MÃ¡rio A Barbosa

List of Publications by Year
in descending order

244 papers	12,448 citations	20817 60 h-index	37204 96 g-index
247 all docs	247 docs citations	247 times ranked	16397 citing authors

#	Article	IF	Citations
1	Chemical modification of chitosan by phosphorylation: an XPS, FT-IR and SEM study. Journal of Biomaterials Science, Polymer Edition, 2005, 16, 1575-1593.	3.5	379
2	Mesenchymal Stromal Cell Secretome: Influencing Therapeutic Potential by Cellular Pre-conditioning. Frontiers in Immunology, 2018, 9, 2837.	4.8	350
3	Inflammation in intervertebral disc degeneration and regeneration. Journal of the Royal Society Interface, 2015, 12, 20141191.	3.4	291
4	Corrosion behaviour of commercially pure titanium shot blasted with different materials and sizes of shot particles for dental implant applications. Biomaterials, 2003, 24, 263-273.	11.4	259
5	Calcium phosphate-alginate microspheres as enzyme delivery matrices. Biomaterials, 2004, 25, 4363-4373.	11.4	235
6	Impact of 3-D printed PLA- and chitosan-based scaffolds on human monocyte/macrophage responses: Unraveling the effect of 3-D structures on inflammation. Acta Biomaterialia, 2014, 10, 613-622.	8.3	235
7	Fibrinogen adsorption, platelet adhesion and activation on mixed hydroxyl-/methyl-terminated self-assembled monolayers. Biomaterials, 2006, 27, 5357-5367.	11.4	217
8	Pectin-Based Injectable Biomaterials for Bone Tissue Engineering. Biomacromolecules, 2011, 12, 568-577.	5.4	213
9	The effect of the co-immobilization of human osteoprogenitors and endothelial cells within alginate microspheres on mineralization in a bone defect. Biomaterials, 2009, 30, 3271-3278.	11.4	192
10	Corrosion behaviour of titanium in biofluids containing H2O2 studied by electrochemical impedance spectroscopy. Corrosion Science, 2001, 43, 547-559.	6.6	187
11	The correlation between the adsorption of adhesive proteins and cell behaviour on hydroxyl-methyl mixed self-assembled monolayers. Biomaterials, 2009, 30, 307-316.	11.4	147
12	Injectable in situ crosslinkable RGD-modified alginate matrix for endothelial cells delivery. Biomaterials, 2011, 32, 7897-7904.	11.4	145
13	Improving chitosan-mediated gene transfer by the introduction of intracellular buffering moieties into the chitosan backbone. Acta Biomaterialia, 2009, 5, 2995-3006.	8.3	144
14	The Two Faces of Tumor-Associated Macrophages and Their Clinical Significance in Colorectal Cancer. Frontiers in Immunology, 2019, 10, 1875.	4.8	144
15	Upregulation of bone cell differentiation through immobilization within a synthetic extracellular matrix. Biomaterials, 2007, 28, 3644-3655.	11.4	139
16	Ionizing radiation modulates human macrophages towards a pro-inflammatory phenotype preserving their pro-invasive and pro-angiogenic capacities. Scientific Reports, 2016, 6, 18765.	3.3	139
17	Cellulose phosphates as biomaterials. I. Synthesis and characterization of highly phosphorylated cellulose gels. Journal of Applied Polymer Science, 2001, 82, 3341-3353.	2.6	133
18	Immobilization of Human Mesenchymal Stem Cells within RGD-Grafted Alginate Microspheres and Assessment of Their Angiogenic Potential. Biomacromolecules, 2010, 11, 1956-1964.	5.4	131

#	ARTICLE	IF	CITATIONS
19	The uptake of titanium ions by hydroxyapatite particlesâ€"structural changes and possible mechanisms. Biomaterials, 2006, 27, 1749-1761.	11.4	130
20	The inflammatory response in the regression of lumbar disc herniation. Arthritis Research and Therapy, 2018, 20, 251.	3.5	130
21	Human Serum Albumin Adsorption on TiO2from Single Protein Solutions and from Plasma. Langmuir, 2004, 20, 9745-9754.	3.5	125
22	Chitosan drives anti-inflammatory macrophage polarisation and pro-inflammatory dendritic cell stimulation. , 2012, 24, 136-153.		125
23	A Novel Dry Active Electrode for EEG Recording. IEEE Transactions on Biomedical Engineering, 2007, 54, 162-165.	4.2	124
24	Protein adsorption on mixtures of hydroxyl- and methyl-terminated alkanethiols self-assembled monolayers. Journal of Biomedical Materials Research Part B, 2003, 67A, 158-171.	3.1	122
25	Modulation of the inflammatory response to chitosan through M2 macrophage polarization using pro-resolution mediators. Biomaterials, 2015, 37, 116-123.	11.4	122
26	Macrophage polarization following chitosan implantation. Biomaterials, 2013, 34, 9952-9959.	11.4	121
27	Cellulose phosphates as biomaterials. In vivo biocompatibility studies. Biomaterials, 2002, 23, 971-980.	11.4	120
28	Apatite deposition on titanium surfaces â€" the role of albumin adsorption. Biomaterials, 1997, 18, 963-968.	11.4	111
29	Albumin and fibrinogen adsorption on PUâ€"PHEMA surfaces. Biomaterials, 2003, 24, 2067-2076.	11.4	110
30	TNF-alpha-induced microglia activation requires miR-342: impact on NF-kB signaling and neurotoxicity. Cell Death and Disease, 2020, 11, 415.	6.3	108
31	Layer-by-Layer Self-Assembly of Chitosan and Poly(Î³-glutamic acid) into Polyelectrolyte Complexes. Biomacromolecules, 2011, 12, 4183-4195.	5.4	107
32	Constructing thromboresistant surface on biomedical stainless steel via layer-by-layer deposition anticoagulant. Biomaterials, 2003, 24, 4699-4705.	11.4	106
33	Decellularized human colorectal cancer matrices polarize macrophages towards an anti-inflammatory phenotype promoting cancer cell invasion via CCL18. Biomaterials, 2017, 124, 211-224.	11.4	104
34	Macrophages stimulate gastric and colorectal cancer invasion through EGFR Y1086, c-Src, Erk1/2 and Akt phosphorylation and smallGTPase activity. Oncogene, 2014, 33, 2123-2133.	5.9	103
35	Effect of hydroxyapatite thickness on metal ion release from Ti6Al4V substrates. Biomaterials, 1996, 17, 397-404.	11.4	101
36	Phenotypic and proliferative modulation of human mesenchymal stem cells via crosstalk with endothelial cells. Stem Cell Research, 2011, 7, 186-197.	0.7	98

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37	Preparation and characterisation of calcium-phosphate porous microspheres with a uniform size for biomedical applications. Journal of Materials Science: Materials in Medicine, 2006, 17, 455-463.	3.6	96
38	The two faces of metal ions: From implants rejection to tissue repair/regeneration. Biomaterials, 2016, 84, 262-275.	11.4	95
39	Concept, design and fabrication of smart orthopedic implants. Medical Engineering and Physics, 2000, 22, 469-479.	1.7	93
40	Bridging Autism Spectrum Disorders and Schizophrenia through inflammation and biomarkers - pre-clinical and clinical investigations. Journal of Neuroinflammation, 2017, 14, 179.	7.2	92
41	In vitro degradation behavior of a novel bioresorbable composite material based on PLA and a soluble CaP glass. Acta Biomaterialia, 2005, 1, 411-419.	8.3	90
42	Osteoblast adhesion and morphology on TiO₂ depends on the competitive preadsorption of albumin and fibronectin. Journal of Biomedical Materials Research - Part A, 2008, 84A, 281-290.	4.0	90
43	Title is missing!. Journal of Materials Science, 2001, 36, 2163-2172.	3.7	88
44	Polysaccharides as scaffolds for bone regeneration. IRBM News, 2005, 26, 212-217.	0.1	88
45	Extracellular Vesicles: Immunomodulatory messengers in the context of tissue repair/regeneration. European Journal of Pharmaceutical Sciences, 2017, 98, 86-95.	4.0	87
46	Extracellular vesicles: intelligent delivery strategies for therapeutic applications. Journal of Controlled Release, 2018, 289, 56-69.	9.9	85
47	The inflammasome in host response to biomaterials: Bridging inflammation and tissue regeneration. Acta Biomaterialia, 2019, 83, 1-12.	8.3	84
48	miR-195 in human primary mesenchymal stromal/stem cells regulates proliferation, osteogenesis and paracrine effect on angiogenesis. Oncotarget, 2016, 7, 7-22.	1.8	83
49	The effect of hyaluronan-based delivery of stromal cell-derived factor-1 on the recruitment of MSCs in degenerating intervertebral discs. Biomaterials, 2014, 35, 8144-8153.	11.4	78
50	The blood compatibility challenge. Part 4: Surface modification for hemocompatible materials: Passive and active approaches to guide blood-material interactions. Acta Biomaterialia, 2019, 94, 33-43.	8.3	78
51	Engineering Endochondral Bone:<i>In Vivo</i>Studies. Tissue Engineering - Part A, 2009, 15, 635-643.	3.1	77
52	Long noncoding RNAs: a missing link in osteoporosis. Bone Research, 2019, 7, 10.	11.4	77
53	Attachment, spreading and short-term proliferation of human osteoblastic cells cultured on chitosan films with different degrees of acetylation. Journal of Biomaterials Science, Polymer Edition, 2007, 18, 469-485.	3.5	75
54	Biofunctional chemically modified pectin for cell delivery. Soft Matter, 2012, 8, 4731.	2.7	74

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55	Development of an immunomodulatory biomaterial: Using resolvin D1 to modulate inflammation. Biomaterials, 2015, 53, 566-573.	11.4	73
56	Production, Characterization and Biocompatibility of Marine Collagen Matrices from an Alternative and Sustainable Source: The Sea Urchin Paracentrotus lividus. Marine Drugs, 2014, 12, 4912-4933.	4.6	71
57	Dynamics of Fibronectin Adsorption on TiO2Surfaces. Langmuir, 2007, 23, 7046-7054.	3.5	69
58	Anti-inflammatory Chitosan/Poly-Î³-glutamic acid nanoparticles control inflammation while remodeling extracellular matrix in degenerated intervertebral disc. Acta Biomaterialia, 2016, 42, 168-179.	8.3	68
59	The influence of functional groups of self-assembled monolayers on fibrous capsule formation and cell recruitment. Journal of Biomedical Materials Research - Part A, 2006, 76A, 737-743.	4.0	65
60	Three-dimensional culture of human osteoblastic cells in chitosan sponges: The effect of the degree of acetylation. Journal of Biomedical Materials Research - Part A, 2006, 76A, 335-346.	4.0	64
61	Surface Engineering of Poly(dl-lactide) via Electrostatic Self-Assembly of Extracellular Matrix-like Molecules. Biomacromolecules, 2003, 4, 378-386.	5.4	62
62	Dendritic Cell-derived Extracellular Vesicles mediate Mesenchymal Stem/Stromal Cell recruitment. Scientific Reports, 2017, 7, 1667.	3.3	62
63	Inflammatory responses and cell adhesion to self-assembled monolayers of alkanethiolates on gold. Biomaterials, 2004, 25, 2557-2563.	11.4	61
64	Chitosan/Î³-PGA nanoparticles-based immunotherapy as adjuvant to radiotherapy in breast cancer. Biomaterials, 2020, 257, 120218.	11.4	60
65	Interactions between calcium, phosphate, and albumin on the surface of titanium. Journal of Biomedical Materials Research Part B, 2001, 55, 45-53.	3.1	59
66	Rat bone marrow stromal cell osteogenic differentiation and fibronectin adsorption on chitosan membranes: The effect of the degree of acetylation. Journal of Biomedical Materials Research - Part A, 2005, 75A, 387-397.	4.0	59
67	<i>In vivo</i> and clinical application of strontium-enriched biomaterials for bone regeneration. Bone and Joint Research, 2017, 6, 366-375.	3.6	59
68	Effect of Polyelectrolyte Film Stiffness on Endothelial Cells During Endothelial-to-Mesenchymal Transition. Biomacromolecules, 2015, 16, 3584-3593.	5.4	57
69	Three-dimensional scaffolds of fetal decellularized hearts exhibit enhanced potential to support cardiac cells in comparison to the adult. Biomaterials, 2016, 104, 52-64.	11.4	57
70	NAP-2 Secreted by Human NK Cells Can Stimulate Mesenchymal Stem/Stromal Cell Recruitment. Stem Cell Reports, 2016, 6, 466-473.	4.8	57
71	Osteogenic, anti-osteoclastogenic and immunomodulatory properties of a strontium-releasing hybrid scaffold for bone repair. Materials Science and Engineering C, 2019, 99, 1289-1303.	7.3	55
72	Fibrinogen scaffolds with immunomodulatory properties promote inÂvivo bone regeneration. Biomaterials, 2016, 111, 163-178.	11.4	54

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73	Proliferation, activity, and osteogenic differentiation of bone marrow stromal cells cultured on calcium titanium phosphate microspheres. Journal of Biomedical Materials Research Part B, 2005, 72A, 57-66.	3.1	53
74	Enhanced mesenchymal stromal cell recruitment via natural killer cells by incorporation of inflammatory signals in biomaterials. Journal of the Royal Society Interface, 2012, 9, 261-271.	3.4	53
75	Modulation of stability and mucoadhesive properties of chitosan microspheres for therapeutic gastric application. International Journal of Pharmaceutics, 2013, 454, 116-124.	5.2	53
76	Biocompatibility of chemoenzymatically derived dextran-acrylate hydrogels. Journal of Biomedical Materials Research Part B, 2004, 68A, 584-596.	3.1	52
77	TiO2 type influences fibronectin adsorption. Journal of Materials Science: Materials in Medicine, 2005, 16, 1173-1178.	3.6	52
78	The pitting resistance of AISI 316 stainless steel passivated in diluted nitric acid. Corrosion Science, 1983, 23, 1293-1305.	6.6	50
79	Macrophages Down-Regulate Gene Expression of Intervertebral Disc Degenerative Markers Under a Pro-inflammatory Microenvironment. Frontiers in Immunology, 2019, 10, 1508.	4.8	50
80	Injectability of a bone filler system based on hydroxyapatite microspheres and a vehicle with <i>in situ</i> gelâ€forming ability. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2008, 87B, 49-58.	3.4	49
81	miR-195 inhibits macrophages pro-inflammatory profile and impacts the crosstalk with smooth muscle cells. PLoS ONE, 2017, 12, e0188530.	2.5	49
82	Immunomodulation of Human Mesenchymal Stem/Stromal Cells in Intervertebral Disc Degeneration. Spine, 2018, 43, E673-E682.	2.0	49
83	Differential effects of eight metal ions on lymphocyte differentiation antigensin vitro. Journal of Biomedical Materials Research Part B, 1990, 24, 1059-1068.	3.1	48
84	Ibuprofen-loaded poly(trimethylene carbonate-co-Îµ-caprolactone) electrospun fibres for nerve regeneration. Journal of Tissue Engineering and Regenerative Medicine, 2016, 10, E154-E166.	2.7	48
85	Corrosion resistance of titanium CP in saline physiological solutions with calcium phosphate and proteins. Clinical Materials, 1993, 14, 287-294.	0.5	47
86	Albumin adsorption on alkanethiols self-assembled monolayers on gold electrodes studied by chronopotentiometry. Biomaterials, 2003, 24, 3697-3706.	11.4	47
87	Engineering Endochondral Bone:<i>In Vitro</i>Studies. Tissue Engineering - Part A, 2009, 15, 625-634.	3.1	47
88	Leptin effect on RANKL and OPG expression in MC3T3-E1 osteoblasts. Journal of Cellular Biochemistry, 2006, 98, 1123-1129.	2.6	46
89	Surface characterization and cell response of a PLA/CaP glass biodegradable composite material. Journal of Biomedical Materials Research - Part A, 2008, 85A, 477-486.	4.0	46
90	Adsorbed fibrinogen leads to improved bone regeneration and correlates with differences in the systemic immune response. Acta Biomaterialia, 2013, 9, 7209-7217.	8.3	46

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91	Mesenchymal stem cell recruitment by stromal derived factor-1-delivery systems based on chitosan/poly(Î³-glutamic acid) polyelectrolyte complexes. , 2012, 23, 249-261.		46
92	Cellulose phosphates as biomaterials. II. Surface chemical modification of regenerated cellulose hydrogels. Journal of Applied Polymer Science, 2001, 82, 3354-3365.	2.6	45
93	An interferon-Î³-delivery system based on chitosan/poly(Î³-glutamic acid) polyelectrolyte complexes modulates macrophage-derived stimulation of cancer cell invasion in vitro. Acta Biomaterialia, 2015, 23, 157-171.	8.3	45
94	Pro-inflammatory chitosan/poly(Î³-glutamic acid) nanoparticles modulate human antigen-presenting cells phenotype and revert their pro-invasive capacity. Acta Biomaterialia, 2017, 63, 96-109.	8.3	45
95	Investigation of the dissolution of the bioceramic hydroxyapatite in the presence of titanium ions using ToF-SIMS and XPS. Biomaterials, 1997, 18, 311-316.	11.4	44
96	Octadecyl Chains Immobilized onto Hyaluronic Acid Coatings by Thiolâ€“ene â€œClick Chemistryâ€•Increase the Surface Antimicrobial Properties and Prevent Platelet Adhesion and Activation to Polyurethane. ACS Applied Materials & Interfaces, 2017, 9, 7979-7989.	8.0	44
97	Biological evaluation of calcium alginate microspheres as a vehicle for the localized delivery of a therapeutic enzyme. Journal of Biomedical Materials Research - Part A, 2005, 74A, 545-552.	4.0	43
98	Evaluation of the effect of the degree of acetylation on the inflammatory response to 3D porous chitosan scaffolds. Journal of Biomedical Materials Research - Part A, 2010, 93A, 20-28.	4.0	43
99	Fibrinogen and magnesium combination biomaterials modulate macrophage phenotype, NF-kB signaling and crosstalk with mesenchymal stem/stromal cells. Acta Biomaterialia, 2020, 114, 471-484.	8.3	42
100	Fibronectin-mediated endothelialisation of chitosan porous matrices. Biomaterials, 2009, 30, 5465-5475.	11.4	41
101	Targeted gene delivery into peripheral sensorial neurons mediated by self-assembled vectors composed of poly(ethylene imine) and tetanus toxin fragment c. Journal of Controlled Release, 2010, 143, 350-358.	9.9	41
102	Adhesion of human leukocytes to biomaterials: Anin vitrostudy using alkanethiolate monolayers with different chemically functionalized surfaces. Journal of Biomedical Materials Research - Part A, 2003, 65A, 429-434.	4.0	40
103	Self-Healing Spongy Coating for Drug â€œCocktailâ€•Delivery. ACS Applied Materials & Interfaces, 2016, 8, 4309-4313.	8.0	39
104	New Insights into Mutable Collagenous Tissue: Correlations between the Microstructure and Mechanical State of a Sea-Urchin Ligament. PLoS ONE, 2011, 6, e24822.	2.5	39
105	Mineralization of regenerated cellulose hydrogels. Journal of Materials Science: Materials in Medicine, 2001, 12, 785-791.	3.6	38
106	Protein adsorption on 18-alkyl chains immobilized on hydroxyl-terminated self-assembled monolayers. Biomaterials, 2005, 26, 3891-3899.	11.4	38
107	Injectable hybrid system for strontium local delivery promotes bone regeneration in a rat critical-sized defect model. Scientific Reports, 2017, 7, 5098.	3.3	38
108	Mesenchymal Stem/Stromal Cells seeded on cartilaginous endplates promote Intervertebral Disc Regeneration through Extracellular Matrix Remodeling. Scientific Reports, 2016, 6, 33836.	3.3	37

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109	Macrophage response to chitosan/poly-(Î³-glutamic acid) nanoparticles carrying an anti-inflammatory drug. Journal of Materials Science: Materials in Medicine, 2015, 26, 167.	3.6	36
110	Macrophage interactions with polylactic acid and chitosan scaffolds lead to improved recruitment of human mesenchymal stem/stromal cells: a comprehensive study with different immune cells. Journal of the Royal Society Interface, 2016, 13, 20160570.	3.4	36
111	A Degenerative/Proinflammatory Intervertebral Disc Organ Culture: An <i>Ex Vivo</i> Model for Anti-inflammatory Drug and Cell Therapy. Tissue Engineering - Part C: Methods, 2016, 22, 8-19.	2.1	35
112	Fabrication of alternating polycation and albumin multilayer coating onto stainless steel by electrostatic layer-by-layer adsorption. Colloids and Surfaces B: Biointerfaces, 2004, 34, 185-190.	5.0	33
113	Adsorption of a therapeutic enzyme to self-assembled monolayers: effect of surface chemistry and solution pH on the amount and activity of adsorbed enzyme. Biomaterials, 2005, 26, 2695-2704.	11.4	33
114	Cellulose phosphates as biomaterials. In vitro biocompatibility studies. Reactive and Functional Polymers, 2006, 66, 728-739.	4.1	33
115	Adsorbed Fibrinogen Enhances Production of Bone- and Angiogenic-Related Factors by Monocytes/Macrophages. Tissue Engineering - Part A, 2014, 20, 250-263.	3.1	33
116	Protein adsorption and clotting time of pHEMA hydrogels modified with C18 ligands to adsorb albumin selectively and reversibly. Biomaterials, 2009, 30, 5541-5551.	11.4	32
117	Biosynthesis of highly pure poly-Î³-glutamic acid for biomedical applications. Journal of Materials Science: Materials in Medicine, 2012, 23, 1583-1591.	3.6	32
118	The mechanically adaptive connective tissue of echinoderms: Its potential for bio-innovation in applied technology and ecology. Marine Environmental Research, 2012, 76, 108-113.	2.5	32
119	Genetically Engineered-MSC Therapies for Non-unions, Delayed Unions and Critical-size Bone Defects. International Journal of Molecular Sciences, 2019, 20, 3430.	4.1	32
120	Chitosan/poly(Î³-glutamic acid) nanoparticles incorporating IFN-Î³ for immune response modulation in the context of colorectal cancer. Biomaterials Science, 2019, 7, 3386-3403.	5.4	32
121	Electrochemical and surface modifications on N+-ion implanted Ti-6A1-4V immersed in HBSS. Corrosion Science, 1995, 37, 1861-1866.	6.6	31
122	Stearyl poly(ethylene oxide) grafted surfaces for preferential adsorption of albumin. Biomaterials, 2001, 22, 3015-3023.	11.4	31
123	Dynamic stiffness of polyelectrolyte multilayer films based on disulfide bonds for in situ control of cell adhesion. Journal of Materials Chemistry B, 2015, 3, 7546-7553.	5.8	31
124	Joint analysis of IVD herniation and degeneration by rat caudal needle puncture model. Journal of Orthopaedic Research, 2017, 35, 258-268.	2.3	31
125	Systemic Delivery of Bone Marrow Mesenchymal Stem Cells for In Situ Intervertebral Disc Regeneration. Stem Cells Translational Medicine, 2017, 6, 1029-1039.	3.3	31
126	Electrochemical and surface modifications on N+-ion-implanted 316 L stainless steel. Journal of Materials Science: Materials in Medicine, 1997, 8, 365-368.	3.6	30

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127	Improving the adhesion of poly(ethylene terephthalate) fibers to poly(hydroxyethyl methacrylate) hydrogels by ozone treatment: Surface characterization and pull-out tests. Polymer, 2005, 46, 9840-9850.	3.8	30
128	Hip fractures cluster in space: an epidemiological analysis in Portugal. Osteoporosis International, 2008, 19, 1797-1804.	3.1	30
129	Albumin adsorption on cibacron blue F3G-A immobilized onto oligo(ethylene glycol)-terminated self-assembled monolayers. Journal of Materials Science: Materials in Medicine, 2003, 14, 945-954.	3.6	29
130	Induction of notch signaling by immobilization of jagged-1 on self-assembled monolayers. Biomaterials, 2009, 30, 6879-6887.	11.4	29
131	Nanostructured lipid carriers loaded with resveratrol modulate human dendritic cells. International Journal of Nanomedicine, 2016, Volume 11, 3501-3516.	6.7	29
132	Molecularly designed surfaces for blood deheparinization using an immobilized heparinâ€binding peptide. Journal of Biomedical Materials Research - Part A, 2009, 88A, 162-173.	4.0	28
133	The effect of immobilization of thrombin inhibitors onto self-assembled monolayers on the adsorption and activity of thrombin. Biomaterials, 2010, 31, 3772-3780.	11.4	28
134	E-cadherin-defective gastric cancer cells depend on Laminin to survive and invade. Human Molecular Genetics, 2015, 24, 5891-5900.	2.9	28
135	Circulating extracellular vesicles: Their role in tissue repair and regeneration. Transfusion and Apheresis Science, 2016, 55, 53-61.	1.0	27
136	Chitosan porous 3D scaffolds embedded with resolvin D1 to improve in vivo bone healing. Journal of Biomedical Materials Research - Part A, 2018, 106, 1626-1633.	4.0	27
137	Surface pretreatments of aluminium for electroplating. Surface and Coatings Technology, 1988, 35, 321-331.	4.8	26
138	Protein electrostatic self-assembly on poly(DL-lactide) scaffold to promote osteoblast growth. Journal of Biomedical Materials Research Part B, 2004, 71B, 159-165.	3.1	26
139	Strontium-rich injectable hybrid system for bone regeneration. Materials Science and Engineering C, 2016, 59, 818-827.	7.3	26
140	Stiffness of polyelectrolyte multilayer film influences endothelial function of endothelial cell monolayer. Colloids and Surfaces B: Biointerfaces, 2017, 149, 379-387.	5.0	26
141	3D chitosan scaffolds impair NLRP3 inflammasome response in macrophages. Acta Biomaterialia, 2019, 91, 123-134.	8.3	26
142	Matrix Metalloproteinases in a Sea Urchin Ligament with Adaptable Mechanical Properties. PLoS ONE, 2012, 7, e49016.	2.5	26
143	Functionalization of chitosan membranes through phosphorylation: Atomic force microscopy, wettability, and cytotoxicity studies. Journal of Applied Polymer Science, 2006, 102, 276-284.	2.6	25
144	Resveratrol as a Natural Anti-Tumor Necrosis Factor-Î± Molecule: Implications to Dendritic Cells and Their Crosstalk with Mesenchymal Stromal Cells. PLoS ONE, 2014, 9, e91406.	2.5	25

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145	Decellularized Scaffolds for Intervertebral Disc Regeneration. Trends in Biotechnology, 2020, 38, 947-951.	9.3	25
146	Impedance and photo electrochemical measurements on passive films formed on metallic biomaterials. Corrosion Engineering Science and Technology, 1990, 25, 136-140.	0.3	25
147	The surface composition and corrosion behaviour of AISI 304 stainless steel after immersion in 20% HNO3 solution. Corrosion Science, 1991, 32, 179-184.	6.6	24
148	Pretreatments of improve the adhesion of electrodeposits on aluminium. Surface and Interface Analysis, 1991, 17, 519-528.	1.8	24
149	Modifications in the molecular structure of hydroxyapatite induced by titanium ions. Journal of Materials Science: Materials in Medicine, 1995, 6, 829-834.	3.6	24
150	The Contribution of Inflammation to Autism Spectrum Disorders: Recent Clinical Evidence. Methods in Molecular Biology, 2019, 2011, 493-510.	0.9	24
151	Electrochemical and surface modifications on N+-ION implanted Ti-5Al-2.5Fe immersed in HBSS. Corrosion Science, 1997, 39, 377-383.	6.6	23
152	In vitro testing of surface-modified biomaterials. Journal of Materials Science: Materials in Medicine, 1998, 9, 543-548.	3.6	23
153	Characterization of Polymeric Solutions as Injectable Vehicles for Hydroxyapatite Microspheres. AAPS PharmSciTech, 2010, 11, 852-858.	3.3	23
154	Immune response and innervation signatures in aseptic hip implant loosening. Journal of Translational Medicine, 2016, 14, 205.	4.4	23
155	Fundamentals of protein and cell interactions in biomaterials. , 2018, , 1-27.		23
156	Electrochemistry of AISI 316L stainless steel in calcium phosphate and protein solutions. Journal of Materials Science: Materials in Electronics, 1991, 2, 19-26.	2.2	22
157	In vitro calcification of orthopaedic implant materials. Journal of Materials Science: Materials in Medicine, 1995, 6, 849-852.	3.6	22
158	Selective protein adsorption modulates platelet adhesion and activation to oligo(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 227 Td Research - Part A, 2009, 89A, 642-653.	4.0	22
159	Matrix metalloproteases as maestros for the dual role of LPS- and IL-10-stimulated macrophages in cancer cell behaviour. BMC Cancer, 2015, 15, 456.	2.6	22
160	Adsorbed Fibrinogen stimulates TLR-4 on monocytes and induces BMP-2 expression. Acta Biomaterialia, 2017, 49, 296-305.	8.3	22
161	miR-99a in bone homeostasis: Regulating osteogenic lineage commitment and osteoclast differentiation. Bone, 2020, 134, 115303.	2.9	22
162	Immunomodulatory potential of chitosan-based materials for cancer therapy: a systematic review of <i>in vitro</i>, <i>in vivo</i> and clinical studies. Biomaterials Science, 2021, 9, 3209-3227.	5.4	22

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163	Staphylococcus epidermidis RP62A adhesion to chemically modified cellulose derivatives. Journal of Materials Science: Materials in Medicine, 2001, 12, 543-548.	3.6	21
164	Albumin and fibrinogen adsorption on Cibacron blue F3G-A immobilised onto PU-PHEMA (polyurethane-poly(hydroxyethylmethacrylate)) surfaces. Journal of Biomaterials Science, Polymer Edition, 2003, 14, 439-455.	3.5	21
165	The effect of adsorbed fibronectin and osteopontin on macrophage adhesion and morphology on hydrophilic and hydrophobic model surfaces. Acta Biomaterialia, 2012, 8, 3669-3677.	8.3	21
166	Stress-induced depressive-like behavior in male rats is associated with microglial activation and inflammation dysregulation in the hippocampus in adulthood. Brain, Behavior, and Immunity, 2022, 99, 397-408.	4.1	21
167	Platelet and leukocyte adhesion to albumin binding self-assembled monolayers. Journal of Materials Science: Materials in Medicine, 2011, 22, 2053-2063.	3.6	20
168	Bioengineered surfaces to improve the blood compatibility of biomaterials through direct thrombin inactivation. Acta Biomaterialia, 2012, 8, 4101-4110.	8.3	20
169	Neonatal Human Dermal Fibroblasts Immobilized in RGDâ€"Alginate Induce Angiogenesis. Cell Transplantation, 2014, 23, 945-957.	2.5	20
170	Poly(Î³-glutamic acid) and poly(Î³-glutamic acid)-based nanocomplexes enhance type II collagen production in intervertebral disc. Journal of Materials Science: Materials in Medicine, 2017, 28, 6.	3.6	20
171	Title is missing!. Journal of Materials Science, 2000, 35, 1165-1175.	3.7	19
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