	0.1	19
335	Nanotechnology-Based Gene-Eluting Stents. Molecular Pharmaceutics, 2013, 10, 1279-1298.	2.3	19
336	The influence of porosity on the hemocompatibility of polyhedral oligomeric silsesquioxane poly (caprolactone-urea) urethane. International Journal of Biochemistry and Cell Biology, 2015, 68, 176-186.	1.2	19
337	Role of insulin-like growth factor binding protein-4 in prevention of colon cancer. World Journal of Surgical Oncology, 2007, 5, 128.	0.8	18
338	Increased apoptosis and decreased proliferation of colorectal cancer cells using insulin-like growth factor binding protein-4 gene delivered locally by gene transfer. Colorectal Disease, 2007, 9, 625-631.	0.7	18
339	Properties Evaluation of a New MRI Contrast Agent Based on Gd-Loaded Nanoparticles. Biological Trace Element Research, 2010, 137, 324-334.	1.9	18
340	Nanostructured Materials for Cardiovascular Tissue Engineering. Journal of Nanoscience and Nanotechnology, 2012, 12, 4775-4785.	0.9	18
341	Controllable degradation kinetics of POSS nanoparticle-integrated poly(ε-caprolactone urea)urethane elastomers for tissue engineering applications. Scientific Reports, 2015, 5, 15040.	1.6	18
342	A Biodesigned Nanocomposite Biomaterial for Auricular Cartilage Reconstruction. Advanced Healthcare Materials, 2016, 5, 1203-1212.	3.9	18

#	Article	IF	CITATIONS
343	Induced Pluripotent Stem Cells (iPSCs) Provide a Potentially Unlimited T Cell Source for CAR-T Cell Development and Off-the-Shelf Products. Pharmaceutical Research, 2021, 38, 931-945.	1.7	18
344	Graphene-Based Materials Prove to Be a Promising Candidate for Nerve Regeneration Following Peripheral Nerve Injury. Biomedicines, 2022, 10, 73.	1.4	18
345	Direct measurement of hepatic tissue hypoxia by using a novel tcp O2 /p CO2 monitoring system in comparison with near-infrared spectroscopy. Liver International, 2003, 23, 163-170.	1.9	17
346	Malignant ascites increases the antioxidant ability of human ovarian (SKOV-3) and gastric adenocarcinoma (KATO-III) cells. Gynecologic Oncology, 2005, 96, 430-438.	0.6	17
347	A Sutureless Aortic Stent-Graft Based on a Nitinol Scaffold Bonded to a Compliant Nanocomposite Polymer Is Durable for 10ÂYears in a Simulated In Vitro Model. Journal of Endovascular Therapy, 2012, 19, 415-427.	0.8	17
348	Arterial Tissue Regeneration for Pediatric Applications: Inspiration From Upâ€toâ€Date Tissueâ€Engineered Vascular Bypass Grafts. Artificial Organs, 2013, 37, 423-434.	1.0	17
349	Chondrogenic potential of bone marrow–derived mesenchymal stem cells on a novel, auricular-shaped, nanocomposite scaffold. Journal of Tissue Engineering, 2013, 4, 204173141351678.	2.3	17
350	λ Phage Nanobioparticle Expressing Apoptin Efficiently Suppress Human Breast Carcinoma Tumor Growth In Vivo. PLoS ONE, 2013, 8, e79907.	1.1	17
351	Tissue-engineered lymphatic graft for the treatment of lymphedema. Journal of Surgical Research, 2014, 192, 544-554.	0.8	17
352	Injectable Hydrogel versus Plastically Compressed Collagen Scaffold for Central Nervous System Applications. International Journal of Biomaterials, 2018, 2018, 1-10.	1.1	17
353	Inducing apoptosis of human colon cancer cells by an IGF-I D domain analogue peptide. Molecular Cancer, 2008, 7, 17.	7.9	16
354	Does Doxycycline work in synergy with cisplatin and oxaliplatin in colorectal cancer?. World Journal of Surgical Oncology, 2009, 7, 2.	0.8	16
355	The Implications of Human Stem Cell Differentiation to Endothelial Cell Via Fluid Shear Stress in Cardiovascular Regenerative Medicine: A Review. Current Pharmaceutical Design, 2010, 16, 3848-3861.	0.9	16
356	How safe and how good are drug-eluting stents?. Future Cardiology, 2011, 7, 251-270.	0.5	16
357	Octa-ammonium POSS-conjugated single-walled carbon nanotubes as vehicles for targeted delivery of paclitaxel. Nano Reviews, 2015, 6, 28297.	3.7	16
358	Novel heart valve prosthesis with self-endothelialization potential made of modified polyhedral oligomeric silsesquioxane-nanocomposite material. Biointerphases, 2016, 11, 029801.	0.6	16
359	Percutaneous Heart Valve Replacement: An Update. Trends in Cardiovascular Medicine, 2008, 18, 117-125.	2.3	15
360	Bioabsorbable Bypass Grafts Biofunctionalised with RGD Have Enhanced Biophysical Properties and Endothelialisation Tested In vivo. Frontiers in Pharmacology, 2016, 7, 136.	1.6	15

#	Article	IF	CITATIONS
361	Limitations in Clinical Translation of Nanoparticle-Based Gene Therapy. Trends in Biotechnology, 2017, 35, 1124-1125.	4.9	15
362	The effect of mechanically enhancing portal venous inflow on hepatic oxygenation, microcirculation, and function in a rabbit model with extensive hepatic fibrosis. Hepatology, 1999, 30, 46-52.	3.6	14
363	Development and evaluation of an ideal flow circuit: assessing the dynamic behavior of endothelial cell seeded grafts. Journal of Artificial Organs, 2000, 3, 16-24.	0.4	14
364	Pyrrolidine dithiocarbamate protects the small bowel from warm ischaemia/reperfusion injury of the intestine: the role of haem oxygenase. Clinical Science, 2006, 111, 373-380.	1.8	14
365	The effect of shear stress on human endothelial cells seeded on cylindrical viscoelastic conduits: an investigation of gene expression. Biotechnology and Applied Biochemistry, 2006, 45, 119.	1.4	14
366	<i>In vivo </i> models for early development of colorectal liver metastasis. International Journal of Experimental Pathology, 2008, 89, 1-12.	0.6	14
367	Chondrogenic potential of blood-acquired mesenchymal progenitor cells. Journal of Plastic, Reconstructive and Aesthetic Surgery, 2010, 63, 841-847.	0.5	14
368	Doxycycline in Mitochondrial Mediated Pathway of Apoptosis: A Systematic Review. Anti-Cancer Agents in Medicinal Chemistry, 2010, 10, 556-563.	0.9	14
369	Cancer Antibody Enhanced Real Time Imaging Cell Probes – a Novel Theranostic Tool using Polymer Linked Carbon Nanotubes and Quantum Dots. Anti-Cancer Agents in Medicinal Chemistry, 2013, 13, 821-832.	0.9	14
370	Synthesis and evaluation of amphiphilic RGD derivatives: Uses for solvent casting in polymers and tissue engineering applications. Medical and Biological Engineering and Computing, 2003, 41, 740-745.	1.6	13
371	Aortic function is compromised in a rat model of polycystic ovary syndrome. Human Reproduction, 2006, 21, 651-656.	0.4	13
372	Attenuation of warm ischemia–reperfusion injury in the liver by bucillamine through decreased neutrophil activation and Bax/Bclâ€⊋ modulation. Journal of Gastroenterology and Hepatology (Australia), 2010, 25, 1891-1899.	1.4	13
373	Next generation brain implant coatings and nerve regeneration via novel conductive nanocomposite development., 2011, 2011, 3253-7.		13
374	Treatment of non-healing sternum wound after open-heart surgery with allogenic platelet-rich plasma and fibrin glue-preliminary outcomes. Indian Journal of Plastic Surgery, 2013, 46, 538-542.	0.2	13
375	COVID-19 Vaccines in Clinical Trials and their Mode of Action for Immunity against the Virus. Current Pharmaceutical Design, 2021, 27, 1553-1563.	0.9	13
376	Strengthening the CARâ€T cell therapeutic application using CRISPR/Cas9 technology. Biotechnology and Bioengineering, 2021, 118, 3691-3705.	1.7	13
377	A new transcatheter heart valve concept (the TRISKELE): feasibility in an acute preclinical model. EuroIntervention, 2016, 12, 901-908.	1.4	13
378	Performance of a polyurethane vascular prosthesis carrying a dipyridamole (Persantin) coating on its lumenal surface. Journal of Biomedical Materials Research Part B, 2002, 61, 337-338.	3.0	12

#	Article	IF	CITATIONS
379	Measurement of critical lower limb tissue hypoxia by coupling chemical and optical techniques. Clinical Science, 2005, 108, 159-165.	1.8	12
380	Assessment of Lower Extremity Peripheral Arterial Disease Using a Novel Automated Optical Device. Vascular and Endovascular Surgery, 2008, 41, 522-527.	0.3	12
381	The Hepatic Soluble Guanylyl Cyclase-Cyclic Guanosine Monophosphate Pathway Mediates the Protection of Remote Ischemic Preconditioning on the Microcirculation in Liver Ischemia-Reperfusion Injury. Transplantation, 2012, 93, 880-886.	0.5	12
382	Biofunctionalized quantum dots for live monitoring of stem cells: applications in regenerative medicine. Regenerative Medicine, 2012, 7, 335-347.	0.8	12
383	Altered sensitivity to nitric oxide donors, induced by intravascular infusion of quantum dots, in murine mesenteric arteries. Nanomedicine: Nanotechnology, Biology, and Medicine, 2013, 9, 532-539.	1.7	12
384	Carbon Nanotubes in the Diagnosis and Treatment of Malignant Melanoma. Anti-Cancer Agents in Medicinal Chemistry, 2013, 13 , $171-185$.	0.9	12
385	Development of a Tissueâ€Engineered Lymphatic Graft Using Nanocomposite Polymer for the Treatment of Secondary Lymphedema. Artificial Organs, 2016, 40, E1-11.	1.0	12
386	Haemodynamic Regulation of Gene Expression in Vascular Tissue Engineering. Current Vascular Pharmacology, 2011, 9, 167-187.	0.8	12
387	Regenerative Medicine Applications in Wound Care. Current Stem Cell Research and Therapy, 2017, 12, 658-674.	0.6	12
388	Chemical Characterization and Cytotoxic/Antibacterial Effects of Nine Iranian Propolis Extracts on Human Fibroblast Cells and Oral Bacteria. BioMed Research International, 2022, 2022, 1-14.	0.9	12
389	Synthesis of Mercaptosuccinic Acid/MercaptoPolyhedral Oligomeric Silsesquioxane Coated Cadmium Telluride Quantum Dots in Cell Labeling Applications. Journal of Nanoscience and Nanotechnology, 2012, 12, 4928-4935.	0.9	11
390	Nasal Reconstruction Using Tissue Engineered Constructs. Annals of Plastic Surgery, 2013, 71, 238-244.	0.5	11
391	Bioabsorbable Stent Quo Vadis: A Case for Nano-Theranostics. Theranostics, 2014, 4, 514-533.	4.6	11
392	Nerve Regeneration and Bioengineering. , 2014, , 799-810.		11
393	Tissue engineering's green shoots of disruptive innovation. Lancet, The, 2014, 384, 288-290.	6.3	11
394	The risk of pancreatic adenocarcinoma following SARS-CoV family infection. Scientific Reports, 2021, 11, 12948.	1.6	11
395	Non-invasive measurement of hepatic oxygenation by an oxygen electrode in human orthotopic liver transplantation. Medical Engineering and Physics, 2000, 22, 371-377.	0.8	10
396	Letter to the Editor. Artificial Organs, 2002, 26, 209-210.	1.0	10

#	Article	IF	CITATIONS
397	IGF-I activates caspases 3/7, 8 and 9 but does not induce cell death in colorectal cancer cells. BMC Cancer, 2009, 9, 158.	1.1	10
398	The effect of consecutively larger doses of l-arginine on hepatic microcirculation and tissue oxygenation in hepatic steatosis. Microvascular Research, 2009, 78, 206-211.	1.1	10
399	Intracellular oxygenation and cytochrome oxidase C activity in ischemic preconditioning of steatotic rabbit liver. American Journal of Surgery, 2010, 200, 507-518.	0.9	10
400	Development of conductive polymer with carbon nanotubes for regenerative medicine applications., 2010, 2010, 815-8.		10
401	Modifying three-dimensional scaffolds from novel nanocomposite materials using dissolvable porogen particles for use in liver tissue engineering. Journal of Biomaterials Applications, 2013, 28, 250-261.	1.2	10
402	Regenerative nanotechnology in oral and maxillofacial surgery. British Journal of Oral and Maxillofacial Surgery, 2014, 52, 884-893.	0.4	10
403	Vascularisation in regenerative therapeutics and surgery. Materials Science and Engineering C, 2015, 54, 225-238.	3.8	10
404	Towards reconstruction of epithelialized cartilages from autologous adipose tissue-derived stem cells. Journal of Tissue Engineering and Regenerative Medicine, 2017, 11, 3078-3089.	1.3	10
405	Morphological and Hemodynamic Assessments of Carotid Stenosis Using Quantitative Digital Subtraction Angiography. Stroke, 1996, 27, 1672-1678.	1.0	10
406	Will Tissue-Engineering Strategies Bring New Hope for the Reconstruction of Nasal Septal Cartilage?. Current Stem Cell Research and Therapy, 2020, 15, 144-154.	0.6	10
407	Laser Doppler imaging for the assessment of liver perfusion during transplantation. European Journal of Gastroenterology and Hepatology, 1993, 5, 479-482.	0.8	9
408	The influence of peripheral vascular disease on the carotid and femoral wall mechanics in subjects with abdominal aortic aneurysm. Journal of Vascular Surgery, 2003, 37, 403-409.	0.6	9
409	Induction of adhesion molecule expression in liver ischaemia–reperfusion injury is associated with impaired hepatic parenchymal microcirculation. British Journal of Surgery, 2004, 91, 1034-1039.	0.1	9
410	A comparison of bile composition from heart-beating and non–heart-beating rabbit organ donors during normothermic extracorporeal liver perfusion: Experimental evaluation using proton magentic resonance spectroscopy. Transplantation Proceedings, 2004, 36, 2914-2916.	0.3	9
411	Development of an RNA isolation procedure for the characterisation of human endothelial cell interactions with polyurethane cardiovascular bypass grafts. Biomaterials, 2005, 26, 3987-3993.	5.7	9
412	Endothelial Cell Retention on a Viscoelastic Nanocomposite Vascular Conduit Is Improved by Exposure to Shear Stress Preconditioning Prior to Physiological Flow. Artificial Organs, 2008, 32, 977-981.	1.0	9
413	Biomedical Application of Polyhedral Oligomeric Silsesquioxane Nanoparticles. Advances in Silicon Science, 2011, , 363-399.	0.6	9
414	A novel method for the extraction and culture of progenitor stem cells from human peripheral blood for use in regenerative medicine. Biotechnology and Applied Biochemistry, 2011, 58, 328-334.	1.4	9

#	Article	IF	CITATIONS
415	Polyhedral Oligomeric Silsesquioxane Poly (Carbonate-Urea) Urethane (POSS-PCU): Applications in Nanotechnology and Regenerative Medicine. Critical Reviews in Biomedical Engineering, 2014, , .	0.5	9
416	Sterilization-Induced Changes in Surface Topography of Biodegradable POSS-PCLU and the Cellular Response of Human Dermal Fibroblasts. Tissue Engineering - Part C: Methods, 2015, 21, 614-630.	1.1	9
417	Stem cells for tissue engineered vascular bypass grafts. Artificial Cells, Nanomedicine and Biotechnology, 2017, 45, 999-1010.	1.9	9
418	Effect of Laser Irradiation on Cell Cycle and Mitosis. Journal of Lasers in Medical Sciences, 2018, 9, 249-253.	0.4	9
419	Insulin-like growth factor binding protein-4 gene therapy increases apoptosis by altering Bcl-2 and Bax proteins and decreases angiogenesis in colorectal cancer. International Journal of Oncology, 0, , .	1.4	9
420	Insulin-like growth factor binding protein-4 gene therapy increases apoptosis by altering Bcl-2 and Bax proteins and decreases angiogenesis in colorectal cancer. International Journal of Oncology, 2007, 30, 883-8.	1.4	9
421	An <i>in vivo</i> rat model for early development of colorectal cancer metastasis to liver. International Journal of Experimental Pathology, 2008, 89, 447-457.	0.6	8
422	Fumed Silica Nanoparticle Mediated Biomimicry for Optimal Cellâ€" <scp>M</scp> aterial Interactions for Artificial Organ Development. Macromolecular Bioscience, 2014, 14, 307-313.	2.1	8
423	The influence of silica nanoparticles on small mesenteric arterial function. Nanomedicine, $2016, 11, 2131-2146.$	1.7	8
424	Fabrications of small diameter compliance bypass conduit using electrospinning of clinical grade polyurethane. Vascular, 2019, 27, 636-647.	0.4	8
425	Key Regulatory miRNAs and their Interplay with Mechanosensing and Mechanotransduction Signaling Pathways in Breast Cancer Progression. Molecular Cancer Research, 2020, 18, 1113-1128.	1.5	8
426	Flow behaviour of a POSS biopolymer solution. Biorheology, 2007, 44, 265-72.	1.2	8
427	<title>Validation of an optical flow algorithm to measure blood flow waveforms in arteries using dynamic digital x-ray images</title> ., 2000, , .		7
428	Mediastinal fat: a source of cells for tissue engineering of coronary artery bypass grafts. Microvascular Research, 2003, 65, 61-64.	1.1	7
429	Acute Limb Ischemia Caused by Femoral Arterial Line Induces Remote Liver Injury in a Rabbit Model of Liver Ischemia/Reperfusion Injury. Angiology, 2009, 60, 554-561.	0.8	7
430	Bucillamine improves hepatic microcirculation and reduces hepatocellular injury after liver warm ischaemia-reperfusion injury. Hpb, 2009, 11, 264-273.	0.1	7
431	Application of OctaAmmonium-POSS Functionalized Single Walled Carbon Nanotubes for Thermal Treatment of Cancer. Journal of Nanoscience and Nanotechnology, 2012, 12, 9018-9028.	0.9	7
432	A potential platform for developing 3D tubular scaffolds for paediatric organ development. Journal of Materials Science: Materials in Medicine, 2015, 26, 141.	1.7	7

#	Article	IF	Citations
433	Preventing in-stent restenosis using lipoprotein (a), lipid and cholesterol adsorbent materials. Medical Hypotheses, 2015, 85, 986-988.	0.8	7
434	Haemoxygenase modulates cytokine induced neutrophil chemoattractant in hepatic ischemia reperfusion injury. World Journal of Gastroenterology, 2016, 22, 7518.	1.4	7
435	The study of collagen immobilization on a novel nanocomposite to enhance cell adhesion and growth. Iranian Biomedical Journal, 2011, 15, 6-14.	0.4	7
436	Effects of hepatic ischaemia/reperfusion injury in a rabbit model of Indocyanine Green clearance. Clinical Science, 2002, 102, 579-586.	1.8	6
437	Viscoelastic behaviour of a small calibre vascular graft made from a POSS-nanocomposite. , 2010, 2010, 251-4.		6
438	Effect of human urine on the tensile strength of Asutures used for hypospadias surgery. Journal of Plastic, Reconstructive and Aesthetic Surgery, 2013, 66, 835-838.	0.5	6
439	Rapid Production of Autologous Fibrin Hydrogels for Cellular Encapsulation in Organ Regeneration. Methods in Molecular Biology, 2013, 1001, 145-152.	0.4	6
440	The Effect of Melanocyte Stimulating Hormone and Hydroxyapatite on Osteogenesis in Pulp Stem Cells of Human Teeth Transferred into Polyester Scaffolds. Fibers and Polymers, 2018, 19, 2245-2253.	1.1	6
441	<p>In vitro and in vivo Evaluation of the Efficacy and Safety of Powder Hydroxypropylmethylcellulose as Nasal Mucosal Barrier</p> . Medical Devices: Evidence and Research, 2020, Volume 13, 107-113.	0.4	6
442	Combination of 5â€azaytidine and hanging drop culture convert fat cell into cardiac cell. Biotechnology and Applied Biochemistry, 2021, 68, 92-101.	1.4	6
443	Intracranial Stents Past, Present and the Future Trend: Stents Made with Nano-particle or Nanocomposite Biomaterials. Current Medicinal Chemistry, 2014, 21, 4290-4299.	1.2	6
444	Dental Radiographic/Digital Radiography Technology along with Biological Agents in Human Identification. Scanning, 2022, 2022, 1-30.	0.7	6
445	Polyhedral oligomeric silsesquioxane poly(carbonate-urea) urethane (POSS-PCU): applications in nanotechnology and regenerative medicine. Critical Reviews in Biomedical Engineering, 2013, 41, 495-513.	0.5	6
446	Regarding "Isolation of endothelial cells and their progenitor cells from human peripheral blood― Journal of Vascular Surgery, 2002, 35, 827.	0.6	5
447	HER2 (ErbB2) receptors, a potential therapeutic target in squamous cell carcinoma of oesophagus. British Journal of Cancer, 2006, 94, 1213-1214.	2.9	5
448	Hind Limb Remote Preconditioning of the Liver: A Role for Nitric Oxide and HO-1. Transplantation, 2007, 83, 363-364.	0.5	5
449	Remote Ischemic Preconditioning by Hindlimb Occlusion Prevents Liver Ischemic/Reperfusion Injury. Annals of Surgery, 2011, 254, 178-180.	2.1	5
450	Evaluation of experimental methods for nitric oxide release from cardiovascular implants; bypass grafts as an exemplar. Therapeutic Advances in Cardiovascular Disease, 2015, 9, 375-388.	1.0	5

#	Article	IF	CITATIONS
451	The effect of TGF- $\hat{1}^21$ and BMP-4 on bone marrow-derived stem cell morphology on a novel bioabsorbable nanocomposite material. Artificial Cells, Nanomedicine and Biotechnology, 2015, 43, 230-234.	1.9	5
452	Blood flow measurements using 3D distance-concentration functions derived from digital x-ray angiograms. Developments in Cardiovascular Medicine, 1996, , 425-442.	0.1	5
453	A note on the compartmental analysis and related issues in laser Doppler flowmetry. IEEE Transactions on Biomedical Engineering, 1998, 45, 534-537.	2.5	4
454	The effect of image colour distortion on evaluation of donor liver suitability for transplantation. Computers in Biology and Medicine, 2004, 34, 615-632.	3.9	4
455	The longâ€term stability in gene expression of human endothelial cells permits the production of large numbers of cells suitable for use in regenerative medicine. Biotechnology and Applied Biochemistry, 2011, 58, 371-375.	1.4	4
456	The Use of Skin Substitutes in the Treatment of Burns. , 2014, , 771-782.		4
457	Emerging In Vitro 3D Tumour Models in Nanoparticle-Based Gene and Drug Therapy. Trends in Biotechnology, 2018, 36, 477-480.	4.9	4
458	Skin regenerative medicine advancements in the Islamic Republic of Iran: a concise review. Regenerative Medicine, 2019, 14, 1047-1056.	0.8	4
459	Gelatin Electrospun Mat as a Potential Co-culture System for <i>In Vitro</i> Production of Sperm Cells from Embryonic Stem Cells. ACS Biomaterials Science and Engineering, 2020, 6, 5823-5832.	2.6	4
460	BIOMECHANICAL REMODELING OF BIODEGRADABLE SMALL-DIAMETER VASCULAR GRAFTS IN SITU. Vestnik Transplantologii I Iskusstvennykh Organov, 2016, 18, 99-109.	0.1	4
461	In-Vitro Validation of a Novel Model-Based Approach to the Measurement of Arterial Blood Flow Waveforms from Dynamic Digital X-ray Images. Lecture Notes in Computer Science, 2001, , 291-300.	1.0	4
462	Distribution of breast skin blood flow in patients with breast cancer. Breast, 1998, 7, 201-205.	0.9	3
463	In vivo evaluation of an implantable portal pump system for augmenting liver perfusion. British Journal of Surgery, 2002, 87, 1024-1029.	0.1	3
464	An Aortic Model for the Physiological Assessment of Endovascular Stent-Grafts. Annals of Vascular Surgery, 2011, 25, 530-537.	0.4	3
465	Editorial: Manufacturing living organs using tissue engineering strategy. Biotechnology and Applied Biochemistry, 2011, 58, 285-287.	1.4	3
466	Slow chlorine releasing compounds: A viable sterilisation method for bioabsorbable nanocomposite biomaterials. Journal of Biomaterials Applications, 2016, 30, 1114-1124.	1.2	3
467	The inhibitory effect of <i>Tamarix hispida</i> mediated silver nanoparticles on Cyclin D1 protein expression of human cancer cells line. Inorganic and Nano-Metal Chemistry, 2020, 50, 1144-1149.	0.9	3
468	Multi-walled carbon nanotube/hydroxyapatite nanocomposite with leukocyte- and platelet-rich fibrin for bone regeneration in sheep model. Oral and Maxillofacial Surgery, 2022, 26, 63-72.	0.6	3

#	Article	IF	Citations
469	The World Against Versatile SARS-Cov-2 Nanomachines: Mythological or Reality?. Current Stem Cell Research and Therapy, 2022, 17, 43-57.	0.6	3
470	Heart Valves, Polymeric: Biocompatibility. , 0, , 3713-3721.		3
471	In-vitro validation of a novel model-based approach to the measurement of arterial blood flow waveforms from dynamic digital x-ray images. , 2002, 4683, 286.		2
472	Near-infrared spectroscopic assessment of mitochondrial oxygenation statusâ€"comparison during normothermic extracorporeal liver perfusion by buffer only or buffer fortified with washed red blood cells: an experimental study. Transplantation Proceedings, 2004, 36, 1265-1267.	0.3	2
473	Glycine Protects Bile Physiology and Biliary-Specific Liver Cell Metabolism from Ischemia-Reperfusion Injury: A 1H NMR Study. Cell Preservation Technology, 2008, 6, 173-180.	0.8	2
474	Modifying biomaterial surfaces to optimise interactions with blood., 2011, , 255-283.		2
475	PS200. Performance of a Nanocomposite Polymer Small Diameter Bypass Graft in a Log-term Sheep Model. Journal of Vascular Surgery, 2012, 55, 77S-78S.	0.6	2
476	Extracellular Matrix Scaffold Using Decellularized Cartilage for Hyaline Cartilage Regeneration. Advances in Experimental Medicine and Biology, 2021, 1345, 209-223.	0.8	2
477	In vitro stability of a novel compliant poly(carbonate-urea)urethane to oxidative and hydrolytic stress., 2002, 59, 207.		2
478	The Effect of Graded Systemic Hypoxaemia on Hepatic Tissue Oxygenation. Advances in Experimental Medicine and Biology, 2003, 540, 317-323.	0.8	2
479	Ac-SDKP peptide improves functional recovery following spinal cord injury in a preclinical model. Neuropeptides, 2022, 92, 102228.	0.9	2
480	Effects of hepatic ischaemia/reperfusion injury in a rabbit model of Indocyanine Green clearance. Clinical Science, 2002, 102, 579.	1.8	1
481	<title>A real-time pointer to a preoperative surgical planning index block of ultrasound images for image guided surgery</title> ., 2004, , .		1
482	Polyhedral Oligomeric Silsesquioxane Nanocomposites: The Next Generation Material for Biomedical Applications. ChemInform, 2006, 37, no.	0.1	1
483	Editorial [Pharmacological Modulation of Liver Ischemia - Reperfusion Injury Executive Editors: G.K. Glantzounis, D.P. Mikhailidis, A.M. Seifalian and B.R. Davidson]. Current Pharmaceutical Design, 2006, 12, 2863-2865.	0.9	1
484	Ex Vivo Formation of Blood Vessels. , 2009, , 685-692.		1
485	The in-vivo effect of pyrrolidine dithiocarbamate on hepatic parenchymal microcirculation and oxygenation of the rat liver. European Journal of Gastroenterology and Hepatology, 2009, 21, 1184-1190.	0.8	1
486	Cancer Imaging: pH-Activatable MnO-Based Fluorescence and Magnetic Resonance Bimodal Nanoprobe for Cancer Imaging (Adv. Healthcare Mater. 6/2016). Advanced Healthcare Materials, 2016, 5, 720-720.	3.9	1

#	Article	IF	CITATIONS
487	Impairment of Hepatic Microcirculation in Fatty Liver. Microcirculation, 2003, 10, 447-456.	1.0	1
488	Intracranial Aneurysms; In Need of Early Diagnostic and Treatment Using Bio- and Nanotechnology. Current Medicinal Chemistry, 2014, 21, 4300-4310.	1.2	1
489	High-Performance Enzyme-Free Glucose Sensor with Co-Cu Nanorod Arrays on Si Substrates. Recent Patents on Biotechnology, 2018, 12, 126-133.	0.4	1
490	Effects of hepatic ischaemia/reperfusion injury in a rabbit model of Indocyanine Green clearance. Clinical Science, 2002, 102, 579-86.	1.8	1
491	Arterialisation of the portal vein improves hepatic parenchymal microcirculation in cirrhosis through stimulation of nitric oxide. Journal of Hepatology, 2002, 36, 67.	1.8	0
492	The relationship of nitric oxide metabolism with ischemic preconditioning of the fatty liver. Gastroenterology, 2003, 124, A806.	0.6	0
493	Tissue Engineering Therapy for Cardiovascular Diseases. Circulation Research, 2003, 93, e1.	2.0	0
494	Haemostatic effects of laser tissue solder as a reinforcement to anastomoses with PTFE grafts. , 2003, 4949, 235.		0
495	Letter to the editor The Surgeon - Volume 2, Issue 5. Journal of the Royal College of Surgeons of Edinburgh, 2004, 2, 302.	0.8	0
496	Authors's reply: Topical haemostatic agents (Br J Surg 2008; 95: 1197–1225). British Journal of Surgery, 2009, 96, 445-445.	0.1	0
497	Development of Cardiovascular Implants Using Nanocomposite Polymer and Stem Cell Technology: From Lab to Commercialisation. Advances in Science and Technology, 0, , .	0.2	0
498	PS222. An Aortic Model for Physiological Assessment of Aortic Stent-grafts and In Vitro Compliance Measurement. Journal of Vascular Surgery, 2010, 51, 76S-77S.	0.6	0
499	Un modèle aortique pour l'évaluation physiologique des endoprothèses couvertes. Annales De Chirurgie Vasculaire, 2011, 25, 570-578.	0.0	0
500	PS220. Thermo-Mechanical Resistance of a Nanocomposite Polymer Exposed to Simulated in Vivo Hydrodynamic Fatigue for Ten Years in Development of a Sutureless Endovascular Stent Graft. Journal of Vascular Surgery, 2011, 53, 86S-87S.	0.6	0
501	Nanotechnology and tissue-engineered organ regeneration. , 2012, , 403-427.		0
502	Selected Peer-Reviewed Articles from the 5th International Conference on Surfaces, Coatings and Nanostructured Materials (NANOSMAT 2010). Journal of Nanoscience and Nanotechnology, 2012, 12, 4685-4687.	0.9	0
503	A New Generation of Aortic Valve Prosthesis: Design, Manufacture and Hydrodynamic Assessment. , 2012, , .		0
504	Pearl 30th anniversary: Nanotechnology & regenerative medicine. Biotechnology Advances, 2013, 31, 490.	6.0	0

#	Article	IF	CITATIONS
505	Assessment of Tissue Viability With Blood Flow Measurements. Angiology, 2013, 64, 409-410.	0.8	0
506	173â€Infused silica nanoparticles compromise vascular function in small mesenteric arteries. Heart, 2015, 101, A98.2-A98.	1.2	0
507	Poly(methyl methacrylate)-Based Composite Bone Cements With Different Types of Reinforcement Agents., 2021,, 867-886.		O
508	New vessels: Vascular tissue engineering. Biochemist, 2007, 29, 12-15.	0.2	0
509	Effects of sterilization treatments on bulk and surface properties of nanocomposite biomaterials. , 2013, , n/a - n/a .		0