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Porous scaffold design for tissue engineering

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2348	Automated quantitative assessment of three-dimensional bioprinted hydrogel scaffolds using optical coherence tomography. 2016 , 7, 894		
2347	Photophysical mechanisms of collagen modification by 80 MHz femtosecond laser. 2010 , 18, 24037		
2346	Photophysical mechanisms of collagen modification by 80 MHz femtosecond laser. 2010 , 18, 24037		
2345	Photophysical mechanisms of collagen modification by 80 MHz femtosecond laser. 2010 , 18, 24037		
2344	3D scaffold fabrication by mask projection excimer laser stereolithography. 2014 , 4, 2032		
2343	Automated quantitative assessment of three-dimensional bioprinted hydrogel scaffolds using optical coherence tomography. 2016 , 7, 894		
2342	The design of scaffolds for use in tissue engineering. Part II. Rapid prototyping techniques. 2002 , 8, 1-11		616
2341	Precision extruding deposition and characterization of cellular poly-ε-caprolactone tissue scaffolds. 2004 , 10, 42-49		191
2340	Inductive tissue engineering with protein and DNA-releasing scaffolds. 2006 , 2, 36-48		62
2339	Chapter 1 Scope of Tissue Engineering. 2006 , 1-89		3
2338	Craniofacial tissue engineering by stem cells. 2006 , 85, 966-79		279
2337	Amorphous linear aliphatic polyesters for the facile preparation of tunable rapidly degrading elastomeric devices and delivery vectors. 2006 , 128, 13625-33		62
2336	Melt coaxial electrospinning: a versatile method for the encapsulation of solid materials and fabrication of phase change nanofibers. 2006 , 6, 2868-72		281
2335	Templating methods for preparation of porous structures. 2006 , 16, 637-648		170
2334	Advanced tools for tissue engineering: scaffolds, bioreactors, and signaling. 2006 , 12, 3285-305		223
2333	Scaffolds for Cell and Tissue Engineering. 2006 ,		1

2332	Internal Structure Evaluation of Three-Dimensional Calcium Phosphate Bone Scaffolds: A Micro-Computed Tomographic Study. 2006 , 89, 3176-3181		6
2331	Erratum: Porous scaffold design for tissue engineering. <i>Nature Materials</i> , 2006 , 5, 590-590	27	69
2330	Sintering and robocasting of beta-tricalcium phosphate scaffolds for orthopaedic applications. 2006 , 2, 457-66		249
2329	Minute changes in composition of polymer substrates produce amplified differences in cell adhesion and motility via optimal ligand conditioning. 2006 , 2, 473-82		10
2328	Porous Ti6Al4V scaffold directly fabricating by rapid prototyping: preparation and in vitro experiment. 2006 , 27, 1223-35		179
2327	Development of a large titanium bone chamber to study in vivo bone ingrowth. 2006 , 27, 1810-6		12
2326	Framework for optimal design of porous scaffold microstructure by computational simulation of bone regeneration. 2006 , 27, 3964-72		236
2325	Polymer hollow fiber three-dimensional matrices with controllable cavity and shell thickness. 2006 , 27, 5918-26		72
2324	Modulations of 17-beta estradiol on osteogenic and adipogenic differentiations of human mesenchymal stem cells. 2006 , 12, 2747-53		95
2323	Electric field driven jetting: an emerging approach for processing living cells. 2006 , 1, 86-94		70
2322	Application of inkjet printing to tissue engineering. 2006 , 1, 910-7		604
2321	Heart valve tissue engineering: concepts, approaches, progress, and challenges. 2006 , 34, 1799-819		232
2320	Mineralization capacity of Runx2/Cbfa1-genetically engineered fibroblasts is scaffold dependent. 2006 , 27, 5535-45		41
2319	Menger sponge-like fractal body created by a novel template method. 2006 , 125, 124706		39
2318	Fabrication and In-Vitro Characterization of Three-Dimensional Composite Scaffolds by Robocasting for Biomedical Applications. 2006 , 49, 153-158		1
2317	Mechanical Behavior of Complex 3D Calcium Phosphate Cement Scaffolds Fabricated by Indirect Solid Freeform Fabrication In Vivo. 2006 , 309-311, 957-960		8
2316	Scaffolds for liver tissue engineering. 2006 , 3, 21-7		41
2315	[First results of the investigation of the stability and tissue integration of a degradable, elastomeric copolymer in an animal model]. 2006 , 51, 116-24		8

2314	COMPUTATIONAL MODELING OF TISSUE SELF-ASSEMBLY. 2006 , 20, 1217-1231	33
2313	Commentary: engineering of tissue healing and regeneration. 2007 , 13, 1393-8	38
2312	Nanotechnology and Tissue Engineering: The Scaffold Based Approach. 2007 ,	2
2311	Development of biodegradable scaffolds for tissue engineering: a perspective on emerging technology. 2007 , 23, 379-391	62
2310	Micro- and Nanofabricated Scaffolds. 2007 , 341-358	4
2309	Three-Dimensional Scaffolds. 2007 , 359-373	14
2308	In vitro vascularization of human connective microtissues. 2007 , 140, 153-66	8
2307	Anatomical 3D fiber-deposited scaffolds for tissue engineering: designing a neotrachea. 2007 , 13, 2483-93	32
2306	Ceramic biomaterials. 2007 , 3-31	7
2305	Cell-based cardiac pumps and tissue-engineered ventricles. 2007 , 2, 391-406	22
2304	Novel Micro-CT Based 3-Dimensional Structural Analyses of Porous Biomaterials. 2007 , 330-332, 967-970	2
2303	Fabrication of Hierarchically Porous Bioactive Glass Ceramics. 2007 , 361-363, 285-288	3
2302	Engineering Functional Tissues. 2007 , 137-153	7
2301	Artificial Bone and Teeth through Controlled Ice Growth in Colloidal Suspensions. 2007 ,	2
2300	Porous biphasic scaffolds and coatings for biomedical applications via morphology transition of nanorods. 2007 , 18, 475604	12
2299	In vitro formation of capillary networks using optical lithographic techniques. 2007 , 358, 692-7	29
2298	Fibronectin, vitronectin, and collagen I induce chemotaxis and haptotaxis of human and rabbit mesenchymal stem cells in a standardized transmembrane assay. 2007 , 16, 489-502	79
2297	Tissue-engineered cartilage constructs using composite hyaluronic acid/collagen I hydrogels and designed poly(propylene fumarate) scaffolds. 2007 , 13, 537-50	100

2296	Polymer Scaffold Fabrication. 2007 , 309-321	16
2295	Tissue Engineering. 2007 ,	4
2294	Construction of collagen scaffolds that mimic the three-dimensional architecture of specific tissues. 2007 , 13, 2387-94	103
2293	Tissue Engineering. 2007 ,	6
2292	Systems engineering challenges in inkjet biofabrication. 2007 ,	2
2291	Design of biphasic polymeric 3-dimensional fiber deposited scaffolds for cartilage tissue engineering applications. 2007 , 13, 361-71	46
2290	Cryogels from poly(2-hydroxyethyl methacrylate): macroporous, interconnected materials with potential as cell scaffolds. 2007 , 3, 1176-1184	99
2289	Synthesis, characterization, and in vitro degradation of a biodegradable photo-cross-linked film from liquid poly(epsilon-caprolactone-co-lactide-co-glycolide) diacrylate. 2007 , 8, 376-85	30
2288	Three-Dimensional Mesoporous/Macroporous Inorganic/Organic Composite Scaffolds for Tissue Engineering. 2007 , 19, 6363-6366	67
2287	Poly(propylene fumarate) bone tissue engineering scaffold fabrication using stereolithography: effects of resin formulations and laser parameters. 2007 , 8, 1077-84	226
2286	Biocompatible MWCNT scaffolds for immobilization and proliferation of E. coli. 2007 , 17, 2992-2995	68
2285	Cryogelation for preparation of novel biodegradable tissue-engineering scaffolds. 2007 , 18, 1165-79	52
2284	Design and preparation of bioactive glasses with hierarchical pore networks. 2007 , 2139-41	124
2283	Engineering the heart piece by piece: state of the art in cardiac tissue engineering. 2007 , 2, 125-44	36
2282	Postnatal Stem Cells. 2007 , 459-468	
2281	Finite Element Analysis of Meniscal Anatomical 3D Scaffolds: Implications for Tissue Engineering. 2007 , 1, 23-34	20
2280	Developmental biology and tissue engineering. 2007 , 81, 320-8	85
2279	SEM and 3D synchrotron radiation micro-tomography in the study of bioceramic scaffolds for tissue-engineering applications. 2007 , 97, 638-48	28

2278	Perfusion flow bioreactor for 3D in situ imaging: investigating cell/biomaterials interactions. 2007 , 97, 952-61	31
2277	Biodegradable magnesium scaffolds: Part 1: appropriate inflammatory response. 2007 , 81, 748-56	299
2276	Fabrication and in vitro characterization of three-dimensional organic/inorganic scaffolds by robocasting. 2007 , 83, 434-45	101
2275	Fracture modes under uniaxial compression in hydroxyapatite scaffolds fabricated by robocasting. 2007 , 83, 646-55	64
2274	Polymer scaffolds with interconnected spherical pores and controlled architecture for tissue engineering: fabrication, mechanical properties, and finite element modeling. 2007 , 81, 448-55	42
2273	Quantitative biorelevant profiling of material microstructure within 3D porous scaffolds via multiphoton fluorescence microscopy. 2007 , 82, 284-97	15
2272	Polarized protein membrane for high cell seeding efficiency. 2007 , 83, 472-80	7
2271	Macroporous gels prepared at subzero temperatures as novel materials for chromatography of particulate-containing fluids and cell culture applications. 2007 , 30, 1657-71	175
2270	Nanofoaming in the surface of biopolymers by femtosecond pulsed laser irradiation. 2007 , 254, 1179-1184	26
2269	Computational design of tissue engineering scaffolds. 2007 , 196, 2991-2998	86
2268	Enabling tools for tissue engineering. 2007 , 22, 2803-11	60
2267	Control of in vitro tissue-engineered bone-like structures using human mesenchymal stem cells and porous silk scaffolds. 2007 , 28, 1152-62	270
2266	One-step fabrication of porous micropatterned scaffolds to control cell behavior. 2007 , 28, 1998-2009	129
2265	Avidin-biotin binding-based cell seeding and perfusion culture of liver-derived cells in a porous scaffold with a three-dimensional interconnected flow-channel network. 2007 , 28, 3815-23	104
2264	A multi-functional scaffold for tissue regeneration: the need to engineer a tissue analogue. 2007 , 28, 5093-9	200
2263	Preparation of porous hydroxyapatite scaffolds. 2007 , 27, 546-550	106
2262	Development and characterization of photopolymerizable biodegradable materials from PEGPLA β EG block macromonomers. 2007 , 48, 6554-6564	65
2261	Prediction of elastic properties of heterogeneous materials with complex microstructures. 2007 , 55, 517-532	35

2260	Formation of poly(epsilon-caprolactone) scaffolds loaded with small molecules by integrated processes. 2007 , 40 Suppl 1, S80-8	29
2259	Developing a virtual materials laboratory. 2007 , 10, 44-51	143
2258	Computed tomography-based tissue-engineered scaffolds in craniomaxillofacial surgery. 2007 , 3, 207-16	87
2257	Design and fabrication of 3D-plotted polymeric scaffolds in functional tissue engineering. 2007 , 47, 608-618	33
2256	A biomimetic three-dimensional woven composite scaffold for functional tissue engineering of cartilage. <i>Nature Materials</i> , 2007 , 6, 162-7	27 572
2255	A tracer metric numerical model for predicting tortuosity factors in three-dimensional porous tissue scaffolds. 2007 , 87, 21-7	14
2254	Concepts of scaffold-based tissue engineering--the rationale to use solid free-form fabrication techniques. 2007 , 11, 654-69	207
2253	Periodontal regeneration using novel glycidyl methacrylated dextran (Dex-GMA)/gelatin scaffolds containing microspheres loaded with bone morphogenetic proteins. 2007 , 121, 81-90	72
2252	Matrices and scaffolds for DNA delivery in tissue engineering. 2007 , 59, 292-307	225
2251	Micromechanical control of cell and tissue development: implications for tissue engineering. 2007 , 59, 1306-18	173
2250	Design and Development of Three-Dimensional Scaffolds for Tissue Engineering. 2007 , 85, 1051-1064	332
2249	Scaffolds for Skeletal Regeneration. 2007 , 3, 104-106	5
2248	Nondestructive micro-computed tomography for biological imaging and quantification of scaffold-bone interaction in vivo. 2007 , 28, 2479-90	164
2247	Bone ingrowth in porous titanium implants produced by 3D fiber deposition. 2007 , 28, 2810-20	294
2246	Solid lipid templating of macroporous tissue engineering scaffolds. 2007 , 28, 3497-507	31
2245	A new approach to the rationale discovery of polymeric biomaterials. 2007 , 28, 4171-7	78
2244	Amino alcohol-based degradable poly(ester amide) elastomers. 2008 , 29, 2315-25	134
2243	Protein functionalized micro hydrogel features for cell-surface interaction. 2008 , 10, 567-71	7

2242	Design of graded two-phase microstructures for tailored elasticity gradients. 2008 , 43, 5157-5167	100
2241	A direct-electrospinning process by combined electric field and air-blowing system for nanofibrous wound-dressings. 2008 , 90, 389-394	32
2240	The U/Effect of electricity parameters of the lotus root silk in the liquor with different pH values. 2008 , 53, 1924-1928	
2239	Scaffolding in tissue engineering: general approaches and tissue-specific considerations. 2008 , 17 Suppl 4, 467-79	917
2238	Biomaterials for bone tissue engineering. 2008 , 11, 18-25	801
2237	Biomaterials engineered for integration. 2008 , 11, 44-51	62
2236	Biomimetic Synthesis of Collagen/Nano-Hydroxyapatite Scaffold for Tissue Engineering. 2008 , 5, 1-8	17
2235	Fabrication of porous substrates: a review of processes using pore forming agents in the biomaterial field. 2008 , 97, 1135-54	150
2234	Hybrid Process for Fabricating 3D Hierarchical Scaffolds Combining Rapid Prototyping and Electrospinning. 2008 , 29, 1577-1581	135
2233	Rapid-prototyped and salt-leached PLGA scaffolds condition cell morpho-functional behavior. 2008 , 85, 466-76	35
2232	Incorporation of growth factor containing Matrigel promotes vascularization of porous PLGA scaffolds. 2008 , 85, 397-407	66
2231	Mechanical properties of calcium phosphate scaffolds fabricated by robocasting. 2008 , 85, 218-27	212
2230	Osteogenic differentiation of human mesenchymal stem cells on chargeable polymer-modified surfaces. 2008 , 87, 903-12	37
2229	Novel 3D collagen scaffolds fabricated by indirect printing technique for tissue engineering. 2008 , 85, 519-28	83
2228	Mechanical and flow characterization of Sponceram carriers: Evaluation by homogenization theory and experimental validation. 2008 , 87, 42-8	31
2227	Hierarchically mesoporous-macroporous bioactive glasses scaffolds for bone tissue regeneration. 2008 , 87, 374-80	56
2226	Biomimetic macroporous hydrogel scaffolds in a high-throughput screening format for cell-based assays. 2008 , 24, 1373-83	22
2225	3D Fiber-Deposited Electrospun Integrated Scaffolds Enhance Cartilage Tissue Formation. 2008 , 18, 53-60	167

2224	Nanoporous Membranes of Hydrogen-bridged Smectic Networks with Nanometer Transverse Pore Dimensions. 2008 , 20, 1246-1252	60
2223	Biodegradable polymer tubes with lithographically controlled 3D micro- and nanotopography. 2008 , 85, 1350-1354	38
2222	Sintering behaviour of calcium phosphate filaments for use as hard tissue scaffolds. 2008 , 28, 159-167	42
2221	Multiwall carbon nanotube scaffolds for tissue engineering purposes. 2008 , 29, 94-102	360
2220	A microfabricated scaffold for retinal progenitor cell grafting. 2008 , 29, 418-26	121
2219	Development of specific collagen scaffolds to support the osteogenic and chondrogenic differentiation of human bone marrow stromal cells. 2008 , 29, 3105-16	86
2218	PEG-stabilized carbodiimide crosslinked collagen-chitosan hydrogels for corneal tissue engineering. 2008 , 29, 3960-72	308
2217	Morphology, mechanical characterization and in vivo neo-vascularization of chitosan particle aggregated scaffolds architectures. 2008 , 29, 3914-26	86
2216	A control approach for pore size distribution in the bone scaffold based on the hexahedral mesh refinement. 2008 , 40, 1040-1050	57
2215	Non-invasive monitoring of tissue scaffold degradation using ultrasound elasticity imaging. 2008 , 4, 783-90	103
2214	Osteoconduction and osteoinduction of low-temperature 3D printed bioceramic implants. 2008 , 29, 944-53	274
2213	Synthesis and characterization of biodegradable elastomeric polyurethane scaffolds fabricated by the inkjet technique. 2008 , 29, 3781-91	87
2212	Formation of hydroxyapatite on a self-organized 3D honeycomb-patterned biodegradable polymer film. 2008 , 313-314, 515-519	23
2211	Surface modification of poly(l-lactide) electrospun fibers with nanocrystal hydroxyapatite for engineered scaffold applications. 2008 , 28, 1242-1249	45
2210	Stem cells and biomimetic materials strategies for tissue engineering. 2008 , 28, 1189-1202	111
2209	Ice-Templated Materials: Sophisticated Structures Exhibiting Enhanced Functionalities Obtained after Unidirectional Freezing and Ice-Segregation-Induced Self-Assembly 2008 , 20, 634-648	355
2208	Patterning surfaces with functional polymers. <i>Nature Materials</i> , 2008 , 7, 277-90	27 767
2207	Aligned porous alumina ceramics with high compressive strengths for bone tissue engineering. 2008 , 58, 537-540	157

2206	Microstructural design of connective base cells for functionally graded materials. 2008 , 62, 4022-4024	23
2205	Engineering custom-designed osteochondral tissue grafts. 2008 , 26, 181-9	118
2204	Vascularization in tissue engineering. 2008 , 26, 434-41	890
2203	Engineered Scaffold Architecture Influences Soft Tissue Regeneration. 2008 , 67-78	
2202	Monolithic cryogels with open porous structure and unique double-continuous macroporous networks. 2008 , 4, 2418	54
2201	Novel biomaterials for drug delivery. 2008 , 18, 639-656	38
2200	Porous networks through colloidal templates. 2009 , 287, 135-80	23
2199	A biomimetic hierarchical scaffold: natural growth of nanotitanates on three-dimensional microporous Ti-based metals. 2008 , 8, 3803-8	110
2198	Bio-Materials and Prototyping Applications in Medicine. 2008 ,	29
2197	Poly(lactic-co-glycolic acid) bone scaffolds with inverted colloidal crystal geometry. 2008 , 14, 1639-49	43
2196	Lymphoid tissue engineering: invoking lymphoid tissue neogenesis in immunotherapy and models of immunity. 2008 , 20, 137-46	35
2195	Organ printing: promises and challenges. 2008 , 3, 93-103	192
2194	Bilayered scaffolds for osteochondral tissue engineering. 2008 , 14, 447-64	102
2193	Dynamic Co-Seeding of Osteoblast and Endothelial Cells on 3D Polycaprolactone Scaffolds for Enhanced Bone Tissue Engineering. 2008 , 23, 227-243	84
2192	PHBV/PLLA-based composite scaffolds containing nano-sized hydroxyapatite particles for bone tissue engineering. 2008 , 3, 121-132	34
2191	Critical factors in the design of growth factor releasing scaffolds for cartilage tissue engineering. 2008 , 5, 543-66	51
2190	Pore architecture of a bovine acellular vocal fold scaffold. 2008 , 14, 1893-903	18
2189	Integrating novel technologies to fabricate smart scaffolds. 2008 , 19, 543-72	168

2188	Patterned melt electrospun substrates for tissue engineering. 2008 , 3, 034109	114
2187	Designed PCL Nanofibers Fabricated Using a Modified Electrohydrodynamic Process for Tissue Engineering. 2008 , 130,	1
2186	Three dimensional elastic modulus reconstruction for non-invasive, quantitative monitoring of tissue scaffold mechanical property changes. 2008 ,	2
2185	The interface of functional biotribology and regenerative medicine in synovial joints. 2008 , 14, 235-47	89
2184	Scaffold design and fabrication. 2008 , 403-454	30
2183	Nanostructured Mesoporous Silicas for Bone Tissue Regeneration. 2008 , 2008, 1-14	59
2182	Mechanical improvement of zein protein as scaffold for bone tissue engineering. 2008 , 24, 1045-1052	12
2181	The Materials Science of Bone: Lessons from Nature for Biomimetic Materials Synthesis. 2008 , 33, 49-55	29
2180	Controlled formation of biological tubule systems in extracellular matrix gels in vitro. 2008 , 73, 1187-92	16
2179	A Hybrid Three-Dimensional Nanofabrication Method for Producing Vascular Tissue Engineering Scaffold. 2008 , 47, 7415-7419	7
2178	Virtual Prototyping & Bio Manufacturing in Medical Applications. 2008 ,	12
2177	A layered ultra-porous scaffold for tissue engineering, created via a hydrospinning method. 2008 , 14, 281-8	69
2176	Brain cortex regeneration affected by scaffold architectures. 2008 , 109, 715-22	39
2175	Wave propagation and instabilities in monolithic and periodically structured elastomeric materials undergoing large deformations. 2008 , 78,	168
2174	Rapid freeze prototyping technique in bio-plotters for tissue scaffold fabrication. 2008 , 14, 246-253	41
2173	Improvement of vascularization of PLGA scaffolds by inosculation of in situ-preformed functional blood vessels with the host microvasculature. 2008 , 248, 939-48	60
2172	Regenerating articular tissue by converging technologies. 2008 , 3, e3032	29
2171	Beyond Trial and Error: Tools to Advance the Engineering of Biomaterials. 2008 , 118-152	

2170	Gel de plaquetas: arcabou 3D para cultura celular. 2009 , 17, 43-45	7
2169	Precision extruding deposition (PED) fabrication of polycaprolactone (PCL) scaffolds for bone tissue engineering. 2009 , 1, 015003	141
2168	COMPUTATIONAL DESIGN FOR MULTIFUNCTIONAL MICROSTRUCTURAL COMPOSITES. 2009 , 23, 1345-1351	35
2167	Proliferation and differentiation of human osteoblasts within 3D printed poly-lactic-co-glycolic acid scaffolds. 2009 , 23, 533-47	56
2166	Segmentation, surface rendering, and surface simplification of 3-D skull images for the repair of a large skull defect. 2009 , 18, 043003	1
2165	Rapid Prototyping of Biomimetic Structures: Fabrication of Mosquito-like Microneedles by Two-Photon Polymerization. 2009 , 1239, 1	2
2164	Biodegradable scaffolds for tissue engineering. 2009 , 185-211	1
2163	Engineering craniofacial structures: facing the challenge. 2009 , 88, 1077-91	77
2162	Branched Channel Scaffolds Fabricated by SFF for Direct Cell Growth Observations. 2009 , 24, 63-74	15
2161	Combinatorial approaches to controlling cell behaviour and tissue formation in 3D via rapid-prototyping and smart scaffold design. 2009 , 12, 562-79	38
2160	Solute transport in cyclically deformed porous tissue scaffolds with controlled pore cross-sectional geometries. 2009 , 15, 1989-99	6
2159	Synthesis and microfabrication of biomaterials for soft-tissue engineering. 2009 , 81, 2183-2201	18
2158	Degradable polymers and polymer composites for tissue engineering. 2009 , 28-60	3
2157	Computer-aided design and finite-element modelling of biomaterial scaffolds for bone tissue engineering. 2009 , 367, 1993-2009	76
2156	Fabrication and characterization of porous Ti6Al4V parts for biomedical applications using electron beam melting process. 2009 , 63, 403-405	150
2155	Compressive strength and processing of camphene-based freeze cast calcium phosphate scaffolds with aligned pores. 2009 , 63, 1548-1550	49
2154	Biodegradable Polyphosphazene Scaffolds for Tissue Engineering. 117-138	4
2153	Bifurcated Mechanical Behavior of Deformed Periodic Porous Solids. 2009 , 19, 1426-1436	56

2152	Laser Spinning of Bioactive Glass Nanofibers. 2009 , 19, 3084-3090	61
2151	Natural-Synthetic Polyblend Nanofibers for Biomedical Applications. 2009 , 21, 2792-2797	126
2150	Scaffold design and manufacturing: from concept to clinic. 2009 , 21, 3330-42	287
2149	Direct-Write Assembly of 3D Hydrogel Scaffolds for Guided Cell Growth. 2009 , 21, 2407-2410	237
2148	Tough Supersoft Sponge Fibers with Tunable Stiffness from a DNA Self-Assembly Technique. 2009 , 121, 5218-5222	5
2147	Evaluation of polycaprolactone scaffold degradation for 6 months in vitro and in vivo. 2009 , 90, 906-19	369
2146	Tissue regeneration and repair of goat segmental femur defect with bioactive triphasic ceramic-coated hydroxyapatite scaffold. 2009 , 91, 855-65	24
2145	Characterization of the behavior of porous hydrogels in model osmotically-conditioned articular cartilage systems. 2009 , 90, 752-9	22
2144	Surface modification of porous scaffolds with nanothick collagen layer by centrifugation and freeze-drying. 2009 , 90, 864-72	25
2143	Analysis of the mechanical behavior of a titanium scaffold with a repeating unit-cell substructure. 2009 , 90, 894-906	25
2142	Microcomputed tomography and microfinite element modeling for evaluating polymer scaffolds architecture and their mechanical properties. 2009 , 91, 191-202	27
2141	Evaluation of the efficacy of platelet-rich plasma in delivering BMSCs into 3D porous scaffolds. 2009 , 91, 679-91	14
2140	Three-dimensional porous scaffolds at the crossroads of tissue engineering and cell-based gene therapy. 2009 , 108, 537-46	51
2139	A Solvent-Assisted Compression Molded of Poly(L-lactide)/Hydroxyapatite Electrospun Fibers for Robust Engineered Scaffold Systems. 2009 , 294, 699-704	16
2138	From natural bone grafts to tissue engineering therapeutics: Brainstorming on pharmaceutical formulative requirements and challenges. 2009 , 98, 1317-75	113
2137	Tough supersoft sponge fibers with tunable stiffness from a DNA self-assembly technique. 2009 , 48, 5116-20	31
2136	Maxillofacial reconstruction using custom-made artificial bones fabricated by inkjet printing technology. 2009 , 12, 200-5	92
2135	Cyclic deformation-induced solute transport in tissue scaffolds with computer designed, interconnected, pore networks: experiments and simulations. 2009 , 37, 1601-12	4

2134	Laser-based micro/nanoengineering for biological applications. 2009 , 33, 127-163	78
2133	Development of porous PEG hydrogels that enable efficient, uniform cell-seeding and permit early neural process extension. 2009 , 5, 1884-97	79
2132	The correlation of pore morphology, interconnectivity and physical properties of 3D ceramic scaffolds with bone ingrowth. 2009 , 30, 1440-51	252
2131	A poly(D,L-lactide) resin for the preparation of tissue engineering scaffolds by stereolithography. 2009 , 30, 3801-9	328
2130	The interaction between bone marrow stromal cells and RGD-modified three-dimensional porous polycaprolactone scaffolds. 2009 , 30, 4063-9	147
2129	Design criteria for a printed tissue engineering construct: a mathematical homogenization approach. 2009 , 259, 489-502	40
2128	TiO ₂ foams with poly-(d,l-lactic acid) (PDLLA) and PDLLA/Bioglass® coatings for bone tissue engineering scaffolds. 2009 , 44, 1442-1448	21
2127	Is tissue engineering a new paradigm in medicine? Consequences for the ethical evaluation of tissue engineering research. 2009 , 12, 459-67	7
2126	Development of 3D PPF/DEF scaffolds using micro-stereolithography and surface modification. 2009 , 20, 271-9	116
2125	3D polycaprolactone scaffolds with controlled pore structure using a rapid prototyping system. 2009 , 20, 229-34	80
2124	Design of porous polymeric scaffolds by gas foaming of heterogeneous blends. 2009 , 20, 2043-51	99
2123	Advances in progenitor cell therapy using scaffolding constructs for central nervous system injury. 2009 , 5, 283-300	43
2122	Engineered 3D tissue models for cell-laden microfluidic channels. 2009 , 395, 185-93	53
2121	3D polycaprolactone (PCL) scaffold with hierarchical structure fabricated by a piezoelectric transducer (PZT)-assisted bioplotter. 2009 , 94, 781-785	41
2120	The differential in vitro and in vivo responses of bone marrow stromal cells on novel porous gelatin-alginate scaffolds. 2009 , 3, 601-14	51
2119	Nanotechnology in joint replacement. 2009 , 1, 540-52	20
2118	Complex microstructured 3D surfaces using chitosan biopolymer. 2009 , 5, 614-20	39
2117	Rapid prototyping of anatomically shaped, tissue-engineered implants for restoring congruent articulating surfaces in small joints. 2009 , 42, 485-97	59

2116	Complexity in biomaterials for tissue engineering. <i>Nature Materials</i> , 2009 , 8, 457-70	27	1340
2115	Finite element study of scaffold architecture design and culture conditions for tissue engineering. 2009 , 30, 6142-9		202
2114	Preparation and characterization of chitosan/poly(vinyl alcohol) chemically crosslinked blends for biomedical applications. 2009 , 76, 472-481		357
2113	Physical interactions in macroporous scaffolds based on poly(ϵ -caprolactone)/chitosan semi-interpenetrating polymer networks. 2009 , 50, 2058-2064		34
2112	Two-dimensional scaffold layer formations on a solid surface through xanthan polysaccharide: temperature effect. 2009 , 74, 136-9		4
2111	Synthetic neoglycopolymer-recombinant human collagen hybrids as biomimetic crosslinking agents in corneal tissue engineering. 2009 , 30, 5403-8		48
2110	Effects of the cooling mode on the structure and strength of porous scaffolds made of chitosan, alginate, and carboxymethyl cellulose by the freeze-gelation method. 2009 , 78, 349-356		49
2109	Characterization of the structure and permeability of titanium foams for spinal fusion devices. 2009 , 5, 477-87		64
2108	On scaffold designing for bone regeneration: A computational multiscale approach. 2009 , 5, 219-29		155
2107	Bilayered chitosan-based scaffolds for osteochondral tissue engineering: influence of hydroxyapatite on in vitro cytotoxicity and dynamic bioactivity studies in a specific double-chamber bioreactor. 2009 , 5, 644-60		121
2106	Gradient collagen/nanohydroxyapatite composite scaffold: development and characterization. 2009 , 5, 661-9		94
2105	Engineered mu-bimodal poly(ϵ -caprolactone) porous scaffold for enhanced hMSC colonization and proliferation. 2009 , 5, 1082-93		45
2104	Injectable poly(lactic-co-glycolic) acid scaffolds with in situ pore formation for tissue engineering. 2009 , 5, 2847-59		45
2103	Three-dimensional biodegradable structures fabricated by two-photon polymerization. 2009 , 25, 3219-23		149
2102	Design and analysis of digital materials for physical 3D voxel printing. 2009 , 15, 137-149		99
2101	Supply of nutrients to cells in engineered tissues. 2010 , 26, 163-78		98
2100	Instabilities and pattern transformation in periodic, porous elastoplastic solid coatings. 2009 , 1, 42-7		42
2099	Block copolymer of polyphosphoester and poly(L-lactic acid) modified surface for enhancing osteoblast adhesion, proliferation, and function. 2009 , 10, 2213-20		49

2098	Design and synthesis of biomimetic hydrogel scaffolds with controlled organization of cyclic RGD peptides. 2009 , 20, 333-9	86
2097	Synthesis and characterization of PLGA-gelatin complex with growth factor incorporation as potential matrix. 2009 , 474, 450-454	5
2096	Synthetic polymer scaffolds for tissue engineering. 2009 , 38, 1139-51	575
2095	Engineering of large cartilaginous tissues through the use of microchanneled hydrogels and rotational culture. 2009 , 15, 3213-20	32
2094	Defining Design Targets for Tissue Engineering Scaffolds. 2009 , 521-537	9
2093	A brief review of dispensing-based rapid prototyping techniques in tissue scaffold fabrication: role of modeling on scaffold properties prediction. 2009 , 1, 032001	67
2092	Three-dimensional porous biodegradable polymeric scaffolds fabricated with biodegradable hydrogel porogens. 2009 , 15, 583-94	67
2091	Fabrication and in Vitro Evaluation of Calcium Phosphate Combined with Chitosan Fibers for Scaffold Structures. 2009 , 24, 113-124	19
2090	Inosculation: connecting the life-sustaining pipelines. 2009 , 15, 455-65	113
2089	Biofabrication: a 21st century manufacturing paradigm. 2009 , 1, 022001	216
2088	Biomanufacturing for tissue engineering: Present and future trends. 2009 , 4, 203-216	114
2087	Characterization and design of 3D scaffolds for biofluidic criteria. 2009 ,	
2086	A cryogenic direct-plotting system for fabrication of 3D collagen scaffolds for tissue engineering. 2009 , 19, 8817	80
2085	Three-dimensional plotter technology for fabricating polymeric scaffolds with micro-grooved surfaces. 2009 , 20, 2089-101	14
2084	Electrostatic crosslinked in situ-forming in vivo scaffold for rat bone marrow mesenchymal stem cells. 2009 , 15, 3201-9	18
2083	Designer Blueprint for vascular trees: morphology evolution of vascular tissue constructs. 2009 , 4, 63-74	26
2082	Fabrication of Ordered Arrays of Biodegradable Polymer Pincushions Using Self-Organized Honeycomb-Patterned Films. 2009 , 279, 175-182	18
2081	Microprocessing of thin collagen films by ultra-short laser ablation. 2010 ,	

2080	Three-dimensional Polycaprolactone Structures Fabricated by Two-Photon Polymerization. 2010 ,	
2079	Chitosan Scaffolds for Bone Regeneration. 2010 , 223-239	2
2078	Designing Three-Dimensional Materials at the Interface to Biology. 2010 , 163-192	9
2077	Topology Optimization of Three Dimensional Tissue Engineering Scaffold Architectures for Prescribed Bulk Modulus and Diffusivity. 2010 , 42, 633-644	83
2076	Patterned transgene expression in multiple-channel bridges after spinal cord injury. 2010 , 6, 2889-97	32
2075	Improving the compressive strength of bioceramic robocast scaffolds by polymer infiltration. 2010 , 6, 4361-8	156
2074	Toward engineering of vascularized three-dimensional liver tissue equivalents possessing a clinically significant mass. 2010 , 48, 348-361	32
2073	Effect of nano-topographical features of Ti/TiO ₂ electrode surface on cell response and electrochemical stability in artificial saliva. 2010 , 79, 122-9	73
2072	A comparison of the influence of material on in vitro cartilage tissue engineering with PCL, PGS, and POC 3D scaffold architecture seeded with chondrocytes. 2010 , 31, 4304-12	97
2071	The use of superporous Ac-CGGASIKVAVS-OH-modified PHEMA scaffolds to promote cell adhesion and the differentiation of human fetal neural precursors. 2010 , 31, 5966-75	80
2070	Preparation of three-dimensional interconnected macroporous cellulosic hydrogels for soft tissue engineering. 2010 , 31, 8141-52	40
2069	A multiscale modeling approach to scaffold design and property prediction. 2010 , 3, 584-93	21
2068	Virtual topological optimisation of scaffolds for rapid prototyping. 2010 , 32, 775-82	65
2067	Peptide-grafted lactide-based poly(ethylene glycol) porous scaffolds for specific cell adhesion. 2010 , 18, 526-532	16
2066	FGF2-adsorbed macroporous hydroxyapatite bone granules stimulate in vitro osteoblastic gene expression and differentiation. 2010 , 21, 1335-42	17
2065	Maintaining cell depth viability: on the efficacy of a trimodal scaffold pore architecture and dynamic rotational culturing. 2010 , 21, 1731-8	9
2064	Experimental and computational characterization of designed and fabricated 50:50 PLGA porous scaffolds for human trabecular bone applications. 2010 , 21, 2371-83	38
2063	Static and dynamic cultivation of bone marrow stromal cells on biphasic calcium phosphate scaffolds derived from an indirect rapid prototyping technique. 2010 , 21, 3039-48	44

2062	Proceedings of the American Association of Oral and Maxillofacial Surgeons 2009 Research Summit. 2010 , 68, 1711-22	0
2061	Tailoring the mechanical properties of 3D-designed poly(glycerol sebacate) scaffolds for cartilage applications. 2010 , 94, 9-18	139
2060	Calcium phosphate cement reinforcement by polymer infiltration and in situ curing: a method for 3D scaffold reinforcement. 2010 , 94, 547-55	5
2059	Biological and mechanical properties of novel composites based on supramolecular polycaprolactone and functionalized hydroxyapatite. 2010 , 95, 209-21	31
2058	Growth and differentiation of bone marrow stromal cells on biodegradable polymer scaffolds: an in vitro study. 2010 , 95, 1244-51	23
2057	Porous keratin scaffold-promising biomaterial for tissue engineering and drug delivery. 2010 , 92, 5-12	53
2056	Mechanical, permeability, and degradation properties of 3D designed poly(1,8 octanediol-co-citrate) scaffolds for soft tissue engineering. 2010 , 93, 141-9	23
2055	Biodegradable poly(alpha-hydroxy acid) polymer scaffolds for bone tissue engineering. 2010 , 93, 285-95	14
2054	Fabrication and characterization of a porous multidomain hydroxyapatite scaffold for bone tissue engineering investigations. 2010 , 93, 459-67	22
2053	Prototypes for Bone Implant Scaffolds Designed via Topology Optimization and Manufactured by Solid Freeform Fabrication. 2010 , 12, 1106-1110	83
2052	Simultaneous Immobilization of Bioactives During 3D Powder Printing of Bioceramic Drug-Release Matrices. 2010 , 20, 1585-1591	83
2051	Hierarchically Assembled Mesenchymal Stem Cell Spheroids Using Biomimicking Nanofilaments and Microstructured Scaffolds for Vascularized Adipose Tissue Engineering. 2010 , 20, 2303-2309	26
2050	Multiplexed protein patterns on a photosensitive hydrophilic polymer matrix. 2010 , 22, 1242-6	19
2049	Preparation and Characterization of Gallium Releasing 3-D Alginate Coated 45S5 Bioglass [®] Based Scaffolds for Bone Tissue Engineering. 2010 , 12, B283-B291	56
2048	A rotating bed system bioreactor enables cultivation of primary osteoblasts on well-characterized Sponceram regarding structural and flow properties. 2010 , 26, 671-8	10
2047	Design of cellular porous biomaterials for wall shear stress criterion. 2010 , 107, 737-46	12
2046	Preparation of collagen-glycosaminoglycan sponges with open surface porous structures using ice particulate template method. 2010 , 10, 860-71	29
2045	Non-viral polyplexes: Scaffold mediated delivery for gene therapy. 2010 , 35, 441-458	90

2044	On stiffness of scaffolds for bone tissue engineering-a numerical study. 2010 , 43, 1738-44	67
2043	Pore3D: A software library for quantitative analysis of porous media. 2010 , 615, 326-332	108
2042	Biodegradable polymer matrix nanocomposites for tissue engineering: A review. 2010 , 95, 2126-2146	719
2041	Piezoelectric inkjet printing of polymers: Stem cell patterning on polymer substrates. 2010 , 51, 2147-2154	143
2040	A theoretical model for tissue growth in confined geometries. 2010 , 58, 1073-1087	38
2039	Multiscale osteointegration as a new paradigm for the design of calcium phosphate scaffolds for bone regeneration. 2010 , 31, 3552-63	159
2038	Primate mandibular reconstruction with prefabricated, vascularized tissue-engineered bone flaps and recombinant human bone morphogenetic protein-2 implanted in situ. 2010 , 31, 4935-43	31
2037	Rapid construction of mechanically- confined multi- cellular structures using dendrimeric intercellular linker. 2010 , 31, 7455-67	21
2036	Chronic label-free volumetric photoacoustic microscopy of melanoma cells in three-dimensional porous scaffolds. 2010 , 31, 8651-8	52
2035	Direct write assembly of calcium phosphate scaffolds using a water-based hydrogel. 2010 , 6, 218-28	151
2034	Sol-gel silica-based biomaterials and bone tissue regeneration. 2010 , 6, 2874-88	424
2033	Crystal templating dendritic pore networks and fibrillar microstructure into hydrogels. 2010 , 6, 2415-21	30
2032	Hierarchically structured titanium foams for tissue scaffold applications. 2010 , 6, 4596-604	51
2031	An analytical effective tensor and its approximation properties for upscaling flows through generalized composites. 2010 , 33, 728-739	8
2030	The mechanically enhanced phase separation of sprayed polyurethane scaffolds and their effect on the alignment of fibroblasts. 2010 , 31, 1126-32	14
2029	Directed growth of fibroblasts into three dimensional micropatterned geometries via self-assembling scaffolds. 2010 , 31, 1683-90	81
2028	Cartilage tissue engineering using funnel-like collagen sponges prepared with embossing ice particulate templates. 2010 , 31, 5825-35	74
2027	Biomimetic hybrid scaffolds for engineering human tooth-ligament interfaces. 2010 , 31, 5945-52	150

2026	Mathematically defined tissue engineering scaffold architectures prepared by stereolithography. 2010 , 31, 6909-16	365
2025	Novel 3D porous multi-phase composite scaffolds based on PCL, thermoplastic zein and ha prepared via supercritical CO2 foaming for bone regeneration. 2010 , 70, 1838-1846	66
2024	A simple and effective geometric representation for irregular porous structure modeling. 2010 , 42, 930-941	65
2023	Preparation and characterization of a novel chitosan scaffold. 2010 , 80, 860-865	76
2022	Resorbable biomaterials as bone graft substitutes. 2010 , 13, 24-30	261
2021	Rapid prototyped PGA/PLA scaffolds in the reconstruction of mandibular condyle bone defects. 2010 , 6, 66-72	37
2020	Bioengineering strategies for regeneration of craniofacial bone: a review of emerging technologies. 2010 , 16, 709-16	57
2019	Scaffold Sheet Design Strategy for Soft Tissue Engineering. 2010 , 3, 1375-1389	35
2018	Proliferation of myoblast skeletal cells on three-dimensional supermacroporous cryogels. 2010 , 6, 371-81	64
2017	Selective Laser Sintering of Poly(L-Lactide)/Carbonated Hydroxyapatite Nanocomposite Porous Scaffolds for Bone Tissue Engineering. 2010 ,	4
2016	Development of robotic dispensed bioactive scaffolds and human adipose-derived stem cell culturing for bone tissue engineering. 2010 , 16, 561-71	23
2015	Organic Solvent Traces in Fibrillar Scaffolds for Tissue Engineering. 2010 , 7, 1-6	6
2014	Creating Biomaterials Inspired by the Microstructure of Cuttlebone. 2010 , 654-656, 2229-2232	4
2013	Functional nanoporous structures by partial sintering of nanorod assemblies. 2010 , 43, 455301	8
2012	Microstructural effects on the overall poroelastic properties of saturated porous media. 2010 , 18, 045009	8
2011	Generation of porous poly(ethylene glycol) hydrogels by salt leaching. 2010 , 16, 905-12	72
2010	Structural and degradation characteristics of an innovative porous PLGA/TCP scaffold incorporated with bioactive molecular icaritin. 2010 , 5, 054109	27
2009	Regenerative Dentistry. 2010 , 2, 1-178	2

2008	A three-dimensional hierarchical collagen scaffold fabricated by a combined solid freeform fabrication (SFF) and electrospinning process to enhance mesenchymal stem cell (MSC) proliferation. 2010 , 20, 065015	40
2007	Effect of micro- and macroporosity of bone tissue three-dimensional-poly(epsilon-caprolactone) scaffold on human mesenchymal stem cells invasion, proliferation, and differentiation in vitro. 2010 , 16, 2661-73	84
2006	Interconnected macroporous poly(ethylene glycol) cryogels as a cell scaffold for cartilage tissue engineering. 2010 , 16, 3033-41	66
2005	The correlation between the internal structure and vascularization of controllable porous bioceramic materials in vivo: a quantitative study. 2010 , 16, 3791-803	120
2004	Functional Tissue Engineering Through Biofunctional Macromolecules and Surface Design. 2010 , 35, 584-590	11
2003	Engineering anatomically shaped human bone grafts. 2010 , 107, 3299-304	324
2002	Stereolithographic bone scaffold design parameters: osteogenic differentiation and signal expression. 2010 , 16, 523-39	182
2001	Directed assembly of cell-laden hydrogels for engineering functional tissues. 2010 , 6, 234-44	61
2000	Rapid prototyping in biomedical engineering: structural intricacies of biological materials. 2010 , 349-397	4
1999	Reinforcement of a porous collagen scaffold with surface-activated PLA fibers. 2010 , 21, 963-77	17
1998	Fabrication of porous extracellular matrix scaffolds from human adipose tissue. 2010 , 16, 387-96	60
1997	Strategies for organ level tissue engineering. 2010 , 6, 151-7	70
1996	Validation of a fluid-structure interaction model of solute transport in pores of cyclically deformed tissue scaffolds. 2010 , 16, 1145-56	3
1995	MEMS resonant load cells for micro-mechanical test frames: feasibility study and optimal design. 2010 , 20, 125004	11
1994	Responsive and in situ-forming chitosan scaffolds for bone tissue engineering applications: an overview of the last decade. 2010 , 20, 1638-1645	70
1993	Controlling the porosity and microarchitecture of hydrogels for tissue engineering. 2010 , 16, 371-83	737
1992	Three-dimensional scaffolds for tissue engineering: the importance of uniformity in pore size and structure. 2010 , 26, 19001-6	108
1991	Designed three-dimensional collagen scaffolds for skin tissue regeneration. 2010 , 16, 813-20	61

1990	Design of Supermacroporous Biomaterials via Gelation at Subzero Temperatures Cryogelation. 2010 , 499-531	7
1989	Biomaterials-based microfluidics for engineered tissue constructs. 2010 , 6, 4999	38
1988	Enhanced cell ingrowth and proliferation through three-dimensional nanocomposite scaffolds with controlled pore structures. 2010 , 11, 682-9	84
1987	Quantifying migration and polarization of murine mesenchymal stem cells on different bone substitutes by confocal laser scanning microscopy. 2010 , 38, 580-8	8
1986	Titanium foams for biomedical applications: a review. 2010 , 25, 127-136	100
1985	Design and synthesis of biomimetic multicomponent all-bone-minerals bionanocomposites. 2010 , 11, 2545-9	17
1984	Scaffold vascularization: a challenge for three-dimensional tissue engineering. 2010 , 17, 3944-67	92
1983	Biocompatible calcium phosphate based tubes. 2010 , 20, 6923	21
1982	Fabrication of three-dimensional porous cell-laden hydrogel for tissue engineering. 2010 , 2, 035003	176
1981	Bioprinting is coming of age: Report from the International Conference on Bioprinting and Biofabrication in Bordeaux (3B'09). 2010 , 2, 010201	131
1980	Photophysical mechanisms of collagen modification by 80 MHz femtosecond laser. 2010 , 18, 24037-47	19
1979	Bioactive Polymer/Hydroxyapatite (Nano)composites for Bone Tissue Regeneration. 2010 , 97-207	71
1978	3D-Fiber Deposition for Tissue Engineering and Organ Printing Applications. 2010 , 225-239	7
1977	Bone tissue engineering therapeutics: controlled drug delivery in three-dimensional scaffolds. 2010 , 7, 209-27	395
1976	A novel cylinder-type poly(L-lactic acid)-collagen hybrid sponge for cartilage tissue engineering. 2010 , 16, 329-38	37
1975	Artificial engineering of secondary lymphoid organs. 2010 , 105, 131-57	18
1974	Influence of shear stress in perfusion bioreactor cultures for the development of three-dimensional bone tissue constructs: a review. 2010 , 16, 587-601	151
1973	Cell and Organ Printing. 2010 ,	8

1972	Functionalized periodic mesoporous organosilicas for enhanced and selective peptide enrichment. 2010 , 26, 7444-50	34
1971	Review: Polymeric Scaffold Materials for Two-Dimensional and Three-Dimensional in Vitro Culture of Hepatocytes. 2010 , 1-32	11
1970	Automated fabrication of three dimensional porous microfiber scaffolds for tissue engineering. 2010 ,	
1969	Design of Hierarchically Porous Materials for Bone Tissue Regeneration. 2010 , 441, 139-153	2
1968	A computer simulation study of cell seeding of a porous biomaterial. 2010 ,	2
1967	Mechanical and biochemical assessments of three-dimensional poly(1,8-octanediol-co-citrate) scaffold pore shape and permeability effects on in vitro chondrogenesis using primary chondrocytes. 2010 , 16, 3759-68	41
1966	Solid free-form fabrication-based PCL/HA scaffolds fabricated with a multi-head deposition system for bone tissue engineering. 2010 , 21, 951-62	28
1965	Electrospinning fabrication, structural and mechanical characterization of rod-like virus-based composite nanofibers. 2011 , 21, 8550	39
1964	Three-dimensional plotted PCL/βTCP scaffolds coated with a collagen layer: preparation, physical properties and in vitro evaluation for bone tissue regeneration. 2011 , 21, 6305	49
1963	Coaxial structured collagen/alginate scaffolds: fabrication, physical properties, and biomedical application for skin tissue regeneration. 2011 , 21, 6165	95
1962	Effects of Scaffold Architecture on Preosteoblastic Cultures under Continuous Fluid Shear. 2011 , 50, 620-629	27
1961	Development of porous alginate-based scaffolds covalently cross-linked through a peroxidase-catalyzed reaction. 2011 , 22, 2407-16	11
1960	Rapid-prototyped PCL/fucoidan composite scaffolds for bone tissue regeneration: design, fabrication, and physical/biological properties. 2011 , 21, 17710	46
1959	Cytocompatibility evaluation of ferrite and NdFeB magnetic sugar particles for vasculature scaffold fabrication. 2011 ,	
1958	Chitosan Nanofibrous Scaffold Fabricated via Electrospinning: The Effect of Processing Parameters on the Nanofiber Morphology. 2011 , 16, 277-289	22
1957	A novel ultra-porous titanium dioxide ceramic with excellent biocompatibility. 2011 , 25, 559-80	58
1956	Synthesis and Assembly of Butyl Rubber/Poly(ethylene oxide) Graft Copolymers: From Surface Patterning to Resistance to Protein Adsorption. 2011 , 44, 6405-6415	19
1955	Macroporous Bioglass Scaffolds Prepared by Coupling Sol-Gel with Freeze Drying. 2011 , 23, 2327-2332	45

1954	Porous Biodegradable Scaffolds for Hard Tissue Engineering. 2011 , 57-66	
1953	Fabrication of three-dimensional scaffolds using precision extrusion deposition with an assisted cooling device. 2011 , 3, 034109	48
1952	Construction of a fluorescent nanostructured chitosan-hydroxyapatite scaffold by nanocrystallon induced biomimetic mineralization and its cell biocompatibility. 2011 , 3, 1692-701	40
1951	Elastomeric degradable biomaterials by photopolymerization-based CAD-CAM for vascular tissue engineering. 2011 , 6, 055003	42
1950	Three-Dimensional Molding Based on Microstereolithography Using Beta-Tricalcium Phosphate Slurry for the Production of Bioceramic Scaffolds. 2011 , 50, 06GL15	7
1949	Future Prospects for Periodontal Bioengineering Using Growth Factors. 2011 , 1, 88-94	5
1948	Three-dimensional hierarchical composite scaffolds consisting of polycaprolactone, tricalcium phosphate, and collagen nanofibers: fabrication, physical properties, and in vitro cell activity for bone tissue regeneration. 2011 , 12, 502-10	94
1947	Synthetic chemoselective rewiring of cell surfaces: generation of three-dimensional tissue structures. 2011 , 133, 8704-13	91
1946	Development of a hybrid scaffold with synthetic biomaterials and hydrogel using solid freeform fabrication technology. 2011 , 3, 034102	165
1945	Bridging the gap between physicochemistry and interpretation prevalent in cell-surface interactions. 2011 , 111, 2900-36	67
1944	Introduction. 2011 , 1-30	
1943	Electrospun Nanocomposites and Stem Cells in Cardiac Tissue Engineering. 2011 , 215-242	6
1942	Patient-Specific Diagnosis and Visualization of Bone Micro-Structures. 2011 , 27-52	1
1941	Organ Printing. 2011 , 587-606	5
1940	Controlled Positioning of Cells in Biomaterials-Approaches Towards 3D Tissue Printing. 2011 , 2, 119-54	163
1939	Collagen: Materials Analysis and Implant Uses. 2011 , 261-278	17
1938	Ordered Mesoporous Silica Materials. 2011 , 497-514	5
1937	Direct laser writing of 3D scaffolds for neural tissue engineering applications. 2011 , 3, 045005	147

1936	Biodegradable Polymers for Emerging Clinical Use in Tissue Engineering. 2011 , 565-629	8
1935	Industrial Applications of Macroalgae. 2011 , 500-521	4
1934	3D Cell Culture. 2011 ,	48
1933	A functionally gradient variational porosity architecture for hollowed scaffolds fabrication. 2011 , 3, 034106	22
1932	Next generation of electrosprayed fibers for tissue regeneration. 2011 , 17, 125-42	52
1931	Tuning the microstructure and biodegradation of three-phase scaffolds for bone regeneration made of PCL, Zein, and HA. 2011 , 47, 245-260	13
1930	A new hybrid scaffold using rapid prototyping and electrohydrodynamic direct writing for bone tissue regeneration. 2011 , 21, 19138	23
1929	Advances on Modeling in Tissue Engineering. 2011 ,	
1928	Elastic properties of polycaprolactone at small strains are significantly affected by strain rate and temperature. 2011 , 225, 1015-20	19
1927	Scaffold translation: barriers between concept and clinic. 2011 , 17, 459-74	137
1926	Microfluidic hydrogels for tissue engineering. 2011 , 3, 012001	139
1925	Myocardial Tissue Engineering. 2011 ,	2
1924	Diopside ($\text{CaO} \cdot \text{MgO} \cdot 2\text{SiO}_2$) fluorapatite ($9\text{CaO} \cdot \text{BP}_2\text{O}_5 \cdot \text{CaF}_2$) glass-ceramics: potential materials for bone tissue engineering. 2011 , 21, 16247	38
1923	Bone Tissue Grafting and Tissue Engineering Concepts. 2011 , 237-255	1
1922	Surface modification with fibrin/hyaluronic acid hydrogel on solid-free form-based scaffolds followed by BMP-2 loading to enhance bone regeneration. 2011 , 48, 298-306	107
1921	3D hierarchical geometric modeling and multiscale FE analysis as a base for individualized medical diagnosis of bone structure. 2011 , 48, 693-703	44
1920	Design of novel 2D and 3D biointerfaces using self-organization to control cell behavior. 2011 , 1810, 251-8	45
1919	Polycaprolactone scaffolds fabricated with an advanced electrohydrodynamic direct-printing method for bone tissue regeneration. 2011 , 12, 4256-63	63

1918	Freeze-gelled silk fibroin protein scaffolds for potential applications in soft tissue engineering. 2011 , 49, 260-7	47
1917	3D cell culture: a review of current approaches and techniques. 2011 , 695, 1-15	312
1916	Softening bioactive glass for bone regeneration: sol-gel hybrid materials. 2011 , 7, 5083	117
1915	Nonlinear Elastic Scaffold Design, Modeling and Fabrication for Soft Tissue Engineering. 2011 , 35-53	3
1914	Bioengineered scaffolds for spinal cord repair. 2011 , 17, 177-94	66
1913	Usage of Rapid Prototyping Technique in Customized Craniomaxillofacial Bone Tissue Engineering Scaffold. 2011 ,	
1912	Differences in chemical composition and internal structure influence systemic host response to implants of biomaterials. 2011 , 34, 422-31	5
1911	Joint Cartilage Tissue Engineering and Pre-Clinical Safety and Efficacy Testing. 2011 ,	1
1910	Xenogenic Tissues and Biomaterials for the Skeletal System. 2011 , 387-404	3
1909	Fluid Mechanics: Transport and Diffusion Analyses as Applied in Biomaterials Studies. 2011 , 133-153	0
1908	Biomimetic component coating on 3D scaffolds using high bioactivity of mesoporous bioactive ceramics. 2011 , 6, 2521-31	28
1907	Engineering Scaffold Mechanical and Mass Transport Properties. 2011 , 13-33	2
1906	Biofabrication with biopolymers and enzymes: potential for constructing scaffolds from soft matter. 2011 , 34, 215-24	22
1905	Advanced and prospective technologies for potential use in craniofacial tissues regeneration by stem cells and growth factors. 2011 , 22, 342-8	11
1904	Culture of bovine articular chondrocytes in funnel-like collagen-PLGA hybrid sponges. 2011 , 6, 045011	11
1903	Spatial Localization of Growth Factors to Regulate Stem Cell Fate. 2011 , 146-179	
1902	Degradable polyester scaffolds with controlled surface chemistry combining minimal protein adsorption with specific bioactivation. <i>Nature Materials</i> , 2011 , 10, 67-73	27 267
1901	Purpose-driven biomaterials research in liver-tissue engineering. 2011 , 29, 110-8	44

1900	Organ printing: the future of bone regeneration?. 2011 , 29, 601-6	177
1899	Bioactive glass scaffolds for bone tissue engineering: state of the art and future perspectives. 2011 , 31, 1245-1256	451
1898	Active immobilized palladium catalyst based on multiporous amphiphilic graft copolymer. 2011 , 71, 1045-1054	9
1897	Novel, simple and reproducible method for preparation of composite hierarchical porous structure scaffolds. 2011 , 65, 2578-2581	10
1896	Regenerative medicine. 2011 , 48, 148-212	29
1895	Interpenetrating polymer network (IPN) scaffolds of sodium hyaluronate and sodium alginate for chondrocyte culture. 2011 , 88, 711-6	36
1894	A highly organized three-dimensional alginate scaffold for cartilage tissue engineering prepared by microfluidic technology. 2011 , 32, 7118-26	153
1893	A hierarchically graded bioactive scaffold bonded to titanium substrates for attachment to bone. 2011 , 32, 7333-46	40
1892	Porous scaffold design using the distance field and triply periodic minimal surface models. 2011 , 32, 7741-54	166
1891	Laser nano-manufacturing [State of the art and challenges. 2011 , 60, 735-755	155
1890	Medical applications of organic-inorganic hybrid materials within the field of silica-based bioceramics. 2011 , 40, 596-607	308
1889	Elastic moduli of sintered powders with application to components fabricated using selective laser melting. 2011 , 59, 5257-5265	16
1888	Direct ink writing of highly porous and strong glass scaffolds for load-bearing bone defects repair and regeneration. 2011 , 7, 3547-54	252
1887	Human endothelial colony forming cells undergo vasculogenesis within biphasic calcium phosphate bone tissue engineering constructs. 2011 , 7, 4222-8	22
1886	Poly(dopamine) coating of scaffolds for articular cartilage tissue engineering. 2011 , 7, 4187-94	161
1885	Vascularization is the key challenge in tissue engineering. 2011 , 63, 300-11	748
1884	Scaffolds with a standardized macro-architecture fabricated from several calcium phosphate ceramics using an indirect rapid prototyping technique. 2011 , 22, 97-105	35
1883	Immobilization and bioactivity evaluation of FGF-1 and FGF-2 on powdered silicon-doped hydroxyapatite and their scaffolds for bone tissue engineering. 2011 , 22, 405-16	30

1882	Automated quantitative characterization of alginate/hydroxyapatite bone tissue engineering scaffolds by means of micro-CT image analysis. 2011 , 22, 2617-29	22
1881	Solid freeform fabrication of designer scaffolds of hyaluronic acid for nerve tissue engineering. 2011 , 13, 983-93	100
1880	Surface characterisation of bioadhesive PLGA/chitosan microparticles produced by supercritical fluid technology. 2011 , 28, 1668-82	28
1879	Fabrication of porous polycaprolactone/hydroxyapatite (PCL/HA) blend scaffolds using a 3D plotting system for bone tissue engineering. 2011 , 34, 505-13	195
1878	Custom-made composite scaffolds for segmental defect repair in long bones. 2011 , 35, 1229-36	98
1877	Cell-culture compatible silk fibroin scaffolds concomitantly patterned by freezing conditions and salt concentration. 2011 , 67, 159-175	19
1876	Synthesis and in-vitro bioactivity of mesoporous bioactive glasses with tunable macropores. 2011 , 143, 157-165	23
1875	A review of the mechanical behavior of CaP and CaP/polymer composites for applications in bone replacement and repair. 2011 , 7, 16-30	454
1874	Commentary: Deciphering the link between architecture and biological response of a bone graft substitute. 2011 , 7, 478-84	112
1873	The influence of stereolithographic scaffold architecture and composition on osteogenic signal expression with rat bone marrow stromal cells. 2011 , 32, 3750-63	120
1872	Computer-aided porous scaffold design for tissue engineering using triply periodic minimal surfaces. 2011 , 12, 61-71	119
1871	Hydrogels to modulate lentivirus delivery in vivo from microporous tissue engineering scaffolds. 2011 , 1, 91-101	18
1870	Fabrication of Porous Aluminum with Controllable Open-Pore Fraction. 2011 , 42, 2040-2047	6
1869	Surface modification of three-dimensional Ca-P/PHBV nanocomposite scaffolds by physical entrapment of gelatin and its in vitro biological evaluation. 2011 , 5, 57-68	20
1868	Hierarchical bioactive materials for tissue reconstruction: Integrated design and manufacturing challenges. 2011 , 63, 56-65	8
1867	P-15 functionalized porous microspheres as biomimetic habitats for bone tissue engineering applications. 2011 , 22, 190-198	7
1866	Poly(L-lysine)/microcrystalline cellulose biocomposites for porous scaffolds. 2011 , 32, 1937-1944	5
1865	Improvement of mechanical properties of polycaprolactone scaffolds by applying piezoelectric vibration system based on a dispensing process: A new concept. 2011 , 51, 311-316	1

1864	Fabrication of nano/microfiber scaffolds using a combination of rapid prototyping and electrospinning systems. 2011 , 51, 1883-1890	16
1863	Microfabrication of PDLLA scaffolds. 2011 , 5, 569-77	15
1862	Biomimetic Materials for Bone Tissue Engineering [State of the Art and Future Trends. 2011 , 13, B135-B150	45
1861	Direct Writing of Polycaprolactone Polymer for Potential Biomedical Engineering Applications. 2011 , 13, B296-B305	36
1860	A Parametrical Analysis on the Elastic Anisotropy of Woven Hierarchical Tissues. 2011 , 13, B377-B394	4
1859	A Novel Manufacturing Route for Fabrication of Topologically-Ordered Porous Magnesium Scaffolds. 2011 , 13, 872-881	57
1858	Evaluation of Cell-Material Interactions on Newly Designed, Printable Polymers for Tissue Engineering Applications. 2011 , 13, B467-B475	7
1857	Bioinspired Strong and Highly Porous Glass Scaffolds. 2011 , 21, 1058-1063	186
1856	A Printable Photopolymerizable Thermosensitive p(HPMAM-lactate)-PEG Hydrogel for Tissue Engineering. 2011 , 21, 1833-1842	130
1855	Solid Free-Form Fabrication of Tissue-Engineering Scaffolds with a Poly(lactic-co-glycolic acid) Grafted Hyaluronic Acid Conjugate Encapsulating an Intact Bone Morphogenetic Protein α /Poly(ethylene glycol) Complex. 2011 , 21, 2906-2912	93
1854	Morphology and linear-elastic moduli of random network solids. 2011 , 23, 2633-7	32
1853	Three-dimensional magnetic assembly of microscale hydrogels. 2011 , 23, 4254-60	188
1852	Biomedical Applications of Single-Walled Carbon Nanotubes. 2011 , 481-528	
1851	The use of whole organ decellularization for the generation of a vascularized liver organoid. 2011 , 53, 604-17	480
1850	Directed assembly of cell-laden microgels for building porous three-dimensional tissue constructs. 2011 , 97, 93-102	49
1849	Three-dimensional glass-derived scaffolds for bone tissue engineering: current trends and forecasts for the future. 2011 , 97, 514-35	199
1848	Electrospray deposited fibronectin retains the ability to promote cell adhesion. 2011 , 96, 110-8	6
1847	Presence of pores and hydrogel composition influence tensile properties of scaffolds fabricated from well-defined sphere templates. 2011 , 96, 294-302	36

1846	Designed hybrid scaffolds consisting of polycaprolactone microstrands and electrospun collagen-nanofibers for bone tissue regeneration. 2011 , 97, 263-70	67
1845	The homopolymer poly(3-hydroxyoctanoate) as a matrix material for soft tissue engineering. 2011 , 122, 3606-3617	17
1844	Processing/structure/property relationship of multi-scaled PCL and PCL-HA composite scaffolds prepared via gas foaming and NaCl reverse templating. 2011 , 108, 963-76	58
1843	A new generation of sodium chloride porogen for tissue engineering. 2011 , 58, 335-44	41
1842	Dynamic crushing and energy absorption of regular, irregular and functionally graded cellular structures. 2011 , 48, 506-516	242
1841	Three-dimensional surface reconstruction of human bone using a -spline based interpolation approach. 2011 , 43, 934-947	64
1840	Robust beam compensation for laser-based additive manufacturing. 2011 , 43, 876-888	15
1839	Fabrication of electrospun polycaprolactone biocomposites reinforced with chitosan for the proliferation of mesenchymal stem cells. 2011 , 83, 940-946	56
1838	Three-dimensional poly(1,8-octanediol-co-citrate) scaffold pore shape and permeability effects on sub-cutaneous in vivo chondrogenesis using primary chondrocytes. 2011 , 7, 505-14	45
1837	Biomimetic composite coating on rapid prototyped scaffolds for bone tissue engineering. 2011 , 7, 809-20	108
1836	Mathematical modeling of degradation for bulk-erosive polymers: applications in tissue engineering scaffolds and drug delivery systems. 2011 , 7, 1140-9	102
1835	Structural and material approaches to bone tissue engineering in powder-based three-dimensional printing. 2011 , 7, 907-20	350
1834	Preparation of 3-D scaffolds in the SiO ₂ -P ₂ O ₅ system with tailored hierarchical meso-macroporosity. 2011 , 7, 1265-73	82
1833	Hydrogen release from titanium hydride in foaming of orthopedic NiTi scaffolds. 2011 , 7, 1387-97	27
1832	Effects of bioactive glass nanoparticles on the mechanical and biological behavior of composite coated scaffolds. 2011 , 7, 1307-18	129
1831	Mechanical characteristics of solid-freeform-fabricated porous calcium polyphosphate structures with oriented stacked layers. 2011 , 7, 1788-96	56
1830	Preparation and characterization of a three-dimensional printed scaffold based on a functionalized polyester for bone tissue engineering applications. 2011 , 7, 1999-2006	96
1829	Mesoporous bioactive glasses: mechanical reinforcement by means of a biomimetic process. 2011 , 7, 2952-9	34

1828	Effect of the pore structure of bioactive glass balls on biocompatibility in vitro and in vivo. 2011 , 7, 2651-60	62
1827	Bioactive glass in tissue engineering. 2011 , 7, 2355-73	1164
1826	Biomaterials and implants for orbital floor repair. 2011 , 7, 3248-66	109
1825	Integration of hollow fiber membranes improves nutrient supply in three-dimensional tissue constructs. 2011 , 7, 3312-24	42
1824	Microstructured templates for directed growth and vascularization of soft tissue in vivo. 2011 , 32, 5391-401	46
1823	Engineering of large osteogenic grafts with rapid engraftment capacity using mesenchymal and endothelial progenitors from human adipose tissue. 2011 , 32, 5801-9	83
1822	Autologous extracellular matrix scaffolds for tissue engineering. 2011 , 32, 2489-99	157
1821	Microstructure design of biodegradable scaffold and its effect on tissue regeneration. 2011 , 32, 5003-14	109
1820	Simulation of the in vivo resorption rate of tricalcium phosphate bone graft substitutes implanted in a sheep model. 2011 , 32, 6362-73	26
1819	Cryogenically fabricated three-dimensional chitosan scaffolds with pore size-controlled structures for biomedical applications. 2011 , 85, 817-823	34
1818	Micro-CT-based improvement of geometrical and mechanical controllability of selective laser melted Ti6Al4V porous structures. 2011 , 528, 7423-7431	282
1817	Bioactive glass/poly (ε-caprolactone) composite scaffolds with 3 dimensionally hierarchical pore networks. 2011 , 31, 198-205	57
1816	Design of artificial extracellular matrices for tissue engineering. 2011 , 36, 238-268	214
1815	Regulatory influence of scaffolds on cell behavior: how cells decode biomaterials. 2011 , 12, 151-9	34
1814	Proliferation of chondrocytes on a 3-d modelled macroporous poly(hydroxyethyl methacrylate)-gelatin cryogel. 2011 , 22, 1733-51	38
1813	Active scaffolds for on-demand drug and cell delivery. 2011 , 108, 67-72	505
1812	Mineral concentration dependent modulation of mechanical properties of bone-inspired bionanocomposite scaffold. 2011 , 99, 013702	4
1811	Research on Microwave Sintering Process for High Strength HA Porous Scaffold. 2011 , 239-242, 2515-2519	

1810	Computer-Aided Design and Fabrication of Bio-Mimetic Materials and Scaffold Micro-Structures. 2011 , 213, 628-632	9
1809	Bone-Inspired Multicomponent Bionanocomposites with a Simple Drop-Cast Processing Strategy. 2011 , 1355, 1	1
1808	Control of the pore architecture in three-dimensional hydroxyapatite-reinforced hydrogel scaffolds. 2011 , 12, 045003	30
1807	Design and manufacture of combinatorial calcium phosphate bone scaffolds. 2011 , 133, 101001	11
1806	Thermal imaging analysis of 3D biological agarose matrices. 2011 , 3, 167	
1805	Modeling of Impact Response of Composite Graded Structure. 2011 ,	
1804	Fabrication of tissue engineered PCL scaffold by selective laser-sintered machine for osteogenesis of adipose-derived stem cells. 2011 , 6, 57-60	25
1803	Tendons: Engineering of Functional Tissues. 2011 , 537-572	6
1802	Optimized fabrication of Ca-P/PHBV nanocomposite scaffolds via selective laser sintering for bone tissue engineering. 2011 , 3, 015001	87
1801	Organ-specific tubular and collagen-based composite scaffolds. 2011 , 17, 327-35	16
1800	CAD/CAM-assisted breast reconstruction. 2011 , 3, 034114	44
1799	A computational and cellular solids approach to the stiffness-based design of bone scaffolds. 2011 , 133, 091003	18
1798	Design optimization of scaffold microstructures using wall shear stress criterion towards regulated flow-induced erosion. 2011 , 133, 081008	17
1797	Histogenesis in Three-dimensional Scaffolds. 2011 , 675-691	
1796	Matrices for tissue engineering and regenerative medicine. 2011 , 270-286	10
1795	Extracellular Matrix: Inspired Biomaterials. 2011 , 113-126	6
1794	Laser Fabrication of 3D Gelatin Scaffolds for the Generation of Bioartificial Tissues. 2011 , 4, 288-299	113
1793	Design of porous three-dimensional PDLLA/nano-hap composite scaffolds using stereolithography. 2012 , 10, 249-58	38

1792	Modeling, Analysis and Rapid Manufacturing of Customised Tibia Bone Scaffold. 2012 , 622-623, 595-599	
1791	3D polylactide-based scaffolds for studying human hepatocarcinoma processes. 2012 , 13, 045003	21
1790	Preparation of Porous Biodegradable Polymer and Its Nanocomposites by Supercritical CO ₂ Foaming for Tissue Engineering. 2012 , 2012, 1-12	29
1789	Multifunctional aliphatic polyester nanofibers for tissue engineering. 2012 , 2, 202-12	32
1788	Computer-aided tissue engineering for bone regeneration. 2012 ,	2
1787	Synthesis of Porous Single Crystalline ZnO Nanowires and the Derivation of Surface Free Energy from Equilibrium Nanopore. 2012 , 159, H239-H242	7
1786	Fabrication of a bio-inspired beta-Tricalcium phosphate/collagen scaffold based on ceramic stereolithography and gel casting for osteochondral tissue engineering. 2012 , 18, 68-80	94
1785	Collagen three-dimensional hydrogel matrix carrying basic fibroblast growth factor for the cultivation of mesenchymal stem cells and osteogenic differentiation. 2012 , 18, 1087-100	56
1784	Interaction between fibroblast cells and porous iron-based biodegradable metals. 2012 ,	3
1783	POLYMER SCAFFOLDS FOR REGENERATIVE THERAPIES DESIGN OF HIERARCHICALLY ORGANIZED STRUCTURES AND THEIR MORPHOLOGICAL CHARACTERIZATION. 2012 , 02, 1230005	2
1782	Bio-inspired composite and cell instructive platforms for bone regeneration. 2012 , 57, 256-275	69
1781	. 2012 ,	19
1780	Low-pressure foaming: a novel method for the fabrication of porous scaffolds for tissue engineering. 2012 , 18, 113-21	22
1779	Multiscale modeling and topology optimization of poroelastic actuators. 2012 , 21, 065005	13
1778	Mechanisms of greater cardiomyocyte functions on conductive nanoengineered composites for cardiovascular application. 2012 , 7, 5653-69	45
1777	Engineered Bone-Inspired Multicomponent Bionanocomposite Scaffolds with Tunable Hardness and Modulus. 2012 , 1465, 1	
1776	A Review of Additive Manufacturing. 2012 , 2012, 1-10	987
1775	Hydrogel-Based Platforms for the Regeneration of Osteochondral Tissue and Intervertebral Disc. 2012 , 4, 1590-1612	44

1774	Macroporous/mesoporous bioglasses doped with Ag/TiO ₂ for dual drug action property and bone repair. 2012 , 6, 93-101	10
1773	Lectin histochemistry Evaluation of Rabbits Tibia Implanted with Macroporous Biphasic Ceramic Implants. 2012 , 529-530, 331-336	1
1772	Microporous Bio-Membrane Materials Based on High Molecular Weight Polylactide and Low Molecular Weight Poly(ethylene glycol). 2012 , 567, 123-126	
1771	Regenerative medicine as applied to general surgery. 2012 , 255, 867-80	79
1770	Stem cells: update and impact on craniofacial surgery. 2012 , 23, 319-22	12
1769	Poly(Lactic Acid)-Based Biomaterials: Synthesis, Modification and Applications. 2012 ,	65
1768	Effect of Controlled Rate Freezing on the Microstructural Properties of Poly (L-lactic Acid) Scaffolds. 2012 ,	
1767	Near-Net Shape Structures Fabricated by Micro-Robotic Deposition Using Precision Extrusion Control. 2012 ,	
1766	The PAM2 system: a multilevel approach for fabrication of complex three-dimensional microstructures. 2012 , 18, 299-307	17
1765	Production of Three-Dimensional Hierarchical Nano Ti-Based Metals Scaffolds for Bone Tissue Grafts. 2012 , 69-82	
1764	Biological Implications of Polymeric Scaffolds for Bone Tissue Engineering Developed via Solid Freeform Fabrication. 2012 , 483-507	
1763	Molecular fabrications of smart nanobiomaterials and applications in personalized medicine. 2012 , 64, 1459-76	57
1762	Biodegradable porous beads and their potential applications in regenerative medicine. 2012 , 22, 11442	52
1761	Printing and prototyping of tissues and scaffolds. 2012 , 338, 921-6	816
1760	Fabrication of porous material for micro component application by direct X-ray lithography and sintering. 2012 , 98, 297-300	5
1759	Controlling the structural organization of regenerated bone by tailoring tissue engineering scaffold architecture. 2012 , 22, 9721	28
1758	Multi-layered polycaprolactone- α -lignate-fucoidan biocomposites supplemented with controlled release of fucoidan for bone tissue regeneration: fabrication, physical properties, and cellular activities. 2012 , 8, 6264	14
1757	Cryogenically direct-plotted alginate scaffolds consisting of micro/nano-architecture for bone tissue regeneration. 2012 , 2, 7578	13

1756	Cell instructive microporous scaffolds through interface engineering. 2012 , 134, 20103-9	58
1755	Computer simulations of in vitro morphogenesis. 2012 , 109, 430-43	12
1754	Rapid 3D printing of anatomically accurate and mechanically heterogeneous aortic valve hydrogel scaffolds. 2012 , 4, 035005	475
1753	Continuum Modelling of In Vitro Tissue Engineering: A Review. 2012 , 229-266	21
1752	Hybridization in Materials Science [Evolution, Current State, and Future Aspirations. 2012 , 2012, 5097-5105	73
1751	3D Photofixation Lithography in Diels-Alder Networks. 2012 , 33, 2092-6	51
1750	Effect of the internal microstructure in rapid-prototyped polycaprolactone scaffolds on physical and cellular properties for bone tissue regeneration. 2012 , 108, 901-909	6
1749	Functionally graded PCL/βTCP biocomposites in a multilayered structure for bone tissue regeneration. 2012 , 108, 949-959	7
1748	Osteoconductive effectiveness of bone graft derived from antler cancellous bone: an experimental study in the rabbit mandible defect model. 2012 , 41, 1330-7	27
1747	Computationally generated cross-property bounds for stiffness and fluid permeability using topology optimization. 2012 , 49, 3397-3408	61
1746	Alginate hydrogel embedding poly(D,L-lactide-co-glycolide) porous scaffold disks for cartilage tissue engineering. 2012 , 20, 447-452	12
1745	Macroporous starPEG-heparin cryogels. 2012 , 13, 2349-58	56
1744	In vivo osteointegration of three-dimensional crosslinked gelatin-coated hydroxyapatite foams. 2012 , 8, 3777-83	27
1743	Construction of mesenchymal stem cell-containing collagen gel with a macrochanneled polycaprolactone scaffold and the flow perfusion culturing for bone tissue engineering. 2012 , 1, 124-36	34
1742	Rapid-prototyped collagen scaffolds reinforced with PCL/βTCP nanofibres to obtain high cell seeding efficiency and enhanced mechanical properties for bone tissue regeneration. 2012 , 22, 16880	32
1741	Microfluidic circulatory system for the raise of liver urea assay. 2012 ,	
1740	Effects of offset values of solid freeform fabricated PCL/βTCP scaffolds on mechanical properties and cellular activities in bone tissue regeneration. 2012 , 22, 21636	35
1739	Fabrication, characterisation and biological activity of phlorotannin-conjugated PCL/βTCP composite scaffolds for bone tissue regeneration. 2012 , 22, 3568	44

1738	Fabrication of cell-laden three-dimensional alginate-scaffolds with an aerosol cross-linking process. 2012 , 22, 18735	47
1737	Formation of graphene oxide gel via the stacked supramolecular self-assembly. 2012 , 2, 12204	51
1736	A new hybrid scaffold constructed of solid freeform-fabricated PCL struts and collagen struts for bone tissue regeneration: fabrication, mechanical properties, and cellular activity. 2012 , 22, 15901	38
1735	The effect of microsized roughness in nano/microsized hierarchical surfaces replicated from a lotus leaf on the activities of osteoblast-like cells (MG63). 2012 , 22, 7584	20
1734	Solid freeform fabrication technology applied to tissue engineering with various biomaterials. 2012 , 8, 1730-1735	107
1733	Bioprinting of a mechanically enhanced three-dimensional dual cell-laden construct for osteochondral tissue engineering using a multi-head tissue/organ building system. 2012 , 22, 085014	272
1732	Rapid-prototyped PLGA/βTCP/hydroxyapatite nanocomposite scaffolds in a rabbit femoral defect model. 2012 , 4, 025003	111
1731	Traversing Material Scales: Macroscale LBL-Assembled Nanocomposites with Microscale Inverted Colloidal Crystal Architecture. 2012 , 24, 9-11	12
1730	Concise review: personalized human bone grafts for reconstructing head and face. 2012 , 1, 64-9	61
1729	Porous inorganic-organic shape memory polymers. 2012 , 53, 2935-2941	31
1728	Additive manufacturing of tissues and organs. 2012 , 37, 1079-1104	841
1727	Novel strategies to engineering biological tissue in vitro. 2012 , 811, 223-44	12
1726	Strut size and surface area effects on long-term in vivo degradation in computer designed poly(L-lactic acid) three-dimensional porous scaffolds. 2012 , 8, 2568-77	46
1725	Enhancement of bone regeneration through facile surface functionalization of solid freeform fabrication-based three-dimensional scaffolds using mussel adhesive proteins. 2012 , 8, 2578-86	71
1724	The effect of pore geometry on the in vitro biological behavior of human periosteum-derived cells seeded on selective laser-melted Ti6Al4V bone scaffolds. 2012 , 8, 2824-34	432
1723	Comparative study of osteogenic potential of a composite scaffold incorporating either endogenous bone morphogenetic protein-2 or exogenous phytomolecule icaritin: an in vitro efficacy study. 2012 , 8, 3128-37	52
1722	Fabrication and properties of porous scaffold of magnesium phosphate/polycaprolactone biocomposite for bone tissue engineering. 2012 , 258, 7589-7595	52
1721	New paradigms in internal architecture design and freeform fabrication of tissue engineering porous scaffolds. 2012 , 34, 762-76	55

1720	Permeability analysis of scaffolds for bone tissue engineering. 2012 , 45, 938-44	116
1719	Hydrogel macroporosity and the prolongation of transgene expression and the enhancement of angiogenesis. 2012 , 33, 7412-21	41
1718	Fabrication of electrospun biocomposites comprising polycaprolactone/fucoidan for tissue regeneration. 2012 , 90, 181-8	54
1717	Electrospun PCL/phlorotannin nanofibres for tissue engineering: physical properties and cellular activities. 2012 , 90, 592-601	17
1716	Cooling-/water-responsive shape memory hybrids. 2012 , 72, 1178-1182	121
1715	Physicochemical characterization and biocompatibility in vitro of biphasic calcium phosphate/polyvinyl alcohol scaffolds prepared by freeze-drying method for bone tissue engineering applications. 2012 , 100, 169-76	106
1714	The design of a heterocellular 3D architecture and its application to monitoring the behavior of cancer cells in response to the spatial distribution of endothelial cells. 2012 , 24, 5339-44	15
1713	Micro-engineered 3D scaffolds for cell culture studies. 2012 , 12, 1301-14	94
1712	Bioactive Nanocomposites Containing Silicate Phases for Bone Replacement and Regeneration. 2012 , 353-379	
1711	Polysaccharides. 2012 , 137-155	10
1710	Human tissue-engineered colon forms from postnatal progenitor cells: an in vivo murine model. 2012 , 7, 807-18	22
1709	Rapid Prototyping. 2012 , 77-99	9
1708	Computational Methods in the Modeling of Scaffolds for Tissue Engineering. 2012 , 107-126	4
1707	Preparation and Characterization of 3D Composite Scaffolds Based on Rapid-Prototyped PCL/βTCP Struts and Electrospun PCL Coated with Collagen and HA for Bone Regeneration. 2012 , 24, 903-913	91
1706	Mechanics of electrospun collagen and hydroxyapatite/collagen nanofibers. 2012 , 13, 185-93	26
1705	Providing osteogenesis conditions to mesenchymal stem cells using bioactive nanocomposite bone scaffolds. 2012 , 32, 2545-2551	14
1704	Collagen in Human Tissues: Structure, Function, and Biomedical Implications from a Tissue Engineering Perspective. 2012 , 173-206	22
1703	Hydrogel Microbeads for Implantable Glucose Sensors. 2012 , 309-330	1

1702 Preparation of Porous Scaffolds from Ice Particulate Templates for Tissue Engineering. **2012**, 47-61

1701 Bioinspired Nanomaterials for Tissue Engineering. **2012**,

1700 Cell and Tissue Engineering. **2012**,

1

1699 APPLICATIONS OF CALCIUM PHOSPHATE NANOPARTICLES IN POROUS HARD TISSUE ENGINEERING SCAFFOLDS. **2012**, 07, 1230004

22

1698 Structure and functionalization of mesoporous bioceramics for bone tissue regeneration and local drug delivery. **2012**, 370, 1400-21

135

1697 Novel Biomimetic Design for Composite Material. **2012**, 1

1696 Metallic ions as therapeutic agents in tissue engineering scaffolds: an overview of their biological applications and strategies for new developments. **2012**, 9, 401-19

265

1695 Fast-degradable microbeads encapsulating human umbilical cord stem cells in alginate for muscle tissue engineering. **2012**, 18, 2303-14

25

1694 Continuous Digital Light Processing (cDLP): Highly Accurate Additive Manufacturing of Tissue Engineered Bone Scaffolds. **2012**, 7, 13-24

86

1693 Tissue Engineering. **2012**, 79-91

2

1692 Patient-Specific Modeling in Tomorrow's Medicine. **2012**,

3

1691 Chemical approaches to synthetic polymer surface biofunctionalization for targeted cell adhesion using small binding motifs. **2012**, 8, 7323-7347

54

1690 Progress of key strategies in development of electrospun scaffolds: bone tissue. **2012**, 13, 043002

43

1689 How linear tension converts to curvature: geometric control of bone tissue growth. **2012**, 7, e36336

126

1688 Porous collagen scaffold reinforced with surfaced activated PLLA nanoparticles. **2012**, 2012, 695137

16

1687 Osteoblast growth and bone-healing response to three-dimensional poly(ϵ -caprolactone fumarate) scaffolds. **2012**, 6, 404-13

14

1686 A new approach for the preparation of hydrophilic poly(L-lactide) porous scaffold for tissue engineering by using lamellar single crystals. **2012**, 61, 1177-1185

12

1685 Regeneration of mastoid air cells using polycaprolactone/tricalcium phosphate biocomposites: an experimental study. **2012**, 122, 660-4

7

1684	Towards high-performance biopackaging: barrier and mechanical properties of dual-action polycaprolactone/zinc oxide nanocomposites. 2012 , 23, 1422-1428	21
1683	Perfluorinated alginate for cellular encapsulation. 2012 , 100, 1963-71	24
1682	Comparison of decellularization techniques for preparation of extracellular matrix scaffolds derived from three-dimensional cell culture. 2012 , 100, 2507-16	55
1681	Three-dimensional porous bioscaffolds for bone tissue regeneration: fabrication via adaptive foam reticulation and freeze casting techniques, characterization, and cell study. 2012 , 100, 2948-59	20
1680	On the role of surface roughness in the corrosion of pure magnesium in vitro. 2012 , 100, 1310-8	23
1679	Preseeding of human vascular cells in decellularized bovine pericardium scaffold for tissue-engineered heart valve: an in vitro and in vivo feasibility study. 2012 , 100, 1654-61	8
1678	Porous scaffold architecture guides tissue formation. 2012 , 27, 1275-88	80
1677	Surface Modification of Ti6Al4V Open Porous Structures Produced by Additive Manufacturing. 2012 , 14, 363-370	162
1676	Biomimetic Scaffolds for Tissue Engineering. 2012 , 22, 2446-2468	310
1675	Emerging technologies for assembly of microscale hydrogels. 2012 , 1, 149-158	74
1674	Novel porous scaffolds of poly(lactic acid) produced by phase-separation using room temperature ionic liquid and the assessments of biocompatibility. 2012 , 23, 1271-9	27
1673	Processing and characterization of innovative scaffolds for bone tissue engineering. 2012 , 23, 1397-409	30
1672	Heterogeneous porous scaffold design for tissue engineering using triply periodic minimal surfaces. 2012 , 13, 527-537	57
1671	Load-adaptive scaffold architecturing: a bioinspired approach to the design of porous additively manufactured scaffolds with optimized mechanical properties. 2012 , 40, 966-75	48
1670	Mechanical properties of open-cell rhombic dodecahedron cellular structures. 2012 , 60, 2873-2885	117
1669	The effect of processing variables on morphological and mechanical properties of supercritical CO ₂ foamed scaffolds for tissue engineering. 2012 , 8, 61-71	88
1668	Printability of calcium phosphate powders for three-dimensional printing of tissue engineering scaffolds. 2012 , 8, 373-85	159
1667	Biological performance of hydroxyapatite-biopolymer foams: in vitro cell response. 2012 , 8, 802-10	27

1666	Biomimetic collagen scaffolds with anisotropic pore architecture. 2012 , 8, 667-76	90
1665	Copper-releasing, boron-containing bioactive glass-based scaffolds coated with alginate for bone tissue engineering. 2012 , 8, 792-801	103
1664	Calcium phosphate ceramic systems in growth factor and drug delivery for bone tissue engineering: a review. 2012 , 8, 1401-21	661
1663	Deposition of Micro-Porous Hydroxyapatite/Tri-Calcium Phosphate Coating on Zirconia-Based Substrate. 2012 , 95, 1212-1215	20
1662	Inter-connecting pores of chitosan scaffold with basic fibroblast growth factor modulate biological activity on human mesenchymal stem cells. 2012 , 87, 2683-2689	14
1661	Effects of silica and zinc oxide doping on mechanical and biological properties of 3D printed tricalcium phosphate tissue engineering scaffolds. 2012 , 28, 113-22	280
1660	Preparation and characterization of a novel 3D scaffold from poly(ϵ -caprolactone)/biphasic calcium phosphate hybrid composite microspheres adhesion. 2012 , 64, 76-83	21
1659	Cartilage regeneration in SCID mice using a highly organized three-dimensional alginate scaffold. 2012 , 33, 120-7	51
1658	Tissue engineering bone-ligament complexes using fiber-guiding scaffolds. 2012 , 33, 137-45	165
1657	Microfabrication of complex porous tissue engineering scaffolds using 3D projection stereolithography. 2012 , 33, 3824-34	474
1656	A review of trends and limitations in hydrogel-rapid prototyping for tissue engineering. 2012 , 33, 6020-41	882
1655	Robocasting chitosan/nanobioactive glass dual-pore structured scaffolds for bone engineering. 2012 , 73, 119-122	47
1654	Heterogeneous minimal surface porous scaffold design using the distance field and radial basis functions. 2012 , 34, 625-39	63
1653	Coating of collagen on a poly(L-lactic acid) sponge surface for tissue engineering. 2012 , 32, 290-295	15
1652	Modification of porous calcium phosphate surfaces with different geometries of bioactive glass nanoparticles. 2012 , 32, 830-839	15
1651	Architecture and properties of bi-modal porous scaffolds for bone regeneration prepared via supercritical CO ₂ foaming and porogen leaching combined process. 2012 , 67, 114-122	34
1650	Laser sintering of polyamides and other polymers. 2012 , 57, 229-267	456
1649	Structural and thermal characterization of CaO-MgO-SiO ₂ -B ₂ O ₅ -CaF ₂ glasses. 2012 , 32, 2739-2746	28

1648	3D Composite scaffolds using strontium containing bioactive glasses. 2012 , 32, 2747-2755	36
1647	Calcium phosphate bone graft substitutes: Failures and hopes. 2012 , 32, 2663-2671	172
1646	Al ₂ O ₃ ceramics with well-oriented and hexagonally ordered pores: The formation of microstructures and the control of properties. 2012 , 32, 3151-3159	26
1645	Porous titanium materials with entangled wire structure for load-bearing biomedical applications. 2012 , 5, 16-31	82
1644	Modifying the pores of an inverse opal scaffold with chitosan microstructures for truly three-dimensional cell culture. 2012 , 33, 296-301	36
1643	Tuning Elasticity of Open-Cell Solid Foams and Bone Scaffolds via Randomized Vertex Connectivity. 2012 , 14, 120-124	7
1642	Dynamic electrostatic lithography: multiscale on-demand patterning on large-area curved surfaces. 2012 , 24, 1947-51	46
1641	Fabrication and in vivo evaluation of Ti6Al4V implants with controlled porous structure and complex shape. 2012 , 7, 66-71	7
1640	Synthesis of multifunctional macroporous-mesoporous TiO ₂ -bioglasses for bone tissue engineering. 2012 , 61, 421-428	15
1639	Tailoring the pore structure of PCL scaffolds for tissue engineering prepared via gas foaming of multi-phase blends. 2012 , 19, 181-188	67
1638	Exogenous phytoestrogenic molecule icaritin incorporated into a porous scaffold for enhancing bone defect repair. 2013 , 31, 164-72	38
1637	Determination of crosslinking density of hydrogels prepared from microcrystalline cellulose. 2013 , 127, 4537-4541	44
1636	Effects of designed PLLA and 50:50 PLGA scaffold architectures on bone formation in vivo. 2013 , 7, 99-111	41
1635	Microwave-sintered 3D printed tricalcium phosphate scaffolds for bone tissue engineering. 2013 , 7, 631-41	247
1634	Bioscaffolds: Fabrication and Performance. 2013 , 161-188	3
1633	Morphologic assessment of polycaprolactone scaffolds for tracheal transplantation in a rabbit model. 2013 , 10, 65-70	11
1632	Tricalcium phosphate induces apoptosis on dental follicle cells. 2013 , 92, 412-7	8
1631	Fatigue design of a mechanically biocompatible lattice for a proof-of-concept femoral stem. 2013 , 22, 65-83	57

1630	Mechanical and Chemical Signaling in Angiogenesis. 2013 ,	1
1629	Robocasting nanocomposite scaffolds of poly(caprolactone)/hydroxyapatite incorporating modified carbon nanotubes for hard tissue reconstruction. 2013 , 101, 1670-81	50
1628	Effects of microwave sintering on the properties of porous hydroxyapatite scaffolds. 2013 , 39, 2389-2395	47
1627	Fiber-based tissue engineering: Progress, challenges, and opportunities. 2013 , 31, 669-87	330
1626	Fabrication and in vitro evaluations with osteoblast-like MG-63 cells of porous hyaluronic acid-gelatin blend scaffold for bone tissue engineering applications. 2013 , 48, 4233-4242	17
1625	Biosensing with electroconductive biomimetic soft materials. 2013 , 1, 5083-5091	9
1624	Heterogeneous object modeling using the radial basis functions. 2013 , 14, 1133-1140	11
1623	Bio-composites composed of a solid free-form fabricated polycaprolactone and alginate-releasing bone morphogenic protein and bone formation peptide for bone tissue regeneration. 2013 , 36, 1725-34	26
1622	Recent advances in 2D and 3D in vitro systems using primary hepatocytes, alternative hepatocyte sources and non-parenchymal liver cells and their use in investigating mechanisms of hepatotoxicity, cell signaling and ADME. 2013 , 87, 1315-530	837
1621	Preparation of designed poly(D,L-lactide)/nanosized hydroxyapatite composite structures by stereolithography. 2013 , 9, 5989-96	113
1620	Composites. 2013 , 223-241	
1619	Scaffold Design for Bone Tissue Engineering: From Micrometric to Nanometric Level. 2013 , 1-16	1
1618	SiO ₂ and ZnO dopants in three-dimensionally printed tricalcium phosphate bone tissue engineering scaffolds enhance osteogenesis and angiogenesis in vivo. 2013 , 9, 9137-48	145
1617	Mineralized self-assembled peptides on 3D laser-made scaffolds: a new route toward 'scaffold on scaffold' hard tissue engineering. 2013 , 5, 045002	34
1616	Computational Modeling in Tissue Engineering. 2013 ,	18
1615	Functionalization of 3D scaffolds with protein-releasing biomaterials for intracellular delivery. 2013 , 171, 63-72	19
1614	Endothelialization approaches for viable engineered tissues. 2013 , 16, 1-14	88
1613	Microengineered PEG hydrogels: 3D scaffolds for guided cell growth. 2013 , 13, 562-72	10

1612	In vitro investigation on the biodegradability and biocompatibility of genipin cross-linked porcine acellular dermal matrix with intrinsic fluorescence. 2013 , 5, 344-50	32
1611	A new method of fabricating robust freeform 3D ceramic scaffolds for bone tissue regeneration. 2013 , 110, 1444-55	57
1610	Hydrogels in calcium phosphate moldable and injectable bone substitutes: Sticky excipients or advanced 3-D carriers?. 2013 , 9, 5421-30	69
1609	Novel crosslinked alginate/hyaluronic acid hydrogels for nerve tissue engineering. 2013 , 7, 269-284	35
1608	Open cellular magnesium alloys for biodegradable orthopaedic implants. 2013 , 1, 303-311	29
1607	Fabrication and Characterization of Porous Sintered TiAg Compacts for Biomedical Application Purpose. 2013 , 29, 330-338	14
1606	Enhancing the mechanical properties of engineered tissue through matrix remodeling via the signaling phospholipid lysophosphatidic acid. 2013 , 433, 133-8	13
1605	Reinforcing bioceramic scaffolds with in situ synthesized β -polycaprolactone coatings. 2013 , 101, 3551-9	34
1604	A tissue-engineered gastric cancer model for mechanistic study of anti-tumor drugs. 2013 , 8, 045003	
1603	Evaluation of the effective diffusivity of a freeform fabricated scaffold using computational simulation. 2013 , 135, 84501	24
1602	Combinatorial on-chip study of miniaturized 3D porous scaffolds using a patterned superhydrophobic platform. 2013 , 9, 768-78	38
1601	Synthesis of bone-like structured foams. 2013 , 33, 1497-1505	8
1600	In vitro cell-biological performance and structural characterization of selective laser sintered and plasma surface functionalized polycaprolactone scaffolds for bone regeneration. 2013 , 33, 3404-12	37
1599	Fabrication of computationally designed scaffolds by low temperature 3D printing. 2013 , 5, 035012	78
1598	Porous biodegradable lumbar interbody fusion cage design and fabrication using integrated global-local topology optimization with laser sintering. 2013 , 135, 101013-8	45
1597	Porous Copolymers of β Caprolactone as Scaffolds for Tissue Engineering. 2013 , 46, 8136-8143	34
1596	Enriched glucose and dextrin mannitol-based media modulates fibroblast behavior on bacterial cellulose membranes. 2013 , 33, 4739-45	34
1595	The effect of sinusoidal AC electric stimulation of 3D PCL/CNT and PCL/ β TCP based bio-composites on cellular activities for bone tissue regeneration. 2013 , 1, 1439-1452	17

1594	Biofabrication of multi-material anatomically shaped tissue constructs. 2013 , 5, 035007	221
1593	Laser Technology in Biomimetics. 2013 ,	8
1592	Photoacoustic Microscopy in Tissue Engineering. 2013 , 16, 67-77	46
1591	Calcium Orthophosphate-Based Bioceramics. 2013 , 6, 3840-3942	175
1590	Synergistic effect of surface modification and scaffold design of bioploted 3-D poly-ε-caprolactone scaffolds in osteogenic tissue engineering. 2013 , 9, 7699-708	50
1589	Mechanical properties of lattice materials via asymptotic homogenization and comparison with alternative homogenization methods. 2013 , 77, 249-262	128
1588	Mimicking the biological world: Methods for the 3D structuring of artificial cellular environments. 2013 , 13, 352-367	26
1587	Minimal perfusion flow for osteogenic growth of mesenchymal stem cells on lattice scaffolds. 2013 , 59, 3131-3144	9
1586	Assembled 3D cell niches in chitosan hydrogel network to mimic extracellular matrix. 2013 , 434, 78-87	13
1585	Heterogeneous porous scaffold design using the continuous transformations of triply periodic minimal surface models. 2013 , 14, 1743-1753	19
1584	Cell interactions between human progenitor-derived endothelial cells and human mesenchymal stem cells in a three-dimensional macroporous polysaccharide-based scaffold promote osteogenesis. 2013 , 9, 8200-13	61
1583	Dynamic tissue engineering scaffolds with stimuli-responsive macroporosity formation. 2013 , 34, 4251-8	70
1582	Handbook on Advanced Design and Manufacturing Technologies for Biomedical Devices. 2013 ,	21
1581	Design, Analysis and Additive Manufacturing of Porous Structures for Biocompatible Micro-Scale Scaffolds. 2013 , 5, 247-252	41
1580	Design standards for engineered tissues. 2013 , 31, 632-7	11
1579	Histogenesis in Three-Dimensional Scaffolds. 2013 , 951-963	
1578	Electrospun PLGA fibre sheets incorporating fluorescent nanosensors: self-reporting scaffolds for application in tissue engineering. 2013 , 5, 68-71	4
1577	Tensile Properties of Processed 3D Printer ZP150 Powder Material. 2013 , 699, 813-816	12

1576	Inverse opal scaffolds for applications in regenerative medicine. 2013 , 9, 9747	51
1575	. 2013 ,	0
1574	Preparation and characterization of multi-layered poly(ϵ -caprolactone)/chitosan scaffolds fabricated with a combination of melt-plotting/in situ plasma treatment and a coating method for hard tissue regeneration. 2013 , 1, 5831-5841	24
1573	Relationship between brainwave signal and human activity of knee joint movement for paraplegic. 2013 ,	0
1572	Fabrication of bionanocomposites comprising flat nanocrystals of calcium in collagen fibers exhibiting hardness comparable to metal. 2013 , 3, 20315	6
1571	Ultrasound-assisted permeability improvement and acoustic characterization for solid-state fabricated PLA foams. 2013 , 20, 137-43	18
1570	Human mesenchymal stem-cell behaviour on direct laser micropatterned electrospun scaffolds with hierarchical structures. 2013 , 13, 299-310	40
1569	High-resolution PLA-based composite scaffolds via 3-D printing technology. 2013 , 9, 5521-30	311
1568	Inorganic-organic shape memory polymer (SMP) foams with highly tunable properties. 2013 , 5, 186-91	42
1567	Integration of a novel injectable nano calcium sulfate/alginate scaffold and BMP2 gene-modified mesenchymal stem cells for bone regeneration. 2013 , 19, 508-18	38
1566	Human umbilical cord stem cell encapsulation in novel macroporous and injectable fibrin for muscle tissue engineering. 2013 , 9, 4688-97	54
1565	How smart do biomaterials need to be? A translational science and clinical point of view. 2013 , 65, 581-603	350
1564	Mechanically improved electrospun PCL biocomposites reinforced with a collagen coating process: preparation, physical properties, and cellular activity. 2013 , 36, 205-14	9
1563	On design of multi-functional microstructural materials. 2013 , 48, 51-66	129
1562	Cell(MC3T3-E1)-printed poly(ϵ -caprolactone)/alginate hybrid scaffolds for tissue regeneration. 2013 , 34, 142-9	72
1561	Novel processing of iron-manganese alloy-based biomaterials by inkjet 3-D printing. 2013 , 9, 8593-603	150
1560	A review of mouse critical size defect models in weight bearing bones. 2013 , 55, 241-7	32
1559	Mechanical properties of a porous bioscaffold with hierarchy. 2013 , 95, 89-92	17

1558	Topological Optimisation of Scaffolds for Tissue Engineering. 2013 , 59, 298-306	19
1557	A novel cost-saving strategy for electrochemical oxidation of organic matters by multi-current controlled operation. 2013 , 109, 18-22	8
1556	Electrospinning and crosslinking of low-molecular-weight poly(trimethylene carbonate-co-(L)-lactide) as an elastomeric scaffold for vascular engineering. 2013 , 9, 6885-97	61
1555	Controlling the pore sizes and related properties of inverse opal scaffolds for tissue engineering applications. 2013 , 34, 485-91	34
1554	Hydrophilization of synthetic biodegradable polymer scaffolds for improved cell/tissue compatibility. 2013 , 8, 014101	91
1553	External inosulation as a feature of revascularization occurs after free transplantation of murine liver grafts. 2013 , 13, 286-98	6
1552	A novel foam-like silane modified alumina scaffold coated with nano-hydroxyapatite/poly(ϵ -caprolactone fumarate) composite layer. 2013 , 39, 209-218	25
1551	Overview of Tissue Engineering Concepts and Applications. 2013 , 1122-1137	3
1550	Biomaterials for Biofabrication of 3D Tissue Scaffolds. 2013 , 23-46	18
1549	Computer-Aided Tissue Engineering: Application to the Case of Anterior Cruciate Ligament Repair. 2013 , 1-44	7
1548	Three-dimensional printing of soy protein scaffolds for tissue regeneration. 2013 , 19, 417-26	75
1547	Biomaterials for Cell-Based Therapeutic Angiogenesis. 2013 , 247-259	
1546	Robotic deposition and in vitro characterization of 3D gelatin-bioactive glass hybrid scaffolds for biomedical applications. 2013 , 101, 2027-37	26
1545	Preparation and characterization of electrospun poly(ϵ -caprolactone)-poly(L-lactic acid) nanofiber tubes. 2013 , 48, 3659-3664	11
1544	Nanoporous microspheres: from controllable synthesis to healthcare applications. 2013 , 1, 2222-2235	73
1543	Ductile Biodegradable Mg-Based Metallic Glasses with Excellent Biocompatibility. 2013 , 23, n/a-n/a	12
1542	Fabrication of Tissue Engineering Scaffolds. 2013 , 427-446	17
1541	Fabrication of three-dimensional poly(ϵ -caprolactone) scaffolds with hierarchical pore structures for tissue engineering. 2013 , 33, 2094-103	38

1540	Bioactive Glasses: From Macro to Nano. 2013 , 4, 149-161	58
1539	From self-assembly of electrospun nanofibers to 3D cm thick hierarchical foams. 2013 , 9, 3164	53
1538	Toward Strong and Tough Glass and Ceramic Scaffolds for Bone Repair. 2013 , 23, 5461-5476	143
1537	Design and assessment of a microfluidic network system for oxygen transport in engineered tissue. 2013 , 29, 701-9	10
1536	Three-dimensional scaffolds for tissue engineering applications: role of porosity and pore size. 2013 , 19, 485-502	1375
1535	General Introduction. 2013 , 1-11	
1534	Investigation of neovascularization in three-dimensional porous scaffolds in vivo by a combination of multiscale photoacoustic microscopy and optical coherence tomography. 2013 , 19, 196-204	60
1533	In situ coating of diatom frustules with silver nanoparticles. 2013 , 15, 2060	15
1532	Chitosan-halloysite nanotubes nanocomposite scaffolds for tissue engineering. 2013 , 1, 2078-2089	280
1531	Preparation, characterization and biological test of 3D-scaffolds based on chitosan, fibroin and hydroxyapatite for bone tissue engineering. 2013 , 33, 3389-95	53
1530	Biocomposite scaffolds containing chitosan/alginate/nano-silica for bone tissue engineering. 2013 , 109, 294-300	176
1529	A Stiff Injectable Biodegradable Elastomer. 2013 , 23, 1527-1533	44
1528	Bonding strength of glass-ceramic trabecular-like coatings to ceramic substrates for prosthetic applications. 2013 , 33, 1530-8	31
1527	Synthesis and characterization of a novel poly(vinyl alcohol) 3D platform for the evaluation of hepatocytes' response to drug administration. 2013 , 1, 3083-3098	26
1526	Bone Bioengineering: Scaffolds, Growth Factors, and Stem Cells. 2013 , 339-366	1
1525	Recent advances in bio-based polymers and composites. 2013 , 49, 1146-1150	8
1524	Effect of solid freeform fabrication-based polycaprolactone/poly(lactic-co-glycolic acid)/collagen scaffolds on cellular activities of human adipose-derived stem cells and rat primary hepatocytes. 2013 , 24, 1053-65	17
1523	Cell-laden poly(e-caprolactone)/alginate hybrid scaffolds fabricated by an aerosol cross-linking process for obtaining homogeneous cell distribution: fabrication, seeding efficiency, and cell proliferation and distribution. 2013 , 19, 784-93	36

1522	Perspectives on the role of nanotechnology in bone tissue engineering. 2013 , 29, 103-15	98
1521	Complex heterogeneous tissue constructs containing multiple cell types prepared by inkjet printing technology. 2013 , 34, 130-9	436
1520	Application of visible light-based projection stereolithography for live cell-scaffold fabrication with designed architecture. 2013 , 34, 331-9	250
1519	Bone regeneration with low dose BMP-2 amplified by biomimetic supramolecular nanofibers within collagen scaffolds. 2013 , 34, 452-9	209
1518	Real-time maps of fluid flow fields in porous biomaterials. 2013 , 34, 1980-6	11
1517	Development of amphiphilic, enzymatically-degradable PEG-peptide conjugate as cell crosslinker for spheroid formation. 2013 , 101, 223-7	11
1516	Fabrication and characterization of porous HA/ β -TCP scaffolds strengthened with micro-ribs structure. 2013 , 92, 274-277	14
1515	Morphological comparison of PVA scaffolds obtained by gas foaming and microfluidic foaming techniques. 2013 , 29, 82-91	79
1514	Injectable, high modulus, and fatigue resistant composite scaffold for load-bearing soft tissue regeneration. 2013 , 14, 4236-47	11
1513	Electrospun human keratin matrices as templates for tissue regeneration. 2013 , 8, 531-41	41
1512	An Approach of Irregular Porous Structure Modeling Based on Subdivision and NURBS. 2013 , 10, 355-369	8
1511	Sintering behaviour of diopside ($\text{CaO} \cdot \text{MgO} \cdot 2\text{SiO}_2$)/fluorapatite ($9\text{CaO} \cdot \text{BP}_2\text{O}_5 \cdot \text{TaF}_2$) bioactive glass. 2013 , 380, 17-24	6
1510	Mechanical characterization of bioprinted in vitro soft tissue models. 2013 , 5, 045010	49
1509	Micro/nanostructured hyaluronic acid matrices with tuned swelling and drug release properties. 2013 , 14, 1-9	31
1508	Fibrin-loaded porous poly(ethylene glycol) hydrogels as scaffold materials for vascularized tissue formation. 2013 , 19, 224-34	46
1507	Tethering bi-functional protein onto mineralized polymer scaffolds to regulate mesenchymal stem cell behaviors for bone regeneration. 2013 , 1, 2731-2741	21
1506	Fabrication of 3-dimensional cellular constructs via microstereolithography using a simple, three-component, poly(ethylene glycol) acrylate-based system. 2013 , 14, 186-92	29
1505	Composite polymer-bioceramic scaffolds with drug delivery capability for bone tissue engineering. 2013 , 10, 1353-65	83

1504	In vitro and in vivo studies of rhBMP2-coated PS/PCL fibrous scaffolds for bone regeneration. 2013 , 101, 797-808	26
1503	Chitosan-based nanofibrous membranes for antibacterial filter applications. 2013 , 92, 254-9	129
1502	Microribbon-Like Elastomers for Fabricating Macroporous and Highly Flexible Scaffolds that Support Cell Proliferation in 3D. 2013 , 23, 346-358	47
1501	A Strategy for the Construction of Controlled, Three-Dimensional, Multilayered, Tissue-Like Structures. 2013 , 23, 42-46	63
1500	Neovascularization in biodegradable inverse opal scaffolds with uniform and precisely controlled pore sizes. 2013 , 2, 145-54	89
1499	Three-dimensional nanocharacterization of porous hydrogel with ion and electron beams. 2013 , 110, 318-26	27
1498	Use of micro-computed tomography to nondestructively characterize biomineral coatings on solid freeform fabricated poly (L-lactic acid) and poly (ε-caprolactone) scaffolds in vitro and in vivo. 2013 , 19, 507-17	10
1497	Multi-scale modification of metallic implants with pore gradients, polyelectrolytes and their indirect monitoring in vivo. 2013 , e50533	1
1496	Design and fabrication of scaffold-based tissue engineering. 2013 , 14,	15
1495	rhBMP-2 Induces Immature Muscular Tissue to Differentiate into Bone-Like Tissue In Vitro. 2013 , 587, 103-108	
1494	Bone Tissue Engineering with Adipose-Derived Stem Cells in Bioactive Composites of Laser-Sintered Porous Polycaprolactone Scaffolds and Platelet-Rich Plasma. 2013 , 6, 4911-4929	14
1493	Cytocompatibility of Plasma and Thermally Treated Biopolymers. 2013 , 2013, 1-10	5
1492	Mechanical and Thermal Properties Biodegradable Microcellular Foams Based on Polylactide and Polycaprolactone. 2013 , 791-793, 274-277	1
1491	Restoration of Critical-Sized Defects in the Rabbit Mandible Using Autologous Bone Marrow Stromal Cells Hybridized with Nano-hydroxyapatite/Calcium Phosphate/Collagen Scaffolds. 2013 , 2013, 1-8	4
1490	A BOTTOM-UP METHOD TO BUILD 3D SCAFFOLDS WITH PREDEFINED VASCULAR NETWORK. 2013 , 13, 1340008	5
1489	Computational Fluid Dynamic Analysis of Customised Tibia Bone Scaffold. 2013 , 330, 698-702	1
1488	Selective laser sintering fabrication of nano-hydroxyapatite/poly-ε-caprolactone scaffolds for bone tissue engineering applications. 2013 , 8, 4197-213	90
1487	Electrohydrodynamic Patterning of Functional Materials. 2013 ,	5

1486	Development of a Coaxial Melt Extrusion Printing process for specialised composite bioscaffold fabrication. 2013,	5
1485	Fabrication of hexagonally packed cell culture substrates using droplet formation in a T-shaped microfluidic junction. 2013, 7, 14101	6
1484	Mastoid obliteration using three-dimensional composite scaffolds consisting of polycaprolactone/tricalcium phosphate/collagen nanofibers: an in vitro and in vivo study. 2013, 13, 660-8	15
1483	Bioprinting and Tissue Engineering: Recent Advances and Future Perspectives. 2013, 53, 795-804	30
1482	Flexible and elastic scaffolds for cartilage tissue engineering prepared by stereolithography using poly(trimethylene carbonate)-based resins. 2013, 13, 1711-9	80
1481	An integrated approach of topology optimized design and selective laser melting process for titanium implants materials. 2013, 23, 433-45	32
1480	Synthesis of spherical calcium phosphate particles for dental and orthopedic applications. 2013, 3,	92
1479	Application of open porous poly(D,L-lactide-co-glycolide) microspheres and the strategy of hydrophobic seeding in hepatic tissue cultivation. 2013, 101, 2862-9	12
1478	3D printed PLA-based scaffolds: a versatile tool in regenerative medicine. 2013, 9, 239-44	115
1477	Bone Regeneration Based on Tissue Engineering Conceptions - A 21st Century Perspective. 2013, 1, 216-48	449
1476	Self-reporting scaffolds for 3-dimensional cell culture. 2013, e50608	2
1475	Vertical ridge augmentation of the atrophic posterior mandible with custom-made, computer-aided design/computer-aided manufacturing porous hydroxyapatite scaffolds. 2013, 24, 856-9	23
1474	Epoxy cross-linked collagen and collagen-laminin Peptide hydrogels as corneal substitutes. 2013, 4, 162-77	40
1473	Polycaprolactone scaffold engineered for sustained release of resveratrol: therapeutic enhancement in bone tissue engineering. 2014, 9, 183-95	56
1472	Upscaling of high-throughput material platforms in two and three dimensions. 133-154	1
1471	Sputtered Hydroxyapatite Nanocoatings on Novel Titanium Alloys for Biomedical Applications. 2013,	4
1470	Bioceramic scaffolds. 151-182	1
1469	Preparation of chitosan nanocomposites with a macroporous structure by unidirectional freezing and subsequent freeze-drying. 2014, 12, 5619-42	45

1468	Increasing Thermal Stability of Gelatin by UV-Induced Cross-Linking with Glucose. 2014 , 2014, 979636	19
1467	Natural and Synthetic Biodegradable Polymers: Different Scaffolds for Cell Expansion and Tissue Formation. 2014 , 37, 187-205	191
1466	Poly(3-hydroxybutyrate-co-3-hydroxyhexanoate)-based scaffolds for tissue engineering. 2014 , 47, 533-9	47
1465	Platinum blue staining of cells grown in electrospun scaffolds. 2014 , 57, 137-41	4
1464	Freeform fabrication of nanobiomaterials using 3D printing. 2014 , 41-92	3
1463	Rapid prototyping technology for bone regeneration. 2014 , 289-314	1
1462	. 2014 ,	1
1461	In vivo performance of combinations of autograft, demineralized bone matrix, and tricalcium phosphate in a rabbit femoral defect model. 2014 , 9, 035010	11
1460	ANALYTICAL RELATIONSHIPS FOR NANOINDENTATION-BASED ESTIMATION OF MECHANICAL PROPERTIES OF BIOMATERIALS. 2014 , 14, 1430004	7
1459	Scaffold Design and Fabrication. 2014 , 311-346	22
1458	Microfabrication Technology in Tissue Engineering. 2014 , 283-310	4
1457	Advanced projection image generation algorithm for fabrication of a tissue scaffold using volumetric distance field. 2014 , 15, 2117-2126	15
1456	Fabrication and perfusion culture of anatomically shaped artificial bone using stereolithography. 2014 , 6, 045002	21
1455	SYNTHESIS AND CHARACTERISATION OF ELECTROSPUN CHITOSAN MEMBRANES REINFORCED BY HALLOYSITE NANOTUBES. 2014 , 14, 1450058	31
1454	Validating continuous digital light processing (cDLP) additive manufacturing accuracy and tissue engineering utility of a dye-initiator package. 2014 , 6, 015003	46
1453	Build-to-last. 2014 , 33, 1-10	151
1452	Scaffold Designing. 2014 , 291-313	5
1451	Development of a novel low-temperature deposition machine using screw extrusion to fabricate poly(l-lactide-co-glycolide) acid scaffolds. 2014 , 228, 593-606	6

1450	Novel preparation of controlled porosity particle/fibre loaded scaffolds using a hybrid micro-fluidic and electrohydrodynamic technique. 2014 , 6, 045010	14
1449	Bio-Hybrid Scaffolds for Bone Tissue Engineering: Nano-Hydroxyapatite/Chitosan Composites. 2014 , 631, 300-305	5
1448	Size-dependent mechanical properties of 2D random nanofibre networks. 2014 , 47, 065310	9
1447	Image-based three-dimensional analysis to characterize the texture of porous scaffolds. 2014 , 2014, 161437	13
1446	Fabrication and In Vitro Evaluation of Nanosized Hydroxyapatite/Chitosan-Based Tissue Engineering Scaffolds. 2014 , 2014, 1-8	18
1445	Synthesis of magnetic, macro/mesoporous bioactive glasses based on coral skeleton for bone tissue engineering. 2014 , 8, 275-81	5
1444	Collagen scaffolds with controlled insulin release and controlled pore structure for cartilage tissue engineering. 2014 , 2014, 623805	20
1443	Quantitative architectural description of tissue engineering scaffolds. 2014 , 29, 281-295	21
1442	PCL/Eggshell Scaffolds for Bone Regeneration. 2014 ,	2
1441	BIOMIMETIC HUMAN LUNG MODELS. 2014 , 1017-1036	
1440	3D scaffold fabrication by mask projection excimer laser stereolithography. 2014 , 4, 2032	22
1439	In Vitro Systems for Hepatotoxicity Testing. 2014 , 27-44	2
1438	Improvement of bone regeneration capability of ceramic scaffolds by accelerated release of their calcium ions. 2014 , 20, 2840-9	39
1437	Recent trends and challenges in computer-aided design of additive manufacturing-based biomimetic scaffolds and bioartificial organs. 2014 , 15, 2205-2217	35
1436	Fabrication of Porous Poly(ϵ -caprolactone) Scaffolds Containing Chitosan Nanofibers by Combining Extrusion Foaming, Leaching, and Freeze-Drying Methods. 2014 , 53, 17909-17918	36
1435	Photoactive electrospun fibers for inducing cell death. 2014 , 3, 494-9	6
1434	Photo-crosslinkable PEG-based microribbons for forming 3D macroporous scaffolds with decoupled niche properties. 2014 , 26, 1757-62	29
1433	Engineering Functional Tissues. 2014 , 237-259	2

1432	Antimicrobial cytocompatible pentaerythritol triacrylate-co-trimethylolpropane composite scaffolds for orthopaedic implants. 2014 , 131, n/a-n/a	4
1431	Biological Performance of Calcium Pyrophosphate-coated Porous Alumina Scaffolds. 2014 , 11, 1-11	13
1430	Design and assembly procedures for large-sized biohybrid scaffolds as patches for myocardial infarct. 2014 , 20, 817-27	13
1429	Free-Standing Cell Sheet Assembled with Ultrathin Extracellular Matrix as an Innovative Approach for Biomimetic Tissues. 2014 , 24, 2216-2223	21
1428	Spatiotemporally controlled microchannels of periodontal mimic scaffolds. 2014 , 93, 1304-12	42
1427	Fabrication of hierarchically porous materials and nanowires through coffee ring effect. 2014 , 6, 20643-53	16
1426	Evaluation of a biomimetic poly(ϵ -caprolactone)/ β -tricalcium phosphate multispiral scaffold for bone tissue engineering: in vitro and in vivo studies. 2014 , 9, 029011	41
1425	Effect of gelatin addition on fabrication of magnesium phosphate-based scaffolds prepared by additive manufacturing system. 2014 , 132, 111-115	32
1424	Optimal design and manufacture of biomedical foam pore structure for tissue engineering applications. 2014 , 71-100	3
1423	Introduction to biomedical foams. 2014 , 3-39	11
1422	Composites for delivery of therapeutics: combining melt electrospun scaffolds with loaded electrospayed microparticles. 2014 , 14, 202-14	22
1421	Solvent-free polymer/bioceramic scaffolds for bone tissue engineering: fabrication, analysis, and cell growth. 2014 , 25, 1856-74	21
1420	Immature muscular tissue differentiation into bone-like tissue by bone morphogenetic proteins in vitro, with ossification potential in vivo. 2014 , 102, 3112-21	1
1419	Preparation of PLLA/HAP/ β -TCP Composite Scaffold for Bone Tissue Engineering. 2014 , 513-517, 143-146	3
1418	Natural-Synthetic Polymer Blend Composite Scaffold for Bone Tissue Engineering: Study of In Vitro Degradation and Protein Adsorption. 2014 , 554, 42-46	2
1417	Stem Cell-Based Tissue Engineering for Bone Repair. 2014 , 1-30	1
1416	Calcium phosphate based three-dimensional cold plotted bone scaffolds for critical size bone defects. 2014 , 2014, 852610	12
1415	Preparation of cylinder-shaped porous sponges of poly(L-lactic acid), poly(DL-lactic-co-glycolic acid), and poly(ϵ -caprolactone). 2014 , 2014, 106082	11

1414	Multiple initiators and dyes for continuous Digital Light Processing (cDLP) additive manufacture of resorbable bone tissue engineering scaffolds. 2014 , 9, 3-9	32
1413	Antimicrobial biocompatible bioscaffolds for orthopaedic implants. 2014 , 8, 386-95	22
1412	Scaffold biomaterials for nano-pathophysiology. 2014 , 74, 104-14	8
1411	Non-tumor mast cells cultured in vitro on a honeycomb-like structured film proliferate with multinucleated formation. 2014 , 10, 313-9	15
1410	3-D self-assembling leucine zipper hydrogel with tunable properties for tissue engineering. 2014 , 35, 5316-5326	56
1409	Regulation of human mesenchymal stem cells differentiation into chondrocytes in extracellular matrix-based hydrogel scaffolds. 2014 , 114, 316-23	20
1408	Nonsolvent induced phase separation (NIPS)-based 3D plotting for 3-dimensionally macrochanneled poly(ϵ -caprolactone) scaffolds with highly porous frameworks. 2014 , 122, 348-351	8
1407	Mesoporous bioactive glass doped-poly (3-hydroxybutyrate-co-3-hydroxyhexanoate) composite scaffolds with 3-dimensionally hierarchical pore networks for bone regeneration. 2014 , 116, 72-80	39
1406	A novel technique for scaffold fabrication: SLUP (salt leaching using powder). 2014 , 14, 371-377	25
1405	A survey of structural and multidisciplinary continuum topology optimization: post 2000. 2014 , 49, 1-38	739
1404	Tissue Engineering. 2014 ,	2
1403	Blast Mitigation. 2014 ,	3
1402	Electrospun nanofibrous cellulose scaffolds with controlled microarchitecture. 2014 , 100, 143-9	35
1401	Biopolymer/Calcium phosphate scaffolds for bone tissue engineering. 2014 , 3, 469-84	71
1400	Vibrational spectroscopy for probing molecular-level interactions in organic films mimicking biointerfaces. 2014 , 207, 199-215	26
1399	3D bioprinting of vascularized, heterogeneous cell-laden tissue constructs. 2014 , 26, 3124-30	1418
1398	Novel rapid direct deposition of ceramic paste for porous biphasic calcium phosphate (BCP) scaffolds with tightly controlled 3-D macrochannels. 2014 , 40, 11079-11084	16
1397	Impact of 3-D printed PLA- and chitosan-based scaffolds on human monocyte/macrophage responses: unraveling the effect of 3-D structures on inflammation. 2014 , 10, 613-22	200

1396	A polyhedral oligomeric silsesquioxane-based bilayered dermal scaffold seeded with adipose tissue-derived stem cells: in vitro assessment of biomechanical properties. 2014 , 188, 361-72	16
1395	Biomaterials for orbital implants and ocular prostheses: overview and future prospects. 2014 , 10, 1064-87	62
1394	Highly porous electrospun 3D polycaprolactone/β-TCP biocomposites for tissue regeneration. 2014 , 120, 246-250	26
1393	High resolution topology optimization using graphics processing units (GPUs). 2014 , 49, 315-325	40
1392	Fabrication of cylindrical PCL scaffolds using a knitting technique and assessment of cell proliferation in the scaffolds. 2014 , 11, 16-22	3
1391	Biomolecule delivery to engineer the cellular microenvironment for regenerative medicine. 2014 , 42, 1557-72	15
1390	Effect of microcavitary alginate hydrogel with different pore sizes on chondrocyte culture for cartilage tissue engineering. 2014 , 34, 168-75	56
1389	Reduced liver cell death using an alginate scaffold bandage: a novel approach for liver reconstruction after extended partial hepatectomy. 2014 , 10, 3209-16	24
1388	3D Scaffolds. 2014 , 475-494	4
1387	Tissue mimetics: engineered hydrogel matrices provide biomimetic environments for cell growth. 2014 , 20, 895-8	22
1386	On the road to bioartificial organs. 2014 , 466, 1847-57	17
1385	Bone Regeneration. 2014 , 1201-1221	10
1384	Effects of processing parameters in thermally induced phase separation technique on porous architecture of scaffolds for bone tissue engineering. 2014 , 102, 1304-15	113
1383	Optimization of scaffold design for bone tissue engineering: A computational and experimental study. 2014 , 36, 448-57	93
1382	Pore size effect of collagen scaffolds on cartilage regeneration. 2014 , 10, 2005-13	208
1381	The effect of scaffold macroporosity on angiogenesis and cell survival in tissue-engineered smooth muscle. 2014 , 35, 5129-37	56
1380	How to determine composite material properties using numerical homogenization. 2014 , 83, 488-495	165
1379	Three-Dimensional Printing of Elastomeric, Cellular Architectures with Negative Stiffness. 2014 , 24, 4905-4913	188

1378	Tissue engineering and regenerative repair in wound healing. 2014 , 42, 1494-507	102
1377	Polylactic acid (PLA) biomedical foams for tissue engineering. 2014 , 313-334	27
1376	Synthesis and characterization of CaP/Col composite scaffolds for load-bearing bone tissue engineering. 2014 , 62, 242-248	20
1375	Modelling polylactide/water/dioxane systems for TIPS scaffold fabrication. 2014 , 374, 1-8	9
1374	Sericin-carboxymethyl cellulose porous matrices as cellular wound dressing material. 2014 , 102, 1928-40	47
1373	Polymeric foams with functional nanocomposite cells. 2014 , 4, 19177-19182	6
1372	Preparation of collagen porous scaffolds with controlled and sustained release of bioactive insulin. 2014 , 29, 95-109	11
1371	Heart regeneration with engineered myocardial tissue. 2014 , 16, 1-28	55
1370	Manufacture of β -TCP/alginate scaffolds through a Fab@home model for application in bone tissue engineering. 2014 , 6, 025001	49
1369	Biocompatible evaluation of barium titanate foamed ceramic structures for orthopedic applications. 2014 , 102, 2089-95	41
1368	Design of tunable protein-releasing nanoapatite/hydrogel scaffolds for hard tissue engineering. 2014 , 144, 409-417	13
1367	From Mathematical Models to Clinical Reality. 2014 , 25-39	
1366	Hybrid hierarchical fabrication of three-dimensional scaffolds. 2014 , 16, 257-263	45
1365	Current trends in the design of scaffolds for computer-aided tissue engineering. 2014 , 10, 580-94	304
1364	Evaluation of 3D printing and its potential impact on biotechnology and the chemical sciences. 2014 , 86, 3240-53	1085
1363	Design of a composite biomaterial system for tissue engineering applications. 2014 , 10, 1177-86	44
1362	A novel therapeutic design of microporous-structured biopolymer scaffolds for drug loading and delivery. 2014 , 10, 1238-50	39
1361	Enzymatically synthesized inorganic polymers as morphogenetically active bone scaffolds: application in regenerative medicine. 2014 , 313, 27-77	42

1360	Hierarchical Characterization of Biomedical Polymers. 2014 , 33-42	1
1359	Silver-containing bioactive glasses for tissue engineering applications. 2014 , 177-211	8
1358	Hydrogel-fibre composites with independent control over cell adhesion to gel and fibres as an integral approach towards a biomimetic artificial ECM. 2014 , 6, 024106	10
1357	Organic/inorganic composite membranes based on poly(L-lactic-co-glycolic acid) and mesoporous silica for effective bone tissue engineering. 2014 , 6, 20895-903	43
1356	Adipose tissue: A valuable resource of biomaterials for soft tissue engineering. 2014 , 22, 932-947	16
1355	Typical Processing Steps with Porous Silicon. 2014 , 1-6	
1354	Microfluidic Thermally Activated Materials for Rapid Control of Macroscopic Compliance. 2014 , 24, 4860-4866	26
1353	Fabrication of dual-pore scaffolds using SLUP (salt leaching using powder) and WNM (wire-network molding) techniques. 2014 , 45, 546-55	22
1352	Efficacy of rhBMP-2 loaded PCL/PLGA/βTCP guided bone regeneration membrane fabricated by 3D printing technology for reconstruction of calvaria defects in rabbit. 2014 , 9, 065006	80
1351	Biotic and abiotic molecule dopants determining the electrochemical performance, stability and fibroblast behavior of conducting polymer for tissue interface. 2014 , 4, 47461-47471	6
1350	Microsphere based scaffolds for bone regenerative applications. 2014 , 2, 1145-1153	35
1349	Multifunctional scaffolds for bone regeneration. 2014 , 95-117	4
1348	Bioceramics for skeletal bone regeneration. 2014 , 180-216	6
1347	Collagen microgel-assisted dexamethasone release from PLLA-collagen hybrid scaffolds of controlled pore structure for osteogenic differentiation of mesenchymal stem cells. 2014 , 25, 1374-86	16
1346	A direct cell printing supplemented with low-temperature processing method for obtaining highly porous three-dimensional cell-laden scaffolds. 2014 , 2, 2773-2782	34
1345	Synthesis and 3D printing of biodegradable polyurethane elastomer by a water-based process for cartilage tissue engineering applications. 2014 , 3, 1578-87	138
1344	Three dimensionally printed mesoporous bioactive glass and poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) composite scaffolds for bone regeneration. 2014 , 2, 6106-6118	72
1343	Mineralized biomimetic collagen/alginate/silica composite scaffolds fabricated by a low-temperature bio-plotting process for hard tissue regeneration: fabrication, characterisation and in vitro cellular activities. 2014 , 2, 5785-5798	39

1342	Facile synthesis of biodegradable and clickable polymer. 2014 , 4, 23377-23381	9
1341	Rapid prototyping of chitosan-coated alginate scaffolds through the use of a 3D fiber deposition technique. 2014 , 2, 6779-6791	55
1340	Cell-printed hierarchical scaffolds consisting of micro-sized polycaprolactone (PCL) and electrospun PCL nanofibers/cell-laden alginate struts for tissue regeneration. 2014 , 2, 314-324	59
1339	A bioactive "self-fitting" shape memory polymer scaffold with potential to treat cranio-maxillo facial bone defects. 2014 , 10, 4597-4605	119
1338	Permeability measurements and modeling of topology-optimized metallic 3-D woven lattices. 2014 , 81, 326-336	34
1337	Three-dimensional electrospun polycaprolactone (PCL)/alginate hybrid composite scaffolds. 2014 , 114, 213-221	106
1336	Bioinspired scaffolds for osteochondral regeneration. 2014 , 20, 2052-76	78
1335	Tuning surface properties of poly(butylene terephthalate) melt blown fibers by alkaline hydrolysis and fluorination. 2014 , 6, 11640-8	16
1334	Emerging chitin and chitosan nanofibrous materials for biomedical applications. 2014 , 6, 9477-93	262
1333	Tailoring hierarchical meso-macroporous 3D scaffolds: from nano to macro. 2014 , 2, 49-58	30
1332	The contribution of rheology for designing hydroxyapatite biomaterials. 2014 , 19, 585-593	24
1331	Porous gelatin-siloxane hybrid scaffolds with biomimetic structure and properties for bone tissue regeneration. 2014 , 102, 1528-36	25
1330	Non-cytotoxic conductive carboxymethyl-chitosan/aniline pentamer hydrogels. 2014 , 82, 81-88	37
1329	Design of tissue engineering scaffolds based on hyperbolic surfaces: structural numerical evaluation. 2014 , 36, 1033-40	55
1328	Computational analysis of cartilage implants based on an interpenetrated polymer network for tissue repairing. 2014 , 116, 249-59	9
1327	Modified gum arabic cross-linked gelatin scaffold for biomedical applications. 2014 , 43, 272-9	49
1326	Microstructural and mechanical characteristics of porous iron prepared by powder metallurgy. 2014 , 43, 494-501	46
1325	Tissue engineering. 2014 , 48, 137-54	30

1324	Synthesis and high-throughput processing of polymeric hydrogels for 3D cell culture. 2014 , 25, 1581-601	40
1323	Indirect three-dimensional printing of synthetic polymer scaffold based on thermal molding process. 2014 , 6, 025003	41
1322	3D bioprinting of tissues and organs. 2014 , 32, 773-85	3876
1321	Photopolymerization-based additive manufacturing for the development of 3D porous scaffolds. 2014 , 149-201	12
1320	Hierarchical multilayer assembly of an ordered nanofibrous scaffold via thermal fusion bonding. 2014 , 6, 024107	9
1319	Effect of topology of poly(L-lactide-co-ε-caprolactone) scaffolds on the response of cultured human umbilical cord Wharton's jelly-derived mesenchymal stem cells and neuroblastoma cell lines. 2014 , 25, 1028-44	6
1318	Multifunctional scaffolds for bone tissue engineering and in situ drug delivery. 2014 , 648-675	3
1317	Clearance kinetics of biomaterials affects stem cell retention and therapeutic efficacy. 2014 , 15, 564-73	6
1316	Regenerative orthopaedics: in vitro, in vivo...in silico. 2014 , 38, 1771-8	18
1315	Microfluidic direct writer with integrated declogging mechanism for fabricating cell-laden hydrogel constructs. 2014 , 16, 387-95	57
1314	Elastic biodegradable starch/ethylene-co-vinyl alcohol fibre-mesh scaffolds for tissue engineering applications. 2014 , 131, n/a-n/a	8
1313	Bioactive ceramics and glasses for tissue engineering. 2014 , 67-114	14
1312	Proteins and Poly(Amino Acids). 2014 , 43-65	7
1311	Relevance of PEG in PLA-based blends for tissue engineering 3D-printed scaffolds. 2014 , 38, 55-62	137
1310	Delivery of growth factors using a smart porous nanocomposite scaffold to repair a mandibular bone defect. 2014 , 15, 1019-30	113
1309	Rapid prototyping technology for bone regeneration. 2014 , 254-284	6
1308	Effect of hyaluronan molecular weight on structure and biocompatibility of silk fibroin/hyaluronan scaffolds. 2014 , 65, 516-23	13
1307	On the Road to Personalized Medicine: Multiscale Computational Modeling of Bone Tissue. 2014 , 21, 399-479	16

1306	Biomaterials for craniofacial bone engineering. 2014 , 93, 1187-95	98
1305	Chitosan-based scaffolds for bone tissue engineering. 2014 , 2, 3161-3184	357
1304	Effect of graphitic layers encapsulating single-crystal apatite nanowire on the osteogenesis of human mesenchymal stem cells. 2014 , 118, 13849-58	3
1303	Three-dimensional printed multiphase scaffolds for regeneration of periodontium complex. 2014 , 20, 1342-51	119
1302	Optical scattering in electrospun poly(ϵ -caprolactone) tissue scaffolds. 2014 , 26, 032004	2
1301	Ceramic biomaterials for tissue engineering. 2014 , 3-34	5
1300	Bone tissue engineering scaffolding: computer-aided scaffolding techniques. 2014 , 3, 61-102	169
1299	A surface-modified poly(ϵ -caprolactone) scaffold comprising variable nanosized surface-roughness using a plasma treatment. 2014 , 20, 951-63	60
1298	Physical and bioactive properties of multi-layered PCL/silica composite scaffolds for bone tissue regeneration. 2014 , 250, 399-408	26
1297	3D printing facilitated scaffold-free tissue unit fabrication. 2014 , 6, 024111	108
1296	Biomimetic porous scaffolds for bone tissue engineering. 2014 , 80, 1-36	666
1295	Indentation-triggered pattern transformation in hyperelastic soft cellular solids. 2014 , 342, 292-298	4
1294	Facilely fabricating PCL nanofibrous scaffolds with hierarchical pore structure for tissue engineering. 2014 , 122, 62-65	23
1293	Therapeutic foam scaffolds incorporating biopolymer-shelled mesoporous nanospheres with growth factors. 2014 , 10, 2612-21	25
1292	Morphology, mechanical properties, and shape memory effects of poly(lactic acid)/thermoplastic polyurethane blend scaffolds prepared by thermally induced phase separation. 2014 , 50, 361-379	41
1291	Evolution of the properties of a poly(l-lactic acid) scaffold with double porosity during in vitro degradation in a phosphate-buffered saline solution. 2014 , 131, n/a-n/a	15
1290	A facile method to fabricate hydrogels with microchannel-like porosity for tissue engineering. 2014 , 20, 169-76	38
1289	Comparative study of poly (lactic-co-glycolic acid)/tricalcium phosphate scaffolds incorporated or coated with osteogenic growth factors for enhancement of bone regeneration. 2014 , 2, 91-104	21

1288	Preparation and mechanical property of a novel 3D porous magnesium scaffold for bone tissue engineering. 2014 , 42, 362-7	60
1287	Enhanced cellular activities of polycaprolactone/alginate-based cell-laden hierarchical scaffolds for hard tissue engineering applications. 2014 , 430, 315-25	18
1286	Surface modification of polycaprolactone scaffolds fabricated via selective laser sintering for cartilage tissue engineering. 2014 , 40, 389-97	75
1285	New strategy to prepare hollow silica microspheres with tunable holes on the shell wall. 2014 , 30, 683-6	20
1284	Biomechanics and mechanobiology in functional tissue engineering. 2014 , 47, 1933-40	157
1283	The effects of pore size in bilayered poly(lactide-co-glycolide) scaffolds on restoring osteochondral defects in rabbits. 2014 , 102, 180-92	81
1282	Phage-based nanomaterials for biomedical applications. 2014 , 10, 1741-50	42
1281	Topological Shear Stress Optimisation of Micro-CT Based Scaffolds. 2014 ,	
1280	Chapter 3: Decellularized Scaffolds: Concepts, Methodologies, and Applications in Cardiac Tissue Engineering and Whole-Organ Regeneration. 2014 , 77-124	5
1279	Porous Titanium Implants Fabricated by a Salt Bath Sintering Process for Bone Repair Applications. 2014 , 57-66	
1278	Non-invasive and in situ characterization of the degradation of biomaterial scaffolds by volumetric photoacoustic microscopy. 2014 , 53, 184-8	29
1277	Powder-Bed Stabilization for Powder-Based Additive Manufacturing. 2014 , 6, 491581	16
1276	In vitro osteoinductive potential of porous monetite for bone tissue engineering. 2014 , 5, 2041731414536572	32
1275	Rapid prototyped porous nickel-titanium scaffolds as bone substitutes. 2014 , 5, 2041731414540674	28
1274	Topology Optimization of Porous Lattice Structures for Orthopaedic Implants. 2014 , 47, 9907-9912	6
1273	Assessment of cell proliferation in salt-leaching using powder (SLUP) scaffolds with penetrated macro-pores. 2014 , 131, n/a-n/a	3
1272	Non-Invasive and In Situ Characterization of the Degradation of Biomaterial Scaffolds by Volumetric Photoacoustic Microscopy. 2014 , 126, 188-192	4
1271	Tissue Engineering: The Therapeutic Strategy of the Twenty-First Century. 2014 , 3-38	1

1270	Microfabrication Techniques in Scaffold Development. 2014 , 103-142	2
1269	Design and 3D Printing of Scaffolds and Tissues. 2015 , 1, 261-268	255
1268	Ultrahigh strength of three-dimensional printed diluted magnesium doping wollastonite porous scaffolds. 2015 , 5, 631-639	34
1267	Robotics-driven printing of curved 3D structures for manufacturing cardiac therapeutic devices. 2015 ,	5
1266	Multifunctional Hydrogels with Reversible 3D Ordered Macroporous Structures. 2015 , 2, 1500069	19
1265	References. 2015 , 457-546	
1264	A Dual Role of Graphene Oxide Sheet Deposition on Titanate Nanowire Scaffolds for Osteo-implantation: Mechanical Hardener and Surface Activity Regulator. 2015 , 5, 18266	24
1263	In Vitro Study of Surface Modified Poly(ethylene glycol)-Impregnated Sintered Bovine Bone Scaffolds on Human Fibroblast Cells. 2015 , 5, 9806	44
1262	Advances in techniques and technologies for bone implants. 2015 , 4, 26-36	4
1261	Tuning methods and mechanical modelling of hydrogels. 2015 , 4, 140-154	2
1260	Fabrication and Characterization of Nano Bioglass-Ceramic Scaffold for Bone Tissue Engineering. 2015 , 37-49	
1259	Construction and in vitro characterization of three-dimensional silk fibroin chitosan scaffolds. 2015 , 34, 475-84	10
1258	Hydrogels as scaffolds and delivery systems to enhance axonal regeneration after injuries. 2015 , 9, 13	63
1257	Porous composite with negative thermal expansion obtained by photopolymer additive manufacturing. 2015 , 3, 076103	52
1256	Tolerance Specification and Related Issues for Additively Manufactured Products. 2015 ,	4
1255	Bioinspired Phospholipid Polymer Hydrogel System for Cellular Engineering. 2015 , 351, 69-77	2
1254	3D Printed Anatomical Nerve Regeneration Pathways. 2015 , 25, 6205-6217	188
1253	High-Resolution Printing of 3D Structures Using an Electrohydrodynamic Inkjet with Multiple Functional Inks. 2015 , 27, 4322-8	184

1252	Improved resolution of 3D printed scaffolds by shrinking. 2015 , 103, 1415-23	4
1251	Implantation of a polycaprolactone scaffold with subchondral bone anchoring ameliorates nodules formation and other tissue alterations. 2015 , 38, 659-66	15
1250	Porous three-dimensional carbon nanotube scaffolds for tissue engineering. 2015 , 103, 3212-25	39
1249	Advanced functional polymers for regenerative and therapeutic dentistry. 2015 , 21, 550-7	3
1248	Advances in Functional Assemblies for Regenerative Medicine. 2015 , 4, 2500-19	4
1247	Engineering Gyroid-Structured Functional Materials via Templates Discovered in Nature and in the Lab. 2015 , 11, 5004-22	33
1246	Simultaneous Nano- and Microscale Control of Nanofibrous Microspheres Self-Assembled from Star-Shaped Polymers. 2015 , 27, 3947-52	55
1245	Inverse Opal Scaffolds with an Embossed Surface Pattern Prepared from Sticky Golf-Ball-Shaped Microparticle Assemblies. 2015 , 2, 1500152	3
1244	The application of nanomaterials in controlled drug delivery for bone regeneration. 2015 , 103, 3978-92	32
1243	Simultaneous Chemical and Optical Patterning of Polyacrylonitrile Film by Vapor-Based Reaction. 2015 , 36, 1192-9	4
1242	3D Printing of Scaffolds for Tissue Regeneration Applications. 2015 , 4, 1742-62	492
1241	3D-Printed Atsttrin-Incorporated Alginate/Hydroxyapatite Scaffold Promotes Bone Defect Regeneration with TNF/TNFR Signaling Involvement. 2015 , 4, 1701-8	41
1240	Electrospun polycaprolactone 3D nanofibrous scaffold with interconnected and hierarchically structured pores for bone tissue engineering. 2015 , 4, 2238-46	183
1239	Chondroprotective effect of zinc oxide nanoparticles in conjunction with hypoxia on bovine cartilage-matrix synthesis. 2015 , 103, 3554-63	9
1238	Osteoinductive peptide-functionalized nanofibers with highly ordered structure as biomimetic scaffolds for bone tissue engineering. 2015 , 10, 7109-28	21
1237	Research Progress in Preparation of Porous Ceramics. 2015 , 64, 100-103	1
1236	Osteo-Induction of Human Adipose Derived Stem Cells Cultured on Poly (L-Lactic Acid) Scaffolds Prepared by Thermally Induced Phase Separation Method. 2015 ,	
1235	Bioceramics and Scaffolds: A Winning Combination for Tissue Engineering. 2015 , 3, 202	161

1234	Fabrication and Evaluation of Multilayer Nanofiber-Hydrogel Meshes with a Controlled Release Property. 2015 , 3, 296-308	10
1233	A Closer Look at Schlemm's Canal Cell Physiology: Implications for Biomimetics. 2015 , 6, 963-85	17
1232	Mechanics of Biological Tissues and Biomaterials: Current Trends. 2015 , 8, 4505-4511	8
1231	3D-Printed ABS and PLA Scaffolds for Cartilage and Nucleus Pulposus Tissue Regeneration. 2015 , 16, 15118-35	202
1230	Three-dimensional bioprinting and tissue fabrication: prospects for drug discovery and regenerative medicine. 2015 , 23	18
1229	Performance of PRP associated with porous chitosan as a composite scaffold for regenerative medicine. 2015 , 2015, 396131	20
1228	Application of Biomaterials and Inkjet Printing to Develop Bacterial Culture System. 2015 , 2015, 1-9	11
1227	Design, materials, and mechanobiology of biodegradable scaffolds for bone tissue engineering. 2015 , 2015, 729076	196
1226	Cell based advanced therapeutic medicinal products for bone repair: Keep it simple?. 2015 , 84, 30-44	33
1225	Alginate Scaffolds with Modified Micro Pores for Tissue Engineering Applications. 2015 , 749, 457-460	1
1224	Characterization of Material-Process-Structure Interactions in the 3D Bioplotting of Polycaprolactone. 2015 , 2, 20-31	16
1223	Biodegradable CSMA/PECA/Graphene Porous Hybrid Scaffold for Cartilage Tissue Engineering. 2015 , 5, 9879	108
1222	Sustained regeneration of high-volume adipose tissue for breast reconstruction using computer aided design and biomanufacturing. 2015 , 52, 551-60	75
1221	Assembly of multiple cell gradients directed by three-dimensional microfluidic channels. 2015 , 15, 3203-10	11
1220	Silicon oxide based materials for controlled release in orthopedic procedures. 2015 , 94, 96-115	21
1219	Additively Manufactured Device for Dynamic Culture of Large Arrays of 3D Tissue Engineered Constructs. 2015 , 4, 864-73	16
1218	Composite Synthetic Scaffolds for Tissue Engineering and Regenerative Medicine. 2015 ,	10
1217	Design and characterization of a composite material based on Sr(II)-loaded clay nanotubes included within a biopolymer matrix. 2015 , 448, 501-7	12

1216	On the role of thermal fluid dynamics into the evolution of porosity during selective laser melting. 2015 , 105, 14-17		133
1215	Accelerated wound healing by injectable microporous gel scaffolds assembled from annealed building blocks. <i>Nature Materials</i> , 2015 , 14, 737-44	27	479
1214	Electrohydrodynamic direct printing of PCL/collagen fibrous scaffolds with a core/shell structure for tissue engineering applications. 2015 , 279, 317-326		27
1213	Fabrication and Characterization of Polymer and Composite Scaffolds Using Freeze-Drying Technique. 2015 , 45-60		
1212	Preparation and Reinforcement of Dual-Porous Biocompatible Cellulose Scaffolds for Tissue Engineering. 2015 , 300, 911-924		42
1211	Mechanically Durable and Biologically Favorable Protein Hydrogel Based on Elastic Silklike Protein Derived from Sea Anemone. 2015 , 16, 3819-26		10
1210	Magnetically Self-Assembled Colloidal Three-Dimensional Structures as Cell Growth Scaffold. 2015 , 31, 9576-81		3
1209	Lifetime estimation applying a kinetic model based on the generalized logistic function to biopolymers. 2015 , 122, 1203-1212		6
1208	Additive technologies for making highly permeable inorganic materials with tailored morphological architectonics for medicine. 2015 , 51, 1297-1315		26
1207	Synthesis and characterisation of 3-dimensional hydroxyapatite nanostructures using a thermoplastic polyurethane nanofiber sacrificial template. 2015 , 5, 97773-97780		8
1206	Facile method for fabricating uniformly patterned and porous nanofibrous scaffolds for tissue engineering. 2015 , 23, 1152-1158		5
1205	The effect of bone scaffold gradient architecture design on stem cell mechanical modulation: a computational study. 2015 ,		
1204	Three-dimensional bioprinting of complex cell laden alginate hydrogel structures. 2015 , 7, 045012		234
1203	Cell-encapsulating alginate micro-sized beads using an air-assisted atomization process to obtain a cell-laden hybrid scaffold. 2015 , 3, 9132-9139		9
1202	Investigating the Role of Geometric Dimensioning and Tolerancing in Additive Manufacturing. 2015 , 137,		54
1201	Synthesis of Fibrous Complex Structures: Designing Microstructure to Deliver Targeted Macroscale Response. 2015 , 67,		89
1200	Microstructural parameter-based modeling for transport properties of collagen matrices. 2015 , 137, 061003		5
1199	A new method of fabricating a blend scaffold using an indirect three-dimensional printing technique. 2015 , 7, 045003		29

1198	Biomaterial coating increases bone formation by ex vivo BMP-7 gene therapy in rapid prototyped poly(L-lactic acid) (PLLA) and poly(ε-caprolactone) (PCL) porous scaffolds. 2015 , 4, 621-32	19
1197	Fabrication of novel Si-doped hydroxyapatite/gelatin scaffolds by rapid prototyping for drug delivery and bone regeneration. 2015 , 15, 200-9	138
1196	Shaping living tissues using microfabricated structures. 2015 , 144, 1-5	
1195	PCL/alginate composite scaffolds for hard tissue engineering: fabrication, characterization, and cellular activities. 2015 , 17, 87-99	50
1194	Low intensity pulse ultrasound stimulate chondrocytes growth in a 3-D alginate scaffold through improved porosity and permeability. 2015 , 58, 43-52	9
1193	Design control for clinical translation of 3D printed modular scaffolds. 2015 , 43, 774-86	69
1192	Additive Manufacturing for Bone Load Bearing Applications. 2015 , 231-263	4
1191	Fabrication of a nanofibrous mat with a human skin pattern. 2015 , 31, 424-31	14
1190	Crystalline nano-coatings of fluorine-substituted hydroxyapatite produced by magnetron sputtering with high plasma confinement. 2015 , 264, 163-174	46
1189	Hierarchical polymeric scaffolds support the growth of MC3T3-E1 cells. 2015 , 26, 116	22
1188	Radiopaque, iodine functionalized, phenylalanine-based poly(ester urea)s. 2015 , 16, 615-24	20
1187	Design of Polymer Scaffolds for Tissue Engineering Applications. 2015 , 54, 2317-2328	7
1186	Dreidimensional gedruckte, zellbeladene Konstrukte aus Spinnenseide. 2015 , 127, 2858-2862	5
1185	Fabrication of honeycomb-structured poly(ethylene glycol)-block-poly(lactic acid) porous films and biomedical applications for cell growth. 2015 , 332, 287-294	25
1184	Mussel-Derived Bioadhesives. 2015 , 1321-1336	2
1183	Biofabrication of cell-loaded 3D spider silk constructs. 2015 , 54, 2816-20	169
1182	Cell response to single-walled carbon nanotubes in hybrid porous collagen sponges. 2015 , 126, 63-9	17
1181	Modelling and simulation of the chondrocyte cell growth, glucose consumption and lactate production within a porous tissue scaffold inside a perfusion bioreactor. 2015 , 5, 55-62	27

1180	Novel self-assembly-induced 3D plotting for macro/nano-porous collagen scaffolds comprised of nanofibrous collagen filaments. 2015 , 143, 265-268	14
1179	Fabrication and Characterization of Deformable Porous Matrices with Controlled Pore Characteristics. 2015 , 107, 79-94	7
1178	Bio-based polymers, supercritical fluids and tissue engineering. 2015 , 50, 826-838	63
1177	Tissue engineering for bone regeneration and osseointegration in the oral cavity. 2015 , 31, 317-38	120
1176	Nano-composite of silk fibroin-chitosan/Nano ZrO ₂ for tissue engineering applications: fabrication and morphology. 2015 , 76, 292-302	50
1175	Macroporous biphasic calcium phosphate scaffolds reinforced by poly-L-lactic acid/hydroxyapatite nanocomposite coatings for bone regeneration. 2015 , 98, 29-37	52
1174	Hierarchical bioglass scaffolds: introducing the "milky way" for templated bioceramics. 2015 , 3, 2971-2977	8
1173	Combination of aligned PLGA/Gelatin electrospun sheets, native dental pulp extracellular matrix and treated dentin matrix as substrates for tooth root regeneration. 2015 , 52, 56-70	81
1172	Current strategies in multiphasic scaffold design for osteochondral tissue engineering: A review. 2015 , 103, 2460-81	125
1171	Computational Design and Simulation. 2015 , 207-254	1
1170	CollagenHydroxyapatite composite scaffolds for tissue engineering. 2015 , 211-234	13
1169	Core-shell designed scaffolds for drug delivery and tissue engineering. 2015 , 21, 2-19	120
1168	Printing cell-laden gelatin constructs by free-form fabrication and enzymatic protein crosslinking. 2015 , 17, 16	92
1167	Shish-kebab-structured poly(ϵ -caprolactone) nanofibers hierarchically decorated with chitosan-poly(ϵ -caprolactone) copolymers for bone tissue engineering. 2015 , 7, 6955-65	93
1166	Additively Manufactured Open-Cell Porous Biomaterials Made from Six Different Space-Filling Unit Cells: The Mechanical and Morphological Properties. 2015 , 8, 1871-1896	222
1165	Modifications of collagen-based biomaterials with immobilized growth factors or peptides. 2015 , 84, 44-52	21
1164	Elastic textures for additive fabrication. 2015 , 34, 1-12	147
1163	In vitro biocompatibility study of keratin/agar scaffold for tissue engineering. 2015 , 81, 1-10	38

1162	Bioprinting a cardiac valve. 2015 , 33, 1503-21	105
1161	Proliferation and osteogenic differentiation of mesenchymal stromal cells in a novel porous hydroxyapatite scaffold. 2015 , 10, 579-90	17
1160	The Biomechanics of eyelid tarsus tissue. 2015 , 48, 3455-9	9
1159	Challenges in engineering osteochondral tissue grafts with hierarchical structures. 2015 , 15, 1583-99	26
1158	Microsphere-based selective laser sintering for building macroporous bone scaffolds with controlled microstructure and excellent biocompatibility. 2015 , 135, 81-89	60
1157	3D printing of layered brain-like structures using peptide modified gellan gum substrates. 2015 , 67, 264-73	283
1156	Liver tissue engineering using functional marine biomaterials. 2015 , 91-106	2
1155	Fabrication of scalable and structured tissue engineering scaffolds using water dissolvable sacrificial 3D printed moulds. 2015 , 55, 569-78	130
1154	On the Collagen Mineralization. A Review. 2015 , 88, 15-22	22
1153	Bioinspired engineering of honeycomb structure [Using nature to inspire human innovation. 2015 , 74, 332-400	315
1152	Combined additive manufacturing approaches in tissue engineering. 2015 , 24, 1-11	96
1151	Osteoarthritis. 2015 ,	6
1150	Microstructural and mechanical properties of biodegradable iron foam prepared by powder metallurgy. 2015 , 83, 468-482	53
1149	Macroporous thin membranes for cell transplant in regenerative medicine. 2015 , 67, 254-63	1
1148	Computer aided biomanufacturing of mechanically robust pure collagen meshes with controlled macroporosity. 2015 , 7, 035005	13
1147	3D multi-layered fibrous cellulose structure using an electrohydrodynamic process for tissue engineering. 2015 , 457, 180-7	38
1146	Synthesis and characterization of a photocrosslinkable chitosan/gelatin hydrogel aimed for tissue regeneration. 2015 , 5, 63478-63488	53
1145	Electrospray deposition in vacuum as method to create functionally active protein immobilization on polymeric substrates. 2015 , 453, 252-259	8

1144	Preparation of a sponge-like biocomposite agarose-chitosan scaffold with primary hepatocytes for establishing an in vitro 3D liver tissue model. 2015 , 5, 30701-30710	57
1143	Circumferentially aligned fibers guided functional neoartery regeneration in vivo. 2015 , 61, 85-94	79
1142	Small angle scattering methods to study porous materials under high uniaxial strain. 2015 , 86, 023901	5
1141	Water-Hydrogel Binding Affinity Modulates Freeze-Drying-Induced Micropore Architecture and Skeletal Myotube Formation. 2015 , 16, 2255-64	16
1140	Fabrication and cytocompatibility of in situ crosslinked carbon nanomaterial films. 2015 , 5, 10261	15
1139	Vascularization of engineered musculoskeletal tissues. 2015 , 269-291	
1138	Primary chicken embryo fibroblasts seeded acellular dermal matrix (3-D ADM) improve regeneration of full thickness skin wounds in rats. 2015 , 47, 311-22	18
1137	Supermacroporous chemically cross-linked poly(aspartic acid) hydrogels. 2015 , 22, 32-8	40
1136	Supramolecular Polyelectrolyte Complexes of Bone Morphogenetic Protein-2 with Sulfonated Polyrotaxanes to Induce Enhanced Osteogenic Differentiation. 2015 , 15, 953-64	20
1135	Controlled fabrication of porous metals from the nanometer to the macroscopic scale. 2015 , 2, 359-377	50
1134	Sintering of bi-porous titanium dioxide scaffolds: Experimentation, modeling and simulation. 2015 , 636, 148-156	19
1133	Biomimetic gradient scaffold from ice-templating for self-seeding of cells with capillary effect. 2015 , 20, 113-119	75
1132	A potential platform for developing 3D tubular scaffolds for paediatric organ development. 2015 , 26, 141	7
1131	Smart scaffolds: the future of bioceramic. 2015 , 26, 154	16
1130	The design of 3D scaffold for tissue engineering using automated scaffold design algorithm. 2015 , 38, 223-8	3
1129	Mechanical properties of porous ceramic scaffolds: Influence of internal dimensions. 2015 , 41, 8425-8432	140
1128	Effect of Gray Scale Binder Levels on Additive Manufacturing of Porous Scaffolds with Heterogeneous Properties. 2015 , 12, 62-70	17
1127	Recent advances in 3D printing of biomaterials. 2015 , 9, 4	963

1126	Silk Hydrogels of Tunable Structure and Viscoelastic Properties Using Different Chronological Orders of Genipin and Physical Cross-Linking. 2015 , 7, 12099-108	48
1125	Integrating mechanical and biological control of cell proliferation through bioinspired multieffector materials. 2015 , 10, 873-91	17
1124	Poly(ϵ -pentadecalactone)-b-poly(L-lactide) Block Copolymers via Organic-Catalyzed Ring Opening Polymerization and Potential Applications. 2015 , 4, 408-411	49
1123	Physical and biological activities of newly designed, macro-pore-structure-controlled 3D fibrous poly(ϵ -caprolactone)/hydroxyapatite composite scaffolds. 2015 , 5, 26954-26964	9
1122	Recellularization of rat liver scaffolds by human liver stem cells. 2015 , 21, 1929-39	41
1121	Biofabricated constructs as tissue models: a short review. 2015 , 26, 156	6
1120	Three-dimensional polycaprolactone-hydroxyapatite scaffolds combined with bone marrow cells for cartilage tissue engineering. 2015 , 30, 160-70	18
1119	An overview of the suitability of hydrogel-forming polymers for extrusion-based 3D-printing. 2015 , 3, 4105-4117	196
1118	Biofunctionalized ceramic with self-assembled networks of nanochannels. 2015 , 9, 4447-57	11
1117	Porous matrix of calcium alginate/gelatin with enhanced properties as scaffold for cell culture. 2015 , 46, 331-42	43
1116	Bioactive gyroid scaffolds formed by sacrificial templating of nanocellulose and nanochitin hydrogels as instructive platforms for biomimetic tissue engineering. 2015 , 27, 2989-95	169
1115	The inter-sample structural variability of regular tissue-engineered scaffolds significantly affects the micromechanical local cell environment. 2015 , 5, 20140097	36
1114	Rapid Prototyping. 2015 , 743-786	5
1113	Bacterial cellulose-hyaluronan nanocomposite biomaterials as wound dressings for severe skin injury repair. 2015 , 3, 3498-3507	92
1112	Biomaterials for Bone Regenerative Engineering. 2015 , 4, 1268-85	192
1111	Fabrication and characterization of silk fibroin/chitosan/Nano Alumina composite scaffolds for tissue engineering applications. 2015 , 5, 27558-27570	22
1110	Biocompatibility and osteogenesis of calcium phosphate composite scaffolds containing simvastatin-loaded PLGA microspheres for bone tissue engineering. 2015 , 103, 3250-8	30
1109	Relationship between micro-porosity, water permeability and mechanical behavior in scaffolds for cartilage engineering. 2015 , 48, 60-69	48

1108	Fabrication and Osteogenesis of a Porous Nanohydroxyapatite/Polyamide Scaffold with an Anisotropic Architecture. 2015 , 1, 825-833	16
1107	An advanced multi-morphology porous scaffold design method using volumetric distance field and beta growth function. 2015 , 16, 2021-2032	45
1106	Beneficial effects of biomimetic nano-sized hydroxyapatite/antibiotic gentamicin enriched chitosan-glycerophosphate hydrogel on the performance of injectable polymethylmethacrylate. 2015 , 5, 91082-91092	14
1105	Evaluation of the Osteoinductive Capacity of Polydopamine-Coated Poly(-caprolactone) Diacrylate Shape Memory Foams. 2015 , 1, 1220-1230	40
1104	3D Printing and Biofabrication for Load Bearing Tissue Engineering. 2015 , 881, 3-14	23
1103	Bioprinting of Three-Dimensional Tissues and Organ Constructs. 2015 , 283-292	1
1102	Calcium orthophosphate bioceramics. 2015 , 41, 13913-13966	153
1101	Evaluation of synovium-derived mesenchymal stem cells and 3D printed nanocomposite scaffolds for tissue engineering. 2015 , 16, 045001	6
1100	Silk as a potential candidate for bone tissue engineering. 2015 , 215, 112-28	100
1099	Antibacterial and conductive injectable hydrogels based on quaternized chitosan-graft-polyaniline/oxidized dextran for tissue engineering. 2015 , 26, 236-48	346
1098	Combined Elastic and Shear Stress Solicitations for Topological Optimisation of Micro-CT Based Scaffolds. 2015 , 110, 159-166	1
1097	3D fibre deposition and stereolithography techniques for the design of multifunctional nanocomposite magnetic scaffolds. 2015 , 26, 250	53
1096	Regenerative Medicine Approaches for Treatment of Osteoarthritis. 2015 , 235-255	
1095	Multilayered Magnetic Gelatin Membrane Scaffolds. 2015 , 7, 23098-109	27
1094	Engineered Adhesion Peptides for Improved Silicon Adsorption. 2015 , 31, 11868-74	10
1093	Bone-repair properties of biodegradable hydroxyapatite nano-rod superstructures. 2015 , 7, 18751-62	46
1092	Biofabrication of reinforced 3D-scaffolds using two-component hydrogels. 2015 , 3, 9067-9078	42
1091	Fabrication of polymeric biomaterials: a strategy for tissue engineering and medical devices. 2015 , 3, 8224-8249	149

1090	Gels as Precursors of Porous Matrices for Use in Foods: a Review. 2015 , 10, 487-499	10
1089	Burr-like, laser-made 3D microscaffolds for tissue spheroid engagement. 2015 , 10, 021011	36
1088	Polythiophene-g-poly(ethylene glycol) with Lateral Amino Groups as a Novel Matrix for Biosensor Construction. 2015 , 7, 20612-22	39
1087	Comparisons between gelatin-tussah silk fibroin/hydroxyapatite and gelatin-Bombyx mori silk fibroin/hydroxyapatite nano-composites for bone tissue engineering. 2015 , 5, 76526-76537	11
1086	Agent-based modeling of porous scaffold degradation and vascularization: Optimal scaffold design based on architecture and degradation dynamics. 2015 , 27, 167-178	16
1085	Scaffolds for Tissue Engineering. 2015 , 17-62	
1084	Fluorescent composite scaffolds made of nanodiamonds/polycaprolactone. 2015 , 641, 123-128	12
1083	Biomimetically Ornamented Rapid Prototyping Fabrication of an Apatite-Collagen-Polycaprolactone Composite Construct with Nano-Micro-Macro Hierarchical Structure for Large Bone Defect Treatment. 2015 , 7, 26244-56	47
1082	Biomaterials for in situ tissue regeneration: development and perspectives. 2015 , 3, 8921-8938	62
1081	Characterization of PLGA/Chitosan Electrospun Nano-Biocomposite Fabricated by Two Different Methods. 2015 , 64, 64-75	12
1080	The use of total human bone marrow fraction in a direct three-dimensional expansion approach for bone tissue engineering applications: focus on angiogenesis and osteogenesis. 2015 , 21, 861-74	17
1079	Injectable, interconnected, high-porosity macroporous biocompatible gelatin scaffolds made by surfactant-free emulsion templating. 2015 , 36, 364-72	40
1078	Porous ovalbumin scaffolds with tunable properties: a resource-efficient biodegradable material for tissue engineering applications. 2015 , 29, 903-11	13
1077	Bone Regeneration. 2015 , 313-333	14
1076	Engineering a freestanding biomimetic cardiac patch using biodegradable poly(lactic-co-glycolic acid) (PLGA) and human embryonic stem cell-derived ventricular cardiomyocytes (hESC-VCMs). 2015 , 15, 426-36	25
1075	Evaluation of small intestine submucosa and poly(caprolactone-co-lactide) conduits for peripheral nerve regeneration. 2015 , 21, 1142-51	11
1074	3D printing of porous hydroxyapatite scaffolds intended for use in bone tissue engineering applications. 2015 , 47, 237-47	307
1073	Micro-poro-elasticity of baghdadite-based bone tissue engineering scaffolds: a unifying approach based on ultrasonics, nanoindentation, and homogenization theory. 2015 , 46, 553-64	30

1072	Effect of different hydroxyapatite incorporation methods on the structural and biological properties of porous collagen scaffolds for bone repair. 2015 , 227, 732-45	30	
1071	Development of porous polyurethane/strontium-substituted hydroxyapatite composites for bone regeneration. 2015 , 103, 1930-9	21	
1070	An additive manufacturing-based PCL-alginate-chondrocyte bioprinted scaffold for cartilage tissue engineering. 2015 , 9, 1286-97	347	
1069	Plug and play: combining materials and technologies to improve bone regenerative strategies. 2015 , 9, 745-59	18	
1068	Micro-computed tomography image-based evaluation of 3D anisotropy degree of polymer scaffolds. 2015 , 18, 446-55	7	
1067	In Vivo Behavior of a Custom-Made 3D Synthetic Bone Substitute in Sinus Augmentation Procedures in Sheep. 2015 , 41, 240-50	19	
1066	Fabrication of porous synthetic polymer scaffolds for tissue engineering. 2015 , 51, 165-196	43	
1065	The effect of porosity on cell ingrowth into accurately defined, laser-made, polylactide-based 3D scaffolds. 2015 , 336, 2-10	75	
1064	Biocompatibility evaluation of porous ceria foams for orthopedic tissue engineering. 2015 , 103, 8-15	25	
1063	Biomimicry in metal-organic materials. 2015 , 293-294, 327-356	108	
1062	Recent developments and directions in printed nanomaterials. 2015 , 7, 3338-55	97	
1061	Porous poly(ethylene glycol)-polyurethane hydrogels as potential biomaterials. 2015 , 64, 397-404	14	
1060	Bioinspired structural materials. <i>Nature Materials</i> , 2015 , 14, 23-36	27	2402
1059	Evaluating 3D-printed biomaterials as scaffolds for vascularized bone tissue engineering. 2015 , 27, 138-44	196	
1058	Computer aided-designed, 3-dimensionally printed porous tissue bioscaffolds for craniofacial soft tissue reconstruction. 2015 , 152, 57-62	88	
1057	Agarose particle-templated porous bacterial cellulose and its application in cartilage growth in vitro. 2015 , 12, 129-138	68	
1056	Microfabrication and Nanofabrication Techniques. 2015 , 207-219	0	
1055	Electrosprayed nanoparticles and electrospun nanofibers based on natural materials: applications in tissue regeneration, drug delivery and pharmaceuticals. 2015 , 44, 790-814	370	

1054	Polyimide precursor pattern induced by banded liquid crystal matrix: Effect of dianhydride moieties flexibility. 2015 , 50, 1358-1369	6
1053	Nanogel tectonic porous gel loading biologics, nanocarriers, and cells for advanced scaffold. 2015 , 37, 107-15	59
1052	Controlled dual delivery of BMP-2 and dexamethasone by nanoparticle-embedded electrospun nanofibers for the efficient repair of critical-sized rat calvarial defect. 2015 , 37, 218-29	217
1051	Molecular interactions in biomineralized hydroxyapatite amino acid modified nanoclay: in silico design of bone biomaterials. 2015 , 46, 207-17	21
1050	Directing collagen fibers using counter-rotating cone extrusion. 2015 , 12, 113-121	27
1049	Direct laser writing: Principles and materials for scaffold 3D printing. 2015 , 132, 83-89	198
1048	Tissue engineering bioreactor systems for applying physical and electrical stimulations to cells. 2015 , 103, 935-48	20
1047	Greater scaffold permeability promotes growth of osteoblastic cells in a perfused bioreactor. 2015 , 9, E210-8	18
1046	A multiscale analysis of nutrient transport and biological tissue growth in vitro. 2015 , 32, 345-66	24
1045	Surface modification of SU-8 for enhanced cell attachment and proliferation within microfluidic chips. 2015 , 103, 473-84	12
1044	Polysaccharide-based strategies for heart tissue engineering. 2015 , 116, 267-77	46
1043	Tissue-engineered chitosan/bioactive glass bone scaffolds integrated with PLGA nanoparticles: A therapeutic design for on-demand drug delivery. 2015 , 138, 16-20	49
1042	In vitro generation of a multilayered osteochondral construct with an osteochondral interface using rabbit bone marrow stromal cells and a silk peptide-based scaffold. 2016 , 10, 284-93	20
1041	. 2016 ,	3
1040	Bone structural similarity score: a multiparametric tool to match properties of biomimetic bone substitutes with their target tissues. 2016 , 14, e277-89	9
1039	Development and Characterization of a Bioinspired Bone Matrix with Aligned Nanocrystalline Hydroxyapatite on Collagen Nanofibers. 2016 , 9,	18
1038	Biomimetic nanocomposite hydrogels for cartilage regeneration. 2016 , 259-281	0
1037	Laser-Assisted 3D Printing of Functional Graded Structures from Polymer Covered Nanocomposites: A Self-Review. 2016 ,	8

1036	Nano- and microstructured materials for in vitro studies of the physiology of vascular cells. 2016 , 7, 1620-1641	35
1035	The digital code driven autonomous synthesis of ibuprofen automated in a 3D-printer-based robot. 2016 , 12, 2776-2783	29
1034	Prospect of Stem Cells in Bone Tissue Engineering: A Review. 2016 , 2016, 6180487	115
1033	Tissue engineering and regenerative approaches to improving the healing of large bone defects. 2016 , 32, 87-110	59
1032	Biomimetic Scaffold with Aligned Microporosity Designed for Dentin Regeneration. 2016 , 4, 48	16
1031	Synovial Joint. 2016 , 253-273	
1030	Stimuli-Responsive Assemblies for Sensing Applications. 2016 , 2,	17
1029	Future Prospects for Scaffolding Methods and Biomaterials in Skin Tissue Engineering: A Review. 2016 , 17,	269
1028	Hidrogéis a base de ácido hialurônico e quitosana para engenharia de tecido cartilaginoso. 2016 , 26, 360-370	6
1027	The Influence of Lyophilized EmuGel Silica Microspheres on the Physicomechanical Properties, In Vitro Bioactivity and Biodegradation of a Novel Ciprofloxacin-Loaded PCL/PAA Scaffold. 2016 , 8,	9
1026	Non-thermal Plasma Technology for the Improvement of Scaffolds for Tissue Engineering and Regenerative Medicine - A Review. 2016 ,	4
1025	Modification and cytocompatibility of biocomposited porous PLLA/HA-microspheres scaffolds. 2016 , 27, 1462-75	8
1024	Biological functionality and mechanistic contribution of extracellular matrix-ornamented three dimensional Ti-6Al-4V mesh scaffolds. 2016 , 104, 2751-63	29
1023	High Internal Phase Emulsion Ring-Opening Polymerization of Pentadecanolide: Strategy to Obtain Porous Scaffolds in a Single Step. 2016 , 217, 1752-1758	9
1022	Emulsion Inks for 3D Printing of High Porosity Materials. 2016 , 37, 1369-74	48
1021	Tailoring the Structure of Bioactive Glasses: From the Nanoscale to Macroporous Scaffolds. 2016 , 7, 195-205	20
1020	Bioactive glass-based materials with hierarchical porosity for medical applications: Review of recent advances. 2016 , 42, 18-32	176
1019	Optimal bovine collagen concentration to achieve tracheal epithelial coverage of collagen sponges. 2016 , 126, E396-E403	5

1018	Hierarchic micro-patterned porous scaffolds via electrochemical replica-deposition enhance neo-vascularization. 2016 , 11, 025018	23
1017	Nanoporous metals for biodegradable implants: Initial bone mesenchymal stem cell adhesion and degradation behavior. 2016 , 104, 1747-58	15
1016	Winner of the Young Investigator Award of the Society for Biomaterials at the 10th World Biomaterials Congress, May 17-22, 2016, Montreal QC, Canada: Microribbon-based hydrogels accelerate stem cell-based bone regeneration in a mouse critical-size cranial defect model. 2016 , 104, 1321-31	24
1015	Bioreactors for heart valve tissue engineering: a review. 2016 , 91, 847-856	9
1014	Thermally Stable Honeycomb-Patterned Porous Films of a Poly(L-lactic acid) and Poly(D-lactic acid) Stereo Complex Prepared Using the Breath Figure Technique. 2016 , 301, 523-529	8
1013	Design and properties of 3D scaffolds for bone tissue engineering. 2016 , 42, 341-350	196
1012	3D Printing of Porous Cell-Laden Hydrogel Constructs for Potential Applications in Cartilage Tissue Engineering. 2016 , 2, 1200-1210	73
1011	Biological functionality of extracellular matrix-ornamented three-dimensional printed hydroxyapatite scaffolds. 2016 , 104, 1343-51	48
1010	Advancing Tissue Engineering: A Tale of Nano-, Micro-, and Macroscale Integration. 2016 , 12, 2130-45	49
1009	Toward Scalable Fabrication of Hierarchical Silica Capsules with Integrated Micro-, Meso-, and Macropores. 2016 , 12, 1797-805	11
1008	Application of Hydrogels in Heart Valve Tissue Engineering. 2016 , 363-383	
1007	Biologically and mechanically driven design of an RGD-mimetic macroporous foam for adipose tissue engineering applications. 2016 , 104, 65-77	29
1006	Computational mechano-chemo-biology: a tool for the design of tissue scaffolds. 2016 , 1, 1	6
1005	Mathematical modelling of the spatial network of bone implants obtained by 3D-prototyping. 2016 , ,	
1004	Characterization of Three-Dimensional Printed Composite Scaffolds Prepared with Different Fabrication Methods. 2016 , 61, 645-650	8
1003	Three-dimensional spherical spatial boundary conditions differentially regulate osteogenic differentiation of mesenchymal stromal cells. 2016 , 6, 21253	36
1002	Repair and Regeneration of Temporomandibular Joint: The Future of Stem Cell-Based Therapies. 2016 , 47-75	1
1001	A review on design for bioprinting. 2016 , 3-4, 1-14	31

1000	The enhancement of osteogenic capacity in a synthetic BMP-2 derived peptide coated mineralized collagen composite in the treatment of the mandibular defects. 2016 , 27, 495-505	5
999	3D-printed scaffolds based on PLA/HA nanocomposites for trabecular bone reconstruction. 2016 , 741, 012068	21
998	Three-dimensional Printing Approaches for the Treatment of Critical-sized Bone Defects. 2016 , 233-278	2
997	Polymer composites for 3D printing of functional sensors and transducers. 2016 ,	2
996	Signal transduction of the physical environment in the neural differentiation of stem cells. 2016 , 4, 1-8	9
995	Cell adhesion behavior of poly(ϵ -caprolactone)/poly(L-lactic acid) nanofibers scaffold. 2016 , 171, 178-181	18
994	Flow perfusion culture of MC3T3-E1 osteogenic cells on gradient calcium polyphosphate scaffolds with different pore sizes. 2016 , 30, 908-18	11
993	Rapid Prototyping. 2016 ,	4
992	Biomedical Polymers: Processing. 2016 , 55-71	
991	Hybrid scaffolding strategy for dermal tissue reconstruction: a bioactive glass/chitosan/silk fibroin composite. 2016 , 6, 19887-19896	14
990	Biomedical Polymers. 2016 ,	2
989	Strain rate and temperature effects on elastic properties of polycaprolactone/starch composite. 2016 , 16, 217-223	1
988	The study on vascularisation and osteogenesis of BMP/VEGF co-modified tissue engineering bone in vivo. 2016 , 6, 41800-41808	7
987	Mimicking natural cell environments: design, fabrication and application of bio-chemical gradients on polymeric biomaterial substrates. 2016 , 4, 4244-4257	35
986	Towards Effective and Efficient Biofabrication Technologies. 2016 , 409-418	
985	Bioinspired trimodal macro/micro/nano-porous scaffolds loading rhBMP-2 for complete regeneration of critical size bone defect. 2016 , 32, 309-323	156
984	Collagen α -carboxymethyl cellulose β -tricalcium phosphate multi-lamellar cryogels for tissue engineering applications: Production and characterization. 2016 , 31, 411-422	7
983	Development of free-standing polymer nanosheets for advanced medical and health-care applications. 2016 , 48, 773-780	68

982	Microsystems for Enhanced Control of Cell Behavior. 2016 ,	5
981	3D printing of versatile reactionware for chemical synthesis. 2016 , 11, 920-36	140
980	Adding functionality with additive manufacturing: Fabrication of titanium-based antibiotic eluting implants. 2016 , 64, 407-415	52
979	Nanofibrous polylactide composite scaffolds with electroactivity and sustained release capacity for tissue engineering. 2016 , 4, 2477-2485	31
978	Fabrication of poly(vinyl alcohol)-Carrageenan scaffolds for cryopreservation: Effect of composition on cell viability. 2016 , 147, 509-516	33
977	Theoretical&experimental evaluation of different biomaterials for parts obtaining by fused deposition modeling. 2016 , 89, 137-144	12
976	Tissue engineering. 2016 , 387-455	8
975	Research trends in biomimetic medical materials for tissue engineering: 3D bioprinting, surface modification, nano/micro-technology and clinical aspects in tissue engineering of cartilage and bone. 2016 , 20, 10	44
974	Simulation of extracellular matrix remodeling by fibroblast cells in soft three-dimensional bioresorbable scaffolds. 2016 , 15, 1685-1698	4
973	Poly (lactic acid)-based biomaterials for orthopaedic regenerative engineering. 2016 , 107, 247-276	234
972	3D-printed fluidic networks as vasculature for engineered tissue. 2016 , 16, 2025-43	93
971	High loading of graphene oxide/multi-walled carbon nanotubes into PDLLA: A route towards the design of osteoconductive, bactericidal and non-immunogenic 3D porous scaffolds. 2016 , 177, 56-66	10
970	A method to design biomimetic scaffolds for bone tissue engineering based on Voronoi lattices. 2016 , 11, 77-90	48
969	Chondrogenic differentiation of rat mesenchymal stem cells on silk fibroin/chondroitin sulfate/hyaluronic acid ternary scaffolds. 2016 , 17, 324-332	6
968	Role of chemical crosslinking in material-driven assembly of fibronectin (nano)networks: 2D surfaces and 3D scaffolds. 2016 , 148, 324-332	6
967	Development and Differentiation of Mesenchymal Bone Marrow Cells in Porous Permeable Titanium Nickelide Implants In Vitro and In Vivo. 2016 , 161, 587-92	1
966	Effect of the biodegradation rate controlled by pore structures in magnesium phosphate ceramic scaffolds on bone tissue regeneration in vivo. 2016 , 44, 155-67	79
965	Design of Highly Porous Hydroxyapatite Scaffolds by Conversion of 3D Printed Gypsum Structures [A Comparison Study. 2016 , 49, 55-60	10

964	Design of magnesium alloys with controllable degradation for biomedical implants: From bulk to surface. 2016 , 45, 2-30	203
963	Improved mechanical properties of carbon fiber/graphene oxide-epoxy hybrid composites. 2016 , 135, 28-38	234
962	Fabrication of macroporous cement scaffolds using PEG particles: In vitro evaluation with induced pluripotent stem cell-derived mesenchymal progenitors. 2016 , 69, 640-52	14
961	3D printed alendronate-releasing poly(caprolactone) porous scaffolds enhance osteogenic differentiation and bone formation in rat tibial defects. 2016 , 11, 055005	25
960	An Introduction to Scaffolds, Biomaterial Surfaces, and Stem Cells. 2016 , 1-37	
959	Aerogels: Cellulose-Based. 2016 , 37-75	3
958	Biomaterial-Based Approaches to Address Vein Graft and Hemodialysis Access Failures. 2016 , 37, 1860-1880	8
957	Bioink properties before, during and after 3D bioprinting. 2016 , 8, 032002	537
956	Molecular mechanisms of mechanotransduction in integrin-mediated cell-matrix adhesion. 2016 , 349, 85-94	49
955	Silk-PVA Hybrid Nanofibrous Scaffolds for Enhanced Primary Human Meniscal Cell Proliferation. 2016 , 249, 813-822	18
954	Halloysite Polymer Nanocomposites. 2016 , 509-553	10
953	Vascular Tissue Engineering: Acellular Tubular Grafts Constructed from Natural Materials. 2016 , 8177-8193	
952	Versatile design of hydrogel-based scaffolds with manipulated pore structure for hard-tissue regeneration. 2016 , 11, 055002	6
951	Fluorescence Lifetime Imaging: Microscopy, Endoscopy, and Tomography. 2016 , 609-636	
950	Induction of Biological Apatite Orientation as a Bone Quality Parameter in Bone Regeneration Using Hydroxyapatite/Poly e-Caprolactone Composite Scaffolds. 2016 , 22, 856-63	2
949	Multichannel silk protein/laminin grafts for spinal cord injury repair. 2016 , 104, 3045-3057	21
948	Chitosan-chitin nanocrystal composite scaffolds for tissue engineering. 2016 , 152, 832-840	78
947	Nanocrystalline calcium sulfate/hydroxyapatite biphasic compound as a TGF- β /VEGF reservoir for vital pulp therapy. 2016 , 32, 1197-1208	25

946	Evaluation of mechanical and morphologic features of PLLA membranes as supports for perfusion cells culture systems. 2016 , 69, 841-9	5
945	Tuning the properties of alginate-chitosan membranes by varying the viscosity and the proportions of polymers. 2016 , 133,	15
944	High-Pressure Compression-Molded Porous Resorbable Polymer/Hydroxyapatite Composite Scaffold for Cranial Bone Regeneration. 2016 , 2, 1471-1482	54
943	Electrospun poly(hydroxybutyrate)/chitosan blend fibrous scaffolds for cartilage tissue engineering. 2016 , 133,	65
942	Design of Injectable Materials to Improve Stem Cell Transplantation. 2016 , 2, 207-220	95
941	Pore formation of poly(ϵ -caprolactone) scaffolds with melting point reduction in supercritical CO ₂ foaming. 2016 , 117, 279-288	30
940	Functionally Graded Ti-6Al-4V Meshes with High Strength and Energy Absorption. 2016 , 18, 34-38	70
939	Characterization and investigation of the deformation behavior of porous magnesium scaffolds with entangled architected pore channels. 2016 , 64, 139-50	19
938	Novel integrative methodology for engineering large liver tissue equivalents based on three-dimensional scaffold fabrication and cellular aggregate assembly. 2016 , 8, 035016	10
937	A novel chitosan-tussah silk fibroin/nano-hydroxyapatite composite bone scaffold platform with tunable mechanical strength in a wide range. 2016 , 93, 87-97	27
936	Binder-jetting 3D printing and alloy development of new biodegradable Fe-Mn-Ca/Mg alloys. 2016 , 45, 375-386	125
935	Viscoelastic Properties of Rapid Prototyped Magnetic Nanocomposite Scaffolds for Osteochondral Tissue Regeneration. 2016 , 49, 76-82	18
934	Automated quantitative assessment of three-dimensional bioprinted hydrogel scaffolds using optical coherence tomography. 2016 , 7, 894-910	23
933	In vitro colonization of stratified bioactive scaffolds by pre-osteoblast cells. 2016 , 44, 73-84	16
932	Hierarchically porous materials: Synthesis strategies and emerging applications. 2016 , 10, 301-347	47
931	Biocompatible Polymers: Biopolymers. 2016 , 552-573	
930	Industrial translation requirements for manufacture of stem cell-derived and tissue-engineered products. 2016 , 110-123	
929	Polyester type polyHIPE scaffolds with an interconnected porous structure for cartilage regeneration. 2016 , 6, 28695	47

928	Highly porous, low elastic modulus 316L stainless steel scaffold prepared by selective laser melting. 2016 , 69, 631-9	99
927	In vivo angiogenesis in tissues penetrating into porous β -tricalcium phosphate scaffolds. 2016 , 6, 68363-68370	2
926	Preparation Methods and Tools. 2016 , 19-111	
925	Current Developments in 3D Printing for Craniofacial Regeneration. 2016 , 3, 319-327	
924	Fabrication of a customized bone scaffold using a homemade medical 3D printer for comminuted fractures. 2016 , 69, 852-857	2
923	Strategy to Achieve Highly Porous/Biocompatible Macroscale Cell Blocks, Using a Collagen/Genipin-bioink and an Optimal 3D Printing Process. 2016 , 8, 32230-32240	101
922	Tuning Hydroxyapatite Particles' Characteristics for Solid Freeform Fabrication of Bone Scaffolds. 2016 , 321-397	3
921	Tough and strong bioinspired nanocomposites with interfacial cross-links. 2016 , 8, 18531-18540	9
920	Taming contact line instability for pattern formation. 2016 , 7, 12458	16
919	Bioprinting three-dimensional cell-laden tissue constructs with controllable degradation. 2016 , 6, 24474	221
918	Systematical Evaluation of Mechanically Strong 3D Printed Diluted magnesium Doping Wollastonite Scaffolds on Osteogenic Capacity in Rabbit Calvarial Defects. 2016 , 6, 34029	40
917	Chondroitin Sulfate Immobilized on a Biomimetic Scaffold Modulates Inflammation While Driving Chondrogenesis. 2016 , 5, 670-82	43
916	CaPO ₄ Bioceramics in Tissue Engineering. 2016 , 231-252	
915	Generation of Microtumors Using 3D Human Biogel Culture System and Patient-derived Glioblastoma Cells for Kinomic Profiling and Drug Response Testing. 2016 ,	15
914	2D and 3D Biocompatible Polymers for Biomedical Devices. 2016 , 82-93	2
913	Biofabrication: The Future of Regenerative Medicine. 2016 , 31, 190-203	20
912	Scaffolds: Skin Tissue Engineering. 2016 , 7124-7137	
911	Review and the state of the art: Sol-gel and melt quenched bioactive glasses for tissue engineering. 2016 , 104, 1248-75	97

910	Folic-Acid-Modified Conducting Polymer: Electrochemical Detection of the Cell Attachment. 2016 , 16, 545-52	8
909	Wnt11 plays an important role in the osteogenesis of human mesenchymal stem cells in a PHA/FN/ALG composite scaffold: possible treatment for infected bone defect. 2016 , 7, 18	12
908	BM-MSCs and Bio-Oss complexes enhanced new bone formation during maxillary sinus floor augmentation by promoting differentiation of BM-MSCs. 2016 , 52, 757-71	4
907	A simultaneous 3D printing process for the fabrication of bioceramic and cell-laden hydrogel core/shell scaffolds with potential application in bone tissue regeneration. 2016 , 4, 4707-4716	72
906	Essential Requirements for Resorbable Bioceramic Development: Research, Manufacturing, and Preclinical Studies. 2016 , 471-501	
905	Periodontal ligament stem/progenitor cells with protein-releasing scaffolds for cementum formation and integration on dentin surface. 2016 , 57, 488-495	30
904	Biomedical Polymers: An Overview. 2016 , 1-22	
903	Textile cell-free scaffolds for in situ tissue engineering applications. 2016 , 27, 63	22
902	Synthesis and characterization of an injectable and self-curing poly(methyl methacrylate) cement functionalized with a biomimetic chitosan/poly(vinyl alcohol)/nano-sized hydroxyapatite/silver hydrogel. 2016 , 6, 60609-60619	13
901	Cell-secreted extracellular matrix formation and differentiation of adipose-derived stem cells in 3D alginate scaffolds with tunable properties. 2016 , 104, 1090-101	25
900	In situ supramolecular hydrogel based on hyaluronic acid and dextran derivatives as cell scaffold. 2016 , 104, 2263-70	15
899	Effect of Immobilized Thiolated Glycosaminoglycans on Fibronectin Adsorption and Behavior of Fibroblasts. 2016 , 16, 381-94	12
898	Melt Processed PCL/PEG Scaffold With Discrete Pore Size Gradient for Selective Cellular Infiltration. 2016 , 301, 182-190	39
897	Phase-Changeable Fatty Acid Available for Temperature-Regulated Drug Release. 2016 , 301, 887-894	6
896	A critical review of algal biomass: A versatile platform of bio-based polyesters from renewable resources. 2016 , 86, 937-49	49
895	Cellulose Nanofibril Hydrogel Tubes as Sacrificial Templates for Freestanding Tubular Cell Constructs. 2016 , 17, 905-13	56
894	Role of pore size and morphology in musculo-skeletal tissue regeneration. 2016 , 61, 922-39	203
893	Net shape fabrication of calcium phosphate scaffolds with multiple material domains. 2016 , 8, 015005	13

892	Fabrication of conductive gelatin methacrylate-polyaniline hydrogels. 2016 , 33, 122-30	64
891	Importance of dual delivery systems for bone tissue engineering. 2016 , 225, 152-69	113
890	Surface modification of a POSS-nanocomposite material to enhance cellular integration of a synthetic bioscaffold. 2016 , 83, 283-93	47
889	Processing and characterization of chitosan/PVA and methylcellulose porous scaffolds for tissue engineering. 2016 , 61, 484-91	95
888	Advancing the field of 3D biomaterial printing. 2016 , 11, 014102	118
887	New method of synthesis and in vitro studies of a porous biomaterial. 2016 , 61, 133-42	3
886	Porous titanium scaffold surfaces modified with silver loaded gelatin microspheres and their antibacterial behavior. 2016 , 286, 140-147	16
885	Inverse high internal phase emulsion polymerization (i-HIPE) of GMMA, HEMA and GDMA for the preparation of superporous hydrogels as a tissue engineering scaffold. 2016 , 4, 450-460	52
884	A scaffold with a bio-mimetically designed micro/nano-fibrous structure using decellularized extracellular matrix. 2016 , 6, 29697-29706	11
883	Peptide-incorporated 3D porous alginate scaffolds with enhanced osteogenesis for bone tissue engineering. 2016 , 143, 243-251	44
882	Fabrication of Hierarchically Structured Porous Films of Metal Oxides and Carbonates Through Coffee Ring Effect. 2016 , 3, 362-368	1
881	Interplay between flow and diffusion in capillary alginate hydrogels. 2016 , 12, 3897-907	13
880	Polymers. 2016 ,	3
879	In vitro analysis of Mg scaffolds coated with polymer/hydrogel/ceramic composite layers. 2016 , 301, 126-132	9
878	Brain on a bench top. 2016 , 19, 124-125	2
877	Surface modification of 3D-printed porous scaffolds via mussel-inspired polydopamine and effective immobilization of rhBMP-2 to promote osteogenic differentiation for bone tissue engineering. 2016 , 40, 182-191	141
876	Enhanced osteogenic differentiation and biomineralization in mouse mesenchymal stromal cells on a rFCP robocast scaffold modified with collagen nanofibers. 2016 , 6, 23588-23598	10
875	Chimeric Aptamer-Gelatin Hydrogels as an Extracellular Matrix Mimic for Loading Cells and Growth Factors. 2016 , 17, 778-87	36

874	Chitosan based biocomposite scaffolds for bone tissue engineering. 2016 , 93, 1354-1365	214
873	Methods of Monitoring Cell Fate and Tissue Growth in Three-Dimensional Scaffold-Based Strategies for In Vitro Tissue Engineering. 2016 , 22, 265-83	14
872	The combination of meltblown technology and electrospinning The influence of the ratio of micro and nanofibers on cell viability. 2016 , 173, 153-157	14
871	Single-crystalline Fe ₂ O ₃ void@frame microframes for rechargeable batteries. 2016 , 4, 4425-4432	19
870	Engineering Regenerative Dextran Hydrogels for Acute Skin Wound Healing. 2016 , 111-136	1
869	Preparation and characterization of chitosan-natural nano hydroxyapatite-fucoidan nanocomposites for bone tissue engineering. 2016 , 93, 1479-1487	83
868	Bio-inspired 3D microenvironments: a new dimension in tissue engineering. 2016 , 11, 022001	66
867	Low temperature additive manufacturing of three dimensional scaffolds for bone-tissue engineering applications: Processing related challenges and property assessment. 2016 , 103, 1-39	142
866	Tuneable Metacomposites Based on Functional Fillers. 2016 , 311-357	2
865	3D printing of polyurethane biomaterials. 2016 , 149-170	12
864	Topological shape optimization of multifunctional tissue engineering scaffolds with level set method. 2016 , 54, 333-347	13
863	Bio-safe processing of polylactic-co-caprolactone and polylactic acid blends to fabricate fibrous porous scaffolds for in vitro mesenchymal stem cells adhesion and proliferation. 2016 , 63, 512-21	18
862	Self-assembled porous film with interconnected 3-dimensional structure from 6sPCL-PMPC copolymer. 2016 , 6, 4826-4834	5
861	3D Bioplotting of Gelatin/Alginate Scaffolds for Tissue Engineering: Influence of Crosslinking Degree and Pore Architecture on Physicochemical Properties. 2016 , 32, 889-900	89
860	Topological design and additive manufacturing of porous metals for bone scaffolds and orthopaedic implants: A review. 2016 , 83, 127-41	1008
859	Construction of a 3D rGO-collagen hybrid scaffold for enhancement of the neural differentiation of mesenchymal stem cells. 2016 , 8, 1897-904	101
858	Computer modeling of the degradation behavior of polyester-based tissue engineering scaffolds. 2016 , 45-74	1
857	Surface functionalization of titanium with tetracycline loaded chitosan-gelatin nanosphere coatings via EPD: fabrication, characterization and mechanism. 2016 , 6, 7674-7682	21

856	Plane bias extension test for a continuum with two inextensible families of fibers: A variational treatment with Lagrange multipliers and a perturbation solution. 2016 , 81, 1-12	79
855	High-strength porous biomaterials for bone replacement: A strategy to assess the interplay between cell morphology, mechanical properties, bone ingrowth and manufacturing constraints. 2016 , 30, 345-356	277
854	Bicomponent electrospun scaffolds to design extracellular matrix tissue analogs. 2016 , 13, 83-102	43
853	Stem cells, growth factors and scaffolds in craniofacial regenerative medicine. 2016 , 3, 56-71	66
852	Emulsion templated scaffolds with tunable mechanical properties for bone tissue engineering. 2016 , 54, 159-72	68
851	Directed cell growth in multi-zonal scaffolds for cartilage tissue engineering. 2016 , 74, 42-52	94
850	Engineering Mechanical, Biochemical, and Topographical Niche Cues by Photocrosslinkable, Microribbon-Like Hydrogels. 2016 , 249-266	
849	Scaffold strategies for modulating immune microenvironment during bone regeneration. 2020 , 108, 110411	28
848	Magnetic Hyperthermia Synergistic H ₂ O ₂ Self-Sufficient Catalytic Suppression of Osteosarcoma with Enhanced Bone-Regeneration Bioactivity by 3D-Printing Composite Scaffolds. 2020 , 30, 1907071	69
847	Core-shell insulin-loaded nanofibrous scaffolds for repairing diabetic wounds. 2020 , 24, 102123	31
846	Engineered chitosan for improved 3D tissue growth through Paxillin-FAK-ERK activation. 2020 , 7, 141-151	13
845	Enhanced fatigue characteristics of a topology-optimized porous titanium structure produced by selective laser melting. 2020 , 32, 101060	15
844	Meta-biomaterials. 2019 , 8, 18-38	46
843	Workshop on the characterization of fiber-based scaffolds: Challenges, progress, and future directions. 2020 , 108, 2063-2072	4
842	The effects of thermoresponsive microgel density on cell adhesion, proliferation, and detachment. 2020 , 137, 48773	6
841	3D Printed Wavy Scaffolds Enhance Mesenchymal Stem Cell Osteogenesis. 2019 , 11,	11
840	Bioactive yet antimicrobial structurally stable collagen/chitosan/lysine functionalized hyaluronic acid - based injectable hydrogels for potential bone tissue engineering applications. 2020 , 155, 938-950	21
839	Fabrication of 3D plotted scaffold with microporous strands for bone tissue engineering. 2020 , 8, 951-960	9

838	Recent innovations in artificial skin. 2020 , 8, 776-797	22
837	A BMSCs-laden quercetin/duck's feet collagen/hydroxyapatite sponge for enhanced bone regeneration. 2020 , 108, 784-794	26
836	The effect of aligned electrospun fibers and macromolecular crowding in tenocyte culture. 2020 , 157, 225-247	4
835	Vat polymerization-based bioprinting-process, materials, applications and regulatory challenges. 2020 , 12, 022001	112
834	Efficient generation strategy for hierarchical porous scaffolds with freeform external geometries. 2020 , 31, 100943	6
833	3D Printing of Textiles: Potential Roadmap to Printing with Fibers. 2020 , 32, e1902086	47
832	3D Printed Random Lasers. 2020 , 5, 1900742	6
831	Tissue Engineering and Regenerative Medicine in Craniofacial Reconstruction and Facial Aesthetics. 2020 , 31, 15-27	22
830	A 3D printing strategy for fabricating in situ topographical scaffolds using pluronic F-127. 2020 , 32, 101023	9
829	Effect of solvent on the physicochemical properties of electrospun nanocomposite with gamat oil and cerium oxide for potential medical engineering application. 2020 , 1-10	2
828	Additive manufacturing of trabecular tantalum scaffolds by laser powder bed fusion: Mechanical property evaluation and porous structure characterization. 2020 , 170, 110694	9
827	Fabrication and characterization of polylactic acid/polycaprolactone composite macroporous micro-nanofiber scaffolds by phase separation. 2020 , 44, 17382-17390	4
826	A Novel 3D-bioprinted Porous Nano Attapulgit Scaffold with Good Performance for Bone Regeneration. 2020 , 15, 6945-6960	10
825	Preparation and characterization of an injectable dexamethasone-cyclodextrin complexes-loaded gellan gum hydrogel for cartilage tissue engineering. 2020 , 327, 747-765	11
824	Advances on Bone Substitutes through 3D Bioprinting. 2020 , 21,	42
823	Injectable and Cryopreservable MSC-Loaded PLGA Microspheres for Recovery from Chemically Induced Liver Damage. 2020 , 28, 1017-1025	0
822	Nanoscale Thermosensitive Hydrogel Scaffolds Promote the Chondrogenic Differentiation of Dental Pulp Stem and Progenitor Cells: A Minimally Invasive Approach for Cartilage Regeneration. 2020 , 15, 7775-7789	11
821	Current Developments in 3D Bioprinting for Tissue and Organ Regeneration A Review. 2020 , 6,	24

820	An in vitro evaluation of zinc silicate fortified chitosan scaffolds for bone tissue engineering. 2020 , 164, 4252-4262	7
819	Modeling osteoinduction in titanium bone scaffold with a representative channel structure. 2020 , 117, 111347	3
818	3D printing in tissue engineering: a state of the art review of technologies and biomaterials. 2020 , 26, 1313-1334	25
817	3D Printing Approach in Dentistry: The Future for Personalized Oral Soft Tissue Regeneration. 2020 , 9,	24
816	Comparing the regeneration potential between PLLA/Aragonite and PLLA/Vaterite pearl composite scaffolds in rabbit radius segmental bone defects. 2020 , 5, 980-989	14
815	Designing Biodegradable Shape Memory Polymers for Tissue Repair. 2020 , 30, 2002014	19
814	Cell proliferation and migration explain pore bridging dynamics in 3D printed scaffolds of different pore size. 2020 , 114, 285-295	29
813	Biodegradable poly (lactic acid-co-trimethylene carbonate)/chitosan microsphere scaffold with shape-memory effect for bone tissue engineering. 2020 , 195, 111218	15
812	Bioinspired scaffolds with hierarchical structures for tailored mechanical behaviour and cell migration. 2020 , 46, 24102-24109	2
811	The effect of natural fibres template on the chemical and structural properties of Biphasic Calcium Phosphate scaffold. 2020 , 7, 065405	6
810	3D Printing in Biomedical Engineering. 2020 ,	7
809	Sensitivity analysis and lattice density optimization for sequential inherent strain method used in additive manufacturing process. 2020 , 370, 113231	15
808	3D Printing of Cytocompatible Graphene/Alginate Scaffolds for Mimetic Tissue Constructs. 2020 , 8, 824	16
807	Fabrication and characterization of porous bone scaffold of bovine hydroxyapatite-glycerin by 3D printing technology. 2020 , 18, e00078	5
806	Magnetic levitational bioassembly of 3D tissue construct in space. 2020 , 6, eaba4174	29
805	Functionally Graded Scaffolds with Programmable Pore Size Distribution Based on Triply Periodic Minimal Surface Fabricated by Selective Laser Melting. 2020 , 13,	8
804	Review of Synthetic and Hybrid Scaffolds in Cartilage Tissue Engineering. 2020 , 10,	19
803	Characterisation of mechanical and surface properties of novel biomimetic interpenetrating alumina-polycarbonate composite materials. 2020 , 36, 1595-1607	2

802	Computer aided designing and finite element analysis for development of porous 3D tissue scaffold - a review. 2020 , 33, 174	1
801	Holistic Approach of Swiss Fetal Progenitor Cell Banking: Optimizing Safe and Sustainable Substrates for Regenerative Medicine and Biotechnology. 2020 , 8, 557758	9
800	A 3D Model of Human Trabecular Meshwork for the Research Study of Glaucoma. 2020 , 11, 591776	0
799	Selective laser sintering in biomedical manufacturing. 2020 , 193-233	4
798	Nanofibers for soft-tissue engineering. 2020 , 437-469	1
797	Xeno-Free In Vitro Cultivation and Osteogenic Differentiation of hAD-MSCs on Resorbable 3D Printed RESOMER. 2020 , 13,	2
796	Colloidal systems toward 3D cell culture scaffolds. 2020 , 283, 102237	6
795	Preparation of Zein/PVP based conduits with tunable degradation. 2020 , 181, 109303	2
794	A tailored polylactic acid/polycaprolactone biodegradable and bioactive 3D porous scaffold containing gelatin nanofibers and Taurine for bone regeneration. 2020 , 10, 13366	27
793	Materdicine: Interdiscipline of materials and medicine. 2020 , 1, 20200016	12
792	Delivering Proangiogenic Factors from 3D-Printed Polycaprolactone Scaffolds for Vascularized Bone Regeneration. 2020 , 9, e2000727	18
791	Cell response to PLA scaffolds functionalized with various seaweed polysaccharides. 2020 , 1-8	4
790	Recent Developments of Biomaterials for Additive Manufacturing of Bone Scaffolds. 2020 , 9, e2000724	19
789	Porous chitosan/ZnO-doped bioglass composites as carriers of bioactive peptides. 2020 , 17, 2807-2816	2
788	Chemical Tuning of Fibers Drawn from Extensible Hyaluronic Acid Networks. 2020 , 142, 19715-19721	7
787	Electrospun PCL Fiber Mats Incorporating Multi-Targeted B and Co Co-Doped Bioactive Glass Nanoparticles for Angiogenesis. 2020 , 13,	6
786	Modeling of Cell-Mediated Self-Assembled Colloidal Scaffolds. 2020 , 12, 48321-48328	2
785	Scaffold Architecture and Matrix Strain Modulate Mesenchymal Cell and Microvascular Growth and Development in a Time Dependent Manner. 2020 , 13, 507-526	1

784	Challenges on optimization of 3D-printed bone scaffolds. 2020 , 19, 69	26
783	Microfluidic Technology for the Production of Well-Ordered Porous Polymer Scaffolds. 2020 , 12,	5
782	Synthesis of Urethane-Type Polymers with Polydimethylsiloxane Blocks for the Manufacture of Fibrous Matrices by Electrospinning. 2020 , 62, 385-393	0
781	Synergistically Enhanced Wound Healing of a Vapor-Constructed Porous Scaffold.. 2020 , 3, 5678-5686	6
780	and Analysis of Adhesive, Anti-Inflammatory, and Proangiogenic Properties of Novel 3D Printed Hyaluronic Acid Glycidyl Methacrylate Hydrogel Scaffolds for Tissue Engineering. 2020 , 6, 5744-5757	10
779	Deformation mode and energy absorption of polycrystal-inspired square-cell lattice structures. 2020 , 41, 1561-1582	6
778	Basic Principles of Emulsion Templating and Its Use as an Emerging Manufacturing Method of Tissue Engineering Scaffolds. 2020 , 8, 875	28
777	Utilization of Carbon Nanotubes in Manufacturing of 3D Cartilage and Bone Scaffolds. 2020 , 13,	15
776	Effective Modulation of CNS Inhibitory Microenvironment using Bioinspired Hybrid-Nanoscaffold-Based Therapeutic Interventions. 2020 , 32, e2002578	15
775	Design and Characterization of Sheet-Based Gyroid Porous Structures with Bioinspired Functional Gradients. 2020 , 13,	11
774	Chitosan-Hydrogel Polymeric Scaffold Acts as an Independent Primary Inducer of Osteogenic Differentiation in Human Mesenchymal Stromal Cells. 2020 , 13,	4
773	The journey of multifunctional bone scaffolds fabricated from traditional toward modern techniques. 2020 , 3, 281-306	22
772	Nonlinear and linearized gray box models of direct-write printing dynamics. 2020 , 26, 1665-1676	2
771	Toward Biomimetic Scaffolds for Tissue Engineering: 3D Printing Techniques in Regenerative Medicine. 2020 , 8, 586406	17
770	Current Advances in 3D Bioprinting Technology and Its Applications for Tissue Engineering. 2020 , 12,	19
769	Poly(3-Hydroxybutyrate)-Multiwalled Carbon Nanotubes Electrospun Scaffolds Modified with Curcumin. 2020 , 12,	9
768	Silica Mesoporous Structures: Effective Nanocarriers in Drug Delivery and Nanocatalysts. 2020 , 10, 7533	11
767	A comprehensive review of mouse diaphyseal femur fracture models. 2020 , 51, 1439-1447	3

766	Synthesis of Chitosan Beads Incorporating Graphene Oxide/Titanium Dioxide Nanoparticles for In Vivo Studies. 2020 , 25,	7
765	Application of green tea extracts epigallocatechin-3-gallate in dental materials: Recent progress and perspectives. 2020 , 108, 2395-2408	6
764	Challenges and Opportunities in the Selective Laser Melting of Biodegradable Metals for Load-Bearing Bone Scaffold Applications. 2020 , 51, 3311-3334	20
763	Scale and structure dependent solute diffusivity within microporous tissue engineering scaffolds. 2020 , 31, 46	6
762	Natural Polymeric Scaffolds in Bone Regeneration. 2020 , 8, 474	73
761	Microfluidic on-demand engineering of longitudinal dynamic self-assembly of particles. 2020 , 145, 5128-5133	8
760	Mechanical properties of graded scaffolds developed by curve interference coupled with selective laser sintering. 2020 , 116, 111181	6
759	Effects of build orientation and sample geometry on the mechanical response of miniature CP-Ti Grade 2 strut samples manufactured by laser powder bed fusion. 2020 , 35, 101403	8
758	Fibrin hydrogel incorporated with graphene oxide functionalized nanocomposite scaffolds for bone repair - In vitro and in vivo study. 2020 , 29, 102251	20
757	Controlling Electrospun Polymer Morphology for Tissue Engineering Demonstrated Using hepG2 Cell Line. 2020 ,	6
756	Porous Three-Dimensional Scaffold Generation for 3D Printing. 2020 , 8, 946	2
755	The Physical Microenvironment of Tumors: Characterization and Clinical Impact. 2020 , 15, 51-82	2
754	Improved Coverage of Mouse Myelomeningocele With a Mussel Inspired Reverse Thermal Gel. 2020 , 251, 262-274	5
753	Fabrication of 3D-Printed Biodegradable Porous Scaffolds Combining Multi-Material Fused Deposition Modeling and Supercritical CO Techniques. 2020 , 10,	13
752	Inorganic additives to augment the mechanical properties of 3D-printed systems. 2020 , 83-107	2
751	Biodegradable Polylactide Scaffolds with Pharmacological Activity by Means of Ultrasound Micromolding Technology. 2020 , 10, 3106	3
750	Directly use conductive materials in tissue engineering applications. 2020 , 1-24	1
749	Development of biocompatible tri-layered nanofibers patches with endothelial cells for cardiac tissue engineering. 2020 , 129, 109630	14

748	Biopolymer-Based Microcarriers for Three-Dimensional Cell Culture and Engineered Tissue Formation. 2020 , 21,	29
747	Induction of fiber-like aggregation and gelation of collagen by ultraviolet irradiation at low temperature. 2020 , 153, 232-239	10
746	Comparative study of different nitrogen-containing plasma modifications applied on 3D porous PCL scaffolds and 2D PCL films. 2020 , 516, 146067	13
745	3D-printed woodpile structure for integral imaging and invisibility cloaking. 2020 , 191, 108618	5
744	Additive manufacturing for bone tissue engineering scaffolds. 2020 , 24, 101024	40
743	Effect of Polymer Concentration on Autoclaved Cryogel Properties. 2020 , 305, 1900824	12
742	Bone Regeneration: A Novel Osteoinductive Function of Spongostan by the Interplay between Its Nano- and Microtopography. 2020 , 9,	10
741	Nanocomposite Films of Chitosan-Grafted Carbon Nano-Onions for Biomedical Applications. 2020 , 25,	7
740	Efficient mineralization and osteogenic gene overexpression of mesenchymal stem cells on decellularized spinach leaf scaffold. 2020 , 757, 144852	9
739	Novel Extrusion-Microdrilling Approach to Fabricate Calcium Phosphate-Based Bioceramic Scaffolds Enabling Fast Bone Regeneration. 2020 , 12, 32340-32351	4
738	A Preliminary Evaluation of the Pro-Chondrogenic Potential of 3D-Bioprinted Poly(ester Urea) Scaffolds. 2020 , 12,	4
737	Effect of Geometric Curvature on Collective Cell Migration in Tortuous Microchannel Devices. 2020 , 11,	2
736	Biological responses to physicochemical properties of biomaterial surface. 2020 , 49, 5178-5224	78
735	Bioactive PLGA/tricalcium phosphate scaffolds incorporating phytomolecule icaritin developed for calvarial defect repair in rat model. 2020 , 24, 112-120	8
734	3D aggregation of cells in packed microgel media. 2020 , 16, 6572-6581	4
733	A multifunctional silk coating on additively manufactured porous titanium to prevent implant-associated infection and stimulate bone regeneration. 2020 , 15, 065016	8
732	Two-scale concurrent topology optimization of lattice structures with connectable microstructures. 2020 , 36, 101427	15
731	Making something out of nothing: Enhanced flaw tolerance and rupture resistance in elastomer/void negative composites. 2020 , 40, 100845	1

730	Blowspinning: A New Choice for Nanofibers. 2020 , 12, 33447-33464	24
729	Nanoscale 3D Bioprinting for Osseous Tissue Manufacturing. 2020 , 15, 215-226	10
728	The Effects of Post Heat Treatment on the Microstructural and Mechanical Properties of an Additive-Manufactured Porous Titanium Alloy. 2020 , 13,	7
727	Tailoring Gellan Gum Spongy-Like Hydrogels' Microstructure by Controlling Freezing Parameters. 2020 , 12,	5
726	A hybrid platform for three-dimensional printing of bone scaffold by combining thermal-extrusion and electrospinning methods. 2020 , 26, 1847-1861	2
725	Porous scaffolds for bone regeneration. 2020 , 5, 1-9	110
724	Phase-contrast 3D tomography of HeLa cells grown in PLLA polymer electrospun scaffolds using synchrotron X-rays. 2020 , 27, 158-163	2
723	Fabrication and Application of a 3D-Printed Poly--Caprolactone Cage Scaffold for Bone Tissue Engineering. 2020 , 2020, 2087475	7
722	An Engineered Infected Epidermis Model for In Vitro Study of the Skin's Pro-Inflammatory Response. 2020 , 11,	8
721	. 2020 ,	5
720	Current Trends in Pickering Emulsions: Particle Morphology and Applications. 2020 , 6, 468-482	110
719	Additive manufacturing of low-cost porous titanium-based composites for biomedical applications: Advantages, challenges and opinion for future development. 2020 , 827, 154263	69
718	Three-dimensional monolithic porous structures assembled from fragmented electrospun nanofiber mats/membranes: Methods, properties, and applications. 2020 , 112, 100656	45
717	Cytotoxic and osteogenic effects of crocin and bicarbonate from calcium phosphates for potential chemopreventative and anti-inflammatory applications in vitro and in vivo. 2020 , 8, 2048-2062	6
716	Functional Biomaterials for Bone Regeneration: A Lesson in Complex Biology. 2020 , 30, 1909874	46
715	Electrospun CoreShell Fibrous 2D Scaffold with Biocompatible Poly(Glycerol Sebacate) and Poly-L-Lactic Acid for Wound Healing. 2020 , 2, 105-117	31
714	3D printing of hydrogels: Rational design strategies and emerging biomedical applications. 2020 , 140, 100543	241
713	Advances in regenerative therapy: A review of the literature and future directions. 2020 , 14, 136-153	45

712	Cartilage repair mediated by thermosensitive photocrosslinkable TGF β -loaded GM-HPCH via immunomodulating macrophages, recruiting MSCs and promoting chondrogenesis. 2020 , 10, 2872-2887	21
711	Cell derived extracellular matrix-rich biomimetic substrate supports podocyte proliferation, differentiation and maintenance of native phenotype. 2020 , 30, 1908752	31
710	Metamaterials: What Is Out There and What Is about to Come. 2020 , 3-51	1
709	A Synergistic Relationship between Polycaprolactone and Natural Polymers Enhances the Physical Properties and Biological Activity of Scaffolds. 2020 , 12, 13587-13597	18
708	Facile preparation of tissue engineering scaffolds with pore size gradients using the muesli effect and their application to cell spheroid encapsulation. 2020 , 108, 2495-2504	2
707	Design of Architected Materials for Thermoelastic Macrostructures Using Level Set Method. 2020 , 72, 1734-1744	3
706	Heparan sulfate loaded polycaprolactone-hydroxyapatite scaffolds with 3D printing for bone defect repair. 2020 , 148, 153-162	18
705	1 β ,25-Dihydroxyvitamin D3-loaded hierarchical titanium scaffold enhanced early osseointegration. 2020 , 109, 110551	15
704	Workflow for highly porous resorbable custom 3D printed scaffolds using medical grade polymer for large volume alveolar bone regeneration. 2020 , 31, 431-441	13
703	3D Printed Scaffolds for Wound Healing and Tissue Regeneration. 2020 , 385-398	4
702	Computational and experimental characterization of 3D-printed PCL structures toward the design of soft biological tissue scaffolds. 2020 , 188, 108488	19
701	Rapid development of dual porous poly(lactic acid) foam using fused deposition modeling (FDM) 3D printing for medical scaffold application. 2020 , 110, 110693	38
700	Fabrication and Plasma Modification of Nanofibrous Tissue Engineering Scaffolds. 2020 , 10,	39
699	Fabrication of fibrillated and interconnected porous poly(ϵ -caprolactone) vascular tissue engineering scaffolds by microcellular foaming and polymer leaching.. 2020 , 10, 10055-10066	14
698	Frontiers in Orthopaedic Biomechanics. 2020 ,	2
697	Biopolymer-based scaffolds. 2020 , 717-749	2
696	Aerogels from Cellulose Phosphates of Low Degree of Substitution: A TBAF/HO/DMSO Based Approach. 2020 , 25,	2
695	From mathematical modeling and machine learning to clinical reality. 2020 , 37-51	3

694	Engineering functional tissues: in vitro culture parameters. 2020 , 157-177	1
693	Three-dimensional scaffolds. 2020 , 343-360	4
692	Prediction of mechanical behavior of 3D bioprinted tissue-engineered scaffolds using finite element method (FEM) analysis. 2020 , 33, 101181	11
691	A review of bioceramic porous scaffolds for hard tissue applications: Effects of structural features. 2020 , 46, 15725-15739	41
690	Porous nanocellulose gels and foams: Breakthrough status in the development of scaffolds for tissue engineering. 2020 , 37, 126-141	76
689	Degradable porous drug-loaded polymer scaffolds for localized cancer drug delivery and breast cell/tissue growth. 2020 , 112, 110794	21
688	Acoustic-Controlled Bubble Generation and Fabrication of 3D Polymer Porous Materials. 2020 , 12, 22318-22326	60
687	Organoid technology for tissue engineering. 2020 , 12, 569-579	14
686	Preparation and Characterization of Electrospun Blend Fibrous Polyethylene Oxide:Polycaprolactone Scaffolds to Promote Cartilage Regeneration. 2020 , 22, 2000131	3
685	A waterborne polyurethane 3D scaffold containing PLGA with a controllable degradation rate and an anti-inflammatory effect for potential applications in neural tissue repair. 2020 , 8, 4434-4446	18
684	3D Printing of Hierarchical Scaffolds Based on Mesoporous Bioactive Glasses (MBGs)-Fundamentals and Applications. 2020 , 13,	27
683	Human Adipose-Derived Mesenchymal Stem Cells-Incorporated Silk Fibroin as a Potential Bio-Scaffold in Guiding Bone Regeneration. 2020 , 12,	8
682	Double crosslinked HLC-CCS hydrogel tissue engineering scaffold for skin wound healing. 2020 , 155, 625-635	27
681	Macroporous 3D Scaffold with Self-Fitting Capability for Effectively Repairing Massive Rotator Cuff Tear. 2021 , 7, 904-915	2
680	Preparation and surface modification of 3D printed Ti6Al4V porous implant. 2021 , 40, 1164-1172	6
679	Investigation on dimensional accuracy, compressive strength and measured porosity of additively manufactured calcium sulphate porous bone scaffolds. 2021 , 36, 492-503	6
678	Three-Dimensional Printing of Scaffolds with Synergistic Effects of Micro-Nano Surfaces and Hollow Channels for Bone Regeneration. 2021 , 7, 872-880	5
677	Polymer-based porous microcarriers as cell delivery systems for applications in bone and cartilage tissue engineering. 2021 , 66, 77-113	20

676	Effect of sodium chloride as a porogen agent in mechanical properties of PLGA/HA nanocomposite scaffolds. 2021 , 7, 035009	1
675	Bacterial cellulose nanofiber distribution on gelatin and silk fibroin scaffolds and the cell behavior. 2021 , 28, 91-102	1
674	Three-dimensionally printed polycaprolactone/beta-tricalcium phosphate scaffold was more effective as an rhBMP-2 carrier for new bone formation than polycaprolactone alone. 2021 , 109, 840-848	10
673	Robust and sensitive pressure/strain sensors from solution processable composite hydrogels enhanced by hollow-structured conducting polymers. 2021 , 403, 126307	55
672	Microfabricated Gaps Reveal the Effect of Geometrical Control in Wound Healing. 2021 , 10, e2000630	7
671	Mussel-inspired multifunctional coating for bacterial infection prevention and osteogenic induction. 2021 , 68, 160-171	2
670	Engineering Anisotropic Meniscus: Zonal Functionality and Spatiotemporal Drug Delivery. 2021 , 27, 133-154	5
669	Human Stem Cell Based Tissue Engineering for Cartilage Repair: A Systematic Review. 2021 , 27, 74-93	3
668	From infection to healing: The use of plant viruses in bioactive hydrogels. 2021 , 13, e1662	3
667	Additively manufactured heterogeneously porous metallic bone with biostructural functions and bone-like mechanical properties. 2021 , 62, 173-179	22
666	Evaluation of remodeling and regeneration of electrospun PCL/fibrin vascular grafts in vivo. 2021 , 118, 111441	16
665	Crosslinker-free silk/decellularized extracellular matrix porous bioink for 3D bioprinting-based cartilage tissue engineering. 2021 , 118, 111388	30
664	Fabrication and Investigation of the Suitability of Chitosan-Silver Composite Scaffolds for Bone Tissue Engineering Applications. 2021 , 100, 178-187	19
663	Lotus-Root-Like Microchanneled Collagen Scaffold. 2021 , 13, 12656-12667	6
662	Characterization and intracellular mechanism of electrospun poly (ε-caprolactone) (PCL) fibers incorporated with bone-dECM powder as a potential membrane for guided bone regeneration. 2021 , 94, 282-291	5
661	Electrospun three-dimensional nanofibrous scaffolds based on polycaprolactone for stem cells differentiation and bone regeneration. 2021 , 179-215	1
660	A 3D-bioprinted scaffold with doxycycline-controlled BMP2-expressing cells for inducing bone regeneration and inhibiting bacterial infection. 2021 , 6, 1318-1329	15
659	In vitro biological response of human osteoblasts in 3D chitosan sponges with controlled degree of deacetylation and molecular weight. 2021 , 254, 117434	15

658	Adaptable hydrogel with reversible linkages for regenerative medicine: Dynamic mechanical microenvironment for cells. 2021 , 6, 1375-1387	40
657	Wnt pathway activator delivery by poly (lactide-co-glycolide)/silk fibroin composite nanofibers promotes dental pulp stem cell osteogenesis. 2021 , 61, 102223	4
656	Additive manufacturing of biodegradable magnesium implants and scaffolds: Review of the recent advances and research trends. 2021 , 9, 392-415	27
655	A simple hydrogel scaffold with injectability, adhesivity and osteogenic activity for bone regeneration. 2021 , 9, 960-972	7
654	Synthesis and characterization of ester-diol based polyurethane: a potentiality check for hypopharyngeal tissue engineering application. 2021 , 11, 25-37	1
653	Bžier-based metamaterials: Synthesis, mechanics and additive manufacturing. 2021 , 199, 109412	6
652	Programmable Local Orientation of Micropores by Mold-Assisted Ice Templating.. 2021 , 5, e2000963	4
651	Development of composite hydrogel based on hydroxyapatite mineralization over pectin reinforced with cellulose nanocrystal. 2021 , 167, 726-735	12
650	Development of a stacked, porous silk scaffold neuroblastoma model for investigating spatial differences in cell and drug responsiveness. 2021 , 9, 1272-1290	
649	The Effect of Physical Cues of Biomaterial Scaffolds on Stem Cell Behavior. 2021 , 10, e2001244	12
648	pH-Dependent Morphology Control of Cellulose Nanofiber/Graphene Oxide Cryogels. 2021 , 17, e2005564	5
647	In vitro and 48 weeks in vivo performances of 3D printed porous Fe-30Mn biodegradable scaffolds. 2021 , 121, 724-740	5
646	Additive manufacturing of biodegradable iron-based particle reinforced polylactic acid composite scaffolds for tissue engineering. 2021 , 289, 116952	12
645	Recent progress in extrusion 3D bioprinting of hydrogel biomaterials for tissue regeneration: a comprehensive review with focus on advanced fabrication techniques. 2021 , 9, 535-573	89
644	3D printed bioactive and antibacterial silicate glass-ceramic scaffold by fused filament fabrication. 2021 , 118, 111516	6
643	Nanocellulose in biomedical and biosensing applications: A review. 2021 , 166, 587-600	20
642	Computer-Aided Tissue Engineering. 2021 ,	
641	Advances in Production and Industrial Engineering. 2021 ,	

640	Piezoelectric and Magnetolectric Scaffolds for Tissue Regeneration and Biomedicine: A Review. 2021 , 68, 229-241	4
639	Bioceramics in Tissue Engineering: Retrospect and Prospects. 2021 , 61-87	
638	Fabrication and characterization of polycaprolactone-based green materials for drug delivery. 2021 , 395-423	0
637	Biomimetic strategies for fabricating musculoskeletal tissue scaffolds: a review. 2021 , 112, 1211-1229	2
636	Covalent Cell-Loading Injectable Hydrogel Scaffold Significantly Promotes Tissue Regeneration In Vivo Compared with a Conventional Physical Cell-Loading Hydrogel Scaffold. 2021 , 5, 2000106	1
635	Multifunctional Biopolymers-Based Composite Materials for Biomedical Applications: A Systematic Review. 2021 , 6, 154-176	5
634	Smart scaffolds: shape memory polymers (SMPs) in tissue engineering. 2021 , 9, 4287-4297	7
633	Biocompatible and functional inorganic magnesium ceramic particles for biomedical applications. 2021 , 9, 1903-1923	10
632	Lab Equipment for 3D Cell Culture. 2021 , 27-67	1
631	PCL-based bionanocomposites in tissue engineering and regenerative medicine. 2021 , 465-480	
630	From Secondary Intent to Accelerated Regenerative Healing: Emergence of the Bio-intelligent Scaffold Vasculogenic Strategy for Skin Reconstruction. 2021 , 205-271	
629	POSS nanocomposites for biological applications. 2021 , 449-470	1
628	Shape memory polymer (SMP) scaffolds with improved self-fitting properties. 2021 , 9, 3826-3837	8
627	Bioceramic-Starch Paste Design for Additive Manufacturing and Alternative Fabrication Methods Applied for Developing Biomedical Scaffolds. 2021 , 261-296	
626	Scaffolds and Tissue Engineering Applications by 3D Bio-Printing Process. 2021 , 718-733	
625	Laser Additive 3D Printing of Titanium Alloys: Current Status, Problems, Trends. 2021 , 122, 6-25	3
624	Cellularized polymeric microarchitectures for drug screening. 2021 , 2, 96-113	0
623	Chapter 13:3D-bioprinting for Engineering Complex Tissues and Vascularization. 2021 , 339-359	

622	Fabrication and Characterization of Fibrous Polycaprolactone Blended with Natural Green Tea Extracts Using Dual Solvent Systems. 2021 ,	0
621	Coaxial nanofibrous scaffolds mimicking the extracellular matrix transition in the wound healing process promoting skin regeneration through enhancing immunomodulation. 2021 , 9, 1395-1405	5
620	Fabrication and maturation of integrated biphasic anatomic mesenchymal stromal cell-laden composite scaffolds for osteochondral repair and joint resurfacing. 2021 , 39, 2323-2332	2
619	Comparison of osteogenic differentiation potential of induced pluripotent stem cells and buccal fat pad stem cells on 3D-printed HA/βTCP collagen-coated scaffolds. 2021 , 384, 403-421	6
618	Muscle tissue engineering A materials perspective. 2021 , 249-274	
617	Applications of 3D bioprinting in tissue engineering: advantages, deficiencies, improvements, and future perspectives. 2021 , 9, 5385-5413	12
616	3B Yazdırma Kemik Doku Ekeleleri Tasarımına Etkisi.	
615	Overview of Decellularized Materials for Tissue Repair and Organ Replacement. 2021 , 1-67	
614	Sol-gel materials for smart electrochromic devices. 2021 , 439-475	1
613	Dextran and pullulan-based hybrid materials for tissue engineering applications. 2021 , 131-154	
612	Electrospun materials as scaffolds in tissue engineering and regenerative medicine. 2021 , 83-121	1
611	Applications of Additive Manufacturing A Review. 2021 , 21-27	1
610	Wet to dry self-transitions in dense emulsions: From order to disorder and back. 2021 , 6,	4
609	Information System for Selection of Conditions and Equipment for Mammalian Cell Cultivation. 2021 , 6, 23	
608	Additive manufacturing of biomorphic scaffolds for bone tissue engineering. 2021 , 113, 2909-2923	6
607	Reduced graphene oxide coating enhances osteogenic differentiation of human mesenchymal stem cells on Ti surfaces. 2021 , 25, 4	19
606	Development of Standardized Fetal Progenitor Cell Therapy for Cartilage Regenerative Medicine: Industrial Transposition and Preliminary Safety in Xenogeneic Transplantation. 2021 , 11,	1
605	Interpolation of tensile properties of polymer composite based on Polyjet 3D printing. 1	3

604	Biomaterials for Three-Dimensional Cell Culture: From Applications in Oncology to Nanotechnology. 2021 , 11,	18
603	Janus 3D printed dynamic scaffolds for nanovibration-driven bone regeneration. 2021 , 12, 1031	15
602	Synthesis and Characterisation of Bioactive Glass 13-93 Scaffolds for Bone Tissue Regeneration. 2021 , 1067, 012136	0
601	Biomatrix from goat-waste in sponge/gel/powder form for tissue engineering and synergistic effect of nanoceria. 2021 , 16, 025008	8
600	Systematic design of an advanced open-source 3D bioprinter for extrusion and electrohydrodynamic-based processes. 2021 , 113, 2539-2554	2
599	Review of Self-Healing Polymers as Propitious Biomaterials. 2021 , 5, 38-53	
598	Chitin Nanocrystals as an Eco-friendly and Strong Anisotropic Adhesive. 2021 , 13, 11356-11368	8
597	Model-based data analysis of tissue growth in thin 3D printed scaffolds.	1
596	Wide-Ranging Multitool Study of Structure and Porosity of PLGA Scaffolds for Tissue Engineering. 2021 , 13,	2
595	Scaffold-free cell-based tissue engineering therapies: advances, shortfalls and forecast. 2021 , 6, 18	13
594	Metal Material, Properties and Design Methods of Porous Biomedical Scaffolds for Additive Manufacturing: A Review. 2021 , 9, 641130	15
593	Recent Progress on Biodegradable Tissue Engineering Scaffolds Prepared by Thermally-Induced Phase Separation (TIPS). 2021 , 22,	15
592	Three-Dimensional Printing of Hydroxyapatite Composites for Biomedical Application. 2021 , 11, 353	11
591	Antibacterial Albumin-Tannic Acid Coatings for Scaffold-Guided Breast Reconstruction. 2021 , 9, 638577	1
590	In Vitro Mineralization of Collagen. 2021 , 33, e2004418	26
589	A bifunctional bone scaffold combines osteogenesis and antibacterial activity via in situ grown hydroxyapatite and silver nanoparticles. 2021 , 4, 452-468	27
588	Self-Assembling Hydrogel Structures for Neural Tissue Repair. 2021 , 7, 4136-4163	8
587	Highly porous tissue scaffolds based on cyclic acetals with tunable hydrophilicity and degradation behavior. 2021 , 32, 1997-2006	1

586	Cartilage Regeneration with Cell-Seeded Natural Biomaterial Scaffold Implants: 15-Year Study. 2021,	2
585	Fabrication of biodegradable polyurethane electrospun webs of fibers modified with biocompatible graphene oxide nanofiller. 152808372110031	0
584	Computer-aided design and additive manufacturing of bone scaffolds for tissue engineering: state of the art. 2021, 36, 3725	5
583	Enhanced Regeneration of Vascularized Adipose Tissue with Dual 3D-Printed Elastic Polymer/dECM Hydrogel Complex. 2021, 22,	6
582	A time-dependent mechanobiology-based topology optimization to enhance bone growth in tissue scaffolds. 2021, 117, 110233	3
581	Appreciating the First Line of the Human Innate Immune Defense: A Strategy to Model and Alleviate the Neutrophil Elastase-Mediated Attack toward Bioactivated Biomaterials. 2021, 17, e2007551	6
580	Optimization and evaluation of ciprofloxacin-loaded collagen/chitosan scaffolds for skin tissue engineering. 2021, 11, 160	1
579	Additive manufacturing enables personalised porous high-density polyethylene surgical implant manufacturing with improved tissue and vascular ingrowth. 2021, 22, 100965	4
578	evaluation of the response of human tendon-derived stromal cells to a novel electrospun suture for tendon repair.. 2021, 4, 409-418	2
577	A Comparative Review of Natural and Synthetic Biopolymer Composite Scaffolds. 2021, 13,	121
576	A sliding window method to identify defects in 3D printing lattice structure based on the difference principle. 2021, 32, 065008	2
575	3D printing of graphene-based polymeric nanocomposites for biomedical applications. 2021, 2,	9
574	Suturable elastomeric tubular grafts with patterned porosity for rapid vascularization of 3D constructs. 2021,	4
573	Engineered Skin Substitute Regenerates the Skin with Hair Follicle Formation. 2021, 9,	0
572	Structure-function assessment of 3D-printed porous scaffolds by a low-cost/open source fused filament fabrication printer. 2021, 123, 111945	0
571	Effect of Dual Pore Size Architecture on In Vitro Osteogenic Differentiation in Additively Manufactured Hierarchical Scaffolds. 2021, 7, 2615-2626	1
570	Extracellular matrix imitation utilizing nanofibers-embedded biomimetic scaffolds for facilitating cartilage regeneration. 2021, 410, 128379	10
569	Hybrid porous zirconia scaffolds fabricated using additive manufacturing for bone tissue engineering applications. 2021, 123, 111950	5

568	Optimization of 3D network topology for bioinspired design of stiff and lightweight bone-like structures. 2021 , 123, 112010	4
567	Introduction of Computational Organometallic Chemistry. 2021 , 1-18	
566	Numerical analysis of mechanical behaviour of lattice and porous structures. 2021 , 261, 113292	7
565	Printing of Woodpile Scaffold Using Fresnel Lens for Tissue Engineering. 1	1
564	Multiscale porosity in a 3D printed gellan-gelatin composite for bone tissue engineering. 2021 , 16,	1
563	The State of Starch/Hydroxyapatite Composite Scaffold in Bone Tissue Engineering with Consideration for Dielectric Measurement as an Alternative Characterization Technique. 2021 , 14,	5
562	Injectable open-porous PLGA microspheres as cell carriers for cartilage regeneration. 2021 , 109, 2091-2100	9
561	Geometrical Degrees of Freedom for Cellular Structures Generation: A New Classification Paradigm. 2021 , 11, 3845	3
560	Bio-polymeric hydrogels for regeneration of corneal epithelial tissue*View all notes. 1-18	0
559	Advanced polymer-based composites and structures for biomedical applications. 2021 , 149, 110388	16
558	3D-printed biodegradable composite scaffolds with significantly enhanced mechanical properties via the combination of binder jetting and capillary rise infiltration process. 2021 , 41, 101988	7
557	Inorganic Materials for Regenerative Medicine. 2021 , 57, 443-474	6
556	3D Printing in alloy design to improve biocompatibility in metallic implants. 2021 , 45, 20-34	23
555	Advanced Strategies of Biomimetic Tissue-Engineered Grafts for Bone Regeneration. 2021 , 10, e2100408	18
554	Intrinsic osteoinductivity of PCL-DA/PLLA semi-IPN shape memory polymer scaffolds. 2021 , 109, 2334-2345	5
553	Composite Scaffolds for Bone Tissue Regeneration Based on PCL and Mg-Containing Bioactive Glasses. 2021 , 10,	10
552	Physico-Chemical Challenges in 3D Printing of Polymeric Nanocomposites and Hydrogels for Biomedical Applications. 2021 , 21, 2778-2792	3
551	Simulation of radiative transfer in dispersive multiphase systems with supercritical fluidic components. 2021 ,	

550	A Comprehensive Overview on the Latest Progress in the Additive Manufacturing of Metal Matrix Composites: Potential, Challenges, and Feasible Solutions. 2021 , 34, 1173-1200	12
549	3D Printing of Strontium Silicate Microcylinder-Containing Multicellular Biomaterial Inks for Vascularized Skin Regeneration. 2021 , 10, e2100523	9
548	Understanding of how the properties of medical grade lactide based copolymer scaffolds influence adipose tissue regeneration: Sterilization and a systematic in vitro assessment. 2021 , 124, 112020	3
547	Printing between the Lines: Intricate Biomaterial Structures Fabricated via Negative Embodied Sacrificial Template 3D (NEST3D) Printing. 2021 , 6, 2100189	5
546	Main 3D Manufacturing Techniques for Customized Bone Substitutes. A Systematic Review. 2021 , 14,	3
545	A Computational Geometry Generation Method for Creating 3D Printed Composites and Porous Structures. 2021 , 14,	1
544	Structural Investigation of Delicate-Geometry Fused Deposition Modeling Additive Manufacturing Scaffolds: Experiment and Analytics. 2021 , 30, 6529-6541	8
543	3D Electrospun Nanofiber-Based Scaffolds: From Preparations and Properties to Tissue Regeneration Applications. 2021 , 2021, 8790143	7
542	The albumin/starch scaffold and its biocompatibility with living cells. 2021 , 27, 102164	2
541	Tuneable Hybrid Hydrogels via Complementary Self-Assembly of a Bioactive Peptide with a Robust Polysaccharide. 2021 , 7, 3340-3350	11
540	Current interpretations on the in vivo response of bone to additively manufactured metallic porous scaffolds: A review. 2021 , 2, 100013	5
539	Foaming Biocompatible and Biodegradable PBAT/PLGA as Fallopian Tube Stent Using Supercritical Carbon Dioxide Porous PBAT/PLGA stent for prevention of fallopian tubal adhesion 2021 ,	
538	3D printing cross-linkable calcium phosphate biocomposites for biocompatible surgical implantation. 2021 , 22, e00141	0
537	Advances in 3D Printing for Tissue Engineering. 2021 , 14,	9
536	Porosity parameters in biomaterial science: Definition, impact, and challenges in tissue engineering. 2021 , 15, 352-373	3
535	Ag-doped Bioactive Glass-Ceramic 3D Scaffolds: Microstructural, Antibacterial, and Biological Properties. 2021 , 41, 3717-3730	5
534	Recent advances in PLGA-based biomaterials for bone tissue regeneration. 2021 , 127, 56-79	24
533	Current natural bioactive materials in bone and tooth regeneration in dentistry: a comprehensive overview. 2021 , 13, 2078-2078	5

532	Construction of the Gypsum-Coated Scaffolds for In Situ Bone Regeneration. 2021 , 13, 31527-31541	2
531	Hydrogen bonding induced enhancement for constructing anisotropic sugarcane composite hydrogels. 2021 , 138, 51374	4
530	How Does Scaffold Porosity Conduct Bone Tissue Regeneration?. 2100463	2
529	Influence of pore sizes in 3D-scaffolds on mechanical properties of scaffolds and survival, distribution, and proliferation of human chondrocytes. 1-12	2
528	Additive manufacturing techniques for the fabrication of tissue engineering scaffolds: a review. 2021 , 27, 1230-1272	8
527	Simple and efficient volume merging method for triply periodic minimal structures. 2021 , 264, 107956	6
526	A comprehensive study of acid and base treatment of 3D printed poly(ϵ -caprolactone) scaffolds to tailor surface characteristics. 2021 , 555, 149602	5
525	Evaluating Directional Dependency of Selective Laser Sintered Patient Specific Biodegradable Devices to Improve Predictive Modeling and Design Verification. 2021 , 49, 2579-2589	1
524	3D printing and osteogenesis of loofah-like hydroxyapatite bone scaffolds. 2021 , 47, 20352-20361	2
523	Polymeric Biocomposites from Renewable and Sustainable Natural Resources. 2022 , 65-108	
522	Curcumin in decellularized goat small intestine submucosa for wound healing and skin tissue engineering. 2022 , 110, 210-219	6
521	Recent Studies on Dispersion of Graphene-Polymer Composites. 2021 , 13,	7
520	The effect of Ag incorporation on the characteristics of the polymer derived bioactive silicate phosphate glass-ceramic scaffolds. 2021 ,	
519	Bioengineered 3D nanocomposite based on gold nanoparticles and gelatin nanofibers for bone regeneration: in vitro and in vivo study. 2021 , 11, 13877	15
518	Pharmaceutical electrospinning and 3D printing scaffold design for bone regeneration. 2021 , 174, 504-534	29
517	The porcine accessory carpal bone as a model for biologic joint replacement for trapeziometacarpal osteoarthritis. 2021 , 129, 159-168	1
516	Recent Advancements in 3D Printing of Polysaccharide Hydrogels in Cartilage Tissue Engineering. 2021 , 14,	7
515	A machine learning-based multiscale model to predict bone formation in scaffolds. 2021 , 1, 532-541	3

514	Shape fidelity and sterility assessment of 3D printed polycaprolactone and hydroxyapatite scaffolds. 2021 , 28, 1	3
513	Predicting bone regeneration from machine learning. 2021 , 1, 509-510	2
512	Fabrication of a bio-instructive scaffold conferred with a favorable microenvironment allowing for superior implant osseointegration and accelerated in situ vascularized bone regeneration via type H vessel formation. 2022 , 9, 491-507	2
511	Combining tunable proteolytic sequences and a VEGF-mimetic peptide for the spatiotemporal control of angiogenesis within Elastin-Like Recombinamer scaffolds. 2021 , 130, 149-160	6
510	Additive Manufacturing of 3D Aerogels and Porous Scaffolds: A Review. 2103410	16
509	A Review of Biomaterials and Scaffold Fabrication for Organ-on-a-Chip (OOAC) Systems. 2021 , 8,	6
508	On the progress of 3D-printed hydrogels for tissue engineering. 2021 , 11, 1-15	17
507	The advances of topology optimization techniques in orthopedic implants: A review. 2021 , 59, 1673-1689	1
506	Development of bioinks for 3D printing microporous, sintered calcium phosphate scaffolds. 2021 , 32, 94	0
505	Vascularization of tissue engineered cartilage - Sequential in vivo MRI display functional blood circulation. 2021 , 276, 121002	1
504	Bio-plotted hydrogel scaffold with core and sheath strand-enhancing mechanical and biological properties for tissue regeneration. 2021 , 205, 111919	5
503	Electrospinning and Electrospaying with Cells for Applications in Biomanufacturing. 2141003	
502	Architected implant designs for long bones: Advantages of minimal surface-based topologies. 2021 , 207, 109838	10
501	Functional role of crosslinking in alginate scaffold for drug delivery and tissue engineering: A review. 2021 , 160, 110807	3
500	Comparison of CAD and Voxel-Based Modelling Methodologies for the Mechanical Simulation of Extrusion-Based 3D Printed Scaffolds. 2021 , 14,	0
499	Silk fibroin nanocomposites as tissue engineering scaffolds - A systematic review. 2021 , 141, 111924	6
498	A Three-in-One Strategy: Injectable Biomimetic Porous Hydrogels for Accelerating Bone Regeneration via Shape-Adaptable Scaffolds, Controllable Magnesium Ion Release, and Enhanced Osteogenic Differentiation. 2021 , 22, 4552-4568	1
497	Thermal Stability and Dynamic Mechanical Properties of Poly(-caprolactone)/Chitosan Composite Membranes. 2021 , 14,	1

496	Tackling Current Biomedical Challenges With Frontier Biofabrication and Organ-On-A-Chip Technologies. 2021 , 9, 732130	4
495	In vivo evaluation of deer antler trabecular bone as a reconstruction material for bone defects. 2021 , 138, 116-124	
494	Surface Integrity and Biological Response of Ti-Alloy Implants after Surface Modification. 2021 ,	0
493	Fabricating Robust Constructs with Internal Phase Nanostructures via Liquid-in-Liquid 3D Printing. 2021 , 42, e2100445	1
492	Scaffold printing using biodegradable poly(1,4-butylene carbonate) ink: printability, physicochemical properties, and biocompatibility. 2021 , 12, 100129	
491	Optimal placement of fixation system for scaffold-based mandibular reconstruction. 2021 , 126, 104855	1
490	Continued sustained insulin-releasing PLGA nanoparticles modified 3D-Printed PCL composite scaffolds for osteochondral repair. 2021 , 422, 130051	7
489	Gradient chondroitin sulfate/poly (L-glutamic acid) hydrogels inducing differentiation of stem cells for cartilage tissue engineering. 2021 , 270, 118330	2
488	Model-based data analysis of tissue growth in thin 3D printed scaffolds. 2021 , 528, 110852	10
487	Redefining architectural effects in 3D printed scaffolds through rational design for optimal bone tissue regeneration. 2021 , 25, 101168	2
486	Design of 3D printed scaffolds for bone tissue engineering: A review. 2021 , 24, e00167	10
485	Fabrication of porous chitosan particles using a novel two-step porogen leaching and lyophilization method with the label-free multivariate spectral assessment of live adhered cells. 2021 , 208, 112094	0
484	Liquid imbibition into 3D printed porous substrates. 2021 , 245, 116967	2
483	Challenges and recent trends with the development of hydrogel fiber for biomedical applications. 2022 , 287, 131956	4
482	Polymeric biomaterials. 2022 , 77-123	
481	A judicious approach of exploiting polyurethane-urea based electrospun nanofibrous scaffold for stimulated bone tissue regeneration through functionally nobbled nanohydroxyapatite. 2022 , 429, 132179	2
480	Trends in the Development of Tailored Elastin-Like RecombinamerBased Porous Biomaterials for Soft and Hard Tissue Applications. 2021 , 7,	9
479	An Overview of Scaffolds for Retinal Pigment Epithelium Research. 2021 , 53, 492-499	1

478	Design of Tissue Engineering Scaffold by Means of Mathematical Modeling. 2021 , 750-757	
477	3D printing of artificial skin patches with bioactive and optically active polymer materials for anti-infection and augmenting wound repair. 2021 ,	7
476	Amino Acid- and Growth Factor-Based Multifunctional Nanocapsules for the Modulation of the Local Microenvironment in Tissue Engineering. 2021 , 13, 2165-2178	16
475	Additive-Manufactured Gyroid Scaffolds of Magnesium Oxide, Phosphate Glass Fiber and Polylactic Acid Composite for Bone Tissue Engineering. 2021 , 13,	2
474	Chitosan-based bionanocomposites in bone tissue engineering. 2021 , 225-242	
473	Rational Integrated Modeling and Analyses of System Engineered Linear Viscoelastic 3-D/4-D Printing Protocols and Their Topology Optimization. 2021 ,	
472	Key Properties of a Bioactive Ag-SiO/TiO Coating on NiTi Shape Memory Alloy as Necessary at the Development of a New Class of Biomedical Materials. 2021 , 22,	4
471	A portable pen-sized instrumentation to measure stiffness of soft tissues in vivo. 2021 , 11, 378	3
470	Freeze Casting of Porous Biomaterial Scaffolds for Bone Tissue Engineering. 23-36	1
469	Calcium Phosphate Ceramics in Drug Delivery and Bone Tissue Engineering. 135-145	1
468	Ceramic Scaffolds, Current Issues and Future Trends. 25-46	2
467	Principles, Applications, and Technology of Craniofacial Bone Engineering. 183-234	1
466	Bioceramics: Silica-Based Organic-Inorganic Hybrid Materials for Medical Applications. 135-161	3
465	Bioprinting a cell-laden matrix for bone regeneration: A focused review. 2021 , 138, 49888	5
464	Predictive value of in vitro and in vivo assays in bone and cartilage repair--what do they really tell us about the clinical performance?. 2006 , 585, 327-60	37
463	Design, Fabrication and Physical Characterization of Scaffolds Made from Biodegradable Synthetic Polymers in combination with RP Systems based on Melt Extrusion. 2008 , 261-291	12
462	Computer Aided Tissue Engineering Scaffold Fabrication. 2008 , 67-85	10
461	Computational Design and Simulation of Tissue Engineering Scaffolds. 2008 , 113-127	3

460	Biomimetic Boundary-Based Scaffold Design for Tissue Engineering Applications. 2021 , 2147, 3-18	2
459	Composite Hydrogels for Scaffold Design, Tissue Engineering, and Prostheses. 2010 , 227-245	9
458	Biofabrication: Main Advances and Challenges. 2013 , 261-275	1
457	Numerical Analysis of the Response of Biomimetic Cellular Materials Under Static and Dynamic Loadings. 2014 , 55-89	3
456	3D structuring of biocompatible and biodegradable polymers via stereolithography. 2011 , 695, 309-21	7
455	Direct fabrication as a patient-targeted therapeutic in a clinical environment. 2012 , 868, 327-40	4
454	Engineering Polymeric Scaffolds for Bone Grafts. 2007 , 81-94	2
453	Use of Computing Techniques for Flood Management in a Coastal Region of South Gujarat: A Case Study of Navsari District. 2020 , 108-117	5
452	Scaffolds for Tissue Engineering: A State-of-the-Art Review Concerning Types, Properties, Materials, Processing, and Characterization. 2020 , 647-676	3
451	Hierarchical Topology Optimization for Bone Tissue Scaffold: Preliminary Results on the Design of a Fracture Fixation Plate. 2015 , 311-340	4
450	Additive Manufacturing for Tissue Engineering. 2018 , 1-52	1
449	Tendon and Ligament Tissue Engineering: Restoring Tendon/Ligament and Its Interfaces. 2009 , 255-269	3
448	Multilevel Experimental and Modelling Techniques for Bioartificial Scaffolds and Matrices. 2010 , 425-486	1
447	Laser-Based Biomimetic Tissue Engineering. 2013 , 211-236	2
446	Biomaterials for Regeneration of Tendons and Ligaments. 2011 , 307-341	2
445	Optimization Approaches for the Design of Additively Manufactured Scaffolds. 2014 , 113-128	2
444	Introduction to Ideal Characteristics and Advanced Biomedical Applications of Biomaterials. 2019 , 171-204	3
443	Fabrication and In Vitro Corrosion Characterization of 316L Stainless Steel for Medical Application. 2019 , 215-226	3

442	Biomechanics of Osteo-Synthetics. 2020 , 397-425	1
441	Selective laser sintering of PCL/TCP composites for tissue engineering scaffolds. 2010 , 24, 241-244	13
440	Nanocomposite hydrogels for tissue engineering applications. 2020 , 499-528	3
439	Decellularization of whole hearts for cardiac regeneration. 2020 , 291-310	1
438	Three-Dimensional Printing of Porous Polylactic-Acid Scaffolds for Tissue Engineering. 2020 ,	1
437	Hierarchical porous hybrid chitosan scaffolds with tailorable mechanical properties. 2017 , 209, 528-531	6
436	Chapter 14:Materials for Tissue Engineering and 3D Cell Culture. 2016 , 460-489	1
435	Scaffolds, BioPolymer: Manufacture. 7016-7028	2
434	3D Printing of large-scale and highly porous biodegradable tissue engineering scaffolds from poly(trimethylene-carbonate) using two-photon-polymerization. 2020 , 12, 045036	22
433	Design of Biphasic Polymeric 3-Dimensional Fiber Deposited Scaffolds for Cartilage Tissue Engineering Applications. 2006 , 061220075423021	1
432	Cell proliferation and migration explain pore bridging dynamics in 3D printed scaffolds of different pore size.	3
431	Emergent collective organization of bone cells in complex curvature fields.	0
430	A Mathematical Analysis of Directional Solidification of Aqueous Solutions. 2020 , 142,	1
429	A low-parametric rhombic microstructure family for irregular lattices. 2020 , 39,	6
428	Organic Open-cell Porous Structure Modeling. 2020 ,	1
427	Biofunctional Ionic-Doped Calcium Phosphates: Silk Fibroin Composites for Bone Tissue Engineering Scaffolding. 2017 , 204, 150-163	28
426	Design of customised bioceramic medical implants by layered manufacturing. 2009 ,	4
425	Microfabrication Techniques in Scaffold Development. 2008 , 87-119	2

424	Tissue Engineering. 2008 , 3-32	1
423	Hybrid Porous Scaffolds of Biodegradable Synthetic Polymers and Collagen for Tissue Engineering. 2012 , 417-434	1
422	Calcium Phosphates as Scaffolds for Mesenchymal Stem Cells. 2012 , 219-238	3
421	Fabrication of 3D Scaffolds and Organ Printing for Tissue Regeneration. 2012 , 101-122	4
420	Biocompatible 2D and 3D Polymeric Scaffolds for Medical Devices. 2014 , 229-253	1
419	Nanocomposite Polymer Scaffolds for Bone Tissue Regeneration. 2012 , 121, 518-521	13
418	In situ surface-enhanced Raman scattering sensing with soft and flexible polymer optical fiber probes. 2018 , 43, 5443-5446	15
417	Living bacterial sacrificial porogens to engineer decellularized porous scaffolds. 2011 , 6, e19344	20
416	Osteoinduction of human mesenchymal stem cells by bioactive composite scaffolds without supplemental osteogenic growth factors. 2011 , 6, e26211	154
415	Bone surface mapping method. 2012 , 7, e32926	4
414	The therapeutic role of monocyte chemoattractant protein-1 in a renal tissue engineering strategy for diabetic patients. 2013 , 8, e57635	6
413	Evaluation of physical and mechanical properties of porous poly (ethylene glycol)-co-(L-lactic acid) hydrogels during degradation. 2013 , 8, e60728	47
412	Synthetic bone substitute engineered with amniotic epithelial cells enhances bone regeneration after maxillary sinus augmentation. 2013 , 8, e63256	48
411	Patterned immobilization of antibodies within roll-to-roll hot embossed polymeric microfluidic channels. 2013 , 8, e68918	31
410	Geometry-driven cell organization determines tissue growths in scaffold pores: consequences for fibronectin organization. 2013 , 8, e73545	56
409	Open-Source Selective Laser Sintering (OpenSLS) of Nylon and Biocompatible Polycaprolactone. 2016 , 11, e0147399	54
408	Human Adipose Tissue Derived Extracellular Matrix and Methylcellulose Hydrogels Augments and Regenerates the Paralyzed Vocal Fold. 2016 , 11, e0165265	12
407	In vitro evaluation of decontamination effects on mechanical properties of fibrin membrane. 2018 , 32, 2	3

406	Additive manufacturing of PLA-based scaffolds intended for bone regeneration and strategies to improve their biological properties. 2020 , 20, 571-599	22
405	Solid Free-form Fabrication Technology and Its Application to Bone Tissue Engineering. 2010 , 3, 85-95	47
404	Recent cell printing systems for tissue engineering. 2017 , 3, 004	31
403	Progress in organ 3D bioprinting. 2018 , 4, 128	29
402	Additive manufacturing of bone scaffolds. 2019 , 5, 148	51
401	Permeability Performance on Porous Structure of Injection Mold Fabricated by Metal Laser Sintering Combined with High Speed Milling. 2012 , 6, 576-583	9
400	The Applications of 3D Printing in Pulmonary Drug Delivery and Treatment of Respiratory Disorders. 2018 , 24, 5072-5080	3
399	Vascularization of Novel Porcine Acellular Dermal Matrix. 2014 , 23, 21-28	2
398	Advancements and Frontiers in the High Performance of Natural Hydrogels for Cartilage Tissue Engineering. 2020 , 8, 53	40
397	Poly(Evalerolactone)/Poly(ethylene-co-vinylalcohol)/Tri-calcium Phosphate Composite as Scaffolds: Preparation, Properties, and In Vitro Amoxicillin Release. 2020 , 13,	0
396	Evaluation of Closed and Open-cell Structural Lattices with Finite Element Analysis. 2020 , 3, 26-32	1
395	BMP-2 Immobilized in BCP-Chitosan-Hyaluronic Acid Hybrid Scaffold for Bone Tissue Engineering. 2014 , 24, 704-709	3
394	In Vitro and In Vivo Evaluation of Composite Scaffold of BCP, Bioglass and Gelatin for Bone Tissue Engineering. 2014 , 24, 310-318	2
393	Three-Dimensional Printed 3D Structure for Tissue Engineering. 2014 , 38, 817-829	4
392	Vascularization in 3D printed tissues: emerging technologies to overcome longstanding obstacles. 2018 , 2, 163-184	6
391	Macro-, micro- and mesoporous materials for tissue engineering applications. 2018 , 5, 1124-1140	8
390	Poly(lactic-co-glycolic acid) conduit for repair of injured sciatic nerve: A mechanical analysis. 2013 , 8, 1966-73	2
389	Research Perspectives on Functional Micro and Nano Scale Coatings. 2016 , 136-169	1

388	Scaffolds and Tissue Engineering Applications by 3D Bio-Printing Process. 2019 , 78-99	6
387	Optimization, characterization, and efficacy evaluation of 2% chitosan scaffold for tissue engineering and wound healing. 2016 , 8, 300-308	14
386	3D Printed Scaffolds as a New Perspective for Bone Tissue Regeneration: Literature Review. 2016 , 07, 430-452	12
385	New era in health care: tissue engineering. 2006 , 1, 8-24	29
384	Tissue Engineering of Craniofacial Tissues [A Review]. 2013 , 2, 6	6
383	Effect of Duck's Feet Derived Collagen Sponge on Skin Regeneration: In Vitro Study. 2015 , 39, 493-498	4
382	Three-Dimensional Molding Based on Microstereolithography Using Beta-Tricalcium Phosphate Slurry for the Production of Bioceramic Scaffolds. 2011 , 50, 06GL15	4
381	Current Status of Biomedical Applications using 3D Printing Technology. 2014 , 31, 1067-1076	10
380	Fabrication of Chitosan-Based Biomaterials: Techniques and Designs. 2021 , 455-518	0
379	Decellularized Matrix Bioscaffolds: Implementation of Native Microenvironment in Pancreatic Tissue Engineering. 2021 , 50, 942-951	0
378	Biocomposites Containing Silver Nanoparticles for Biomedical Applications. 1	
377	Cell-Incorporated Bioactive Tissue Engineering Scaffolds made by Concurrent Cell Electrospinning and Emulsion Electrospinning. 2021 , 11,	1
376	Vascular Tissue Engineering: Challenges and Requirements for an Ideal Large Scale Blood Vessel. 2021 , 9, 721843	7
375	Candidate Bioinks for Extrusion 3D Bioprinting-A Systematic Review of the Literature. 2021 , 9, 616753	4
374	Calcium-Enriched Nanofibrillated Cellulose/Ploxamer in-situ Forming Hydrogel Scaffolds as a Controlled Delivery System of Raloxifene HCl for Bone Engineering. 2021 , 16, 6807-6824	1
373	A comparative study on cylindrical and spherical models in fabrication of bone tissue engineering scaffolds: Finite element simulation and experiments. 2021 , 211, 110150	2
372	Modulations of 17- β Estradiol on Osteogenic and Adipogenic Differentiations of Human Mesenchymal Stem Cells. 2006 , 060928131519001	
371	Evaluation of Mechanical and Biodegradable Properties on Composite Scaffolds Composed of Three-Dimensional Fabric Structure. 2008 , 57, 868-874	

- 370 Design, Fabrication, and Characterization of Scaffolds via Solid Free-Form Fabrication Techniques. **2008**, 45-67
- 369 A comparison of 2 kinds of hydroxyapatite/collagen composites as tissue engineering scaffold. **2008**, 28, 236-240
- 368 Nanoscale Mechanisms for Assembly of Biomaterials. **2009**, 43-75
- 367 Study on Porous Scaffold of Nano Hydroxyapatite/poly (Ecaprolactone) Bioactive Composite. **2009**, 24, 485-490
- 366 Stereolithographic rendering of low molecular weight polymer scaffolds for bone tissue engineering. **2009**,
- 365 Manufacturing of Artificial Bones Using 3D Inkjet Printing Technology. **2009**, 3, 509-513 3
- 364 Macroporous Polymeric Scaffolds for Tissue Engineering Applications. **2009**, 405-466
- 363 Macroporous Polymeric Scaffolds for Tissue Engineering Applications. **2009**, 417-478
- 362 Macroporous Polymeric Materials. **2009**, 237-263
- 361 Injectable Hydrogels: From Basics to Nanotechnological Features and Potential Advances. **2010**, 347-378
- 360 Computer Aided Tissue Engineering from Modeling to Manufacturing. **2010**, 75-88
- 359 Chapter 13. Stem Cell-based Replacement Tissue for Heart Repair. **2010**, 273-295
- 358 Preparation and Properties of Nano Calcium Deficient Apatite/Poly (Ecaprolactone) Composite Scaffold. **2010**, 25, 500-506 0
- 357 Computational Modeling of Tissue Self-Assembly. **2012**, 251-272 0
- 356 Wireless Wearable ECG Monitoring System. **2011**, 72-88
- 355 Development of Scaffold Fabrication System using Multi-axis RP Software Technique. **2012**, 29, 33-40 1
- 354 Three-Dimensional Shape Control of Implant Devices. **2012**, 579-588
- 353 Fabrication of PCL scaffold using autoadhesion phenomenon. **2012**, 14, 25-29

352 Introduction. **2013**, 1-10

351 Biomimetic ECM Scaffolds Prepared from Cultured Cells. 243-252

350 Micro-CT based topological optimisation scheme for the design of scaffolds. **2013**, 577-582

349 Typical Processing Steps with Porous Silicon. **2014**, 523-529

348 Immunological disorders and immunotherapy. **2014**, 136-157

347 Nanoscaffolds and Other Nano-Architectures for Tissue Engineering Related Applications. **2014**, 195-227

346 Essential Requirements for Resorbable Bioceramic Development: Research, Manufacturing, and Preclinical Studies. **2015**, 1-31

345 Encyclopedia of Nanotechnology. **2015**, 1-8

344 Foams: Hydroxyapatite BioPolymer. 3445-3457

343 Synthesis of Functional Materials for Bone Regeneration. **2016**, 4010-4017

342 Scaffolds, Porous Polymer: Tissue Engineering. 7085-7092

341 Biomedical Applications of Recombinant Proteins and Derived Polypeptides. **2016**, 183-212

340 Three Dimensional Porous Scaffolds: Mechanical and Biocompatibility Properties. **2017**, 353-384

339 Overview of Scaffold Reinforcement for Tissue Repair. **2017**, 1-23

338 Tissue Engineering in Microgravity. **2017**, 73-85

2

337 The Biocompatibility of the Scaffolds Reinforced by Fibers or Tubes for Tissue Repair. **2017**, 145-177

336 Typical Processing Steps with Porous Silicon. **2017**, 1-9

335 Selective Laser Sintering of Polyamide/Hydroxyapatite Scaffolds. **2017**, 95-103

0

- 334 Biomaterials for Tendon Regeneration. **2017**, 131-143 1
- 333 Scaffolds, Porous Polymer: Tissue Engineering. **2017**, 1374-1381
- 332 Optical Coherence Tomography Reveals Self-Organizing Di-Fork Architecture of Mice Cutaneous Scars.
- 331 Aerogels: Cellulose-Based. **2017**, 19-57
- 330 Zwitterionic hydrogels modulate the foreign body response in a modulus-dependent manner. 0
- 329 The Application of Reverse Engineering Technology in Orthopaedics. **2018**, 265-280
- 328 Temporomandibular Joint Replacement Past, Present and Future: A Bioengineering Perspective. **2018**, 547-551
- 327 Processing Techniques and Process Flows with Porous Silicon. **2018**, 1-9
- 326 Preparation and Physicochemical Characterization of Nano- Hydroxyapatite Based 3D Porous Scaffold for Biomedical Application. **2017**, 3, 1
- 325 Bioprinting. **2018**, 1-8
- 324 Tissue Engineering Products. **2018**, 75-85
- 323 Processing Techniques and Process Flows with Porous Silicon. **2018**, 787-796
- 322 CHAPTER 22: The Usefulness of Direct Digital Manufacturing for Biomedical Applications. **2018**, 478-487 2
- 321 Computational Methods for the Predictive Design of Bone Tissue Engineering Scaffolds. **2018**, 1-23
- 320 CRISPR engineering cardiometabolic disease models using human iPSC. **2018**, 2, 185-202
- 319 Towards a New Approach to Analyse Quality Control and Morphometric Variability in a Scaffold. **2019**, 59-80
- 318 The Effects of Adoption of 3D Printing Technology on the Operational Performance of the Companies of Cross Border Entrepreneurs. **2018**, 7, 28-48
- 317 Scaffold Design. **2019**, 297-327

316	Chitosan-Based Systems in Tissue Engineering. 2019 , 297-320	
315	Nanotechnology-Based Stem Cell Tissue Engineering with a Focus on Regeneration of Cardiovascular Systems. 2019 , 1-67	0
314	Surface-enhanced Raman scattering sensor based on soft polymer optical fibers. 2019 ,	
313	Fractal algorithm for 3D-printed continuous porous scaffold design. 2019 , 2019, 485-489	
312	Structure diagnostics of dispersive two-phase systems using speckle correlation technique. 2019 ,	
311	Micro-CT in Artificial Tissues. 2020 , 125-137	1
310	Optimization Design Strategy for Additive Manufacturing Process to Develop 3D Magnetic Nanocomposite Scaffolds. 2020 , 948-958	
309	Off-the-Shelf Tissue-Engineered Vascular Conduits: Clinical Translation. 2020 , 1-44	
308	3D architecture developments for spatial controls of periodontal ligament regeneration with angular orientations. 2019 , 46, 215-228	
307	Application of Gellan Gum-Based Scaffold for Regenerative Medicine. 2020 , 1249, 15-37	0
306	Sevimli Lazer Ergitme ile Ti6Al4V ELI Alaşımından Etilen Trabeküler Metal Yapıların Basma Ve Basma-Kayma Dayanımlarının İncelenmesi.	1
305	Fabrication of Optimal Structure by Additive Manufacturing. 2020 , 86, 405-408	
304	The Role of Neural Tissue Engineering in the Repair of Nerve Lesions. 2020 , 8, 80-96	1
303	3D Bioprinting of Complex, Cell-laden Alginate Constructs. 2021 , 2147, 143-148	1
302	An Analysis on the Advanced Research in Additive Manufacturing. 2021 , 229-277	1
301	Natural lotus root-based scaffolds for bone regeneration. 2021 ,	0
300	Single point exposure LPBF for the production of biodegradable Zn-alloy lattice structures. 2021 , 48, 102426	2
299	Injectable eggshell-derived hydroxyapatite-incorporated fibroin-alginate composite hydrogel for bone tissue engineering. 2021 , 193, 799-808	4

298	Medical Applications of Rapid Prototyping Technology. 2022 , 241-250	3
297	Improving the colonization and functions of Wharton's Jelly-derived mesenchymal stem cells by a synergetic combination of porous polyurethane scaffold with an albumin-derived hydrogel. 2020 , 16, 015005	0
296	3D printed hydrogel scaffolds with macro pores and interconnected microchannel networks for tissue engineering vascularization. 2022 , 430, 132926	8
295	Identifying Structure-Property Relationships of Micro-Architected Porous Scaffolds through 3D Printing and Finite Element Analysis.. 2022 , 202,	0
294	Novel and Emerging Materials Used in 3D Printing for Oral Health Care. 2020 , 317-336	
293	Research Perspectives on Functional Micro and Nano Scale Coatings. 2020 , 1076-1109	
292	Surface Modification of Orthopedic Implants Based on Titanium Alloys. 2020 , 36, 31-40	
291	Spatiotemporal Controls of Tooth-Supportive Structure Neogenesis by 3D Printing Technology. 2020 , 259-271	
290	From Secondary Intent to Accelerated Regenerative Healing: Emergence of the Bio-intelligent Scaffold Vasculogenic Strategy for Skin Reconstruction. 2020 , 1-68	1
289	Tissue Engineering Bone Mimics. 2020 , 750-777	0
288	Off-the-Shelf Tissue-Engineered Vascular Conduits: Clinical Translation. 2020 , 489-531	0
287	Efficient Representation and Optimization for TPMS-Based Porous Structures. 2020 , PP,	2
286	Mechanical and Geometrical Study of 3D Printed Voronoi Scaffold Design for Large Bone Defects. 2021 , 212, 110224	1
285	Shape fidelity, mechanical and biological performance of 3D printed polycaprolactone-bioactive glass composite scaffolds.. 2021 , 112540	3
284	Bone tissue engineering using 3-D polycaprolactone/gelatin nanofibrous scaffold containing berberine: In vivo and in vitro study.	0
283	Mechanical Behavior and In Vitro Corrosion of Cubic Scaffolds of Pure Magnesium Processed by Severe Plastic Deformation. 2021 , 11, 1791	3
282	Tissue Engineering [Combining Cells and Biomaterials into Functional Tissues. 2008 , 193-214	
281	Additive Manufacturing Technologies Based on Photopolymerization. 2021 , 263-282	

280 Computer Aided Tissue Engineering Scaffolds. **2021**, 77-94

279 Computation of Discrete Medial Axis Using Local Search in Domain Delaunay Triangulation of a Solid. **2021**, 21,

278 In vitro evaluation of the response of human tendon-derived stromal cells to a novel electrospun suture for tendon repair.

277 Nanotechnology approaches to improve dental implants. **2011**, 26 Suppl, 25-44; discussion 45-9 15

276 Biochemical Methods in Production of Three-Dimensional Scaffolds from Human Skin: A Window in Aesthetic Surgery. **2018**, 7, 204-211 4

275 Control-released Alpha-lipoic acid-loaded PLGA microspheres enhance bone formation in type 2 diabetic rat model. **2017**, 10, 10019-10031 2

274 Fabrication of titanium based biphasic scaffold using selective laser melting and collagen immersion. **2017**, 3, 007 2

273 Scaffolds with drug delivery capability. **2022**, 817-840

272 Bioactive glasses and ceramics for tissue engineering. **2022**, 111-178 1

271 Ceramic biomaterials for tissue engineering. **2022**, 3-40 2

270 Advances in Filament Structure of 3D Bioprinted Biodegradable Bone Repair Scaffolds. **2021**, 7, 426 2

269 Static Compressive Behavior and Material Failure Mechanism of Trabecular Tantalum Scaffolds Fabricated by Laser Powder Bed Fusion-based Additive Manufacturing.. **2022**, 8, 438 1

268 Fabrication of Porous Crystalline PLGA-PEG Induced by Swelling during the Recrystallization Annealing Process. **2021**, 0

267 Functional tissue engineering of articular cartilage for biological joint resurfacing-The 2021 Elizabeth Winston Lanier Kappa Delta Award. **2021**,

266 Recent Advances in Multicellular Tumor Spheroid Generation for Drug Screening. **2021**, 11, 3

265 Differences in the Structural Components Influence the Pumping Capacity of Marine Sponges. **2021**, 8, 1

264 Asthmatic Bronchial Matrices Determine the Gene Expression and Behavior of Smooth Muscle Cells in a 3D Culture Model.. **2021**, 2, 762026

263 Cell Therapy: Types, Regulation, and Clinical Benefits. **2021**, 8, 756029 2

262	Development of alginate-chitosan composite scaffold incorporation of bacterial cellulose for bone tissue engineering. 1-12	1
261	Alginate-Based Smart Materials and Their Application: Recent Advances and Perspectives. 2021 , 380, 3	6
260	Comprehensive Review on Design and Manufacturing of Bio-scaffolds for Bone Reconstruction.. 2021 , 4, 8129-8158	1
259	Additive manufacturing technology of polymeric materials for customized products: recent developments and future prospective.. 2021 , 11, 36398-36438	6
258	Gelatine characteristics from the skin of Pangasius hypophthalmus (striped catfish) with different of body size and extraction treatments: Viscosity, microstructure and its potential for pharmaceutical purposes. 2021 ,	
257	An in vitro assessment of the responses of human dermal fibroblast seeded on 3D printed thermoplastic polyurethane scaffold.	
256	Amine Plasma-Polymerization of 3D Polycaprolactone/Tricalcium Phosphate Scaffold to Improving Osteogenic Differentiation In Vitro.. 2022 , 15,	1
255	3D-Printed PCL/Zn scaffolds for bone regeneration with a dose-dependent effect on osteogenesis and osteoclastogenesis.. 2022 , 13, 100202	5
254	Applications of bone regeneration hydrogels in the treatment of bone defects: a review. 2022 , 57, 887	1
253	The osteogenic effects of porous Tantalum and Titanium alloy scaffolds with different unit cell structure. 2021 , 210, 112229	6
252	Effects of scattering on ultrasound wave transmission through bioinspired scaffolds.. 2021 , 126, 105065	1
251	Numerical investigation of the effective mechanical properties and local stress distributions of TPMS-based and strut-based lattices for biomedical applications.. 2021 , 126, 105025	0
250	Review of extrusion-based multi-material bioprinting processes. 2022 , 25, e00189	4
249	Design and optimization of bionic bone with micropore structure suitable for 3D printing. 2020 ,	
248	Electrospun Bioscaffold Based on Cellulose Acetate and Dendrimer-Modified Cellulose Nanocrystals for Controlled Drug Release.	
247	Fabrication, characterization and evaluation of the efficacy of gelatin/hyaluronic acid microporous scaffolds suffused with aloe-vera in a rat burn model. 2021 , 8853282211061821	0
246	Effect of Hydroxyapatite Nanoparticles and Nitrogen Plasma Treatment on Osteoblast Biological Behaviors of 3D-Printed HDPE Scaffold for Bone Tissue Regeneration Applications.. 2022 , 15,	1
245	Titanium alloy composited with dual-cytokine releasing polysaccharide hydrogel to enhance osseointegration via osteogenic and macrophage polarization signaling pathways.	3

244	Assessment of chitosan:gum tragacanth cryogels for tissue engineering applications. 2022,	0
243	Fabrication of channeled scaffolds through polyelectrolyte complex (PEC) printed sacrificial templates for tissue formation.. 2022, 17, 261-275	1
242	Tunable Microgel-Templated Porogel (MTP) Bioink for 3D Bioprinting Applications.. 2022, e2200027	2
241	Perfused Platforms to Mimic Bone Microenvironment at the Macro/Milli/Microscale: Pros and Cons.. 2021, 9, 760667	
240	An in vitro and in vivo study of PCL/chitosan electrospun mat on polyurethane/propolis foam as a bilayer wound dressing.. 2022, 112667	5
239	Polysaccharide-based nanoparticles for dentistry applications. 2022, 329-341	0
238	Electroactive nanofibrous scaffold based on polythiophene for bone tissue engineering application. 2022, 37, 796-806	1
237	Recent Advances in Synthetic and Natural Biomaterials-Based Therapy for Bone Defects.. 2022, e2100383	3
236	Design characterization of 3D printed compliant gripper. 2022, 57, 723	0
235	Numerical Investigation of 3D Lattice Infill Pattern Cellular Structure for Orthopedic Implant Design. 2022, 467-472	
234	Chitosan-based scaffolds in tissue engineering and regenerative medicine. 2022, 329-354	0
233	Biodegradable and crosslinkable poly(propylene fumarate) liquid crystal polymers.	
232	Fetal dermis inspired parallel PCL fibers layered PCL/COL/HA scaffold for dermal regeneration. 2022, 170, 105146	1
231	Patient-Specific Bioimplants and Reconstruction Plates for Mandibular Defects: Production Workflow and In Vivo Large Animal Model Study.. 2022, e2100398	1
230	Challenges in computational fluid dynamics applications for bone tissue engineering.. 2022, 478, 20210607	0
229	3D printing for functional tissue engineering. 2022, 415-430	0
228	Methods to Characterize Electrospun Scaffold Morphology: A Critical Review.. 2022, 14,	0
227	Synthesis and Surface Functionalization of Nanostructured Biomaterials. 2022, 581-616	

226	Digital Model to Predict Failures of Porous Structures in DLP-Based Additive Manufacturing. 2022 , 219-228	
225	Shape-controlled synthesis of zinc nanostructures mediating macromolecules for biomedical applications.. 2022 , 26, 4	4
224	Vapor construction and modification of stem cell-laden multicomponent scaffolds for regenerative therapeutics.. 2022 , 13, 100213	0
223	3-Dimensional Two-Points Correlation Function for Comparing Biological Fiber Networks. 2022 , 20, 57-64	
222	Biomaterial Interface in Cardiac Cell and Tissue Engineering. 2022 , 249-280	
221	One-Pot Multifunctional Polyesters by Continuous Flow Organocatalysed Ring-Opening Polymerisation for Targeted and Tunable Materials Design.	1
220	3D printed GelMA/carboxymethyl chitosan composite scaffolds for vasculogenesis. 1-13	1
219	Design optimization of functionally graded lattice infill total hip arthroplasty stem for stress shielding reduction.. 2022 , 9544119221075140	1
218	Engineer a pre-metastatic niched microenvironment to attract breast cancer cells by utilizing a 3D printed polycaprolactone/nano-hydroxyapatite osteogenic scaffold - An in vitro model system for proof of concept.. 2022 ,	0
217	On-Growth and In-Growth Osseointegration Enhancement in PM Porous Ti-Scaffolds by Two Different Bioactivation Strategies: Alkali Thermochemical Treatment and RGD Peptide Coating.. 2022 , 23,	1
216	Electrospun Bioscaffold Based on Cellulose Acetate and Dendrimer-modified Cellulose Nanocrystals for Controlled Drug Release. 2022 , 3, 100187	1
215	Nanofibrillated cellulose/glucosamine 3D aerogel implants loaded with rosuvastatin and bioactive ceramic for dental socket preservation.. 2022 , 616, 121549	2
214	3D Bioprinted Spheroidal Droplets for Engineering the Heterocellular Coupling between Cardiomyocytes and Cardiac Fibroblasts. 2021 , 2021, 1-16	4
213	Metallic Foams in Bone Tissue Engineering. 2022 , 181-205	
212	Engineering strategies to achieve efficient expansion of haematopoietic stem cells: development and improvement.. 2022 ,	0
211	Advanced Optical Methods and Materials for Fabricating 3D Tissue Scaffolds. 2022 , 3, 1	
210	Construction of the drug-contained microenvironment for in situ bone regeneration.	
209	Additive Manufacturing Technologies for Bone Tissue Engineering. 2022 , 71-91	

208	Controllable fabrication of multi-modal porous PLGA scaffolds with different sizes of SPIONs using supercritical CO ₂ foaming. 52287	0
207	Efficient Fabrication of Uniform, Injectable, and Shape-Memory Chitosan Microsponges as Cell Carriers for Tissue Engineering. 2022 , 4, 1743-1751	1
206	A Comparative Study of an Anti-Thrombotic Small-Diameter Vascular Graft with Commercially Available e-PTFE Graft in a Porcine Carotid Model.. 2022 , 1	1
205	Clinical Application of 3D-Printed Patient-Specific Polycaprolactone/Beta Tricalcium Phosphate Scaffold for Complex Zygomatico-Maxillary Defects.. 2022 , 14,	1
204	Mechanomimetic 3D Scaffolds as a Humanized In Vitro Model for Ovarian Cancer.. 2022 , 11,	1
203	The 3D Bioprinted Scaffolds for Wound Healing.. 2022 , 14,	4
202	Fabrication and biological evaluation of 3D printed calcium phosphate ceramic scaffolds with distinct macroporous geometries through digital light processing technology.	2
201	Mechanic-Driven Biodegradable Polyglycolic Acid/Silk Fibroin Nanofibrous Scaffolds Containing Deferoxamine Accelerate Diabetic Wound Healing.. 2022 , 14,	1
200	Influence of 3D Printing Parameters on the Mechanical Stability of PCL Scaffolds and the Proliferation Behavior of Bone Cells.. 2022 , 15,	0
199	Design and analysis of the mechanical properties of controllable porous scaffolds for bone tissue engineering.. 2022 , 9544119221086766	1
198	Biofabrication of an Esophageal Tissue Construct from a Polymer Blend Using 3D Extrusion-Based Printing. 2200096	0
197	Inflammation-Stimulated MSC-Derived Small Extracellular Vesicle miR-27b-3p Regulates Macrophages by Targeting CSF-1 to Promote Temporomandibular Joint Condylar Regeneration.. 2022 , e2107354	4
196	A flexible and easy-to-use open-source tool for designing functionally graded 3D porous structures. 1-18	0
195	Nanoparticle-Stabilized Emulsion Bioink for Digital Light Processing Based 3D Bioprinting of Porous Tissue Constructs.. 2022 , e2102810	1
194	Recent Advances in Bioengineered Scaffolds for Cutaneous Wound Healing.. 2022 , 10, 841583	4
193	Elimination of Induced Hypoxic Regions in Depth of 3D Porous Silk Scaffolds by the Introduction of Channel Configuration.. 2022 , 2022, 9767687	
192	Bioactive inorganic particles-based biomaterials for skin tissue engineering. 20210083	5
191	Chitosan-sodium alginate-collagen/gelatin three-dimensional edible scaffolds for building a structured model for cell cultured meat.. 2022 ,	1

190	Engineering Biomimetic Extracellular Matrix with Silica Nanofibers: From 1D Material to 3D Network.. 2022 ,	0
189	Particulate leaching improves spheroid formation in PEG and gelatin-based matrices for 3D tumour model. 2022 , 103494	0
188	Elastic anisotropy and wave propagation properties of multifunctional hollow sphere foams. 2022 , 115540	1
187	The powder-based 3D printed alloys on titanium-based biomaterial applications: A review. 2022 ,	3
186	3D printing of complex architected metamaterial structures by simple material extrusion for bone tissue engineering. 2022 , 31, 103382	1
185	Development of a Modular Reinforced Bone Tissue Engineering Scaffold with Enhanced Mechanical Properties.. 2022 , 318,	0
184	A review of 3D printed porous ceramics. 2022 , 42, 3351-3373	4
183	Tailoring 3D Biomaterials for Spinal Cord Injury Repair. 2022 , 57-78	
182	Biopolymer-Based Scaffolds for Bone and Tissue Engineering. 2022 , 33-61	
181	Biocompatible Poly(ϵ -caprolactone)-based Shape-memory Polyurethane Composite Scaffold with Bone-induced Activity. 2022 , 19, 167-178	1
180	The effect of surface morphology on endothelial and smooth muscle cells growth on blow-spun fibrous scaffolds.. 2021 , 15, 27	0
179	3D porous polyurethane (PU)/ triethanolamine modified hydroxyapatite (TEA-HA) nano composite for enhanced bioactivity for biomedical applications. 2022 , 29, 1	
178	3D Printed SiOC(N) Ceramic Scaffolds for Bone Tissue Regeneration: Improved Osteogenic Differentiation of Human Bone Marrow-Derived Mesenchymal Stem Cells.. 2021 , 22,	2
177	Breast Cancer Cells Metastasize to the Tissue-Engineered Premetastatic Niche by Using an Osteoid-Formed Polycaprolactone/Nanohydroxyapatite Scaffold.. 2021 , 2021, 9354202	
176	Integrating pore architectures to evaluate vascularization efficacy in silicate-based bioceramic scaffolds.. 2022 , 9, rbab077	2
175	Adhesion and proliferation properties of type I collagen-derived peptide for possible use in skin tissue engineering application. 2021 ,	0
174	Design Data and Finite Element Analysis of 3D Printed Poly(ϵ -Caprolactone)-Based Lattice Scaffolds: Influence of Type of Unit Cell, Porosity, and Nozzle Diameter on the Mechanical Behavior. 2022 , 3, 9-23	0
173	Effectively improved 3-dimensional structural stability of atelocollagen-gelatin sponge biomaterial by heat treatment.. 2022 ,	

172	Hybridizing gellan/alginate and thixotropic magnesium phosphate-based hydrogel scaffolds for enhanced osteochondral repair.. 2022 , 14, 100261	2
171	Stable mechanical fixation in a bionic osteochondral scaffold considering bone growth.	0
170	Personalized 3D printed bone scaffolds: a review.. 2022 ,	3
169	3D Bioprinting for Spinal Cord Injury Repair.. 2022 , 10, 847344	0
168	Orsellinic acid-loaded chitosan nanoparticles in gelatin/nanohydroxyapatite scaffolds for bone formation in vitro.. 2022 , 299, 120559	1
167	Densification behavior of freeze-casted alumina with grain boundary segregation of impurities. 2022 , 593, 153437	
166	Data_Sheet_1.docx. 2020 ,	
165	Image_1.pdf. 2020 ,	
164	Gradient versus End-Capped Degradable Polymer Sequence Variations Result in Stiff to Elastic Photochemically 3D-Printed Substrates.. 2022 ,	1
163	Novel Porous β Tcp/Mg-Zn Scaffolds with Suitable Mechanical Properties and Corrosion Resistance Designed Via Statistical Optimization and Function Modelling.	
162	Tissue Engineering Applications of Marine-Based Materials. 2022 , 205-254	1
161	Recent advances in graphene-based polymer composite scaffolds for bone/cartilage tissue engineering. 2022 , 103360	1
160	3D Printing of Calcium Phosphate/Calcium Sulfate with Alginate/Cellulose-Based Scaffolds for Bone Regeneration: Multilayer Fabrication and Characterization. 2022 , 13, 47	4
159	Modeling of the PHEMA-gelatin scaffold enriched with graphene oxide utilizing finite element method for bone tissue engineering.. 2022 , 1-9	
158	Recent advancements in blended and reinforced polymeric systems as bioscaffolds. 1-22	
157	Biomedical applications of three-dimensional bioprinted craniofacial tissue engineering.	1
156	Three-Dimensional Bioprinted Controlled Release Scaffold Containing Mesenchymal Stem/Stromal Lyosecretome for Bone Regeneration: Sterile Manufacturing and In Vitro Biological Efficacy. 2022 , 10, 1063	2
155	Biodesigned bioinks for 3D printing via divalent crosslinking of self-assembled peptide-polysaccharide hybrids. 2022 , 14, 100243	2

- 154 Additive Manufacturing for Bone Load Bearing Applications. **2015**, 337-370 1
- 153 Selective Laser Melting Fabrication of Porous Ti6Al4V Scaffolds With Triply Periodic Minimal Surface Architectures: Structural Features, Cytocompatibility, and Osteogenesis. **2022**, 10, 1
- 152 Static Compressive Behavior and Failure Mechanism of Tantalum Scaffolds with Optimized Periodic Lattice Fabricated by Laser-Based Additive Manufacturing. 1
- 151 3D bacterial cellulose-chitosan-alginate-gelatin hydrogel scaffold for cartilage tissue engineering. **2022**, 184, 108476 1
- 150 A topologically gradient body centered lattice design with enhanced stiffness and energy absorption properties. **2022**, 263, 114384 1
- 149 Biomechanical properties of cylindrical and twisted triply periodic minimal surface scaffolds fabricated by laser powder bed fusion. **2022**, 56, 102899 0
- 148 Complex Architectural Control of Ice-Templated Collagen Scaffolds Using a Predictive Model. 1
- 147 Additive manufacturing of biomaterials for bone tissue engineering [A critical review of the state of the art and new concepts. **2022**, 100963 1
- 146 Textured and Rigid Capillary Materials for Passive Energy-Conversion Devices. 2200057 0
- 145 Effect of different pore sizes of 3D printed PLA-based scaffold in bone tissue engineering. 1-11 1
- 144 Rational Design of Electrically Conductive Biomaterials toward Excitable Tissues Regeneration. **2022**, 101573 1
- 143 Collagen-based shape-memory biocomposites. **2022**, 9, 021415 0
- 142 A Surgical Robot for Intracorporeal Additive Manufacturing of Tissue Engineering Constructs. **2022**, 1-8 1
- 141 Facile Fabrication of Transparent and Opaque Albumin Methacryloyl Gels with Highly Improved Mechanical Properties and Controlled Pore Structures. **2022**, 8, 367 1
- 140 Progress of Platelet Derivatives for Cartilage Tissue Engineering. 10, 0
- 139 Nanobiomimetic Medicine. 2204791 0
- 138 3D printed bioresorbable scaffolds for articular cartilage tissue engineering: A comparative study between neat Polycaprolactone (PCL) and Poly (lactide-b-ethylene glycol) (PLA-PEG) block copolymer. 1
- 137 Computer-aided patterning of PCL microspheres to build modular scaffolds featuring improved strength and neovascularized tissue integration.. 1

- 136 Novel Design and Optimization of Porous Titanium Structure for Mandibular Reconstruction. **2022**, 2022, 1-13 0
- 135 Continuous ice-templating of macro-porous materials with uniformly ordered architecture. 2
- 134 Strong, Tough Bioactive Glasses and Composite Scaffolds. **2022**, 147-172
- 133 Development and performance study of biomedical porous zinc scaffold manufactured by using additive manufacturing and microwave sintering. 1-13
- 132 Advances in 3D bioprinting of tissues/organs for regenerative medicine and in-vitro models. **2022**, 121639 6
- 131 Introduction. **2022**, 1-15
- 130 Cell navigation and delivery in vivo. **2022**, 433-465
- 129 Mechanical and microstructural evaluation of solid-state foamed Ti6Al4V-ELI alloy. **2022**, 110, 105-110
- 128 Nucleoside-Derived Low-Molecular-Weight Gelators as a Synthetic Microenvironment for 3D Cell Culture.
- 127 Functionalized silk promotes cell migration into calcium phosphate cements by providing macropores and cell adhesion motifs. **2022**,
- 126 Recent advances in silicate-based crystalline bioceramics for orthopedic applications: a review. 0
- 125 Personalized Volumetric Tissue Generation by Enhancing Multiscale Mass Transport through 3D Printed Scaffolds in Perfused Bioreactors. 2200454
- 124 3D printing of bioactive glass S53P4/sodium alginate sintering-free scaffolds. **2022**, 27, e00226 0
- 123 Tissue Engineering Alveolar Bone. **2010**, 19-81
- 122 Integrated gradient tissue-engineered osteochondral scaffolds: Challenges, current efforts and future perspectives. **2023**, 20, 574-597 5
- 121 Facile processing of oriented macro-porous ceramics with high strength and low thermal conductivity. **2022**,
- 120 Geometry-Based Computational Fluid Dynamic Model for Predicting the Biological Behavior of Bone Tissue Engineering Scaffolds. **2022**, 13, 104 0
- 119 Bone tissue growth in ultrasonically stimulated bioinspired scaffolds. 1-6

- 118 Fighting Antibiotic-Resistant Bacterial Infections by Surface Biofunctionalization of 3D-Printed Porous Titanium Implants with Reduced Graphene Oxide and Silver Nanoparticles. **2022**, 23, 9204
- 117 Recent advances in bio-medical implants; mechanical properties, surface modifications and applications. ○
- 116 Ice-templated synthesis of multicomponent porous coatings via vapour sublimation and deposition polymerization. **2022**, 100403 1
- 115 3D-printed Mg-1Ca/polycaprolactone composite scaffolds with promoted bone regeneration. **2022**, ○
- 114 Extrusion-Based Three-Dimensional Bioprinting Technology. **2022**, 1-7
- 113 Powder-Bed Fusion. **2022**, 1-15
- 112 Obtaining a freeze-dried biomaterial for skin regeneration: Reinforcement of the microstructure through the use of crosslinkers and in vivo application. **2022**, 290, 126544 ○
- 111 Piezoelectric charge induced hydrophilic poly(L-lactic acid) nanofiber for electro-topographical stimulation enabling stem cell differentiation and expansion. **2022**, 102, 107690 ○
- 110 Programmable, biodegradable composite scaffolds with variable pore morphology for minimal invasive bone repair. **2022**, 162, 107130 ○
- 109 Characterization of Polymer Materials. **2022**, 49-70 ○
- 108 Protease-Sensitive, VEGF-Mimetic Peptide and IKVAV Laminin-Derived Peptide Sequences within Elastin-Like Recombinamer Scaffolds Provide Spatiotemporally Synchronized Guidance of Angiogenesis and Neurogenesis. 2201646 1
- 107 Microwaves speed up producing scaffold foams with designed porosity from water glass. **2022**, 222, 111100 ○
- 106 Development of hydrocolloid bio-ink for 3D bioprinting. 1
- 105 Controllable preparation of bioactive open porous microspheres for tissue engineering. **2022**, 10, 6464-6471 ○
- 104 Cryogenic 3D Printing of w/o Pickering Emulsions Containing Bifunctional Drugs for Producing Hierarchically Porous Bone Tissue Engineering Scaffolds with Antibacterial Capability. **2022**, 23, 9722 ○
- 103 3D-Printed PCL Scaffolds Combined with Juglone for Skin Tissue Engineering. **2022**, 9, 427 2
- 102 Surgical cotton microfibers loaded with nanoceria: A new platform for bone tissue engineering. **2022**, ○
- 101 Elastic and Conductive Melanin/Poly(Vinyl Alcohol) Composite Hydrogel for Enhancing Repair Effect on Myocardial Infarction. 2200223 ○

100	Fucoidan-Incorporated Composite Scaffold Stimulates Osteogenic Differentiation of Mesenchymal Stem Cells for Bone Tissue Engineering. 2022 , 20, 589	0
99	Surface modification of silica nonwoven fabrics for osteogenesis of bone marrow-derived mesenchymal stem cells. 2022 ,	0
98	Bone Implants (Bone Regeneration and Bone Cancer Treatments). 2022 , 265-321	0
97	Scaffolds for bone-tissue engineering. 2022 , 5, 2722-2759	3
96	Intrinsic Elasticity of a Three-Dimensional Macroporous Scaffold Governs the Kinetics of In Situ Biomimetic Reactions.	1
95	Current Progress and Technological Challenges in Translational 3D Bioprinting. 2022 , 1-23	0
94	Mechanical Property Analysis of Triply Periodic Minimal Surface Inspired Porous Scaffold for Bone Applications: A Compromise between Desired Mechanical Strength and Additive Manufacturability.	0
93	Complex Architectural Control of Ice-Templated Collagen Scaffolds Using a Predictive Model. 2022 ,	1
92	Calcium Orthophosphate (CaPO ₄)-Based Bioceramics: Preparation, Properties, and Applications. 2022 , 12, 1380	1
91	Morphing-to-Adhesion Polysaccharide Hydrogel for Adaptive Biointerfaces. 2022 , 14, 42420-42429	1
90	Decellularized esophageal tubular scaffold microperforated by quantum molecular resonance technology and seeded with mesenchymal stromal cells for tissue engineering esophageal regeneration. 10,	0
89	Additive manufacturing of graphene oxide/hydroxyapatite bioceramic scaffolds with reinforced osteoinductivity based on digital light processing technology. 2022 , 111231	0
88	Mechanical Properties and In Vitro Corrosion of Biodegradable Open-Cell Zn Alloy Foams.	0
87	Scalable macroporous hydrogels enhance stem cell treatment of volumetric muscle loss. 2022 , 290, 121818	0
86	Biodegradable Nanocomposite as Advanced Bone Tissue Scaffold. 2022 , 1-50	0
85	Development and optimization of an ocular hydrogel adhesive patch using definitive screening design (DSD).	0
84	DLP 3D printed hydrogels with hierarchical structures post-programmed by lyophilization and ionic locking.	0
83	In Situ Bioprinting Current Applications and Future Challenges. 2022 , 225-236	0

- 82 Advancements and Utilizations of Scaffolds in Tissue Engineering and Drug Delivery. **2022**, 23, 0
- 81 A comparative study of bone bioactivity and osteogenic potential of different bioceramics in methacrylated collagen hydrogels. 0
- 80 Additively Manufactured Scaffolds with Optimized Thickness Based on Triply Periodic Minimal Surface. **2022**, 15, 7084 0
- 79 TEGylated Double-Walled Carbon Nanotubes as Platforms to Engineer Neuronal Networks. 1
- 78 Fabrication of initial trabecular bone inspired three-dimensional structure with cell membrane nanofragments. 0
- 77 Custom-made computer-aided-design/ computer-assisted-manufacturing (CAD/CAM) synthetic bone grafts for alveolar ridge augmentation: A retrospective clinical study with 3 years of follow-up. **2022**, 127, 104323 1
- 76 Cell Scaffold interactions in tissue engineering for oral and craniofacial reconstruction. **2023**, 23, 16-44 2
- 75 The synthesis, mechanisms, and additives for bio-compatible polyvinyl alcohol hydrogels: A review on current advances, trends, and future outlook. 0
- 74 The Combination of Hydrogels with 3D Fibrous Scaffolds Based on Electrospinning and Meltblown Technology. **2022**, 9, 660 0
- 73 3D conductive material strategies for modulating and monitoring cells. **2022**, 101041 0
- 72 High porosity composite structures produced from poly(lactic acid)/hydroxyapatite microspheres using novel Dual Beam Laser Sintering method: Analysis of structural, mechanical and thermal properties. **2022**, 84, 1284-1297 0
- 71 Additively Manufactured Meta-biomaterials: A State-of-the-Art Review. **2022**, 116491 2
- 70 Three-dimensional biomimetic reinforced chitosan/gelatin composite scaffolds containing PLA nano/microfibers for soft tissue engineering application. **2022**, 1 1
- 69 Laser Powder Bed Fusion-built Ti6Al4V Bone Scaffolds Composed of Sheet and Strut-based Porous Structures: Morphology, Mechanical Properties, and Biocompatibility. **2022**, 100051 0
- 68 Large-Scale Transfer of Anodic Aluminum Oxide Honeycomb Patterns onto Low-Surface-Energy Polymers. 0
- 67 Automated Folding of Origami Lattices: From Nanopatterned Sheets to Stiff Meta-Biomaterials. 2203603 1
- 66 Multi-crosslinked flexible nanocomposite hydrogel fibers with excellent strength and knittability. **2023**, 182, 111737 0
- 65 Novel bio-inspired 3D porous scaffold intended for bone-tissue engineering: Design and in silico characterisation of histomorphometric, mechanical and mass-transport properties. **2023**, 225, 111467 0

64	In vitro functional models for human liver diseases and drug screening: beyond animal testing.	1
63	Nondeterministic multiobjective optimization of 3D printed ceramic tissue scaffolds. 2023 , 138, 105580	1
62	Silk fibroin scaffolds: A promising candidate for bone regeneration. 10,	0
61	3D printing of bioceramic/polycaprolactone composite scaffolds for bone tissue engineering. 2022 ,	0
60	Additive Manufactured Magnesium-Based Scaffolds for Tissue Engineering. 2022 , 15, 8693	1
59	Calcium Phosphate Bone Cements Incorporated with Black Phosphorus Nanosheets Enhanced Osteogenesis.	0
58	Three-Dimensional Digital Light-Processing Bioprinting Using Silk Fibroin-Based Bio-Ink: Recent Advancements in Biomedical Applications. 2022 , 10, 3224	0
57	Mechanical properties of triply periodic minimal surface (TPMS) scaffolds: considering the influence of spatial angle and surface curvature.	0
56	The effect of pore size and layout on mechanical and biological properties of 3D -printed bone scaffolds with gradient porosity.	0
55	Calcium peroxide-mediated bioactive hydrogels for enhanced angiogenic paracrine effect and osteoblast proliferation. 2022 ,	0
54	Small intestinal submucosa-derived extracellular matrix as a heterotopic scaffold for cardiovascular applications. 10,	0
53	Many Facets of Photonic Crystals: From Optics and Sensors to Energy Storage and Photocatalysis. 2201410	0
52	Additive manufacturing of biodegradable magnesium-based materials: Design strategies, properties, and biomedical applications. 2023 ,	0
51	Design, Printing, and Engineering of Regenerative Biomaterials for Personalized Bone Healthcare. 2023 , 101072	1
50	Porosity-permeability tensor relationship of closely and randomly packed fibrous biomaterials and biological tissues: Application to the brain white matter.	0
49	Functional acellular matrix for tissue repair. 2023 , 18, 100530	2
48	A review: In vivo studies of bioceramics as bone substitute materials.	0
47	Honeycomb-like Structured Film, a Novel Therapeutic Device, Suppresses Tumor Growth in an In Vivo Ovarian Cancer Model. 2023 , 15, 237	0

- 46 High-end applications and case studies of laser additive manufacturing technology for metallic components. **2023**, 749-771 ○
- 45 Graphene 3D Printing. **2023**, 129-153 ○
- 44 Additive manufacturing techniques used for preparation of scaffolds in bone repair and regeneration. **2023**, 103-127 ○
- 43 3D Printed Hierarchical Porous Poly(E-caprolactone) Scaffolds from Pickering High Internal Phase Emulsion Templating. **2023**, 39, 1927-1946 1
- 42 In-Vitro and In-Vivo Tracking of Cell-Biomaterial Interaction to Monitor the Process of Bone Regeneration. **2023**, 305-329 ○
- 41 Polymeric microcarriers for minimally-invasive cell delivery. 11, ○
- 40 Smart biomaterials and constructs for Bone tissue regeneration. **2023**, 177-209 ○
- 39 On the Various Numerical Techniques for the Optimization of Bone Scaffold. **2023**, 16, 974 ○
- 38 Silk fibroin-chitosan aerogel reinforced by nanofibers for enhanced osteogenic differentiation in MC3T3-E1 cells. **2023**, 233, 123501 ○
- 37 Early osteoimmunomodulation by mucin hydrogels augments the healing and revascularization of rat critical-size calvarial bone defects. **2023**, 25, 176-188 ○
- 36 Surface modification of calcium phosphate scaffolds with antimicrobial agents for bone tissue engineering. **2023**, 289-322 ○
- 35 Injectable zwitterionic cryogels for accurate and sustained chemoimmunotherapy. **2023**, 11, 2733-2744 ○
- 34 PCL and DMSO₂ Composites for Bio-Scaffold Materials. **2023**, 16, 2481 ○
- 33 Biocompatibility of silk methacrylate/gelatin-methacryloyl composite hydrogel and its feasibility as a vascular tissue engineering scaffold. **2023**, 650, 62-72 ○
- 32 Magnetic Microsphere Scaffold-Based Soft Microbots for Targeted Mesenchymal Stem Cell Delivery. ○
- 31 Surgical cotton microfibers loaded with proteins and apatite: A potential platform for bone tissue engineering. **2023**, 236, 123812 ○
- 30 Lignin-enriched tricalcium phosphate/sodium alginate 3D scaffolds for application in bone tissue regeneration. **2023**, 239, 124258 ○
- 29 3D printed pore morphology mediates bone marrow stem cell behaviors via RhoA/ROCK2 signaling pathway for accelerating bone regeneration. **2023**, 26, 413-424 ○

- 28 Numerical simulation and printability analysis of fused deposition modeling with dual-temperature control. **2023**, 6, 174-188 ○
- 27 A simple and fast method for screening production of polymer-ceramic filaments for bone implant printing using commercial fused deposition modelling 3D printers. **2023**, 146, 213317 ○
- 26 In-situ ionic crosslinking of 3D bioprinted cell-hydrogel constructs for mechanical reinforcement and improved cell growth. **2023**, 147, 213322 ○
- 25 Preliminary Application Research of 3D Bioprinting in Craniofacial Reconstruction. **2023**, 34, 805-808 1
- 24 Chitosan and Pectin Hydrogels for Tissue Engineering and In Vitro Modeling. **2023**, 9, 132 ○
- 23 In vitro and in vivo degradation correlations for polyurethane foams with tunable degradation rates. **2023**, 111, 580-595 ○
- 22 Advanced Methods for Design of Scaffolds for 3D Cell Culturing. **2023**, 305-334 ○
- 21 Size and environment: The effect of phonon localization on micro-Brillouin imaging. **2023**, 147, 213341 ○
- 20 Additive Manufacturing of Bio-Inspired Microstructures for Bone Tissue Engineering. ○
- 19 Adjustment of Micro- and Macroporosity of β -TCP Scaffolds Using Solid-Stabilized Foams as Bone Replacement. **2023**, 10, 256 ○
- 18 Additive Manufacturing: A Brief Introduction. **2022**, 1-23 ○
- 17 Bioceramic scaffolds with triply periodic minimal surface architectures guide early-stage bone regeneration. **2023**, 25, 374-386 ○
- 16 Advance Biodegradable Polymer Composite Materials for Biomedical Additive Manufacturing Applications. **2023**, 107-129 ○
- 15 Biodegradable Nanocomposite as Advanced Bone Tissue Scaffold. **2023**, 929-977 ○
- 14 Reconfigurable scaffolds for adaptive tissue regeneration. **2023**, 15, 6105-6120 ○
- 13 Numerical investigation of electrohydrodynamic effect for size-tunable droplet formation in a flow-focusing microfluidic device. **2023**, 21, 174-190 ○
- 12 Emergent collective organization of bone cells in complex curvature fields. **2023**, 14, ○
- 11 Fabrication and multiscale modeling of polycaprolactone/amniotic membrane electrospun nanofiber scaffolds for wound healing. ○

- 10 Injectable Biomimetic Hydrogel Guided Functional Bone Regeneration by Adapting Material Degradation to Tissue Healing. 2213047
- 9 Design and characterization of porous poly(glycerol-dodecanedioate) scaffolds for cartilage repair.
- 8 Fabrication of Solvent-Free PCL/βTCP Composite Fiber for 3D Printing: Physiochemical and Biological Investigation. **2023**, 15, 1391
- 7 3D Printing of Poly-εCaprolactone (PCL) Auxetic Implants with Advanced Performance for Large Volume Soft Tissue Engineering. 2215220
- 6 Microstructural controls on the plastic consolidation of porous brittle solids. **2023**, 250, 118861
- 5 Study on the influence of scaffold morphology and structure on osteogenic performance. 11,
- 4 Marangoni-Driven Patterning in Polymer Thin Film Supported on Shrinking Substrate for Resolution Enhancement.
- 3 3D printing of cell-delivery scaffolds for tissue regeneration. **2023**, 10,
- 2 Tissue engineering and the potential use of chitin.
- 1 Poly(L -Lactic Acid) Nanofiber-Based Multilayer Film for the Electrical Stimulation of Nerve Cells.