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## Exploring and engineering the cell surface interface

DOI: 10.1126/science.1106587  
Science, 2005, 310, 1135-8.

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**Version:** 2024-04-10

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#	Paper	IF	Citations
2272	Tissue cells feel and respond to the stiffness of their substrate. <i>Science</i> , <b>2005</b> , 310, 1139-43	33.3	4669
2271	Multifunctional cell-instructive materials for tissue regeneration. <b>2006</b> , 1, 447-55		28
2270	Tailoring the morphology of emulsion-templated porous polymers. <b>2006</b> , 2, 608-616		165
2269	Combining cell therapy and nanotechnology. <b>2006</b> , 6, 971-81		9
2268	Peptide-based stimuli-responsive biomaterials. <b>2006</b> , 2, 822-835		497
2267	Large area protein nanopatterning for biological applications. <b>2006</b> , 6, 1165-71		114
2266	Biomimetic electrospun nanofibers for tissue regeneration. <b>2006</b> , 1, R45-53		202
2265	Polypyrrole-based conducting polymers and interactions with biological tissues. <b>2006</b> , 3, 741-52		347
2264	A perspective on nanophase materials for orthopedic implant applications. <b>2006</b> , 16, 3737		109
2263	Chapter 8 Basic CellCell and CellSurface Interactions in Liposome and Cellular Systems. <b>2006</b> , 229-251		
2262	Cell-directed assembly of lipid-silica nanostructures providing extended cell viability. <i>Science</i> , <b>2006</b> , 313, 337-41	33.3	137
2261	Effects of static and cyclic loading in regulating extracellular matrix synthesis by cardiovascular cells. <b>2006</b> , 72, 375-83		153
2260	3D scaffolds for bone marrow stem cell support in bone repair. <b>2006</b> , 1, 519-28		40
2259	New ways to print living cells promise breakthroughs for engineering complex tissues in vitro. <b>2006</b> , 394, e1-2		5
2258	Observing cell response to biomaterials. <b>2006</b> , 9, 34-43		33
2257	Cellular responses to a nanofibrous environment. <b>2006</b> , 1, 34-43		56
2256	Minute changes in composition of polymer substrates produce amplified differences in cell adhesion and motility via optimal ligand conditioning. <i>Acta Biomaterialia</i> , <b>2006</b> , 2, 473-82	10.8	10

2255	Biocompatibility of cluster-assembled nanostructured TiO <sub>2</sub> with primary and cancer cells. <b>2006</b> , 27, 3221-9	116
2254	Novel materials for bone and cartilage regeneration. <b>2006</b> , 10, 568-75	103
2253	From Advanced Biomedical Coatings to Multi-Functionalized Biomaterials. <b>2006</b> , 46, 347-375	53
2252	Nanotechnology and biomaterials for orthopedic medical applications. <b>2006</b> , 1, 169-76	93
2251	Acrylic acid-grafted hydrophilic electrospun nanofibrous poly(L-lactic acid) Scaffold. <b>2006</b> , 14, 552-558	20
2250	Enhancing osseointegration using surface-modified titanium implants. <b>2006</b> , 58, 71-76	49
2249	Dual-syringe reactive electrospinning of cross-linked hyaluronic acid hydrogel nanofibers for tissue engineering applications. <b>2006</b> , 6, 811-7	111
2248	Engineering Increased Stability into Self-Assembled Protein Fibers. <i>Advanced Functional Materials</i> , <b>2006</b> , 16, 1022-1030	15.6 85
2247	Production and Potential of Bioactive Glass Nanofibers as a Next-Generation Biomaterial. <i>Advanced Functional Materials</i> , <b>2006</b> , 16, 1529-1535	15.6 221
2246	Using a Core-Shell Distribution of Surface Chemistry through 3D Tissue Engineering Scaffolds to Control Cell Ingress. <b>2006</b> , 18, 1406-1410	85
2245	Synthetic Design. <b>2006</b> , 68, 113-117	
2244	Biology Today. <b>2006</b> , 68, 113-117	
2243	Principles of Regenerative Biology - Pages 325-369. <b>2007</b> , 325-369	
2242	Engineered cell-adhesive nanoparticles nucleate extracellular matrix assembly. <b>2007</b> , 13, 567-78	7
2241	Differences in Chlamydia trachomatis serovar E growth rate in polarized endometrial and endocervical epithelial cells grown in three-dimensional culture. <b>2007</b> , 75, 553-64	27
2240	Three-Dimensional Scaffolds. <b>2007</b> , 359-373	14
2239	Nanotechnology as an adjunct tool for transplanting engineered cells and tissues. <b>2007</b> , 7, 609-18	17
2238	Genomic and morphological changes of neuroblastoma cells in response to three-dimensional matrices. <b>2007</b> , 13, 1035-47	74

2237	Cell receptor interaction chromatography: importance of corrosion processes. <b>2007</b> , 42, 344-348	1
2236	Nano-film and Coating for Biomedical Application Prepared by Plasma-based Technologies. <b>2007</b> , 1020, 1	
2235	Supramolecular Biomaterials. A Modular Approach towards Tissue Engineering. <b>2007</b> , 80, 2047-2073	109
2234	Cellular Behavior on Basement Membrane Inspired Topographically Patterned Synthetic Matrices. 297-319	1
2233	ECM Interactions with Cells from the Macro- to Nanoscale. 223-260	4
2232	Nanostructured materials for applications in drug delivery and tissue engineering. <b>2007</b> , 18, 241-68	782
2231	Micro- and nanopatterned star poly(ethylene glycol) (PEG) materials prepared by UV-based imprint lithography. <b>2007</b> , 23, 7841-6	40
2230	Influence of van der Waals forces on increasing the strength and toughness in dynamic fracture of nanofibre networks: a peridynamic approach. <b>2007</b> , 15, 397-417	65
2229	Cell-directed assembly of bio/nano interfaces-a new scheme for cell immobilization. <b>2007</b> , 40, 836-45	60
2228	Laser surface treatment for porous and textured Ca-P bio-ceramic coating on Ti-6Al-4V. <b>2007</b> , 2, 274-81	29
2227	Vertically aligned carbon nanofiber architecture as a multifunctional 3-D neural electrical interface. <b>2007</b> , 54, 1121-8	120
2226	Discrete deposition of hydroxyapatite nanoparticles on a titanium implant with predisposing substrate microtopography accelerated osseointegration. <b>2007</b> , 18, 245101	43
2225	Enzyme-triggered cell attachment to hydrogel surfaces. <b>2007</b> , 3, 547-550	57
2224	Exploring cellular behaviour with multi-walled carbon nanotube constructs. <b>2007</b> , 17, 1894	70
2223	Interactions of biomolecules with inorganic materials: principles, applications and future prospects. <b>2007</b> , 17, 2875	81
2222	Cell adhesion and growth to Peptide-patterned supported lipid membranes. <b>2007</b> , 23, 3849-56	59
2221	Role of hydroxyapatite nanoparticle size in bone cell proliferation. <b>2007</b> , 17, 3780	296
2220	Control of cell detachment in a microfluidic device using a thermo-responsive copolymer on a gold substrate. <b>2007</b> , 7, 1322-9	54

2219	Non-Peptide Polymeric Silicatein Mimic for Neutral pH Catalysis in the Formation of Silica. <b>2007</b> , 40, 5710-5717	20
2218	Simultaneous self-assembly, orientation, and patterning of peptide-amphiphile nanofibers by soft lithography. <b>2007</b> , 7, 1165-71	84
2217	Nanoscale patterning in mixed fluorocarbon-hydrocarbon phospholipid bilayers. <b>2007</b> , 129, 9037-43	33
2216	Switching the electrochemical impedance of low-density self-assembled monolayers. <b>2007</b> , 23, 297-304	21
2215	Amyloid Fibrils: From Disease to Design. New Biomaterial Applications for Self-Assembling Cross- $\beta$ Fibrils. <b>2007</b> , 60, 333	55
2214	Capillary-induced contact guidance. <b>2007</b> , 23, 10216-23	26
2213	Three-Dimensional Mesoporous/Hierarchical Porous Inorganic/Organic Composite Scaffolds for Tissue Engineering. <b>2007</b> , 19, 6363-6366	67
2212	Applications of microfluidics for neuronal studies. <b>2007</b> , 252, 135-43	78
2211	Understanding adsorption-desorption dynamics of BMP-2 on hydroxyapatite (001) surface. <b>2007</b> , 93, 750-9	152
2210	Colloidal lithography and current fabrication techniques producing in-plane nanotopography for biological applications. <b>2007</b> , 4, 1-17	131
2209	Cell sensing and response to micro- and nanostructured surfaces produced by chemical and topographic patterning. <b>2007</b> , 13, 1879-91	446
2208	Cell and Tissue Regenerative Engineering. 456-467	1
2207	. <b>2007</b> ,	49
2206	. <b>2007</b> ,	21
2205	Synthetic tissue biology: tissue engineering meets synthetic biology. <b>2007</b> , 81, 354-61	17
2204	Perfusion flow bioreactor for 3D in situ imaging: investigating cell/biomaterials interactions. <b>2007</b> , 97, 952-61	31
2203	Development of a 3D cell culture system for investigating cell interactions with electrospun fibers. <b>2007</b> , 97, 1318-28	87
2202	An artificial liver sinusoid with a microfluidic endothelial-like barrier for primary hepatocyte culture. <b>2007</b> , 97, 1340-6	368

2201	Facile preparation of complex protein architectures with sub-100-nm resolution on surfaces. <b>2007</b> , 46, 6837-40	104
2200	Facile Preparation of Complex Protein Architectures with Sub-100-nm Resolution on Surfaces. <b>2007</b> , 119, 6961-6964	14
2199	Micro- and Nanoscale Control of Cellular Environment for Tissue Engineering. 347-364	4
2198	Physical and Biological Properties of a Novel Hydrogel Composite Based on Oxidized Alginate, Gelatin and Tricalcium Phosphate for Bone Tissue Engineering. <b>2007</b> , 9, 1082-1088	37
2197	Polyelectrolyte-Clay-Protein Layer Films on Microfluidic PDMS Bioreactor Surfaces for Primary Murine Bone Marrow Culture. <i>Advanced Functional Materials</i> , <b>2007</b> , 17, 2701-2709	15.6 46
2196	Coating of Human Mesenchymal Cells in 3D Culture with Bioinorganic Nanoparticles Promotes Osteoblastic Differentiation and Gene Transfection. <b>2007</b> , 19, 2236-2240	52
2195	Organic Bioelectronics. <b>2007</b> , 19, 3201-3213	514
2194	Enhanced differentiation and mineralization of human fetal osteoblasts on PDLLA containing Bioglass composite films in the absence of osteogenic supplements. <b>2007</b> , 80, 837-51	74
2193	Enhancement of in vitro osteogenesis on titanium by chemically produced nanotopography. <b>2007</b> , 80, 554-64	165
2192	Biomedical nanocomposites of hydroxyapatite/polycaprolactone obtained by surfactant mediation. <b>2007</b> , 83, 169-77	83
2191	Imaging cellular responses to mechanical stimuli within three-dimensional tissue constructs. <b>2007</b> , 70, 361-71	24
2190	Surface modification and property analysis of biomedical polymers used for tissue engineering. <b>2007</b> , 60, 137-57	446
2189	Retroviral microarray-based platform on nanostructured TiO <sub>2</sub> for functional genomics and drug discovery. <b>2007</b> , 28, 2244-53	27
2188	Suppression of apoptosis by enhanced protein adsorption on polymer/hydroxyapatite composite scaffolds. <b>2007</b> , 28, 2622-30	179
2187	RGD-Functionalized polymer brushes as substrates for the integrin specific adhesion of human umbilical vein endothelial cells. <b>2007</b> , 28, 2536-46	231
2186	Cell culture models of higher complexity in tissue engineering and regenerative medicine. <b>2007</b> , 28, 5193-8	69
2185	Smart Polymeric Gels: Redefining the Limits of Biomedical Devices. <b>2007</b> , 32, 1083-1122	483
2184	Bioresponsive hydrogels. <b>2007</b> , 10, 40-48	375

2183	Creating ultrathin nanoscopic collagen matrices for biological and biotechnological applications. <b>2007</b> , 3, 956-63	59
2182	The control of human mesenchymal cell differentiation using nanoscale symmetry and disorder. <b>2007</b> , 6, 997-1003	1967
2181	Fibroblast mechanics in 3D collagen matrices. <b>2007</b> , 59, 1299-305	146
2180	Cell responses to the mechanochemical microenvironment--implications for regenerative medicine and drug delivery. <b>2007</b> , 59, 1329-39	315
2179	Modern biomaterials: a review - bulk properties and implications of surface modifications. <b>2007</b> , 18, 1263-77	398
2178	Investigation of fibroblast and keratinocyte cell-scaffold interactions using a novel 3D cell culture system. <b>2007</b> , 18, 321-8	23
2177	Bio-nanopatterning of Surfaces. <b>2007</b> , 2, 373-84	100
2176	Inhibition of proliferation of osteosarcoma by nano calcium phosphates: potential hard tissue repair after tumor extraction. <b>2007</b> , 1, 30-34	3
2175	Synthesis of two-component injectable polyurethanes for bone tissue engineering. <b>2007</b> , 28, 423-33	131
2174	Electrospun aliphatic polycarbonates as tailored tissue scaffold materials. <b>2007</b> , 28, 2211-9	125
2173	Enzymatic formation of modular cell-instructive fibrin analogs for tissue engineering. <b>2007</b> , 28, 3856-66	184
2172	Fibrous poly(chitosan-g-DL-lactic acid) scaffolds prepared via electro-wet-spinning. <i>Acta Biomaterialia</i> , <b>2008</b> , 4, 876-86	10.8 49
2171	Reversible on-demand cell alignment using reconfigurable microtopography. <b>2008</b> , 29, 1705-12	79
2170	Electrospun nanofiber scaffolds for rapid and rich capture of bone marrow-derived hematopoietic stem cells. <b>2008</b> , 29, 2096-103	117
2169	The promotion of osteoblastic differentiation of rat bone marrow stromal cells by a polyvalent plant mosaic virus. <b>2008</b> , 29, 4074-81	72
2168	Surface tailoring of poly(ethylene terephthalate) via ligand-tethered comb-like PEG to enhance endothelialization. <b>2008</b> , 19, 291-9	3
2167	3-D Nanofibrous electrospun multilayered construct is an alternative ECM mimicking scaffold. <b>2008</b> , 19, 1249-55	131
2166	Electrospun fibrous web of collagen-apatite precipitated nanocomposite for bone regeneration. <b>2008</b> , 19, 2925-32	78

2165	The inhibitory effect of an RGD-human chitin-binding domain fusion protein on the adhesion of fibroblasts to reacylated chitosan films. <b>2008</b> , 40, 269-79	5
2164	Biomaterials for bone tissue engineering. <b>2008</b> , 11, 18-25	801
2163	Biomaterials engineered for integration. <b>2008</b> , 11, 44-51	62
2162	Manufacturing technologies of polymeric nanofibres and nanofibre yarns. <b>2008</b> , 57, 837-845	124
2161	A self-correcting inking strategy for cantilever arrays addressed by an inkjet printer and used for dip-pen nanolithography. <b>2008</b> , 4, 1666-70	35
2160	Engineering microporosity in bacterial cellulose scaffolds. <b>2008</b> , 2, 320-30	179
2159	Lactide polymerization co-initiated by carbohydrate esters and pyranoses. <b>2008</b> , 46, 4352-4362	16
2158	Engineering biodegradable polyester particles with specific drug targeting and drug release properties. <b>2008</b> , 97, 71-87	223
2157	The hematopoietic stem cell niche: what are we trying to replicate?. <b>2008</b> , 83, 421-443	48
2156	Three-dimensional encapsulation of live cells by using a hybrid matrix of nanoparticles in a supramolecular hydrogel. <b>2008</b> , 14, 10808-15	33
2155	Bioactive and degradable hybridized nanofibers of gelatin-siloxane for bone regeneration. <b>2008</b> , 84, 875-84	49
2154	Bioactivity and osteoblast responses of novel biomedical nanocomposites of bioactive glass nanofiber filled poly(lactic acid). <b>2008</b> , 85, 651-63	116
2153	Nanofibrous matrices of poly(lactic acid) and gelatin polymeric blends for the improvement of cellular responses. <b>2008</b> , 87, 25-32	118
2152	Porous beta-tricalcium phosphate/collagen composites prepared in an alkaline condition. <b>2008</b> , 87, 38-44	9
2151	Polymer cell culture substrates with micropatterned carbon nanotubes. <b>2008</b> , 86, 996-1001	14
2150	Polymer surfaces structured with random or aligned electrospun nanofibers to promote the adhesion of blood platelets. <b>2009</b> , 89, 168-75	11
2149	Hierarchically mesoporous-macroporous bioactive glasses scaffolds for bone tissue regeneration. <b>2008</b> , 87, 374-80	56
2148	Photochemical surface patterning by the thiol-ene reaction. <b>2008</b> , 47, 4421-4	169



2147	Chemical strategies for generating protein biochips. <b>2008</b> , 47, 9618-47	507
2146	3D Fiber-Deposited Electrospun Integrated Scaffolds Enhance Cartilage Tissue Formation. <i>Advanced Functional Materials</i> , <b>2008</b> , 18, 53-60	15.6 167
2145	Polyelectrolyte multilayer films of controlled stiffness modulate myoblast cells differentiation. <i>Advanced Functional Materials</i> , <b>2008</b> , 18, 1378-1389	15.6 220
2144	Surface Nanopatterning to Control Cell Growth. <b>2008</b> , 20, 1488-1492	138
2143	Photochemical Surface Patterning by the Thiol-Ene Reaction. <b>2008</b> , 120, 4493-4496	51
2142	Chemische Verfahren zur Herstellung von Proteinbiochips. <b>2008</b> , 120, 9762-9792	57
2141	Use of electrospinning technique for biomedical applications. <b>2008</b> , 49, 5603-5621	1337
2140	Investigation of cell-surface interactions using chemical gradients formed from plasma polymers. <b>2008</b> , 29, 172-84	137
2139	Molecular simulation of protein adsorption and desorption on hydroxyapatite surfaces. <b>2008</b> , 29, 513-32	218
2138	Incorporation of a matrix metalloproteinase-sensitive substrate into self-assembling peptides - a model for biofunctional scaffolds. <b>2008</b> , 29, 1713-9	139
2137	Non-invasive characterization of structure and morphology of silk fibroin biomaterials using non-linear microscopy. <b>2008</b> , 29, 2015-24	63
2136	Fabrication and evaluation of Zn containing fluoridated hydroxyapatite layer with Zn release ability. <i>Acta Biomaterialia</i> , <b>2008</b> , 4, 441-6	10.8 61
2135	Partitioning microfluidic channels with hydrogel to construct tunable 3-D cellular microenvironments. <b>2008</b> , 29, 1853-61	160
2134	Shield effect of silicate on adsorption of proteins onto silicon-doped hydroxyapatite (100) surface. <b>2008</b> , 29, 2423-32	56
2133	Effect of surface structure on biomechanical properties and osseointegration. <b>2008</b> , 28, 1448-1461	22
2132	Stem cells and biomimetic materials strategies for tissue engineering. <b>2008</b> , 28, 1189-1202	111
2131	Natural Polymers in tissue engineering applications. <b>2008</b> , 145-192	21
2130	Apoptosis in bone for tissue engineering. <b>2008</b> , 39, 467-82	38

2129	Biofunctionalization of biomaterials for accelerated in situ endothelialization: a review. <i>Biomacromolecules</i> , <b>2008</b> , 9, 2969-79	6.9	292
2128	Degradation of electrospun nanofiber scaffold by short wave length ultraviolet radiation treatment and its potential applications in tissue engineering. <b>2008</b> , 14, 1321-9		86
2127	Long-term viability of coronary artery smooth muscle cells on poly(L-lactide-co-epsilon-caprolactone) nanofibrous scaffold indicates its potential for blood vessel tissue engineering. <b>2008</b> , 5, 1109-18		31
2126	A biomimetic hierarchical scaffold: natural growth of nanotitanates on three-dimensional microporous Ti-based metals. <b>2008</b> , 8, 3803-8		110
2125	Calcium phosphate nanoparticles in biomineralization and biomaterials. <b>2008</b> , 18, 3775		232
2124	De novo design of strand-swapped beta-hairpin hydrogels. <b>2008</b> , 130, 4466-74		124
2123	Morphology based particle segregation by electrostatic charge. <b>2008</b> , 39, 785-792		15
2122	Three-dimensional cell culture matrices: state of the art. <b>2008</b> , 14, 61-86		790
2121	Mechanically Tunable Thin Films of Photosensitive Artificial Proteins: Preparation and Characterization by Nanoindentation. <b>2008</b> , 41, 1839-1845		38
2120	Stimuli-responsive surfaces for bio-applications. <b>2008</b> , 37, 2512-29		569
2119	Microparticles as tissue engineering scaffolds: manufacture, modification and manipulation. <b>2008</b> , 24, 1031-1044		17
2118	Review of laser based biomimetic and bioactive CaP coatings. <b>2008</b> , 24, 1144-1161		14
2117	Carbon nanotube-enhanced polyurethane scaffolds fabricated by thermally induced phase separation. <b>2008</b> , 18, 1865		87
2116	Morphology control of lysozyme crystal shapes by different block copolymers. <b>2008</b> , 10, 166-169		2
2115	In vitro and in vivo analysis of co-electrospun scaffolds made of medical grade poly(epsilon-caprolactone) and porcine collagen. <b>2008</b> , 19, 693-707		25
2114	Correlations between structure, material properties and bioproperties in self-assembled beta-hairpin peptide hydrogels. <b>2008</b> , 139, 251-64; discussion 309-25, 419-20		104
2113	Modular self-assembling biomaterials for directing cellular responses. <b>2008</b> , 4, 2310-2315		56
2112	Light-guided surface engineering for biomedical applications. <b>2008</b> , 19, 792-6		7

2111	Protection of sensors for biological applications by photoinitiated chemical vapor deposition of hydrogel thin films. <i>Biomacromolecules</i> , <b>2008</b> , 9, 2857-62	6.9	52
2110	Behavior regulation of adsorbed proteins via hydroxyapatite surface texture control. <b>2008</b> , 112, 4751-9		31
2109	Polymer nanofibers via nozzle-free centrifugal spinning. <b>2008</b> , 8, 1187-91		167
2108	Integrating novel technologies to fabricate smart scaffolds. <b>2008</b> , 19, 543-72		168
2107	Density Functional Theory calculations and Molecular Dynamics Simulations of the Interaction of Bio-molecules with Hydroxyapatite Surfaces in an Aqueous Environment. <b>2008</b> , 1131, 10601		
2106	Biomimetic polymers to control cell adhesion. <b>2008</b> , 18, 15-24		8
2105	Dynamic control of nanofluidic channels in protein drug delivery vehicles. <b>2008</b> , 18, 41-45		56
2104	Porous bioactive nanostructured scaffolds for bone regeneration: a sol-gel solution. <b>2008</b> , 3, 233-45		28
2103	Tuning hierarchical architecture of 3D polymeric scaffolds for cardiac tissue engineering. <b>2008</b> , 3, 97-110		20
2102	Electrospinning: processing technique for tissue engineering scaffolding. <b>2008</b> , 53, 257-274		125
2101	Materials viewpoints in bone regenerative medicine: progress and prospects. <b>2008</b> , 24, 1027-1030		5
2100	NANOTECHNOLOGY IN MEDICINE AND HEALTH SCIENCES. <b>2008</b> , 03, 263-269		7
2099	Bioactive Composite Materials for Bone Tissue Engineering Scaffolds. <b>2008</b> , 279-311		3
2098	Optimizing substrate disorder for bone tissue engineering of mesenchymal stem cells. <b>2008</b> , 26, 2554-2557		12
2097	Electrospun Nanoporous Fiber. <b>2008</b> , 78, 812-815		10
2096	Cellular responses to novel, micropatterned biomaterials. <b>2008</b> , 80, 2479-2487		36
2095	Biodegradable Polymers in Bone Tissue Engineering. <b>2009</b> , 2, 833-856		81
2094	. <b>2009</b> ,		58

2093	Multimodality microscopy of cell dynamics in three-dimensional engineered and natural tissues. <b>2009</b> ,	2
2092	Surface characterization and cytocompatibility of three chitosan/polycation composite membranes for guided bone regeneration. <b>2009</b> , 24, 209-29	12
2091	Three-dimensional synthetic niche components to control germ cell proliferation. <b>2009</b> , 15, 255-62	23
2090	Science of nanofibrous scaffold fabrication: strategies for next generation tissue-engineering scaffolds. <b>2009</b> , 4, 193-206	76
2089	Physical properties and biocompatibility of poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) blended with poly(3-hydroxybutyrate-co-4-hydroxybutyrate). <b>2009</b> , 20, 1537-53	32
2088	From biominerals to biomaterials: the role of biomolecule-mineral interactions. <b>2009</b> , 37, 687-91	22
2087	Effect of scaffold stiffness on myoblast differentiation. <b>2009</b> , 15, 935-44	99
2086	The role of collagen crosslinking in differentiation of human mesenchymal stem cells and MC3T3-E1 cells. <b>2009</b> , 15, 3857-67	37
2085	Interface biology of implants. <b>2009</b> , 3, 390-4	12
2084	Fabrication of Nanoscale Bioarrays for the Study of Cytoskeletal Protein Binding Interactions Using Nanoimprint Lithography. <b>2009</b> , 27, 61-65	19
2083	Flexible electrical recording from cells using nanowire transistor arrays. <b>2009</b> , 106, 7309-13	191
2082	Responses of fibroblasts and glial cells to nanostructured platinum surfaces. <b>2009</b> , 20, 385103	38
2081	Heparinized Micropatterned Surfaces for the Spatial Control of Human Mesenchymal Stem Cells. <b>2009</b> , 24, 493-506	7
2080	Extraction and assembly of tissue-derived gels for cell culture and tissue engineering. <b>2009</b> , 15, 309-21	87
2079	Surface modification of polymers using a multi-step plasma treatment. <b>2009</b> , 60, 44-47	47
2078	Preparation of bioactive glass ceramic beads with hierarchical pore structure using polymer self-assembly technique. <b>2009</b> , 115, 670-676	31
2077	Influence of Treatment Conditions on the Chemical Oxidative Activity of H <sub>2</sub> SO <sub>4</sub> /H <sub>2</sub> O <sub>2</sub> Mixtures for Modulating the Topography of Titanium. <b>2009</b> , 11, B227-B234	31
2076	Laser Spinning of Bioactive Glass Nanofibers. <i>Advanced Functional Materials</i> , <b>2009</b> , 19, 3084-3090	15.6 61

2075	Step-by-Step Build-Up of Biologically Active Cell-Containing Stratified Films Aimed at Tissue Engineering. <b>2009</b> , 21, 650-655	41
2074	Progress in the field of electrospinning for tissue engineering applications. <b>2009</b> , 21, 3343-51	395
2073	Formation of Patches on 3D SAMs Driven by Thiols with Immiscible Chains Observed by ESR Spectroscopy. <b>2009</b> , 121, 3106-3110	10
2072	Reactive polyurethane carbon nanotube foams and their interactions with osteoblasts. <b>2009</b> , 88, 65-73	54
2071	Factorial design optimization and in vivo feasibility of poly(epsilon-caprolactone)-micro- and nanofiber-based small diameter vascular grafts. <b>2009</b> , 89, 865-75	119
2070	Gelatin nanofibrous membrane fabricated by electrospinning of aqueous gelatin solution for guided tissue regeneration. <b>2009</b> , 90, 671-9	165
2069	Cyto- and hemocompatibility of a biodegradable 3D-scaffold material designed for medical applications. <b>2009</b> , 91, 109-21	18
2068	Micropatterned fiber scaffolds for spatially controlled cell adhesion. <b>2009</b> , 30, 1638-44	25
2067	Dextran-based coating system for the immobilization of cell adhesion promoting molecules on titanium surfaces. <b>2009</b> , 40, 853-860	4
2066	Hybrid multicomponent hydrogels for tissue engineering. <b>2009</b> , 9, 140-56	213
2065	The surface modification of hydroxyapatite nanoparticles by the ring opening polymerization of gamma-benzyl-L-glutamate N-carboxyanhydride. <b>2009</b> , 9, 631-8	56
2064	Disulfide-crosslinked electrospun poly(gamma-glutamic acid) nonwovens as reduction-responsive scaffolds. <b>2009</b> , 9, 568-74	52
2063	Self assembling and crosslinking of polyelectrolyte multilayer films of chitosan and alginate studied by QCM and IR spectroscopy. <b>2009</b> , 9, 776-85	111
2062	Surface modification of hydroxyapatite nanoparticles with thermal-responsive PNIPAM by ATRP. <b>2009</b> , 9, 1237-46	40
2061	Substrate influence on cell shape and cell mechanics: HepG2 cells spread on positively charged surfaces. <b>2009</b> , 72, 957-64	29
2060	Formation of patches on 3D SAMs driven by thiols with immiscible chains observed by ESR spectroscopy. <b>2009</b> , 48, 3060-4	58
2059	Bone tissue engineering: a review in bone biomimetics and drug delivery strategies. <b>2009</b> , 25, 1539-60	466
2058	Poly-L-lactic acid/hydroxyapatite electrospun nanocomposites induce chondrogenic differentiation of human MSC. <b>2009</b> , 37, 1376-89	96

2057	Laser-based micro/nanoengineering for biological applications. <b>2009</b> , 33, 127-163	78
2056	Correlation of anisotropic cell behaviors with topographic aspect ratio. <b>2009</b> , 30, 1560-7	101
2055	Optimization strategies for electrospun silk fibroin tissue engineering scaffolds. <b>2009</b> , 30, 3058-67	172
2054	Influence of micro-well biomimetic topography on intestinal epithelial Caco-2 cell phenotype. <b>2009</b> , 30, 6825-34	68
2053	On the effect of substrate curvature on cell mechanics. <b>2009</b> , 30, 6674-86	71
2052	Development of a mini 3D cell culture system using well defined nickel grids for the investigation of cell scaffold interactions. <b>2009</b> , 20, 1483-93	10
2051	Nanofibrous membrane of collagen-polycaprolactone for cell growth and tissue regeneration. <b>2009</b> , 20, 1927-35	54
2050	Nanostructured 3-D collagen/nanotube biocomposites for future bone regeneration scaffolds. <b>2009</b> , 2, 462-473	51
2049	[Tissue engineering of bone tissue. Principles and clinical applications]. <b>2009</b> , 112, 785-94; quiz 795	14
2048	Improving biocompatibility of implantable metals by nanoscale modification of surfaces: an overview of strategies, fabrication methods, and challenges. <b>2009</b> , 5, 996-1006	163
2047	Tissue engineering: state of the art in oral rehabilitation. <b>2009</b> , 36, 368-89	125
2046	Physical approaches to biomaterial design. <b>2009</b> , 8, 15-23	1103
2045	Complexity in biomaterials for tissue engineering. <b>2009</b> , 8, 457-70	1340
2044	Comparative materials differences revealed in engineered bone as a function of cell-specific differentiation. <b>2009</b> , 8, 763-70	193
2043	The effect of nanometre-scale structure on interfacial energy. <b>2009</b> , 8, 837-42	196
2042	Toxicology: Testing in the third dimension. <b>2009</b> , 4, 342-3	11
2041	Preparation and characterization of 2,3-dialdehyde bacterial cellulose for potential biodegradable tissue engineering scaffolds. <b>2009</b> , 29, 1635-1642	159
2040	In vitro and in vivo evaluation of the surface bioactivity of a calcium phosphate coated magnesium alloy. <b>2009</b> , 30, 1512-23	398

2039	Surface mediated in situ differentiation of mesenchymal stem cells on gene-functionalized titanium films fabricated by layer-by-layer technique. <b>2009</b> , 30, 3626-35	78
2038	Cell adhesion over two distinct surfaces varied with chemical and mechanical properties. <b>2009</b> , 517, 5386-5389	5
2037	Nano-fiber scaffold electrodes based on PEDOT for cell stimulation. <b>2009</b> , 142, 451-456	99
2036	New trends in bioactive scaffolds: The importance of nanostructure. <b>2009</b> , 29, 1275-1281	146
2035	Polyelectrolyte-complex nanostructured fibrous scaffolds for tissue engineering. <b>2009</b> , 29, 2079-2084	38
2034	Calcium phosphate coatings for bio-implant applications: Materials, performance factors, and methodologies. <b>2009</b> , 66, 1-70	475
2033	Fabrication and characterization of aligned nanofibrous PLGA/Collagen blends as bone tissue scaffolds. <b>2009</b> , 50, 3778-3785	149
2032	The effect of pre-coating human bone marrow stromal cells with hydroxyapatite/amino acid nanoconjugates on osteogenesis. <b>2009</b> , 30, 3174-82	15
2031	Nano- and sub-micron porous polyelectrolyte multilayer assemblies: biomimetic surfaces for human corneal epithelial cells. <b>2009</b> , 30, 4029-36	60
2030	The controlled presentation of TGF-beta1 to hepatocytes in a 3D-microfluidic cell culture system. <b>2009</b> , 30, 3847-53	31
2029	Cellular behavior on TiO2 nanonodular structures in a micro-to-nanoscale hierarchy model. <b>2009</b> , 30, 5319-29	253
2028	The treatment of collagen fibrils by tissue transglutaminase to promote vascular smooth muscle cell contractile signaling. <b>2009</b> , 30, 5486-96	44
2027	[Regenerative potential of human adult precursor cells: cell therapy--an option for treating cartilage defects?]. <b>2009</b> , 68, 234-8	
2026	Genetically engineered nanofiber-like viruses for tissue regenerating materials. <b>2009</b> , 9, 846-52	159
2025	Adhesion and membrane tension of single vesicles and living cells using a micropipette-based technique. <b>2009</b> , 30, 117-21	37
2024	Preparation of PVDF/PMMA Blend Nanofibers by Electro spray Deposition: Effects of Blending Ratio and Humidity. <b>2009</b> , 41, 402-406	24
2023	Towards a human-on-chip: culturing multiple cell types on a chip with compartmentalized microenvironments. <b>2009</b> , 9, 3185-92	263
2022	Cell-targeted self-assembled DNA nanostructures. <b>2009</b> , 131, 14237-9	38

2021	Structural Analysis and Mechanical Characterization of Hyaluronic Acid-Based Doubly Cross-Linked Networks. <b>2009</b> , 42, 537-546			107
2020	Self-Diffusion and Cooperative Diffusion in Semidilute Polymer Solutions As Measured by Fluorescence Correlation Spectroscopy. <b>2009</b> , 42, 9537-9547			70
2019	Density functional theory study of the binding of glycine, proline, and hydroxyproline to the hydroxyapatite (0001) and (0110) surfaces. <b>2009</b> , 25, 5018-25			109
2018	Dependence of Self-Assembled Peptide Hydrogel Network Structure on Local Fibril Nanostructure. <b>2009</b> , 42, 7137-7145			76
2017	Antiplatelet and thermally responsive poly(N-isopropylacrylamide) surface with nanoscale topography. <b>2009</b> , 131, 10467-72			183
2016	Reversible self-assembly: a key feature for a new class of autodelivering therapeutic peptides. <b>2009</b> , 6, 1036-9			25
2015	Analysis of the biological response of endothelial and fibroblast cells cultured on synthetic scaffolds with various hydrophilic/hydrophobic ratios: influence of fibronectin adsorption and conformation. <b>2009</b> , 15, 1331-41			55
2014	Enzyme-activated RGD ligands on functionalized poly(ethylene glycol) monolayers: surface analysis and cellular response. <b>2009</b> , 25, 7533-9			58
2013	Nanoimprinted thin films of reactive, azlactone-containing polymers: combining methods for the topographic patterning of cell substrates with opportunities for facile post-fabrication chemical functionalization. <i>Biomacromolecules</i> , <b>2009</b> , 10, 994-1003	6.9	21	
2012	Nylon-3 copolymers that generate cell-adhesive surfaces identified by library screening. <b>2009</b> , 131, 16779-89			46
2011	Engineering Molecular Self-Assembled Fibrillar Networks by Ultrasound. <b>2009</b> , 9, 3286-3291			44
2010	A Fluorescent Polymer for Patterning of Mesenchymal Stem Cells. <b>2009</b> , 42, 3326-3332			24
2009	Synthetic polymer scaffolds for tissue engineering. <b>2009</b> , 38, 1139-51			575
2008	Nanofiber enabled layer-by-layer approach toward three-dimensional tissue formation. <b>2009</b> , 15, 945-56			129
2007	Degradation behaviors of electrospun resorbable polyester nanofibers. <b>2009</b> , 15, 333-51			125
2006	Modulation of protein-surface interactions on nanopatterned polymer films. <i>Biomacromolecules</i> , <b>2009</b> , 10, 1061-6	6.9	32	
2005	Nanodimensional and Nanocrystalline Apatites and Other Calcium Orthophosphates in Biomedical Engineering, Biology and Medicine. <b>2009</b> , 2, 1975-2045			190
2004	The design of novel nanostructures on titanium by solution chemistry for an improved osteoblast response. <b>2009</b> , 20, 195101			76



2003	Encapsulation of bacterial spores in nanoorganized polyelectrolyte shells. <b>2009</b> , 25, 14011-6	65
2002	Polymer brushes via surface-initiated controlled radical polymerization: synthesis, characterization, properties, and applications. <b>2009</b> , 109, 5437-527	1461
2001	Review paper: a review of the cellular response on electrospun nanofibers for tissue engineering. <b>2009</b> , 24, 7-29	242
2000	A bone-like nano-hydroxyapatite/collagen loaded injectable scaffold. <b>2009</b> , 4, 055005	56
1999	Electrical recording from hearts with flexible nanowire device arrays. <b>2009</b> , 9, 914-8	186
1998	Surface- and Solution-Based Assembly of Amyloid Fibrils for Biomedical and Nanotechnology Applications. <b>2009</b> , 161-209	27
1997	Conclusions. 215-226	
1996	Stem cell bioprocessing: fundamentals and principles. <b>2009</b> , 6, 209-32	143
1995	Design and adsorption of modular engineered proteins to prepare customized, neuron-compatible coatings. <b>2009</b> , 2, 9	22
1994	Cell response to Electrospun PVA and PVA/Chitosan nanofibers. <b>2009</b> ,	
1993	Fabrication and evaluation of a pulse laser-induced Ca-P coating on a Ti alloy for bioapplication. <b>2009</b> , 4, 015009	24
1992	Nanoscale oxidative patterning of metallic surfaces to modulate cell activity and fate. <b>2009</b> , 9, 659-65	121
1991	Growth factor delivery approaches in hydrogels. <i>Biomacromolecules</i> , <b>2009</b> , 10, 9-18	6.9 206
1990	Mild and Versatile (Bio-)Functionalization of Glass Surfaces via Thiolene Photochemistry. <b>2009</b> , 21, 5698-5700	75
1989	NanoScience in Biomedicine. <b>2009</b> ,	9
1988	Tissue engineering in the rheumatic diseases. <b>2009</b> , 11, 211	50
1987	Surface topography induces fibroblast adhesion on intrinsically nonadhesive poly(ethylene glycol) substrates. <i>Biomacromolecules</i> , <b>2009</b> , 10, 2795-801	6.9 86
1986	Microfluidic synthesis of a cell adhesive Janus polyurethane microfiber. <b>2009</b> , 9, 2596-602	62

1985	Sequence-dependent gelation kinetics of Hairpin peptide hydrogels. <b>2009</b> , 42, 8443-8450	47
1984	Multiradiate calcium phosphate patterns derived from a gradating polysaccharide-acidic protein system. <b>2009</b> , 442-4	5
1983	Opportunities for nanotechnology-enabled bioactive bone implants. <b>2009</b> , 19, 2653	70
1982	Micropatterning of bioactive self-assembling gels. <b>2009</b> , 5, 1228-1236	124
1981	Heparin functionalisation of porous PLGA scaffolds for controlled, biologically relevant delivery of growth factors for soft tissue engineering. <b>2009</b> , 19, 9265	28
1980	Thylakoids entrapped within porous silica gel: towards living matter able to convert energy. <b>2009</b> , 19, 1535	45
1979	Hydrogel Nanocomposites in Biology and Medicine: Applications and Interactions. <b>2009</b> , 319-342	6
1978	Photodegradable hydrogels for dynamic tuning of physical and chemical properties. <i>Science</i> , <b>2009</b> , 324, 59-63	33.3 1367
1977	Modulating the gelation properties of self-assembling peptide amphiphiles. <b>2009</b> , 3, 3447-54	79
1976	Biomaterial Surface patterning of self assembled monolayers for controlling neuronal cell behavior. <b>2009</b> , 2, 104-134	22
1975	Ex vivo nanofiber expansion and genetic modification of human cord blood-derived progenitor/stem cells enhances vasculogenesis. <b>2009</b> , 18, 305-18	66
1974	Fabrication and Surface Modification of Porous Nano-Structured NiTi Orthopedic Scaffolds for Bone Implants. <b>2009</b> , 1181, 7	1
1973	High-content profiling of cell responsiveness to graded substrates based on combinatorially variant polymers. <b>2009</b> , 12, 646-55	12
1972	Culture of human anulus fibrosus cells on polyamide nanofibers: extracellular matrix production. <b>2009</b> , 34, 4-9	28
1971	Microfluidics For Nanoneuroscience. <b>2010</b> , 1-46	1
1970	Enhanced Cell Growth, Function, and Differentiation by TiO <sub>2</sub> Nanotube Surface Structuring. <b>2010</b> , 157-166	
1969	Nanotechnologies for Peripheral Nerve Regeneration. <b>2010</b> , 185-208	
1968	ESR spectroscopy as a tool to investigate the properties of self-assembled monolayers protecting gold nanoparticles. <b>2010</b> , 2, 668-76	43

1967	Designing Three-Dimensional Materials at the Interface to Biology. <b>2010</b> , 163-192	9
1966	Dynamic control over cell adhesive properties using molecular-based surface engineering strategies. <b>2010</b> , 39, 354-78	191
1965	Emerging materials for tissue engineering and regenerative medicine: themed issue for Soft Matter and Journal of Materials Chemistry. <b>2010</b> , 6, 4962	7
1964	Intrinsic extracellular matrix properties regulate stem cell differentiation. <b>2010</b> , 43, 55-62	603
1963	Structural and morphological modification of PDMS thick film surfaces by ion implantation with the formation of strain-induced buckling domains. <b>2010</b> , 58, 1861-1867	10
1962	Optimization of the structure of polyurethanes for bone tissue engineering applications. <i>Acta Biomaterialia</i> , <b>2010</b> , 6, 2501-10	10.8 72
1961	A facile method to fabricate poly(L-lactide) nano-fibrous morphologies by phase inversion. <i>Acta Biomaterialia</i> , <b>2010</b> , 6, 2477-83	10.8 26
1960	Protein adhesion and cell response on atmospheric pressure dielectric barrier discharge-modified polymer surfaces. <i>Acta Biomaterialia</i> , <b>2010</b> , 6, 2609-20	10.8 55
1959	Modulating cellular adhesion through nanotopography. <b>2010</b> , 31, 173-9	110
1958	The nanofibrous architecture of poly(L-lactic acid)-based functional copolymers. <b>2010</b> , 31, 259-69	74
1957	Effect of functionalised fluorescence-labelled nanoparticles on mesenchymal stem cell differentiation. <b>2010</b> , 31, 2064-71	43
1956	Nanoscale engineering of biomimetic surfaces: cues from the extracellular matrix. <b>2010</b> , 339, 131-53	279
1955	Electromagnetically controlled biological assembly of aligned bacterial cellulose nanofibers. <b>2010</b> , 38, 2475-84	45
1954	Laser process effects on physical texture and wetting in implantable Ti-alloys. <b>2010</b> , 62, 76-83	4
1953	Electrospun nanofibers: Work for medicine?. <b>2010</b> , 4, 29-33	21
1952	Effect of collagen II coating on mesenchymal stem cell adhesion on chitosan and on reacylated chitosan fibrous scaffolds. <b>2010</b> , 21, 2479-90	23
1951	Nanotechnology for regenerative medicine. <b>2010</b> , 12, 575-87	93
1950	Effect of annealing on aqueous stability and elastic modulus of electrospun poly(vinyl alcohol) fibers. <b>2010</b> , 45, 2456-2465	31

1949	Experimental study on the conduction function of nano-hydroxyapatite artificial bone. <b>2010</b> , 5, 19		17
1948	A comprehensive review of surface modification for neural cell adhesion and patterning. <b>2010</b> , 93, 1209-24		50
1947	Surface nanoscale patterning of bioactive glass to support cellular growth and differentiation. <b>2010</b> , 94, 1091-9		17
1946	Electrospun nanofibrous matrix improves the regeneration of dense cortical bone. <b>2010</b> , 95, 49-57		33
1945	Characterization and cytocompatibility of biphasic calcium phosphate/polyamide 6 scaffolds for bone regeneration. <b>2010</b> , 95, 330-8		19
1944	Synthesis of Functional Nanomaterials via Colloidal Mask Templating and Glancing Angle Deposition (GLAD). <b>2010</b> , 12, 899-905		17
1943	Stem Cell Aligned Growth Induced by CeO <sub>2</sub> Nanoparticles in PLGA Scaffolds with Improved Bioactivity for Regenerative Medicine. <i>Advanced Functional Materials</i> , <b>2010</b> , 20, 1617-1624	15.6	143
1942	Tuning Specific Biomolecular Interactions Using Electro-Switchable Oligopeptide Surfaces. <i>Advanced Functional Materials</i> , <b>2010</b> , 20, 2657-2663	15.6	68
1941	Silica-Gelatin Hybrids with Tailorable Degradation and Mechanical Properties for Tissue Regeneration. <i>Advanced Functional Materials</i> , <b>2010</b> , 20, 3835-3845	15.6	179
1940	Multiple functionalities of polyelectrolyte multilayer films: new biomedical applications. <b>2010</b> , 22, 441-67		610
1939	Biomimetic nanopatterns as enabling tools for analysis and control of live cells. <b>2010</b> , 22, 4551-66		135
1938	Layer-by-layer assembly of Estradiol loaded mesoporous silica nanoparticles on titanium substrates and its implication for bone homeostasis. <b>2010</b> , 22, 4146-50		89
1937	Biomimetic Collagen Nanofibrous Materials for Bone Tissue Engineering. <b>2010</b> , 12, B451-B466		50
1936	Single-step electrospinning of bimodal fiber meshes for ease of cellular infiltration. <b>2010</b> , 31, 59-64		49
1935	Stem cell microenvironments--unveiling the secret of how stem cell fate is defined. <b>2010</b> , 10, 1302-15		63
1934	Scaffold microarchitecture determines internal bone directional growth structure: a numerical study. <b>2010</b> , 43, 2480-6		37
1933	Fabrication, biological effects, and medical applications of calcium phosphate nanoceramics. <b>2010</b> , 70, 225-242		140
1932	Surface nano-functionalization of biomaterials. <b>2010</b> , 70, 275-302		213

1931	Bio-functionalized PCL nanofibrous scaffolds for nerve tissue engineering. <b>2010</b> , 30, 1129-1136		153
1930	Effect of fiber diameter, pore size and seeding method on growth of human dermal fibroblasts in electrospun poly(epsilon-caprolactone) fibrous mats. <b>2010</b> , 31, 491-504		333
1929	General functionalization route for cell adhesion on non-wetting surfaces. <b>2010</b> , 31, 2535-41		546
1928	PHBV microspheres--PLGA matrix composite scaffold for bone tissue engineering. <b>2010</b> , 31, 4278-85		88
1927	The cytoskeletal organization of breast carcinoma and fibroblast cells inside three dimensional (3-D) isotropic silicon microstructures. <b>2010</b> , 31, 4552-61		78
1926	Effects of fractal surface on C6 glioma cell morphogenesis and differentiation in vitro. <b>2010</b> , 31, 6201-6		8
1925	Biochemical and biomechanical gradients for directed bone marrow stromal cell differentiation toward tendon and bone. <b>2010</b> , 31, 7695-704		111
1924	Sonochemical stabilization of ultrafine colloidal biocompatible magnetite nanoparticles using amino acid, L-arginine, for possible bio applications. <b>2010</b> , 17, 730-7		50
1923	Adhesion of osteoblast-like cells on nanostructured hydroxyapatite. <i>Acta Biomaterialia</i> , <b>2010</b> , 6, 591-7	10.8	105
1922	Nanosized and nanocrystalline calcium orthophosphates. <i>Acta Biomaterialia</i> , <b>2010</b> , 6, 715-34	10.8	406
1921	An alternative technique to shape scaffolds with hierarchical porosity at physiological temperature. <i>Acta Biomaterialia</i> , <b>2010</b> , 6, 1288-96	10.8	42
1920	Multiscale three-dimensional scaffolds for soft tissue engineering via multimodal electrospinning. <i>Acta Biomaterialia</i> , <b>2010</b> , 6, 1227-37	10.8	168
1919	Tuning cell adhesion by controlling the roughness and wettability of 3D micro/nano silicon structures. <i>Acta Biomaterialia</i> , <b>2010</b> , 6, 2711-20	10.8	349
1918	Nanostructured poly(epsilon-caprolactone)-silica xerogel fibrous membrane for guided bone regeneration. <i>Acta Biomaterialia</i> , <b>2010</b> , 6, 3557-65	10.8	97
1917	Alginate-controlled formation of nanoscale calcium carbonate and hydroxyapatite mineral phase within hydrogel networks. <i>Acta Biomaterialia</i> , <b>2010</b> , 6, 3665-75	10.8	59
1916	Characterization and in vitro cytocompatibility of piezoelectric electrospun scaffolds. <i>Acta Biomaterialia</i> , <b>2010</b> , 6, 3550-6	10.8	109
1915	Biomineralized porous composite scaffolds prepared by chemical synthesis for bone tissue regeneration. <i>Acta Biomaterialia</i> , <b>2010</b> , 6, 4090-9	10.8	67
1914	The effect of type II collagen coating of chitosan fibrous scaffolds on mesenchymal stem cell adhesion and chondrogenesis. <i>Acta Biomaterialia</i> , <b>2010</b> , 6, 3988-97	10.8	63

1913	Regulation of osteogenic differentiation of rat bone marrow stromal cells on 2D nanorod substrates. <b>2010</b> , 31, 1732-41	118
1912	The influence of nanoscale grooved substrates on osteoblast behavior and extracellular matrix deposition. <b>2010</b> , 31, 3307-16	174
1911	Synergic effects of crypt-like topography and ECM proteins on intestinal cell behavior in collagen based membranes. <b>2010</b> , 31, 7586-98	50
1910	Characterization and biocompatibility of nanohybrid scaffold prepared via in situ crystallization of hydroxyapatite in chitosan matrix. <b>2010</b> , 81, 640-7	56
1909	Chemistry and material science at the cell surface. <b>2010</b> , 13, 14-21	35
1908	Controlling cell behavior through the design of polymer surfaces. <b>2010</b> , 6, 2208-20	257
1907	High-throughput near-field optical nanoprocessing of solution-deposited nanoparticles. <b>2010</b> , 6, 1812-21	52
1906	Superhigh-throughput needleless electrospinning using a rotary cone as spinneret. <b>2010</b> , 6, 1612-6	173
1905	Nanoscale surfacing for regenerative medicine. <b>2010</b> , 2, 478-95	56
1904	Histomorphometric evaluation of bioceramic molecular impregnated and dual acid-etched implant surfaces in the human posterior maxilla. <b>2010</b> , 12, 281-8	33
1903	. <b>2010</b> ,	2
1902	Biomimetic Architectures for Tissue Engineering. <b>2010</b> ,	3
1901	Comparative Study of Different Techniques for the Sterilization of Poly-L-lactide Electrospun Microfibers: Effectiveness vs. Material Degradation. <b>2010</b> , 33, 76-85	32
1900	How do cells make decisions: engineering micro- and nanoenvironments for cell migration. <b>2010</b> , 2010, 363106	11
1899	Large-Scale Protein Arrays Generated with Interferometric Lithography for Spatial Control of Cell-Material Interactions. <b>2010</b> , 2010, 1-9	4
1898	The effect of surface nanometre-scale morphology on protein adsorption. <b>2010</b> , 5, e11862	194
1897	Bio-nanotechnology Approaches to Neural Tissue Engineering. <b>2010</b> ,	3
1896	Enhanced production of red blood cells in suspension by electrostatic interactions with culture plates. <b>2010</b> , 16, 1325-34	13

1895	Nanoclay Based Composite Scaffolds for Bone Tissue Engineering Applications. <b>2010</b> , 1,	69
1894	A novel design of nanofibrous gel actuator by electrospinning. <b>2010</b> ,	2
1893	Electrospun scaffolds of a polyhydroxyalkanoate consisting of omega-hydroxypentadecanoate repeat units: fabrication and in vitro biocompatibility studies. <b>2010</b> , 21, 1283-96	20
1892	Nanoscale cues regulate the structure and function of macroscopic cardiac tissue constructs. <b>2010</b> , 107, 565-70	484
1891	Nanostructured Materials for Skeletal Repair. <b>2010</b> , 294, 109-119	4
1890	Implication of silk film RGD availability and surface roughness on cytoskeletal organization and proliferation of primary rat bone marrow cells. <b>2010</b> , 16, 2391-403	44
1889	Wetting effects on in vitro bioactivity and in vitro biocompatibility of laser micro-textured Ca-P coating. <b>2010</b> , 2, 025001	21
1888	Nanostructured biocomposites for tissue engineering scaffolds. <b>2010</b> , 509-546	1
1887	Strategies for organ level tissue engineering. <b>2010</b> , 6, 151-7	70
1886	Effects of matrix composition, microstructure, and viscoelasticity on the behaviors of vocal fold fibroblasts cultured in three-dimensional hydrogel networks. <b>2010</b> , 16, 1247-61	44
1885	Investigation of adaptive responses in bystander cells in 3D cultures containing tritium-labeled and unlabeled normal human fibroblasts. <b>2010</b> , 174, 216-27	18
1884	One-step recovery of marrow stromal cells on nanofibers. <b>2010</b> , 16, 503-9	15
1883	Functional Biomaterials for Controlling Stem Cell Differentiation. <b>2010</b> , 19-44	12
1882	The Nanofiber Matrix as an Artificial Stem Cell Niche. <b>2010</b> , 89-118	2
1881	Biocompatible, detachable, and free-standing polyelectrolyte multilayer films. <i>Biomacromolecules</i> , <b>2010</b> , 11, 2788-96	6.9 70
1880	Drug releasing polymer thin films: new era of surface-mediated drug delivery. <b>2010</b> , 4, 2494-509	244
1879	Calcium Phosphate Nanoparticles in Biomineralization and Biomaterials. <b>2010</b> ,	2
1878	Clarification of the blood compatibility mechanism by controlling the water structure at the blood-poly(meth)acrylate interface. <b>2010</b> , 21, 1849-63	65

1877	Bioactive Glass and Glass-Ceramic Scaffolds for Bone Tissue Engineering. <b>2010</b> , 3, 3867-3910		669
1876	Designing Nanofibrous Scaffolds for Tissue Engineering. <b>2010</b> , 435-497		4
1875	Polymerization-like multilevel hierarchical self-assembly of polymer vesicles into macroscopic superstructures with controlled complexity. <b>2010</b> , 26, 14512-9		25
1874	Nanomaterials for Improved Orthopedic and Bone Tissue Engineering Applications. <b>2010</b> , 205-241		4
1873	Continuum model of mechanical interactions between biological cells and artificial nanostructures. <b>2010</b> , 5, 37-44		17
1872	Directing the morphology and differentiation of skeletal muscle cells using oriented cellulose nanowhiskers. <i>Biomacromolecules</i> , <b>2010</b> , 11, 2498-504	6.9	115
1871	Higher-order assembly of collagen peptides into nano- and microscale materials. <b>2010</b> , 49, 4411-9		57
1870	Bone grafting, orthopaedic biomaterials, and the clinical need for bone engineering. <b>2010</b> , 224, 1329-43		259
1869	Distinctive degradation behaviors of electrospun polyglycolide, poly(DL-lactide-co-glycolide), and poly(L-lactide-co-epsilon-caprolactone) nanofibers cultured with/without porcine smooth muscle cells. <b>2010</b> , 16, 283-98		54
1868	Electrospun nanoporous materials: reality, potential and challenges. <b>2010</b> , 26, 1304-1308		16
1867	Tailoring Polylactide Degradation: Copolymerization of a Carbohydrate Lactone and S,S-Lactide. <b>2010</b> , 43, 7556-7564		18
1866	Selective and direct immobilization of cysteinyl biomolecules by electrochemical cleavage of azo linkage. <b>2010</b> , 26, 15087-91		8
1865	A 3D ECM-Mimicking Device to Assess Stem Cells Differentiation: A Novel Approach to Stemness Evaluation. <b>2010</b> ,		
1864	Stable biomimetic superhydrophobic surfaces fabricated by polymer replication method from hierarchically structured surfaces of Al templates. <b>2010</b> , 26, 14103-10		49
1863	Cell-directed integration into three-dimensional lipid-silica nanostructured matrices. <b>2010</b> , 4, 5539-50		32
1862	Recombinant human collagen and biomimetic variants using a de novo gene optimized for modular assembly. <i>Biomacromolecules</i> , <b>2010</b> , 11, 1460-9	6.9	19
1861	Exploring cellular contact guidance using gradient nanogratings. <i>Biomacromolecules</i> , <b>2010</b> , 11, 3067-72	6.9	35
1860	Interfacing carbon nanotubes with living mammalian cells and cytotoxicity issues. <b>2010</b> , 23, 1131-47		126



1859	Graphene and nanowire transistors for cellular interfaces and electrical recording. <b>2010</b> , 10, 1098-102	332
1858	Nanotechnology in drug delivery and tissue engineering: from discovery to applications. <b>2010</b> , 10, 3223-30	1158
1857	Influences of physical and chemical crosslinking techniques on electrospun type A and B gelatin fiber mats. <i>International Journal of Biological Macromolecules</i> , <b>2010</b> , 47, 431-8	7.9 128
1856	Periodic beaded-filament assembly of fibronectin on negatively charged surface. <b>2010</b> , 170, 50-9	31
1855	Cellular compatibility of RGD-modified chitosan nanofibers with aligned or random orientation. <b>2010</b> , 5, 054112	28
1854	Injectable solid hydrogel: mechanism of shear-thinning and immediate recovery of injectable Hairpin peptide hydrogels. <b>2010</b> , 6, 5143-5156	257
1853	Fibronectin adsorption, cell adhesion, and proliferation on nanostructured tantalum surfaces. <b>2010</b> , 4, 2874-82	146
1852	Silicon scaffolds promoting three-dimensional neuronal web of cytoplasmic processes. <b>2010</b> , 16, 497-502	39
1851	Bacteria pattern spontaneously on periodic nanostructure arrays. <b>2010</b> , 10, 3717-21	232
1850	Dry Adhesion Based on Electrospun Polymer Nanofibers. <b>2010</b> ,	
1849	Bio rapid prototyping by extruding/aspirating/refilling thermoreversible hydrogel. <b>2010</b> , 2, 014108	59
1848	Polyglycerol nanogels: highly functional scaffolds for biomedical applications. <b>2010</b> , 6, 4968	62
1847	Creating biomimetic surfaces through covalent and oriented binding of proteins. <b>2010</b> , 26, 14707-15	32
1846	Biomaterials as Stem Cell Niche. <b>2010</b> ,	1
1845	Modular Approach toward Bioactive Fiber Meshes Carrying Oligosaccharides. <b>2010</b> , 43, 9239-9247	37
1844	Characterization of adhesion phenomena and contact of surfaces by soft colloidal probe AFM. <b>2010</b> , 6, 1432	65
1843	A G-CSF functionalized PLLA scaffold for wound repair: An in vitro preliminary study. <b>2010</b> , 2010, 843-6	9
1842	Fabrication, structure and biological properties of organic acid-derived sol-gel bioactive glasses. <b>2010</b> , 5, 054103	28

1841	Design of Hierarchically Porous Materials for Bone Tissue Regeneration. <b>2010</b> , 441, 139-153	2
1840	Morphology of mixed-monolayers protecting metal nanoparticles. <b>2010</b> , 20, 1403-1412	35
1839	Multimodal biomaterial strategies for regeneration of infarcted myocardium. <b>2010</b> , 20, 8819	20
1838	Designing a three-dimensional alginate hydrogel by spraying method for cartilage tissue engineering. <b>2010</b> , 6, 5165	31
1837	Emerging materials for tissue engineering and regenerative medicine: themed issue for Journal of Materials Chemistry and Soft Matter. <b>2010</b> , 20, 8729	1
1836	Tunable mechanics of peptide nanofiber gels. <b>2010</b> , 26, 3641-7	172
1835	In vitro assessment of the differentiation potential of bone marrow-derived mesenchymal stem cells on genipin-chitosan conjugation scaffold with surface hydroxyapatite nanostructure for bone tissue engineering. <b>2011</b> , 17, 1341-9	63
1834	Micropatterns of double-layered nanofiber scaffolds with dual functions of cell patterning and metabolite detection. <b>2011</b> , 11, 2849-57	31
1833	Direct and cell signaling-based, geometry-induced neuronal differentiation of neural stem cells. <b>2011</b> , 3, 1207-14	20
1832	Thermal gelling polyalanine-poloxamine-polyalanine aqueous solution for chondrocytes 3D culture: Initial concentration effect. <b>2011</b> , 7, 456-462	40
1831	Electrospun silica/PLLA hybrid materials for skeletal regeneration. <b>2011</b> , 7, 10241	58
1830	Nano-textured self-assembled aligned collagen hydrogels promote directional neurite guidance and overcome inhibition by myelin associated glycoprotein. <b>2011</b> , 7, 2770	60
1829	Protein coverage on polymer nanolayers leading to mesenchymal stem cell patterning. <b>2011</b> , 13, 17625-32	12
1828	Titanium dioxide nanoparticles induced intracellular calcium homeostasis modification in primary human keratinocytes. Towards an in vitro explanation of titanium dioxide nanoparticles toxicity. <b>2011</b> , 5, 125-39	39
1827	Introduction to electrospinning. <b>2011</b> , 3-33	11
1826	Cell surface engineering with polyelectrolyte multilayer thin films. <b>2011</b> , 133, 7054-64	157
1825	Enzymatically degradable thermogelling poly(alanine-co-leucine)-poloxamer-poly(alanine-co-leucine). <i>Biomacromolecules</i> , <b>2011</b> , 12, 1234-42	6.9 55
1824	Nanostructured polymer assemblies formed at interfaces: applications from immobilization and encapsulation to stimuli-responsive release. <b>2011</b> , 13, 4782-801	78

1823	Construction of a fluorescent nanostructured chitosan-hydroxyapatite scaffold by nanocrystallon induced biomimetic mineralization and its cell biocompatibility. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2011</b> , 3, 1692-701	9.5	40
1822	Poly(carboxybetaine methacrylamide)-modified nanoparticles: a model system for studying the effect of chain chemistry on film properties, adsorbed protein conformation, and clot formation kinetics. <i>Biomacromolecules</i> , <b>2011</b> , 12, 3567-80	6.9	40
1821	Collagen-Membrane-Induced Calcium Phosphate Electrocrystallization. <b>2011</b> , 11, 26-28		4
1820	Polypeptide folding-mediated tuning of the optical and structural properties of gold nanoparticle assemblies. <b>2011</b> , 11, 5564-73		52
1819	Self-assembly of virus particles on flat surfaces via controlled evaporation. <b>2011</b> , 27, 1398-402		36
1818	Nanoscale surface modifications of medically relevant metals: state-of-the art and perspectives. <b>2011</b> , 3, 335-53		193
1817	Exploring and Engineering the Cell-Surface Interface. <b>2011</b> , 100, 189a		11
1816	Condensing Chromosomes to Effect Chromosome-Wide Regulation of Gene Expression and Meiotic Crossovers. <b>2011</b> , 100, 189a		
1815	How Entropic Forces can Drive Chromosome Organization. <b>2011</b> , 100, 189a		
1814	Nanoelectronics Meets Biology. <b>2011</b> , 100, 189a		
1813	Statistical Mechanics of the Condensation of Linear Genome Molecules by Viral Capsid Proteins. <b>2011</b> , 100, 189a		
1812	Spacing of integrin ligands influences signal transduction in endothelial cells. <b>2011</b> , 101, 764-73		53
1811	Cell-scaffold transplant of hydrogel seeded with rat bone marrow progenitors for bone regeneration. <b>2011</b> , 39, 364-71		53
1810	Surface functionalization of TiO <sub>2</sub> nanotubes with bone morphogenetic protein 2 and its synergistic effect on the differentiation of mesenchymal stem cells. <i>Biomacromolecules</i> , <b>2011</b> , 12, 1097-105	6.9	217
1809	Introduction. <b>2011</b> , 1-30		
1808	Hydrogels in Tissue Engineering. <b>2011</b> , 9-46		6
1807	Electrospun Nanocomposites and Stem Cells in Cardiac Tissue Engineering. <b>2011</b> , 215-242		6
1806	Nanoparticle-functionalized polymer platform for controlling metastatic cancer cell adhesion, shape, and motility. <b>2011</b> , 5, 5444-56		30

1805	Electrospinning of nanofibres with parallel line surface texture for improvement of nerve cell growth. <b>2011</b> , 7, 10812	51
1804	Adhesion of osteoblasts to a nanorough titanium implant surface. <b>2011</b> , 6, 1801-16	101
1803	Nanoscale tissue engineering: spatial control over cell-materials interactions. <b>2011</b> , 22, 212001	87
1802	Nanopatterning by block copolymer micelle nanolithography and bioinspired applications. <b>2011</b> , 6, MR1-12	102
1801	Efficient creation of cellular micropatterns with long-term stability and their geometric effects on cell behavior. <b>2011</b> , 6, 143-52	4
1800	Polymer Patterns and Scaffolds for Biomedical Applications and Tissue Engineering. <b>2011</b> , 291-302	
1799	Next generation of electrosprayed fibers for tissue regeneration. <b>2011</b> , 17, 125-42	52
1798	Advances on Modeling in Tissue Engineering. <b>2011</b> ,	
1797	Effects of nanofiber/stem cell composite on wound healing in acute full-thickness skin wounds. <b>2011</b> , 17, 1413-24	90
1796	Poly(vinyl alcohol)-based electrospun meshes as potential candidate scaffolds in regenerative medicine. <b>2011</b> , 26, 20-34	43
1795	Engineered microenvironments for self-renewal and musculoskeletal differentiation of stem cells. <b>2011</b> , 6, 505-24	28
1794	Genipin-cross-linked electrospun collagen fibers. <b>2011</b> , 22, 2241-59	36
1793	Encapsulation of <i>S. cerevisiae</i> in Poly(glycerol) Silicate Derived Matrices: Effect of Matrix Additives and Cell Metabolic Phase on Long-Term Viability and Rate of Gene Expression. <b>2011</b> , 23, 2555-2564	29
1792	Control of bacterial biofilm growth on surfaces by nanostructural mechanics and geometry. <b>2011</b> , 22, 494007	113
1791	Myocardial Tissue Engineering. <b>2011</b> ,	2
1790	Bacterial Cellulose as Biomaterial. <b>2011</b> , 405-410	3
1789	Bacterial retention on superhydrophobic titanium surfaces fabricated by femtosecond laser ablation. <b>2011</b> , 27, 3012-9	304
1788	Novel scaffold design with multi-grooved PLA fibers. <b>2011</b> , 6, 045001	21

1787	Insights into Hierarchically Structured Porous Materials: From Nanoscience to Catalysis, Separation, Optics, Energy, and Life Science. <b>2011</b> , 1-27	4
1786	Vertical Nanopillars For Highly-Localized Fluorescence Imaging in Live Cells. <b>2011</b> , 100, 188a-189a	2
1785	Invited Speaker RNA and DNA, In and Out of Viral Capsids. <b>2011</b> , 100, 189a	
1784	Separating the One From the Many-Microfabricated Arrays for Cell Separations. <b>2011</b> , 100, 189a	
1783	Biocompatible polymeric implants for controlled drug delivery produced by MAPLE. <b>2011</b> , 257, 10780-10788	30
1782	Design of novel 2D and 3D biointerfaces using self-organization to control cell behavior. <b>2011</b> , 1810, 251-8	45
1781	Template synthesis of ordered macroporous hydroxyapatite bioceramics. <b>2011</b> , 47, 9048-50	21
1780	Microscale versus nanoscale scaffold architecture for mesenchymal stem cell chondrogenesis. <b>2011</b> , 17, 831-40	50
1779	3D cell culture: a review of current approaches and techniques. <b>2011</b> , 695, 1-15	312
1778	Large Protein Absorptions from Small Changes on the Surface of Nanoparticles. <b>2011</b> , 115, 18275-18283	43
1777	Proton-fountain Electric-field-assisted Nanolithography (PEN). <b>2011</b> , 299-324	
1776	Supported lipid bilayers with controlled curvature via colloidal lithography. <b>2011</b> , 10, 187-93	2
1775	Development and Applications of Varieties of Bioactive Glass Compositions in Dental Surgery, Third Generation Tissue Engineering, Orthopaedic Surgery and as Drug Delivery System. <b>2011</b> ,	1
1774	Micro- and nanoengineering approaches to control stem cell-biomaterial interactions. <b>2011</b> , 2, 88-106	39
1773	Micro and nanotechnologies for bioengineering regenerative medicine scaffolds. <b>2011</b> , 5, 266	5
1772	High Throughput Tools for the Study of Protein-Nanostructured Surface Interaction. <b>2011</b> , 14, 206-216	4
1771	Influence of mineralized collagen fibrils on the thermo-sensitivity of an injectable scaffold for bone regeneration. <b>2011</b> , 102, 1384-1390	1
1770	Cell Lysis Techniques in Lab-on-a-Chip Technology. <b>2011</b> , 942-965	

1769	Fabrication of multi-parametric platforms based on nanocone arrays for determination of cellular response. <b>2011</b> , 2, 545-551	13
1768	Shape memory polymers for active cell culture. <b>2011</b> ,	10
1767	Degradable polyester scaffolds with controlled surface chemistry combining minimal protein adsorption with specific bioactivation. <b>2011</b> , 10, 67-73	267
1766	Nanofibrous hollow microspheres self-assembled from star-shaped polymers as injectable cell carriers for knee repair. <b>2011</b> , 10, 398-406	309
1765	Nanotechnological strategies for engineering complex tissues. <b>2011</b> , 6, 13-22	1074
1764	Novel sol-gel derived calcium phosphate coatings on Mg4Y alloy. <b>2011</b> , 176, 1679-1689	40
1763	Enzymatically crosslinked carboxymethyl-chitosan/gelatin/nano-hydroxyapatite injectable gels for in situ bone tissue engineering application. <b>2011</b> , 31, 1295-1304	79
1762	Increasing mouse embryonic fibroblast cells adhesion on superhydrophilic vertically aligned carbon nanotube films. <b>2011</b> , 31, 1505-1511	21
1761	Functionalization of poly(caprolactone) scaffolds by the surface mineralization for use in bone regeneration. <b>2011</b> , 65, 3559-3562	11
1760	Evaluation of the nanofibrillar structure of Dioscorea opposite extract for cell attachment. <b>2011</b> , 88, 425-31	4
1759	Enhanced bone-integration capability of alkali- and heat-treated nanopolymorphic titanium in micro-to-nanoscale hierarchy. <b>2011</b> , 32, 7297-308	66
1758	The determination of stem cell fate by 3D scaffold structures through the control of cell shape. <b>2011</b> , 32, 9188-96	230
1757	The effect of substrate microtopography on focal adhesion maturation and actin organization via the RhoA/ROCK pathway. <b>2011</b> , 32, 9568-75	138
1756	Modulation of cell adhesion, proliferation and differentiation on materials designed for body implants. <b>2011</b> , 29, 739-67	654
1755	Bone regeneration by stem cell and tissue engineering in oral and maxillofacial region. <b>2011</b> , 5, 401-13	32
1754	Polyelectrolyte multilayers in tissue engineering. <b>2011</b> , 17, 101-13	91
1753	Exploring and exploiting chemistry at the cell surface. <b>2011</b> , 3, 582-9	249
1752	Nucleoside-assisted self-assembly of oligo(p-phenylenevinylene)s at liquid/solid interface: chirality and nanostructures. <b>2011</b> , 133, 17764-71	45

1751	Substrates for cardiovascular tissue engineering. <b>2011</b> , 63, 221-41	206
1750	Laser surface modification for synthesis of textured bioactive and biocompatible Ca-P coatings on Ti-6Al-4V. <b>2011</b> , 22, 1393-406	14
1749	Electrospun hydroxyapatite-functionalized PLLA scaffold: potential applications in sternal bone healing. <b>2011</b> , 39, 1882-90	31
1748	The interactions of astrocytes and fibroblasts with defined pore structures in static and perfusion cultures. <b>2011</b> , 32, 2021-31	20
1747	Engineering the cell-material interface for controlling stem cell adhesion, migration, and differentiation. <b>2011</b> , 32, 3700-11	251
1746	Preparation and mineralization of three-dimensional carbon nanofibers from bacterial cellulose as potential scaffolds for bone tissue engineering. <b>2011</b> , 205, 2938-2946	50
1745	Multi-functional initiator and poly(carboxybetaine methacrylamides) for building biocompatible surfaces using Bitroxide mediated free radical polymerization strategies. <b>2011</b> , 49, 1051-1060	28
1744	Multicomponent supramolecular thermoplastic elastomer with peptide-modified nanofibers. <b>2011</b> , 49, 1764-1771	27
1743	Micro-/nano-engineered cellular responses for soft tissue engineering and biomedical applications. <b>2011</b> , 7, 1361-78	107
1742	Layer-by-layer assembly of chitosan and recombinant biopolymers into biomimetic coatings with multiple stimuli-responsive properties. <b>2011</b> , 7, 2640-9	87
1741	Nanoengineered films via surface-confined continuous assembly of polymers. <b>2011</b> , 7, 2863-7	39
1740	Reconstructing the differentiation niche of embryonic stem cells using biomaterials. <b>2011</b> , 11, 36-49	58
1739	Polyelectrolyte multilayer nanofilms used as thin materials for cell mechano-sensitivity studies. <b>2011</b> , 11, 77-89	42
1738	A collagen peptide-based physical hydrogel for cell encapsulation. <b>2011</b> , 11, 1426-31	51
1737	Assembly of collagen fibril meshes using gold nanoparticles functionalized with tris(hydroxymethyl)phosphine-alanine as multivalent cross-linking agents. <b>2011</b> , 24, 477-82	6
1736	Spark Plasma Sintered Hydroxyapatite/Graphite Nanosheet and Hydroxyapatite/Multiwalled Carbon Nanotube Composites: Mechanical and in Vitro Cellular Properties. <b>2011</b> , 13, 336-341	54
1735	Layer-by-Layer Fabrication of Covalently Crosslinked and Reactive Polymer Multilayers Using Azlactone-Functionalized Copolymers: A Platform for the Design of Functional Biointerfaces. <b>2011</b> , 13, B343-B352	15
1734	Biomimetic Materials for Bone Tissue Engineering State of the Art and Future Trends. <b>2011</b> , 13, B135-B150	45

1733	Evaluation of the Biocompatibility of PLACL/Collagen Nanostructured Matrices with Cardiomyocytes as a Model for the Regeneration of Infarcted Myocardium. <i>Advanced Functional Materials</i> , <b>2011</b> , 21, 2291-2300	15.6	54
1732	Thermodynamic underpinnings of cell alignment on controlled topographies. <b>2011</b> , 23, 421-5		32
1731	Cooperation of biological and mechanical signals in cardiac progenitor cell differentiation. <b>2011</b> , 23, 514-8		30
1730	Aptamer-mediated efficient capture and release of T lymphocytes on nanostructured surfaces. <b>2011</b> , 23, 4376-80		163
1729	Biomimeticity in tissue engineering scaffolds through synthetic peptide modifications-altering chemistry for enhanced biological response. <b>2011</b> , 96, 477-91		57
1728	Development of bioactive photocrosslinkable fibrous hydrogels. <b>2011</b> , 98, 167-76		8
1727	Molecular plasma deposited peptides on anodized nanotubular titanium: an osteoblast density study. <b>2011</b> , 98, 192-200		8
1726	An investigation into the influence of electrospinning parameters on the diameter and alignment of poly(hydroxybutyrate-co-hydroxyvalerate) fibers. <b>2011</b> , 120, 1694-1706		42
1725	Design concepts and strategies for tissue engineering scaffolds. <b>2011</b> , 58, 423-38		58
1724	Hyaluronic acid-g-poly(HEMA) copolymer with potential implications for lung tissue engineering. <i>Carbohydrate Polymers</i> , <b>2011</b> , 85, 439-445	10.3	18
1723	Electrospun collagen-chitosan-TPU nanofibrous scaffolds for tissue engineered tubular grafts. <b>2011</b> , 82, 307-15		179
1722	Cell adhesive and growth behavior on electrospun nanofibrous scaffolds by designed multifunctional composites. <b>2011</b> , 84, 26-34		37
1721	Nanoscale topography reduces fibroblast growth, focal adhesion size and migration-related gene expression on platinum surfaces. <b>2011</b> , 85, 189-97		55
1720	Electrospun gelatin nanofibers: optimization of genipin cross-linking to preserve fiber morphology after exposure to water. <i>Acta Biomaterialia</i> , <b>2011</b> , 7, 1702-9	10.8	188
1719	Functional composite nanofibers of poly(lactide-co-caprolactone) containing gelatin-apatite bone mimetic precipitate for bone regeneration. <i>Acta Biomaterialia</i> , <b>2011</b> , 7, 1609-17	10.8	70
1718	Electrospinning of Biosyn(II)-based tubular conduits: structural, morphological, and mechanical characterizations. <i>Acta Biomaterialia</i> , <b>2011</b> , 7, 2070-9	10.8	26
1717	Effect of the pore structure of bioactive glass balls on biocompatibility in vitro and in vivo. <i>Acta Biomaterialia</i> , <b>2011</b> , 7, 2651-60	10.8	62
1716	Dynamic cell behavior on shape memory polymer substrates. <b>2011</b> , 32, 2285-93		182



1715	Differential response of Staphylococci and osteoblasts to varying titanium surface roughness. <b>2011</b> , 32, 951-60	181
1714	The structural and biological properties of hydroxyapatite-modified titanate nanowire scaffolds. <b>2011</b> , 32, 5837-46	73
1713	Morphologies of nanostructured TiO <sub>2</sub> doped with F on Ti-6Al-4V alloy. <b>2011</b> , 56, 2221-2229	41
1712	Bioactive glass/poly (ε-caprolactone) composite scaffolds with 3 dimensionally hierarchical pore networks. <b>2011</b> , 31, 198-205	57
1711	Physicochemical properties and enhanced cellular responses of biocompatible polymeric scaffolds treated with atmospheric pressure plasma using O <sub>2</sub> gas. <b>2011</b> , 31, 688-696	8
1710	Investigation of cancer cell behavior on nanofibrous scaffolds. <b>2011</b> , 31, 37-42	42
1709	Designing polyHEMA substrates that mimic the viscoelastic response of soft tissue. <b>2011</b> , 44, 1491-8	6
1708	Amorphous calcium phosphate/poly(D,L-lactic acid) composite nanofibers: electrospinning preparation and biomineralization. <b>2011</b> , 359, 371-9	48
1707	Design of artificial extracellular matrices for tissue engineering. <b>2011</b> , 36, 238-268	214
1706	Patterning the mechanical properties of hydrogen silsesquioxane films using electron beam irradiation for application in mechano cell guidance. <b>2011</b> , 519, 2003-2010	10
1705	Hydrothermal growth of rutile TiO <sub>2</sub> nanorod films on titanium substrates. <b>2011</b> , 519, 4634-4640	44
1704	Surface shape memory substrates for active cell culture. <b>2011</b> ,	
1703	Surface Engineering Using Peptide Amphiphiles. <b>2011</b> , 219-245	2
1702	Adsorption Properties of Phospho-Polypeptide on Synthetic Hydroxyapatite Biomaterials. <b>2011</b> , 130-134, 1445-1447	
1701	Heart valve tissue regeneration. <b>2011</b> , 202-224	4
1700	Porous Coatings in Orthopedics. <b>2011</b> , 65-77	3
1699	Three-dimensional scaffolds as a model system for neural and endothelial 'in vitro' culture. <b>2011</b> , 26, 293-310	4
1698	Surface modification of biomaterials by peptide functionalisation. <b>2011</b> , 78-101	1

1697	Controlling cell adhesion via replication of laser micro/nano-textured surfaces on polymers. <b>2011</b> , 3, 045004	44
1696	Biomimetic three-dimensional microenvironment for controlling stem cell fate. <b>2011</b> , 1, 792-803	52
1695	The Chemical and Physical Properties of Poly(E-caprolactone) Scaffolds Functionalised with Poly(vinyl phosphonic acid-co-acrylic acid). <b>2011</b> , 2011, 615328	27
1694	Tendon tissue regeneration. <b>2011</b> , 148-167	4
1693	Nanofabrication techniques for controlled drug-release devices. <b>2011</b> , 6, 1-6	19
1692	An algorithm-based topographical biomaterials library to instruct cell fate. <b>2011</b> , 108, 16565-70	310
1691	Synthesis and characterization of nanocrystalline calcium sulfate for use in osseous regeneration. <b>2011</b> , 6, 055007	28
1690	Nanostructured Polymeric Films for Cell Biology. <b>2011</b> , 341-355	
1689	A Pendulum-Like Motion of Nanofiber Gel Actuator Synchronized with External Periodic pH Oscillation. <b>2011</b> , 3, 405-412	31
1688	Frontiers of More than Moore in Bioelectronics and the Required Metrology Needs. <b>2011</b> ,	
1687	Dual-Scale Polymeric Constructs as Scaffolds for Tissue Engineering. <b>2011</b> , 4, 527-542	45
1686	Cell-biomaterial mechanical interaction in the framework of tissue engineering: insights, computational modeling and perspectives. <b>2011</b> , 12, 8217-44	42
1685	Surface Modification of Polyamide 6 Immobilized with Collagen: Characterization and Cytocompatibility. <b>2011</b> , 60, 907-921	9
1684	MEMS manufacturing techniques for tissue scaffolding devices. <b>2012</b> , 192-217	
1683	Morphological alterations of T24 cells on flat and nanotubular TiO <sub>2</sub> surfaces. <b>2012</b> , 53, 577-85	9
1682	Gradient Technology for High-Throughput Screening of Interactions between Cells and Nanostructured Materials. <b>2012</b> , 2012, 1-7	19
1681	Aluminum Silicate Nanotube Coating of Siloxane-Poly(lactic acid)-Vaterite Composite Fibermats for Bone Regeneration. <b>2012</b> , 2012, 1-7	10
1680	Stem Cells and Extracellular Matrices. <b>2012</b> , 1, 1-84	1

1679 The Future of Biomateriomics. **2012**, 425-430

1678 Influences of surface chemistry and swelling of salt-treated polyelectrolyte multilayers on migration of smooth muscle cells. **2012**, 9, 3455-68 30

1677 3D polylactide-based scaffolds for studying human hepatocarcinoma processes. **2012**, 13, 045003 21

1676 Nano structures via laser interference patterning for guided cell growth of neuronal cells. **2012**, 24, 042013 29

1675 Nanotopography effects on astrocyte attachment to nanoporous gold surfaces. **2012**, 2012, 6568-71 0

1674 Surface characterization of silicate bioceramics. **2012**, 370, 1281-312 20

1673 Biomaterials-Based Strategies for the Engineering of Mechanically Active Soft Tissues. **2012**, 2, 31-39 14

1672 Electrospun Nanofiber and Stem Cells in Tissue Engineering. **2012**, 91-118 2

1671 Poly(lactide-co-glycolide)-Hydroxyapatite Composites: The Development of Osteoinductive Scaffolds for Bone Regenerative Engineering. **2012**, 1417, 8 2

1670 Nanoporous Gold: A Biomaterial for Microfabricated Drug-Delivery Platforms. **2012**, 1415, 48

1669 Highly porous drug-eluting structures: from wound dressings to stents and scaffolds for tissue regeneration. **2012**, 2, 239-70 26

1668 A comparison of epithelial cells, fibroblasts, and osteoblasts in dental implant titanium topographies. **2012**, 2012, 687291 26

1667 Microfibrous substrate geometry as a critical trigger for organization, self-renewal, and differentiation of human embryonic stem cells within synthetic 3-dimensional microenvironments. **2012**, 26, 3240-51 47

1666 Stem cells from umbilical cord and placenta for musculoskeletal tissue engineering. **2012**, 7, 272-81 27

1665 Biomimetic scaffolds: implications for craniofacial regeneration. **2012**, 23, 294-7 19

1664 Nanodimensional and Nanocrystalline Calcium Orthophosphates. **2012**, 221-327

1663 Development of Three-Dimensional Tissue Models Based on Hierarchical Cell Manipulation Using Nanofilms. **2012**, 85, 401-414 30

1662 Enhanced osteogenic differentiation with 3D electrospun nanofibrous scaffolds. **2012**, 7, 1561-75 32

1661	Electrospun azido-PCL nanofibers for enhanced surface functionalization by click chemistry. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2012</b> , 4, 6499-504	9.5	49
1660	Nanostructured polymeric scaffolds for orthopaedic regenerative engineering. <b>2012</b> , 11, 3-14		67
1659	Nanocomposite gold-silk nanofibers. <b>2012</b> , 12, 5403-6		79
1658	Electrospun nanoyarn scaffold and its application in tissue engineering. <b>2012</b> , 89, 146-149		49
1657	La "rivoluzione" nanotecnologica in ortopedia. <b>2012</b> , 123, 11-12		
1656	Wettability influences cell behavior on superhydrophobic surfaces with different topographies. <b>2012</b> , 7, 46		84
1655	Electrospun microfibrinous PLGA meshes coated with in situ cross-linkable gelatin hydrogels for tissue regeneration. <b>2012</b> , 12, S144-S149		6
1654	Dynamic mass redistribution assays decode surface influence on signaling of endogenous purinergic P2Y receptors. <b>2012</b> , 10, 37-45		20
1653	Bioactive interlinked extracellular matrix-like silicon nano-network fabricated by femtosecond laser synthesis. <b>2012</b> , 1, 231-8		11
1652	Synthesis of large area crack-free nanostructured TiO <sub>2</sub> with selective masking for cell/electronics interfacing. <b>2012</b> ,		
1651	Collagen/TCP conjugated PCL biocomposites for bone tissue regeneration: fabrication, physical properties, and cellular activities. <b>2012</b> , 22, 22565		15
1650	CHAPTER 8:Hydrogels for Biomedical Applications. <b>2012</b> , 167-209		2
1649	Morphological and histological evaluations of 3D-layered blood vessel constructs prepared by hierarchical cell manipulation. <b>2012</b> , 23, 63-79		37
1648	DNA microarrays on silicon surfaces through thiol-ene chemistry. <b>2012</b> , 48, 2116-8		40
1647	Controlled hydrogel photopolymerization inside live systems by X-ray irradiation. <b>2012</b> , 8, 1420-1427		23
1646	Immobilization and characterization of giant unilamellar vesicles (GUVs) within porous silica glasses. <b>2012</b> , 8, 408-417		16
1645	Design of conformational, substrate-independent surface modification for controlled protein adsorption by chemical vapor deposition (CVD). <b>2012</b> , 8, 31-43		71
1644	Amniotic fluid-derived stem cells as a cell source for bone tissue engineering. <b>2012</b> , 18, 2518-27		39

1643	Micropatterned thermoresponsive surfaces by polymerization of monomer crystals: modulating cellular morphology and cell-substrate interactions. <b>2012</b> , 84, 9439-45	4
1642	Fine-tuning the degree of stem cell polarization and alignment on ordered arrays of high-aspect-ratio nanopillars. <b>2012</b> , 6, 6222-30	151
1641	Recrystallization of water in non-water-soluble (meth)acrylate polymers is not rare and is not devitrification. <b>2012</b> , 116, 1850-7	14
1640	Self-assembly process of peptide amphiphile worm-like micelles. <b>2012</b> , 116, 240-3	44
1639	Fibroin scaffold repairs critical-size bone defects in vivo supported by human amniotic fluid and dental pulp stem cells. <b>2012</b> , 18, 1006-13	91
1638	Engineering a Biomimetic Villus Array for In Vitro Three-Dimensional Culture of Intestinal Epithelial Cells. <b>2012</b> , 21, 1418-1425	1
1637	Improvement and characterization of the adhesion of electrospun PLDLA nanofibers on PLDLA-based 3D object substrates for orthopedic application. <b>2012</b> , 23, 1863-77	6
1636	Nanosurface design of dental implants for improved cell growth and function. <b>2012</b> , 23, 335703	12
1635	Controlling E. coli adhesion on high-k dielectric bioceramics films using poly(amino acid) multilayers. <b>2012</b> , 28, 4301-8	10
1634	Nanotopography influences adhesion, spreading, and self-renewal of human embryonic stem cells. <b>2012</b> , 6, 4094-103	287
1633	Polymer chain length effects on fibroblast attachment on nylon-3-modified surfaces. <i>Biomacromolecules</i> , <b>2012</b> , 13, 1100-5	6.9 32
1632	Adsorption of enamel matrix proteins to a bovine-derived bone grafting material and its regulation of cell adhesion, proliferation, and differentiation. <b>2012</b> , 83, 936-47	58
1631	Identifying individual cell types in heterogeneous cultures using secondary ion mass spectrometry imaging with C60 etching and multivariate analysis. <b>2012</b> , 84, 893-900	32
1630	Peptide hydrogels: mimicking the extracellular matrix. <b>2012</b> , 1, 4-12	18
1629	Early stage evolution of structure and nanoscale property of nanofibers in thermally induced phase separation process. <b>2012</b> , 72, 765-772	30
1628	The smartest materials: the future of nanoelectronics in medicine. <b>2012</b> , 6, 6541-5	63
1627	Instructive nanofiber scaffolds with VEGF create a microenvironment for arteriogenesis and cardiac repair. <b>2012</b> , 4, 146ra109	115
1626	Regulating synthetic gene networks in 3D materials. <b>2012</b> , 109, 15217-22	31

1625	Graft-artery junctions: design optimization and CAD development. <b>2012</b> , 868, 269-87	4
1624	Structure and surface nanomechanics of poly(l-lactide) from thermally induced phase separation process. <b>2012</b> , 258, 6665-6671	27
1623	Cytotoxicity and biocompatibility evaluation of N,O-carboxymethyl chitosan/oxidized alginate hydrogel for drug delivery application. <i>International Journal of Biological Macromolecules</i> , <b>2012</b> , 50, 1299-305	78
1622	Micro-engineered 3D scaffolds for cell culture studies. <b>2012</b> , 12, 1301-14	94
1621	Bone repair by periodontal ligament stem cellseeded nanohydroxyapatite-chitosan scaffold. <b>2012</b> , 7, 5405-14	66
1620	Hybrid Nanoparticle Systems: New Materials for Sensing and Functional Bio-Applications. <b>2012</b> , 03,	1
1619	Forcing stem cells to behave: a biophysical perspective of the cellular microenvironment. <b>2012</b> , 41, 519-42	319
1618	Chemical and physical properties of regenerative medicine materials controlling stem cell fate. <b>2012</b> , 44, 635-50	54
1617	Spinal cord explants use carbon nanotube interfaces to enhance neurite outgrowth and to fortify synaptic inputs. <b>2012</b> , 6, 2041-55	112
1616	Nanostructured Electrospun Fibers. <b>2012</b> , 187-210	2
1615	Biomimetic Polymers (for Biomedical Applications). <b>2012</b> , 339-361	1
1614	Nano-regenerative medicine towards clinical outcome of stem cell and tissue engineering in humans. <b>2012</b> , 16, 1991-2000	33
1613	Polymer Nanocomposites for Biomedical Applications. <b>2012</b> , 285-329	
1612	Biological and Medical Significance of Nanodimensional and Nanocrystalline Calcium Orthophosphates. <b>2012</b> , 19-99	4
1611	Nanocomposites for Bone Tissue Engineering. <b>2012</b> ,	1
1610	Carbon Nanotube-Based Three-Dimensional Matrices for Tissue Engineering. <b>2012</b> ,	
1609	From nano- to macro-scale: nanotechnology approaches for spatially controlled delivery of bioactive factors for bone and cartilage engineering. <b>2012</b> , 7, 1045-66	47
1608	Crosslink density of a biomimetic poly(HEMA)-based hydrogel influences growth and proliferation of attachment dependent RMS 13 cells. <b>2012</b> , 22, 19529	50

1607	Engineering ECM signals into biomaterials. <b>2012</b> , 15, 454-459	133
1606	Nanomanufacturing of biomaterials. <b>2012</b> , 15, 478-485	49
1605	Porous chitosan scaffold cross-linked by chemical and natural procedure applied to investigate cell regeneration. <b>2012</b> , 262, 218-221	20
1604	Synthesis of pendent carboxyl-containing poly( $\epsilon$ -caprolactone-co- $\epsilon$ -malic acid)-block-poly(L-lactide) copolymers for fabrication of nano-fibrous scaffolds. <b>2012</b> , 53, 4993-5001	13
1603	Polyelectrolyte Multilayer Assemblies on Materials Surfaces: From Cell Adhesion to Tissue Engineering. <b>2012</b> , 24, 854-869	267
1602	Ultrasoft 100 nm thick zero Poisson's ratio film with 60% reversible compressibility. <b>2012</b> , 12, 2171-5	10
1601	pH-responsive layer-by-layer nanoshells for direct regulation of cell activity. <b>2012</b> , 6, 4266-78	84
1600	Mechanism of adhesion between polymer fibers at nanoscale contacts. <b>2012</b> , 28, 4663-71	35
1599	Polymer brush nanopatterns with controllable features for protein pattern applications. <b>2012</b> , 22, 25116	27
1598	Self-assembled amino acids and dipeptides as noncovalent hydrogels for tissue engineering. <b>2012</b> , 3, 18-33	197
1597	Strategies of Regenerative Medicine. <b>2012</b> , 229-260	
1596	Progress of three-dimensional macroporous bioactive glass for bone regeneration. <b>2012</b> , 6, 470-483	7
1595	Composite Scaffolds for Bone Tissue Regeneration. <b>2012</b> , 1	2
1594	Advances in Stem Cell Research. <b>2012</b> ,	1
1593	Synthesis and functionalization of poly(ethylene glycol) microparticles as soft colloidal probes for adhesion energy measurements. <b>2012</b> , 8, 1664-1672	29
1592	Electrodeposition of polymer nanodots with controlled density and their reversible functionalization by polyhistidine-tag proteins. <b>2012</b> , 28, 13968-75	4
1591	Chitosan-Based Biopharmaceutical Scaffolds in Tissue Engineering and Regenerative Medicine. <b>2012</b> , 393-427	4
1590	Synthetically encoded ultrashort-channel nanowire transistors for fast, pointlike cellular signal detection. <b>2012</b> , 12, 2639-44	77

1589	Nanopatterning Biomolecules by Block Copolymer Self-Assembly. <b>2012</b> , 1, 758-763	30
1588	"Contact" of nanoscale stiff films. <b>2012</b> , 28, 9562-72	21
1587	Chemical approaches to synthetic polymer surface biofunctionalization for targeted cell adhesion using small binding motifs. <b>2012</b> , 8, 7323-7347	54
1586	Laser-engineered topography: correlation between structure dimensions and cell control. <b>2012</b> , 23, 2813-9	6
1585	Molecular Dynamics Simulation of the Early Stages of Nucleation of Hydroxyapatite at a Collagen Template. <b>2012</b> , 12, 756-763	66
1584	Progress of key strategies in development of electrospun scaffolds: bone tissue. <b>2012</b> , 13, 043002	43
1583	Fabrication of large pores in electrospun nanofibrous scaffolds for cellular infiltration: a review. <b>2012</b> , 18, 77-87	159
1582	Design of biomolecules for nanoengineered biomaterials for regenerative medicine. <b>2012</b> , 811, 39-49	21
1581	How linear tension converts to curvature: geometric control of bone tissue growth. <b>2012</b> , 7, e36336	126
1580	Hydrogel Films on Optical Fiber Core: Properties, Challenges, and Prospects for Future Applications. <b>2012</b> ,	
1579	Preparation of PHEMA Copolymers Containing Cell-binding Peptides as Graft Chains and Their Cell Adhesive Properties. <b>2012</b> , 37, 533-536	3
1578	Novel Self-Oscillating Polymer Actuators for Soft Robot. <b>2012</b> ,	
1577	. <b>2012</b> ,	44
1576	Minimally invasive cell-seeded biomaterial systems for injectable/epicardial implantation in ischemic heart disease. <b>2012</b> , 7, 5969-94	31
1575	Physical aspects of cell culture substrates: topography, roughness, and elasticity. <b>2012</b> , 8, 336-55	239
1574	Chondrogenic potential of electrospun nanofibres for cartilage tissue engineering. <b>2012</b> , 6, 536-49	31
1573	A miniaturized bioreactor system for the evaluation of cell interaction with designed substrates in perfusion culture. <b>2012</b> , 6 Suppl 3, s4-14	5
1572	Nanofibrous gelatin/silica hybrid scaffolds mimicking the native extracellular matrix (ECM) using thermally induced phase separation. <b>2012</b> , 22, 14133	93



1571	LbL Assemblies Using van der Waals or Affinity Interactions and Their Applications. <b>2012</b> , 99-133	2
1570	Lab-in-a-tube: ultracompact components for on-chip capture and detection of individual micro-/nanoorganisms. <b>2012</b> , 12, 1917-31	81
1569	Fabrication and applications of large arrays of multifunctional rolled-up SiO/SiO <sub>2</sub> microtubes. <b>2012</b> , 22, 2878-2884	62
1568	Self-supporting nanoporous alumina membranes as substrates for hepatic cell cultures. <b>2012</b> , 100, 2230-8	12
1567	Osteoblasts responses to three-dimensional nanofibrous gelatin scaffolds. <b>2012</b> , 100, 3029-41	20
1566	Hyaluronic Acid-Based Hydrogels: from a Natural Polysaccharide to Complex Networks. <b>2012</b> , 8, 3280-3294	344
1565	Mesenchymal Stem Cells Differentiation on Hierarchically Micro/Nano-Structured Titanium Substrates. <b>2012</b> , 14, B216-B223	31
1564	AFM Characterization of Elastically Micropatterned Surfaces Fabricated by Fill-Molding In Capillaries (FIMIC) and Investigation of the Topographical Influence on Cell Adhesion to the Patterns. <b>2012</b> , 14, B56-B66	12
1563	Directing Osteogenesis of Stem Cells with Drug-Laden, Polymer-Microsphere-Based Micropatterns Generated by Teflon Microfluidic Chips. <i>Advanced Functional Materials</i> , <b>2012</b> , 22, 3799-3807	15.6 47
1562	Microfabrication-compatible nanoporous gold foams as biomaterials for drug delivery. <b>2012</b> , 1, 172-6	37
1561	A rapid screening method for wound dressing by cell-on-a-chip device. <b>2012</b> , 1, 560-6	23
1560	Release of magnetic nanoparticles from cell-encapsulating biodegradable nanobiomaterials. <b>2012</b> , 6, 6640-9	65
1559	Engineering approaches toward deconstructing and controlling the stem cell environment. <b>2012</b> , 40, 1301-15	48
1558	Osteointegration of titanium implant is sensitive to specific nanostructure morphology. <i>Acta Biomaterialia</i> , <b>2012</b> , 8, 1976-89	10.8 143
1557	Preparation and biocompatibility of nanohybrid scaffolds by in situ homogeneous formation of nano hydroxyapatite from biopolymer polyelectrolyte complex for bone repair applications. <b>2012</b> , 93, 100-7	42
1556	Topographic control of the growth and function of cardiomyoblast H9c2 cells using nanodot arrays. <b>2012</b> , 33, 20-8	32
1555	The use of hyaluronan to regulate protein adsorption and cell infiltration in nanofibrous scaffolds. <b>2012</b> , 33, 3428-45	101
1554	Freeform fabricated scaffolds with roughened struts that enhance both stem cell proliferation and differentiation by controlling cell shape. <b>2012</b> , 33, 4022-30	104

1553	Micropatterning of mammalian cells on inorganic-based nanosponges. <b>2012</b> , 33, 4988-97	18
1552	Engineering microscale topographies to control the cell-substrate interface. <b>2012</b> , 33, 5230-46	499
1551	Nanostructured PEG-based hydrogels with tunable physical properties for gene delivery to human mesenchymal stem cells. <b>2012</b> , 33, 6533-41	43
1550	Guidance of stem cell fate on 2D patterned surfaces. <b>2012</b> , 33, 6626-33	136
1549	Implantable enzyme amperometric biosensors. <b>2012</b> , 35, 14-26	105
1548	Adult stem cell coatings for regenerative medicine. <b>2012</b> , 15, 60-66	21
1547	Early-stage osseointegration capability of a submicrofeatured titanium surface created by microroughening and anodic oxidation. <b>2013</b> , 24, 991-1001	7
1546	A new nanofiber fabrication technique based on coaxial electrospinning. <b>2012</b> , 66, 257-260	25
1545	Calcium ion release and osteoblastic behavior of gelatin/beta-tricalcium phosphate composite nanofibers fabricated by electrospinning. <b>2012</b> , 73, 172-175	25
1544	Cytocompatibility studies of vertically-aligned multi-walled carbon nanotubes: Raw material and functionalized by oxygen plasma. <b>2012</b> , 32, 648-652	20
1543	Preparation of composite tubular grafts for vascular repair via electrospinning. <b>2012</b> , 22, 108-114	16
1542	Early stage structural evolution of PLLA porous scaffolds in thermally induced phase separation process and the corresponding biodegradability and biological property. <b>2012</b> , 97, 955-963	37
1541	Preparation and characterization of poly( $\epsilon$ -caprolactone) nonwoven mats via melt electrospinning. <b>2012</b> , 53, 248-253	47
1540	Mechanical behavior of a cellulose-reinforced scaffold in vascular tissue engineering. <b>2012</b> , 7, 50-9	82
1539	The significance of the host inflammatory response on the therapeutic efficacy of cell therapies utilising human adult stem cells. <b>2012</b> , 318, 361-70	4
1538	In vitro and in vivo evaluations on osteogenesis and biodegradability of a tricalcium phosphate coated magnesium alloy. <b>2012</b> , 100, 293-304	40
1537	Effect of fiber alignment in electrospun scaffolds on keratocytes and corneal epithelial cells behavior. <b>2012</b> , 100, 527-35	68
1536	Reinforcement of electrospun membranes using nanoscale Al <sub>2</sub> O <sub>3</sub> whiskers for improved tissue scaffolds. <b>2012</b> , 100, 903-10	18

1535	Layer-by-layer assembly through weak interactions and their biomedical applications. <b>2012</b> , 24, 454-74	140
1534	Functional silk: colored and luminescent. <b>2012</b> , 24, 1388-97	104
1533	Chondrocyte 3D-culture in RGD-modified crosslinked hydrogel with temperature-controllable modulus. <b>2012</b> , 20, 106-111	16
1532	Synthesis of multifunctional macroporous-mesoporous TiO <sub>2</sub> -bioglasses for bone tissue engineering. <b>2012</b> , 61, 421-428	15
1531	In vivo lamellar bone formation in fibre coated MgCHA-PCL-composite scaffolds. <b>2012</b> , 23, 117-28	17
1530	Plasma-Sprayed Ceramic Coatings for Osseointegration. <b>2013</b> , 10, 1-10	27
1529	Effect of substrate stiffness on early human embryonic stem cell differentiation. <b>2013</b> , 7, 7	77
1528	Applications of nanostructured calcium phosphate in tissue engineering. <b>2013</b> , 1, 1012-1028	38
1527	Surface grafting of electrospun fibers using ATRP and RAFT for the control of biointerfacial interactions. <b>2013</b> , 8, 16	28
1526	In Vitro Characterization of CellBiomaterials Interactions. <b>2013</b> , 175-205	2
1525	Advancing musculoskeletal research with nanoscience. <b>2013</b> , 9, 614-23	10
1524	Surface Modification of Polymeric Biomaterials. <b>2013</b> , 89-158	6
1523	Diverse applications of fibers surface-functionalized with nano- and microparticles. <b>2013</b> , 79, 77-86	6
1522	Highly IR-transparent microfluidic chip with surface-modified BaF <sub>2</sub> optical windows for Infrared Microspectroscopy of living cells. <b>2013</b> , 107, 6-9	12
1521	Essentials of Mesenchymal Stem Cell Biology and Its Clinical Translation. <b>2013</b> ,	4
1520	Nanoscale topography and chemistry affect embryonic stem cell self-renewal and early differentiation. <b>2013</b> , 2, 1644-50	30
1519	Effects of hydroxyapatite-containing composite nanofibers on osteogenesis of mesenchymal stem cells in vitro and bone regeneration in vivo. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2013</b> , 5, 319-30	9.5 115
1518	Stimuli-Responsive Surfaces for Biomedical Applications. <b>2013</b> , 63-87	1

1517	In vitro endothelialization of cobalt chromium alloys with micro/nanostructures using adipose-derived stem cells. <b>2013</b> , 24, 1067-77		6
1516	Bench-Top Fabrication of Hierarchically Structured High-Surface-Area Electrodes. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 3030-3039	15.6	54
1515	Emerging ideas: Engineering the periosteum: revitalizing allografts by mimicking autograft healing. <b>2013</b> , 471, 721-6		26
1514	The effect of substrate surface nanotopography on the behavior of multipotent mesenchymal stromal cells and osteoblasts. <b>2013</b> , 34, 8851-9		88
1513	Scaffold Design for Bone Tissue Engineering: From Micrometric to Nanometric Level. <b>2013</b> , 1-16		1
1512	Biomimetic electrospun nanofibrous structures for tissue engineering. <b>2013</b> , 16, 229-241		541
1511	Enhanced adhesion of osteoblastic cells on polystyrene films by independent control of surface topography and wettability. <b>2013</b> , 33, 1689-95		24
1510	Tissue growth into three-dimensional composite scaffolds with controlled micro-features and nanotopographical surfaces. <b>2013</b> , 101, 2796-807		40
1509	Protein nanomachines assembly modes: cell-free expression and biochip perspectives. <b>2013</b> , 5, 613-28		12
1508	Carbon nanotubes: their potential and pitfalls for bone tissue regeneration and engineering. <b>2013</b> , 9, 1139-58		87
1507	Micromechanical Design Criteria for Tissue Engineering Biomaterials. <b>2013</b> , 1165-1178		1
1506	Surface Nanoarchitecture for Bio-Applications: Self-Regulating Intelligent Interfaces. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 4483-4506	15.6	70
1505	In vitro investigation on the biodegradability and biocompatibility of genipin cross-linked porcine acellular dermal matrix with intrinsic fluorescence. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2013</b> , 5, 344-50	8.5	32
1504	Scaffold-free microtissues: differences from monolayer cultures and their potential in bone tissue engineering. <b>2013</b> , 17, 9-17		32
1503	Dentin hypersensitivity: pain mechanisms and aetiology of exposed cervical dentin. <b>2013</b> , 17, 9-19		131
1502	On eukaryotic intelligence: signaling system's guidance in the evolution of multicellular organization. <b>2013</b> , 114, 8-24		22
1501	Hydrogel Composite Materials for Tissue Engineering Scaffolds. <b>2013</b> , 65, 505-516		61
1500	Carbon Nanotube-Based Materials Preparation, Biocompatibility, and Applications in Dentistry. <b>2013</b> , 37-67		2

1499	Tissue engineering on the nanoscale: lessons from the heart. <b>2013</b> , 24, 664-71		73
1498	The influence of substrate topography on the migration of corneal epithelial wound borders. <b>2013</b> , 34, 9244-51		27
1497	Nanostructured substrates for isolation of circulating tumor cells. <b>2013</b> , 8, 347-387		117
1496	Influence of extracellular matrix proteins and substratum topography on corneal epithelial cell alignment and migration. <b>2013</b> , 19, 1713-22		22
1495	Investigation of bioactivity and cell effects of nano-porous sol-gel derived bioactive glass film. <b>2013</b> , 284, 738-744		12
1494	Enhanced mechanical strength and biocompatibility of electrospun polycaprolactone-gelatin scaffold with surface deposited nano-hydroxyapatite. <b>2013</b> , 33, 2376-85		54
1493	Laser Technology in Biomimetics. <b>2013</b> ,		8
1492	Antimicrobial properties of enzymatically triggered self-assembling aromatic peptide amphiphiles. <b>2013</b> , 1, 1138-1142		56
1491	The roles of water molecules at the biointerface of medical polymers. <b>2013</b> , 45, 701-710		157
1490	Designing nanotopographical density of extracellular matrix for controlled morphology and function of human mesenchymal stem cells. <b>2013</b> , 3, 3552		104
1489	Development of electrospun beaded fibers from Thai silk fibroin and gelatin for controlled release application. <i>International Journal of Biological Macromolecules</i> , <b>2013</b> , 55, 176-84	7.9	36
1488	Liquid-mediated three-dimensional scanning probe nanosculpting. <b>2013</b> , 9, 2851-6		13
1487	Surfactant sculpting of biologically inspired hierarchical surfaces. <b>2013</b> , 9, 9857		3
1486	Cell-imprinted substrates direct the fate of stem cells. <b>2013</b> , 7, 8379-84		89
1485	Integrin binding and MAPK signal pathways in primary cell responses to surface chemistry of calcium silicate cements. <b>2013</b> , 34, 6589-606		110
1484	Nanofiber for cardiovascular tissue engineering. <b>2013</b> , 10, 1565-82		34
1483	Layer-by-layer self-assembly techniques for nanostructured devices in tissue engineering. <b>2013</b> , 88-118		3
1482	Substrate curvature sensing through Myosin IIa upregulates early osteogenesis. <b>2013</b> , 5, 1407-16		43

1481	Ordered HAp nanoarchitecture formed on HAp-TCP bioceramics by "nanocarving" and mineralization deposition and its potential use for guiding cell behaviors. <b>2013</b> , 1, 2455-2462		19
1480	Acrylic-acid-functionalized PolyHIPE scaffolds for use in 3D cell culture. <b>2013</b> , 34, 1844-9		48
1479	Laser Patterning of Bacterial Cellulose Hydrogel and its Modification With Gelatin and Hydroxyapatite for Bone Tissue Engineering. <b>2013</b> , 11, 173-180		44
1478	Fibroblasts remodeling of type IV collagen at a biomaterials interface. <b>2013</b> , 1, 494-502		16
1477	Protein adsorption at nanopatterned surfaces studied by quartz crystal microbalance with dissipation and surface plasmon resonance. <b>2013</b> , 117, 10376-83		14
1476	Hierarchical polymer brush nanoarrays: a versatile way to prepare multiscale patterns of proteins. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2013</b> , 5, 2126-32	9.5	28
1475	Galactose-functionalized polyHIPE scaffolds for use in routine three dimensional culture of mammalian hepatocytes. <i>Biomacromolecules</i> , <b>2013</b> , 14, 4271-7	6.9	51
1474	The hydrophilic/hydrophobic nature of a Cl-terminated Si surface. <b>2013</b> , 9, 9799		7
1473	Self-assembly of suspended collagen films and their viability as cell culture substrates. <b>2013</b> , 1, 4711-4718		3
1472	Randomized phase II study of three doses of the integrin inhibitor cilengitide versus docetaxel as second-line treatment for patients with advanced non-small-cell lung cancer. <b>2013</b> , 31, 175-82		49
1471	Electrospun chitosan/hydroxyapatite nanofibers for bone tissue engineering. <b>2013</b> , 48, 1640-1645		58
1470	Cytophilic/cytophobic design of nanomaterials at biointerfaces. <b>2013</b> , 9, 1444-8		11
1469	Large-scale and highly efficient synthesis of micro- and nano-fibers with controlled fiber morphology by centrifugal jet spinning for tissue regeneration. <b>2013</b> , 5, 2337-45		85
1468	Assemblies at the liquid-solid interface: chirality expression from molecular conformers. <b>2013</b> , 14, 92-5		5
1467	Nanomechanical measurements of polyethylene glycol hydrogels using atomic force microscopy. <b>2013</b> , 18, 20-8		53
1466	Preparation and in vitro evaluation of mesoporous hydroxyapatite coated $\beta$ -TCP porous scaffolds. <b>2013</b> , 33, 5001-7		15
1465	Electrophoretic coating of amphiphilic chitosan colloids on regulating cellular behaviour. <b>2013</b> , 10, 20130411		4
1464	Resonant waveguide grating biosensor-enabled label-free and fluorescence detection of cell adhesion. <b>2013</b> , 188,		8

1463	The macroscopic structure of RADA16 peptide hydrogel stimulates monocyte/macrophage differentiation in HL60 cells via cholesterol synthesis. <b>2013</b> , 433, 298-304		6
1462	Influence of polymer molecular weight in osteoinductive composites for bone tissue regeneration. <i>Acta Biomaterialia</i> , <b>2013</b> , 9, 9401-13	10.8	28
1461	Electrospinning covalently cross-linking biocompatible hydrogelators. <b>2013</b> , 54, 363-371		13
1460	The effect of scaffold-cell entrapment capacity and physico-chemical properties on cartilage regeneration. <b>2013</b> , 34, 4259-65		35
1459	Natural Polymers in Tissue Engineering Applications. <b>2013</b> , 385-425		15
1458	Heparin loading and pre-endothelialization in enhancing the patency rate of electrospun small-diameter vascular grafts in a canine model. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2013</b> , 5, 2220-6 <sup>9.5</sup>		49
1457	Materiomics: an -omics approach to biomaterials research. <b>2013</b> , 25, 802-24		90
1456	Mesenchymal stromal cell-derived extracellular matrix influences gene expression of chondrocytes. <b>2013</b> , 5, 025003		24
1455	Cell attachment and proliferation on high conductivity PEDOT-glycol composites produced by vapour phase polymerisation. <b>2013</b> , 1, 368-378		24
1454	Multifaceted applications of nanomaterials in cell engineering and therapy. <b>2013</b> , 31, 638-53		19
1453	A novel Ti-based nanoglass composite with submicron-nanometer-sized hierarchical structures to modulate osteoblast behaviors. <b>2013</b> , 1, 2568-2574		52
1452	Review scaffold design and stem cells for tooth regeneration. <b>2013</b> , 49, 14-26		62
1451	Fabrication of quantum dot microarrays using electron beam lithography for applications in analyte sensing and cellular dynamics. <b>2013</b> , 7, 4617-28		52
1450	Scaffolds for bone tissue engineering: role of surface patterning on osteoblast response. <b>2013</b> , 3, 11073		76
1449	Self-assembled proteins and peptides for regenerative medicine. <b>2013</b> , 113, 4837-61		220
1448	Review of bioactive glass: from Hench to hybrids. <i>Acta Biomaterialia</i> , <b>2013</b> , 9, 4457-86	10.8	1445
1447	Design of a cellulose-based nanocomposite as a potential polymeric scaffold in tissue engineering. <b>2013</b> , 54, 2105-2114		30
1446	Electrospun acetalated dextran scaffolds for temporal release of therapeutics. <b>2013</b> , 29, 7957-65		25

1445	Nanotopographic surfaces with defined surface chemistries from amyloid fibril networks can control cell attachment. <i>Biomacromolecules</i> , <b>2013</b> , 14, 2305-16	6.9	50
1444	Topographical control of ocular cell types for tissue engineering. <b>2013</b> , 101, 1571-84		17
1443	Single-crystal apatite nanowires sheathed in graphitic shells: synthesis, characterization, and application. <b>2013</b> , 7, 5711-23		13
1442	Biotemplated syntheses of macroporous materials for bone tissue engineering scaffolds and experiments in vitro and vivo. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2013</b> , 5, 5557-62	9.5	20
1441	Electrospun poly(L-lactic)acid/nanoalumina (PLA/Al <sub>2</sub> O <sub>3</sub> ) composite fiber mats with potential biomedical application Investigation of cytotoxicity. <b>2013</b> , 14, 578-583		16
1440	Scab-inspired cytophilic membrane of anisotropic nanofibers for rapid wound healing. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2013</b> , 5, 4821-6	9.5	20
1439	Hybrid hydroxyapatite nanoparticles-loaded PCL/GE blend fibers for bone tissue engineering. <b>2013</b> , 24, 520-38		38
1438	Neural transdifferentiation of human bone marrow mesenchymal stem cells on hydrophobic polymer-modified surface and therapeutic effects in an animal model of ischemic stroke. <b>2013</b> , 238, 305-18		35
1437	Electrochemically controlled stiffness of multilayers for manipulation of cell adhesion. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2013</b> , 5, 4597-602	9.5	34
1436	Functionalized self-assembling peptide nanofiber hydrogels mimic stem cell niche to control human adipose stem cell behavior in vitro. <i>Acta Biomaterialia</i> , <b>2013</b> , 9, 6798-805	10.8	88
1435	Fabrication of hierarchical micro-nanotopographies for cell attachment studies. <b>2013</b> , 24, 255305		31
1434	Neuronal differentiation on anisotropic substrates and the influence of nanotopographical noise on neurite contact guidance. <b>2013</b> , 34, 6027-36		53
1433	Nanoclays mediate stem cell differentiation and mineralized ECM formation on biopolymer scaffolds. <b>2013</b> , 101, 2644-60		51
1432	Fabrication of Silk Fibroin/P(LLA-CL) Aligned Nanofibrous Scaffolds for Nerve Tissue Engineering. <b>2013</b> , 298, 565-574		25
1431	Cell-material interactions on biphasic polyurethane matrix. <b>2013</b> , 101, 2151-63		13
1430	Bone Tissue Engineering. <b>2013</b> , 1194-1214		2
1429	Arraying cell cultures using PEG-DMA micromolding in standard culture dishes. <b>2013</b> , 13, 595-602		12
1428	Culturing primary human osteoblasts on electrospun poly(lactic-co-glycolic acid) and poly(lactic-co-glycolic acid)/nanohydroxyapatite scaffolds for bone tissue engineering. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2013</b> , 5, 5921-6	9.5	52



1427	Nanofiber Technology for Controlling Stem Cell Functions and Tissue Engineering. <b>2013</b> , 27-51	10
1426	Surface nano-architectures and their effects on the mechanical properties and corrosion behavior of Ti-based orthopedic implants. <b>2013</b> , 233, 13-26	51
1425	To enhance protein production from osteoblasts by using micro-patterned surfaces. <b>2013</b> , 78, 120-127	8
1424	Building fluorescent DNA nanodevices on target living cell surfaces. <b>2013</b> , 52, 5490-6	114
1423	Engineered ECM Microenvironments and Their Regulation of Stem Cells. <b>2013</b> , 133-160	1
1422	Nanofibrous patterns by direct electrospinning of nanofibers onto topographically structured non-conductive substrates. <b>2013</b> , 5, 4993-5000	55
1421	Guidance of glial cells and neurites from dorsal root ganglia by laser induced periodic patterning of biphasic core/shell nanowires. <b>2013</b> , 210, 952-956	6
1420	GeometryBorce Control of Stem Cell Fate. <b>2013</b> , 3, 43-51	18
1419	Current research on electrospinning of silk fibroin and its blends with natural and synthetic biodegradable polymers. <b>2013</b> , 7, 129-142	31
1418	Lotus-leaf-like topography predominates over adsorbed ECM proteins in poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) surface/cell interactions. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2013</b> , 5, 5882-7	9.5 15
1417	Perspectives on the role of nanotechnology in bone tissue engineering. <b>2013</b> , 29, 103-15	98
1416	Directional cell migration through cell-cell interaction on polyelectrolyte multilayers with swelling gradients. <b>2013</b> , 34, 975-84	55
1415	Honeycomb patterned surfaces functionalized with polypeptide sequences for recognition and selective bacterial adhesion. <b>2013</b> , 34, 1453-60	42
1414	The switching of focal adhesion maturation sites and actin filament activation for MSCs by topography of well-defined micropatterned surfaces. <b>2013</b> , 34, 1764-71	47
1413	Cell interaction study method using novel 3D silica nanoneedle gradient arrays. <b>2013</b> , 102, 111-6	13
1412	Electrospun Chitosan-graft-PLGA nanofibres with significantly enhanced hydrophilicity and improved mechanical property. <b>2013</b> , 102, 674-81	50
1411	Photomodulation of Cellular Gene Expression in Hydrogels.. <b>2013</b> , 2, 269-272	14
1410	Synthesis of polymeric nanomaterials for biomedical applications. <b>2013</b> , 27-63	9

1409	Reduced in vitro immune response on titania nanotube arrays compared to titanium surface. <b>2013</b> , 1, 322-332	57
1408	In situ fabrication and wettability of Ca <sub>2</sub> SiO <sub>4</sub> /CaTiO <sub>3</sub> biocoating by laser cladding technology on Ti6Al4V alloy. <b>2013</b> , 29, 598-604	5
1407	Hydrolysis of Ca-deficient hydroxyapatite precursors in the presence of alanine-functionalized polyphosphazene nanofibers. <b>2013</b> , 39, 519-528	11
1406	Facile fabrication of "dual click" one- and two-dimensional orthogonal peptide concentration gradients. <i>Biomacromolecules</i> , <b>2013</b> , 14, 665-71	6.9 23
1405	From Molecular Structure to Macromolecular Organization: Keys to Design Supramolecular Biomaterials. <b>2013</b> , 46, 8528-8537	22
1404	Versatile functional microstructured polystyrene-based platforms for protein patterning and recognition. <i>Biomacromolecules</i> , <b>2013</b> , 14, 3147-54	6.9 5
1403	Advances in fabrication of TiO <sub>2</sub> nanofiber/nanowire arrays toward the cellular response in biomedical implantations: a review. <b>2013</b> , 48, 8337-8353	36
1402	Two-step recrystallization of water in concentrated aqueous solution of poly(ethylene glycol). <b>2013</b> , 117, 2188-94	9
1401	Construction of microenvironment onto titanium substrates to regulate the osteoblastic differentiation of bone marrow stromal cells in vitro and osteogenesis in vivo. <b>2013</b> , 101, 653-66	5
1400	In vitro and in vivo studies of rhBMP2-coated PS/PCL fibrous scaffolds for bone regeneration. <b>2013</b> , 101, 797-808	26
1399	Nuclear and cellular alignment of primary corneal epithelial cells on topography. <b>2013</b> , 101, 1069-79	18
1398	Biological, Chemical, and Electronic Applications of Nanofibers. <b>2013</b> , 298, 822-867	48
1397	Microfabricated nanotopological surfaces for study of adhesion-dependent cell mechanosensitivity. <b>2013</b> , 9, 81-9	21
1396	Stem-cell niche based comparative analysis of chemical and nano-mechanical material properties impacting ex vivo expansion and differentiation of hematopoietic and mesenchymal stem cells. <b>2013</b> , 2, 25-42	53
1395	Adhesion of Osteoblasts to a Vertically Aligned TiO <sub>2</sub> Nanotube Surface. <b>2013</b> , 13, 194-200	1
1394	Biofilm attachment reduction on bioinspired, dynamic, micro-wrinkling surfaces. <b>2013</b> , 15, 095018	58
1393	In vitro adhesion of commensal and pathogenic bacteria to commercial titanium implants with different surfaces. <b>2013</b> , 26, 453-62	2
1392	In Vivo Study of Ligament-Bone Healing after Anterior Cruciate Ligament Reconstruction Using Autologous Tendons with Mesenchymal Stem Cells Affinity Peptide Conjugated Electrospun Nanofibrous Scaffold. <b>2013</b> , 2013, 1-11	7

1391	Synthesis and Characterization of Drug-Loaded Poly(E-caprolactone)/Silica Hybrid Nanofibrous Scaffolds. <b>2013</b> , 2013, 1-12	7
1390	Comparing Biocompatibility of Nanocrystalline Titanium and Titanium-Oxide with Microcrystalline Titanium. <b>2013</b> , 1569, 91-96	4
1389	Thin Film Nanoelectronic Probe for Protein Detection [CORRIGENDUM]. <b>2013</b> , 1572, 1-2	3
1388	Nanotechnology in the regulation of stem cell behavior. <b>2013</b> , 14, 054401	23
1387	Thin Film Nanoelectronic Probe for Protein Detection. <b>2013</b> , 1572, 1	3
1386	Engineering a biocompatible scaffold with either micrometre or nanometre scale surface topography for promoting protein adsorption and cellular response. <b>2013</b> , 2013, 782549	52
1385	Biofabrication of Tissue Scaffolds. <b>2013</b> ,	23
1384	Nanostructured diamond coatings for orthopaedic applications. <b>2013</b> , 2013, 105-150	16
1383	Microstructured, functional PVA hydrogels through bioconjugation with oligopeptides under physiological conditions. <b>2013</b> , 9, 942-50	43
1382	Cell spreading and proliferation in response to the composition and mechanics of engineered fibrillar extracellular matrices. <b>2013</b> , 110, 2731-41	13
1381	Heat-Induced Dry Tailoring of Porosity in Polymer Scaffolds. <b>2013</b> , 298, 1143-1148	2
1380	Nanomaterials for dental and craniofacial tissue engineering. <b>2013</b> , 415-432	
1379	Immobilization of heparan sulfate on electrospun meshes to support embryonic stem cell culture and differentiation. <b>2013</b> , 288, 5530-8	36
1378	NANOTOPOGRAPHICAL MODULATION OF CELL PHENOTYPE AND FUNCTION. <b>2013</b> , 03, 1340003	1
1377	Selective modulation of cell response on engineered fractal silicon substrates. <b>2013</b> , 3, 1461	30
1376	Advances in Smart Wearable Systems. <b>2013</b> , 167-200	
1375	Nanotechnology for dental implants. <b>2013</b> , 28, e535-46	28
1374	Synthetic Polymer-Network Based Materials in Stem Cell Research. <b>2013</b> , 3-36	

1373	Membrane Systems in Liver Regenerative Medicine. <b>2013</b> , 37-64	1
1372	Hybrid processes in enzymatically gelled gelatin: impact on , macroscopic properties and cellular response. <b>2013</b> , 9, 6986-6999	29
1371	Building Fluorescent DNA Nanodevices on Target Living Cell Surfaces. <b>2013</b> , 125, 5600-5606	18
1370	In vitro and in vivo studies on nanocrystalline Ti fabricated by equal channel angular pressing with microcrystalline CP Ti as control. <b>2013</b> , 101, 1694-707	35
1369	A Robust Lithographic Method for Multiplex Surface Patterning. <b>2013</b> , 9, 29-36	3
1368	Nanotechnology for Cerebral Aneurysm Treatment. <b>2013</b> , 259-282	1
1367	Biotechnological applications of supersonic cluster beam-deposited nanostructured thin films: bottom-up engineering to optimize cell-protein-surface interactions. <b>2013</b> , 101, 2994-3008	10
1366	Adsorption of multimeric T cell antigens on carbon nanotubes: effect on protein structure and antigen-specific T cell stimulation. <b>2013</b> , 9, 666-72	34
1365	Processing and characterization of supercritical CO2 batch foamed poly(lactic acid)/poly(ethylene glycol) scaffold for tissue engineering application. <b>2013</b> , 130, 3066-3073	43
1364	Nanomolding of Nanostructured Biodegradable Tissue Engineering Scaffolds. <b>2013</b> ,	
1363	In Vitro Blood Compatibility of Novel Hydrophilic Chitosan Films for Vessel Regeneration and Repair. <b>2013</b> ,	3
1362	The effects of topographical patterns and sizes on neural stem cell behavior. <b>2013</b> , 8, e59022	59
1361	Effects of hydroxyapatite nanostructure on channel surface of porcine acellular dermal matrix scaffold on cell viability and osteogenic differentiation of human periodontal ligament stem cells. <b>2013</b> , 8, 1887-95	16
1360	Effects of a hybrid micro/nanorod topography-modified titanium implant on adhesion and osteogenic differentiation in rat bone marrow mesenchymal stem cells. <b>2013</b> , 8, 257-65	62
1359	Cultivation of human microvascular endothelial cells on topographical substrates to mimic the human corneal endothelium. <b>2013</b> , 4, 38-58	5
1358	Stem Cells in Tissue Engineering. <b>2013</b> ,	3
1357	Pathways by which the interplay of organismic and environmental factors lead to phenotypic variation within and across generations. <b>2013</b> , 44, 325-54	
1356	Cell Surface Engineering by Chemical Reaction and Remodeling. <b>2014</b> , 27-41	1

1355	Osteogenic response of human mesenchymal stem cells to well-defined nanoscale topography in vitro. <b>2014</b> , 9, 2499-515	36
1354	Comparative study of bioactivity of collagen scaffolds coated with graphene oxide and reduced graphene oxide. <b>2014</b> , 9, 3363-73	60
1353	Plasminogen activator inhibitor-1 is involved in impaired bone repair associated with diabetes in female mice. <b>2014</b> , 9, e92686	36
1352	Citrobacter amalonaticus phytase on the cell surface of Pichia pastoris exhibits high pH stability as a promising potential feed supplement. <b>2014</b> , 9, e114728	10
1351	Cell microenvironment engineering and monitoring for tissue engineering and regenerative medicine: the recent advances. <b>2014</b> , 2014, 921905	129
1350	Human pluripotent stem cells on artificial microenvironments: a high content perspective. <b>2014</b> , 5, 150	10
1349	Nanotechnology biomimetic cartilage regenerative scaffolds. <b>2014</b> , 41, 231-40	32
1348	Nanoengineered Platforms to Guide Pluripotent Stem Cell Fate. <b>2014</b> , 5,	3
1347	. <b>2014</b> ,	
1346	Investigation of osteoblast cells behavior in polymeric 3D micropatterned scaffolds using digital holographic microscopy. <b>2014</b> , 53, 4850-8	21
1345	Dynamics of filopodium-like protrusion and endothelial cellular motility on one-dimensional extracellular matrix fibrils. <b>2014</b> , 4, 20130060	12
1344	Thiol-Reactive Parylenes as a Robust Coating for Biomedical Materials. <b>2014</b> , 1, 1400093	15
1343	Cell/Material Interactions. <b>2014</b> , 217-251	7
1342	Human procollagen type I surface-modified PHB-based non-woven textile scaffolds for cell growth: preparation and short-term biological tests. <b>2014</b> , 9, 065005	7
1341	Scaffold Designing. <b>2014</b> , 291-313	5
1340	Engaging novel cell types, protein targets and efficacy biomarkers in the treatment of diabetic nephropathy. <b>2014</b> , 5, 185	1
1339	Polyelectrolyte Multilayers: Towards Single Cell Studies. <b>2014</b> , 6, 1502-1527	40
1338	Synthesis of magnetic, macro/mesoporous bioactive glasses based on coral skeleton for bone tissue engineering. <b>2014</b> , 8, 275-81	5

1337	Fabrication of photo-crosslinked chitosan- gelatin scaffold in sodium alginate hydrogel for chondrocyte culture. <b>2014</b> , 24, 633-41	10
1336	Roofed grooves: rapid layer engineering of perfusion channels in collagen tissue models. <b>2014</b> , 29, 605-16	4
1335	The Promotion of Human Neural Stem Cells Adhesion Using Bioinspired Poly(norepinephrine) Nanoscale Coating. <b>2014</b> , 2014, 1-10	11
1334	Construction and Computation with Nucleic Acids on the Cell Surface. <b>2014</b> , 157-173	
1333	Monitoring layer-by-layer self-assembly process of natural polyelectrolytes by fluorescent bioconjugate with aggregation-induced emission characteristic. <b>2014</b> , 2, 8406-8411	24
1332	Vapor-Based Multicomponent Coatings for Antifouling and Biofunctional Synergic Modifications. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 2281-2287	15.6 31
1331	[New possibilities for ocular surface reconstruction: collagen membranes and biocompatible elastomer nanofibers]. <b>2014</b> , 111, 1019-26	2
1330	Early molecular assessment of osseointegration in humans. <b>2014</b> , 25, 1273-1285	27
1329	Functionality-oriented molecular gels: synthesis and properties of nitrobenzoxadiazole (NBD)-containing low-molecular mass gelators. <b>2014</b> , 10, 9159-66	20
1328	Embryonic Stem Cell Differentiation to Cardiomyocytes on Nanostructured Scaffolds for Myocardial Tissue Regeneration. <b>2014</b> , 63, 240-245	22
1327	. <b>2014</b> ,	
1326	Adhesion, growth, and proliferation of endothelial cells on biopolymer extracellular film matrices. <b>2014</b> , 158, 153-8	5
1325	Cell behavior on surface modified polydimethylsiloxane (PDMS). <b>2014</b> , 14, 953-64	12
1324	Neuronal electrophysiological function and control of neurite outgrowth on electrospun polymer nanofibers are cell type dependent. <b>2014</b> , 20, 1089-95	25
1323	Feasibility of 3D scaffolds for organs. <b>2014</b> , 221-235	
1322	Biomimetic nanocomposites to control osteogenic differentiation of human mesenchymal stem cells. <b>2014</b> , 3, 737-51	38
1321	Rapid Generation of Cell Gradients by Utilizing Solely Nanotopographic Interactions on a Bio-Inert Glass Surface. <b>2014</b> , 126, 2959-2962	13
1320	Potential of Tourmaline/Chitosan Fiber for Wound Dressing. <b>2014</b> , 804, 235-238	

1319	Chapter 11: Surface Structure of Nanocomposites and Its Properties: A Practical Example. <b>2014</b> , 473-515	2
1318	Large area micropatterning of cells on polydimethylsiloxane surfaces. <b>2014</b> , 8, 24	15
1317	Bacterial cellulose as a substrate for microbial cell culture. <b>2014</b> , 80, 1926-32	20
1316	Noncovalent Functionalization of Cell Surface. <b>2014</b> , 99-120	
1315	Capillary force lithography for cardiac tissue engineering. <b>2014</b> ,	18
1314	Rotator cuff healing and repair. <b>2014</b> , 25, 266-280	
1313	Development of functional biomaterials with micro- and nanoscale technologies for tissue engineering and drug delivery applications. <b>2014</b> , 8, 1-14	80
1312	Enhanced endothelial differentiation of adipose-derived stem cells by substrate nanotopography. <b>2014</b> , 8, 50-8	36
1311	Development of multilayer constructs for tissue engineering. <b>2014</b> , 8, 106-19	9
1310	Effect of sterilization on structural and material properties of 3-D silk fibroin scaffolds. <i>Acta Biomaterialia</i> , <b>2014</b> , 10, 308-17	10.8 46
1309	Modification of Abiotic/Biotic Interfaces with Small Molecules and Nanomaterials for Improved Bioelectronics. <b>2014</b> , 26, 686-697	79
1308	A three-dimensional dual-layer nano/microfibrous structure of electrospun chitosan/poly(d,l-lactide) membrane for the improvement of cytocompatibility. <b>2014</b> , 450, 224-234	43
1307	Substrate topography determines the fate of chondrogenesis from human mesenchymal stem cells resulting in specific cartilage phenotype formation. <b>2014</b> , 10, 1507-16	85
1306	Square-wave voltammetry assays for glycoproteins on nanoporous gold. <b>2014</b> , 717-718, 47-60	21
1305	Biomimetic deposition of hydroxyapatite on the surface of silica thin film covered steel tape. <b>2014</b> , 40, 6949-6955	13
1304	Evidence of antibacterial activity on titanium surfaces through nanotextures. <b>2014</b> , 308, 275-284	47
1303	Genipin-crosslinked chitosan/poly-L-lysine gels promote fibroblast adhesion and proliferation. <i>Carbohydrate Polymers</i> , <b>2014</b> , 108, 91-8	10.3 60
1302	A simultaneous process of 3D magnesium phosphate scaffold fabrication and bioactive substance loading for hard tissue regeneration. <b>2014</b> , 36, 252-60	43

1301	Influence of nanoparticle-embedded polymeric surfaces on cellular adhesion, proliferation, and differentiation. <b>2014</b> , 102, 2652-61		16
1300	Novel and simple alternative to create nanofibrillar matrices of interest for tissue engineering. <b>2014</b> , 20, 285-96		16
1299	Electrospun nanofibrous cellulose scaffolds with controlled microarchitecture. <i>Carbohydrate Polymers</i> , <b>2014</b> , 100, 143-9	10.3	35
1298	Combining surface topography with polymer chemistry: exploring new interfacial biological phenomena. <b>2014</b> , 5, 14-24		64
1297	Morphology, mechanical properties, and mineralization of rigid thermoplastic polyurethane/hydroxyapatite scaffolds for bone tissue applications: effects of fabrication approaches and hydroxyapatite size. <b>2014</b> , 49, 2324-2337		50
1296	Preparation of electrospun nanofibers of star-shaped polycaprolactone and its blends with polyaniline. <b>2014</b> , 49, 4844-4854		9
1295	Biopolymer/Calcium phosphate scaffolds for bone tissue engineering. <b>2014</b> , 3, 469-84		71
1294	Vibrational spectroscopy for probing molecular-level interactions in organic films mimicking biointerfaces. <b>2014</b> , 207, 199-215		26
1293	Matricellular proteins and biomaterials. <b>2014</b> , 37, 183-91		44
1292	Using submicroporous Ta oxide coatings deposited by a simple hydrolysis/condensation process to increase the biological responses to Ti surface. <b>2014</b> , 259, 199-205		8
1291	The relevance of biomaterials to the prevention and treatment of osteoporosis. <i>Acta Biomaterialia</i> , <b>2014</b> , 10, 1793-805	10.8	103
1290	Methacrylate-based polymer films useful in lithographic applications exhibit different glass transition temperature-confinement effects at high and low molecular weight. <b>2014</b> , 55, 1249-1258		42
1289	Three-dimensional nano-biointerface as a new platform for guiding cell fate. <b>2014</b> , 43, 2385-401		224
1288	Engineering physical microenvironment for stem cell based regenerative medicine. <b>2014</b> , 19, 763-73		48
1287	Effects of the polymeric niche on neural stem cell characteristics during primary culturing. <b>2014</b> , 25, 1339-55		1
1286	Synthesis and patterning of tunable multiscale materials with engineered cells. <b>2014</b> , 13, 515-23		260
1285	Rapid generation of cell gradients by utilizing solely nanotopographic interactions on a bio-inert glass surface. <b>2014</b> , 53, 2915-8		20
1284	3D Scaffolds. <b>2014</b> , 475-494		4



1283	Surface topography and chemistry shape cellular behavior on wide band-gap semiconductors. <i>Acta Biomaterialia</i> , <b>2014</b> , 10, 2455-62	10.8	21
1282	Titanium microbead-based porous implants: bead size controls cell response and host integration. <b>2014</b> , 3, 79-87		13
1281	Characterization of structural, mechanical and nano-mechanical properties of electrospun PGS/PCL fibers. <b>2014</b> , 4, 16951-16957		58
1280	Cardiac differentiation of cardiosphere-derived cells in scaffolds mimicking morphology of the cardiac extracellular matrix. <i>Acta Biomaterialia</i> , <b>2014</b> , 10, 3449-62	10.8	37
1279	Hierarchical biointerfaces assembled by leukocyte-inspired particles for specifically recognizing cancer cells. <b>2014</b> , 10, 3735-41		32
1278	Galactosylated electrospun membranes for hepatocyte sandwich culture. <b>2014</b> , 116, 576-81		10
1277	Surface reconstruction and hemocompatibility improvement of a phosphorylcholine end-capped poly(butylene succinate) coating. <b>2014</b> , 102, 2972-81		21
1276	Translational study between structure and biological response of nanocellulose from wood and green algae. <b>2014</b> , 4, 2892-2903		107
1275	A nanopatterned cell-seeded cardiac patch prevents electro-uncoupling and improves the therapeutic efficacy of cardiac repair. <b>2014</b> , 2, 567-80		41
1274	Multiscale patterning of a biomimetic scaffold integrated with composite microspheres. <b>2014</b> , 10, 3943-53		37
1273	Nanofibrous microposts and microwells of controlled shapes and their hybridization with hydrogels for cell encapsulation. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2014</b> , 6, 7038-44	9.5	27
1272	A novel combination of nano-scaffolds with micro-scaffolds to mimic extracellular matrices improve osteogenesis. <b>2014</b> , 29, 59-71		14
1271	Material control of stem cell differentiation: challenges in nano-characterization. <b>2014</b> , 28, 46-50		23
1270	Modulation of stem cell adhesion and morphology via facile control over surface presentation of cell adhesion molecules. <i>Biomacromolecules</i> , <b>2014</b> , 15, 43-52	6.9	43
1269	Nanotechnology meets 3D in vitro models: tissue engineered tumors and cancer therapies. <b>2014</b> , 34, 270-9		39
1268	The potential of anisotropic matrices as substrate for heart valve engineering. <b>2014</b> , 35, 1833-44		38
1267	A novel heparin loaded poly(L-lactide-co-caprolactone) covered stent for aneurysm therapy. <b>2014</b> , 116, 39-42		16
1266	Crystallization-driven surface segregation and surface structures in poly(L-lactide)-block-poly(ethylene glycol) copolymer thick films. <b>2014</b> , 30, 394-401		1

1265	Hydroxyapatite/graphene-nanosheet composite coatings deposited by vacuum cold spraying for biomedical applications: Inherited nanostructures and enhanced properties. <b>2014</b> , 67, 250-259	131
1264	Calcium phosphate deposition rate, structure and osteoconductivity on electrospun poly(l-lactic acid) matrix using electrodeposition or simulated body fluid incubation. <i>Acta Biomaterialia</i> , <b>2014</b> , 10, 419-27	10.8 50
1263	Recent progress in the research of biomaterials regulating cell behavior. <b>2014</b> , 4, 63807-63816	13
1262	Directing osteogenesis of stem cells with hydroxyapatite precipitated electrospun eri-tasar silk fibroin nanofibrous scaffold. <b>2014</b> , 25, 1440-57	15
1261	Surface-initiated polymer brushes in the biomedical field: applications in membrane science, biosensing, cell culture, regenerative medicine and antibacterial coatings. <b>2014</b> , 114, 10976-1026	426
1260	Templated fabrication of fiber-basket polymersomes via crystallization-driven block copolymer self-assembly. <b>2014</b> , 136, 16676-82	33
1259	Enhanced chondrogenic differentiation of dental pulp stem cells using nanopatterned PEG-GelMA-HA hydrogels. <b>2014</b> , 20, 2817-29	51
1258	Hydrogel-fibre composites with independent control over cell adhesion to gel and fibres as an integral approach towards a biomimetic artificial ECM. <b>2014</b> , 6, 024106	10
1257	Effects of nanoporous alumina on inflammatory cell response. <b>2014</b> , 102, 3773-80	11
1256	Advances in nanofibrous scaffolds for biomedical applications: From electrospinning to self-assembly. <b>2014</b> , 9, 722-742	89
1255	Cell-mimetic coatings for immune spheres. <b>2014</b> , 123, 845-51	
1254	Effect of solvent evaporation on fiber morphology in rotary jet spinning. <b>2014</b> , 30, 13369-74	74
1253	Differentiation of human adipose-derived stem cells into neuron-like cells which are compatible with photocurable three-dimensional scaffolds. <b>2014</b> , 20, 1271-84	53
1252	Multifunctional alkoxysilanes prepared by thiol-ene click chemistry: their luminescence properties and modification on a silicon surface. <b>2014</b> , 4, 62827-62834	16
1251	Focus on the interlude between topographic transition and cell response on shape-memory surfaces. <b>2014</b> , 55, 5961-5968	30
1250	Light-Induced Remodeling of Physically Crosslinked Hydrogels Using Near-IR Wavelengths. <b>2014</b> , 2, 1613-1618	23
1249	Response of osteoblast-like MG63 on neoglycosylated collagen matrices. <b>2014</b> , 5, 1208-1212	6
1248	Facile and controllable synthesis of carbon-encapsulating carbonate apatite nanowires from biomass containing calcium compounds such as CaC <sub>2</sub> O <sub>4</sub> and CaCO <sub>3</sub> . <b>2014</b> , 4, 50938-50946	1

1247	Stem cell delivery systems inspired by tissue-specific niches. <b>2014</b> , 193, 42-50		22
1246	Polypeptide films via N-carboxyanhydride ring-opening polymerization (NCA-ROP): past, present and future. <b>2014</b> , 50, 4971-88		50
1245	Noninvasive label-free nanoplasmonic optical imaging for real-time monitoring of in vitro amyloid fibrogenesis. <b>2014</b> , 6, 3561-5		9
1244	Development of an hydrophobic fluoro-silica surface for studying homotypic cancer cell aggregation-disaggregation as a single dynamic process in vitro. <b>2014</b> , 2, 1486-1496		6
1243	Ink-on-probe hydrodynamics in atomic force microscope deposition of liquid inks. <b>2014</b> , 10, 3717-28		20
1242	Tuning the surface properties of hydrogel at the nanoscale with focused ion irradiation. <b>2014</b> , 10, 8448-56		10
1241	Three dimensionally printed mesoporous bioactive glass and poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) composite scaffolds for bone regeneration. <b>2014</b> , 2, 6106-6118		72
1240	Organoamine-assisted biomimetic synthesis of faceted hexagonal hydroxyapatite nanotubes with prominent stimulation activity for osteoblast proliferation. <b>2014</b> , 2, 1760-1763		32
1239	In situ generation of redox active peptides driven by selenoester mediated native chemical ligation. <b>2014</b> , 50, 11397-400		19
1238	Highly moldable electrospun clay-like fluffy nanofibers for three-dimensional scaffolds. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2014</b> , 6, 1082-91	9.5	37
1237	Strong Collagen Hydrogels by Oxidized Dextran Modification. <b>2014</b> , 2, 1318-1324		62
1236	Rapid fibroblast activation in mammalian cells induced by silicon nanowire arrays. <b>2014</b> , 6, 8318-25		18
1235	Differentiation of tonsil-tissue-derived mesenchymal stem cells controlled by surface-functionalized microspheres in PEG-polypeptide thermogels. <i>Biomacromolecules</i> , <b>2014</b> , 15, 2180-7 <sup>6.9</sup>		38
1234	Time Evolution of a Cl-Terminated Si Surface at Ambient Conditions. <b>2014</b> , 118, 11350-11356		15
1233	Tailoring hierarchical meso-macroporous 3D scaffolds: from nano to macro. <b>2014</b> , 2, 49-58		30
1232	Engineering of biomimetic nanofibrous matrices for drug delivery and tissue engineering. <b>2014</b> , 2, 7828-7848		72
1231	In situ quantification of living cell adhesion forces: single cell force spectroscopy with a nanotweezer. <b>2014</b> , 30, 2952-9		22
1230	Synthesis and characterization of proteoglycan-mimetic graft copolymers with tunable glycosaminoglycan density. <i>Biomacromolecules</i> , <b>2014</b> , 15, 3772-80	6.9	20

1229	Fabrication of shish/kebab structured poly( $\epsilon$ -caprolactone) electrospun nanofibers that mimic collagen fibrils: Effect of solvents and matrigel functionalization. <b>2014</b> , 55, 5396-5406	20
1228	Quantitative biomolecular imaging by dynamic nanomechanical mapping. <b>2014</b> , 43, 7412-29	64
1227	Surface engineering of synthetic polymer materials for tissue engineering and regenerative medicine applications. <b>2014</b> , 2, 1318-1331	52
1226	Guiding the behaviors of human umbilical vein endothelial cells with patterned silk fibroin films. <b>2014</b> , 122, 79-84	25
1225	Microporous polymeric 3D scaffolds templated by the layer-by-layer self-assembly. <b>2014</b> , 35, 1408-13	29
1224	Synthesis and high-throughput processing of polymeric hydrogels for 3D cell culture. <b>2014</b> , 25, 1581-601	40
1223	Advances in cellular and tissue engineering using layer-by-layer assembly. <b>2014</b> , 6, 411-21	31
1222	Near-infrared upconversion controls photocaged cell adhesion. <b>2014</b> , 136, 2248-51	170
1221	Underwater-transparent nanodendritic coatings for directly monitoring cancer cells. <b>2014</b> , 3, 332-7	30
1220	3D bioprinting of tissues and organs. <b>2014</b> , 32, 773-85	3876
1219	Hyaluronic acid/poly-L-lysine multilayers coated with gold nanoparticles: cellular response and permeability study. <b>2014</b> , 25, 1342-1348	10
1218	STM Characterization of Supramolecular Materials with Potential for Organic Electronics and Nanotechnology. <b>2014</b> , 457-490	
1217	Tissue engineering of electrically responsive tissues using polyaniline based polymers: a review. <b>2014</b> , 35, 9068-86	289
1216	Self-organized ECM-mimetic model based on an amphiphilic multiblock silk-elastin-like corecombinamer with a concomitant dual physical gelation process. <i>Biomacromolecules</i> , <b>2014</b> , 15, 3781-93	61
1215	The role of surface free energy in osteoblast/Biomaterial interactions. <b>2014</b> , 59, 417-429	123
1214	Biomaterial/stem cell interactions and their impact on stem cell response. <b>2014</b> , 4, 53307-53320	38
1213	Cellular response to titanium discs coated with polyelectrolyte multilayer films. <b>2014</b> , 21, 925-933	3
1212	Engineering cellular response using nanopatterned bulk metallic glass. <b>2014</b> , 8, 4366-75	77

1211	Microstructural and mechanical properties of porous biocomposite scaffolds based on polyvinyl alcohol, nano-hydroxyapatite and cellulose nanocrystals. <b>2014</b> , 21, 3409-3426	103
1210	Preparation of Mineralized Electrospun Fibers as a Biomimetic Nanocomposite. <b>2014</b> , 63, 576-582	5
1209	A comparative study of nano-scale coatings on gold electrodes for bioimpedance studies of breast cancer cells. <b>2014</b> , 16, 689-96	10
1208	Effect of structure, topography and chemistry on fibroblast adhesion and morphology. <b>2014</b> , 25, 1781-7	16
1207	Optimization of fully aligned bioactive electrospun fibers for "in vitro" nerve guidance. <b>2014</b> , 25, 2323-32	48
1206	PLGA/nHA hybrid nanofiber scaffold as a nanocargo carrier of insulin for accelerating bone tissue regeneration. <b>2014</b> , 9, 314	49
1205	Smart instructive polymer substrates for tissue engineering. <b>2014</b> , 301-326	4
1204	Nano/microfibrous polymeric constructs loaded with bioactive agents and designed for tissue engineering applications: a review. <b>2014</b> , 102, 1562-79	63
1203	Polymeric Biomaterials for Implantable Prostheses. <b>2014</b> , 309-331	12
1202	Atomic force microscopy-based bioanalysis for the study of disease. <b>2014</b> , 6, 4932-4955	14
1201	Nanoimprinting of topographical and 3D cell culture scaffolds. <b>2014</b> , 9, 349-66	16
1200	Combinatorial MAPLE gradient thin film assemblies signalling to human osteoblasts. <b>2014</b> , 6, 035010	32
1199	Electrospun honeycomb as nests for controlled osteoblast spatial organization. <b>2014</b> , 14, 1580-9	21
1198	Aggregation behavior of the template-removed 5,10,15,20-tetrakis(4-sulfonatophenyl)porphyrin chiral array directed by poly(ethylene glycol)-block-poly(L-lysine). <b>2014</b> , 30, 4797-805	16
1197	Studying the influence of surface topography on bacterial adhesion using spatially organized microtopographic surface patterns. <b>2014</b> , 30, 4633-41	129
1196	Tantalum coating on TiO <sub>2</sub> nanotubes induces superior rate of matrix mineralization and osteofunctionality in human osteoblasts. <b>2014</b> , 37, 332-41	55
1195	Engineering biomolecular microenvironments for cell instructive biomaterials. <b>2014</b> , 3, 797-810	65
1194	Peptide-directed spatial organization of biomolecules in dynamic gradient scaffolds. <b>2014</b> , 3, 1381-6	36

1193	Engineering cell alignment in vitro. <b>2014</b> , 32, 347-65		169
1192	Liposomal clodronate inhibition of osteoclastogenesis and osteoinduction by submicrostructured beta-tricalcium phosphate. <b>2014</b> , 35, 5088-97		76
1191	Cell adhesion mechanisms on laterally mobile polymer films. <b>2014</b> , 35, 4827-34		24
1190	The potential of cellulose nanocrystals in tissue engineering strategies. <i>Biomacromolecules</i> , <b>2014</b> , 15, 2327-46	6.9	344
1189	3D presentation of a neurotrophic factor for the regulation of neural progenitor cells. <b>2014</b> , 9, 1239-51		12
1188	Properties and Characterization of Bioconjugates. <b>2014</b> , 415-430		0
1187	Fabrication of poly(ethylene glycol): gelatin methacrylate composite nanostructures with tunable stiffness and degradation for vascular tissue engineering. <b>2014</b> , 6, 024112		49
1186	Three-dimensional scaffolds: an in vitro strategy for the biomimetic modelling of in vivo tumour biology. <b>2014</b> , 49, 5809-5820		4
1185	Morphology and functions of astrocytes cultured on water-repellent fractal tripalmitin surfaces. <b>2014</b> , 35, 7386-97		8
1184	Cell-based biosensors and their application in biomedicine. <b>2014</b> , 114, 6423-61		221
1183	Engineering the Surface of Cells Using Biotin-Avidin Chemistry. <b>2014</b> , 143-155		0
1182	Cotton-wool-like bioactive glasses for bone regeneration. <i>Acta Biomaterialia</i> , <b>2014</b> , 10, 3733-46	10.8	78
1181	Nanomechanical properties of poly(L-lactide) nanofibers after deformation. <b>2014</b> , 120, 97-101		5
1180	Stimulation of bone growth following zinc incorporation into biomaterials. <b>2014</b> , 35, 6882-97		191
1179	Ontology analysis of global gene expression differences of human bone marrow stromal cells cultured on 3D scaffolds or 2D films. <b>2014</b> , 35, 6716-26		28
1178	Molecular dynamics simulations of collagen adsorption onto grooved rutile surface: the effects of groove width. <b>2014</b> , 121, 150-7		10
1177	Engineering vertically aligned semiconductor nanowire arrays for applications in the life sciences. <b>2014</b> , 9, 172-196		108
1176	Anisotropic cell-to-cell spread of vaccinia virus on microgrooved substrate. <b>2014</b> , 35, 5049-55		10

1175	Cell interactions with superhydrophilic and superhydrophobic surfaces. <b>2014</b> , 28, 843-863	88
1174	Addition of nanoscaled bioinspired surface features: A revolution for bone related implants and scaffolds?. <b>2014</b> , 102, 275-94	43
1173	Phage-based nanomaterials for biomedical applications. <i>Acta Biomaterialia</i> , <b>2014</b> , 10, 1741-50	10.8 42
1172	- Engineering Biomimetic Scaffolds. <b>2014</b> , 242-281	3
1171	Chapter 7: Nanodimensional and Nanocrystalline Calcium Orthophosphates. <b>2014</b> , 219-341	4
1170	Surface modification of electrospun polycaprolactone fibers and effect on cell proliferation. <b>2014</b> , 2, 47-59	7
1169	Chapter 9: Cell Behavior on Electrospun Scaffolds: Factors at Play on Nanoscale. <b>2014</b> , 393-434	1
1168	Enhanced MC3T3-E1 preosteoblast response and bone formation on the addition of nano-needle and nano-porous features to microtopographical titanium surfaces. <b>2014</b> , 9, 045001	23
1167	Scanning electron microscopical observation of an osteoblast/osteoclast co-culture on micropatterned orthopaedic ceramics. <b>2014</b> , 5, 2041731414552114	9
1166	Nanostructures for Musculoskeletal Tissue Engineering. <b>2014</b> , 407-434	1
1165	Biocompatible and biodegradable elastomer/fibrinogen composite electrospun scaffolds for cardiac tissue regeneration. <b>2015</b> , 5, 103308-103314	14
1164	Comparative study of recombinant human bone morphogenetic protein-2 carriers in rat subcutaneous tissues: Pilot study. <b>2015</b> , 12, 138-146	1
1163	Microconical silicon structures influence NGF-induced PC12 cell morphology. <b>2015</b> , 9, 424-34	26
1162	Electrospun Nanostructures as Biodegradable Composite Materials for Biomedical Applications. <b>2015</b> , 62-85	
1161	Solid Materials for Biomedical Applications. <b>2015</b> , 1345-1370	1
1160	Flexible Robotic AFM-Based System for Manipulation and Characterization of Micro- and Nano-Objects. <b>2015</b> , 441-476	
1159	Nanomaterials and bone regeneration. <b>2015</b> , 3, 15029	321
1158	Conducting Polymers: Prospects. <b>2015</b> , 2024-2038	

1157	Electrospun SF/PLCL nanofibrous membrane: a potential scaffold for retinal progenitor cell proliferation and differentiation. <b>2015</b> , 5, 14326	49
1156	Interplay between motility and cell-substratum adhesion in amoeboid cells. <b>2015</b> , 9, 054112	5
1155	Localized surface functionalization of polycaprolactone with atmospheric-pressure microplasma jet. <b>2015</b> , 1, 025002	3
1154	The Micro/Nanohybrid Structures Enhancing B35 Cell Guidance on Chitosan. <b>2015</b> , 6,	0
1153	Optimization of protein cross-linking in bicomponent electrospun scaffolds for therapeutic use. <b>2015</b> ,	
1152	Osteoblast biocompatibility of novel chitosan crosslinker, hexamethylene-1,6-diaminocarboxysulfonate. <b>2015</b> , 103, 3026-33	6
1151	Cardiomyocyte-Driven Actuation in Biohybrid Microcylinders. <b>2015</b> , 27, 4509-4515	40
1150	Novel Nanostructured Electrodes Obtained by Pyrolysis of Composite Polymeric Materials. <b>2015</b> , 27, 1544-1549	5
1149	A primer of statistical methods for correlating parameters and properties of electrospun poly(L-lactide) scaffolds for tissue engineering--PART 1: design of experiments. <b>2015</b> , 103, 91-102	16
1148	Highly Porous Gelatin Reinforced 3D Scaffolds for Articular Cartilage Regeneration. <b>2015</b> , 15, 941-52	21
1147	Concentration-dependent and surface-assisted self-assembly properties of a bioactive estrogen receptor $\alpha$ -derived peptide. <b>2015</b> , 21, 95-104	20
1146	Rationally Designed Peptide Interface for Potential Modulated Cell Adhesion and Migration. <b>2015</b> , 2, 1500335	8
1145	Role of nanotopography in the development of tissue engineered 3D organs and tissues using mesenchymal stem cells. <b>2015</b> , 7, 266-80	34
1144	Fabrication, Properties and Applications of Dense Hydroxyapatite: A Review. <b>2015</b> , 6, 1099-140	140
1143	Mesoporous bioactive glass surface modified poly(lactic-co-glycolic acid) electrospun fibrous scaffold for bone regeneration. <b>2015</b> , 10, 3815-27	19
1142	Enhanced Critical Size Defect Repair in Rabbit Mandible by Electrospun Gelatin/ $\beta$ -TCP Composite Nanofibrous Membranes. <b>2015</b> , 2015, 1-9	7
1141	History and Applications of Hydrogels. <b>2015</b> , 04,	70
1140	Physical, Spatial, and Molecular Aspects of Extracellular Matrix of In Vivo Niches and Artificial Scaffolds Relevant to Stem Cells Research. <b>2015</b> , 2015, 167025	94



1139	. <b>2015</b> ,	3
1138	Bidirectional regulation of zinc embedded titania nanorods: antibiosis and osteoblastic cell growth. <b>2015</b> , 5, 14470-14481	8
1137	Contractile cell forces deform macroscopic cantilevers and quantify biomaterial performance. <b>2015</b> , 11, 5053-9	4
1136	Citric acid modification of PLLA nano-fibrous scaffolds to enhance cellular adhesion, proliferation and osteogenic differentiation. <b>2015</b> , 3, 5291-5299	17
1135	Noninvasive and Reversible Cell Adhesion and Detachment via Single-Wavelength Near-Infrared Laser Mediated Photoisomerization. <b>2015</b> , 137, 8199-205	91
1134	Responsive cell-material interfaces. <b>2015</b> , 10, 849-71	43
1133	In situ growth of a polyphosphazene nanoparticle coating on a honeycomb surface: facile formation of hierarchical structures for bioapplication. <b>2015</b> , 51, 5698-701	12
1132	Phosphorylcholine-modified chitosan films as effective promoters of cell aggregation: correlation between the films properties and cellular response. <b>2015</b> , 15, 490-500	4
1131	Nano-bioelectronics via dip-pen nanolithography. <b>2015</b> , 3, 6431-6444	22
1130	Virus Nanoparticles Mediated Osteogenic Differentiation of Bone Derived Mesenchymal Stem Cells. <b>2015</b> , 2, 1500026	20
1129	Tuning neuron adhesion and neurite guiding using functionalized AuNPs and backfill chemistry. <b>2015</b> , 5, 39252-39262	15
1128	Hydrogel-laden paper scaffold system for origami-based tissue engineering. <b>2015</b> , 112, 15426-31	74
1127	Hierarchical scaffolds enhance osteogenic differentiation of human Wharton's jelly derived stem cells. <b>2015</b> , 7, 035009	16
1126	Mesoporous bioactive glasses: Relevance of their porous structure compared to that of classical bioglasses. <b>2015</b> , 1,	47
1125	Bone-tissue engineering: complex tunable structural and biological responses to injury, drug delivery, and cell-based therapies. <b>2015</b> , 47, 431-54	25
1124	Progress in cell-based therapies for tendon repair. <b>2015</b> , 84, 240-56	114
1123	Non-genetic engineering of cells for drug delivery and cell-based therapy. <b>2015</b> , 91, 125-40	157
1122	A modular DNA origami-based enzyme cascade nanoreactor. <b>2015</b> , 51, 5351-4	152

1121	Titanium nanostructures for biomedical applications. <b>2015</b> , 26, 062002			295
1120	Micro-/nano-structured superhydrophobic surfaces in the biomedical field: part I: basic concepts and biomimetic approaches. <b>2015</b> , 10, 103-19			53
1119	Future of Nanotechnology in Tissue Engineering. <b>2015</b> , 289-306			3
1118	Micro-structured, spontaneously eroding hydrogels accelerate endothelialization through presentation of conjugated growth factors. <b>2015</b> , 49, 113-24			14
1117	Mesenchymal stem cell growth behavior on micro/nano hierarchical surfaces of titanium substrates. <b>2015</b> , 127, 221-32			72
1116	Biocompatible small peptide super-hydrogelators bearing carbazole functionalities. <b>2015</b> , 3, 2277-2280			36
1115	Hierarchical polymeric scaffolds support the growth of MC3T3-E1 cells. <b>2015</b> , 26, 116			22
1114	Fabrication of a Biomimetic Hierarchical Surface Replicated from a Lotus Leaf and In Vitro Cellular Activities. <b>2015</b> , 12, 141-152			10
1113	Multiresponsive hydrogel coassembled from phenylalanine and azobenzene derivatives as 3D scaffolds for photoguiding cell adhesion and release. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 301-7	9.5		70
1112	Induction of intermembrane adhesion by incorporation of synthetic adhesive molecules into cell membranes. <b>2015</b> , 31, 1988-98			4
1111	Matrix Protein Interactions with Synthetic Surfaces. <b>2015</b> , 91-146			1
1110	Lithium-end-capped polylactide thin films influence osteoblast progenitor cell differentiation and mineralization. <b>2015</b> , 103, 500-10			3
1109	Epitope topography controls bioactivity in supramolecular nanofibers. <b>2015</b> , 3, 530-532			32
1108	Surface engineered nanostructures on metallic biomedical materials for anti-abrasion. <b>2015</b> , 349-383			
1107	Nanofibrous hydrogels with spatially patterned biochemical signals to control cell behavior. <b>2015</b> , 27, 1356-62			132
1106	Natural-based nanocomposites for bone tissue engineering and regenerative medicine: a review. <b>2015</b> , 27, 1143-69			565
1105	Surface roughness dependent osteoblast and fibroblast response on poly(L-lactide) films and electrospun membranes. <b>2015</b> , 103, 2260-8			43
1104	Cell-cell crosslinking by bio-molecular recognition of heparin-based layer-by-layer nanofilms. <b>2015</b> , 15, 312-7			5

1103	Expansion of Stem Cells by Nanotissue Engineering. <b>2015</b> , 243-263		
1102	Stem-Cell Nanoengineering. <b>2015</b> , 87-95		
1101	Strontium and zoledronate hydroxyapatites graded composite coatings for bone prostheses. <b>2015</b> , 448, 1-7		44
1100	Controlling Young's modulus of polymerized structures fabricated by direct laser writing. <b>2015</b> , 118, 437-441		6
1099	Shape-memory surfaces for cell mechanobiology. <b>2015</b> , 16, 014804		29
1098	Remote control of tissue interactions via engineered photo-switchable cell surfaces. <b>2014</b> , 4, 6313		35
1097	Directing cell migration and organization via nanocrater-patterned cell-repellent interfaces. <b>2015</b> , 14, 918-23		130
1096	Titania nanotube arrays as interfaces for neural prostheses. <b>2015</b> , 49, 735-745		20
1095	Bone regeneration strategy inspired by the study of calcification behavior in deer antler. <b>2015</b> , 57, 67-76		3
1094	Switching the Biointerface of Displaceable Poly-p-xylylene Coatings. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 14431-8	9.5	11
1093	Sphere-shaped nano-hydroxyapatite/chitosan/gelatin 3D porous scaffolds increase proliferation and osteogenic differentiation of human induced pluripotent stem cells from gingival fibroblasts. <b>2015</b> , 10, 045005		43
1092	High resolution Raman spectroscopy mapping of stem cell micropatterns. <b>2015</b> , 140, 1798-803		12
1091	Preparation of poly(L-lactic acid) nanofiber scaffolds with a rough surface by phase inversion using supercritical carbon dioxide. <b>2015</b> , 10, 035015		9
1090	Fabrication of Thermo-Responsive Molecular Layers from Self-Assembling Elastin-Like Oligopeptides Containing Cell-Binding Domain for Tissue Engineering. <b>2015</b> , 7, 134-146		14
1089	A Dual Receptor and Reporter for Multi-Modal Cell Surface Engineering. <b>2015</b> , 10, 2219-26		16
1088	Controlling Hybridization Chain Reactions with pH. <b>2015</b> , 15, 5539-44		40
1087	Green Techniques for Biomedical Metallic Materials with Nanotechnology. <b>2015</b> , 35-73		
1086	Fabrication and cytocompatibility of in situ crosslinked carbon nanomaterial films. <b>2015</b> , 5, 10261		15

1085	Spatial coordination of cell orientation directed by nanoribbon sheets. <b>2015</b> , 53, 86-94	32
1084	Cell Positioning by Patterned Nanowires. <b>2015</b> , 25, 312-317	1
1083	A Multidisciplined Teaching Reform of Biomaterials Course for Undergraduate Students. <b>2015</b> , 24, 735-746	1
1082	Recent advances in 3D printing of biomaterials. <b>2015</b> , 9, 4	963
1081	Tunable high aspect ratio polymer nanostructures for cell interfaces. <b>2015</b> , 7, 8438-50	36
1080	An overview of injectable polymeric hydrogels for tissue engineering. <b>2015</b> , 72, 543-565	221
1079	Upregulation of BMSCs osteogenesis by positively-charged tertiary amines on polymeric implants via charge/iNOS signaling pathway. <b>2015</b> , 5, 9369	28
1078	Self-assembling peptide nanofiber hydrogels for central nervous system regeneration. <b>2015</b> , 9, 1-13	15
1077	Polyelectrolyte Multilayer Film for the Regulation of Stem Cells in Orthopedic Field. <b>2015</b> , 507-524	
1076	Three-Dimensional Multilayered Devices for Biomedical Applications. <b>2015</b> , 363-384	
1075	Bioactive and Spatially Organized LbL Films. <b>2015</b> , 79-102	1
1074	Mesoporous silica-layered biopolymer hybrid nanofibrous scaffold: a novel nanobiomatrix platform for therapeutics delivery and bone regeneration. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 8088-985	67
1073	Peptide-based switchable and responsive surfaces. <b>2015</b> , 65-92	1
1072	Polymer-based platforms by electric field-assisted techniques for tissue engineering and cancer therapy. <b>2015</b> , 12, 113-29	45
1071	Directed Neural Stem Cell Differentiation with a Functionalized Graphene Oxide Nanocomposite. <b>2015</b> , 4, 1408-16	81
1070	Chitosan/arginine-chitosan polymer blends for assembly of nanofibrous membranes for wound regeneration. <i>Carbohydrate Polymers</i> , <b>2015</b> , 130, 104-12	10.3 101
1069	Magnetospinning of Nano- and Microfibers. <b>2015</b> , 27, 3560-5	26
1068	Exploring the kinetics of gelation and final architecture of enzymatically cross-linked chitosan/gelatin gels. <i>Biomacromolecules</i> , <b>2015</b> , 16, 1401-9	6.9 39

1067	From 2D to 3D: novel nanostructured scaffolds to investigate signalling in reconstructed neuronal networks. <b>2015</b> , 5, 9562		105
1066	Influence of integration of TiO2 nanorods into its nanodot films on pre-osteoblast cell responses. <b>2015</b> , 126, 387-93		10
1065	Integrated Systems: Innovations and Applications. <b>2015</b> ,		2
1064	Biomaterials for Bone Regenerative Engineering. <b>2015</b> , 4, 1268-85		192
1063	The influence of anisotropic nano- to micro-topography on in vitro and in vivo osteogenesis. <b>2015</b> , 10, 693-711		37
1062	Effects of Chitin Whiskers on Physical Properties and Osteoblast Culture of Alginate Based Nanocomposite Hydrogels. <i>Biomacromolecules</i> , <b>2015</b> , 16, 3499-507	6.9	86
1061	Reprint of: Review of bioactive glass: From Hench to hybrids. <i>Acta Biomaterialia</i> , <b>2015</b> , 23 Suppl, S53-82	10.8	335
1060	Nanoparticle-based bioactive agent release systems for bone and cartilage tissue engineering. <b>2015</b> , 1, 109-118		41
1059	Macromolecular cell surface engineering for accelerated and reversible cellular aggregation. <b>2015</b> , 51, 17556-9		13
1058	Micropillar arrays as potential drug screens: Inhibition of micropillar-mediated activation of the FAK-Src-paxillin signaling pathway by the CK2 inhibitor CX-4945. <i>Acta Biomaterialia</i> , <b>2015</b> , 27, 13-20	10.8	9
1057	Bone-repair properties of biodegradable hydroxyapatite nano-rod superstructures. <b>2015</b> , 7, 18751-62		46
1056	Amorphous calcium phosphate, hydroxyapatite and poly(d,l-lactic acid) composite nanofibers: Electrospinning preparation, mineralization and in vivo bone defect repair. <b>2015</b> , 136, 27-36		65
1055	Functionalized PDMS with Versatile and Scalable Surface Roughness Gradients for Cell Culture. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 17181-7	9.5	22
1054	Unbiased phosphoproteomic method identifies the initial effects of a methacrylic acid copolymer on macrophages. <b>2015</b> , 112, 10673-8		10
1053	Effective Bone Regeneration Using Thermosensitive Poly(N-Isopropylacrylamide) Grafted Gelatin as Injectable Carrier for Bone Mesenchymal Stem Cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 19006-15	9.5	66
1052	Tuning cell adhesion by direct nanostructuring silicon into cell repulsive/adhesive patterns. <b>2015</b> , 337, 44-52		7
1051	Highly flexible silica/chitosan hybrid scaffolds with oriented pores for tissue regeneration. <b>2015</b> , 3, 7560-7576		66
1050	Preparation and characterization of fibrous chitosan-glued phosphate glass fiber scaffolds for bone regeneration. <b>2015</b> , 26, 224		7

1049	Photo-polymerization of monomer crystals producing thermo-responsive micropatterns to direct cell growth and cell selective harvest. <b>2015</b> , 74, 150-158		1
1048	3D imaging of cell interactions with electrospun PLGA nanofiber membranes for bone regeneration. <i>Acta Biomaterialia</i> , <b>2015</b> , 27, 88-100	10.8	81
1047	2015 4(th) TERMIS World Congress Boston, Massachusetts September 8-11, 2015. <b>2015</b> , 21 Suppl 1, S1-S413		2
1046	A Review on Extracellular Matrix Mimicking Strategies for an Artificial Stem Cell Niche. <b>2015</b> , 55, 561-595		48
1045	Femtosecond laser nano/micro patterning of titanium influences mesenchymal stem cell adhesion and commitment. <b>2015</b> , 10, 055002		74
1044	Differentiation capacity and maintenance of differentiated phenotypes of human mesenchymal stromal cells cultured on two distinct types of 3D polymeric scaffolds. <b>2015</b> , 7, 1574-86		6
1043	A 3-dimensional fibre scaffold as an investigative tool for studying the morphogenesis of isolated plant pells. <b>2015</b> , 15, 211		7
1042	Tapered microtract array platform for antimigratory drug screening of human glioblastoma multiforme. <b>2015</b> , 4, 405-11		14
1041	Anisotropic poly (glycerol sebacate)-poly (?-caprolactone) electrospun fibers promote endothelial cell guidance. <b>2014</b> , 7, 015001		77
1040	Bioactive thermoresponsive polyblend nanofiber formulations for wound healing. <b>2015</b> , 48, 126-37		38
1039	Nanomaterials, inflammation, and tissue engineering. <b>2015</b> , 7, 355-70		60
1038	Analysis of cellular adhesion on superhydrophobic and superhydrophilic vertically aligned carbon nanotube scaffolds. <b>2015</b> , 48, 365-71		18
1037	Biomineralized hydroxyapatite nanoclay composite scaffolds with polycaprolactone for stem cell-based bone tissue engineering. <b>2015</b> , 103, 2077-101		58
1036	Concise reviews: the role of biomechanics in the limbal stem cell niche: new insights for our understanding of this structure. <b>2015</b> , 33, 916-24		21
1035	Interface Oral Health Science 2014. <b>2015</b> ,		1
1034	Additive manufacturing techniques for the production of tissue engineering constructs. <b>2015</b> , 9, 174-90		226
1033	Evolving insights in cell-matrix interactions: elucidating how non-soluble properties of the extracellular niche direct stem cell fate. <i>Acta Biomaterialia</i> , <b>2015</b> , 11, 3-16	10.8	94
1032	Flavonoid-modified surfaces: multifunctional bioactive biomaterials with osteopromotive, anti-inflammatory, and anti-fibrotic potential. <b>2015</b> , 4, 540-9		44

1031	A general strategy for the preparation of aligned multiwalled carbon nanotube/inorganic nanocomposites and aligned nanostructures. <b>2015</b> , 61, 453-458	6
1030	Preparation of electroactive nanofibers of star-shaped polycaprolactone/polyaniline blends. <b>2015</b> , 293, 481-491	10
1029	Wet chemical process to enhance osteoconductivity of electrospun chitosan nanofibers. <b>2015</b> , 50, 1575-1585	12
1028	Dynamic biointerfaces: from recognition to function. <b>2015</b> , 11, 1097-112	45
1027	Wharton's Jelly human mesenchymal stem cell contact guidance by noisy nanotopographies. <b>2014</b> , 4, 3830	13
1026	Fibroblast extracellular matrix and adhesion on microtextured polydimethylsiloxane scaffolds. <b>2015</b> , 103, 861-9	8
1025	Learning from nature: binary cooperative complementary nanomaterials. <b>2015</b> , 11, 1072-96	79
1024	Non-thermal plasma assisted lithography for biomedical applications: an overview. <b>2016</b> , 13, 695	4
1023	Pluripotent Stem Cells and Their Dynamic Niche. <b>2016</b> ,	3
1022	Machine design for multimaterial processing. <b>2016</b> , 111-140	2
1021	Scientometric overview regarding the surface chemistry of nanobiomaterials. <b>2016</b> , 463-486	4
1020	Biofunctionalization of silicone rubber with microgroove-patterned surface and carbon-ion implantation to enhance biocompatibility and reduce capsule formation. <b>2016</b> , 11, 5563-5572	12
1019	Nano- and microstructured materials for in vitro studies of the physiology of vascular cells. <b>2016</b> , 7, 1620-1641	35
1018	Micro- and Macrostructured PLGA/Gelatin Scaffolds Promote Early Cardiogenic Commitment of Human Mesenchymal Stem Cells In Vitro. <b>2016</b> , 2016, 7176154	16
1017	RGD Peptide-Grafted Graphene Oxide as a New Biomimetic Nanointerface for Impedance-Monitoring Cell Behaviors. <b>2016</b> , 2016, 1-12	9
1016	Preparation and Evaluation of Gelatin-Chitosan-Nanobioglass 3D Porous Scaffold for Bone Tissue Engineering. <b>2016</b> , 2016, 9825659	118
1015	Dynamic Reorganization and Enzymatic Remodeling of Type IV Collagen at Cell-Biomaterial Interface. <b>2016</b> , 105, 81-104	9
1014	Design and fabrication of nanocomposites for musculoskeletal tissue regeneration. <b>2016</b> , 3-29	6

1013	Electrospinning of calcium phosphate-poly (d,l-lactic acid) nanofibers for sustained release of water-soluble drug and fast mineralization. <b>2016</b> , 11, 5087-5097	17
1012	Collagen scaffolds for corneal regeneration. <b>2016</b> , 151-177	1
1011	2D and 3D cell cultures - a comparison of different types of cancer cell cultures. <b>2018</b> , 14, 910-919	325
1010	Potential of Electrospun Nanofibers for Biomedical and Dental Applications. <b>2016</b> , 9,	128
1009	Advanced nanobiomaterials in tissue engineering. <b>2016</b> , 141-172	12
1008	Fabrication of Nerve Growth Factor Encapsulated Aligned Poly( $\epsilon$ -Caprolactone) Nanofibers and Their Assessment as a Potential Neural Tissue Engineering Scaffold. <b>2016</b> , 8,	59
1007	Biopolymer Thin Films Synthesized by Advanced Pulsed Laser Techniques. <b>2016</b> ,	8
1006	Bioinspired Superwettability Materials. <b>2016</b> , 1-34	2
1005	Double Linear Gradient Biointerfaces for Determining Two-Parameter Dependent Stem Cell Behavior. <b>2016</b> , 2, 407-413	13
1004	Integration of 3D Printed and Micropatterned Polycaprolactone Scaffolds for Guidance of Oriented Collagenous Tissue Formation In Vivo. <b>2016</b> , 5, 676-87	69
1003	Bioactive Nanofiber Matrices Functionalized with Fibronectin-Mimetic Peptides Driving the Alignment and Tubular Commitment of Adult Renal Stem Cells. <b>2016</b> , 217, 199-212	6
1002	3D Micropillars Guide the Mechanobiology of Human Induced Pluripotent Stem Cell-Derived Cardiomyocytes. <b>2016</b> , 5, 335-41	11
1001	Hierarchical Structures of Bone and Bioinspired Bone Tissue Engineering. <b>2016</b> , 12, 4611-32	172
1000	3D Biomaterial Microarrays for Regenerative Medicine: Current State-of-the-Art, Emerging Directions and Future Trends. <b>2016</b> , 28, 771-81	71
999	Aligned Fibrillar Collagen Matrices. <b>2016</b> , 340-354	
998	Kaleidoscopic imaging patterns of complex structures fabricated by laser-induced deformation. <b>2016</b> , 7, 13743	13
997	Minimization of cell-substrate interaction using suspended microstructured meshes initiates cell sheet formation by self-assembly organization. <b>2016</b> , 2, 065019	5
996	Fabrication and modelling of fractal, biomimetic, micro and nano-topographical surfaces. <b>2016</b> , 11, 046009	



995	Influence of Controlled Micro- and Nanoengineered Environments on Stem Cell Fate. <b>2016</b> , 87-141		1
994	Direct Electrospinning of Ultrafine Fibers with Interconnected Macropores Enabled by in Situ Mixing Microfluidics. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 34870-34878	9.5	26
993	Nano and ultra fine grained metallic biomaterials by severe plastic deformation techniques. <b>2016</b> , 31, 743-755		10
992	Scaffold Free Bio-orthogonal Assembly of 3-Dimensional Cardiac Tissue via Cell Surface Engineering. <b>2016</b> , 6, 39806		40
991	Recent advances in nano scaffolds for bone repair. <b>2016</b> , 4, 16050		158
990	Matrigel immobilization on the shish-kebab structured poly( $\epsilon$ -caprolactone) nanofibers for skin tissue engineering. <b>2016</b> ,		2
989	Enhanced in vitro angiogenic behaviour of human umbilical vein endothelial cells on thermally oxidized TiO <sub>2</sub> nanofibrous surfaces. <b>2016</b> , 6, 21828		23
988	Intraneuronal Computation. <b>2016</b> , 49-87		1
987	Molecular Pathways of Mechanotransduction. <b>2016</b> , 23-42		1
986	Biocompatible graphene nanosheets grafted with poly(2-hydroxyethyl methacrylate) brushes via surface-initiated ARGET ATRP. <b>2016</b> , 6, 35641-35647		15
985	Nanofibrous poly(3-hydroxybutyrate)/poly(3-hydroxyoctanoate) scaffolds provide a functional microenvironment for cartilage repair. <b>2016</b> , 31, 77-91		37
984	Noble Hybrid Nanostructures as Efficient Anti-Proliferative Platforms for Human Breast Cancer Cell. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 10253-65	9.5	7
983	Involvement of 3D osteoblast migration and bone apatite during in vitro early osteocytogenesis. <b>2016</b> , 88, 146-156		19
982	Functional nanocarriers by miniaturization of polymeric materials. <b>2016</b> , 11, 1507-9		2
981	Tailoring Supramolecular Peptide-Poly(ethylene glycol) Hydrogels by Coiled Coil Self-Assembly and Self-Sorting. <i>Biomacromolecules</i> , <b>2016</b> , 17, 2260-7	6.9	29
980	Cells Cultured on Core-Shell Photonic Crystal Barcodes for Drug Screening. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 13840-8	9.5	88
979	Aerogel Microparticles from Oil-in-Oil Emulsion Systems. <b>2016</b> , 32, 5637-45		18
978	Effect of dexamethasone, $\beta$ -glycerophosphate, OGP and BMP2 in TiO <sub>2</sub> nanotubes on differentiation of MSCs. <b>2016</b> , 31, 603-612		12

977	Aligned PLLA nanofibrous scaffolds coated with graphene oxide for promoting neural cell growth. <i>Acta Biomaterialia</i> , <b>2016</b> , 37, 131-42	10.8	180
976	Concentration-Dependent hMSC Differentiation on Orthogonal Concentration Gradients of GRGDS and BMP-2 Peptides. <i>Biomacromolecules</i> , <b>2016</b> , 17, 1486-95	6.9	18
975	Coating nanofiber scaffolds with beta cell membrane to promote cell proliferation and function. <b>2016</b> , 8, 10364-70		50
974	Improved cell infiltration and vascularization of three-dimensional bacterial cellulose nanofibrous scaffolds by template biosynthesis. <b>2016</b> , 6, 42229-42239		23
973	Supramolecular Nanofibers Enhance Growth Factor Signaling by Increasing Lipid Raft Mobility. <b>2016</b> , 16, 3042-50		25
972	Advanced fibroblast proliferation inhibition for biocompatible coating by electrostatic layer-by-layer assemblies of heparin and chitosan derivatives. <b>2016</b> , 474, 9-17		29
971	PDMS-SiO <sub>2</sub> -TiO <sub>2</sub> -CaO hybrid materials - Cytocompatibility and nanoscale surface features. <b>2016</b> , 64, 74-86		8
970	Modulation of Protein Adsorption and Cell Proliferation on Polyethylene Immobilized Graphene Oxide Reinforced HDPE Bionanocomposites. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 11954-68	9.5	26
969	Nanocontainers in and onto Nanofibers. <b>2016</b> , 49, 816-23		40
968	Optical Projection Tomography Technique for Image Texture and Mass Transport Studies in Hydrogels Based on Gellan Gum. <b>2016</b> , 32, 5173-82		20
967	Amplified effect of surface charge on cell adhesion by nanostructures. <b>2016</b> , 8, 12540-3		33
966	Characterization of gelatin/cellulose acetate nanofibrous scaffolds: Prediction and optimization by response surface methodology and artificial neural networks. <b>2016</b> , 58, 399-408		16
965	Creating biomaterials with spatially organized functionality. <b>2016</b> , 241, 1025-32		7
964	Titanium nanotubes induce osteogenic differentiation through the FAK/RhoA/YAP cascade. <b>2016</b> , 6, 44062-44069		15
963	Role of chemical crosslinking in material-driven assembly of fibronectin (nano)networks: 2D surfaces and 3D scaffolds. <b>2016</b> , 148, 324-332		6
962	The Past, Present, and the Future of Nanotechnology. <b>2016</b> , 515-525		1
961	Making metal surfaces strong, resistant, and multifunctional by nanoscale-sculpturing. <b>2016</b> , 1, 467-472		14
960	Functionalized Carbon Nanotubes. <b>2016</b> , 431-444		

959	Imaging and Modelling Tissue Structure to Inform the Development of Musculoskeletal Therapies. <b>2016</b> , 49, 99-104		1
958	An Introduction to Scaffolds, Biomaterial Surfaces, and Stem Cells. <b>2016</b> , 1-37		
957	Production and characterization of polycaprolactone- hyaluronic acid/chitosan- zein electrospun bilayer nanofibrous membrane for tissue regeneration. <i>International Journal of Biological Macromolecules</i> , <b>2016</b> , 93, 1100-1110	7.9	91
956	Adsorption of Human Plasma Albumin and Fibronectin onto Nanostructured Black Silicon Surfaces. <b>2016</b> , 32, 10744-10751		20
955	Communication between nitric oxide synthase and positively-charged surface and bone formation promotion. <b>2016</b> , 148, 354-362		10
954	Effect of Mineralized Layer Topographies on Stem Cell Behavior in Microsphere Scaffold. <b>2016</b> , 32, 971-977		3
953	Graphical analysis of mammalian cell adhesion in vitro. <b>2016</b> , 148, 211-219		3
952	Additively Manufactured Macroporous Titanium with Silver-Releasing Micro-/Nanoporous Surface for Multipurpose Infection Control and Bone Repair - A Proof of Concept. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 28495-28510	9.5	69
951	Advances in electrospun skin substitutes. <b>2016</b> , 84, 314-334		87
950	Diversification and enrichment of clinical biomaterials inspired by Darwinian evolution. <i>Acta Biomaterialia</i> , <b>2016</b> , 42, 33-45	10.8	8
949	Materials and surface modification for tissue engineered vascular scaffolds. <b>2016</b> , 27, 1534-52		8
948	Vapor-based coatings for antibacterial and osteogenic functionalization and the immunological compatibility. <b>2016</b> , 69, 283-91		8
947	Polyester Nano- and Microtechnologies for Tissue Engineering. <b>2016</b> , 595-649		1
946	Polymer microfiber meshes facilitate cardiac differentiation of c-kit(+) human cardiac stem cells. <b>2016</b> , 347, 143-152		5
945	Generation of a Scaffold-Free Three-Dimensional Liver Tissue via a Rapid Cell-to-Cell Click Assembly Process. <b>2016</b> , 27, 1991-8		11
944	Surface modification of electrospun fibres for biomedical applications: A focus on radical polymerization methods. <b>2016</b> , 106, 24-45		85
943	Photochemical radical thiol-ene click-based methodologies for silica and transition metal oxides materials chemical modification: a mini-review. <b>2016</b> , 6, 77410-77426		30
942	Carbon Nanotube Functionalization Decreases Osteogenic Differentiation in Aluminum Oxide Reinforced Ultrahigh Molecular Weight Polyethylene. <b>2016</b> , 2, 1242-1256		17

941	Viscoelastic phase separation at cytochrome c solution/capsules interface. <b>2016</b> , 506, 756-764		
940	Rapid Formation of Cell Aggregates and Spheroids Induced by a "Smart" Boronic Acid Copolymer. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 22930-41	9.5	17
939	Rationally designed particle preloading method to improve protein delivery performance of electrospun polyester nanofibers. <b>2016</b> , 512, 204-212		11
938	Spontaneous, Solvent-Free, Polymer-Templated, Solid-Solid Transformation of Thin Metal Films into Nanoparticles. <b>2016</b> , 16, 5420-5		4
937	In vitro colonization of stratified bioactive scaffolds by pre-osteoblast cells. <i>Acta Biomaterialia</i> , <b>2016</b> , 44, 73-84	10.8	16
936	Recreating composition, structure, functionalities of tissues at nanoscale for regenerative medicine. <b>2016</b> , 11, 849-858		15
935	Glycomics: New Challenges and Opportunities in Regenerative Medicine. <b>2016</b> , 22, 13380-8		27
934	A comparison of nanoscale and multiscale PCL/gelatin scaffolds prepared by disc-electrospinning. <b>2016</b> , 146, 632-41		30
933	Engineering a Dual-Layer Chitosan-Lactide Hydrogel To Create Endothelial Cell Aggregate-Induced Microvascular Networks In Vitro and Increase Blood Perfusion In Vivo. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 19245-55	9.5	11
932	Conjugated polymers for the optical control of the electrical activity of living cells. <b>2016</b> , 4, 5272-5283		27
931	Application of Chitosan-Based Gels in Pharmaceuticals. <b>2016</b> , 325-348		2
930	Mechanical Properties of Aligned Nanotopologies for Directing Cellular Behavior. <b>2016</b> , 3, 1600275		17
929	Mathematical Models of the Interaction of Cells and Cell Aggregates with the Extracellular Matrix. <b>2016</b> , 131-210		3
928	Mathematical Models and Methods for Living Systems. <b>2016</b> ,		2
927	Laser thin films deposition and characterization for biomedical applications. <b>2016</b> , 77-125		14
926	Regulation of cell-cell fusion by nanotopography. <b>2016</b> , 6, 33277		26
925	Bacterial Nanocellulose Biomaterials with Controlled Architecture for Tissue Engineering Scaffolds and Customizable Implants. <b>2016</b> , 197-216		
924	The potential of nanoparticles in stem cell differentiation and further therapeutic applications. <b>2016</b> , 11, 1550-1560		32

923	Biologically Inspired Nanomaterials and Nanobiomagnetism: A Synergy among New Emerging Concepts in Regenerative Medicine. <b>2016</b> , 15-34		
922	Hydrogel films and coatings by swelling-induced gelation. <b>2016</b> , 113, 13295-13300		14
921	Hybrid Sol-Gel-Derived Films That Spontaneously Form Complex Surface Topographies. <b>2016</b> , 32, 10113-10119		2
920	Generation and Application of 3D Culture Systems in Human Drug Discovery and Medicine. <b>2016</b> , 265-287		1
919	Impact of Collagen/Heparin Multilayers for Regulating Bone Cellular Functions. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 29923-29932	9.5	23
918	3D meshes of carbon nanotubes guide functional reconnection of segregated spinal explants. <b>2016</b> , 2, e1600087		66
917	2D and 3D Biocompatible Polymers for Biomedical Devices. <b>2016</b> , 82-93		2
916	Enhanced osteogenic differentiation of MC3T3-E1 cells on grid-topographic surface and evidence for involvement of YAP mediator. <b>2016</b> , 104, 1143-52		24
915	Development of Non-Cell Adhesive Vascular Grafts Using Supramolecular Building Blocks. <b>2016</b> , 16, 350-62		37
914	Influence of strontium ions incorporated into nanosheet-pore topographical titanium substrates on osteogenic differentiation of mesenchymal stem cells in vitro and on osseointegration in vivo. <b>2016</b> , 4, 4549-4564		24
913	A simultaneous 3D printing process for the fabrication of bioceramic and cell-laden hydrogel core/shell scaffolds with potential application in bone tissue regeneration. <b>2016</b> , 4, 4707-4716		72
912	Swelling Behavior and Nanomechanical Properties of (Peptide-Modified) Poly(2-hydroxyethyl methacrylate) and Poly(poly(ethylene glycol) methacrylate) Brushes. <b>2016</b> , 49, 4609-4618		15
911	Plasma-Sprayed Titanium Patterns for Enhancing Early Cell Responses. <b>2016</b> , 25, 946-958		2
910	Preparation of micro-nanostructure on titanium implants and its bioactivity. <b>2016</b> , 26, 1019-1024		15
909	Hydrophobic fractal surface from glycerol tripalmitate and the effects on C6 glioma cell growth. <b>2016</b> , 142, 377-384		1
908	In situ supramolecular hydrogel based on hyaluronic acid and dextran derivatives as cell scaffold. <b>2016</b> , 104, 2263-70		15
907	Two-Phase Electrospinning to Incorporate Polyelectrolyte Complexes and Growth Factors into Electrospun Chitosan Nanofibers. <b>2016</b> , 16, 371-80		15
906	TiO <sub>2</sub> Nanorod Array Constructed Nanotopography for Regulation of Mesenchymal Stem Cells Fate and the Realization of Location-Committed Stem Cell Differentiation. <b>2016</b> , 12, 1770-8		48

905	Development of a versatile procedure for the biofunctionalization of Ti-6Al-4V implants. <b>2016</b> , 387, 652-660	4
904	Fabrication, characterization and in vitro biocompatibility of electrospun hydroxyethyl cellulose/poly (vinyl) alcohol nanofibrous composite biomaterial for bone tissue engineering. <b>2016</b> , 144, 17-29	62
903	Electrically charged selectivity of poly-para-xylylene deposition. <b>2016</b> , 52, 3022-5	7
902	Microstructure-dependent mechanical properties of electrospun core-shell scaffolds at multi-scale levels. <b>2016</b> , 59, 207-219	14
901	Self-assembly chitosan/gelatin composite coating on icariin-modified TiO <sub>2</sub> nanotubes for the regulation of osteoblast bioactivity. <b>2016</b> , 92, 471-479	37
900	Three-dimensional superhydrophobic copper 7,7,8,8-tetracyanoquinodimethane biointerfaces with the capability of high adhesion of osteoblasts. <b>2016</b> , 8, 3264-7	16
899	A novel and facile approach to fabricate a conductive and biomimetic fibrous platform with sub-micron and micron features. <b>2016</b> , 4, 1056-1063	9
898	Fabrication of a well-aligned TiO <sub>2</sub> nanofibrous membrane by modified parallel electrode configuration with enhanced photocatalytic performance. <b>2016</b> , 6, 31476-31483	7
897	Sliding Fibers: Slidable, Injectable, and Gel-like Electrospun Nanofibers as Versatile Cell Carriers. <b>2016</b> , 10, 3282-94	32
896	Extracellular matrix-based biomaterial scaffolds and the host response. <b>2016</b> , 86, 68-82	250
895	Nanosheet-pore topographical titanium substrates: a biophysical regulator of the fate of mesenchymal stem cells. <b>2016</b> , 4, 1797-1810	23
894	Providing the right cues in nerve guidance conduits: Biofunctionalization versus fiber profile to facilitate oriented neuronal outgrowth. <b>2016</b> , 61, 466-72	9
893	Fabrication, Characterization, and Biocompatibility of Polymer Cored Reduced Graphene Oxide Nanofibers. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 5170-7	9.5 37
892	Enhanced mechanical properties and increased corrosion resistance of a biodegradable magnesium alloy by plasma electrolytic oxidation (PEO). <b>2016</b> , 208, 39-46	55
891	Phosphorylated poly(sebacoyl diglyceride) - a phosphate functionalized biodegradable polymer for bone tissue engineering. <b>2016</b> , 4, 2090-2101	30
890	Articular cartilage: from formation to tissue engineering. <b>2016</b> , 4, 734-67	164
889	Bio-inspired 3D microenvironments: a new dimension in tissue engineering. <b>2016</b> , 11, 022001	66
888	Preparation, characterization and properties of nano-hydroxyapatite/polypropylene carbonate biocomposite. <b>2016</b> , 63, 285-91	20

887	A biocompatible hybrid material with simultaneous calcium and strontium release capability for bone tissue repair. <b>2016</b> , 62, 429-38		14
886	Noninvasive imaging of embryonic stem cell cultures by multiphoton microscopy reveals the significance of collagen hydrogel preparation parameters. <b>2016</b> , 8, 280-294		0
885	Stem cells and injectable hydrogels: Synergistic therapeutics in myocardial repair. <b>2016</b> , 34, 362-379		76
884	Designing biomaterials based on biomineralization for bone repair and regeneration. <b>2016</b> , 377-404		1
883	Grotthuss mechanisms: from proton transport in proton wires to bioprotonic devices. <b>2016</b> , 28, 023001		70
882	Electrophoretic Deposition of Dexamethasone-Loaded Mesoporous Silica Nanoparticles onto Poly(L-Lactic Acid)/Poly(ε-Caprolactone) Composite Scaffold for Bone Tissue Engineering. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 4137-48	9.5	79
881	Influence of Surface Topographical Cues on the Differentiation of Mesenchymal Stem Cells in Vitro. <b>2016</b> , 2, 142-151		117
880	Material Cues as Potent Regulators of Epigenetics and Stem Cell Function. <b>2016</b> , 18, 39-52		134
879	Reactive electrospinning of degradable poly(oligoethylene glycol methacrylate)-based nanofibrous hydrogel networks. <b>2016</b> , 52, 1451-4		42
878	Patient-Derived Human Induced Pluripotent Stem Cells From Gingival Fibroblasts Compositd With Defined Nanohydroxyapatite/Chitosan/Gelatin Porous Scaffolds as Potential Bone Graft Substitutes. <b>2016</b> , 5, 95-105		36
877	A biocompatibility study of new nanofibrous scaffolds for nervous system regeneration. <b>2016</b> , 8, 253-65		45
876	Chitosan microspheres with an extracellular matrix-mimicking nanofibrous structure as cell-carrier building blocks for bottom-up cartilage tissue engineering. <b>2016</b> , 8, 309-17		46
875	Emulsion templated scaffolds with tunable mechanical properties for bone tissue engineering. <b>2016</b> , 54, 159-72		68
874	Chitin, Chitosan, and Silk Fibroin Electrospun Nanofibrous Scaffolds: A Prospective Approach for Regenerative Medicine. <b>2016</b> , 151-189		7
873	Enhancing antimicrobial activity of TiO <sub>2</sub> /Ti by torularhodin bioinspired surface modification. <b>2016</b> , 107, 14-24		38
872	Electrospun silk fibroin/poly (lactic-co-glycolic acid) membrane for nerve tissue engineering. <b>2016</b> , 31, 208-224		9
871	Skeletal stem cell and bone implant interactions are enhanced by LASER titanium modification. <b>2016</b> , 473, 719-25		16
870	Accelerated bony defect healing by chitosan/silica hybrid membrane with localized bone morphogenetic protein-2 delivery. <b>2016</b> , 59, 339-345		32

869	A review of hydrogel-based composites for biomedical applications: enhancement of hydrogel properties by addition of rigid inorganic fillers. <b>2016</b> , 51, 271-310		173
868	Chitin and Chitosan for Regenerative Medicine. <b>2016</b> ,		25
867	Surface nitridation improves bone cell response to melt-derived bioactive silicate/borosilicate glass composite scaffolds. <i>Acta Biomaterialia</i> , <b>2016</b> , 29, 424-434	10.8	12
866	An update on clinical applications of electrospun nanofibers for skin bioengineering. <b>2016</b> , 44, 1350-64		54
865	Stress distribution retrieval in granular materials: A multi-scale model and digital image correlation measurements. <b>2016</b> , 76, 17-26		12
864	Augmenting the bioactivity of polyetheretherketone using a novel accelerated neutral atom beam technique. <b>2017</b> , 105, 1438-1446		10
863	A scaffold-filter model for studying the chondrogenic differentiation of stem cells in vitro. <b>2017</b> , 70, 962-968		8
862	Effect of inorganic/organic ratio and chemical coupling on the performance of porous silica/chitosan hybrid scaffolds. <b>2017</b> , 70, 969-975		23
861	Collagen type I/PLGA film as an efficient substratum for corneal endothelial cells regeneration. <b>2017</b> , 11, 2471-2478		16
860	Electrospun fibrinogen-PLA nanofibres for vascular tissue engineering. <b>2017</b> , 11, 2774-2784		30
859	Toward a new generation of pelvic floor implants with electrospun nanofibrous matrices: A feasibility study. <b>2017</b> , 36, 565-573		25
858	In vivo biocompatibility assessment of poly (ether imide) electrospun scaffolds. <b>2017</b> , 11, 1034-1044		12
857	Advances and perspectives in tooth tissue engineering. <b>2017</b> , 11, 2443-2461		33
856	Biocompatibility study of three distinct carbon pastes for application as electrode material in neural stimulations and recordings. <b>2017</b> , 28, 30		3
855	Gold nanoparticles for regulation of cell function and behavior. <b>2017</b> , 13, 40-60		61
854	Controlling the morphology and outgrowth of nerve and neuroglial cells: The effect of surface topography. <i>Acta Biomaterialia</i> , <b>2017</b> , 51, 21-52	10.8	125
853	3D cell bioprinting of self-assembling peptide-based hydrogels. <b>2017</b> , 190, 103-106		74
852	Current Progress in Bioprinting. <b>2017</b> , 227-259		4



851	Surface modification of copolymerized films from three-armed biodegradable macromers - An analytical platform for modified tissue engineering scaffolds. <i>Acta Biomaterialia</i> , <b>2017</b> , 51, 148-160	10.8	7
850	Exo-organoplasty interventions: A brief review of past, present and future directions for advance heart failure management. <b>2017</b> , 88, 162-172		7
849	Modulation of osteoblast behavior on nanopatterned yttria-stabilized zirconia surfaces. <b>2017</b> , 68, 26-31		6
848	The use of nanoscaffolds and dendrimers in tissue engineering. <b>2017</b> , 22, 652-664		90
847	Tuneable hydrolytic degradation of poly(l-lactide) scaffolds triggered by ZnO nanoparticles. <b>2017</b> , 75, 714-720		13
846	Surface Energy in Nanocrystalline Carbon Thin Films: Effect of Size Dependence and Atmospheric Exposure. <b>2017</b> , 33, 2514-2522		9
845	Preparation, structural characterization, and in vitro cell studies of three-dimensional SiO-CaO binary glass scaffolds built of ultra-small nanofibers. <b>2017</b> , 76, 94-101		11
844	Thin polymeric films for building biohybrid microrobots. <b>2017</b> , 12, 021001		14
843	Enhancing the Mechanical Properties of Electrospun Nanofiber Mats through Controllable Welding at the Cross Points. <b>2017</b> , 38, 1600723		61
842	Synthesis and characterization of chitosan-alginate scaffolds for seeding human umbilical cord derived mesenchymal stem cells. <b>2016</b> , 27, 561-575		5
841	Cellular Response to Surface Topography and Substrate Stiffness. <b>2017</b> , 41-57		2
840	Synthesis of nanosized 58S bioactive glass particles by a three-dimensional ordered macroporous carbon template. <b>2017</b> , 75, 590-595		23
839	Fabrication of Zn-Sr-doped laser-spinning glass nanofibers with antibacterial properties. <b>2017</b> , 31, 819-831		18
838	Mechanically Enhanced Hierarchically Porous Scaffold Composed of Mesoporous Silica for Host Immune Cell Recruitment. <b>2017</b> , 6, 1601160		11
837	The fabrication of Ag-containing hierarchical micro/nano-structure on titanium and its antibacterial activity. <b>2017</b> , 193, 97-100		7
836	Functional PEG-Hydrogels Convey Gold Nanoparticles from Silicon and Aid Cell Adhesion onto the Nanocomposites. <b>2017</b> , 29, 2008-2015		21
835	The combined effects of nanotopography and Sr ion for enhanced osteogenic activity of bone marrow mesenchymal stem cells (BMSCs). <b>2017</b> , 31, 1135-1147		20
834	Electrically Reversible Redox-Switchable Polydopamine Films for Regulating Cell Behavior. <b>2017</b> , 228, 343-350		16

833	In vitro and in vivo evaluation of the chitosan/Tur composite film for wound healing applications. <b>2017</b> , 28, 601-615		13
832	Nanoengineering Hybrid Supramolecular Multilayered Biomaterials Using Polysaccharides and Self-Assembling Peptide Amphiphiles. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1605122	15.6	42
831	Graphene oxide reinforced hydrogels for osteogenic differentiation of human adipose-derived stem cells. <b>2017</b> , 7, 20779-20788		26
830	From organoids to organs: Bioengineering liver grafts from hepatic stem cells and matrix. <b>2017</b> , 31, 151-159		25
829	Multifunctional PLLA-ceramic fiber membranes for bone regeneration applications. <b>2017</b> , 504, 101-110		25
828	Flexible Gold Nanocone Array Surfaces as a Tool for Regulating Neuronal Behavior. <b>2017</b> , 13, 1700629		14
827	Simultaneously improving surface mechanical properties and in vitro biocompatibility of pure titanium via surface mechanical attrition treatment combined with low-temperature plasma nitriding. <b>2017</b> , 309, 382-389		22
826	Initial contact guidance during cell spreading is contractility-independent. <b>2017</b> , 13, 5158-5167		20
825	Modeling Physiological Events in 2D vs. 3D Cell Culture. <b>2017</b> , 32, 266-277		617
824	Bone tissue regenerative medicine via bioactive nanomaterials. <b>2017</b> , 769-792		2
823	Biophysical Regulation of Cell Behavior-Cross Talk between Substrate Stiffness and Nanotopography. <b>2017</b> , 3, 36-54		129
822	Antibacterial Property of a Polyethylene Glycol-Grafted Dental Material. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 17688-17692	9.5	47
821	Constructing three-dimensional nanofibrous bioglass/gelatin nanocomposite scaffold for enhanced mechanical and biological performance. <b>2017</b> , 326, 210-221		22
820	Sacrificial template method for the synthesis of three-dimensional nanofibrous 58S bioglass scaffold and its in vitro bioactivity and cell responses. <b>2017</b> , 32, 265-275		17
819	Adaptive and freeze-tolerant heteronetwork organohydrogels with enhanced mechanical stability over a wide temperature range. <b>2017</b> , 8, 15911		175
818	Controlled Hydrophobic Biosurface of Bacterial Cellulose Nanofibers through Self-Assembly of Natural Zein Protein. <b>2017</b> , 3, 1595-1604		16
817	Application of advanced sampling and analysis methods to predict the structure of adsorbed protein on a material surface. <b>2017</b> , 12, 02D409		10
816	Biomimetic mineralized hierarchical hybrid scaffolds based on in situ synthesis of nano-hydroxyapatite/chitosan/chondroitin sulfate/hyaluronic acid for bone tissue engineering. <b>2017</b> , 157, 93-100		63

815	Mechanical properties, structure, bioadhesion, and biocompatibility of pectin hydrogels. <b>2017</b> , 105, 2572-2581	30
814	A Nanostructured Molybdenum Disulfide Film for Promoting Neural Stem Cell Neuronal Differentiation: toward a Nerve Tissue-Engineered 3D Scaffold. <b>2017</b> , 1, e1600042	32
813	Alternately plasma-roughened nanosurface of a hybrid scaffold for aligning myoblasts. <b>2017</b> , 9, 025035	4
812	Bilayered nanofibrous 3D hierarchy as skin rudiment by emulsion electrospinning for burn wound management. <b>2017</b> , 5, 1786-1799	46
811	Engineering Niches for Embryonic and Induced Pluripotent Stem Cells. <b>2017</b> , 445-457	2
810	Tetracycline hydrochloride-loaded electrospun nanofibers mats based on PVA and chitosan for wound dressing. <b>2017</b> , 77, 271-281	163
809	Construction of Three-Dimensional Dermo-Epidermal Skin Equivalents Using Cell Coating Technology and Their Utilization as Alternative Skin for Permeation Studies and Skin Irritation Tests. <b>2017</b> , 23, 481-490	25
808	Bioprinters in Use Today. <b>2017</b> , 65-80	
807	Electrospun PBLG/PLA nanofiber membrane for constructing in vitro 3D model of melanoma. <b>2017</b> , 76, 313-318	25
806	Atomic force microscopy-based characterization and design of biointerfaces. <b>2017</b> , 2,	95
805	Injectable Polypeptide Hydrogel as Biomimetic Scaffolds with Tunable Bioactivity and Controllable Cell Adhesion. <i>Biomacromolecules</i> , <b>2017</b> , 18, 1411-1418	6.9 43
804	Nanomaterial-based bone regeneration. <b>2017</b> , 9, 4862-4874	69
803	Multicellular Biohybrid Materials: Probing the Interplay of Cells of Different Types Precisely Positioned and Constrained on 3D Wireframe-Like Microstructures. <b>2017</b> , 6, 1601053	13
802	Biofunctionalized Plants as Diverse Biomaterials for Human Cell Culture. <b>2017</b> , 6, 1601225	46
801	Polymeric mechanical amplifiers of immune cytokine-mediated apoptosis. <b>2017</b> , 8, 14179	21
800	TiO nanorod arrays modified Ti substrates promote the adhesion, proliferation and osteogenic differentiation of human periodontal ligament stem cells. <b>2017</b> , 76, 684-691	27
799	Strategies on process engineering of chondrocyte culture for cartilage tissue regeneration. <b>2017</b> , 40, 601-610	7
798	Assessing the Potential of Folded Globular Polyproteins As Hydrogel Building Blocks. <i>Biomacromolecules</i> , <b>2017</b> , 18, 636-646	6.9 21

797	Collagen tethering of synthetic human antimicrobial peptides cathelicidin LL37 and its effects on antimicrobial activity and cytotoxicity. <i>Acta Biomaterialia</i> , <b>2017</b> , 52, 9-20	10.8	24
796	Decellularized adipose tissue microcarriers as a dynamic culture platform for human adipose-derived stem/stromal cell expansion. <b>2017</b> , 120, 66-80		61
795	Nanoreinforced Hydrogels for Tissue Engineering: Biomaterials that are Compatible with Load-Bearing and Electroactive Tissues. <b>2017</b> , 29, 1603612		197
794	Multifunctional Superelastic Foam-Like Boron Nitride Nanotubular Cellular-Network Architectures. <b>2017</b> , 11, 558-568		76
793	Construction of poly (vinyl alcohol)/poly (lactide-glycolide acid)/vancomycin nanoparticles on titanium for enhancing the surface self-antibacterial activity and cytocompatibility. <b>2017</b> , 151, 165-177		64
792	In Vitro Design of Nanoparticles Using an Artificial 3D-Blood Vessel Wall Model for Atherosclerosis Treatment. <b>2017</b> , 195-225		
791	Biological responses to nanomaterials: understanding nano-bio effects on cell behaviors. <b>2017</b> , 24, 1-15		51
790	Fabrication of Uniform Casein/CaCO <sub>3</sub> Vaterite Microspheres and Investigation of Its Formation Mechanism. <b>2017</b> , 17, 6178-6188		10
789	Functional and Biomimetic Materials for Engineering of the Three-Dimensional Cell Microenvironment. <b>2017</b> , 117, 12764-12850		408
788	Mechanical enhancement and in vitro biocompatibility of nanofibrous collagen-chitosan scaffolds for tissue engineering. <b>2017</b> , 28, 2255-2270		13
787	Balancing Bacteria-Osteoblast Competition through Selective Physical Puncture and Biofunctionalization of ZnO/Polydopamine/Arginine-Glycine-Aspartic Acid-Cysteine Nanorods. <b>2017</b> , 11, 11250-11263		178
786	High-efficiency single cell encapsulation and size selective capture of cells in picoliter droplets based on hydrodynamic micro-vortices. <b>2017</b> , 17, 4324-4333		27
785	Remote Control of Multimodal Nanoscale Ligand Oscillations Regulates Stem Cell Adhesion and Differentiation. <b>2017</b> , 11, 9636-9649		47
784	Screening Platform for Cell Contact Guidance Based on Inorganic Biomaterial Micro/nanotopographical Gradients. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 31433-31445	9.5	55
783	One-Dimensional Hydroxyapatite Nanostructures with Tunable Length for Efficient Stem Cell Differentiation Regulation. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 33717-33727	9.5	34
782	2.22 Bacterial Cellulose as Biomaterial. <b>2017</b> , 505-511		1
781	Highly Efficient Capture and Electrochemical Release of Circulating Tumor Cells by Using Aptamers Modified Gold Nanowire Arrays. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 34706-34714	9.5	59
780	Nano-topography Enhances Communication in Neural Cells Networks. <b>2017</b> , 7, 9841		35

779	Applications of Different Bioactive Glass and Glass-Ceramic Materials for Osteoconductivity and Osteoinductivity. <b>2017</b> , 76, 149-158		5
778	Visible-Light Neural Stimulation on Graphitic-Carbon Nitride/Graphene Photocatalytic Fibers. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 34736-34743	9.5	51
777	Grotthuss Mechanism: From Proton Transport in Ion Channels to Bioprotonic Devices. <b>2017</b> , 235-253		1
776	Electrospun PCL-PIBMD/SF blend scaffolds with plasmid complexes for endothelial cell proliferation. <b>2017</b> , 7, 39452-39464		20
775	The effect of HPMC and MC as pore formers on the rheology of the implant microenvironment and the drug release in vitro. <i>Carbohydrate Polymers</i> , <b>2017</b> , 177, 433-442	10.3	9
774	Hierarchical thermoplastic rippled nanostructures regulate Schwann cell adhesion, morphology and spatial organization. <b>2017</b> , 9, 14861-14874		18
773	Enhanced Osteogenic Commitment of Human Mesenchymal Stem Cells on Polyethylene Glycol-Based Cryogel with Graphene Oxide Substrate. <b>2017</b> , 3, 2470-2479		9
772	Endothelial Cell Culture Under Perfusion On A Polyester-Toner Microfluidic Device. <b>2017</b> , 7, 10466		13
771	Composites Based on Hydroxyapatite and Biodegradable Polylactide. <b>2017</b> , 183-214		
770	Scaffold-Free Liver-On-A-Chip with Multiscale Organotypic Cultures. <b>2017</b> , 29, 1701545		34
769	Controlled Exposure of Bioactive Growth Factor in 3D Amyloid Hydrogel for Stem Cells Differentiation. <b>2017</b> , 6, 1700368		24
768	Development of a Virtual Cell Model to Predict Cell Response to Substrate Topography. <b>2017</b> , 11, 9084-9092		26
767	The effect of ozone gas sterilization on the properties and cell compatibility of electrospun polycaprolactone scaffolds. <b>2017</b> , 28, 1918-1934		7
766	Development of polyurethanes for bone repair. <b>2017</b> , 80, 736-747		73
765	Dimensional Metrology of Cell-matrix Interactions in 3D Microscale Fibrous Substrates. <b>2017</b> , 65, 32-37		17
764	Deterministic Integration of Biological and Soft Materials onto 3D Microscale Cellular Frameworks. <b>2017</b> , 1, 1700068		12
763	Enhanced regeneration of large cortical bone defects with electrospun nanofibrous membranes and low-intensity pulsed ultrasound. <b>2017</b> , 14, 525-530		1
762	Silk fibroin/chitosan scaffold with tunable properties and low inflammatory response assists the differentiation of bone marrow mesenchymal stem cells. <i>International Journal of Biological Macromolecules</i> , <b>2017</b> , 105, 584-597	7.9	41

761	Topographical and Electrical Stimulation of Neuronal Cells through Microwrinkled Conducting Polymer Biointerfaces. <b>2017</b> , 17, 1700128	14
760	Cellular interfaces with hydrogen-bonded organic semiconductor hierarchical nanocrystals. <b>2017</b> , 8, 91	37
759	Understanding biomaterial-tissue interface quality: combined evaluation. <b>2017</b> , 18, 550-562	27
758	Engineering Nanobiomaterials for Improved Tissue Regeneration. <b>2017</b> , 281-304	1
757	Bone regeneration from human mesenchymal stem cells on porous hydroxyapatite-PLGA-collagen bioactive polymer scaffolds. <b>2017</b> , 28, 671-685	11
756	Hyperbranched polyglycerols: recent advances in synthesis, biocompatibility and biomedical applications. <b>2017</b> , 5, 9249-9277	79
755	Nanopatterned Bulk Metallic Glass Biosensors. <b>2017</b> , 2, 1779-1787	21
754	Growth and Differentiation of Myoblastic Precursor Cells on Thin Films of Metallo-Supramolecular Coordination Polyelectrolyte (MEPE). <b>2017</b> , 4, 1600272	2
753	Biophysical stimulation for engineering of functional cardiac tissues. <b>2017</b> , 131, 1393-1404	16
752	7.5 Porous Coatings in Orthopedics. <b>2017</b> , 74-91	1
751	Water contact angle is not a good predictor of biological responses to materials. <b>2017</b> , 12, 02C201	36
750	Exploring Polymer Nanofiber Mechanics: A review of the methods for determining their properties.. <b>2017</b> , 11, 16-28	4
749	Revealing the Cell-Material Interface with Nanometer Resolution by Focused Ion Beam/Scanning Electron Microscopy. <b>2017</b> , 11, 8320-8328	112
748	Biomedical applications of hybrid polymer composite materials. <b>2017</b> , 343-408	5
747	Biomimetic membranes: A critical review of recent progress. <b>2017</b> , 420, 403-424	69
746	Effects of Structural Variations on the Cellular Response and Mechanical Properties of Biocompatible, Biodegradable, and Porous Smectic Liquid Crystal Elastomers. <b>2017</b> , 17, 1600278	22
745	Biomaterials and Culture Technologies for Regenerative Therapy of Liver Tissue. <b>2017</b> , 6, 1600791	17
744	Patterned Poly(dopamine) Films for Enhanced Cell Adhesion. <b>2017</b> , 28, 75-80	13

743	Role of non-mulberry silk fibroin in deposition and regulation of extracellular matrix towards accelerated wound healing. <i>Acta Biomaterialia</i> , <b>2017</b> , 48, 157-174	10.8	115
742	Cell delivery for regenerative medicine by using bioresorbable polymers. <b>2017</b> , 365-389		1
741	Human-derived extracellular matrix from Wharton's jelly: An untapped substrate to build up a standardized and homogeneous coating for vascular engineering. <i>Acta Biomaterialia</i> , <b>2017</b> , 48, 227-237	10.8	17
740	Tailoring biomaterial scaffolds for osteochondral repair. <b>2017</b> , 523, 476-489		29
739	Improved proliferation and osteogenic differentiation of mesenchymal stem cells on polyaniline composited by polyethersulfone nanofibers. <b>2017</b> , 45, 78-84		37
738	Establishment of 3D culture and induction of osteogenic differentiation of pre-osteoblasts using wet-collected aligned scaffolds. <b>2017</b> , 71, 222-230		5
737	Fibrin structural and diffusional analysis suggests that fibers are permeable to solute transport. <i>Acta Biomaterialia</i> , <b>2017</b> , 47, 25-39	10.8	14
736	Biomaterial microarchitecture: a potent regulator of individual cell behavior and multicellular organization. <b>2017</b> , 105, 640-661		36
735	Modulating cell adhesion to polybutylene succinate biotextile constructs for tissue engineering applications. <b>2017</b> , 11, 2853-2863		8
734	Biological and proteomic characterization of a composite mesh for abdominal wall hernia treatment: Reference Study. <b>2017</b> , 105, 2045-2052		2
733	A titanium dioxide nanorod array as a high-affinity nano-bio interface of a microfluidic device for efficient capture of circulating tumor cells. <b>2017</b> , 10, 776-784		18
732	A new class of non-crystalline materials: Nanogranular metallic glasses. <b>2017</b> , 707, 371-378		22
731	Designing biocompatible Ti-based amorphous thin films with no toxic element. <b>2017</b> , 707, 142-147		7
730	Improved mechanical strength of porous chitosan scaffold by graphene coatings. <b>2017</b> , 186, 17-20		18
729	3D printing of biocomposites for osteochondral tissue engineering. <b>2017</b> , 261-302		11
728	Tantalum nitride coatings prepared by magnetron sputtering to improve the bioactivity and osteogenic activity for titanium alloy implants. <b>2017</b> , 7, 55408-55417		24
727	Calcium Phosphate Coatings for Metallic Orthopedic Biomaterials. <b>2017</b> , 167-183		2
726	Understanding Behavior of Polycaprolactone-Gelatin Blends under High Pressure CO <sub>2</sub> . <b>2017</b> , 59, 866-879		

725 Introduction. **2017**, 1-5

724 . **2017**,

21

723 Implications of Substrate Topographic Surface on Tissue Engineering. **2017**, 287-313

1

722 Electrospun nanofibrous materials for wound healing applications. **2017**, 147-177

5

721 Nanofeatured Titanium Surfaces for Dental Implantology: Biological Effects, Biocompatibility, and Safety. **2017**, 2017, 1-18

11

720 3.22 Nanostructured Polymeric Films for Cell Biology. **2017**, 482-497

719 Engineering Niches for Bone Tissue Regeneration. **2017**, 499-516

1

718 Rapamycin/sodium hyaluronate binding on nano-hydroxyapatite coated titanium surface improves MC3T3-E1 osteogenesis. **2017**, 12, e0171693

9

717 Study on the regulation of focal adhesions and cortical actin by matrix nanotopography in 3D environment. **2017**, 29, 455101

3

716 Robot-aided electrospinning toward intelligent biomedical engineering. **2017**, 4, 17

5

715 General requirements of electrospun materials for tissue engineering. **2017**, 43-56

11

714 4.13 Use and Manipulation of Microporous Membranes in Mammalian Cell Cultures. **2017**, 272-292

2

713 Fabrication Methodologies of Biomimetic and Bioactive Scaffolds for Tissue Engineering Applications. **2017**,

3

712 Nanostructured biocomposites for tissue engineering scaffolds. **2017**, 501-542

2

711 Biomimetic Polymers (for Biomedical Applications). **2017**,

710 Patterning of Structurally Anisotropic Composite Hydrogel Sheets. *Biomacromolecules*, **2018**, 19, 1276-1284

42

709 3D Jet Writing: Functional Microtissues Based on Tessellated Scaffold Architectures. **2018**, 30, e1707196

42

708 In vitro mineralization kinetics of poly(l-lactic acid)/hydroxyapatite nanocomposite material by attenuated total reflection Fourier transform infrared mapping coupled with principal component analysis. **2018**, 53, 8009-8019

10



707	Molecularly Selective Regulation of Delivery Fluxes by Employing Supramolecular Interactions in Layer-by-Layer Films. <b>2018</b> , 13, 1067-1073	5
706	Fabrication of nanofibrous microcarriers mimicking extracellular matrix for functional microtissue formation and cartilage regeneration. <b>2018</b> , 171, 118-132	54
705	Micro/Nano Scaffolds for Osteochondral Tissue Engineering. <b>2018</b> , 1058, 125-139	8
704	A review of nanostructured surfaces and materials for dental implants: surface coating, patterning and functionalization for improved performance. <b>2018</b> , 6, 1312-1338	94
703	Three dimensional extrusion printing induces polymer molecule alignment and cell organization within engineered cartilage. <b>2018</b> , 106, 2190-2199	17
702	Phosphocreatine-modified chitosan porous scaffolds promote mineralization and osteogenesis in vitro and in vivo. <b>2018</b> , 12, 21-33	17
701	Concise Review: Altered Versus Unaltered Amniotic Membrane as a Substrate for Limbal Epithelial Cells. <b>2018</b> , 7, 415-427	15
700	Instructive microenvironments in skin wound healing: Biomaterials as signal releasing platforms. <b>2018</b> , 129, 95-117	68
699	Cell Membrane Coating Nanotechnology. <b>2018</b> , 30, e1706759	592
698	The influence of mineral particles on fibroblast behaviour: A comparative study. <b>2018</b> , 167, 239-251	3
697	Chemically Modified Silk Proteins. <b>2018</b> , 20, 1700961	21
696	A multifaceted coating on titanium dictates osteoimmunomodulation and osteo/angio-genesis towards ameliorative osseointegration. <b>2018</b> , 162, 154-169	134
695	Spermidine-Induced Attraction of Like-Charged Surfaces Is Correlated with the pH-Dependent Spermidine Charge: Force Spectroscopy Characterization. <b>2018</b> , 34, 2725-2733	10
694	Looking into the Future: Toward Advanced 3D Biomaterials for Stem-Cell-Based Regenerative Medicine. <b>2018</b> , 30, e1705388	79
693	Regulation of skeletal myotube formation and alignment by nanotopographically controlled cell-secreted extracellular matrix. <b>2018</b> , 106, 1543-1551	22
692	Investigation of osteogenic responses of Fe-incorporated micro/nano-hierarchical structures on titanium surfaces. <b>2018</b> , 6, 1359-1372	24
691	Heterogeneous adhesion of cells on polymer surfaces with underlying amorphous/crystalline phases. <b>2018</b> , 6, 903-907	4
690	Underwater Mechanically Robust Oil-Repellent Materials: Combining Conflicting Properties Using a Heterostructure. <b>2018</b> , 30, 1706634	46

689	Wound dressings from naturally-occurring polymers: A review on homopolysaccharide-based composites. <i>Carbohydrate Polymers</i> , <b>2018</b> , 189, 379-398	10.3	170
688	Cell-geometry-dependent changes in plasma membrane order direct stem cell signalling and fate. <b>2018</b> , 17, 237-242		108
687	Layer-by-layer 3-dimensional nanofiber tissue scaffold with controlled gap by electrospinning. <b>2018</b> , 5, 025401		1
686	Engineering 3D Hydrogels for Personalized In Vitro Human Tissue Models. <b>2018</b> , 7, 1701165		57
685	Hierarchical Design of Tissue Regenerative Constructs. <b>2018</b> , 7, e1701067		52
684	Electric fields control the orientation of peptides irreversibly immobilized on radical-functionalized surfaces. <b>2018</b> , 9, 357		52
683	Design of Polymeric Culture Substrates to Promote Proangiogenic Potential of Stem Cells. <b>2018</b> , 18, 1700340		
682	The effect of ordered and partially ordered surface topography on bone cell responses: a review. <b>2018</b> , 6, 250-264		58
681	Single cells in nanoshells for the functionalization of living cells. <b>2018</b> , 10, 3112-3129		45
680	Development of mesoporous bioactive glass nanoparticles and its use in bone tissue engineering. <b>2018</b> , 106, 2878-2887		23
679	Electrospinning: An enabling nanotechnology platform for drug delivery and regenerative medicine. <b>2018</b> , 132, 188-213		197
678	Electrodeless coating polypyrrole on chitosan grafted polyurethane with functionalized multiwall carbon nanotubes electrospun scaffold for nerve tissue engineering. <b>2018</b> , 136, 430-443		70
677	Osteochondral Tissue Engineering. <b>2018</b> ,		
676	Extracellular matrix-coated polyethersulfone-TPGS hollow fiber membranes showing improved biocompatibility and uremic toxins removal for bioartificial kidney application. <b>2018</b> , 167, 457-467		21
675	Potential of silk sericin based nanofibrous mats for wound dressing applications. <b>2018</b> , 90, 420-432		70
674	Development of non-orthogonal 3D-printed scaffolds to enhance their osteogenic performance. <b>2018</b> , 6, 1569-1579		20
673	Left-Right Symmetry or Asymmetry of Cells on Stripe-Like Micropatterned Material Surfaces. <b>2018</b> , 36, 605-611		10
672	Topographical cues of direct metal laser sintering titanium surfaces facilitate osteogenic differentiation of bone marrow mesenchymal stem cells through epigenetic regulation. <b>2018</b> , 51, e12460		16

671	Electrospinning pectin-based nanofibers: a parametric and cross-linker study. <b>2018</b> , 8, 33-40		22
670	Current advanced therapy cell-based medicinal products for type-1-diabetes treatment. <b>2018</b> , 543, 107-120		14
669	Orienting proteins by nanostructured surfaces: evidence of a curvature-driven geometrical resonance. <b>2018</b> , 10, 7544-7555		7
668	Simulated embryonic and fetal cellular dynamics inside structured biomaterials. <b>2018</b> , 11, 291-307		1
667	Nanostructured substrates for multi-cue investigations of single cells. <b>2018</b> , 8, 49-58		5
666	Cell-Sheet-Derived ECM Coatings and Their Effects on BMSCs Responses. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 11508-11518	9.5	20
665	Micropatterning of reagent-free, high energy crosslinked gelatin hydrogels for bioapplications. <b>2018</b> , 106, 320-330		3
664	Hydroxyapatite coating on C/C with graphene oxide interlayer. <b>2018</b> , 34, 801-808		4
663	Monitoring cell substrate interactions in exopolysaccharide-based films reinforced with chitin whiskers and starch nanoparticles used as cell substrates. <b>2018</b> , 67, 333-339		9
662	Nanocomposite hydrogels for cartilage tissue engineering: a review. <b>2018</b> , 46, 465-471		59
661	Biological responses to immobilized microscale and nanoscale surface topographies. <b>2018</b> , 182, 33-55		50
660	Decellularized matrix of adipose-derived mesenchymal stromal cells enhanced retinal progenitor cell proliferation via the Akt/Erk pathway and neuronal differentiation. <b>2018</b> , 20, 74-86		8
659	Protein/polysaccharide-based scaffolds mimicking native extracellular matrix for cardiac tissue engineering applications. <b>2018</b> , 106, 769-781		45
658	Nanodimensional and Nanocrystalline Calcium Orthophosphates. <b>2018</b> , 355-448		3
657	Surface modification of biomaterials and biomedical devices using additive manufacturing. <i>Acta Biomaterialia</i> , <b>2018</b> , 66, 6-22	10.8	116
656	Scaffold-Based microRNA Therapies in Regenerative Medicine and Cancer. <b>2018</b> , 7, 1700695		40
655	Functionalized PVA-silk blended nanofibrous mats promote diabetic wound healing via regulation of extracellular matrix and tissue remodelling. <b>2018</b> , 12, e1559-e1570		54
654	Surface Engineering for Cell-Based Therapies: Techniques for Manipulating Mammalian Cell Surfaces. <b>2018</b> , 4, 3658-3677		38

653	Laser micro-ablation of fibrocartilage tissue: Effects of tissue processing on porosity modification and mechanics. <b>2018</b> , 106, 1858-1868		5
652	Poly(vinylphosphonic acid-co-acrylic acid) hydrogels: The effect of copolymer composition on osteoblast adhesion and proliferation. <b>2018</b> , 106, 255-264		30
651	Polymer coated mesoporous ceramic for drug delivery in bone tissue engineering. <i>International Journal of Biological Macromolecules</i> , <b>2018</b> , 110, 65-73	7.9	26
650	Surface-attached hydrogel coatings via C,H-insertion crosslinking for biomedical and bioanalytical applications (Review). <b>2017</b> , 13, 010801		47
649	Bottom-up Nanoencapsulation from Single Cells to Tunable and Scalable Cellular Spheroids for Hair Follicle Regeneration. <b>2018</b> , 7, 1700447		23
648	Antibiotic Algae by Chemical Surface Engineering. <b>2018</b> , 19, 439-443		5
647	Surface modification: activation and deactivation of osteogenic differentiation based on detachable growth factor protein. <b>2018</b> , 6, 236-240		3
646	Coating of Polyurethane Scaffold With Arabinogalactan Leads to Increase of Adhesion to Fibroblast Cells by Integrin Molecules Pathway. <b>2018</b> , 22, 1-4		7
645	Regulation of ATP utilization during metastatic cell migration by collagen architecture. <b>2018</b> , 29, 1-9		60
644	Biomimetic implants for pelvic floor repair. <b>2018</b> , 37, 566-580		18
643	Functional polymer surfaces for controlling cell behaviors. <b>2018</b> , 21, 38-59		172
642	Nanostructured hybrid device mimicking bone extracellular matrix as local and sustained antibiotic delivery system. <b>2018</b> , 256, 165-176		9
641	Fibrous polymer nanomaterials for biomedical applications and their transport by fluids: an overview. <b>2018</b> , 14, 8421-8444		10
640	Synthesis, characterization and osteogenesis of phosphorylated methacrylamide chitosan hydrogels.. <b>2018</b> , 8, 36331-36337		5
639	Graphene Oxide Immobilized PLGA-polydopamine Nanofibrous Scaffolds for Growth Inhibition of Colon Cancer Cells. <b>2018</b> , 18, e1800321		7
638	3D Bioprinting for Artificial Pancreas Organ. <b>2018</b> , 1064, 355-374		12
637	Chemoresistance of Cancer Cells: Requirements of Tumor Microenvironment-mimicking Models in Anti-Cancer Drug Development. <b>2018</b> , 8, 5259-5275		89
636	Fabrication of Gelatin Complexes/Bio-Nanocellulose Nanostructured Composite Mats. <b>2018</b> , 936, 142-147		4

635	Interactions of Functionalized Multi-Wall Carbon Nanotubes with Giant Phospholipid Vesicles as Model Cellular Membrane System. <b>2018</b> , 8, 17998	11
634	Fibrin-Modified Cellulose as a Promising Dressing for Accelerated Wound Healing. <b>2018</b> , 11,	15
633	3D scaffolds for brain tissue regeneration: architectural challenges. <b>2018</b> , 6, 2812-2837	38
632	Label-Free Quantification Proteomics for the Identification of Mesenchymal Stromal Cell Matrisome Inside 3D Poly(Ethylene Glycol) Hydrogels. <b>2018</b> , 7, e1800534	10
631	Patterned bacterial cellulose wound dressing for hypertrophic scar inhibition behavior. <b>2018</b> , 25, 6705-6717	17
630	Biomembrane Adhesion to Substrates Topographically Patterned with Nanopits. <b>2018</b> , 115, 1292-1306	4
629	Cell Surface Engineering. <b>2018</b> , 1-42	
628	Electrospun 3D Scaffolds for Tissue Regeneration. <b>2018</b> , 1078, 29-47	4
627	Sustainable and Degradable Epoxy Resins from Trehalose, Cyclodextrin, and Soybean Oil Yield Tunable Mechanical Performance and Cell Adhesion. <b>2018</b> , 6, 14967-14978	10
626	Enhanced Raman Investigation of Cell Membrane and Intracellular Compounds by 3D Plasmonic Nanoelectrode Arrays. <b>2018</b> , 5, 1800560	33
625	Scaffolds Fabricated from Natural Polymers/Composites by Electrospinning for Bone Tissue Regeneration. <b>2018</b> , 1078, 49-78	26
624	Hybrid scaffolds enhanced by nanofibers improve in vitro cell behavior for tissue regeneration. <b>2018</b> , 25, 7113-7125	5
623	Tuning microenvironment for multicellular spheroid formation in thermo-responsive anionic microgel scaffolds. <b>2018</b> , 106, 2899-2909	7
622	Single-Step Reactive Electrospinning of Cell-Loaded Nanofibrous Scaffolds as Ready-to-Use Tissue Patches. <i>Biomacromolecules</i> , <b>2018</b> , 19, 4182-4192	6.9 12
621	Tailoring the Interface of Biomaterials to Design Effective Scaffolds. <b>2018</b> , 9,	33
620	Multi-length scale bioprinting towards simulating microenvironmental cues. <b>2018</b> , 1, 77-88	22
619	Enhancement of synthesis of extracellular matrix proteins on retinoic acid loaded electrospun scaffolds. <b>2018</b> , 6, 6468-6480	3
618	Biofabrication via integrated additive manufacturing and electrofluidodynamics. <b>2018</b> , 71-85	1

617	Three-Dimensional Heterogeneous Structure Formation on a Supported Lipid Bilayer Disclosed by Single-Particle Tracking. <b>2018</b> , 34, 11857-11865		2
616	Enhanced Growth Activities of Stem Cell Spheroids Based on a Durable and Chemically Defined Surface Modification Coating. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 31882-31891	9.5	6
615	Orthopaedic regenerative tissue engineering en route to the holy grail: disequilibrium between the demand and the supply in the operating room. <b>2018</b> , 5, 14		16
614	Bio-surface engineering with DNA scaffolds for theranostic applications. <b>2018</b> , 4, 1-16		7
613	Programmed Shape-Morphing Scaffolds Enabling Facile 3D Endothelialization. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1801027	15.6	85
612	Creating Biomimetic Anisotropic Architectures with Co-Aligned Nanofibers and Macrochannels by Manipulating Ice Crystallization. <b>2018</b> , 12, 5780-5790		40
611	A computational model of amoeboid cell motility in the presence of obstacles. <b>2018</b> , 14, 5741-5763		10
610	Introduction. <b>2018</b> , 1-34		
609	Regulating the migration of smooth muscle cells by a vertically distributed poly(2-hydroxyethyl methacrylate) gradient on polymer brushes covalently immobilized with RGD peptides. <i>Acta Biomaterialia</i> , <b>2018</b> , 75, 75-92	10.8	25
608	Magnetic Manipulation of Reversible Nanocaging Controls In Vivo Adhesion and Polarization of Macrophages. <b>2018</b> , 12, 5978-5994		47
607	Light-based additive manufacturing of PolyHIPEs: Controlling the surface porosity for 3D cell culture applications. <b>2018</b> , 156, 494-503		19
606	Cell Alignment on Graphene/Amyloid Composites. <b>2018</b> , 5, 1800621		7
605	Regulation Effects of Biomimetic Hybrid Scaffolds on Vascular Endothelium Remodeling. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 23583-23594	9.5	35
604	Multiwalled Carbon nanotubes/hydroxyapatite nanoparticles incorporated GTR membranes. <b>2018</b> , 181-209		
603	Polymeric gels for tissue engineering applications. <b>2018</b> , 305-330		
602	Tissue Engineering: Towards Development of Regenerative and Transplant Medicine. <b>2018</b> , 471-495		2
601	Atmospheric pressure plasma jet: A facile method to modify the intimal surface of polymeric tubular conduits. <b>2018</b> , 36, 04F404		10
600	Chemically Modified Gellan Gum Hydrogels with Tunable Properties for Use as Tissue Engineering Scaffolds. <b>2018</b> , 3, 6998-7007		47

599	Evaluation of highly carbonated hydroxyapatite bioceramic implant coatings with hierarchical micro-/nanorod topography optimized for osseointegration. <b>2018</b> , 13, 3643-3659	29
598	Engineering Cell Adhesion and Orientation via Ultrafast Laser Fabricated Microstructured Substrates. <b>2018</b> , 19,	16
597	Applications of de novo designed peptides. <b>2018</b> , 51-86	10
596	Synthesis, Characterization and 3D Micro-Structuring via 2-Photon Polymerization of Poly(glycerol sebacate)-Methacrylate An Elastomeric Degradable Polymer. <b>2018</b> , 6,	22
595	Effects of aligned and random fibers with different diameter on cell behaviors. <b>2018</b> , 171, 461-467	56
594	Metallic biomaterials: State of the art and new challenges. <b>2018</b> , 1-33	11
593	Metal nanoparticles-grafted functionalized graphene coated with nanostructured polyaniline Hybrid Nanocomposites as high-performance biosensors. <b>2018</b> , 274, 85-101	19
592	Achieving Controlled Biomolecule-Biomaterial Conjugation. <b>2018</b> , 118, 7702-7743	105
591	Hierarchical structures on nickel-titanium fabricated by ultrasonic nanocrystal surface modification. <b>2018</b> , 93, 12-20	15
590	Drug release kinetics of electrospun fibrous systems. <b>2018</b> , 349-374	5
589	Introduction to Science and Engineering Principles for the Development of Bioinspired Materials. <b>2018</b> , 1-16	
588	Promoting Osseointegration of Ti Implants through Micro/Nanoscaled Hierarchical Ti Phosphate/Ti Oxide Hybrid Coating. <b>2018</b> , 12, 7883-7891	63
587	Biomimetic Layer-by-Layer Self-Assembly of Nanofilms, Nanocoatings, and 3D Scaffolds for Tissue Engineering. <b>2018</b> , 19,	39
586	3D-printed chitosan-based scaffolds: An in vitro study of human skin cell growth and an in-vivo wound healing evaluation in experimental diabetes in rats. <i>Carbohydrate Polymers</i> , <b>2018</b> , 199, 593-602	10.3 101
585	A micron-scale surface topography design reducing cell adhesion to implanted materials. <b>2018</b> , 8, 10887	56
584	An electrospun poly( $\epsilon$ -caprolactone) nanocomposite fibrous mat with a high content of hydroxyapatite to promote cell infiltration.. <b>2018</b> , 8, 25228-25235	17
583	Designed Surface Topographies Control ICAM-1 Expression in Tonsil-Derived Human Stromal Cells. <b>2018</b> , 6, 87	10
582	Preparation of Gallic Acid Anhydride Conjugate and Evaluation of Prodrug Release Through Pva-Based Hydrogel. <b>2018</b> , 52, 139-144	

581	Functionalized cardiovascular stents: Cardiovascular stents incorporated with stem cells. <b>2018</b> , 251-290		1
580	Keratinocyte Migration in a Three-Dimensional Wound Healing Model Co-Cultured with Fibroblasts. <b>2018</b> , 15, 721-733		13
579	Additive manufacturing of nanostructured bone scaffolds. <b>2018</b> , 181-210		1
578	Fabrication of three-dimensional nanofibrous gelatin scaffolds using one-step crosslink technique. <b>2018</b> , 29, 1859-1875		1
577	Upregulation of osteogenesis of mesenchymal stem cells with virus-based thin films. <b>2018</b> , 2, 42-58		7
576	Biomechanical performance of hybrid electrospun structures for skin regeneration. <b>2018</b> , 93, 816-827		16
575	Nanostructured polymer scaffolds for tissue engineering technology. <b>2018</b> , 451-483		2
574	Cell Membrane Disruption by Vertical Micro-/Nanopillars: Role of Membrane Bending and Traction Forces. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 29107-29114	9.5	29
573	Morphology, Migration, and Transcriptome Analysis of Schwann Cell Culture on Butterfly Wings with Different Surface Architectures. <b>2018</b> , 12, 9660-9668		22
572	Macroporous Conductive Hydrogels with Fatigue Resistance as Strain Sensor for Human Motion Monitoring. <b>2018</b> , 303, 1800339		20
571	Engineering of M13 Bacteriophage for Development of Tissue Engineering Materials. <b>2018</b> , 1776, 487-502		3
570	Differential effect of hydroxyapatite nano-particle versus nano-rod decorated titanium micro-surface on osseointegration. <i>Acta Biomaterialia</i> , <b>2018</b> , 76, 344-358	10.8	60
569	Morphologically modified surface with hierarchical micro-/nano-structures for enhanced bioactivity of titanium implants. <b>2018</b> , 53, 12679-12691		28
568	Surface Functionalization With Biopolymers via Plasma-Assisted Surface Grafting and Plasma-Induced Graft Polymerization Materials for Biomedical Applications. <b>2018</b> , 115-151		11
567	Development of cylindrical microfibrillar scaffold using melt-spinning method for vascular tissue engineering. <b>2018</b> , 228, 334-338		5
566	Surface mediated non-viral gene transfection on titanium substrates using polymer electrolyte and nanostructured silicate substituted calcium phosphate pDNA (NanoSiCaPs) composites. <b>2018</b> , 16, 169-173		3
565	Effect of electrochemical oxidation and reduction on cell de-adhesion at the conducting polymer-live cell interface as revealed by single cell force spectroscopy. <b>2018</b> , 13, 041004		5
564	Substrate micropatterns produced by polymer demixing regulate focal adhesions, actin anisotropy, and lineage differentiation of stem cells. <i>Acta Biomaterialia</i> , <b>2018</b> , 76, 21-28	10.8	16



563	A facile method for fabricating nano/microfibrous three-dimensional scaffold with hierarchically porous to enhance cell infiltration. <b>2019</b> , 136, 47046	3
562	IFN- $\beta$ -ethered hydrogels enhance mesenchymal stem cell-based immunomodulation and promote tissue repair. <b>2019</b> , 220, 119403	39
561	Recent trends in peripheral nervous regeneration using 3D biomaterials. <b>2019</b> , 59, 70-81	9
560	Optimizing the alignment of thermoresponsive poly(N-isopropyl acrylamide) electrospun nanofibers for tissue engineering applications: A Factorial design of experiments approach. <b>2019</b> , 14, e0219254	16
559	Strategies to Tune Electrospun Scaffold Porosity for Effective Cell Response in Tissue Engineering. <b>2019</b> , 10,	62
558	Plasmonic nano surface for neuronal differentiation and manipulation. <b>2019</b> , 21, 102048	4
557	Advance of Nano-Composite Electrospun Fibers in Periodontal Regeneration. <b>2019</b> , 7, 495	24
556	Nanocellulose Composite Biomaterials in Industry and Medicine. <b>2019</b> , 693-784	4
555	Tuning the Structure and Properties of Ultra-Low Cross-Linked Temperature-Sensitive Microgels at Interfaces via the Adsorption Pathway. <b>2019</b> , 35, 14769-14781	17
554	Cell-Membrane-Anchored DNA NanoplatforM for Programming Cellular Interactions. <b>2019</b> , 141, 18013-18020	67
553	DLITE Uses Cell-Cell Interface Movement to Better Infer Cell-Cell Tensions. <b>2019</b> , 117, 1714-1727	8
552	Biomimetic polyetheretherketone microcarriers with specific surface topography and self-secreted extracellular matrix for large-scale cell expansion. <b>2020</b> , 7, 109-118	2
551	Exploring the mechanism behind improved osteointegration of phosphorylated titanium implants with hierarchically structured topography. <b>2019</b> , 184, 110520	7
550	Effect of Cross-Linker in Poly(N-Isopropyl Acrylamide)-Grafted-Gelatin Gels Prepared by Microwave-Assisted Synthesis. <b>2019</b> , 4, 10346-10351	1
549	Mechanical Interaction between Cells Facilitates Molecular Transport. <b>2019</b> , 3, e1900192	10
548	Biodegradable polymer nanocomposites for tissue engineering: synthetic strategies and related applications. <b>2019</b> , 157-198	1
547	Engineering High-Resolution Micropatterns Directly onto Titanium with Optimized Contact Guidance to Promote Osteogenic Differentiation and Bone Regeneration. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 43888-43901	9.5 13
546	Enzyme-Mediated Mineralization of TiO <sub>2</sub> Nanotubes Subjected to Different Heat Treatments. <b>2019</b> , 19, 7112-7121	0

545	Adsorption of Amyloidogenic Peptides to Functionalized Surfaces Is Biased by Charge and Hydrophilicity. <b>2019</b> , 35, 14522-14531	12
544	Permissive Electroconductive Nanocomposites for Neuronal Progenitor Cells. <b>2019</b> ,	
543	High-Throughput Cell Motility Studies on Surface-Bound Protein Nanoparticles with Diverse Structural and Compositional Characteristics. <b>2019</b> , 5, 5470-5480	4
542	The interactions of human ovarian cancer cells and nanotextured surfaces: cell attachment, viability and apoptosis studies.. <b>2019</b> , 9, 25957-25966	4
541	Hybrid scaffold comprising of nanofibers and extrusion printed PCL for tissue engineering. <b>2019</b> , 11, 804-812	3
540	Importance of Polyacrylamide Hydrogel Diverse Chains and Cross-Linking Density for Cell Proliferation, Aging, and Death. <b>2019</b> , 35, 13999-14006	4
539	Advanced cell culture platforms: a growing quest for emulating natural tissues. <b>2019</b> , 6, 45-71	82
538	Medical Applications. <b>2019</b> , 215-302	
537	Biofabrication for osteochondral tissue regeneration: bioink printability requirements. <b>2019</b> , 30, 20	18
536	Electrospun Polymeric Nanofibers: Fundamental Aspects of Electrospinning Processes, Optimization of Electrospinning Parameters, Properties, and Applications. <b>2019</b> , 375-409	10
535	Nanotopographical Control of Cell Assembly into Supracellular Structures. <b>2019</b> , 19-53	1
534	A biofunctionalized viral delivery patch for spatially defined transfection. <b>2019</b> , 55, 2317-2320	4
533	Interfacial Self-Assembly in Halloysite Nanotube Composites. <b>2019</b> , 35, 8646-8657	56
532	Enhanced Adhesion of Fish Ovarian Germline Stem Cells on Solid Surfaces by Mussel-Inspired Polymer Coating. <b>2018</b> , 17,	2
531	Biomedical Applications of Electrospun Polymer Composite Nanofibres. <b>2019</b> , 111-165	4
530	Solvent-Induced Nanotopographies of Single Microfibers Regulate Cell Mechanotransduction. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 7671-7685	9.5 23
529	Polymer Nanocomposites in Biomedical Engineering. <b>2019</b> ,	7
528	Cell Surface Engineering. <b>2019</b> , 307-346	0

527	Design of Hierarchical Beads for Efficient Label-Free Cell Capture. <b>2019</b> , 15, e1902441		35
526	Photocleavable Peptide-Poly(2-hydroxyethyl methacrylate) Hybrid Graft Copolymer via Postpolymerization Modification by Click Chemistry To Modulate the Cell Affinities of 2D and 3D Materials. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 24577-24587	9.5	6
525	Utility of Chitosan for 3D Printing and Bioprinting. <b>2019</b> , 271-292		7
524	Magnetic Responsive PVA Hydrogels for Remote Modulation of Protein Sorption. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 21239-21249	9.5	30
523	Supramolecular Self-Assembly and Organization of Collagen at Solid/Liquid Interface: Effect of Spheroid- and Rod-Shaped TiO <sub>2</sub> Nanocrystals. <b>2019</b> , 6, 1900195		5
522	Cell Morphology on Poly(methyl methacrylate) Microstructures as Function of Surface Energy. <b>2019</b> , 2393481		1
521	Cultured cell-derived extracellular matrices to enhance the osteogenic differentiation and angiogenic properties of human mesenchymal stem/stromal cells. <b>2019</b> , 13, 1544-1558		20
520	Nano-fabrication methods and novel applications of black silicon. <b>2019</b> , 295, 560-573		15
519	Gold-nanoisland-decorated titanium nanorod arrays fabricated by thermal dewetting approach. <b>2019</b> , 7, 249-259		7
518	Sustainable Agriculture Reviews 35. <b>2019</b> ,		6
517	Surface potential and charges impact on cell responses on biomaterials interfaces for medical applications. <b>2019</b> , 104, 109883		76
516	Cell Integration with Electrospun PMMA Nanofibers, Microfibers, Ribbons, and Films: A Microscopy Study. <b>2019</b> , 6,		19
515	Three-Dimensional Printed Scaffolds with Controlled Micro-/Nanoporous Surface Topography Direct Chondrogenic and Osteogenic Differentiation of Mesenchymal Stem Cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 18896-18906	9.5	34
514	Advances in Conducting, Biodegradable and Biocompatible Copolymers for Biomedical Applications. <b>2019</b> , 6,		27
513	Synergistic Effect and Characterization of Graphene/Carbon Nanotubes/Polyvinyl Alcohol/Sodium Alginate Nanofibrous Membranes Formed Using Continuous Needleless Dynamic Linear Electrospinning. <b>2019</b> , 9,		19
512	microRNA Modulation. <b>2019</b> , 1-66		
511	Mammalian Cell Behavior on Hydrophobic Substrates: Influence of Surface Properties. <b>2019</b> , 3, 48		76
510	Fabrication, characterization, and in vitro evaluation of biomimetic silk fibroin porous scaffolds via supercritical CO <sub>2</sub> technology. <b>2019</b> , 150, 86-93		14

509	Electrospun polycaprolactone/collagen nanofibers cross-linked with 1-ethyl-3-(3-dimethylaminopropyl) carbodiimide/hydroxysuccinimide and genipin facilitate endothelial cell regeneration and may be a promising candidate for vascular scaffolds. <b>2019</b> , 14, 2127-2144	14
508	Carbon nanotube-based materials Preparation, biocompatibility, and applications in dentistry. <b>2019</b> , 41-76	4
507	Nanophase graphene frameworks. <b>2019</b> , 11, 9264-9269	4
506	Bioactive glass nanofibers for tissue engineering. <b>2019</b> , 329-356	1
505	Poly (ethylene glycol) hydrogel scaffolds with multiscale porosity for culture of human adipose-derived stem cells. <b>2019</b> , 30, 895-918	5
504	Influence of hydrogel network microstructures on mesenchymal stem cell chondrogenesis in vitro and in vivo. <i>Acta Biomaterialia</i> , <b>2019</b> , 91, 159-172	10.8 32
503	Nanobiomaterials for tissue engineering. <b>2019</b> , 1-21	3
502	Enhancement of Schwann Cells Function Using Graphene-Oxide-Modified Nanofiber Scaffolds for Peripheral Nerve Regeneration. <b>2019</b> , 5, 2444-2456	35
501	Deformation behavior of porous PHBV scaffold in compression: A finite element analysis study. <b>2019</b> , 96, 1-8	9
500	Composite Nanostructures and Adhesion Analysis of Natural Plant Hydrogels Investigated by Atomic Force Microscopy. <b>2019</b> , 18, 448-455	5
499	DNA Nanotechnology Enters Cell Membranes. <b>2019</b> , 6, 1900043	51
498	Machine learning metrology of cell confinement in melt electrowritten three-dimensional biomaterial substrates. <b>2019</b> , 5, 15	34
497	Micropatterned fibrous scaffolds for biomedical application. <b>2019</b> , 80, 729-738	6
496	Harnessing topographical & biochemical cues to enhance elastogenesis by paediatric cells for cardiovascular tissue engineering applications. <b>2019</b> , 512, 156-162	3
495	Bacterial-nanostructure interactions: The role of cell elasticity and adhesion forces. <b>2019</b> , 546, 192-210	69
494	Probiotics Biofilm-Integrated Electrospun Nanofiber Membranes: A New Starter Culture for Fermented Milk Production. <b>2019</b> , 67, 3198-3208	27
493	Multi-cellular tumor spheroids formation of colorectal cancer cells on Gelatin/PLCL and Collagen/PLCL nanofibrous scaffolds. <b>2019</b> , 115, 115-124	12
492	Construction of Vascularized Oral Mucosa Equivalents Using a Layer-by-Layer Cell Coating Technology. <b>2019</b> , 25, 262-275	13

491	Effect of Silk Fibroin on Cell Viability in Electrospun Scaffolds of Polyethylene Oxide. <b>2019</b> , 11,	6
490	Heat-treated carbon coatings on poly (l-lactide) foils for tissue engineering. <b>2019</b> , 100, 117-128	5
489	Bicomponent nanofibrous scaffolds with dual release of anticancer drugs and biomacromolecules. <b>2019</b> , 9, 413-420	4
488	High performance high-density polyethylene/hydroxyapatite nanocomposites for load-bearing bone substitute: fabrication, in vitro and in vivo biocompatibility evaluation. <b>2019</b> , 175, 100-110	39
487	Analyses of equilibrium water content and blood compatibility for Poly(2-methoxyethyl acrylate) by molecular dynamics simulation. <b>2019</b> , 170, 76-84	12
486	Construction of Cell Extracellular Matrix Microenvironments by Conjugating ECM Proteins on Supported Lipid Bilayers. <b>2019</b> , 6,	7
485	Ultrasound-assisted biofabrication and bioprinting of preferentially aligned three-dimensional cellular constructs. <b>2019</b> , 11, 035015	36
484	Tuning the biomimetic behavior of scaffolds for regenerative medicine through surface modifications. <b>2019</b> , 13, 1275-1293	63
483	Smart Instructive Polymer Substrates for Tissue Engineering. <b>2019</b> , 411-438	6
482	Peptide-modified bone repair materials: Factors influencing osteogenic activity. <b>2019</b> , 107, 1491-1512	10
481	Robust hierarchical porous MBG scaffolds with promoted biomineralization ability. <b>2019</b> , 178, 22-31	4
480	Optimization strategies for ACL: A step-chronicle review. <b>2019</b> , 17, 3-14	5
479	Recent advances in electrospun polycaprolactone based scaffolds for wound healing and skin bioengineering applications. <b>2019</b> , 19, 319-335	69
478	Nanotechnology in Tissue Engineering. <b>2019</b> , 151-186	
477	Physiochemical and morphological dependent growth of NIH/3T3 and PC-12 on polyaniline-chloride/chitosan bionanocomposites. <b>2019</b> , 99, 1304-1312	18
476	Three-Dimensional Objects Consisting of Hierarchically Assembled Nanofibers with Controlled Alignments for Regenerative Medicine. <b>2019</b> , 19, 2059-2065	36
475	Effect of plasma-nitrided titanium surfaces on the differentiation of pre-osteoblastic cells. <b>2019</b> , 43, 764-772	4
474	Natural polymers for bone repair. <b>2019</b> , 199-232	5

473	Cellular Stemness Maintenance of Human Adipose-Derived Stem Cells on ZnO Nanorod Arrays. <b>2019</b> , 15, e1904099	15
472	Extracellular recordings of bionic engineered cardiac tissue based on a porous scaffold and microelectrode arrays. <b>2019</b> , 11, 5872-5879	9
471	Biomaterials for In Situ Tissue Regeneration: A Review. <b>2019</b> , 9,	77
470	A 3D-Printed Multi-Chamber Device Allows Culturing Cells On Buckypapers Coated With PAMAM Dendrimer And Obtain Innovative Materials For Biomedical Applications. <b>2019</b> , 14, 9295-9306	4
469	Carbon nanotube-based matrices for tissue engineering. <b>2019</b> , 323-353	4
468	Silk scaffolds with gradient pore structure and improved cell infiltration performance. <b>2019</b> , 94, 179-189	26
467	Surface-Potential-Controlled Cell Proliferation and Collagen Mineralization on Electrospun Polyvinylidene Fluoride (PVDF) Fiber Scaffolds for Bone Regeneration. <b>2019</b> , 5, 582-593	54
466	Differential neural cell adhesion and neurite outgrowth on carbon nanotube and graphene reinforced polymeric scaffolds. <b>2019</b> , 97, 539-551	30
465	Modified cells as potential ocular drug delivery systems. <b>2019</b> , 24, 1621-1626	
464	Evaluation of cellular attachment and proliferation on different surface charged functional cellulose electrospun nanofibers. <i>Carbohydrate Polymers</i> , <b>2019</b> , 207, 796-805	10.3 31
463	From deceased to bioengineered graft: New frontiers in liver transplantation. <b>2019</b> , 33, 72-76	2
462	Biomimetic Conditioning of Human Dentin Using Citric Acid. <b>2019</b> , 45, 45-50	16
461	3D printing mesoporous bioactive glass/sodium alginate/gelatin sustained release scaffolds for bone repair. <b>2019</b> , 33, 755-765	29
460	In situ Study Unravels Bio-Nanomechanical Behavior in a Magnetic Bacterial Nano-cellulose (MBNC) Hydrogel for Neuro-Endovascular Reconstruction. <b>2019</b> , 19, e1800225	12
459	Halloysite nanotubes coated 3D printed PLA pattern for guiding human mesenchymal stem cells (hMSCs) orientation. <b>2019</b> , 359, 672-683	46
458	EConjugated polyaniline-assisted flexible titania nanotubes with controlled surface morphology as regenerative medicine in nerve cell growth. <b>2019</b> , 360, 701-713	20
457	Effect of Microarc Oxidation-Treated Ti6Al4V Scaffold Following Low-Intensity Pulsed Ultrasound Stimulation on Osteogenic Cells in Vitro. <b>2019</b> , 5, 572-581	9
456	Engineering the Biointerface of Electrospun 3D Scaffolds with Functionalized Polymer Brushes for Enhanced Cell Binding. <i>Biomacromolecules</i> , <b>2019</b> , 20, 813-825	6.9 9

455	Photoconductive Micro/Nanoscale Interfaces of a Semiconducting Polymer for Wireless Stimulation of Neuron-Like Cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 4833-4841	9.5	22
454	Polysaccharides for tissue engineering: Current landscape and future prospects. <i>Carbohydrate Polymers</i> , <b>2019</b> , 205, 601-625	10.3	67
453	Reconstructing nanofibers from natural polymers using surface functionalization approaches for applications in tissue engineering, drug delivery and biosensing devices. <b>2019</b> , 94, 1102-1124		44
452	Hip and Knee Section, Prevention, Prosthesis Factors: Proceedings of International Consensus on Orthopedic Infections. <b>2019</b> , 34, S309-S320		6
451	Recent progress in bio-inspired electrospun materials. <b>2019</b> , 11, 12-20		38
450	3D-Printed Hydrogel Composites for Predictive Temporal (4D) Cellular Organizations and Patterned Biogenic Mineralization. <b>2019</b> , 8, e1800788		17
449	Multiform TiO <sub>2</sub> nano-network enhances biological response to titanium surface for dental implant applications. <b>2019</b> , 471, 1041-1052		19
448	O/W Pickering Emulsion Templated Organo-hydrogels with Enhanced Mechanical Strength and Energy Storage Capacity.. <i>ACS Applied Bio Materials</i> , <b>2019</b> , 2, 480-487	4.1	19
447	Bactericidal effects of nanopatterns: A systematic review. <i>Acta Biomaterialia</i> , <b>2019</b> , 83, 29-36	10.8	102
446	Biological behavior of titanium processed by severe plastic deformation. <b>2019</b> , 472, 54-63		14
445	Magnetic Actuator Device Assisted Modulation of Cellular Behavior and Tuning of Drug Release on Silk Platform. <b>2019</b> , 5, 92-105		17
444	Fiber length and concentration: Synergistic effect on mechanical and cellular response in wet-laid poly(lactic acid) fibrous scaffolds. <b>2019</b> , 107, 332-341		8
443	A multilayer scaffold design with spatial arrangement of cells to modulate esophageal tissue growth. <b>2019</b> , 107, 324-331		12
442	Mesoporous bioactive glasses for bone healing and biomolecules delivery. <b>2020</b> , 106, 110180		29
441	Mechanical performance of elastomeric PGS scaffolds under dynamic conditions. <b>2020</b> , 102, 103474		7
440	Development of double porous poly (ε caprolactone)/chitosan polymer as tissue engineering scaffold. <b>2020</b> , 107, 110257		8
439	Nanostructured Substrates for Detection and Characterization of Circulating Rare Cells: From Materials Research to Clinical Applications. <b>2020</b> , 32, e1903663		44
438	Hydrogel screening approaches for bone and cartilage tissue regeneration. <b>2020</b> , 1460, 25-42		11

437	Advances in high-resolution microscopy for the study of intracellular interactions with biomaterials. <b>2020</b> , 226, 119406		15
436	Biomimetic proteoglycan nanoparticles for growth factor immobilization and delivery. <b>2020</b> , 8, 1127-1136		9
435	Feasibility of 3-D scaffolds for organs. <b>2020</b> , 227-241		
434	Immobilization of polyvinyl alcohol-siloxane on the oxygen plasma-modified polyurethane-carbon nanotube composite matrix. <b>2020</b> , 137, 48477		6
433	Biointegration. <b>2020</b> , 1-16		1
432	Elastic Anisotropy Governs the Range of Cell-Induced Displacements. <b>2020</b> , 118, 1152-1164		13
431	Nanostructured degradable macroporous hydrogel scaffolds with controllable internal morphologies via reactive electrospinning. <i>Acta Biomaterialia</i> , <b>2020</b> , 104, 135-146	10.8	22
430	Temperature Responsive Shape-Memory Scaffolds with Circumferentially Aligned Nanofibers for Guiding Smooth Muscle Cell Behavior. <b>2020</b> , 20, e1900312		9
429	Nanostructured biomaterials for regenerative medicine: Clinical perspectives. <b>2020</b> , 47-80		
428	Biomolecules-derived biomaterials. <b>2020</b> , 230, 119633		52
427	Conductive electrospun polyurethane-polyaniline scaffolds coated with poly(vinyl alcohol)-GPTMS under oxygen plasma surface modification. <b>2020</b> , 22, 100752		13
426	Well Plate Integrated Topography Gradient Screening Technology for Studying Cell-Surface Topography Interactions. <b>2020</b> , 4, e1900218		4
425	Plasma Amine Oxidase-Induced Nanoparticle-to-Nanofiber Geometric Transformation of an Amphiphilic Peptide for Drug Encapsulation and Enhanced Bactericidal Activity. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 4323-4332	9.5	18
424	Mechanical Roles in Formation of Oriented Collagen Fibers. <b>2020</b> , 26, 116-128		20
423	On the Future Design of Bio-Inspired Polyetheretherketone Dental Implants. <b>2020</b> , 20, e1900239		21
422	A stage-specific cell-manipulation platform for inducing endothelialization on demand. <b>2020</b> , 7, 629-643		21
421	Designing laser-modified surface structures on titanium alloy custom medical implants using a hybrid manufacturing technology. <b>2020</b> , 108, 1790-1800		1
420	Enhancement of the Mechanical Properties of Hydrogels with Continuous Fibrous Reinforcement. <b>2020</b> , 6, 5453-5473		9



4 <sup>19</sup>	The Anatase Phase of Nanotopography Titania with Higher Roughness Has Better Biocompatibility in Osteoblast Cell Morphology and Proliferation. <b>2020</b> , 2020, 8032718	3
4 <sup>18</sup>	Multiscale engineering of functional organic polymer interfaces for neuronal stimulation and recording. <b>2020</b> , 4, 3444-3471	2
4 <sup>17</sup>	Generating Nanotopography on PCL Microfiber Surface for Better Cell-Scaffold Interactions. <b>2020</b> , 48, 619-624	2
4 <sup>16</sup>	3D Printing in Biomedical Engineering. <b>2020</b> ,	7
4 <sup>15</sup>	Micromechanical Design Criteria for Tissue-Engineering Biomaterials. <b>2020</b> , 1335-1350	
4 <sup>14</sup>	Fundamentals of chitosan for biomedical applications. <b>2020</b> , 199-230	5
4 <sup>13</sup>	Recent Advances in the Regenerative Approaches for Traumatic Spinal Cord Injury: Materials Perspective. <b>2020</b> , 6, 6490-6509	13
4 <sup>12</sup>	Functionalization of Electrospun Nanofibers and Fiber Alignment Enhance Neural Stem Cell Proliferation and Neuronal Differentiation. <b>2020</b> , 8, 580135	17
4 <sup>11</sup>	Application of Inorganic Nanocomposite Hydrogels in Bone Tissue Engineering. <b>2020</b> , 23, 101845	10
4 <sup>10</sup>	A blueprint for translational regenerative medicine. <b>2020</b> , 12,	7
4 <sup>09</sup>	Cell Type-Specific Adhesion and Migration on Laser-Structured Opaque Surfaces. <b>2020</b> , 21,	3
4 <sup>08</sup>	Galactosylated chitosan-modified ethosomes combined with silk fibroin nanofibers is useful in transcutaneous immunization. <b>2020</b> , 327, 88-99	12
4 <sup>07</sup>	Promoting Cell Migration and Neurite Extension along Uniaxially Aligned Nanofibers with Biomacromolecular Particles in a Density Gradient. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 2002031	15.6 19
4 <sup>06</sup>	Tailoring the spatial filament organization within nanofibrous tissue engineering scaffolds. <b>2020</b> , 1-10	1
4 <sup>05</sup>	Doping and Incorporation of Hydroxyapatite in Development of PU-PLA Electrospun Osteogenic Membranes. <b>2020</b> , 28, 2988-3002	3
4 <sup>04</sup>	Change of Phase Transition Temperature in Band Engineered Ferroelectric Lanthanum-Modified Bismuth Titanates. <b>2020</b> , 20, 7135-7139	0
4 <sup>03</sup>	Nanotechnology for Bioengineers. <b>2020</b> , 15, 1-109	
4 <sup>02</sup>	3D Printing and Bioprinting Nerve Conduits for Neural Tissue Engineering. <b>2020</b> , 12,	26

401	Matrix-Metalloproteinase-Responsive Gene Delivery Surface for Enhanced in Situ Endothelialization. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 40121-40132	9.5	15
400	An injectable, self-healing and MMP-inhibiting hyaluronic acid gel via iron coordination. <i>International Journal of Biological Macromolecules</i> , <b>2020</b> , 165, 2022-2029	7.9	3
399	Topography: A Biophysical Approach to Direct the Fate of Mesenchymal Stem Cells in Tissue Engineering Applications. <b>2020</b> , 10,		27
398	Enhanced Wound Healing Potential of Primary Human Oral Fibroblasts and Periodontal Ligament Cells Cultured on Four Different Porcine-Derived Collagen Matrices. <b>2020</b> , 13,		7
397	ZnO/Nanocarbons-Modified Fibrous Scaffolds for Stem Cell-Based Osteogenic Differentiation. <b>2020</b> , 16, e2003010		28
396	Engineering the Mammalian Cell Surface with Synthetic Polymers: Strategies and Applications. <b>2020</b> , 41, e2000302		5
395	Metallic Nanoparticle-Decorated Polydopamine Thin Films and Their Cell Proliferation Characteristics. <b>2020</b> , 10, 802		4
394	Doxorubicin hydrochloride loaded nanotextured films as a novel drug delivery platform for ovarian cancer treatment. <b>2020</b> , 25, 1289-1301		1
393	Nanomaterial-based scaffolds for bone tissue engineering and regeneration. <b>2020</b> , 15, 1995-2017		15
392	Organogel Coupled with Microstructured Electrospun Polymeric Nonwovens for the Effective Cleaning of Sensitive Surfaces. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 39620-39629	9.5	6
391	Surface functionalization as a new functional dimension added to 3D printing. <b>2020</b> , 8, 12380-12411		15
390	Fluorescent Nanofibrillar Hydrogels of Carbon Dots and Cellulose Nanocrystals and Their Biocompatibility. <b>2020</b> , 8, 18492-18499		15
389	Modeling adult skeletal stem cell response to laser-machined topographies through deep learning. <b>2020</b> , 67, 101442		5
388	Engineering the Interaction Dynamics between Nano-Topographical Immunocyte-Templated Micromotors across Scales from Ions to Cells. <b>2020</b> , 16, e2005185		5
387	Polydopamine regulated hydroxyapatite microspheres grown in the three-dimensional honeycomb-like mollusk shell-derived organic template for osteogenesis. <b>2020</b> , 12, 035022		5
386	Bioinspired Fabrication of Calcium-Doped TiP Coating with Nanofibrous Microstructure to Accelerate Osseointegration. <b>2020</b> , 31, 1641-1650		7
385	Directional Osteo-Differentiation Effect of hADSCs on Nanotopographical Self-Assembled Polystyrene Nanopit Surfaces. <b>2020</b> , 15, 3281-3290		4
384	A comparative study of materials assembled from recombinant K31 and K81 and extracted human hair keratins. <b>2020</b> , 15, 065006		1

383	A pathway toward new era of intelligent cell attachment; mechanism and a key major guideline. <b>2020</b> , 266, 121873		2
382	Tailorable hierarchical structures of biomimetic hydroxyapatite micro/nano particles promoting endocytosis and osteogenic differentiation of stem cells. <b>2020</b> , 8, 3286-3300		19
381	Do trabecular metal and cancellous titanium implants reduce the risk of late haematogenous infection? An experimental study in rabbits. <b>2021</b> , 31, 766-773		1
380	Improvements in Clinical Durability From Functional Biomimetic Metallic Dental Implants. <b>2020</b> , 7,		6
379	Electrospinning nanofiber scaffolds for soft and hard tissue regeneration. <b>2020</b> , 59, 243-261		64
378	A Mussel-Inspired Extracellular Matrix-Mimicking Composite Scaffold for Diabetic Wound Healing.. <i>ACS Applied Bio Materials</i> , <b>2020</b> , 3, 4052-4061	4.1	8
377	Unraveling how nanoscale curvature drives formation of lysozyme protein monolayers on inorganic oxide surfaces. <b>2020</b> , 20, 100729		2
376	Biodegradable Polymers for Biomedical Additive Manufacturing. <b>2020</b> , 20, 100700		37
375	Onion Epithelial Membrane Scaffolds Transfer Corneal Epithelial Layers in Reconstruction Surgery. <b>2020</b> , 9, e2000469		1
374	Emerging Nano/Micro-Structured Degradable Polymeric Meshes for Pelvic Floor Reconstruction. <b>2020</b> , 10,		8
373	Concepts for Designing Tailored Thin Film Surfaces with Potential Biological Applications. <b>2020</b> ,		
372	Antibacterial and Osteogenic Activity of Titania Nanotubes Modified with Electrospray-Deposited Tetracycline Nanoparticles. <b>2020</b> , 10,		6
371	Bioactive micropatterning of biomaterials for induction of endothelial progenitor cell differentiation: Acceleration of in situ endothelialization. <b>2020</b> , 108, 1479-1492		2
370	Novel Silicon Titanium Diboride Micropatterned Substrates for Cellular Patterning. <b>2020</b> , 244, 119927		11
369	Comparative study of different nitrogen-containing plasma modifications applied on 3D porous PCL scaffolds and 2D PCL films. <b>2020</b> , 516, 146067		13
368	Differential in vitro degradation and protein adhesion behaviour of spark plasma sintering fabricated magnesium-based temporary orthopaedic implant in serum and simulated body fluid. <b>2019</b> , 15, 015006		7
367	Multifunctional Surface with Enhanced Angiogenesis for Improving Long-Term Osteogenic Fixation of Poly(ether ether ketone) Implants. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 14971-14982	9.5	36
366	Liquid metal dealloying of titanium-tantalum (Ti-Ta) alloy to fabricate ultrafine Ta ligament structures: A comparative study in molten copper (Cu) and Cu-based alloys. <b>2020</b> , 169, 108600		7

365	Cell Theranostics on Mesoporous Silicon Substrates. <b>2020</b> , 12,	3
364	Cellular response to nanobiomaterials. <b>2020</b> , 473-504	1
363	Skin responses to biomaterials. <b>2020</b> , 701-718	1
362	Bovine Serum Albumin (BSA)/polyacrylonitrile (PAN) biohybrid nanofibers coated with a biomineralized calcium deficient hydroxyapatite (HA) shell for wound dressing. <b>2020</b> , 116, 111248	14
361	Self-assembly of concentric microrings of tubule and platy nanoclays for cell patterning and capturing. <b>2020</b> , 195, 105707	8
360	Nanocomposite hydrogels for tissue engineering applications. <b>2020</b> , 12, 14976-14995	61
359	Biocompatibility of Biomaterials for Tissue Regeneration or Replacement. <b>2020</b> , 15, e2000160	14
358	Textured nanofibrils drive microglial phenotype. <b>2020</b> , 257, 120177	0
357	A novel knitted scaffold made of microfiber/nanofiber core-sheath yarns for tendon tissue engineering. <b>2020</b> , 8, 4413-4425	18
356	Effect of the nano/microscale structure of biomaterial scaffolds on bone regeneration. <b>2020</b> , 12, 6	139
355	Nanoscale 3D Bioprinting for Osseous Tissue Manufacturing. <b>2020</b> , 15, 215-226	10
354	In vitro biocompatibility of biohybrid polymers membrane evaluated in human gingival fibroblasts. <b>2020</b> , 108, 2590-2598	3
353	Correlating Surface Plasmon Resonance Microscopy of Living and Fixated Cells with Electron Microscopy Allows for Investigation of Potential Preparation Artifacts. <b>2020</b> , 7, 1901991	2
352	Neuronal contact guidance and YAP signaling on ultra-small nanogratings. <b>2020</b> , 10, 3742	12
351	DNA-mediated biomineralization of calcium-deficient hydroxyapatite for bone tissue engineering. <b>2020</b> , 44, 4755-4761	3
350	Antibacterial biohybrid nanofibers for wound dressings. <i>Acta Biomaterialia</i> , <b>2020</b> , 107, 25-49	10.8 203
349	3D printing of hydrogels: Rational design strategies and emerging biomedical applications. <b>2020</b> , 140, 100543	241
348	Spreading of biologically relevant liquids over the laser textured surfaces. <b>2020</b> , 567, 224-234	7

347	High-Aspect-Ratio Nanostructured Surfaces as Biological Metamaterials. <b>2020</b> , 32, e1903862		90
346	Osteoblasts and fibroblasts attachment to poly(3-hydroxybutyric acid-co-3-hydrovaleric acid) (PHBV) film and electrospun scaffolds. <b>2020</b> , 110, 110668		24
345	Bioinspired functional organohydrogels with synergistic multiphases heterostructure. <b>2020</b> , 190, 122214		5
344	Controlling cell viability and bacterial attachment through fabricating extracellular matrix-like micro/nanostructured surface on titanium implant. <b>2020</b> , 15, 035002		9
343	Cell Interactions with Size-Controlled Colloidal Monolayers: Toward Improved Coatings in Bone Tissue Engineering. <b>2020</b> , 36, 1793-1803		5
342	Electrospun poly(vinyl alcohol)/reduced graphene oxide nanofibrous scaffolds for skin tissue engineering. <b>2020</b> , 191, 110994		19
341	Endowing chloroplasts with artificial "cell walls" using metal-organic frameworks. <b>2020</b> , 12, 11582-11592		3
340	Three-dimensional scaffolds. <b>2020</b> , 343-360		4
339	Biomimetic fabrication of icariin loaded nano hydroxyapatite reinforced bioactive porous scaffolds for bone regeneration. <b>2020</b> , 394, 124895		17
338	Electrospun chitosan membranes containing bioactive and therapeutic agents for enhanced wound healing. <i>International Journal of Biological Macromolecules</i> , <b>2020</b> , 156, 153-170	7.9	81
337	A nanomechanical model enables comprehensive characterization of biological tissues in ultrasound imaging. <b>2020</b> , 6, 035026		0
336	Size-Tunable Nanoneedle Arrays for Influencing Stem Cell Morphology, Gene Expression, and Nuclear Membrane Curvature. <b>2020</b> , 14, 5371-5381		22
335	Creation of a contractile biomaterial from a decellularized spinach leaf without ECM protein coating: An in vitro study. <b>2020</b> , 108, 2123-2132		14
334	A MEMS dynamic mechanical analyzer for in situ viscoelastic characterization of 3D printed nanostructures. <b>2020</b> , 30, 075008		2
333	Novel Ultrathin Films Based on a Blend of PEG-PCL and PLLA and Doped with ZnO Nanoparticles. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 21398-21410	9.5	13
332	Synthetic mycomelanin thin films as emergent bio-inspired interfaces controlling the fate of embryonic stem cells. <b>2020</b> , 8, 4412-4418		10
331	3D-Printed Poly-Caprolactone Scaffolds Modified With Biomimetic Extracellular Matrices for Tarsal Plate Tissue Engineering. <b>2020</b> , 8, 219		6
330	Self-Organization of Fibroblast-Laden 3D Collagen Microstructures From Inkjet-Printed Cell Patterns. <b>2020</b> , 4, e1900280		12

329	Single-cell yolk-shell nanoencapsulation for long-term viability with size-dependent permeability and molecular recognition. <b>2021</b> , 8, nwaa097	8
328	Three-Dimensional Printing of Scaffolds with Synergistic Effects of Micro-Nano Surfaces and Hollow Channels for Bone Regeneration. <b>2021</b> , 7, 872-880	5
327	Enhancing the Surface Properties of a Bioengineered Anterior Cruciate Ligament Matrix for Use with Point-of-Care Stem Cell Therapy. <b>2021</b> , 7, 153-161	7
326	A computational study of amoeboid motility in 3D: the role of extracellular matrix geometry, cell deformability, and cell-matrix adhesion. <b>2021</b> , 20, 167-191	1
325	Synthetic DNA for Cell-Surface Engineering. <b>2021</b> , 133, 11684-11695	6
324	Synthetic DNA for Cell-Surface Engineering. <b>2021</b> , 60, 11580-11591	14
323	3D printing of silk microparticle reinforced polycaprolactone scaffolds for tissue engineering applications. <b>2021</b> , 118, 111433	29
322	In vitro characterization of hierarchical 3D scaffolds produced by combining additive manufacturing and thermally induced phase separation. <b>2021</b> , 32, 454-476	1
321	Synthesis, characterization, and antimicrobial properties of strontium-substituted hydroxyapatite. <b>2021</b> , 57, 195-204	3
320	Cell aggregation on nanorough surfaces. <b>2021</b> , 115, 110134	3
319	Bioactive 3D porous cobalt-doped alginate/waterborne polyurethane scaffolds with a coral reef-like rough surface for nerve tissue engineering application. <b>2021</b> , 9, 322-335	9
318	Antibacterial surface design of biomedical titanium materials for orthopedic applications. <b>2021</b> , 78, 51-67	25
317	Bioinspired antibacterial surface for orthopedic and dental implants. <b>2021</b> , 109, 973-981	6
316	Preparation of oriented collagen fiber scaffolds and its application in bone tissue engineering. <b>2021</b> , 22, 100902	14
315	Cryo-3D Printing of Hierarchically Porous Polyhydroxymethylene Scaffolds for Hard Tissue Regeneration. <b>2021</b> , 306, 2000541	4
314	Virtual Prototyping & Bio Manufacturing in Medical Applications. <b>2021</b> ,	1
313	Simultaneous Visualization of Wet Cells and Nanostructured Biomaterials in SEM using Ionic Liquids. <b>2021</b> , 22, 571-576	2
312	Designing Novel Synthetic Grafts for Large Bone Defects: Experimental and Numerical Studies. <b>2021</b> , 71-89	

311	Pathway-Driven PeptideBiosglass Nanocomposites as the Dynamic and Self-Healable Matrix. <b>2021</b> , 33, 589-599	7
310	User-defined, temporal presentation of bioactive molecules on hydrogel substrates using supramolecular coiled coil complexes. <b>2021</b> , 9, 4374-4387	2
309	Electrospinning of Polysaccharides for Tissue Engineering Applications. <b>2021</b> , 11, 112-133	0
308	VE-cadherin-based matrix promoting the self-reconstruction of pro-vascularization microenvironments and endothelial differentiation of human mesenchymal stem cells. <b>2021</b> , 9, 3357-3370	1
307	Electrospun hydrogels for dynamic culture systems: advantages, progress, and opportunities. <b>2021</b> , 9, 4228-4245	5
306	Facile cell patterning induced by combined surface topography and chemistry on polydopamine-defined nanosubstrates. <b>2021</b> , 32, 145303	1
305	Heparin-based nanocomposites for tissue engineering. <b>2021</b> , 81-101	
304	Spatial organization of biochemical cues in 3D-printed scaffolds to guide osteochondral tissue engineering. <b>2021</b> , 9, 6813-6829	5
303	Chapter 12:Bioinspired and Bioinstructive Surfaces to Control Mesenchymal Stem Cells. <b>2021</b> , 301-325	
302	Chapter 13:Biomimetic Surface Modifications of Biomaterials Using a Layer-by-layer Technique. <b>2021</b> , 326-362	1
301	Nanomaterial-Based Bio Scaffolds for Enhanced Biomedical Applications. <b>2021</b> , 125-160	1
300	Electrospun Scaffold for Biomimic Culture of Caco-2 Cell Monolayer as an Intestinal Model.. <i>ACS Applied Bio Materials</i> , <b>2021</b> , 4, 1340-1349	4.1 3
299	Biofabrication of aligned structures that guide cell orientation and applications in tissue engineering. <b>2021</b> , 4, 258-277	8
298	Cost and Time Effective Lithography of Reusable Millimeter Size Bone Tissue Replicas With Sub-15µm Feature Size on A Biocompatible Polymer. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2008662	15.6 1
297	Designing hybrid nanofibers based on keratin-poly (vinyl alcohol) and poly (ε-caprolactone) for application as wound dressing. 152808372198897	8
296	Enhanced Cells Anchoring to Electrospun Hybrid Scaffolds With PHBV and HA Particles for Bone Tissue Regeneration. <b>2021</b> , 9, 632029	15
295	Multipoint connection by long-range density interaction and short-range distance rule. <b>2021</b> , 96, 045004	1
294	Designing Nanoparticles as Glues for Hydrogels: Insights from a Microscopic Model. <b>2021</b> , 54, 1992-2000	1

293	Assembly Pathway Selection with DNA Reaction Circuits for Programming Multiple Cell-Cell Interactions. <b>2021</b> , 143, 3448-3454	22
292	Bioactive Electrospun Fibers: Fabrication Strategies and a Critical Review of Surface-Sensitive Characterization and Quantification. <b>2021</b> , 121, 11194-11237	10
291	Response of bEnd.3 cells to growing behavior on the graphene oxide film with 2-D grating structure by two-beam laser interference. <b>2021</b> , 11, 1141-1149	
290	Cell Behavior of Primary Fibroblasts and Osteoblasts on Plasma-Treated Fluorinated Polymer Coated with Honeycomb Polystyrene. <b>2021</b> , 14,	1
289	Bioactive Polymeric Materials for the Advancement of Regenerative Medicine. <b>2021</b> , 12,	7
288	Laser fabrication of composite layers from biopolymers with branched 3D networks of single-walled carbon nanotubes for cardiovascular implants. <b>2021</b> , 260, 113517	12
287	Programmed dual-electrospun fibers with a 3D substrate-independent customized biomolecule gradient. <b>2021</b> , 26, 102066	0
286	Genipin crosslinked chitosan/PEO nanofibrous scaffolds exhibiting an improved microenvironment for the regeneration of articular cartilage. <b>2021</b> , 36, 503-516	2
285	The Synergy of Topographical Micropatterning and Ta TaCu Bilayered Thin Film on Titanium Implants Enables Dual-Functions of Enhanced Osteogenesis and Anti-Infection. <b>2021</b> , 10, e2002020	7
284	High-Throughput Methods in the Discovery and Study of Biomaterials and Materiobiology. <b>2021</b> , 121, 4561-4677	45
283	Fabricating spatially functionalized 3D-printed scaffolds for osteochondral tissue engineering. <b>2021</b> , 8, e146	2
282	Three-dimensional endothelial cell incorporation within bioactive nanofibrous scaffolds through concurrent emulsion electrospinning and coaxial cell electrospraying. <i>Acta Biomaterialia</i> , <b>2021</b> , 123, 312-324	10.8 9
281	Peptide-based scaffolds for the culture and maintenance of primary human hepatocytes. <b>2021</b> , 11, 6772	5
280	Recent Advances in Promoting Chondrogenesis of Human Mesenchymal Stem Cells Using Physically and Chemically Modified Hydrogels. <b>2021</b> , 11, 2130001	
279	Bioinspired Highly Anisotropic, Ultrastrong and Stiff, and Osteoconductive Mineralized Wood Hydrogel Composites for Bone Repair. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2010068	15.6 26
278	Biomimetic biohybrid nanofibers containing bovine serum albumin as a bioactive moiety for wound dressing. <b>2021</b> , 123, 111965	6
277	Advances in Fabricating the Electrospun Biopolymer-Based Biomaterials. <b>2021</b> , 12,	9
276	Material-mediated cell immobilization technology in the biological fermentation proces. <b>2021</b> , 15, 1160	4



275	Green Electrospun Silk Fibroin Nanofibers Loaded with Cationic Ethosomes for Transdermal Drug Delivery. <b>2021</b> , 37, 488-495		2
274	Ultrathin polymer fibers hybridized with bioactive ceramics: A review on fundamental pathways of electrospinning towards bone regeneration. <b>2021</b> , 123, 111853		12
273	Biomechanical properties of acellular scar ECM during the acute to chronic stages of myocardial infarction. <b>2021</b> , 116, 104342		2
272	Electrospun Shape Memory Polymer Micro-/Nanofibers and Tailoring Their Roles for Biomedical Applications. <b>2021</b> , 11,		11
271	Comparison of nanofibrillar and macroporous-spongy composite tissue scaffolds for periodontal tissue engineering. <b>2021</b> , 1-15		
270	Bioactive hierarchical silk fibers created by bioinspired self-assembly. <b>2021</b> , 12, 2375		8
269	Interfacing Live Cells with Surfaces: A Concurrent Control Technique for Quantifying Surface Ligand Activity.		
268	Constructing 3D Macroporous Microfibrous Scaffolds with a Featured Surface by Heat Welding and Embossing. <i>Biomacromolecules</i> , <b>2021</b> , 22, 1867-1874	6.9	1
267	Degradation Behavior of Polymers Used as Coating Materials for Drug Delivery-A Basic Review. <b>2021</b> , 13,		11
266	Hard Dental Tissues Regeneration-Approaches and Challenges. <b>2021</b> , 14,		5
265	On the Use of Black Ti as a Bone Substituting Biomaterial: Behind the Scenes of Dual-Functionality. <b>2021</b> , 17, e2100706		5
264	Morphology regulation of nanowire forests for tumour-cell behaviours. <b>2021</b> , 16, 392-398		
263	A Brief Review on the Evolution of Metallic Dental Implants: History, Design, and Application. <b>2021</b> , 8,		8
262	Reversed-engineered human alveolar lung-on-a-chip model. <b>2021</b> , 118,		43
261	Recent advances in hydrothermal modification of calcium phosphorus coating on magnesium alloy. <b>2021</b> , 10, 62-62		4
260	Seaweed cellulose scaffolds derived from green macroalgae for tissue engineering. <b>2021</b> , 11, 11843		12
259	Advanced mycelium materials as potential self-growing biomedical scaffolds. <b>2021</b> , 11, 12630		8
258	Advances in 3D Printing for Tissue Engineering. <b>2021</b> , 14,		9

257	The Materiobiology of Silk: Exploring the Biophysical Influence of Silk Biomaterials on Directing Cellular Behaviors. <b>2021</b> , 9, 697981	0
256	Biomimetic, biodegradable, and osteoinductive Microgels with open porous structure and excellent injectability for construction of microtissues for bone tissue engineering. <b>2021</b> , 414, 128714	4
255	Novel Poly(ester urethane urea)/Polydioxanone Blends: Electrospun Fibrous Meshes and Films. <b>2021</b> , 26,	1
254	Cell Adhesion Characteristics on Tantalum Pentoxide Gate Insulator for Cultured-Cell-Gate Field-Effect Transistor. <b>2021</b> , 37, 7548-7555	2
253	Challenges and strategies for endothelialization and long-term lumen patency of vascular grafts. <b>2021</b> , 6, 1791-1809	32
252	Experimental and Numerical Simulations of 3D-Printed Polycaprolactone Scaffolds for Bone Tissue Engineering Applications. <b>2021</b> , 14,	2
251	Ultrasonic Induced Refinement of Induction Heated Oxide Coating on Titanium. <b>2021</b> , 11, 812	
250	Fighting Like Cats and Dogs: Challenges in Domestic Carnivore Oocyte Development and Promises of Innovative Culture Systems. <b>2021</b> , 11,	1
249	Bacterial cellulose nanofiber reinforced poly(glycerol-sebacate) biomimetic matrix for 3D cell culture. <b>2021</b> , 28, 8483-8492	3
248	Positive Effects of Three-Dimensional Collagen-Based Matrices on the Behavior of Osteoprogenitors. <b>2021</b> , 9, 708830	3
247	Chirality in peptide-based materials: From chirality effects to potential applications. <b>2021</b> , 33, 618-642	2
246	In vitro and in vivo advancement of multifunctional electrospun nanofiber scaffolds in wound healing applications: Innovative nanofiber designs, stem cell approaches, and future perspectives. <b>2021</b> ,	8
245	Biocompatibility evaluation of micro textures coated with zinc oxide on Ti-6Al-4V treated by nanosecond laser. <b>2021</b> , 422, 127453	3
244	Bioactive glass with biocompatible polymers for bone applications. <b>2021</b> , 160, 110801	3
243	Analysis of Actin and Focal Adhesion Organisation in U2OS Cells on Polymer Nanostructures. <b>2021</b> , 16, 143	1
242	Biological effects, applications and strategies of nanomodification of dental metal surfaces. <b>2021</b> , 207, 109890	1
241	0D/1D Heterojunction Implant with Electro-Mechanobiological Coupling Cues Promotes Osteogenesis. <i>Advanced Functional Materials</i> , 2106249	15.6 7
240	Colored and Luminescent Silk. 1-14	

239	Porous micro/nano structured oxidic titanium surface decorated with silicon monoxide. <b>2021</b> , 26, 101304	1
238	3D-bioprinted gradient-structured scaffold generates anisotropic cartilage with vascularization by pore-size-dependent activation of HIF1 $\alpha$ /FAK signaling axis. <b>2021</b> , 37, 102426	5
237	Tissue engineering, 3D-Bioprinting, morphogenesis modelling and simulation of biostructures: Relevance, underpinning biological principles and future trends. <b>2021</b> , 24, e00171	3
236	Mechanism of zirconia microgroove surface structure for osseointegration. <b>2021</b> , 12, 100159	0
235	Polyacrylonitrile (PAN) nanofiber mats for mushroom mycelium growth investigations and formation of mycelium-reinforced nanocomposites. <b>2021</b> , 16, 155892502110379	1
234	Combined effect of shear stress and laser-patterned topography on Schwann cell outgrowth: synergistic or antagonistic?. <b>2021</b> , 9, 1334-1344	3
233	Biomimetic Approaches Towards Device-Tissue Integration. <b>2021</b> , 1-26	
232	Biocompatibility and biosafety of butterfly wings for the clinical use of tissue-engineered nerve grafts. <b>2021</b> , 16, 1606-1612	3
231	Nanoscale Topographies for Corneal Endothelial Regeneration. <b>2021</b> , 11, 827	1
230	Chapter 3:Biomimetic and Collagen-based Biomaterials for Biomedical Applications. <b>2021</b> , 61-87	1
229	Molecular Engineering of Peptides for Cellular Adhesion Control. 283-317	1
228	Controlling Biological Functionalization of Surfaces by Engineered Peptides. 137-150	2
227	Strategy for a Biomimetic Paradigm in Dental and Craniofacial Tissue Engineering. 119-162	2
226	Phage Display as a Strategy for Designing Organic/Inorganic Biomaterials. <b>2009</b> , 115-132	3
225	Functionalization of surfaces with synthetic oligonucleotides. <b>2012</b> , 811, 89-100	1
224	Spatial and Electrical Factors Regulating Cardiac Regeneration and Assembly. <b>2015</b> , 71-92	3
223	Design and Integration of a Nanohybrid Functional Biomaterial with Enhanced Mechanical and Thermal Properties. <b>2015</b> , 55-67	1
222	Biomaterial-Related Approaches: Surface Structuring. <b>2009</b> , 469-484	8

221	Raman Spectroscopy: A Tool for Tissue Engineering. <b>2010</b> , 419-437	5
220	Nanomedicine: The Medicine of Tomorrow. <b>2012</b> , 1-26	4
219	Biomimetic Assemblies by Matrix-Assisted Pulsed Laser Evaporation. <b>2013</b> , 111-141	5
218	Laser-Based Biomimetic Tissue Engineering. <b>2013</b> , 211-236	2
217	Microscale Biomaterials for Tissue Engineering. <b>2011</b> , 119-138	1
216	Biofabrication Strategies for Tissue Engineering. <b>2011</b> , 137-176	19
215	Nanotechnology's Impact on Cell Transplantation. <b>2007</b> , 611-627	1
214	Biomimetic micro/nano structures for biomedical applications. <b>2020</b> , 35, 100980	32
213	The Calcium Phosphate Modified Titanium Implant Combined With Platelet-Rich Plasma Treatment Promotes Implant Stabilization in an Osteoporotic Model. <b>2021</b> , 32, 603-608	3
212	Revealing the cell-material interface with nanometer resolution by FIB-SEM.	1
211	Analysis of actin and focal adhesion organisation in U2OS cells on polymer nanostructures.	1
210	Biopolymers in Regenerative Medicine: Overview, Current Advances and Future Trends. <b>2016</b> , 1-37	1
209	Nanostructures for Musculoskeletal Tissue Engineering. <b>2008</b> , 329-351	2
208	Biocompatible 2D and 3D Polymeric Scaffolds for Medical Devices. <b>2014</b> , 229-253	1
207	Stem cell therapy with overexpressed VEGF and PDGF genes improves cardiac function in a rat infarct model. <b>2009</b> , 4, e7325	68
206	Enhanced growth and osteogenic differentiation of human osteoblast-like cells on boron-doped nanocrystalline diamond thin films. <b>2011</b> , 6, e20943	53
205	Quantitative characterization of the influence of the nanoscale morphology of nanostructured surfaces on bacterial adhesion and biofilm formation. <b>2011</b> , 6, e25029	206
204	Chondrogenic Differentiation of Human Mesenchymal Stem Cells on a Patterned Polymer Surface. <b>2015</b> , 47, 117-124	2

203	Combined Porogen Leaching and Emulsion Templating to produce Bone Tissue Engineering Scaffolds. <b>2020</b> , 6, 265	11
202	Biomimetic Nanostructures with Compositional Gradient Grown by Combinatorial Matrix-Assisted Pulsed Laser Evaporation for Tissue Engineering. <b>2020</b> , 27, 903-918	3
201	Nanoscale Surface Modifications of Orthopaedic Implants: State of the Art and Perspectives. <b>2016</b> , 10, 920-938	10
200	Study of the Properties and Cells Growth on Antibacterial Electrospun Polycaprolactone/Cefuroxime Scaffolds. <b>2020</b> , 20, 312-318	1
199	Investigation of microalgae growth on electrospun nanofiber mats. <b>2017</b> , 4, 376-385	23
198	Role of Modern Technologies in Tissue Engineering. <b>2020</b> , 7,	3
197	Modification of the surface nanotopography of implant devices: A translational perspective. <b>2021</b> , 12, 100152	6
196	Bioactive Synthetic Polymers. <b>2021</b> , e2105063	11
195	Tissue engineering ECM-enriched controllable vascularized human microtissue for hair regenerative medicine using a biomimetic developmental approach.. <b>2022</b> , 38, 77-89	1
194	Recent developments and future perspectives on neuroelectronic devices. <b>2021</b> ,	1
193	Modern approaches on stem cells and scaffolding technology for osteogenic differentiation and regeneration. <b>2021</b> , 15353702211052927	3
192	Interfacing Live Cells with Surfaces: A Concurrent Control Technique for Quantifying Surface Ligand Activity.. <i>ACS Applied Bio Materials</i> , <b>2021</b> , 4, 7856-7864	4.1 1
191	Time dependent adhesion of cells on nanorough surfaces. <b>2021</b> , 129, 110814	1
190	Engineered Cell-Adhesive Nanoparticles Nucleate Extracellular Matrix Assembly. <b>2007</b> , 070110120913001	
189	Nanostructured Materials Constructed from Polypeptides. <b>2009</b> , 96-127	
188	Micro- and Nanoscale Technologies in High-Throughput Biomedical Experimentation. <b>2009</b> , 314-346	
187	Nanoscale Control of Hetero-biointerfaces. <b>2009</b> , 30, 193-201	
186	Nanoscale Bioactive Surfaces and Endosseous Implantology. <b>2009</b> , 428-450	1

185 Polymeric Scaffolds for Regenerative Medicine. **2009**, 467-495

184 Nanoengineered Systems for Tissue Engineering and Regeneration. 361

1

183 Diblock Copolymer Micelle Nanolithography: Characteristics and Applications. 291

182 Modelling bone tissue engineering. Towards an understanding of the role of scaffold design parameters. **2011**, 71-90

1

181 Microfluidic Cell Culture Devices. **2011**, 966-1031

180 Microtechnological Approaches in Stem Cell Science. **2012**, 135-165

179 Stem Cell Response to Biomaterial Topography. **2012**, 299-326

1

178 A Role for Electrochemical Synthesis in Bioceramic Composite Materials. 3-13

177 Control of Mesenchymal Stem Cells with Biomaterials. **2013**, 139-159

176 Design of a Nanobiomaterial from Renewable Resources. **2013**, 293-302

175 The Potential Use of Three-Dimensional Cellular Multilayers as a Blood Vessel Model. **2014**, 95-129

174 MC3T3-E1 osteoblast adhesion to laser induced hydroxyapatite coating on Ti alloy. **2014**, 1, 81-93

173 Nanofiber Structured Polymeric Tissue Scaffolds. **2014**, 38-50

0

172 Applications of Nanomaterials for Activation and Suppression of Immune Responses. **2015**, 205-220

171 Biological Events Occuring on the BiosisAbiosis Interface: Cellular Responses Induced by Implantable Electrospun Nanofibrous Scaffolds. **2015**, 3-16

170 Polymer Gradient Surfaces for Biomedical Applications. **2015**, 93-122

169 Membrane Modification by CVD Polymers. 279-300

168 Silk Natural Nanofibers. 7244-7254

167 Films: Stimuli-Responsive Biothin Films. 3409-3419

166 Nanotechnology for Bone and Cartilage Engineering. **2016**, 10, 805-807

165 2. Designing Scaffolds for Bone Tissue Engineering. **2016**, 19-40

1

164 Dielectric Barrier Discharge: Biomaterials. **2016**, 367-380

163 Progress in Nanomaterials Applications for Water Purification. **2017**, 1-24

0

162 Applications of Nanomaterials for Activation and Suppression of Immune Responses. **2017**, 859-875

161 Biomimetic Materials. **2017**, 189-213

160 Alkaline phosphatase levels of murine pre-osteoblastic cells on anodized and annealed titanium surfaces. **2018**, 52, 12-19

0

159 Nanotechnology-Based Stem Cell Tissue Engineering with a Focus on Regeneration of Cardiovascular Systems. **2019**, 1-67

0

158 Biomaterials for Cranio-Maxillofacial Bone Engineering. **2019**, 7-25

157 DLITE: Dynamic Local Intercellular Tension Estimation.

156 Correlating surface plasmon resonance microscopy of living and fixated cells with electron microscopy allows for investigation of potential preparation artifacts.

155 microRNA Modulation. **2020**, 511-576

154 Three-dimensional cell cultivation systems. **2020**, 36, 182-196

1

153 Combined Effect of Shear Stress and Laser-Patterned Topography on Schwann cell Outgrowth: Synergistic or Antagonistic?.

152 A Facile Method for Simultaneous Visualization of Wet Cells and Nanostructured Biomaterials in SEM using Ionic Liquids.

151 NanoZnO-modified titanium implants for enhanced anti-bacterial activity, osteogenesis and corrosion resistance. **2021**, 19, 353

13

150 Mechanochemical Regulation of Cell Adhesion by Incorporation of Synthetic Polymers to Plasma Membranes. **2021**, 37, 366-375

1

149	Novel and Emerging Materials Used in 3D Printing for Oral Health Care. <b>2020</b> , 317-336	
148	Nanoscaffolds for neural regenerative medicine. <b>2020</b> , 47-88	0
147	Nanobiomaterials in musculoskeletal regeneration. <b>2020</b> , 43-76	0
146	Evolution of the structural polymorphs of poly(l-lactic acid) during the in vitro mineralization of its hydroxyapatite nanocomposites by attenuated total reflection fourier transform infrared mapping coupled with principal component analysis. <b>2021</b> , 236, 124318	1
145	Quantifying the dynamics of long-range cell-cell mechanical communication.	
144	Novel Composite Membrane Guides Cortical Bone Regeneration. <b>2009</b> , 1373-1376	
143	Study of adhesion and migration dynamics in ubiquitin E3A ligase (UBE3A)-silenced SY5Y neuroblastoma cells by micro-structured surfaces. <b>2021</b> , 32, 025708	2
142	Scaffold Design for Nerve Regeneration. <b>2021</b> , 257-283	
141	Reversible coating of cells with synthetic polymers for mechanochemical regulation of cell adhesion.	
140	Stem cell behaviors on periodic arrays of nanopillars analyzed by high-resolution scanning electron microscope images. <b>2020</b> , 50, 26	
139	Scanning probe recognition microscopy investigation of tissue scaffold properties. <b>2007</b> , 2, 651-61	4
138	Human Bone Marrow Mesenchymal Stem Cell Behaviors on PCL/Gelatin Nanofibrous Scaffolds Modified with A Collagen IV-Derived RGD-Containing Peptide. <b>2014</b> , 16, 1-10	26
137	Functional peptides for cartilage repair and regeneration. <b>2018</b> , 10, 501-510	1
136	Enhancing the Surface Properties of a Bioengineered Anterior Cruciate Ligament Matrix for Use with Point-of-Care Stem Cell Therapy. <b>2021</b> , 7, 153-161	3
135	Nanofabrication through molding. <b>2022</b> , 125, 100891	4
134	Bioactive injectable hydrogels for on demand molecule/cell delivery and for tissue regeneration in the central nervous system. <i>Acta Biomaterialia</i> , <b>2021</b> , 140, 88-88	10.8 2
133	Locally Injectable Hydrogels for Tumor Immunotherapy. <b>2021</b> , 7,	6
132	A dynamic duo. <i>Science</i> , <b>2021</b> , 374, 825-826	33.3 2



131	Design of 3D Scaffolds for Hard Tissue Engineering: From Apatites to Silicon Mesoporous Materials. <b>2021</b> , 13,	3
130	Toward stronger robocast calcium phosphate scaffolds for bone tissue engineering: A mini-review and meta-analysis.. <b>2021</b> , 112578	4
129	Hierarchical Piezoresponse in Collagen. 2101166	0
128	Structural alignment guides oriented migration and differentiation of endogenous neural stem cells for neurogenesis in brain injury treatment. <b>2021</b> , 280, 121310	2
127	Naphthalenephenylalanine-phenylalanine-glycine-arginine-glycine-aspartic promotes self-assembly of nephron progenitor cells in decellularized scaffolds to construct bioengineered kidneys.. <b>2021</b> , 112590	0
126	Biomimetic Hydroxyapatite Nanorods Promote Bone Regeneration Accelerating Osteogenesis of BMSCs through T Cell-Derived IL-22.. <b>2022</b> ,	5
125	Phenotypic change of mesenchymal stem cells into smooth muscle cells regulated by dynamic cell-surface interactions on patterned arrays of ultrathin graphene oxide substrates.. <b>2022</b> , 20, 17	1
124	A facile approach to fabricate load-bearing porous polymer scaffolds for bone tissue engineering. 1	3
123	Perspectives of future lung toxicology studies using human pluripotent stem cells.. <b>2022</b> ,	1
122	Nucleic Acid-Based Cell Surface Engineering Strategies and Their Applications.. <i>ACS Applied Bio Materials</i> , <b>2022</b> ,	4.1 2
121	The Galapagos Chip Platform for High-Throughput Screening of Cell Adhesive Chemical Micropatterns.. <b>2022</b> , e2105704	1
120	Biomedical applications of electrospun chitosan nanofibers. <b>2022</b> , 75-110	
119	Cell Adhesion Assessment Reveals a Higher Force per Contact Area on Fibrous Structures Compared to Flat Substrates.. <b>2022</b> ,	0
118	Combination of 3D Printing and Electrospinning Techniques for Biofabrication. 2101309	2
117	Chemical/Biological approaches for the direct regulation of cell/cell aggregation.	
116	High efficiency biomimetic electrospun fibers for use in regenerative medicine and drug delivery: A review. <b>2022</b> , 279, 125785	1
115	Recent advances in renewable polymer/metal oxide systems used for tissue engineering. <b>2022</b> , 395-445	
114	Advances in Nanoenabled 3D Matrices for Cartilage Repair.	

- 113 Construction of vascularized oral mucosa equivalents using a layer-by-layer cell coating technology. **2022**, 68, 53-68
- 112 Cell Membrane-Cloaked Nanotherapeutics for Targeted Drug Delivery.. **2022**, 23, 7
- 111 Bidirectional Supramolecular Display and Signal Amplification on the Surface of Living Cells.. *Biomacromolecules*, **2022**, 6.9
- 110 Influence of Extracellular Cues of Hydrogel Biomaterials on Stem Cell Fate.. **2022**, 1-22
- 109 A comprehensive review on methods for promotion of mechanical features and biodegradation rate in amniotic membrane scaffolds.. **2022**, 33, 32 0
- 108 ABSTRACTS (BY NUMBER). **2022**, 28, S-1-S-654
- 107 Bioprinting of Cell-Laden Hydrogels onto Titanium Alloy Surfaces to Produce a Bioactive Interface.. **2022**, e2200071
- 106 Modification of polyether ether ketone for the repairing of bone defects.. **2022**, 1
- 105 Biopolymer-Based Scaffolds for Bone and Tissue Engineering. **2022**, 33-61
- 104 Endowing Polyetheretherketone Implants with Osseointegration Properties: In Situ Construction of Patterned Nanorod Arrays.. **2021**, e2105589 5
- 103 Melt electro-written scaffolds with box-architecture support orthogonally-oriented collagen. **2021**, 1
- 102 3D Printed Biocatalytic Living Materials with Dual-Network Reinforced Bioinks. **2021**, e2104820 4
- 101 Static and Dynamic Biomaterial Engineering for Cell Modulation.. **2022**, 12, 1
- 100 Microporous Spongy Scaffolds Based on Biodegradable Elastic Polyurethanes for the Migration and Growth of Host Cells. 0
- 99 Challenges and limits of mechanical stability in 3D direct laser writing.. **2022**, 13, 2115 5
- 98 A novel gene-activated matrix composed of PEI/plasmid-BMP2 complexes and hydroxyapatite/chitosan-microspheres promotes bone regeneration. 1
- 97 Image\_1.JPEG. **2018**,
- 96 Image\_2.JPEG. **2018**,

95 Image\_3.JPEG. **2018,**

94 Image\_4.JPEG. **2018,**

93 Image\_5.JPEG. **2018,**

92 Image\_6.PNG. **2018,**

91 Data\_Sheet\_1.docx. **2020,**

90 Video\_1.AVI. **2020,**

89 Image\_1.pdf. **2018,**

88 Understanding Hydrogels and Insight on the Latest Hydrogel Applications in Pharmaceutical and Allied Sciences. **2022,** 281-308

87 Biomimetic biphasic curdlan-based scaffold for osteochondral tissue engineering applications □ Characterization and preliminary evaluation of mesenchymal stem cell response in vitro. **2022,** 212724 1

86 Porous Scaffold-Hydrogel Composites Spatially Regulate 3D Cellular Mechanosensing.. **2022,** 4, 884314 1

85 Expansion Microscopy for Imaging the Cell-Material Interface.. **2022,** 2

84 Emerging tissue engineering strategies for the corneal regeneration.. **2022,** 0

83 Metallic glass nanostructures: Forming strategies and functional applications. **2022,** 15, 100253 0

82 Everything You Always Wanted to Know About Organoid-Based Models (and Never Dared to Ask). **2022,** 0

81 Hydrogels for Tissue Engineering: Addressing Key Design Needs Toward Clinical Translation. **2022,** 10, 1 1

80 Polydopamine Biomaterials for Skin Regeneration. 3

79 Development of Innovative Biomaterials and Devices for the Treatment of Cardiovascular Diseases. 2201971 5

78 Nano-enabled systems for neural tissue regenerative applications. **2022,** 623-648

77	Low-Stiffness Hydrogels Promote Peripheral Nerve Regeneration Through the Rapid Release of Exosomes. 10,		
76	Construction of Customized Bio Incubator and Designing of Tailored Scaffolds for Bone Tissue Engineering from Laboratory Scale Up to Clinical Scale. <i>Journal of Renewable Materials</i> , <b>2022</b> , 10, 2699-2716		
75	Engineering living cells with cucurbit[7]uril-based supramolecular polymer chemistry: from cell surface engineering to manipulation of subcellular organelles. <i>Chemical Science</i> ,	9.4	0
74	Effect of Sulfonation Group on Polyaniline Copolymer Scaffolds for Tissue Engineering with Laminin Treatment under Electrical Stimulation. <i>ACS Applied Bio Materials</i> ,	4.1	1
73	Polymer Texture Influences Cell Responses in Osteogenic Microparticles. <i>Cellular and Molecular Bioengineering</i> ,	3.9	
72	The Role of the Extracellular Matrix (ECM) in Wound Healing: A Review. <i>Biomimetics</i> , <b>2022</b> , 7, 87	3.7	8
71	Construction and Properties of Simvastatin and Calcium Phosphate Dual-Loaded Coaxial Fibrous Membranes with Osteogenic and Angiogenic Functions. <i>Journal of Bionic Engineering</i> ,	2.7	
70	Bioengineering approaches for modelling retinal pathologies of the outer blood-retinal barrier. <i>Progress in Retinal and Eye Research</i> , <b>2022</b> , 101097	20.5	
69	Biointerface Engineering with Nucleic Acid Materials for Biosensing Applications. <i>Advanced Functional Materials</i> , 2201069	15.6	2
68	Discovering the effect of solvents on poly(2-aminoethyl methacrylate) grafting onto chitosan for an in vitro skin model. <i>Carbohydrate Polymers</i> , <b>2022</b> , 119864	10.3	0
67	Mimicking the Natural Basement Membrane for Advanced Tissue Engineering. <i>Biomacromolecules</i> ,	6.9	3
66	Exosome-mediated transduction of mechanical force regulates prostate cancer migration via microRNA. <i>Biochemistry and Biophysics Reports</i> , <b>2022</b> , 31, 101299	2.2	
65	Bacterial cellulose reinforced chitosan-based hydrogel with highly efficient self-healing and enhanced antibacterial activity for wound healing. <i>International Journal of Biological Macromolecules</i> , <b>2022</b> , 217, 77-87	7.9	3
64	Cellular Flocculation Driven by Concentrated Polymer Brush-Modified Cellulose Nanofibers with Different Surface Charges. <i>Biomacromolecules</i> ,	6.9	
63	TiO <sub>2</sub> Nanotopography-Driven Osteoblast Adhesion through Coulomb Force Evolution. <i>ACS Applied Materials &amp; Interfaces</i> ,	9.5	
62	Advances in nanoenabled 3D matrices for cartilage repair. <i>Acta Biomaterialia</i> , <b>2022</b> ,	10.8	1
61	Natural biopolyester microspheres with diverse structures and surface topologies as micro-devices for biomedical applications. <i>Smart Materials in Medicine</i> , <b>2022</b> ,	12.9	3
60	Non-destructive Two-Dimensional Motion Measurement of Cardiomyocytes Based on Hough Transform. <b>2022</b> , 559-567		

- 59 Water as the often neglected medium at the interface between materials and biology. **2022**, 13, 0
- 58 Correction of large jaw bone defect in the mouse using immature osteoblast-like cells and a three dimensional polylactic acid scaffold.
- 57 Towards osteogenic bioengineering of human dental pulp stem cells induced by incorporating *Prunus amygdalus dulcis* extract in polycaprolactone-gelatin nanofibrous scaffold. 0
- 56 Investigating the Transient Regenerative Potential of Cardiac Muscle Using a Neonatal Pig Partial Apical Resection Model. **2022**, 9, 401 1
- 55 Ice-templated synthesis of multicomponent porous coatings via vapour sublimation and deposition polymerization. **2022**, 100403 1
- 54 Topographic Orientation of Scaffolds for Tissue Regeneration: Recent Advances in Biomaterial Design and Applications. **2022**, 7, 131 2
- 53 Nanoarchitectonics beyond perfect order [not quite perfect but quite useful]. 0
- 52 Bioactive glass-based fibrous wound dressings. **2022**, 10, 1
- 51 Nanocomposite scaffolds and coatings for wound healing and infection control. **2023**, 69-99 0
- 50 Plant Tissue Parenchyma and Vascular Bundles Selectively Regulate Stem Cell Mechanosensing and Differentiation. 0
- 49 Metal Ion Doping of Alginate-Based Surface Coatings Induces Adipogenesis of Stem Cells. 1
- 48 Polycaprolactone/Gelatin/Hydroxyapatite Electrospun Nanomembrane Materials Incorporated with Different Proportions of Attapulgit Synergistically Promote Bone Formation. Volume 17, 4087-4103 0
- 47 Self-assembling peptide-laden electrospun scaffolds for guided mineralized tissue regeneration. **2022**, 0
- 46 Morphing-to-Adhesion Polysaccharide Hydrogel for Adaptive Biointerfaces. **2022**, 14, 42420-42429 1
- 45 A bone-on-a-chip collagen hydrogel-based model using pre-differentiated adipose-derived stem cells for personalized bone tissue engineering. 1
- 44 High Strength and High Toughness Electrospun Multifibrillar Yarns with Highly Aligned Hierarchy Intended as Anisotropic Extracellular Matrix. 2200291 0
- 43 Hydrothermal Desulfurization on Porous Sulfonated CFR-PEEK Surface Structure Used for Implant Application. 0
- 42 Mechanobiology and Applications in Biomaterials for Soft Tissue Repair and Regeneration. **2022**, 0

- 41 Three-Dimensional Bioprinting of Naturally Derived Protein-Based Biopolymers. **2022**, 363-377 o
- 40 The Design of 3D-Printed Polylactic Acid/Bioglass Composite Scaffold: A Potential Implant Material for Bone Tissue Engineering. **2022**, 27, 7214 1
- 39 Nanocomposite Biomaterials for Tissue Engineering and Regenerative Medicine Applications. o
- 38 Strong and tough collagen/cellulose nanofibril composite films via the synergistic effect of hydrogen and metal-ligand bonds. **2022**, 180, 111628 o
- 37 Self-Assembled Nanomaterials. **2022**, 95-113 o
- 36 Preparation, Mechanism and Bioactivity of Nano-Hydroxyapatite/Poly(DTH carbonate) Composite Bone Repair Material. **2022**, 14, 1065-1074 o
- 35 Applications of carbon dots and its modified carbon dots in bone defect repair. **2022**, 16, o
- 34 The addition of carbon nanotubes modifies the biological, physicochemical, and electrical properties of carbon nanofiber composites. **2022**, 140617 o
- 33 Research Progress of Shape Memory Polymer and 4D Printing in Biomedical Application. 2201975 1
- 32 Development of 3D-Printed, Biodegradable, Conductive PGSA Composites for Nerve Tissue Regeneration. 2200470 o
- 31 Injectable 2D flexible hydrogel sheets for optoelectrical/biochemical dual stimulation of neurons. **2023**, 213284 o
- 30 Structure-Based Design of Dual Bactericidal and Bacteria-Releasing Nanosurfaces. **2023**, 15, 3420-3432 o
- 29 Nanotechnology for Biomedical Applications. **2023**, 297-327 o
- 28 In-situ construction of the nanostructured TiO<sub>2</sub>/TiN composite films by induction heat treatment: Improved mechanical, corrosion, and biological properties. **2023**, 614, 156300 o
- 27 Design and fabrication of polyvinylidene fluoride-graphene oxide/gelatine nanofibrous scaffold for cardiac tissue engineering. 1-22 o
- 26 Current approaches in nanofiber-based drug delivery systems: methods and applications. **2023**, 39-71 o
- 25 Substitute for orthognathic surgery using bioprinted bone scaffolds in restoring osseous defects. **2023**, 335-347 o
- 24 Configurational Entropy-Enabled Thermostability of Cell Membranes in Extremophiles: From Molecular Mechanism to Bioinspired Design. **2023**, 23, 1109-1118 o

- 23 From understanding bacterial interactions to developing bactericidal surfaces. **2023**, 41-57 ○
- 22 Nanofibrous scaffolds for tissue engineering processes. **2023**, 213-226 ○
- 21 Direct laser biofabrication of scaffolds for neural tissue engineering. **2023**, 151-176 ○
- 20 Biomimetic Approaches Towards Device-Tissue Integration. **2023**, 261-286 ○
- 19 3D Culturing of Stem Cells: An Emerging Technique for Advancing Fundamental Research in Regenerative Medicine. ○
- 18 Towards a Material-by-Design Approach to Electrospun Scaffolds for Tissue Engineering Based on Statistical Design of Experiments (DOE). **2023**, 16, 1539 ○
- 17 Incorporation of strontium-containing bioactive particles into PEOT/PBT electrospun scaffolds for bone tissue regeneration. **2023**, 149, 213406 ○
- 16 Thermomechanical characteristics of green nanofibers made from polylactic acid: An insight into tensile behavior via molecular dynamics simulation. **2023**, 181, 104640 ○
- 15 Cyclodextrin regulated natural polysaccharide hydrogels for biomedical applications-a review. **2023**, 313, 120760 ○
- 14 Immobilization of Actinobacillus succinogenes on nano- and micro-fiber membranes for efficient and robust production of succinic acid. **2023**, 46, 611-620 ○
- 13 Sequential Control of Cellular Interactions Using Dynamic DNA Displacement. **2023**, 23, 1167-1174 ○
- 12 Polymeric Materials, Advances and Applications in Tissue Engineering: A Review. **2023**, 10, 218 ○
- 11 Multifunctional polylactide composites. **2023**, 279-350 ○
- 10 Cells Responses to Surface Geometries and Potential of Electrospun Fibrous Scaffolds. **2023**, 445-464 ○
- 9 A Three-Dimensional Engineered Cardiac In Vitro Model: Controlled Alignment of Cardiomyocytes in 3D Microphysiological Systems. **2023**, 12, 576 ○
- 8 Cell-Selective Multifunctional Surface Covalent Reconfiguration Using Aptamer-Enabled Proximity Catalytic Labeling. **2023**, 145, 5092-5104 ○
- 7 Cytotoxicity, Corrosion and Electrochemical Stability of Titanium Dental Implants. **2023**, 219-253 ○
- 6 A Study on the Effect of Doping Metallic Nanoparticles on Fracture Properties of Polylactic Acid Nanofibres via Molecular Dynamics Simulation. **2023**, 13, 989 ○

- 5 Bone regeneration by biodegradable polymers. **2022**, 61, 816-845 o
- 4 Nanostructured materials for bone tissue replacement. **2023**, 189-211 o
- 3 Inorganic bionanocomposites for bone tissue engineering. **2023**, 589-619 o
- 2 Biofunctionalized 3D printed structures for biomedical applications: A critical review of recent advances and future prospects. **2023**, 137, 101124 o
- 1 Effective elastic properties of loosely connected fibrous bio-inspired materials. **2023**, 104117 o