Citation Report
List of articles citing

Hydrogels for tissue engineering

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#	Paper	IF	Citations
2245	Enzymatically Prepared Dual Functionalized Hydrogels with Gelatin and Heparin To Facilitate Cellular Attachment and Proliferation.		
2244	Cell-by-Cell Construction of Living Tissue. **2001**, 698, 511		2
2243	Controlled Growth Factor Delivery By Mechanical Stimulation. **2001**, 711, 1		
2242	Controlling Material Properties of Ionically Cross-Linked Alginate Hydrogels by Varying Molecular Weight Distribution. **2001**, 711, 1		2
2241	Cell-by-cell construction of living tissue by ambient laser transfer.		1
2240	Cell-by-cell construction of living tissue. **2002**,		3
2239	Aqueous gel formation of a synthetic peptide derived from the beta-sheet domain of platelet factor-4. **2002**, 3, 1225-32		17
2238	Synthesis and Characterization of Double-Hydrophilic Model Networks Based on Cross-linked Star Polymers of Poly(ethylene glycol) Methacrylate and Methacrylic Acid. **2002**, 35, 4903-4911		50
2237	In situ preparation of beta-D-1-O-hydroxylamino carbohydrate polymers mediated by galactose oxidase. **2002**, 4, 1863-6		25
2236	New gelatin-based hydrogels via enzymatic networking. **2002**, 3, 1384-91		94
2235	Evaluation of chain stiffness of partially oxidized polyguluronate. **2002**, 3, 1129-34		53
2234	Rapidly recovering hydrogel scaffolds from self-assembling diblock copolypeptide amphiphiles. **2002**, 417, 424-8		734
2233	A new strategy for the preparation of supramolecular neutral hydrogels. **2002**, 3, 272-9		39
2232	Hydrogels for biomedical applications. **2002**, 54, 3-12		3032
2231	Rapid induction of thermoreversible hydrogel formation based on poly(propylene glycol)-grafted dextran inclusion complexes. **2002**, 2, 298-303		62
2230	Decoupling the dependence of rheological/mechanical properties of hydrogels from solids concentration. **2002**, 43, 6239-6246		126
2229	Glycosaminoglycan hydrogel films as bio-interactive dressings for wound healing. **2002**, 23, 3661-71		280

2228	Transglutaminase-mediated gelatin matrices incorporating cell adhesion factors as a biomaterial for tissue engineering. **2003**, 95, 196-199	104
2227	Comparison of vascular endothelial growth factor and basic fibroblast growth factor on angiogenesis in SCID mice. **2003**, 87, 49-56	143
2226	Biomimetic surface modification of poly (L-lactic acid) with gelatin and its effects on articular chondrocytes in vitro. **2003**, 66, 770-8	52
2225	Synthesis and Characterization of Amphiphilic Biodegradable Copolymer, Poly(aspartic acid-co-lactic acid). **2003**, 3, 34-43	53
2224	A family of low-molecular-weight hydrogelators based on L-lysine derivatives with a positively charged terminal group. **2003**, 9, 348-54	151
2223	Preparation and swelling behavior of biodegradable hydrogels based on ‡poly(N-2-hydroxyethyl-DL-aspartamide). **2003**, 90, 3741-3746	18
2222	A synthetic tripeptide as a novel organo-gelator: a structural investigation. **2003**, 44, 4103-4107	37
2221	Synthesis and properties of degradable poly(vinyl alcohol) hydrogel. **2003**, 81, 297-301	45
2220	Enzyme-catalyzed gel formation of gelatin and chitosan: potential for in situ applications. **2003**, 24, 2831-41	291
2219	In vivo bone and soft tissue response to injectable, biodegradable oligo(poly(ethylene glycol) fumarate) hydrogels. **2003**, 24, 3201-11	171
2218	Disulfide-crosslinked hyaluronan-gelatin hydrogel films: a covalent mimic of the extracellular matrix for in vitro cell growth. **2003**, 24, 3825-34	309
2217	Designing alginate hydrogels to maintain viability of immobilized cells. **2003**, 24, 4023-9	275
2216	Biomimetic materials for tissue engineering. **2003**, 24, 4353-64	1253
2215	Hydrogels for tissue engineering: scaffold design variables and applications. **2003**, 24, 4337-51	3830
2214	Hyaluronan networking via Ugi's condensation using lysine as cross-linker diamine. **2003**, 53, 311-316	36
2213	Direct UV photocrosslinking of poly(N-vinyl-2-pyrrolidone) (PVP) to produce hydrogels. **2003**, 44, 6217-6222	107
2212	Covalent amphiphilic polymer networks. **2003**, 8, 76-85	173
2211	Preparation of pHEMA□P composites with high interfacial adhesion via template-driven mineralization. **2003**, 23, 2905-2919	36

2210	Effect of the crosslinking level on the properties of temperature-sensitive poly(N-isopropylacrylamide) hydrogels. **2003**, 41, 582-593	67
2209	Hydrogel-like elastic membrane consisting of semi-interpenetrating polymer networks based on a phosphorylcholine polymer and a segmented polyurethane. **2003**, 41, 68-75	15
2208	Synthesis and characterization of biodegradable hydrogels based on photopolymerizable acrylate-terminated CL-PEG-CL macromers with supramolecular assemblies of □-cyclodextrins. **2003**, 44, 5177-5186	25
2207	Rational design and engineering of delivery systems for therapeutics: biomedical exercises in colloid and surface science. **2003**, 106, 147-68	98
2206	Influence of Polymer Conformation on the Shear Modulus and Morphology of Polyallylamine and Poly(□-lysine) Hydrogels. **2003**, 36, 6189-6201	19
2205	Independent Control of Rigidity and Toughness of Polymeric Hydrogels. **2003**, 36, 4582-4588	172
2204	Polysaccharide Scaffolds Prepared by Crosslinking of Polysaccharides with Chitosan or Proteins for Cell Growth. **2003**, 18, 323-338	21
2203	Synthesis and characterization of injectable poly(N-isopropylacrylamide-co-acrylic acid) hydrogels with proteolytically degradable cross-links. **2003**, 4, 1214-23	286
2202	Substrate patterning: an emerging technology for the study of neuronal behavior. **2003**, 184 Suppl 1, S89-96	50
2201	Tissue-engineered neogenesis of human-shaped mandibular condyle from rat mesenchymal stem cells. **2003**, 82, 951-6	168
2200	In vitro cytotoxicity of unsaturated oligo[poly(ethylene glycol) fumarate] macromers and their cross-linked hydrogels. **2003**, 4, 552-60	92
2199	Novel low-molecular-weight hydrogelators based on 2'-deoxyuridine. **2003**, 2912-3	63
2198	Bottom-Up Synthesis and Morphological Control of High-Axial-Ratio Nanostructures through Molecular Self-Assembly. **2003**, 35, 1-22	68
2197	Tissue Engineering of Autologous Cartilage for Craniofacial Reconstruction by Injection Molding; Sophia C. N. Chang, M.D., Ph.D., Geoffrey Tobias, M.D., Amit K. Roy, Ph.D., Charles A. Vacanti, M.D., and Lawrence J. Bonassar, Ph.D.. **2003**, 112, 800-801	13
2196	In vitro physical stimulation of tissue-engineered and native cartilage. **2004**, 100, 325-52	10
2195	Lipids: An Alternative Material for Protein and Peptide Release. **2004**, 176-196	6
2194	Biopolymer deposition for freeform fabrication of tissue engineered scaffolds.	2
2193	Controlling Fracture Behavior of Polymeric Hydrogels. **2004**, 844, 1	

2192	Employing Microfluidics in the Demonstration of Cell Encapsulation. **2004**, 861, 60	
2191	Nanoscale RGD Peptide Organization Regulates Cell Proliferation and Differentiation. **2004**, 845, 59	
2190	Sulfonated Poly(Arylene Ether Sulfone) Copolymers - Acid and Salt Form: Potential Biofunctional Polymers. **2004**, 19, 315-329	3
2189	Semi-wet peptide/protein array using supramolecular hydrogel. **2004**, 3, 58-64	509
2188	Self-assembling peptides and proteins for nanotechnological applications. **2004**, 14, 480-6	394
2187	Culture of Meniscal Chondrocytes on Alginate Hydrogel Matrices. **2004**, 82, 126-132	4
2186	Adult stem cell driven genesis of human-shaped articular condyle. **2004**, 32, 911-23	153
2185	Synthetic elastin hydrogels derived from massive elastic assemblies of self-organized human protein monomers. **2004**, 25, 4921-7	211
2184	Rheological studies of PLLA-PEO-PLLA triblock copolymer hydrogels. **2004**, 25, 1087-93	118
2183	Surfactant-free thermochromic hydrogel system: PVA/borax gel networks containing pH-sensitive dyes. **2004**, 91, 890-893	12
2182	Controlling Degradation of Hydrogels via the Size of Cross-Linked Junctions. **2004**, 16, 1917-1921	95
2181	Biocompatibility of chemoenzymatically derived dextran-acrylate hydrogels. **2004**, 68, 584-96	50
2180	A study on biomineralization behavior of N-methylene phosphochitosan scaffolds. **2004**, 4, 971-7	39
2179	Two-dimensional multiarray formation of hepatocyte spheroids on a microfabricated PEG-brush surface. **2004**, 5, 850-5	115
2178	In situ crosslinkable hyaluronan hydrogels for tissue engineering. **2004**, 25, 1339-48	514
2177	Controlled degradation of hydrogels using multi-functional cross-linking molecules. **2004**, 25, 2461-6	134
2176	Supramolecular hydrogels containing inorganic salts and acids. **2004**, 45, 2947-2950	25
2175	New l -valine-based hydrogelators: formation of supramolecular hydrogels. **2004**, 45, 5399-5402	34

2174	Poly(N-vinyl-2-pyrrolidone) hydrogel production by ultraviolet radiation: new methodologies to accelerate crosslinking. **2004**, 45, 4705-4709	58
2173	Poly(vinyl alcohol) hydrogel fixation on poly(ethylene terephthalate) surface for biomedical application. **2004**, 45, 8779-8789	50
2172	The tensile properties of alginate hydrogels. **2004**, 25, 3187-99	398
2171	Poly(2-hydroxyethyl methacrylate)-based slabs as a mouse embryonic stem cell support. **2004**, 25, 5249-60	44
2170	Photo-crosslinkable, thermo-sensitive and biodegradable pluronic hydrogels for sustained release of protein. **2004**, 15, 1571-83	48
2169	Hydrogen-bonding-driven spontaneous gelation of water-soluble phospholipid polymers in aqueous medium. **2004**, 15, 631-44	27
2168	Preparation and Properties of PHEA/Chitosan Composite Hydrogel. **2004**, 36, 943-948	24
2167	Synthesis and Characterization of Biodegradable Thermosensitive Poly(organophosphazene) Gels. **2004**, 37, 4533-4537	111
2166	Galactose-substituted alginate 2: conformational aspects. **2004**, 5, 186-96	25
2165	Fabrication of gradient hydrogels using a microfluidics/photopolymerization process. **2004**, 20, 5153-6	320
2164	Tuning the Degradation Rate of Poly(2-hydroxypropyl methacrylamide)-graft-oligo(lactic acid) Stereocomplex Hydrogels. **2004**, 37, 2113-2118	28
2163	Structure and dynamics of a molecular hydrogel derived from a tripodal cholamide. **2004**, 126, 15905-14	92
2162	Effect of chemistry and morphology on the biofunctionality of self-assembling diblock copolypeptide hydrogels. **2004**, 5, 312-8	68
2161	Nanoscale Adhesion Ligand Organization Regulates Osteoblast Proliferation and Differentiation. **2004**, 4, 1501-1506	154
2160	Shape retaining injectable hydrogels for minimally invasive bulking. **2004**, 172, 763-8	43
2159	Biomaterials for Cell Immobilization. **2004**, 15-32	6
2158	Biofunctionalized, ultrathin coatings of cross-linked star-shaped poly(ethylene oxide) allow reversible folding of immobilized proteins. **2004**, 126, 4234-9	171
2157	Structure and properties of silk hydrogels. **2004**, 5, 786-92	632

2156	Salt-Triggered Peptide Folding and Consequent Self-Assembly into Hydrogels with Tunable Modulus. **2004**, 37, 7331-7337		339
2155	Water gelation by small organic molecules. *Chemical Reviews*, **2004**, 104, 1201-18	68.1	1779
2154	Cartilage and Osteoarthritis. **2004**,		4
2153	Solid-phase ATRP synthesis of peptide-polymer hybrids. **2004**, 126, 3472-6		166
2152	Biomimetic polymers in pharmaceutical and biomedical sciences. **2004**, 58, 385-385		
2151	Synthetic extracellular matrices for tissue engineering and regeneration. **2004**, 64, 181-205		62
2150	Engineered and designed peptide-based fibrous biomaterials. **2004**, 8, 141-149		122
2149	Biomimetic polymers in pharmaceutical and biomedical sciences. **2004**, 58, 385-407		138
2148	Biomaterials: where we have been and where we are going. **2004**, 6, 41-75		1188
2147	A hydrogel system for stimulus-responsive, oxygen-sensitive in situ gelation. **2004**, 15, 895-904		35
2146	Injectable scaffolds for tissue regeneration. **2004**, 14, 1915		238
2145	Heart valve tissue engineering -- where do we stand?. **2004**, 95 Suppl 1, S57-8		13
2144	Shape-defining scaffolds for minimally invasive tissue engineering. **2004**, 77, 1798-803		74
2143	Supramolecular Hydrogels Formed by L-Lysine Derivatives. **2004**, 33, 1496-1497		10
2142	Polysaccharide Scaffolds for Tissue Engineering. **2005**, 27-44		1
2141	Carbon dioxide and carbon disulfide as resources for functional polymers. **2005**, 30, 183-215		194
2140	Gelling of otherwise nongelable polysaccharides. **2005**, 287, 373-8		47
2139	Biodegradable multiblock PEO/PLA thermoplastic elastomers: molecular design and properties. **2005**, 46, 2068-2075		111

2138	Synthesis and characterization of new injectable and degradable dextran-based hydrogels. **2005**, 46, 9604-9614	187
2137	Controlling alginate gel degradation utilizing partial oxidation and bimodal molecular weight distribution. **2005**, 26, 2455-65	488
2136	Three-dimensional aqueous-derived biomaterial scaffolds from silk fibroin. **2005**, 26, 2775-85	793
2135	Preparation of poly(vinyl alcohol)-chondroitin sulfate hydrogel as matrices in tissue engineering. **2005**, 61, 348-354	97
2134	Polyelectrolyte capsules made of two biocompatible natural polymers. **2005**, 41, 923-932	66
2133	New low-molecular weight gelators based on l-valine and l-isoleucine with various terminal groups. **2005**, 46, 2741-2745	84
2132	Synthesis and properties of coumarin-derived organogelators. **2005**, 61, 8932-8938	33
2131	Characterization of protein release from photocrosslinkable hyaluronic acid-polyethylene glycol hydrogel tissue engineering scaffolds. **2005**, 26, 125-35	359
2130	Bacterial cellulose as a potential scaffold for tissue engineering of cartilage. **2005**, 26, 419-31	827
2129	In vitro cytocompatibility of MG63 cells on chitosan-organosiloxane hybrid membranes. **2005**, 26, 485-93	141
2128	Self-gelling hydrogels based on oppositely charged dextran microspheres. **2005**, 26, 2129-35	169
2127	Self-cross-linking biopolymers as injectable in situ forming biodegradable scaffolds. **2005**, 26, 3941-51	516
2126	Biocatalytic synthesis of highly ordered degradable dextran-based hydrogels. **2005**, 26, 4707-16	62
2125	Macroporous interconnected dextran scaffolds of controlled porosity for tissue-engineering applications. **2005**, 26, 7436-46	186
2124	Delivery of TGF-beta1 and chondrocytes via injectable, biodegradable hydrogels for cartilage tissue engineering applications. **2005**, 26, 7095-103	249
2123	Supramolecular gels: functions and uses. **2005**, 34, 821-36	1732
2122	Actively regulating bioengineered tissue and organ formation. **2005**, 8, 141-4	9
2121	Coating alginate microspheres with a serum albumin-alginate membrane: application to the encapsulation of a peptide. **2005**, 24, 187-97	45

2120	Stem-cell-driven regeneration of synovial joints. **2005**, 97, 289-301	51
2119	Preparation and characterization of pH sensitive poly(N-vinyl-2-pyrrolidone/itaconic acid) copolymer hydrogels. **2005**, 91, 484-489	61
2118	Mobility of model proteins in hydrogels composed of oppositely charged dextran microspheres studied by protein release and fluorescence recovery after photobleaching. **2005**, 110, 67-78	64
2117	A novel star PEG-derived surface coating for specific cell adhesion. **2005**, 74, 607-17	120
2116	Design and Application of Self-Assembled Low Molecular Weight Hydrogels. **2005**, 2005, 3615-3631	479
2115	Stem cell-based composite tissue constructs for regenerative medicine. **2005**, 91, 261-84	138
2114	Functional Hydrogel Surfaces: Binding Kinesin-Based Molecular Motor Proteins to Selected Patterned Sites. **2005**, 15, 1303-1309	26
2113	Inverted-Colloidal-Crystal Hydrogel Matrices as Three-Dimensional Cell Scaffolds. **2005**, 15, 725-731	112
2112	Novel poly(amido-amine)-based hydrogels as scaffolds for tissue engineering. **2005**, 5, 613-22	57
2111	Poly(N-isopropylacrylamide) Nanoparticle-Incorporated PNIPAAm Hydrogels with Fast Shrinking Kinetics. **2005**, 26, 1346-1350	49
2110	Design parameters of polymers for tissue engineering applications. **2005**, 13, 277-284	8
2109	Cultivation of endothelial cells on adhesive protein-free synthetic polymer gels. **2005**, 26, 4588-96	76
2108	A novel pH- and ionic-strength-sensitive carboxy methyl dextran hydrogel. **2005**, 26, 4677-83	206
2107	Cytocompatibility of self-assembled beta-hairpin peptide hydrogel surfaces. **2005**, 26, 5177-86	241
2106	Three-dimensional culture and differentiation of human osteogenic cells in an injectable hydroxypropylmethylcellulose hydrogel. **2005**, 26, 5509-17	102
2105	Development of nanocomposites for bone grafting. **2005**, 65, 2385-2406	535
2104	From high molecular weight precursor polyrotaxanes to supramolecular sliding networks. The sliding gels **2005**, 46, 8494-8501	78
2103	Enhanced neurite outgrowth of rat neural cortical cells on surface-modified films of poly(lactic-co-glycolic acid). **2005**, 27, 53-8	8

2102	Novel preparative method for porous hydrogels using overrun process. **2005**, 54, 537-543	32
2101	Magnetic resonance imaging of self-assembled biomaterial scaffolds. **2005**, 16, 1343-8	85
2100	Engineered adipose tissue from human mesenchymal stem cells maintains predefined shape and dimension: implications in soft tissue augmentation and reconstruction. **2005**, 11, 556-66	168
2099	Safe transportation for infants with severe hydrocephalus. **1991**, 23, 369-73	24
2098	Assembly of one-dimensional supramolecular objects: from monomers to networks. **2005**, 72, 011803	10
2097	Drug delivery from mucoadhesive disks based on a photo-cross-linkable polyaspartamide derivative. **2005**, 15, 377-382	8
2096	Tissue-engineered osteochondral constructs in the shape of an articular condyle. **2005**, 87, 936-44	140
2095	Porous poly (DL-lactic acid) modified chitosan-gelatin scaffolds for tissue engineering. **2005**, 19, 303-22	15
2094	Cellular cross-linking of peptide modified hydrogels. **2005**, 127, 220-8	47
2093	Perspectives on: Strategies to Fabricate Starch-based Hydrogels with Potential Biomedical Applications. **2005**, 20, 297-314	39
2092	Network formation and degradation behavior of hydrogels formed by Michael-type addition reactions. **2005**, 6, 290-301	267
2091	Freeform fabrication of bioactive tissue scaffolds.	
2090	Photo- and electropatterning of hydrogel-encapsulated living cell arrays. **2005**, 5, 111-8	239
2089	Hydrogelation characteristics of amphiphilic N-octadecyl maleamic acid derivative. **2005**, 15, 5144	9
2088	Local Monomer Activation Model for Phase Behavior and Calorimetric Properties of LCST Gel-Forming Polymers. **2005**, 38, 4456-4464	15
2087	Ultrathin coatings from isocyanate-terminated star PEG prepolymers: layer formation and characterization. **2005**, 21, 1991-9	57
2086	A tetrameric sugar-based azobenzene that gels water at various pH values and in the presence of salts. **2005**, 70, 6574-82	75
2085	Preparation and Supramolecular Self-Assembly of a Polypeptide-block-polypseudorotaxane. **2005**, 38, 6551-6558	36

2084	Enhanced oligonucleotide binding to self-assembled nanofibers. **2005**, 16, 501-3	41
2083	Reversible hydrogels from self-assembling genetically engineered protein block copolymers. **2005**, 6, 1739-49	139
2082	Coassembly of amphiphiles with opposite peptide polarities into nanofibers. **2005**, 127, 1193-200	272
2081	In situ study of the thermoresponsive behavior of micropatterned hydrogel films by imaging ellipsometry. **2005**, 21, 2317-22	45
2080	Effect of polymer entanglement on the toughening of double network hydrogels. **2005**, 109, 16304-9	154
2079	Micellar aggregates and hydrogels from phosphonobile salts. **2005**, 3, 3695-700	22
2078	l-Lysine-based supramolecular hydrogels containing various inorganic ions. **2005**, 3, 3073-8	31
2077	Water/humidity and ammonia sensor, based on a polymer hydrogel matrix containing a fluorescent flavylium compound. **2005**, 15, 2840	49
2076	Tailor-made alginate bearing galactose moieties on mannuronic residues: selective modification achieved by a chemoenzymatic strategy. **2005**, 6, 88-98	32
2075	Assembly of an Artificial Protein Hydrogel through Leucine Zipper Aggregation and Disulfide Bond Formation. **2005**, 38, 3909-3916	106
2074	Self-assembly of small molecules affords multifunctional supramolecular hydrogels for topically treating simulated uranium wounds. **2005**, 4414-6	144
2073	Multi-nozzle deposition for construction of 3D biopolymer tissue scaffolds. **2005**, 11, 9-17	275
2072	Temperature-sensitive hydrogels. **2005**, 3, 239-251	34
2071	A Bio-inspired Route to Fabricate Submicrometer-Sized Particles with Unusual Shapes Mineralization of Calcium Carbonate within Hydrogel Spheres. **2005**, 17, 656-660	55
2070	Nitrocinnamate-functionalized gelatin: synthesis and "smart"hydrogel formation via photo-cross-linking. **2005**, 6, 1503-9	58
2069	New properties from PLA-PEO-PLA hydrogels. **2005**, 1, 253-258	50
2068	A thermo-sensitive poly(organophosphazene) hydrogel used as an extracellular matrix for artificial pancreas. **2005**, 16, 1421-31	19
2067	Controlling Hydrogel Properties by Crystallization of Hydrophobic Domains. **2006**, 39, 1308-1310	51

2066	Control of cell cultivation and cell sheet detachment on the surface of polymer/clay nanocomposite hydrogels. **2006**, 7, 3267-75	175
2065	Fabrication of hyaluronic acid hydrogel beads for cell encapsulation. **2006**, 22, 297-302	60
2064	Multifunctional cell-instructive materials for tissue regeneration. **2006**, 1, 447-55	28
2063	Synergic effect in gelation by two-component mixture of chiral gelators. **2006**, 30, 1411-1419	31
2062	Extracellular Matrix-like Cell-Adhesive Hydrogels from RGD-Containing Poly(ethylene glycol) Diacrylate. **2006**, 39, 1305-1307	32
2061	Biomedical Applications of Hyaluronic Acid. **2006**, 155-174	20
2060	Development of carboxymethyl cellulose acrylate for various biomedical applications. **2006**, 1, 85-91	62
2059	Fabrication of TiO2 using L-lysine-based organogelators as organic templates: control of the nanostructures. **2006**, 377-9	66
2058	A supramolecular hydrogel that responds to biologically relevant stimuli. **2006**, 4903-5	48
2057	Functional Polymers Based on Dextran. **2006**, 199-291	170
2056	Synthesis of organic□inorganic hybrid hydrogels using rodlike polysiloxane having acrylamido groups as a new cross-linking agent. **2006**, 16, 1746-1750	28
2055	Conformational and thermal behavior of a pH-sensitive bolaform hydrogelator. **2006**, 2, 77-86	44
2054	Growth factor-delivery systems for tissue engineering: a materials perspective. **2006**, 3, 29-47	118
2053	Vocal fold tissue repair in vivo using a synthetic extracellular matrix. **2006**, 12, 2171-80	140
2052	Highly luminescent gels and mesogens based on elaborated borondipyrromethenes. **2006**, 128, 4548-9	172
2051	Powerful low-molecular-weight gelators based on L-valine and L-isoleucine with various terminal groups. **2006**, 30, 1184	77
2050	Thermoresponsive behavior of poly(n-isopropylacrylamide) hydrogels containing gold nanostructures. **2006**, 22, 3851-7	39
2049	Rheological studies of thermosensitive triblock copolymer hydrogels. **2006**, 22, 10180-4	83

2048	Preparation of Novel pH-Sensitive Hydrogels of Carboxymethyl Cellulose Acrylates: A Comparative Study. **2006**, 21, 877-882	20
2047	Presentation of RGDS epitopes on self-assembled nanofibers of branched peptide amphiphiles. **2006**, 7, 1855-63	169
2046	Gelation Kinetics of ╫Hairpin Peptide Hydrogel Networks. **2006**, 39, 6608-6614	94
2045	Phase-transition thermodynamics of N-isopropylacrylamide hydrogels. **2006**, 7, 2923-5	39
2044	Radiation Induced Synthesis of 2-Hydroxyethyl Methacrylate-Co-Vinylbenzyltrimethylammonium Chloride Binary Hydrogel System-I: Equilibrium Swelling Studies. **2006**, 43, 327-343	4
2043	From nonfunctional lamellae to functional nanotubes. **2006**, 8, 1271-4	23
2042	Biochemical functionalization of polymeric cell substrata can alter mechanical compliance. **2006**, 7, 1990-5	50
2041	Self-Assembly of Fluorescent Amphipathic Borondipyrromethene Scaffoldings in Mesophases and Organogels. **2006**, 18, 5009-5021	90
2040	Nanophase-separated amphiphilic conetworks as versatile matrixes for optical chemical and biochemical sensors. **2006**, 78, 6376-83	53
2039	Cation-Induced Supramolecular Isomerism in the Hydrogen-Bonded Network of Secondary Ammonium Monocarboxylate Salts: A New Class of Organo Gelator and Their Structures. **2006**, 6, 2114-2121	36
2038	Iodine Transfer Radical Polymerization of Vinyl Acetate in Fluoroalcohols for Simultaneous Control of Molecular Weight, Stereospecificity, and Regiospecificity. **2006**, 39, 4054-4061	93
2037	New Series of Organogelators Derived from a Combinatorial Library of Primary Ammonium Monocarboxylate Salts. **2006**, 18, 3795-3800	64
2036	Microencapsulation using natural polysaccharides for drug delivery and cell implantation. **2006**, 16, 3252	140
2035	Synthesis of well-defined hydrogel networks using click chemistry. **2006**, 2774-6	433
2034	Unique milk protein based nanotubes: Food and nanotechnology meet. **2006**, 17, 196-203	225
2033	Tissue Engineering. **2006**,	
2032	Cartilage and Meniscus, Properties of. **2006**,	4
2031	Hydrogels Constructed via ╫Hairpin Peptide Self-Assembly. **2006**, 284-297	2

2030	Hydrogel Drug Delivery Systems. **2006**,	
2029	Tissue Engineering. **2006**,	
2028	Novel dually responsive hydrogel with rapid deswelling rate. **2006**, 55, 1407-1412	18
2027	Regeneration of vascularized bone. **2006**, 41, 109-22	62
2026	Fungal tyrosinases: new prospects in molecular characteristics, bioengineering and biotechnological applications. **2006**, 100, 219-32	275
2025	Tuning the erosion rate of artificial protein hydrogels through control of network topology. **2006**, 5, 153-8	247
2024	Solvent control of crack dynamics in a reversible hydrogel. **2006**, 5, 552-5	157
2023	Morphology and gelation of thermosensitive xyloglucan hydrogels. **2006**, 121, 14-20	58
2022	Sustained release of dexamethasone from hydrophilic matrices using PLGA nanoparticles for neural drug delivery. **2006**, 27, 3031-7	350
2021	Degradation behavior of dextran hydrogels composed of positively and negatively charged microspheres. **2006**, 27, 4141-8	45
2020	Poly(vinyl alcohol)-assisted dispersion of multiwalled carbon nanotubes in aqueous solution for electroanalysis. **2006**, 8, 956-960	36
2019	A new polymer/clay nano-composite hydrogel with improved response rate and tensile mechanical properties. **2006**, 42, 2125-2132	141
2018	Probing the reaction kinetics of vinyl acetate free radical polymerization via living free radical polymerization (MADIX). **2006**, 47, 999-1010	73
2017	A study of hydrogel thermal-dynamics using Fourier transform infrared spectrometer. **2006**, 47, 4718-4725	18
2016	Natural microshells of alginate□hitosan: Unexpected stability and permeability. **2006**, 47, 6167-6171	20
2015	Controlled release from a nanocarrier entrapped within a microcarrier. **2006**, 301, 617-23	11
2014	Molecular recognition and controlled release in drug delivery systems based on nanostructured lipid surfactants. **2006**, 18, S2203-S2220	15
2013	Triblock PLLA-PEO-PLLA Hydrogels: Structure and Mechanical Properties. **2006**, 102-119	2

2012	Revisiting silica based ordered mesoporous materials: medical applications. **2006**, 16, 26-31	293
2011	Biodegradable polymers based on bile acids and potential biomedical applications. **2006**, 17, 1123-1139	31
2010	Instant Gelation of Various Organic Fluids Including Petrol at Room Temperature by a New Class of Supramolecular Gelators. **2006**, 18, 1470-1478	102
2009	Poly(lactide)-Poly(ethylene oxide)-Poly(lactide) Triblock Copolymers: Synthesis and Thermal Properties. **2006**, 156-167	2
2008	Two-step protocol to incorporate cells in thermoresponsive hydrogels. **2006**, 1, 462-5	4
2007	Jet-based methods to print living cells. **2006**, 1, 930-48	201
2006	Fracture of a biopolymer gel as a viscoplastic disentanglement process. **2006**, 21, 81-9	86
2005	Thermoresponsive gelatin/monomethoxy poly(ethylene glycol)-poly(D,L-lactide) hydrogels: formulation, characterization, and antibacterial drug delivery. **2006**, 23, 205-14	40
2004	Characterization of structured acrylamide/acrylic acid hydrogels by TMDSC and microscopy. **2006**, 86, 511-516	5
2003	In vitro characterization of human dental pulp cells: various isolation methods and culturing environments. **2006**, 324, 225-36	163
2002	Rheological characterization of hydrogels formed by recombinantly produced spider silk. **2006**, 82, 261-264	120
2001	Probing the importance of lateral hydrophobic association in self-assembling peptide hydrogelators. **2006**, 35, 162-9	73
2000	Preparation and properties of PEG-modified PHEMA hydrogel and the morphological effect. **2006**, 14, 394-399	16
1999	Optical biochemical sensor for determining hydroperoxides in nonpolar organic liquids as archetype for sensors consisting of amphiphilic conetworks as immobilisation matrices. **2006**, 386, 1273-83	53
1998	Synthesis and characterization of coumarin-containing polyphosphazene. **2006**, 66, 455-464	9
1997	Protein diffusion in agarose hydrogel in situ measured by improved refractive index method. **2006**, 115, 189-96	91
1996	Water gelation of an amino acid-based amphiphile. **2006**, 12, 5068-74	101
1995	Preparation of biodegradable crosslinking agents and application in PVP hydrogel. **2006**, 101, 1515-1521	22

1994	Polysaccharide-based artificial extracellular matrix: Preparation and characterization of three-dimensional, macroporous chitosan and chondroitin sulfate composite scaffolds. **2006**, 99, 2091-2100	15
1993	Functional polymer hydrogels for embryonic stem cell support. **2006**, 76, 315-25	30
1992	Structural analysis of dextran-based hydrogels obtained chemoenzymatically. **2006**, 77, 55-64	33
1991	An improved hydrophilicity via electrospinning for enhanced cell attachment and proliferation. **2006**, 78, 283-90	228
1990	Novel porous gelatin scaffolds by overrun/particle leaching process for tissue engineering applications. **2006**, 79, 388-97	35
1989	Structural effects of crosslinking a biopolymer hydrogel derived from marine mussel adhesive protein. **2006**, 6, 711-8	45
1988	Synthesis of Novel Biomimetic Zwitterionic Phosphorylcholine-Bound Chitosan Derivative. **2006**, 27, 548-552	28
1987	Synthesis of a New PHEMA/PEO Enzymatically Biodegradable Hydrogel. **2006**, 27, 1004-1008	19
1986	Supercritical Carbon Dioxide in Water/Emulsion-Templated Synthesis of Porous Calcium Alginate Hydrogels. **2006**, 18, 501-504	81
1985	Nanostructured Hydrogels for Three-Dimensional Cell Culture Through Self-Assembly of Fluorenylmethoxycarbonyl/Dipeptides. **2006**, 18, 611-614	821
1984	Hydrogels in Biology and Medicine: From Molecular Principles to Bionanotechnology. **2006**, 18, 1345-1360	3009
1983	Using Enzymes to Control Molecular Hydrogelation. **2006**, 18, 3043-3046	70
1982	Solid-phase synthesis of reactive peptide crosslinker by selective deprotection. **2006**, 13, 715-8	20
1981	Intrinsic mechanical properties of the extracellular matrix affect the behavior of pre-osteoblastic MC3T3-E1 cells. **2006**, 290, C1640-50	190
1980	Polymeric Systems for Bioinspired Delivery of Angiogenic Molecules. 191-221	20
1979	Development of Novel Nanostructured Tissue Engineering Scaffold Materials through Self-assembly for Bed-side Orthopedic Applications. **2006**, 950, 1	1
1978	Progress in the development of a corneal replacement: keratoprostheses and tissue-engineered corneas. **2006**, 3, 59-72	41
1977	Rheological characterization of biocompatible associative polymer hydrogels with crystalline and amorphous endblocks. **2006**, 21, 2118-2125	22

1976	Soft Tissue Scaffolds. **2006**,	1
1975	pH-sensitive hydrogel based on a polyaspartamide derivative. **2006**, 16, 77-84	18
1974	Abstracts of the 5th International Meeting on Intensive Cardiac Care, October 14-16, 2007, Tel Aviv, Israel. **2007**, 9, 134-74	
1973	Controlling hydrogelation kinetics by peptide design for three-dimensional encapsulation and injectable delivery of cells. **2007**, 104, 7791-6	545
1972	Partially biodegradable temperature- and pH-responsive poly(N-isopropylacrylamide)/dextran-maleic acid hydrogels: formulation and controlled drug delivery of doxorubicin. **2007**, 18, 901-24	25
1971	Angiogenic effects of sequential release of VEGF-A165 and PDGF-BB with alginate hydrogels after myocardial infarction. **2007**, 75, 178-85	294
1970	Ultrasensitive Fluorescence Microscopy Studies of Protein Interactions with Functionalized Surfaces. **2007**, 221, 75-93	3
1969	Engineering the follicle microenvironment. **2007**, 25, 287-99	97
1968	Helical Rosettee Nanotubes for bone tissue engineering applications. **2007**,	
1967	Chondrocyte signaling and artificial matrices for articular cartilage engineering. **2006**, 585, 67-86	41
1966	Hydrogels in cell encapsulation and tissue engineering. **2007**, 57-82	4
1965	Injectable Scaffolds for Bone and Cartilage Regeneration. **2007**, 95-109	6
1964	Development of finely dispersed Ti- and Zr-doped isotropic graphites for the divertor of next step fusion devices. **2007**, T128, 60-65	11
1963	Osteoblast Behaviors on Novel Self-assembled Helical Rosette Nanotubes and Hydrogel Composites for Bone Tissue Engineering. **2007**, 1056, 1	1
1962	Tissue engineering of the synovial joint: the role of cell density. **2007**, 221, 429-40	15
1961	Surface Characteristics of Plasma-Treated PLGA Nanofibers. **2007**, 249-250, 103-108	17
1960	Adipose tissue engineering from human adult stem cells: clinical implications in plastic and reconstructive surgery. **2007**, 119, 71-83	98
1959	Biodegradable Hydrogels. **2007**, 5-1-5-44	4

1958	Injectable in situ forming drug delivery system for cancer chemotherapy using a novel tissue adhesive: characterization and in vitro evaluation. **2007**, 66, 383-90	36
1957	Antitumor effect of an injectable in-situ forming drug delivery system composed of a novel tissue adhesive containing doxorubicin hydrochloride. **2007**, 67, 676-81	18
1956	Water gelation abilities of alkylbenzyltriazole-appended 2'-deoxyribonucleoside and ribonucleoside. **2007**, 5, 610-2	22
1955	Synthesis of an agarose-gelatin conjugate for use as a tissue engineering scaffold. **2007**, 103, 22-6	57
1954	Mechanical and transport properties of the poly(ethylene oxide)-poly(acrylic acid) double network hydrogel from molecular dynamic simulations. **2007**, 111, 1729-37	121
1953	Novel hydrogels via click chemistry: synthesis and potential biomedical applications. **2007**, 8, 1844-50	267
1952	Autonomous microfluidics with stimuli-responsive hydrogels. **2007**, 3, 1223-1230	164
1951	Tissue Engineering. **2007**,	6
1950	In vitro and in vivo cartilage engineering using a combination of chondrocyte-seeded long-term stable fibrin gels and polycaprolactone-based polyurethane scaffolds. **2007**, 13, 2207-18	104
1949	Controlled release of vascular endothelial growth factor from alginate hydrogels nano-coated with polyelectrolyte multilayer films. **2007**, 18, 775-83	44
1948	A new pH and thermo-responsive chiral hydrogel for stimulated release. **2007**, 111, 9294-300	49
1947	Structural aspects and properties of salt and inclusion compounds of 8-hydroxyquinoline based amides. **2007**, 9, 379	22
1946	Cationic surfactant-triggered formation of a supramolecular hydrogel by a negatively charged L-valine derivative. **2007**, 31, 69-74	19
1945	Structure and properties of an exceptional low molecular weight hydrogelator. **2007**, 111, 13180-7	35
1944	Supramolecular Hydrogels Hybridized with Single-Walled Carbon Nanotubes. **2007**, 40, 3402-3407	72
1943	Modulation of the supramolecular structure of G-quartet assemblies by dynamic covalent decoration. **2007**, 129, 10058-9	42
1942	CO2-in-Water Emulsion-Templated Poly(vinyl alcohol) Hydrogels Using Poly(vinyl acetate)-Based Surfactants. **2007**, 40, 1955-1961	73
1941	Alkyl chain length dependent hydrogelation of L-tryptophan-based amphiphile. **2007**, 23, 11769-76	70

1940	Controlled release biopolymers for enhancing the immune response. **2007**, 4, 33-46	28
1939	Facile Synthesis of Degradable Gels by Oxygen Cross-Linking of Polymers Including a Dienyl Group on Their Side Chain or at Chain Ends. **2007**, 40, 6143-6149	20
1938	Noninvasive probing of the spatial organization of polymer chains in hydrogels using fluorescence resonance energy transfer (FRET). **2007**, 129, 4518-9	27
1937	Structure and properties of low molecular weight amphiphilic peptide hydrogelators. **2007**, 111, 14107-13	54
1936	Reversible stiffening transition in beta-hairpin hydrogels induced by ion complexation. **2007**, 111, 13901-8	35
1935	Synthesis, patterning and applications of star-shaped poly(ethylene glycol) biofunctionalized surfaces. **2007**, 3, 419-30	78
1934	Synthesis and characterization of photo-cross-linked hydrogels based on biodegradable polyphosphoesters and poly(ethylene glycol) copolymers. **2007**, 8, 3375-81	74
1933	New ground for organic catalysis: a ring-opening polymerization approach to hydrogels. **2007**, 8, 3294-7	54
1932	Block polyelectrolyte networks from poly(acrylic acid) and poly(ethylene oxide): sorption and release of cytochrome C. **2007**, 8, 490-7	34
1931	Adsorption-resistant acrylic copolymer for prototyping of microfluidic devices for proteins and peptides. **2007**, 79, 1926-31	30
1930	Design, synthesis, and degradation studies of new enzymatically erodible poly(hydroxyethyl methacrylate)/poly(ethylene oxide) hydrogels. **2007**, 2, 131-5	11
1929	Large Strain Hysteresis and Mullins Effect of Tough Double-Network Hydrogels. **2007**, 40, 2919-2927	496
1928	A cell-laden microfluidic hydrogel. **2007**, 7, 756-62	310
1927	Synthesis of hyaluronan haloacetates and biology of novel cross-linker-free synthetic extracellular matrix hydrogels. **2007**, 8, 2821-8	29
1926	Hydrogels as extracellular matrices for skeletal tissue engineering: state-of-the-art and novel application in organ printing. **2007**, 13, 1905-25	382
1925	Conjugates of naphthalene and dipeptides produce molecular hydrogelators with high efficiency of hydrogelation and superhelical nanofibers. **2007**, 17, 850-854	175
1924	Clicking polymers: a straightforward approach to novel macromolecular architectures. **2007**, 36, 1369-80	696
1923	Breast Reconstruction. **2007**, 519-534	

1922	Developmental biology and tissue engineering. **2007**, 81, 320-8	85
1921	Relationship between composition and properties for stable chitosan films containing lipid microdomains. **2007**, 103, 3453-3460	8
1920	Preparation and properties of modified PHEMA hydrogel with sulfonated PEG graft. **2007**, 104, 2484-2489	16
1919	Preparation and characterization of macroporous poly(2-hydroxyethyl methacrylate)-based biomaterials: Water sorption property and in vitro blood compatibility. **2007**, 104, 1559-1571	31
1918	Cucurbit[7]uril: A simple macrocyclic, pH-triggered hydrogelator exhibiting guest-induced stimuli-responsive behavior. **2007**, 46, 210-3	188
1917	Fabrication of cellular multilayers with nanometer-sized extracellular matrix films. **2007**, 46, 4689-92	170
1916	Cucurbit[7]uril: A Simple Macrocyclic, pH-Triggered Hydrogelator Exhibiting Guest-Induced Stimuli-Responsive Behavior. **2007**, 119, 214-217	55
1915	Fabrication of Cellular Multilayers with Nanometer-Sized Extracellular Matrix Films. **2007**, 119, 4773-4776	18
1914	Physical and Biological Properties of a Novel Hydrogel Composite Based on Oxidized Alginate, Gelatin and Tricalcium Phosphate for Bone Tissue Engineering. **2007**, 9, 1082-1088	37
1913	Multifunctional hydrogels that promote osteogenic hMSC differentiation through stimulation and sequestering of BMP2. **2007**, 17, 2085-2093	87
1912	Biomimetic interfacial interpenetrating polymer networks control neural stem cell behavior. **2007**, 81, 240-9	88
1911	Fast and efficient screening system for new biomaterials in tissue engineering: a model for peripheral nerve regeneration. **2007**, 81, 736-47	11
1910	Rapid aqueous photo-polymerization route to polymer and polymer-composite hydrogel 3D inverted colloidal crystal scaffolds. **2007**, 83, 1-9	15
1909	Transglutaminase crosslinked gelatin as a tissue engineering scaffold. **2007**, 83, 1039-1046	184
1908	Modification of sericin-free silk fibers for ligament tissue engineering application. **2007**, 82, 129-38	72
1907	Tracking the urinary excretion of high molar mass poly(vinyl alcohol). **2007**, 82, 383-9	17
1906	Simplifying the extracellular matrix for 3-D cell culture and tissue engineering: a pragmatic approach. **2007**, 101, 1370-83	115
1905	A flexible approach to the preparation of polymer scaffolds for tissue engineering. **2007**, 7, 201-7	7

1904	Modification of gelatin by reaction with 1,6-diisocyanatohexane. **2007**, 7, 328-38	29
1903	Macroporous gels prepared at subzero temperatures as novel materials for chromatography of particulate-containing fluids and cell culture applications. **2007**, 30, 1657-71	175
1902	Thermally associating polypeptides designed for drug delivery produced by genetically engineered cells. **2007**, 96, 484-516	20
1901	Low molecular mass cationic gelators derived from deoxycholic acid: remarkable gelation of aqueous solvents. **2007**, 63, 7309-7320	34
1900	Glycine and l-glutamic acid-based dendritic gelators. **2007**, 63, 8794-8800	23
1899	Assembling and releasing performance of supramolecular hydrogels formed from simple drug molecule as the hydrogelator. **2007**, 18, 1009-1012	10
1898	Effect of hydrogen bonding and hydrophobic interaction on the formation of supramolecular hydrogels formed by l-phenylalanine derivative hydrogelator. **2007**, 18, 1001-1004	7
1897	Influence of gelator structures on formation and stability of supramolecular hydrogels. **2007**, 18, 1548-1550	2
1896	pH-responsive swelling behavior of collagen gels prepared by novel crosslinkers based on naturally derived di- or tricarboxylic acids. **2007**, 3, 89-94	43
1895	Synthesis and characterization of both ionically and enzymatically cross-linkable alginate. **2007**, 3, 495-501	137
1894	Osteogenic differentiation of rabbit mesenchymal stem cells in thermo-reversible hydrogel constructs containing hydroxyapatite and bone morphogenic protein-2 (BMP-2). **2007**, 28, 2631-7	125
1893	The construction of 3D-engineered tissues composed of cells and extracellular matrices by hydrogel template approach. **2007**, 28, 2729-37	92
1892	Integration of layered chondrocyte-seeded alginate hydrogel scaffolds. **2007**, 28, 2987-93	78
1891	Transient inter-cellular polymeric linker. **2007**, 28, 3656-67	24
1890	The effect of hyaluronic acid incorporation on fibroblast spreading and proliferation within PEG-diacrylate based semi-interpenetrating networks. **2007**, 28, 4928-38	77
1889	Fabrication methods of an engineered microenvironment for analysis of cell-biomaterial interactions. **2007**, 28, 126-33	98
1888	Physical properties of alginate hydrogels and their effects on in vitro follicle development. **2007**, 28, 4439-48	232
1887	Preparation of a novel pH-responsive silver nanoparticle/poly(HEMA-PEGMA-MAA) composite hydrogel. **2007**, 43, 4178-4187	133

1886	Formulation and cytotoxicity of doxorubicin loaded in self-assembled bio-polyelectrolyte microshells. **2007**, 336, 376-81	37
1885	Photoregulation of drug release in azo-dextran nanogels. **2007**, 342, 184-93	85
1884	Effect of the incorporation of a low amount of carbohydrate-containing monomer on the swelling properties of polyacrylamide hydrogels. **2007**, 48, 7539-7545	9
1883	Facile encapsulation of nanoparticles in nanoorganized bio-polyelectrolyte microshells. **2007**, 48, 7598-7603	13
1882	Polymeric protein delivery systems. **2007**, 32, 669-697	328
1881	Synthetic polypeptides for biomedical applications. **2007**, 32, 858-875	429
1880	Formation of supramolecular hydrogels with controlled microstructures and stability via molecular assembling in a two-component system. **2007**, 307, 280-7	25
1879	Properties of a novel thermal sensitive polymer based on poly(vinyl alcohol) and its layer-by-layer assembly. **2007**, 18, 335-345	9
1878	Spatiotemporal control of vascular endothelial growth factor delivery from injectable hydrogels enhances angiogenesis. **2007**, 5, 590-8	268
1877	Novel glycidyl methacrylated dextran (Dex-GMA)/gelatin hydrogel scaffolds containing microspheres loaded with bone morphogenetic proteins: formulation and characteristics. **2007**, 118, 65-77	98
1876	Production of heparin-functionalized hydrogels for the development of responsive and controlled growth factor delivery systems. **2007**, 122, 287-96	202
1875	Synthesis and characterization of novel thiol-reactive poly(ethylene glycol) cross-linkers for extracellular-matrix-mimetic biomaterials. **2007**, 8, 2883-9	97
1874	Bioprinting living structures. **2007**, 17, 2054	100
1873	Matrices and scaffolds for protein delivery in tissue engineering. **2007**, 59, 274-91	293
1872	Spatiotemporal control over growth factor signaling for therapeutic neovascularization. **2007**, 59, 1340-50	100
1871	3-D culture in synthetic extracellular matrices: new tissue models for drug toxicology and cancer drug discovery. **2007**, 47, 196-207	30
1870	Biocompatible Hydrogel Formation of Gelatin from Cold Water Fish via Enzymatic Networking. **2007**, 39, 1040-1046	19
1869	Cation identity dependence of crown ether photonic crystal Pb2+ sensing. **2007**, 387, 2121-30	14

1868	Self-Assembling Hydrogels. **2007**, 58, 53-63	40
1867	Plasma-treated poly(lactic-co-glycolic acid) nanofibers for tissue engineering. **2007**, 15, 238-243	96
1866	Synthesis and characterization of biodegradable elastic hydrogels based on poly(ethylene glycol) and poly(ε-caprolactone) blocks. **2007**, 15, 363-369	28
1865	RGD Island Spacing Controls Phenotype of Primary Human Fibroblasts Adhered to Ligand-Organized Hydrogels. **2007**, 15, 469-472	12
1864	Preparation and characterisation of controlled porosity alginate hydrogels made via a simultaneous micelle templating and internal gelation process. **2007**, 42, 3502-3507	34
1863	Studies on the use of hollow fibre membrane bioreactors for tissue generation by using rat bone marrow fibroblastic cells and a composite scaffold. **2007**, 18, 641-8	29
1862	In Vitro and In Vivo Characterization of Biodegradable Poly(organophosphazenes) for Biomedical Applications. **2007**, 16, 365-385	64
1861	Preparation and Characterization of pH Sensitive Semi-interpenetrating Network Hydrogel Based on Methacrylic Acid, Bovine Serum Albumin (BSA), and PEG. **2007**, 13, 349-355	39
1860	Agarose-gelatin conjugate for adherent cell-enclosing capsules. **2007**, 29, 731-5	29
1859	A novel amphiphilic pH-sensitive hydrogel based on pullulan. **2007**, 285, 1085-1091	23
1858	The emergence of ECM mechanics and cytoskeletal tension as important regulators of cell function. **2007**, 47, 300-20	155
1857	Rational design of hydrogels for tissue engineering: impact of physical factors on cell behavior. **2007**, 28, 134-46	384
1856	Fluorescent resonance energy transfer: A tool for probing molecular cell-biomaterial interactions in three dimensions. **2007**, 28, 2424-37	73
1855	Injectable biodegradable hydrogel composites for rabbit marrow mesenchymal stem cell and growth factor delivery for cartilage tissue engineering. **2007**, 28, 3217-27	295
1854	Amperometric ethanol biosensor based on poly(vinyl alcohol)-multiwalled carbon nanotube-alcohol dehydrogenase biocomposite. **2007**, 22, 3051-6	118
1853	In situ micro/nano-hydrogel synthesis from acrylamide derivates with lecithin organogel system. **2007**, 48, 2827-2834	40
1852	Synthesis and cytocompatibility of porous chitosan–silicate hybrids for tissue engineering scaffold application. **2008**, 137, 122-128	66
1851	Drug release characteristics of modified PHEMA hydrogel containing tethered PEG sulfonate. **2008**, 16, 379-383	9

1850	Preparation and properties of alginate/polyaspartate composite hydrogels. **2008**, 16, 45-50	18
1849	Biomaterials engineered for integration. **2008**, 11, 44-51	62
1848	Probing the morphology and nanoscale mechanics of single poly(N-isopropylacrylamide) microgels across the lower-critical-solution temperature by atomic force microscopy. **2008**, 4, 119-26	72
1847	Chitosan microparticles as injectable scaffolds for tissue engineering. **2008**, 2, 378-80	58
1846	Hydrophilic, cationic large-core star polymers and polymer networks: Synthesis and physicochemical characterization. **2008**, 46, 3958-3969	11
1845	Irreversible temperature-responsive formation of high-strength hydrogel from an enantiomeric mixture of starburst triblock copolymers consisting of 8-arm PEG and PLLA or PDLA. **2008**, 46, 6317-6332	50
1844	Synthesis of poly(tert-butyl acrylate-block-vinyl acetate) copolymers by combining ATRP and RAFT polymerizations. **2008**, 46, 7200-7206	33
1843	Novel biomimetic composite based on collagen and poly(Ebenzyl L-glutamate)-co-poly(glutamic acid). **2008**, 19, 244-249	3
1842	Poly(hydroxyethyl methacrylate)-Based Macroporous Hydrogels with Disulfide Cross-Linker. **2008**, 209, 577-584	54
1841	Temperature- and pH-Sensitive Nanocomposite Gels with Semi-Interpenetrating Organic/Inorganic Networks. **2008**, 209, 1564-1575	54
1840	Biotin-, Pyrene-, and GRGDS-Functionalized Polymers and Nanogels via ATRP and End Group Modification. **2008**, 209, 2179-2193	55
1839	pH/Thermosensitive Hydrogels Formed at Low pH by a PMMA-PAA-P2VP-PAA-PMMA Pentablock Terpolymer. **2008**, 29, 130-135	42
1838	A Novel Approach to Prepare Porous Poly(N-isopropylacrylamide) Hydrogel with Superfast Shrinking Kinetics. **2008**, 29, 593-597	44
1837	Tissue engineering of cartilages using biomatrices. **2008**, 83, 444-463	17
1836	Chemical conjugation of linear and cyclic RGD moieties to a recombinant elastin-mimetic polypeptide--a versatile approach towards bioactive protein hydrogels. **2008**, 8, 577-88	34
1835	Recruitment of endogenous stem cells for tissue repair. **2008**, 8, 836-42	54
1834	Two-component hydrogels comprising fatty acids and amines: structure, properties, and application as a template for the synthesis of metal nanoparticles. **2008**, 14, 6534-45	194
1833	Fluorescent magnesium(II) coordination polymeric hydrogel. **2008**, 14, 8822-9	52

1832	Oligonucleotide Analogues with Integrated Bases and Backbones. Part 19.. **2008**, 91, 2181-2202	9
1831	Synthesis, characterization, and hydrolytic degradation behavior of a novel biodegradable pH-sensitive hydrogel based on polycaprolactone, methacrylic acid, and poly(ethylene glycol). **2008**, 85, 36-46	50
1830	Fibroin/collagen hybrid hydrogels with crosslinking method: preparation, properties, and cytocompatibility. **2008**, 84, 198-207	74
1829	An optimized beta-tricalcium phosphate and agarose scaffold fabrication technique. **2008**, 84, 99-107	40
1828	Adhesive properties of laminated alginate gels for tissue engineering of layered structures. **2008**, 85, 611-8	29
1827	Hydrogels used for cell-based drug delivery. **2008**, 87, 1113-22	174
1826	Fabrication, characterization, and biocompatibility of single-walled carbon nanotube-reinforced alginate composite scaffolds manufactured using freeform fabrication technique. **2008**, 87, 406-14	79
1825	Blending polysaccharides with biodegradable polymers. II. Structure and biological response of chitosan/polycaprolactone blends. **2008**, 87, 544-54	25
1824	Internal transport properties of macroporous sugar polyacrylate hydrogels: microsphere diffusion described by phenomenological laws. **2008**, 99, 1241-9	1
1823	Antibacterial hydrogels of amino acid-based cationic amphiphiles. **2008**, 100, 756-64	89
1822	Enhancing cell affinity of nonadhesive hydrogel substrate: the role of silica hybridization. **2008**, 24, 1142-6	14
1821	Preparation and properties of physically crosslinked sodium carboxymethylcellulose/poly(vinyl alcohol) complex hydrogels. **2008**, 107, 1568-1572	54
1820	Preparation and characterization of poly(ethylene glycol) crosslinked chitosan films. **2008**, 107, 3823-3830	65
1819	Synthesis and characterization of amphiphilic biodegradable poly(glutamic acid-co-lactic acid-co-glycolic acid) by direct polycondensation. **2008**, 107, 3638-3643	20
1818	Investigation on the formation mechanisms of hydrogels made by combination of γ-ray irradiation and freeze-thawing. **2008**, 108, 1365-1372	18
1817	Polysaccharide-based artificial extracellular matrix: Preparation and characterization of three-dimensional, macroporous chitosan, and heparin composite scaffold. **2008**, 109, 3639-3644	12
1816	Structure calculation of an elastic hydrogel from sonication of rigid small molecule components. **2008**, 47, 1058-62	100
1815	Temperature-Induced Hydrogels Through Self-Assembly of Cholesterol-Substituted Star PEG-b-PLLA Copolymers: An Injectable Scaffold for Tissue Engineering. **2008**, 18, 1220-1231	128

1814	Hydrogel Scaffolds of Amphiphilic and Acidic β-Sheet Peptides. **2008**, 18, 2889-2896	42
1813	Structure Calculation of an Elastic Hydrogel from Sonication of Rigid Small Molecule Components. **2008**, 120, 1074-1078	20
1812	Hydrogels in drug delivery: Progress and challenges. **2008**, 49, 1993-2007	2595
1811	Superporous poly(2-hydroxyethyl methacrylate) based scaffolds: Preparation and characterization. **2008**, 49, 2046-2054	58
1810	In situ 1H NMR studies of free radical cryopolymerization. **2008**, 49, 3855-3858	30
1809	Effects of PVA, agar contents, and irradiation doses on properties of PVA/ws-chitosan/glycerol hydrogels made by γ-irradiation followed by freeze-thawing. **2008**, 77, 954-960	47
1808	Preparation and properties of an injectable scaffold of poly(lactic-co-glycolic acid) microparticles/chitosan hydrogel. **2008**, 1, 352-9	35
1807	Controlling J aggregation in fluorescein by bile salt hydrogels. **2008**, 197, 402-414	26
1806	Multiwall carbon nanotube scaffolds for tissue engineering purposes. **2008**, 29, 94-102	360
1805	Engineered extracellular matrices with cleavable crosslinkers for cell expansion and easy cell recovery. **2008**, 29, 4521-31	90
1804	Labeling of a self-hardening bone substitute using ruthenium tris-bipyridine complexes, for the analysis of its in vivo metabolism. **2008**, 11, 641-649	3
1803	Alginate–calcium carbonate porous microparticle hybrid hydrogels with versatile drug loading capabilities and variable mechanical strengths. **2008**, 71, 476-480	88
1802	Synthesis of poly(vinyl acetate) with fluorescence via a combination of RAFT/MADIX and "click" chemistry. **2008**, 44, 1789-1795	43
1801	Hydroxyapatite/β-tricalcium phosphate/agarose macroporous scaffolds for bone tissue engineering. **2008**, 137, 62-71	95
1800	Foaming of chitin hydrogels processed by supercritical carbon dioxide. **2008**, 47, 302-308	40
1799	Two component hydrogel with γ-amino butyric acid as potential receptor and neurotransmitter delivery system. **2008**, 64, 186-190	19
1798	Structural and functional characterisation of poly(vinyl alcohol) and heparin hydrogels. **2008**, 29, 4658-64	95
1797	Swelling properties of aspartic acid-based hydrogels. **2008**, 319, 154-158	11

1796	Controlled dual release of basic fibroblast growth factor and indomethacin from heparin-conjugated polymeric micelle. **2008**, 346, 57-63	85
1795	Biomimetic material systems for neural progenitor cell-based therapy. **2008**, 13, 806-21	86
1794	Laser Printing Cells. **2008**, 207-228	1
1793	Controlled drug delivery in tissue engineering. **2008**, 60, 229-42	327
1792	Efficient construction of therapeutics, bioconjugates, biomaterials and bioactive surfaces using azide-alkyne "click" chemistry. **2008**, 60, 958-70	440
1791	Loading dependent swelling and release properties of novel biodegradable, elastic and environmental stimuli-sensitive polyurethanes. **2008**, 131, 128-36	50
1790	Chemically controlled closed-loop insulin delivery. **2008**, 132, 2-11	210
1789	Novel applications for microbial transglutaminase beyond food processing. **2008**, 26, 559-65	109
1788	Combining nebulization-mediated transfection and polymer microarrays for the rapid determination of optimal transfection substrates. **2008**, 10, 179-84	25
1787	Photopolymerized thermosensitive hydrogels: synthesis, degradation, and cytocompatibility. **2008**, 9, 919-26	85
1786	Photo-cross-linked PLA-PEO-PLA hydrogels from self-assembled physical networks: mechanical properties and influence of assumed constitutive relationships. **2008**, 9, 2784-91	69
1785	Investigation of Spontaneous Transition from Low-Molecular-Weight Hydrogel into Macroscopic Crystals. **2008**, 8, 884-889	79
1784	Supramolecular gelling agents: can they be designed?. **2008**, 37, 2699-715	647
1783	Development of micro- and nano-porous composite materials by processing cellulose with ionic liquids and supercritical CO2. **2008**, 10, 965	137
1782	Head group modulated pH-responsive hydrogel of amino acid-based amphiphiles: entrapment and release of cytochrome c and vitamin B12. **2008**, 24, 4280-8	104
1781	Physical Properties of Hydrogel Prepared from Stereo Complex of Star-Shaped PEG-Polylactide Block Copolymers Exhibiting Temperature-Responsive Sol-Gel Transition as Cellular Scaffold for Tissue Engineering. **2008**,	
1780	Enhanced osteoblast adhesion on self-assembled nanostructured hydrogel scaffolds. **2008**, 14, 1353-64	66
1779	Reinforcement of porous alginate scaffolds by incorporating electrospun fibres. **2008**, 3, 034102	20

1778	Bioactive borate glass scaffold for bone tissue engineering. **2008**, 354, 1690-1696	109
1777	Properties of chitosan-collagen sponges and osteogenic differentiation of rat-bone-marrow stromal cells. **2008**, 37, 357-66	82
1776	Oxidized alginate-cross-linked alginate/gelatin hydrogel fibers for fabricating tubular constructs with layered smooth muscle cells and endothelial cells in collagen gels. **2008**, 9, 2036-41	73
1775	Cell encapsulation in biodegradable hydrogels for tissue engineering applications. **2008**, 14, 149-65	878
1774	Effect of particle size and charge on the network properties of microsphere-based hydrogels. **2008**, 70, 522-30	39
1773	Three-dimensional cell culture matrices: state of the art. **2008**, 14, 61-86	790
1772	Biodegradable and pH-sensitive hydrogels for cell encapsulation and controlled drug release. **2008**, 9, 1155-62	96
1771	Synthesis and evaluation of novel biodegradable hydrogels based on poly(ethylene glycol) and sebacic acid as tissue engineering scaffolds. **2008**, 9, 149-57	112
1770	A Microspheric System: Hemicellulose-based Hydrogels. **2008**, 23, 171-186	45
1769	Unlocking the potential of bile acids in synthesis, supramolecular/materials chemistry and nanoscience. **2008**, 6, 657-69	108
1768	Engineering tandem modular protein based reversible hydrogels. **2008**, 4144-6	39
1767	Correlations between structure, material properties and bioproperties in self-assembled beta-hairpin peptide hydrogels. **2008**, 139, 251-64; discussion 309-25, 419-20	104
1766	Organo-Cobalt Mediated Living Radical Polymerization of Vinyl Acetate. **2008**, 41, 2368-2373	104
1765	Effect of injectable alginate implant on cardiac remodeling and function after recent and old infarcts in rat. **2008**, 117, 1388-96	359
1764	Carbon nanotubes as structural nanofibers for hyaluronic acid hydrogel scaffolds. **2008**, 9, 505-9	114
1763	Controlled magnetic nanofiber hydrogels by clustering ferritin. **2008**, 24, 12107-11	37
1762	Salt effects on poly(N-isopropylacrylamide) phase transition thermodynamics from NMR spectroscopy. **2008**, 112, 10399-404	63
1761	Thermoreversible hydrogels from RAFT-synthesized BAB triblock copolymers: steps toward biomimetic matrices for tissue regeneration. **2008**, 9, 481-6	115

1760	Direct Observation of Early-Time Hydrogelation in beta-Hairpin Peptide Self-Assembly. **2008**, 41, 5763-5772	74
1759	Structural characterization of ionic gelator studied by dynamic light scattering and small-angle neutron scattering. **2008**, 112, 16469-77	10
1758	Directed assembly of cell-laden microgels for fabrication of 3D tissue constructs. **2008**, 105, 9522-7	488
1757	In situ cross-linking of elastin-like polypeptide block copolymers for tissue repair. **2008**, 9, 222-30	137
1756	Collagen-based biomimetic nanofibrous scaffolds: preparation and characterization of collagen/silk fibroin bicomponent nanofibrous structures. **2008**, 9, 1106-16	135
1755	In situ cross-linkable novel alginate-dextran methacrylate IPN hydrogels for biomedical applications: mechanical characterization and drug delivery properties. **2008**, 9, 2014-20	60
1754	Hydrostatic pressure effect on the electron mobility in a ZnSe/Zn 1- x Cd x Se strained heterojunction. **2008**, 17, 4606-4613	2
1753	Time-Dependent 2D Modeling of Magnetron Plasma Torch in Turbulent Flow. **2008**, 10, 328-335	5
1752	Hydrogels from polysaccharide-based materials: Fundamentals and applications in regenerative medicine. **2008**, 485-514	7
1751	Alginate hydrogels as matrices for tissue engineering. **2008**, 515-532	4
1750	Bioengineering approaches to controlled protein delivery. **2008**, 63, 513-9	45
1749	Agarose-gelatin conjugate membrane enhances proliferation of adherent cells enclosed in hollow-core microcapsules. **2008**, 19, 937-44	16
1748	Effect of the NaOH Concentration and Temperature on the Dissolution Mechanisms of Lactoglobulin Gels in Alkali. **2008**, 4,	17
1747	Engineering Cellular Microenvironments. **2008**, 536-553	
1746	Toward New Materials Prepared via the RAFT Process: From Drug Delivery to Optoelectronics?. 483-535	4
1745	Screening the cellular microenvironment: a role for microfluidics. **2008**, 1, 75-93	22
1744	Tuning the mechanical and bioresponsive properties of peptide-amphiphile nanofiber networks. **2008**, 19, 665-76	28
1743	Kinetic Study of Bovine Serum Albumin (BSA) Released from Alginate-Ca2+/PNIPAAm Hydrogels. **2008**, 266, 108-113	12

1742	Influence of Ultrasound Treatment on Assembling Structures and Properties of Supramolecular Hydrogels Formed from 1,3,5-Benzenetricarboxylic Acid and 4-Hydroxypyridine. **2008**, 37, 554-555	12
1741	Measuring macrodiffusion coefficients in microbicide hydrogels via postphotoactivation scanning. **2008**, 9, 748-51	10
1740	Regenerative Medicine in the Cornea. **2008**, 1060-1071	3
1739	Current strategies and applications of tissue engineering in dentistry--a review part 1. **2009**, 36, 577-9, 581-2	4
1738	Three-dimensional synthetic niche components to control germ cell proliferation. **2009**, 15, 255-62	23
1737	Fabrication of microchannels in methacrylated hyaluronic acid hydrogels. **2009**,	
1736	Encapsulated three-dimensional culture supports development of nonhuman primate secondary follicles. **2009**, 81, 587-94	148
1735	Mechanically robust and bioadhesive collagen and photocrosslinkable hyaluronic acid semi-interpenetrating networks. **2009**, 15, 1645-53	148
1734	Hydrogels for Tissue Engineering. **2009**, 495-517	6
1733	W-plug via electromigration in CMOS process. **2009**, 30, 056001	3
1732	Studies on chemically crosslinkable carboxy terminated-poly(propylene fumarate-co-ethylene glycol)-acrylamide hydrogel as an injectable biomaterial. **2009**, 4, 015002	8
1731	A phase diagram for microfabrication of geometrically controlled hydrogel scaffolds. **2009**, 1, 045002	76
1730	Dielectric properties of thermo-reversible hydrogels: the case of a dextran copolymer grafted with poly(N-isopropylacrylamide). **2009**, 113, 11421-8	20
1729	Synthesis and characterization of thermo- and pH-sensitive kappa-carrageenan-g-poly(methacrylic acid)/poly(N,N-diethylacrylamide) semi-IPN hydrogel. **2009**, 115, 339-346	65
1728	Radiation synthesis of pH-sensitive hydrogels from ╫cyclodextrin-grafted PEG and acrylic acid for drug delivery. **2009**, 116, 148-152	14
1727	Design and evaluation of novel fast forming pilocarpine-loaded ocular hydrogels for sustained pharmacological response. **2009**, 137, 152-9	65
1726	Ischemic heart diseases: current treatments and future. **2009**, 140, 194-202	53
1725	Preparation and characterization of chitosan/polyguluronate nanoparticles for siRNA delivery. **2009**, 139, 146-52	77

1724	Drug releasing systems in cardiovascular tissue engineering. **2009**, 13, 422-39	48
1723	Tailoring vancomycin release from beta-TCP/agarose scaffolds. **2009**, 37, 249-56	37
1722	Scaffold-Mediated 2D Cellular Orientations for Construction of Three Dimensionally Engineered Tissues Composed of Oriented Cells and Extracellular Matrices. **2009**, 19, 1001-1007	16
1721	Biodegradable Polymer Crosslinker: Independent Control of Stiffness, Toughness, and Hydrogel Degradation Rate. **2009**, 19, 3056-3062	71
1720	Shaped Films of Ionotropic Hydrogels Fabricated Using Templates of Patterned Paper. **2009**, 21, 445-450	30
1719	Hydrogels in regenerative medicine. **2009**, 21, 3307-29	1971
1718	Controlled growth factor delivery for tissue engineering. **2009**, 21, 3269-85	320
1717	Synthesis of Single-Crystal Tetra(4-pyridyl)porphyrin Rectangular Nanotubes in the Vapor Phase. **2009**, 121, 2544-2547	8
1716	Enhancing gelation ability of a dendritic gelator through complexation with a polyelectrolyte. **2009**, 15, 2352-61	25
1715	Tuning of cell proliferation on tough gels by critical charge effect. **2009**, 88, 74-83	46
1714	Effect of dual growth factor delivery on chondrogenic differentiation of rabbit marrow mesenchymal stem cells encapsulated in injectable hydrogel composites. **2009**, 88, 889-97	90
1713	Tissue response and orbital floor regeneration using cyclic acetal hydrogels. **2009**, 90, 819-29	28
1712	Cellular responses to degradable cyclic acetal modified PEG hydrogels. **2009**, 90, 863-73	10
1711	Development of biodegradable and injectable macromers based on poly(ethylene glycol) and diacid monomers. **2009**, 90, 1010-20	7
1710	Bio-functionalized star PEG-coated PVDF surfaces for cytocompatibility-improved implant components. **2010**, 92, 1538-51	7
1709	One-step preparation of glycopeptide microspheres based on alpha-amino acid-N-carboxyanhydride polymerization using interfacial protocols. **2009**, 89, 45-54	2
1708	Hybrid multicomponent hydrogels for tissue engineering. **2009**, 9, 140-56	213
1707	Injectable microsphere/hydrogel combination systems for localized protein delivery. **2009**, 9, 671-6	39

1706	Shear-reversibly crosslinked alginate hydrogels for tissue engineering. **2009**, 9, 895-901	87
1705	Synthesis of single-crystal tetra(4-pyridyl)porphyrin rectangular nanotubes in the vapor phase. **2009**, 48, 2506-9	65
1704	Regenerative medicine bioprocessing: concentration and behavior of adherent cell suspensions and pastes. **2009**, 103, 1236-47	17
1703	Hydrogels as extracellular matrix mimics for 3D cell culture. **2009**, 103, 655-63	1816
1702	Swelling properties of CMC-g-poly (AAm-co-AMPS) superabsorbent hydrogel. **2009**, 113, 3442-3449	56
1701	A versatile approach to develop porous hydrogels with a regular pore distribution and investigation of their physicomechanical properties. **2009**, 114, 2204-2212	12
1700	Synthesis, characterization, and application of composite alginate microspheres with magnetic and fluorescent functionalities. **2009**, 113, 4042-4051	17
1699	Physical, chemical and in vitro biological profile of chitosan hybrid membrane as a function of organosiloxane concentration. **2009**, 5, 346-55	90
1698	Biodegradable hydrogels based on novel photopolymerizable guar gum-methacrylate macromonomers for in situ fabrication of tissue engineering scaffolds. **2009**, 5, 3441-52	60
1697	Biocompatibility of amphiphilic diblock copolypeptide hydrogels in the central nervous system. **2009**, 30, 2881-98	119
1696	Molecular dynamics simulation study of P (VP-co-HEMA) hydrogels: effect of water content on equilibrium structures and mechanical properties. **2009**, 30, 6130-41	61
1695	Thermal analysis of PVA/CNTs 2D membrane. **2009**, 97, 859-864	20
1694	Synthesis and characterization of biodegradable poly (ethylene glycol) and poly (caprolactone diol) end capped poly (propylene fumarate) cross linked amphiphilic hydrogel as tissue engineering scaffold material. **2009**, 20 Suppl 1, S115-22	17
1693	Surface modification of hydrogels based on poly(2-hydroxyethyl methacrylate) with extracellular matrix proteins. **2009**, 20, 909-15	20
1692	Preparation and characterization of an injectable composite. **2009**, 20, 1245-53	42
1691	Biocompatibility of implantable electrodes coated with PVA films in the brain of rats: a histological evaluation. **2009**, 24, 393-396	4
1690	Polyelectrolyte multilayer coated nanofibrous mats: Controlled surface morphology and cell culture. **2009**, 10, 419-424	9
1689	Facile preparation of biodegradable glycol chitosan hydrogels using divinyladipate as a crosslinker. **2009**, 17, 734-738	8

1688	Supramolecular hydrogels instantaneously formed by inclusion complexation between amphiphilic oligomers and □-cyclodextrins. **2009**, 17, 156-162	11
1687	Novel injectable gel (system) as a vehicle for human articular chondrocytes in cartilage tissue regeneration. **2009**, 3, 97-106	62
1686	Role of electrospun fibre diameter and corresponding specific surface area (SSA) on cell attachment. **2009**, 3, 269-79	60
1685	Initial evaluation of vascular ingrowth into superporous hydrogels. **2009**, 3, 486-90	20
1684	Preparation of fast pH-responsive ferric carboxymethylcellulose/poly(vinyl alcohol) double-network microparticles. **2009**, 58, 112-115	27
1683	Preparation of novel bilayer hydrogels by combination of irradiation and freeze□thawing and their physical and biological properties. **2009**, 58, 1291-1298	7
1682	Stabilization of polymer-hydrogel capsules via thiol-disulfide exchange. **2009**, 5, 2601-10	87
1681	Fabrication of biodegradable poly(trimethylene carbonate) networks for potential tissue engineering scaffold applications. **2009**, 20, 742-747	14
1680	Formation and properties of supramolecular hydrogels based on 1,2,4,5-benzene tetracarboxylic acid and 2-amino-3-hydroxy pyridine. **2009**, 20, 558-565	4
1679	Alkenyl-functionalized precursors for renewable hydrogels design. **2009**, 47, 3595-3606	41
1678	In vitro drug release behavior from a novel thermosensitive composite hydrogel based on Pluronic f127 and poly(ethylene glycol)-poly(epsilon-caprolactone)-poly(ethylene glycol) copolymer. **2009**, 9, 8	50
1677	Genipin-crosslinked casein hydrogels for controlled drug delivery. **2009**, 373, 41-7	138
1676	Facile fabrication of well-defined hydrogel beads with magnetic nanocomposite shells. **2009**, 376, 92-8	46
1675	The effect of photopolymerization on stem cells embedded in hydrogels. **2009**, 30, 344-53	310
1674	Self-assembled prodrugs: an enzymatically triggered drug-delivery platform. **2009**, 30, 383-93	131
1673	Silk fibroin/polyacrylamide semi-interpenetrating network hydrogels for controlled drug release. **2009**, 30, 2826-36	237
1672	An injectable, in situ enzymatically gellable, gelatin derivative for drug delivery and tissue engineering. **2009**, 30, 3371-7	253
1671	Biocompatibility of injectable chitosan-phospholipid implant systems. **2009**, 30, 3818-24	75

1670	Poly(vinyl alcohol)/poly(acrylic acid) hydrogel coatings for improving electrode-neural tissue interface. **2009**, 30, 4143-51	143
1669	The use of injectable, thermosensitive poly(organophosphazene)-RGD conjugates for the enhancement of mesenchymal stem cell osteogenic differentiation. **2009**, 30, 6295-308	81
1668	Chitins and chitosans for the repair of wounded skin, nerve, cartilage and bone. **2009**, 76, 167-182	868
1667	Hydrophobic and oleophobic surface modification using fluorinated bis-urea and bis-amide gelators. **2009**, 130, 410-417	23
1666	In situ formation of chitosan hydrogels with anionic polysaccharides. **2009**, 19, 149-151	14
1665	Memory effects of polymerized 2-hydroxyethylmethacrylate/4-cyano-. **2009**, 2, 1405-1410	1
1664	Supramolecular organogels formed by monochain derivatives of succinic acid. **2009**, 329, 372-5	17
1663	Synthesis and dual response of ionic nanocomposite hydrogels with ultrahigh tensibility and transparence. **2009**, 50, 1933-1938	56
1662	Assembled alginate/chitosan micro-shells for removal of organic pollutants. **2009**, 50, 2841-2846	40
1661	Heteropolyacid-conjugated chitosan matrix for triphase catalyst. **2009**, 50, 6076-6082	15
1660	The preparation of poly(2-hydroxyethyl methacrylate) and poly{(2-hydroxyethyl methacrylate)-co-[poly(ethylene glycol) methyl ether methacrylate]} by photoinitiated polymerisation-induced phase separation in water. **2009**, 50, 5918-5927	25
1659	The reversible addition-fragmentation chain transfer (RAFT) miniemulsion polymerization of vinyl acetate mediated by xanthate. **2009**, 20, 733-737	9
1658	Facile synthesis of high-magnetization □Fe2O3/alginate/silica microspheres for isolation of plasma DNA. **2009**, 341, 33-39	21
1657	Two-dimensional scaffold layer formations on a solid surface through xanthan polysaccharide: temperature effect. **2009**, 74, 136-9	4
1656	Hydrogel based on interpenetrating polymer networks of dextran and gelatin for vascular tissue engineering. **2009**, 30, 196-207	212
1655	Arginine-glycine-aspartic acid modified rosette nanotube-hydrogel composites for bone tissue engineering. **2009**, 30, 1309-20	118
1654	Injectable chitosan-based hydrogels for cartilage tissue engineering. **2009**, 30, 2544-51	377
1653	A polymeric composite carrier for oral delivery of peptide drugs: Bilaminated hydrogel film loaded with nanoparticles. **2009**, 45, 368-376	29

1652	Improved polyHEMA–DAQ films for the optical analysis of nitrite. **2009**, 45, 1516-1523	16
1651	Inhomogeneous swelling of a gel in equilibrium with a solvent and mechanical load. **2009**, 46, 3282-3289	371
1650	Self-assembly of a swollen chitosan/chondroitin sulfate hydrogel by outward diffusion of the chondroitin sulfate chains. **2009**, 5, 2601-9	51
1649	Biodegradable in situ gel-forming controlled drug delivery system based on thermosensitive PCL-PEG-PCL hydrogel. Part 2: sol-gel-sol transition and drug delivery behavior. **2009**, 5, 3358-70	163
1648	Fmoc-diphenylalanine self-assembly mechanism induces apparent pKa shifts. **2009**, 25, 9447-53	332
1647	Physical hydrogels photo-cross-linked from self-assembled macromers for potential use in tissue engineering. **2009**, 10, 3182-7	31
1646	Electrospinning of polysaccharides for regenerative medicine. **2009**, 61, 1020-32	426
1645	Structural Analysis and Mechanical Characterization of Hyaluronic Acid-Based Doubly Cross-Linked Networks. **2009**, 42, 537-546	107
1644	Tuning the pH responsiveness of beta-hairpin peptide folding, self-assembly, and hydrogel material formation. **2009**, 10, 2619-25	149
1643	Spherulitic networks: from structure to rheological property. **2009**, 113, 4549-54	20
1642	Synthesis of macroporous thermosensitive hydrogels: a novel method of controlling pore size. **2009**, 25, 3249-54	42
1641	Semisynthesis of a controlled stimuli-responsive alginate hydrogel. **2009**, 10, 609-16	97
1640	De novo design of saccharide-peptide hydrogels as synthetic scaffolds for tailored cell responses. **2009**, 131, 17638-46	62
1639	Direct sampling from human liver tissue cross sections for electrophoretic analysis of doxorubicin. **2009**, 81, 3321-8	12
1638	Influence of synthetic polyelectrolytes on the growth and properties of hyaluronan-chitosan multilayers. **2009**, 10, 294-301	37
1637	Extended investigation of the aqueous self-assembling behavior of a newly designed fluorinated surfactant. **2009**, 25, 13368-75	13
1636	Dependence of Self-Assembled Peptide Hydrogel Network Structure on Local Fibril Nanostructure. **2009**, 42, 7137-7145	76
1635	Facile in-situ fabrication of novel organic nanoparticle hydrogels with excellent mechanical properties. **2009**, 19, 7340	61

1634	pH-responsive jello: gelatin gels containing fatty acid vesicles. **2009**, 25, 8519-25	42
1633	Effect of swelling ratio of injectable hydrogel composites on chondrogenic differentiation of encapsulated rabbit marrow mesenchymal stem cells in vitro. **2009**, 10, 541-6	256
1632	Ion and pH effect on the lower critical solution temperature phase behavior in neutral and acidic poly(organophosphazene) counterparts. **2009**, 25, 2407-18	30
1631	Effect of monomeric sequence on mechanical properties of P(VP-co-HEMA) hydrogels at low hydration. **2009**, 113, 6604-12	27
1630	Combinatorial library of primaryalkylammonium dicarboxylate gelators: a supramolecular synthon approach. **2009**, 25, 8742-50	39
1629	Gelation Behavior of Thermo-Responsive Poly(ethylene oxide) and Poly(propylene oxide) Multiblock Polycarbonates. **2009**, 46, 397-404	4
1628	Hydrogels cross-linked by native chemical ligation. **2009**, 10, 2194-200	101
1627	Design and synthesis of biomimetic hydrogel scaffolds with controlled organization of cyclic RGD peptides. **2009**, 20, 333-9	86
1626	Solvent programmable polymers based on restricted rotation. **2009**, 131, 12062-3	8
1625	Three-dimensional cell cultures in toxicology. **2010**, 26, 117-38	57
1624	Energy landscapes associated with the self-aggregation of an alanine-based oligopeptide (AAKA)4. **2009**, 113, 6054-61	16
1623	Biocompatible Polymeric Hydrogels with Tunable Adhesion to Both Hydrophobic and Hydrophilic Surfaces. **2009**,	1
1622	Finite-Size Networks from Cylindrical Polyelectrolyte Brushes and Porphyrins. **2009**, 42, 830-840	62
1621	Intracoronary injection of in situ forming alginate hydrogel reverses left ventricular remodeling after myocardial infarction in Swine. **2009**, 54, 1014-23	263
1620	Vortex-induced injectable silk fibroin hydrogels. **2009**, 97, 2044-50	271
1619	Optical and Electro-Optical Properties of Poly(2-hydroxyethylmethacrylate)/5CB Systems. **2009**, 502, 77-86	2
1618	Supramolecular synthons in noncovalent synthesis of a class of gelators derived from simple organic salts: instant gelation of organic fluids at room temperature via in situ synthesis of the gelators. **2009**, 74, 7111-21	47
1617	A pH-Sensitive Hydrogel with Hydrophobic Association for Controlled Release of Poorly Water-Soluble Drugs. **2009**, 46, 816-820	6

1616	Mammalian Cell Culture on a Novel Chitosan-Based Biomaterial Crosslinked with Gluteraldehyde. **2009**, 283-284, 181-190	4
1615	Glycosyl-nucleoside lipids as low-molecular-weight gelators. **2009**, 25, 8447-50	63
1614	Supramolecular electroactive organogel and conducting nanofibers with C3-symmetrical architectures. **2009**, 19, 4495	54
1613	In situ gelation of P(NIPAM-HEMA) microgel dispersion and its applications as injectable 3D cell scaffold. **2009**, 10, 1410-5	110
1612	Access to poly-beta-peptides with functionalized side chains and end groups via controlled ring-opening polymerization of beta-lactams. **2009**, 131, 1589-97	64
1611	Novel Organometallic Gelators with Enhanced Amphiphilic Character: Structure□Property Correlations, Principles for Design, and Diversity of Gelation. **2009**, 28, 1377-1382	34
1610	Organogelation and hydrogelation of low-molecular-weight amphiphilic dipeptides: pH responsiveness in phase-selective gelation and dye removal. **2009**, 25, 8639-48	142
1609	Enzyme-instructed molecular self-assembly confers nanofibers and a supramolecular hydrogel of taxol derivative. **2009**, 131, 13576-7	334
1608	Effect of cross-linking on the diffusion of water, ions, and small molecules in hydrogels. **2009**, 113, 3512-20	132
1607	Versatile strategy for the synthesis of dendronlike polypeptide/linear poly(epsilon-caprolactone) block copolymers via click chemistry. **2009**, 10, 1140-8	50
1606	Dendron-like Polypeptide/Linear Poly(ethylene oxide) Biohybrids with Both Asymmetrical and Symmetrical Topologies Synthesized via the Combination of Click Chemistry and Ring-Opening Polymerization. **2009**, 42, 104-113	55
1605	Conducting bio-materials based on gellan gum hydrogels. **2009**, 5, 3430	77
1604	pH-Responsive self-assembly in an aqueous mixture of surfactant and hydrophobic amino acid mimic. **2009**, 5, 2919	73
1603	Zwitterionic hydrogels: an in vivo implantation study. **2009**, 20, 1845-59	92
1602	Two-component thermoreversible hydrogels of melamine and gallic acid. **2009**, 25, 8457-61	72
1601	Material Properties of Alginates. **2009**, 1-53	50
1600	Sequence-dependent gelation kinetics of □hairpin peptide hydrogels. **2009**, 42, 8443-8450	47
1599	Effect of monomer structure on the gelation of a class of metallo-supramolecular polymers. **2009**, 5, 4647	43

1598	A new trinuclear Cu(II) complex of inositol as a hydrogelator. **2009**, 2341-3	35
1597	Rapidly in situ forming hydrophobically-modified chitosan hydrogels via pH-responsive nanostructure transformation. **2009**, 5, 962	30
1596	Counterion dependent hydrogelation of amino acid based amphiphiles: switching from non-gelators to gelators and facile synthesis of silver nanoparticles. **2009**, 5, 1607	52
1595	Neurite outgrowth at the interface of 2D and 3D growth environments. **2009**, 6, 016002	36
1594	Fabrication and properties of cucurbit[6]uril induced thermo-responsive supramolecular hydrogels. **2009**, 5, 3511	32
1593	Dynamic cell behavior on synthetic hydrogels with different charge densities. **2009**, 5, 1804	48
1592	A novel single precursor-based biodegradable hydrogel with enhanced mechanical properties. **2009** , 5, 3831	55
1591	Adipose-derived stem cells for soft tissue reconstruction. **2009**, 4, 109-17	67
1590	Extracellular matrix and tissue engineering applications. **2009**, 19, 5474	54
1589	Genetically designed Peptide-based molecular materials. **2009**, 3, 1606-15	78
1588	Adult stem cells in tissue engineering. **2009**, 6, 621-40	32
1587	Layer-by-layer self-assembly of modified hyaluronic acid/chitosan based on hydrogen bonding. **2009**, 10, 2632-9	64
1586	Cyclic arginine-glycine-aspartate peptides enhance three-dimensional stem cell osteogenic differentiation. **2009**, 15, 263-72	78
1585	Hydrogels and Tissue Engineering. **2009**, 1-8	8
1584	Synthesis by AGET ATRP of degradable nanogel precursors for in situ formation of nanostructured hyaluronic acid hydrogel. **2009**, 10, 2499-507	89
1583	Tissue engineering in endodontics. **2009**, 51, 495-507	34
1582	From Supramolecular Hydrogel to Macroscopic Spheres: Nucleation-controlled Polymorphic Transition. **2009**, 38, 472-473	4
1581	Theoretical Study on the Properties of Cationic, Amidoamine Oxide and Betaine Viscoelastic Diverting Surfactants in Gas Phase and Water Solution. **2009**,	1

1580	Novel Biomaterials for Cartilage Tissue Engineering. **2009**, 5, 51-57	17
1579	Nanoparticles for Biomedical Imaging: Fundamentals of Clinical Translation. **2010**, 9, 7290.2010.00031	128
1578	Chitosan Scaffolds for Bone Regeneration. **2010**, 223-239	2
1577	Nano- and Microgels Through Addition Reactions of Functional Oligomers and Polymers. **2010**, 65-93	11
1576	Hydrolytically degradable poly(ethylene glycol) hydrogel scaffolds with tunable degradation and mechanical properties. **2010**, 11, 1348-57	345
1575	Chitosan-based hydrogels for controlled, localized drug delivery. **2010**, 62, 83-99	1716
1574	Preparation of enzymatically recyclable hydrogels through the formation of inclusion complexes of amylose in a vine-twining polymerization. **2010**, 5, 1627-33	23
1573	Designing Three-Dimensional Materials at the Interface to Biology. **2010**, 163-192	9
1572	The effect of spacer arm length of an adhesion ligand coupled to an alginate gel on the control of fibroblast phenotype. **2010**, 31, 5545-51	49
1571	Synthesis and properties of thermo- and pH-sensitive poly(diallyldimethylammonium chloride)/poly(N,N-diethylacrylamide) semi-IPN hydrogel. **2010**, 159, 247-256	61
1570	Covalent grafting of polyacrylamide-based hydrogels to a polypropylene surface activated with functional polyperoxide. **2010**, 70, 647-655	14
1569	Supramolecular hydrogels for enzymatically triggered self-immolative drug delivery. **2010**, 66, 2614-2618	41
1568	Tissue engineering and regenerative medicine research perspectives for pediatric surgery. **2010**, 26, 557-73	19
1567	Injectable materials for the treatment of myocardial infarction and heart failure: the promise of decellularized matrices. **2010**, 3, 478-86	140
1566	Effect of AAc-GA content on swelling behaviors of temperature-sensitive PNIPAAm-based hydrogels. **2010**, 4, 84-89	2
1565	Effect of Solvent Composition on Porosity, Surface Morphology and Thermal Behavior of Metal Alginate Prepared from Algae (Undaria pinnatifida). **2010**, 18, 45-56	8
1564	Cell encapsulation using biopolymer gels for regenerative medicine. **2010**, 32, 733-42	314
1563	Thermal properties of amphiphilic biodegradable triblock copolymer of l,l-lactide and ethylene glycol. **2010**, 101, 229-233	17

1562	Intradiscal drug delivery system for the treatment of low back pain. **2010**, 92, 378-85	21
1561	Collagen type I hydrogel allows migration, proliferation, and osteogenic differentiation of rat bone marrow stromal cells. **2010**, 94, 442-9	60
1560	Diffusion of interleukin-2 from cells overlaid with cytocompatible enzyme-crosslinked gelatin hydrogels. **2010**, 95, 25-32	30
1559	Evaluation of the biocompatibility of novel peptide hydrogel in rabbit eye. **2010**, 93, 324-32	28
1558	In vivo outcomes of tissue-engineered osteochondral grafts. **2010**, 93, 164-74	24
1557	Injectable hyaluronic acid-dextran hydrogels and effects of implantation in ferret vocal fold. **2010**, 93, 386-93	33
1556	Smart Hydrogels Co-switched by Hydrogen Bonds and π Stacking for Continuously Regulated Controlled-Release System. **2010**, 20, 669-676	56
1555	Peptide-Based Biomimetic Materials. **2010**, 129-181	
1554	Development of Biomimetic Chitosan-Based Hydrogels Using an Elastin-Like Polymer. **2010**, 12, B37-B44	20
1553	ChemInform Abstract: Hydrogels for Tissue Engineering. **2010**, 32, no-no	1
1552	Macroporous Poly(N-isopropylamide-co-acrylamide) Hydrogels Prepared by Two-Step Polymerization for Drug Delivery Applications. **2010**, 33, 1943-1949	6
1551	Amino acid based low-molecular-weight ionogels as efficient dye-adsorbing agents and templates for the synthesis of TiO(2) nanoparticles. **2010**, 16, 1493-505	74
1550	Versatile supramolecular gelling agents: unusual stabilization of physical gels by lithium ions. **2010**, 16, 13955-9	1
1549	Polysaccharide-modified synthetic polymeric biomaterials. **2010**, 94, 128-40	217
1548	Microporous cell-laden hydrogels for engineered tissue constructs. **2010**, 106, 138-48	72
1547	Alumina-supported microwave synthesis of Cassia marginata seed gum-graft-polyacrylamide. **2010**, 117, n/a-n/a	6
1546	Collagen Cryogel Cross-Linked by Dialdehyde Starch. **2010**, 295, 100-107	87
1545	The design of biodegradable microcarriers for induced cell aggregation. **2010**, 10, 156-63	41

1544	In vitro and in vivo degradation of an injectable bone repair composite. **2010**, 95, 1736-1742	26
1543	Synthesis and characterization of in situ cross-linked hydrogel based on self-assembly of thiol-modified chitosan with PEG diacrylate using Michael type addition. **2010**, 51, 639-646	102
1542	Large deformation and electrochemistry of polyelectrolyte gels. **2010**, 58, 558-577	192
1541	A thermodynamic model of physical gels. **2010**, 58, 2083-2099	30
1540	Spontaneous patterning and nanoparticle encapsulation in carboxymethylcellulose/alginate/dextran hydrogels and sponges. **2010**, 30, 352-356	19
1539	Using hydrophilic polysaccharide to modify supramolecular hydrogel from a low-molecular-mass gelator. **2010**, 30, 804-811	12
1538	Injectable biodegradable hydrogels with tunable mechanical properties for the stimulation of neurogenesic differentiation of human mesenchymal stem cells in 3D culture. **2010**, 31, 1148-57	209
1537	Decoupled control of stiffness and permeability with a cell-encapsulating poly(ethylene glycol) dimethacrylate hydrogel. **2010**, 31, 4864-71	76
1536	Biodegradable poly(ethylene glycol) hydrogels based on a self-elimination degradation mechanism. **2010**, 31, 6675-84	57
1535	Multi-lineage differentiation of hMSCs encapsulated in thermo-reversible hydrogel using a co-culture system with differentiated cells. **2010**, 31, 7275-87	16
1534	Rapid construction of mechanically- confined multi- cellular structures using dendrimeric intercellular linker. **2010**, 31, 7455-67	21
1533	Supramolecular gelation of alcohol and water by synthetic amphiphilic gallic acid derivatives. **2010**, 66, 1661-1666	5
1532	Preparation and gelling properties of sugar-contained low-molecular-mass gelators: Combination of cholesterol and linear glucose. **2010**, 66, 2961-2968	30
1531	Glycosyl-nucleoside fluorinated amphiphiles as components of nanostructured hydrogels. **2010**, 51, 1012-1015	35
1530	Influence of the grafted chain length on responsive behaviors of the grafted poly(DEA-co-DMAEMA) hydrogel. **2010**, 149, 34-43	13
1529	Magnetic hydrogels with supracolloidal structures prepared by suspension polymerization stabilized by Fe(2)O(3) nanoparticles. **2010**, 6, 275-81	94
1528	In vitro differentiation of chondrogenic ATDC5 cells is enhanced by culturing on synthetic hydrogels with various charge densities. **2010**, 6, 494-501	67
1527	Modified PHBV scaffolds by in situ UV polymerization: structural characteristic, mechanical properties and bone mesenchymal stem cell compatibility. **2010**, 6, 1329-36	47

1526	Effects of TGF-beta3 and preculture period of osteogenic cells on the chondrogenic differentiation of rabbit marrow mesenchymal stem cells encapsulated in a bilayered hydrogel composite. **2010**, 6, 2920-31	57
1525	Synthesis, characterization and cytotoxicity of photo-crosslinked maleic chitosan-polyethylene glycol diacrylate hybrid hydrogels. **2010**, 6, 3908-18	99
1524	Synthesis and characterization of degradable bioconjugated hydrogels with hyperbranched multifunctional cross-linkers. **2010**, 6, 4189-98	8
1523	Novel technique to control inner and outer diameter of calcium-alginate hydrogel hollow microfibers, and immobilization of mammalian cells. **2010**, 49, 143-147	54
1522	The cavity-to-cavity migration of leukaemic cells through 3D honey-combed hydrogels with adjustable internal dimension and stiffness. **2010**, 31, 2201-8	40
1521	The application of 3D micropatterning of agarose substrate for cell culture and in situ comet assays. **2010**, 31, 3156-65	46
1520	Bioactive modification of poly(ethylene glycol) hydrogels for tissue engineering. **2010**, 31, 4639-56	929
1519	Cell-laden microengineered gelatin methacrylate hydrogels. **2010**, 31, 5536-44	1458
1518	Epoxy-amine synthesised hydrogel scaffolds for soft-tissue engineering. **2010**, 31, 6454-67	51
1517	An injectable oxidized carboxymethylcellulose/N-succinyl-chitosan hydrogel system for protein delivery. **2010**, 160, 779-787	89
1516	Self-assembly behavior of peptide amphiphiles (PAs) with different length of hydrophobic alkyl tails. **2010**, 81, 329-35	46
1515	Synthesis and swelling behavior of acrylatedstarch-g-poly (acrylic acid) and acrylatedstarch-g-poly (acrylamide) hydrogels. **2010**, 79, 933-940	73
1514	A prospective, randomised, controlled, double-blind phase I-II clinical trial on the safety of A-Part Gel as adhesion prophylaxis after major abdominal surgery versus non-treated group. **2010**, 10, 20	4
1513	Fabrication and Characterization of Thermoresponsive Films Deposited by an RF Plasma Reactor. **2010**, 7, 992-1000	12
1512	Surface and mechanical properties of some new biopolyurethane composites. **2010**, 31, 1956-1964	9
1511	. **2010**,	6
1510	Chiral gels derived from secondary ammonium salts of (1R,3S)-(+)-camphoric acid. **2010**, 6, 848-58	6
1509	Materiomics: biological protein materials, from nano to macro. **2010**, 3, 127-48	38

1508	Preparation of novel bioactive nano-calcium phosphate-hydrogel composites. **2010**, 11, 014103	32
1507	Hydrophobic nanoparticles improve permeability of cell-encapsulating poly(ethylene glycol) hydrogels while maintaining patternability. **2010**, 107, 20709-14	32
1506	Bilateral comparison on the calibrations of hydrometers for liquid density between INRIM Italy and INMETRO Brazil: SIM.M.D-S2. **2010**, 47, 07011-07011	1
1505	Hydrogels for Tissue Engineering Applications. **2010**, 203-225	23
1504	Double Network Hydrogels as Tough, Durable Tissue Substitutes. **2010**, 285-301	6
1503	A newly developed chemically crosslinked dextran-poly(ethylene glycol) hydrogel for cartilage tissue engineering. **2010**, 16, 565-73	45
1502	Cell biology and microsystems - what a combination. **2010**,	1
1501	Poroelasticity of a covalently crosslinked alginate hydrogel under compression. **2010**, 108, 113514	57
1500	Fibroblast growth factors: biology, function, and application for tissue regeneration. **2010**, 2010, 218142	326
1499	Synthesis and Characterization of Carboxymethylcellulose-Methacrylate Hydrogel Cell Scaffolds. **2010**, 2, 252-264	52
1498	Thermo-sensitive hydrogels. **2010**, 91-95	
1497	Photo-cross-linked PDMSstar-PEG hydrogels: synthesis, characterization, and potential application for tissue engineering scaffolds. **2010**, 11, 648-56	94
1496	Aromatic-aromatic interactions induce the self-assembly of pentapeptidic derivatives in water to form nanofibers and supramolecular hydrogels. **2010**, 132, 2719-28	302
1495	A smart supramolecular hydrogel of N(alpha)-(4-n-alkyloxybenzoyl)-L-histidine exhibiting pH-modulated properties. **2010**, 26, 7761-7	60
1494	Micropatterned Hydrogels for Stem Cell Culture. **2010**, 119-152	3
1493	Injectable Materials for Myocardial Tissue Engineering. **2010**, 133-163	1
1492	Two-photon lithography in the future of cell-based therapeutics and regenerative medicine: a review of techniques for hydrogel patterning and controlled release. **2010**, 2, 1669-80	34
1491	Magnetically Sensitive Alginate-Templated Polyelectrolyte Multilayer Microcapsules for Controlled Release of Doxorubicin. **2010**, 114, 7673-7679	62

1490	Hydrogels in regenerative medicine: towards understanding structure-function relationships. **2010**, 5, 809-21	18
1489	Biodegradation of poly(2-hydroxyethyl methacrylate) (PHEMA) and poly{(2-hydroxyethyl methacrylate)-co-[poly(ethylene glycol) methyl ether methacrylate]} hydrogels containing peptide-based cross-linking agents. **2010**, 11, 2949-59	42
1488	PEG–POSS Multiblock Polyurethanes: Synthesis, Characterization, and Hydrogel Formation. **2010**, 43, 7637-7649	107
1487	Unique temperature-dependent supramolecular self-assembly: from hierarchical 1D nanostructures to super hydrogel. **2010**, 114, 11725-30	93
1486	Degradable, thermo-sensitive poly(N-isopropyl acrylamide)-based scaffolds with controlled porosity for tissue engineering applications. **2010**, 11, 2583-92	142
1485	In situ simultaneous protein-polysaccharide bioconjugation and hydrogelation using horseradish peroxidase. **2010**, 11, 1370-5	39
1484	Engineering hydrogels as extracellular matrix mimics. **2010**, 5, 469-84	595
1483	Biomaterials-based microfluidics for engineered tissue constructs. **2010**, 6, 4999	38
1482	Swelling and degradation of hydrogels synthesized with degradable poly(β-amino ester) crosslinkers. **2010**, 1, 860	47
1481	Hydrogels formed through regulated self-organization of gradually charging chitosan in solution of xanthan. **2010**, 12, 1187	41
1480	Nanomaterials for Improved Orthopedic and Bone Tissue Engineering Applications. **2010**, 205-241	4
1479	Design of renewable hydrogel release systems from fiberboard mill wastewater. **2010**, 11, 1406-11	48
1478	3D cell growth and proliferation on a RGD functionalized nanofibrillar hydrogel based on a conformationally restricted residue containing dipeptide. **2010**, 2, 2839-48	47
1477	Cooperative effect of stress and ion displacement on the dynamics of cross-link unzipping and rupture of alginate gels. **2010**, 11, 1571-8	28
1476	Effects of surfactant and gentle agitation on inkjet dispensing of living cells. **2010**, 2, 025003	67
1475	De Novo Design of a Shear-Thin Recoverable Peptide-Based Hydrogel Capable of Intrafibrillar Photopolymerization. **2010**, 43, 7924-7930	46
1474	Molecular nanofibers of olsalazine form supramolecular hydrogels for reductive release of an anti-inflammatory agent. **2010**, 132, 17707-9	157
1473	Peptide hydrogel as an intraocular drug delivery system for inhibition of postoperative scarring formation. **2010**, 2, 2663-71	74

1472	Quantitative Poly(vinyl alcohol) Modification in Ionic Liquids: Esterification and Urethanation with Low Surface Tension Producing Reagents. **2010**, 43, 4584-4588	14
1471	Dual cross-linking systems of functionally photo-cross-linkable and thermoresponsive polyphosphazene hydrogels for biomedical applications. **2010**, 11, 1741-53	45
1470	Vesicle-to-micelle oscillations and spatial patterns. **2010**, 26, 13770-2	53
1469	Unique Thermo-Induced Sequential Gel/Sol/Gel Transition of Responsive Multiblock Copolymer-Based Hydrogels. **2010**, 43, 5184-5187	44
1468	Bicomponent hydrogels of lumichrome and melamine: photoluminescence property and its dependency on pH and temperature. **2010**, 114, 11454-61	44
1467	Exploring peptide space for enzyme modulators. **2010**, 132, 6419-24	16
1466	Development of thick and highly cell-incorporated engineered tissues by hydrogel template approach with basic fibroblast growth factor or ascorbic acid. **2010**, 21, 415-28	2
1465	Bioinspired methodology to fabricate hydrogel spheres for multi-applications using superhydrophobic substrates. **2010**, 6, 5868	82
1464	Rational design of responsive self-assembling peptides from native protein sequences. **2010**, 11, 3390-4	12
1463	Biomimetic materials for medical application through enzymatic modification. **2011**, 125, 181-205	1
1462	Mineralization of hydrogels for bone regeneration. **2010**, 16, 577-85	171
1461	Enhancement of sustained and controlled protein release using polyelectrolyte complex-loaded injectable and thermosensitive hydrogel. **2010**, 76, 179-88	25
1460	Soft and Wet Materials: From Hydrogels to Biotissues. **2010**, 203-246	37
1459	Rheological properties of peptide-based hydrogels for biomedical and other applications. **2010**, 39, 3528-40	523
1458	Solute diffusion and interactions in cross-linked poly(ethylene glycol) hydrogels studied by Fluorescence Correlation Spectroscopy. **2010**, 6,	92
1457	Designable synthesis of nanocomposite hydrogels with excellent mechanical properties based on chemical cross-linked interactions. **2010**, 46, 7790-2	26
1456	Pharmaceutical and Medical Applications of Poly-Gamma-Glutamic Acid. **2010**, 119-153	6
1455	Biomaterials from ultrasonication-induced silk fibroin-hyaluronic acid hydrogels. **2010**, 11, 3178-88	141

1454	Peptide-modified "smart" hydrogels and genetically engineered stem cells for skeletal tissue engineering. **2010**, 11, 1516-26	42
1453	A structurally tunable DNA-based extracellular matrix. **2010**, 132, 14727-9	46
1452	Stress-relaxation behavior in gels with ionic and covalent crosslinks. **2010**, 107, 63509	230
1451	Amino-Acid Homopolymers Occurring in Nature. **2010**,	1
1450	Hydrogels Based on Living Ring-Opening Metathesis Polymerization. **2010**, 43, 10246-10252	14
1449	In situ gellable oxidized citrus pectin for localized delivery of anticancer drugs and prevention of homotypic cancer cell aggregation. **2010**, 11, 3525-30	56
1448	Polyglycerol nanogels: highly functional scaffolds for biomedical applications. **2010**, 6, 4968	62
1447	Biomaterials as Stem Cell Niche. **2010**,	1
1446	Adapting biodegradable oligo(poly(ethylene glycol) fumarate) hydrogels for pigment epithelial cell encapsulation and lens regeneration. **2010**, 16, 261-7	7
1445	Transferases in Polymer Chemistry. **2010**, 21-54	8
1444	Effect of Nell-1 delivery on chondrocyte proliferation and cartilaginous extracellular matrix deposition. **2010**, 16, 1791-800	36
1443	Time sensitive, temperature and pH responsive photoluminescence behaviour of a melamine containing bicomponent hydrogel. **2010**, 6, 3337	56
1442	Reversible hydrogels from amphiphilic polyelectrolyte model multiblock copolymers: the importance of macromolecular topology. **2010**, 6, 5417	26
1441	Synthesis and characterization of a biodegradable elastomer featuring a dual crosslinking mechanism. **2010**, 6, 2449-2461	85
1440	Thermogelable PNIPAM microgel dispersion as 3D cell scaffold: effect of syneresis. **2010**, 20, 5937	102
1439	Poroelastic swelling kinetics of thin hydrogel layers: comparison of theory and experiment. **2010**, 6, 6004	157
1438	Phenyl groups in supramolecular nanofibers confer hydrogels with high elasticity and rapid recovery. **2010**, 20, 2128	54
1437	Chain collapse and revival thermodynamics of poly(N-isopropylacrylamide) hydrogel. **2010**, 114, 9761-70	87

1436	Coassembly of oppositely charged short peptides into well-defined supramolecular hydrogels. **2010**, 114, 2365-72	45
1435	Effect of pH on Gelation Behavior of Hydrolyzed Polyacrylamide and O-carboxymethyl Chitosan Mixed System. **2010**, 47, 595-601	4
1434	Biocompatibility assessment of advanced wafer-level based chip encapsulation. **2010**,	5
1433	Sorption of water vapor of EVAL/PAA blend nano-nonwovens modified by layer-by-layer technique. **2010**, 17, 2-9	2
1432	Fabrication of microgels via supramolecular assembly of cyclodextrin-containing star polycations and oppositely charged linear polyanions. **2010**, 6, 3751	18
1431	A composite SWNT-collagen matrix: characterization and preliminary assessment as a conductive peripheral nerve regeneration matrix. **2010**, 7, 066002	40
1430	Fabrication of engineered M13 bacteriophages into liquid crystalline films and fibers for directional growth and encapsulation of fibroblasts. **2010**, 6, 4454	38
1429	Enzyme-induced graft polymerization for preparation of hydrogels: synergetic effect of laccase-immobilized-cryogels for pollutants adsorption. **2010**, 6, 3533	19
1428	Polyphosphazene polymers for tissue engineering: an analysis of material synthesis, characterization and applications. **2010**, 6, 3119	111
1427	Amino acid based low-molecular-weight tris(bis-amido) organogelators. **2011**, 7, 2121	40
1426	Supramolecular hydrogels of adenine: morphological, structural and rheological investigations. **2011**, 7, 4234	40
1425	Spectral insights into gelation microdynamics of N-octyl-D-gluconamide in water. **2011**, 7, 6451	13
1424	Thermo-switchable surfactant gel. **2011**, 47, 7191-3	113
1423	Pyridine-based coordination polymeric hydrogel with Cu2+ ion and its encapsulation of a hydrophobic molecule. **2011**, 47, 2937-9	45
1422	Preparation of a self-supporting cell architecture mimic by water channel confined photocrosslinking within a lamellar structured hydrogel. **2011**, 7, 9695	7
1421	Biodegradable and biocompatible synthetic saccharide-Peptide hydrogels for three-dimensional stem cell culture. **2011**, 12, 560-7	54
1420	Oligonucleotide-functionalized hydrogels as stimuli responsive materials and biosensors. **2011**, 7, 6757	153
1419	Stimuli-responsive gels as reaction vessels and reusable catalysts. **2011**, 40, 427-48	342

1418	Direct write tethered protein arrays. **2011**, 21, 14072	1
1417	Rheology and thermal stability of pH-dependent hydrogels of N-acyl-L-carnosine amphiphiles: effect of the alkoxy tail length. **2011**, 7, 10369	26
1416	3D inverted colloidal crystals in realistic cell migration assays for drug screening applications. **2011**, 3, 1202-6	12
1415	Quantifying specific cell□polymer interactions using fluorescence correlation spectroscopy. **2011**, 7, 4876	2
1414	Simple preparation of supramolecular polymer gels viahydrogen bonding by blending two liquid polymers. **2011**, 7, 1667	38
1413	Asymmetric microstructure of hydrogel: two-photon microfabrication and stimuli-responsive behavior. **2011**, 7, 10353	47
1412	Facile patterning of genetically engineered M13 bacteriophage for directional growth of human fibroblast cells. **2011**, 7, 363-368	47
1411	Influence of the percentage of acetylation on the assembly of LbL multilayers of poly(acrylic acid) and chitosan. **2011**, 13, 18200-7	40
1410	Variation of physical and mechanical properties in the bicomponent hydrogels of melamine with positional isomers of hydroxybenzoic acid. **2011**, 7, 8067	31
1409	Ferrocene based organometallic gelators: a supramolecular synthon approach. **2011**, 7, 3634	27
1408	Structure and biocompatibility of an injectable bone regeneration composite. **2011**, 22, 1861-79	11
1407	Shape Memory RGD-Containing Networks: Synthesis, Characterization, and Application in Cell Culture. **2011**, 309-310, 162-172	18
1406	Highly extensible, tough, and elastomeric nanocomposite hydrogels from poly(ethylene glycol) and hydroxyapatite nanoparticles. **2011**, 12, 1641-50	258
1405	Laser printing of three-dimensional multicellular arrays for studies of cell-cell and cell-environment interactions. **2011**, 17, 973-82	172
1404	Using stop-flow lithography to produce opaque microparticles: synthesis and modeling. **2011**, 27, 13813-9	20
1403	Encapsulation of adipose-derived stem cells and transforming growth factor-□ in carrageenan-based hydrogels for cartilage tissue engineering. **2011**, 26, 493-507	79
1402	Copolymer hydrogels of acrylic acid and a nonionic surfmer: pH-induced switching of transparency and volume and improved mechanical stability. **2011**, 27, 2997-3005	18
1401	Stimuli-responsive releasing of gold nanoparticles and liposomes from aptamer-functionalized hydrogels. **2011**, 22, 494011	35

1400	Rapid, high resolution screening of biomaterial hydrogelators by rheology. **2011**, 12, 4178-82	19
1399	Biologically modified hydrogels for chemical and biochemical analysis. **2011**, 136, 3410-8	9
1398	Xylan-rich hemicelluloses-graft-acrylic acid ionic hydrogels with rapid responses to pH, salt, and organic solvents. **2011**, 59, 8208-15	127
1397	Mechanical properties of the beetle elytron, a biological composite material. **2011**, 12, 321-35	54
1396	Access to Nanostructured Hydrogel Networks through Photocured Body-Centered Cubic Block Copolymer Melts. **2011**, 44, 6557-6567	18
1395	Thermally induced changes in amphiphilicity drive reversible restructuring of assemblies of ABC triblock copolymers with statistical polyether blocks. **2011**, 133, 1058-65	78
1394	Synthesis and characterization of tunable poly(ethylene glycol): gelatin methacrylate composite hydrogels. **2011**, 17, 1713-23	225
1393	Water-induced physical gelation of organic solvents by N-(n-alkylcarbamoyl)-L-alanine amphiphiles. **2011**, 27, 3401-8	77
1392	Real-time in siturheology of alginate hydrogel photocrosslinking. **2011**, 7, 11510	77
1391	Design of a shear-thinning recoverable peptide hydrogel from native sequences and application for influenza H1N1 vaccine adjuvant. **2011**, 7, 8905	43
1390	Degradable and Electroactive Hydrogels with Tunable Electrical Conductivity and Swelling Behavior. **2011**, 23, 1254-1262	136
1389	Natural and Synthetic Scaffolds. **2011**, 41-67	13
1388	Solution behavior of copolymers with poly(ethylene oxide) as the hydrophobic block. **2011**, 7, 9956	15
1387	Applications of Polymer Bioconjugates. **2011**, 2645-2687	
1386	Multifunctional, biocompatible supramolecular hydrogelators consist only of nucleobase, amino acid, and glycoside. **2011**, 133, 17513-8	101
1385	The use of reversible addition fragmentation chain transfer polymerization for drug delivery systems. **2011**, 8, 237-69	31
1384	ANALYTICAL SOLUTIONS OF POLYMERIC GEL STRUCTURES UNDER BUCKLING AND WRINKLE. **2011**, 03, 235-257	71
1383	Supramolecular self-assembly of biopolymers with carbon nanotubes for biomimetic and bio-inspired sensing and actuation. **2011**, 3, 2412-20	25

1382	Thixotropic hydrogel derived from a product of an organic solid-state synthesis: properties and densities of metal-organic nanoparticles. **2011**, 133, 3365-71		85
1381	Novel hydrogels prepared via direct dissolution of chitin at low temperature: structure and biocompatibility. **2011**, 21, 3865		169
1380	Biopolymer-based hydrogels for cartilage tissue engineering. *Chemical Reviews*, **2011**, 111, 4453-74	68.1	393
1379	Regenerating the Heart. **2011**,		1
1378	Biomaterials for the feeder-free culture of human embryonic stem cells and induced pluripotent stem cells. *Chemical Reviews*, **2011**, 111, 3021-35	68.1	84
1377	Amino acid based smart hydrogel: formation, characterization and fluorescence properties of silver nanoclusters within the hydrogel matrix. **2011**, 7, 5300		144
1376	Calcium ions to cross-link supramolecular nanofibers to tune the elasticity of hydrogels over orders of magnitude. **2011**, 27, 14425-31		49
1375	3D Cell Culture. **2011**,		48
1374	Surface Modified Polylactic Acid Microspheres Reinforced Calcium Alginate Hydrogels. **2011**, 140, 58-62		1
1373	Mechanobiology of Cell-Cell and Cell-Matrix Interactions. **2011**,		15
1372	Connectivity and Structural Defects in Model Hydrogels: A Combined Proton NMR and Monte Carlo Simulation Study. **2011**, 44, 9666-9674		129
1371	Nondestructive method to evaluate the collagen content of fibrin-based tissue engineered structures via ultrasound. **2011**, 17, 1021-6		40
1370	Biophysical Regulation of Vascular Differentiation and Assembly. **2011**,		
1369	Disulfide Cross-Linked Hydrogel Scaffold Based on Poly (Amic Acid) with Tunable Degradation. **2011**, 391-392, 319-322		0
1368	In situ gelable interpenetrating double network hydrogel formulated from binary components: thiolated chitosan and oxidized dextran. **2011**, 12, 1428-37		81
1367	Chemically well-defined self-assembled monolayers for cell culture: toward mimicking the natural ECM. **2011**, 7, 9561-9571		62
1366	Myocardial Tissue Engineering. **2011**,		2
1365	Vascular Grafts. **2011**, 449-467		2

1364	Cytocompatible Hydrogel Composed of Phospholipid Polymers for Regulation of Cell Functions. **2011**, 141-165	6
1363	Marine polysaccharides in microencapsulation and application to aquaculture: "from sea to sea". **2011**, 9, 2572-604	39
1362	Rapid spatial and temporal controlled signal delivery over large cell culture areas. **2011**, 11, 3057-63	49
1361	Porphyrin-cross-linked hydrogel for fluorescence-guided monitoring and surgical resection. **2011**, 12, 3115-8	68
1360	Cardiovascular Tissue Engineering. **2011**, 361-376	
1359	pH-induced changes in the fabrication of multilayers of poly(acrylic acid) and chitosan: fabrication, properties, and tests as a drug storage and delivery system. **2011**, 27, 6836-45	64
1358	Drug-carrier/hydrogel scaffold for controlled growth of cells. **2011**, 78, 346-54	23
1357	pH and anion sensitive silver(I) coordinated melamine hydrogel with dye absorbing properties: metastability at low melamine concentration. **2011**, 21, 11747	53
1356	Growth factor delivery-based tissue engineering: general approaches and a review of recent developments. **2011**, 8, 153-70	996
1355	A one-step strategy for thermal- and pH-responsive graphene oxide interpenetrating polymer hydrogel networks. **2011**, 21, 4095	231
1354	Modification of collagen with a natural cross-linker, procyanidin. **2011**, 48, 354-9	220
1353	Differentially photo-crosslinked polymers enable self-assembling microfluidics. **2011**, 2, 527	189
1352	Progress Toward Robust Polymer Hydrogels. **2011**, 64, 1007	229
1351	Tissue Engineering of Heart Valves. **2011**, 377-391	
1350	Novel dimeric cholesteryl derivatives and their smart thixotropic gels. **2011**, 27, 12156-63	54
1349	Effect of complementary small molecules on the properties of bicomponent hydrogel of riboflavin. **2011**, 9, 770-6	25
1348	Hydrogels for the repair of articular cartilage defects. **2011**, 17, 281-99	331
1347	Self-Assembled Prodrugs. **2011**, 339-355	2

1346	Adipose Tissue Engineering. **2011**, 529-539	1
1345	Cell Adhesion and Spreading on an Intrinsically Anti-Adhesive PEG Biomaterial. **2011**,	1
1344	Recent Advances in the Modeling of PEG Hydrogel Membranes for Biomedical Applications. **2011**,	
1343	Joint Cartilage Tissue Engineering and Pre-Clinical Safety and Efficacy Testing. **2011**,	1
1342	Preparation, characterization and in vitro study of biocompatible fibroin hydrogel. **2011**, 10, 7878-7892	11
1341	Poly(amidoamine) Hydrogels as Scaffolds for Cell Culturing and Conduits for Peripheral Nerve Regeneration. **2011**, 2011, 1-20	4
1340	Multivalent, biodegradable polyglycerol hydrogels. **2011**, 34, 118-22	8
1339	Investigation of Complexation of Linear Poly(N-vinyl-2-pyrrolidone) with Poly(methacrylic acid-co-methyl methacrylate) Gel. **2011**, 8, S481-S487	2
1338	Hydrogel Synthesis Directed Toward Tissue Engineering: Impact of Reaction Condition on Structural Parameters and Macroscopic Properties of Xerogels. **2011**, 2011, 1-14	4
1337	Polymeric Scaffolds in Tissue Engineering Application: A Review. **2011**, 2011, 1-19	1017
1336	Negative Impact of Paclitaxel Crystallization on Hydrogels and Novel Approaches for Anticancer Drug Delivery Systems. **2011**,	1
1335	Hydrogel Biomaterials. **2011**,	23
1334	Bioreactors for bone tissue engineering. **2011**, 34, 259-70	31
1333	Self-assembling peptides: implications for patenting in drug delivery and tissue engineering. **2011**, 5, 24-51	41
1332	Microfluidic chip containing porous gradient for chemotaxis study. **2011**,	1
1331	Pharmaceutical Induction of ApoE Secretion. **2011**, 212-230	
1330	Hydrogelation and spontaneous fiber formation of 8-aza-7-deazaadenine nucleoside “click” conjugates. **2011**, 67, 7418-7425	15
1329	Influence of solvent on the thermal stability and organization of self-assembling fibrillar networks in methyl-4,6-O-(p-nitrobenzylidene)-α-d-glucopyranoside gels. **2011**, 67, 7222-7230	26

1328	Bioactive glass scaffolds for bone tissue engineering: state of the art and future perspectives. **2011**, 31, 1245-1256	451
1327	In Vivo Modulation of Dendritic Cells by Engineered Materials: Towards New Cancer Vaccines. **2011**, 6, 466-477	55
1326	Alginate/hyaluronate hydrogels for cartilage regeneration. **2011**, 152 Suppl 1, e233-4	3
1325	Fabrication of PLLA nanofibrous multi-channel conduits for neural tissue engineering. **2011**, 152 Suppl 1, e234-6	5
1324	Degradation of PEG and non-PEG alginate□hitosan microcapsules in different pH environments. **2011**, 96, 2189-2197	17
1323	In situ gellable sugar beet pectin via enzyme-catalyzed coupling reaction of feruloyl groups for biomedical applications. **2011**, 112, 491-4	26
1322	Hydrogel containing L-valine residues as a platform for cisplatin chemotherapy. **2011**, 88, 389-95	18
1321	Ultrasound assisted preparation of nanoclay Bentonite-FeCo nanocomposite hybrid hydrogel: A potential responsive sorbent for removal of organic pollutant from water. **2011**, 281, 429-437	74
1320	The use of injectable sonication-induced silk hydrogel for VEGF(165) and BMP-2 delivery for elevation of the maxillary sinus floor. **2011**, 32, 9415-24	213
1319	The use of N,N'-diallylaldardiamides as cross-linkers in xylan derivatives-based hydrogels. **2011**, 346, 2736-45	28
1318	Multipurpose smart hydrogel systems. **2011**, 168, 247-62	118
1317	Exceptionally small supramolecular hydrogelators based on aromatic-aromatic interactions. **2011**, 7, 167-72	84
1316	Glycosylated nucleoside lipid promotes the liposome internalization in stem cells. **2011**, 47, 12598-600	19
1315	Supramolecular synthons in designing low molecular mass gelling agents: L-amino acid methyl ester cinnamate salts and their anti-solvent-induced instant gelation. **2011**, 6, 1038-47	45
1314	Self-assembled gels for biomedical applications. **2011**, 6, 30-42	87
1313	Cytocompatible poly(ethylene glycol)-co-polycarbonate hydrogels cross-linked by copper-free, strain-promoted click chemistry. **2011**, 6, 2730-7	82
1312	Drug delivery in soft tissue engineering. **2011**, 8, 1175-88	49
1311	Formation of calcium alginate-based macroporous materials comprising chitosan and hydroxyapatite. **2011**, 73, 565-574	5

1310	Hydrodynamic dispersion in β-lactoglobulin gels measured by PGSE NMR. **2011**, 34, 18	1
1309	Erratum to: Hydrodynamic dispersion in β-lactoglobulin gels measured by PGSE NMR. **2011**, 34, 29	
1308	Tuning the dependency between stiffness and permeability of a cell encapsulating hydrogel with hydrophilic pendant chains. **2011**, 7, 3719-28	44
1307	Transport of biological molecules in surfactant-alginate composite hydrogels. **2011**, 7, 3988-98	25
1306	Transparent, elastomeric and tough hydrogels from poly(ethylene glycol) and silicate nanoparticles. **2011**, 7, 4139-48	176
1305	Enzymatic degradation of the hydrogels based on synthetic poly(α-amino acid)s. **2011**, 22, 781-8	16
1304	In vivo tests of a novel wound dressing based on biomaterials with tissue adhesion controlled through external stimuli. **2011**, 22, 1357-64	11
1303	Evolution of PVA gels prepared without crosslinking agents as a cell adhesive surface. **2011**, 22, 1763-72	90
1302	A hydrophobically-modified alginate gel system: utility in the repair of articular cartilage defects. **2011**, 22, 2365-75	34
1301	Controlled delivery systems: from pharmaceuticals to cells and genes. **2011**, 28, 1241-58	46
1300	Gel viscosity influenced by nanosilica phase morphology in high and low molecular weights PVA-ex-situ silica hybrids. **2011**, 59, 260-268	8
1299	Gelation behavior of polysaccharide-based interpenetrating polymer network (IPN) hydrogels. **2011**, 50, 39-52	16
1298	Cell-culture compatible silk fibroin scaffolds concomitantly patterned by freezing conditions and salt concentration. **2011**, 67, 159-175	19
1297	Cell-adhesive and mechanically tunable glucose-based biodegradable hydrogels. **2011**, 7, 106-14	22
1296	Controlling the adhesion and differentiation of mesenchymal stem cells using hyaluronic acid-based, doubly crosslinked networks. **2011**, 32, 2466-78	88
1295	The effects of cross-linked thermo-responsive PNIPAAm-based hydrogel injection on retinal function. **2011**, 32, 3620-6	82
1294	Preparation of collagen–chondroitin sulfate–hyaluronic acid hybrid hydrogel scaffolds and cell compatibility in vitro. **2011**, 84, 118-125	123
1293	Effect of intermolecular interaction on electrospinning of sodium alginate. **2011**, 85, 276-279	82

1292	Facile control of RGD-alginate/hyaluronate hydrogel formation for cartilage regeneration. **2011**, 86, 1107-1112	33
1291	Synthesis of hydrogels based on poly(NIPAM) inserted into collagen sponge. **2011**, 87, 382-90	30
1290	Cardiac cell therapy: the next (re)generation. **2011**, 7, 1018-30	26
1289	Injectable acellular hydrogels for cardiac repair. **2011**, 4, 528-42	112
1288	Strategies for tissue engineering cardiac constructs to affect functional repair following myocardial infarction. **2011**, 4, 575-91	45
1287	RGD-conjugated In Situ forming hydrogels as cell-adhesive injectable scaffolds. **2011**, 19, 300-306	37
1286	A pH-sensitive composite hydrogel based on sodium alginate and medical stone: Synthesis, swelling, and heavy metal ions adsorption properties. **2011**, 19, 739-748	37
1285	Towards a universal organogelator: A general mixing approach to fabricate various organic compounds into organogels. **2011**, 54, 1051-1063	24
1284	Carbohydrate-based crosslinking agents: Potential use in hydrogels. **2011**, 49, 4312-4315	18
1283	Noncovalent binding interactions of polyacrylamide and clay in nanocomposite hydrogels. **2011**, 49, 263-266	9
1282	Poly[octanediol-co-(citric acid)-co-(sebacic acid)] elastomers: novel bio-elastomers for tissue engineering. **2011**, 60, 333-343	25
1281	Polysaccharide-based materials for cartilage tissue engineering applications. **2011**, 5, 421-36	71
1280	Gellan gum-based hydrogels for intervertebral disc tissue-engineering applications. **2011**, 5, e97-107	170
1279	Controlled gelation and degradation rates of injectable hyaluronic acid-based hydrogels through a double crosslinking strategy. **2011**, 5, 790-7	74
1278	Reconstructing the differentiation niche of embryonic stem cells using biomaterials. **2011**, 11, 36-49	58
1277	Biodegradable elastomers for tissue engineering and cell-biomaterial interactions. **2011**, 11, 467-82	97
1276	In situ forming physical hydrogels for three-dimensional tissue morphogenesis. **2011**, 11, 1325-30	19
1275	A collagen peptide-based physical hydrogel for cell encapsulation. **2011**, 11, 1426-31	51

1274	The Effect of Mixing on the Mechanical Properties of Hyaluronan-Based Injectable Hydrogels. **2011**, 296, 944-951	23
1273	Synthesis of poly(2-oxazoline)-based hydrogels with tailor-made swelling degrees capable of stimuli-triggered compound release. **2011**, 32, 1815-9	34
1272	A one pot, one step method for the preparation of clickable hydrogels by photoinitiated polymerization. **2011**, 32, 1906-9	36
1271	Functional Porous Polymers by Emulsion Templating: Recent Advances. **2011**, 21, 211-225	326
1270	Room Temperature Multifunctional Organophosphorus Gels and Liquid Crystals. **2011**, 21, 4088-4099	40
1269	Controlled and sustained release of drugs from dendrimer-nanoparticle composite films. **2011**, 23, 2839-42, 2843	34
1268	Ultrafiltration membranes composed of highly cross-linked cationic polymer gel: the network structure and superior separation performance. **2011**, 23, 2004-8	40
1267	Bromoisobutyramide as an intermolecular surface binder for the preparation of free-standing biopolymer assemblies. **2011**, 23, 5668-73	38
1266	Development of bioactive photocrosslinkable fibrous hydrogels. **2011**, 98, 167-76	8
1265	Compositional control of poly(ethylene glycol) hydrogel modulus independent of mesh size. **2011**, 98, 268-73	54
1264	Cell adhesion and proliferation studies on semi-interpenetrating polymeric networks (semi-IPNs) of polyacrylamide and gelatin. **2011**, 98, 342-50	26
1263	New hybrid system: Poly(ethylene glycol) hydrogel with covalently bonded pegylated nanotubes. **2011**, 120, 124-132	15
1262	Development of a thermosensitive grafted drug delivery system: Synthesis and characterization of NIPAAm-based grafts and hydrogel structure. **2011**, 120, 1597-1606	8
1261	Photogeneration of gelatinous networks from pre-existing polymers. **2011**, 122, 168-174	14
1260	Mechanically Driven Reorganization of Thermoresponsive Diblock Copolymer Assemblies in Water. **2011**, 123, 8232-8235	7
1259	Supramolecular Nanofibers and Hydrogels of Nucleopeptides. **2011**, 123, 9537-9541	23
1258	Mechanically driven reorganization of thermoresponsive diblock copolymer assemblies in water. **2011**, 50, 8082-5	53
1257	Supramolecular nanofibers and hydrogels of nucleopeptides. **2011**, 50, 9365-9	114

1256	Two-phase bioreactor system for cell-laden hydrogel assembly. **2011**, 27, 466-72	8
1255	Characterization of protein release from hydrolytically degradable poly(ethylene glycol) hydrogels. **2011**, 108, 197-206	96
1254	Self-assembled dextrin nanogel as protein carrier: controlled release and biological activity of IL-10. **2011**, 108, 1977-86	19
1253	Regulation of the chiral twist and supramolecular chirality in co-assemblies of amphiphilic L-glutamic acid with bipyridines. **2011**, 17, 3429-37	77
1252	Lanthanide-containing photoluminescent materials: from hybrid hydrogel to inorganic nanotubes. **2011**, 17, 5180-7	83
1251	Noncovalent water-based materials: robust yet adaptive. **2011**, 17, 9016-26	98
1250	A favorable, narrow, (δh) Hansen-parameter domain for gelation of low-molecular-weight amino acid derivatives. **2011**, 17, 13603-12	31
1249	Zwitterionic poly(carboxybetaine) hydrogels for glucose biosensors in complex media. **2011**, 26, 2454-9	119
1248	Cryogenic fabrication of savlon loaded macroporous blends of alginate and polyvinyl alcohol (PVA). Swelling, deswelling and antibacterial behaviors. **2011**, 83, 876-882	64
1247	Preparation and properties of new micellar drug carriers based on hydrophobically modified amylopectin. **2011**, 83, 1499-1506	35
1246	Cellulose-based hydrogels: Present status and application prospects. **2011**, 84, 40-53	690
1245	Detailed characterization of an injectable hyaluronic acid-polyaspartylhydrazide hydrogel for protein delivery. **2011**, 85, 717-725	27
1244	A saccharide-based supramolecular hydrogel for cell culture. **2011**, 346, 1013-7	37
1243	Hydrogel microparticles from lithographic processes: novel materials for fundamental and applied colloid science. **2011**, 16, 106-117	110
1242	Polymeric emulsion and crosslink-mediated synthesis of super-stable nanoparticles as sustained-release anti-tuberculosis drug carriers. **2011**, 87, 243-54	45
1241	Synthesis and characterization of photocrosslinkable gelatin and silk fibroin interpenetrating polymer network hydrogels. **2011**, 7, 2384-93	205
1240	Bioactive glass in tissue engineering. **2011**, 7, 2355-73	1164
1239	Micropatterning neural cell cultures in 3D with a multi-layered scaffold. **2011**, 32, 2088-98	120

1238	Microstructured templates for directed growth and vascularization of soft tissue in vivo. **2011**, 32, 5391-401	46
1237	Hybrid hydrogels self-assembled from graft copolymers containing complementary sheets as hydroxyapatite nucleation scaffolds. **2011**, 32, 5341-53	46
1236	Biological and mechanical implications of PEGylating proteins into hydrogel biomaterials. **2011**, 32, 6025-33	43
1235	Encapsulation of curcumin in self-assembling peptide hydrogels as injectable drug delivery vehicles. **2011**, 32, 5906-14	368
1234	Anisotropic material synthesis by capillary flow in a fluid stripe. **2011**, 32, 6493-504	32
1233	Chitosan composites with inorganics, morphogenetic proteins and stem cells, for bone regeneration. **2011**, 83, 1433-1445	212
1232	A click-chemistry approach to cellulose-based hydrogels. **2011**, 86, 154-161	75
1231	Biomimetic material strategies for cardiac tissue engineering. **2011**, 31, 503-513	63
1230	Inhomogeneous deformation of elastomer gels in equilibrium under saturated and unsaturated conditions. **2011**, 59, 561-582	50
1229	Buckling condensation in constrained growth. **2011**, 59, 538-560	72
1228	Microwave-assisted polymer synthesis (MAPS) as a tool in biomaterials science: How new and how powerful. **2011**, 36, 1050-1078	107
1227	Unusual in vitro degradation behavior of physically cross-linked liposome gel network. **2011**, 96, 1111-1117	8
1226	Block copolymerization of vinyl ester monomers via RAFT/MADIX under microwave irradiation. **2011**, 52, 3038-3045	34
1225	Poly(lactic acid)-poly(ethylene oxide) block copolymers: new directions in self-assembly and biomedical applications. **2011**, 18, 5676-86	53
1224	Biomaterial selection for tooth regeneration. **2011**, 17, 373-88	98
1223	Poly(N-isopropylacrylamide) Prepared by Free-Radical Polymerization in Aqueous Solutions and in Nanocomposite Hydrogels. **2011**, 306-307, 33-48	7
1222	PVAc Microspheres via Semicontinuous Emulsion Polymerization: Synthesis, Characterization, Kinetic, and Surface Morphology Studies. **2011**, 87, 1020-1037	5
1221	Microfluidic wet spinning of chitosan-alginate microfibers and encapsulation of HepG2 cells in fibers. **2011**, 5, 22208	88

1220	PAM2 (piston assisted microsyringe): a new rapid prototyping technique for biofabrication of cell incorporated scaffolds. **2011**, 17, 229-37	34
1219	A novel fibrin gel derived from hyaluronic acid-grafted fibrinogen. **2011**, 6, 025009	11
1218	Cell Direct Assembly Technology Adopting Hybrid of Gelatin-Based Hydrogels. **2011**, 189-193, 2986-2992	5
1217	Scaffolding for Three-Dimensional Embryonic Vasculogenesis. **2011**, 49-67	1
1216	Rendering Rayon Fibres Antimicrobial and Thermal-Responsive via Layer-by-Layer Self-Assembly of Functional Polymers. **2011**, 236-238, 1103-1106	3
1215	Glucose sensor membranes for mitigating the foreign body response. **2011**, 5, 1052-9	33
1214	Central Nervous System Tissue Engineering: Current Considerations and Strategies. **2011**, 3, 1-120	4
1213	Control of the pore architecture in three-dimensional hydroxyapatite-reinforced hydrogel scaffolds. **2011**, 12, 045003	30
1212	Experimental and simulation studies on soliton generation in a double-plasma device: role of fast ions. **2011**, 53, 065012	5
1211	Bifurcation of a Swelling Gel with a Mechanical Load and Geometric Constraint. **2011**, 28, 118301	
1210	Recapitulating cancer cell invasion in vitro. **2011**, 108, 6693-4	9
1209	Biomaterials for Studies in Cellular Mechanotransduction. **2011**, 267-277	1
1208	EFFECTS OF GELATIN MODIFICATION ON RAPID PROTOTYPING PCL SCAFFOLDS FOR CARTILAGE ENGINEERING. **2011**, 11, 993-1002	17
1207	Hydrogels in Biosensing Applications. **2011**, 491-517	6
1206	Cell Encapsulation. **2011**, 115-130	1
1205	Modulating Biofunctional starPEG Heparin Hydrogels by Varying Size and Ratio of the Constituents. **2011**, 3, 602-620	51
1204	Design of Biodegradable Injectable Polymers Exhibiting Temperature-Responsive Sol-Gel Transition. **2012**, 86, 9-16	2
1203	Synthesis of bioactive microcapsules using a microfluidic device. **2012**, 12, 10136-47	9

1202	Preparation and Applications of Amylose Supramolecules by Means of Phosphorylase-Catalyzed Enzymatic Polymerization. **2012**, 4, 116-133	54
1201	Multiple Stimuli-Responsive Hydrogels for Metal-Based Drug Therapy. **2012**, 4, 964-985	11
1200	Synthesis and Deswelling Behavior of Intelligent Thermosensitive Poly(N, N-Diethylacrylamide-Co-Itaconic Acid) Hydrogels. **2012**, 490-495, 3667-3671	3
1199	Evaluation of the effects of phenylalanine and carboxylate on the rheological behaviors of small molecule hydrogelators containing naphthalene. **2012**, 1418, 57	
1198	Poroelastic relaxation of polymer-loaded hydrogels. **2012**, 8, 8234	20
1197	Engineering Biomaterials for Regenerative Medicine. **2012**,	12
1196	Modulating the rigidity and mineralization of collagen gels using poly(lactic-co-glycolic acid) microparticles. **2012**, 18, 1642-51	21
1195	Temperature-Dependent, High-Resolution Magic-Angle-Spinning (HRMAS) NMR Studies of Poly(N-isopropylacrylamide-co-acrylic Acid). **2012**, 555, 280-294	3
1194	Rapid Responsive Behaviors of the Dual Stimuli-Sensitive Poly(DEA-co-DMAEMA) Hydrogel via Comb-Type Grafted Polymeriziation. **2012**, 61, 177-198	19
1193	Self-assembled nanomaterials for tissue-engineering applications. **2012**, 490-533	
1192	Materials of marine origin: a review on polymers and ceramics of biomedical interest. **2012**, 57, 276-306	146
1191	Gelatin-based emulsion gels for diffusion-controlled release applications. **2012**, 23, 645-61	33
1190	Oral delivery of chemotherapeutic agents: background and potential of drug delivery systems for colon delivery. **2012**, 22, 459-468	11
1189	Fabrication of capillary-like network in a matrix of water-soluble polymer using poly(methyl methacrylate) microfibers. **2012**, 40, 66-9	7
1188	PLA–PEO–PLA Hydrogels and Their Mechanical Properties. **2012**, 127-140	1
1187	Hydrogel networks based on ABA triblock copolymers. **2012**, 10, 243-8	4
1186	Hydrogel-Based Platforms for the Regeneration of Osteochondral Tissue and Intervertebral Disc. **2012**, 4, 1590-1612	44
1185	Continuum Models of Stimuli-responsive Gels. **2012**, 165-196	1

1184	Effect of EDA/PEGDGE Mole Ratios on PEG-Based Hydrogel Scaffolds Properties. **2012**, 626, 681-685	1
1183	Bone tissue engineering: recent advances and challenges. **2012**, 40, 363-408	1340
1182	Preparation of organic□inorganic hybrids with silicate network for the medical applications. **2012**, 120, 555-559	15
1181	Stimulus-Responsive Polymers as Intelligent Coatings for Biosensors: Architectures, Response Mechanisms, and Applications. **2012**, 1-30	
1180	Development of Three-Dimensional Tissue Models Based on Hierarchical Cell Manipulation Using Nanofilms. **2012**, 85, 401-414	30
1179	A nanocomposite gel based on 1D coordination polymers and nanoclusters reversibly gelate water upon heating. **2012**, 2, 12718	15
1178	Phase selective carbohydrate gelator. **2012**, 2, 2270	74
1177	Hydrogels in sensing applications. **2012**, 37, 1678-1719	483
1176	Microfluidic models of vascular functions. **2012**, 14, 205-30	184
1175	Photodegradable iron(III) cross-linked alginate gels. **2012**, 13, 2465-71	120
1174	Preparation of hybrid hydrogel containing Ag nanoparticles by a green in situ reduction method. **2012**, 28, 11188-94	52
1173	Cell instructive microporous scaffolds through interface engineering. **2012**, 134, 20103-9	58
1172	CuII Coordination Polymers Capable of Gelation and Selective SO_4^{2-} Separation. **2012**, 12, 4135-4143	28
1171	Reverse thermal gelation of aromatic solvents by a series of easily accessible organic salt based gelators. **2012**, 8, 2595	15
1170	Studies on a novel class of triaryl pyridine N-glycosylamine amphiphiles as super gelators. **2012**, 10, 2077-83	18
1169	Hydrogels from Biopolymer Hybrid for Biomedical, Food, and Functional Food Applications. **2012**, 4, 997-1011	68
1168	Targeted, Multifunctional Hydrogel Nanoparticles for Imaging and Treatment of Cancer. **2012**, 225-255	9
1167	Injectable hydrogels from segmented PEG-bisurea copolymers. **2012**, 13, 3966-76	48

1166	Diffusion and birefringence of bioactive dyes in a supramolecular guanosine hydrogel. **2012**, 18, 6008-14	51
1165	Designing cell-compatible hydrogels for biomedical applications. **2012**, 336, 1124-8	1313
1164	Directed endothelial cell morphogenesis in micropatterned gelatin methacrylate hydrogels. **2012**, 33, 9009-18	191
1163	The effect of large deformation and material nonlinearity on gel indentation. **2012**, 28, 1058-1067	10
1162	Nanocomposite: An emerging tool for bone tissue transplantation and drug delivery. **2012**, 6, 88-96	5
1161	Molecular Organization of Polylactides Immobilized on a Flat Surface: Observation of Single Crystal Arrays of Homochiral and Stereocomplexed Polylactides. **2012**, 45, 5993-6001	8
1160	The use of ionic liquids in the processing of chitosan/silk hydrogels for biomedical applications. **2012**, 14, 1463	74
1159	Macroporous starPEG-heparin cryogels. **2012**, 13, 2349-58	56
1158	Programmed cell adhesion and growth on cell-imprinted polyacrylamide hydrogels. **2012**, 8, 10403	32
1157	Gelator-polysaccharide hybrid hydrogel for selective and controllable dye release. **2012**, 387, 115-22	25
1156	Electrospun microfibrous PLGA meshes coated with in situ cross-linkable gelatin hydrogels for tissue regeneration. **2012**, 12, S144-S149	6
1155	Highly stretchable and tough hydrogels. **2012**, 489, 133-6	3109
1154	Encoding Cell-Instructive Cues to PEG-Based Hydrogels via Triple Helical Peptide Assembly. **2012**, 8, 10409-10418	28
1153	Chemical modification of polymeric cantilever Sensors with multiamine supramolecular hydrogel. **2012**,	0
1152	Functionalized single walled carbon nanotube containing amino acid based hydrogel: a hybrid nanomaterial. **2012**, 2, 2105	35
1151	Rapid fabrication of reconstructible hydrogels by electrophoretic microbead adhesion. **2012**, 48, 10019-21	29
1150	Metal cholate hydrogels: versatile supramolecular systems for nanoparticle embedded soft hybrid materials. **2012**, 22, 18268	78
1149	Molecular theory of weak polyelectrolyte thin films. **2012**, 8, 1344-1354	45

1148	Engineered (hep/pARG)2polyelectrolyte capsules for sustained release of bioactive TGF-¶. **2012**, 8, 1146-1154	21
1147	Ultrathin, bioresponsive and drug-functionalized protein capsules. **2012**, 22, 21434	42
1146	Synthesis and characterization of biodegradable macroporous cryogels crosslinked by chitosan oligosaccharide-graft-acrylic acid. **2012**, 8, 4382	9
1145	Manipulating the nanostructure of organogels generated from molecules with a 3-dimensional truxene core. **2012**, 48, 3515-7	15
1144	Hydrophilic coatings for biomedical applications in and ex vivo. **2012**, 3-42	7
1143	CHAPTER 8:Hydrogels for Biomedical Applications. **2012**, 167-209	2
1142	Morphological and histological evaluations of 3D-layered blood vessel constructs prepared by hierarchical cell manipulation. **2012**, 23, 63-79	37
1141	Encapsulation of angiogenic monocytes using bio-spraying technology. **2012**, 4, 628-32	10
1140	Recovery from applied strain in interpenetrating polymer network hydrogels with ionic and covalent cross-links. **2012**, 8, 9985	126
1139	Molecular theory of solvation for supramolecules and soft matter structures: application to ligand binding, ion channels, and oligomeric polyelectrolyte gelators. **2012**, 8, 1508-1520	43
1138	Sonication induced peptide-appended bolaamphiphile hydrogels for in situ generation and catalytic activity of Pt nanoparticles. **2012**, 8, 5301	83
1137	Hierarchically structured free-standing hydrogels with liquid crystalline domains and magnetic nanoparticles as dual physical cross-linkers. **2012**, 134, 1630-41	86
1136	Supramolecular Synthon Transferability and Gelation by Diprimary Ammonium Monocarboxylate Salts. **2012**, 12, 5864-5868	13
1135	Controllable Preparation of Polyacrylamide Hydrogel Microspheres in a Coaxial Microfluidic Device. **2012**, 51, 9016-9022	23
1134	PEG-l-PAF and PEG-d-PAF: Comparative Study on Thermogellation and Biodegradation. **2012**, 45, 2007-2013	37
1133	Strain-Promoted Crosslinking of PEG-based Hydrogels via Copper-Free Cycloaddition. **2012**, 1, 1071-1073	108
1132	Kinetic Study for AB-Type Coupling Reaction of Tetra-Arm Polymers. **2012**, 45, 1031-1036	40
1131	Finely dispersed single-walled carbon nanotubes for polysaccharide hydrogels. **2012**, 4, 4610-5	16

1130	Stimuli-Responsive Amphiphilic Polyelectrolyte Heptablock Copolymer Physical Hydrogels: An Unusual pH-Response. **2012**, 45, 3523-3530	27
1129	A New Approach for Creating Polymer Hydrogels with Regions of Distinct Chemical, Mechanical, and Optical Properties. **2012**, 45, 5712-5717	27
1128	Non-fouling hydrogels of 2-hydroxyethyl methacrylate and zwitterionic carboxybetaine (meth)acrylamides. **2012**, 13, 4164-70	54
1127	Bionanocomposites: Green sustainable materials for the near future. **2012**, 84, 2579-2607	104
1126	Structure Optimization and Mechanical Model for Microgel-Reinforced Hydrogels with High Strength and Toughness. **2012**, 45, 5218-5228	105
1125	Peptide hydrogels: mimicking the extracellular matrix. **2012**, 1, 4-12	18
1124	Hydrophilic and amphiphilic polyethylene glycol-based hydrogels with tunable degradability prepared by "click" chemistry. **2012**, 13, 4012-21	76
1123	Secondary Ammonium Dicarboxylate (SAD)⊠A Supramolecular Synthon in Designing Low Molecular Weight Gelators Derived from Azo-Dicarboxylates. **2012**, 12, 5917-5924	15
1122	Development of a hybrid dextrin hydrogel encapsulating dextrin nanogel as protein delivery system. **2012**, 13, 517-27	69
1121	Engineering of an environmentally responsive beta roll peptide for use as a calcium-dependent cross-linking domain for peptide hydrogel formation. **2012**, 13, 1758-64	41
1120	Rediscovering Hydrogel-Based Double-Diffusion Systems for Studying Biomineralization. **2012**, 14, 5681-5700	29
1119	Supramolecular polymeric hydrogels. **2012**, 41, 6195-214	836
1118	Biohybrid glycopolymer capable of ionotropic gelation. **2012**, 13, 3108-19	19
1117	Injectable and biodegradable hydrogels: gelation, biodegradation and biomedical applications. **2012**, 41, 2193-221	974
1116	Supramolecular self-assembly induced graphene oxide based hydrogels and organogels. **2012**, 28, 3005-10	80
1115	Supramolecular chirality in organo-, hydro-, and metallogels derived from bis-amides of L-(+)-tartaric acid: formation of highly aligned 1D silica fibers and evidence of 5-c net SnS topology in a metallogel network. **2012**, 18, 13079-90	24
1114	The Effect of Ionic Strength on the Mechanical, Structural and Transport Properties of Peptide Hydrogels. **2012**, 8, 11723-11731	37
1113	Controlled peptide coated nanostructures via the self-assembly of functional peptide building blocks. **2012**, 3, 2479	21

1112	Defining and designing polymers and hydrogels for neural tissue engineering. **2012**, 72, 199-213	131
1111	Cancer cell migration within 3D layer-by-layer microfabricated photocrosslinked PEG scaffolds with tunable stiffness. **2012**, 33, 7064-70	94
1110	Preparation, characterization and properties of aminoethyl chitin hydrogels. **2012**, 90, 1614-9	19
1109	Hybrid conducting polymer-hydrogel conduits for axonal growth and neural tissue engineering. **2012**, 1, 762-7	100
1108	In situ pH maintenance for mammalian cell cultures in shake flasks and tissue culture flasks. **2012**, 28, 1605-10	9
1107	Aqueous reversible addition-fragmentation chain transfer dispersion polymerization of thermoresponsive diblock copolymer assemblies: Temperature directed morphology transformations. **2012**, 50, 4879-4887	38
1106	Hierarchically designed injectable hydrogel from oxidized dextran, amino gelatin and 4-arm poly(ethylene glycol)-acrylate for tissue engineering application. **2012**, 22, 25130	45
1105	A low-molecular-weight supramolecular hydrogel of riboflavin bolaamphiphile for VEGF-siRNA delivery. **2012**, 48, 8901-3	28
1104	Tissue Analogs by the Assembly of Engineered Hydrogel Blocks. **2012**, 471-493	5
1103	Biomimetic Hydrogels for Regenerative Medicine. **2012**, 503-513	1
1102	Hydrogels. **2012**, 385-395	19
1101	Polymer Nanogels and Microgels. **2012**, 309-350	10
1100	Ultrahigh-water-content supramolecular hydrogels exhibiting multistimuli responsiveness. **2012**, 134, 11767-73	371
1099	Hydrogels for biomedical applications. **2012**, 64, 18-23	1995
1098	Temperature-sensitive polymers for drug delivery. **2012**, 9, 339-51	46
1097	Odontogenic responses of human dental pulp cells to collagen/nanobioactive glass nanocomposites. **2012**, 28, 1271-9	47
1096	Revisit the pre-transition of type I collagen denaturation in dilute solution by ultrasensitive differential scanning calorimetry. **2012**, 548, 1-5	17
1095	Cross-Linking Structural Effect of Hydrogel Based on 2-Hydroxyethyl Methacrylate. **2012**, 51, 7769-7776	11

1094	Development of antibiotic and debriding enzyme-loaded PLGA microspheres entrapped in PVA-gelatin hydrogel for complete wound management. **2012**, 40, 345-53		17
1093	PLA-PEO-PLA Hydrogels: Chemical Structure, Self-Assembly and Mechanical Properties. **2012**, 313-324		2
1092	Reactions Involving Oxidases and Peroxidases. **2012**, 303-432		
1091	Self-assembled amino acids and dipeptides as noncovalent hydrogels for tissue engineering. **2012**, 3, 18-33		197
1090	One-step synthesis of biodegradable curcumin-derived hydrogels as potential soft tissue fillers after breast cancer surgery. **2012**, 13, 2279-86		37
1089	Injectable, mixed natural-synthetic polymer hydrogels with modular properties. **2012**, 13, 369-78		129
1088	Responses of preosteoblasts on nano-structured polymer surfaces prepared from block copolymer□surfactant complexes. **2012**, 8, 7898		3
1087	Novel smart supramolecular metallo-hydrogel that could selectively recognize and effectively remove Pb2+ in aqueous solution. **2012**, 55, 2554-2561		11
1086	Preparation and characterization of a novel hybrid copolymer hydrogel with poly(ethylene glycol) dimethacrylate, 2-hydroxyethyl methacrylate and layered double hydroxides. **2012**, 17, 712-716		3
1085	Comparison of properties between NIPAAm-based simultaneously physically and chemically gelling polymer systems for use in vivo. **2012**, 8, 3629-42		20
1084	Biomimetic cell culture proteins as extracellular matrices for stem cell differentiation. *Chemical Reviews*, **2012**, 112, 4507-40	68.1	104
1083	Hydrogels for protein delivery. *Chemical Reviews*, **2012**, 112, 2853-88	68.1	836
1082	Injectable in situ Gelling Hydrogels as Biomaterials. **2012**, 359-396		2
1081	Biomimetic interpenetrating polymer network hydrogels based on methacrylated alginate and collagen for 3D pre-osteoblast spreading and osteogenic differentiation. **2012**, 8, 2398		46
1080	Multifunctional Nanoparticles for Drug Delivery Applications. **2012**,		25
1079	Effect of polymer deposition method on thermoresponsive polymer films and resulting cellular behavior. **2012**, 28, 2281-7		15
1078	A perspective on bioactive cell microencapsulation. **2012**, 26, 283-301		26
1077	Electrosensitive polyacrylic acid/fibrin hydrogel facilitates cell seeding and alignment. **2012**, 13, 1448-57		42

1076	Chitosan-Based Biopharmaceutical Scaffolds in Tissue Engineering and Regenerative Medicine. **2012**, 393-427	4
1075	Fast-degradable microbeads encapsulating human umbilical cord stem cells in alginate for muscle tissue engineering. **2012**, 18, 2303-14	25
1074	Microfluidic-Based Synthesis of Hydrogel Particles for Cell Microencapsulation and Cell-Based Drug Delivery. **2012**, 4, 1084-1108	115
1073	Ultrasonication and Genipin Cross-Linking to Prepare Novel Silk Fibroin□Gelatin Composite Hydrogel. **2012**, 27, 327-341	47
1072	Temperature-responsive compounds as in situ gelling biomedical materials. **2012**, 41, 4860-83	325
1071	Tissue engineered human skin equivalents. **2012**, 4, 26-41	88
1070	Regenerative approaches as alternatives to donor allografting for restoration of corneal function. **2012**, 10, 170-83	38
1069	Tissue Engineering. **2012**, 369-384	
1068	Construction of therapeutic glycopeptide hydrogel as a new substitute for antiproliferative drugs to inhibit postoperative scarring formation. **2012**, 22, 18164	19
1067	Self-sustaining, fluorescent and semi-conducting co-assembled organogel of Fmoc protected phenylalanine with aromatic amines. **2012**, 8, 7436	54
1066	Structure and dynamics of poly(vinyl alcohol) gels in mixtures of dimethyl sulfoxide and water. **2012**, 44, 83-94	21
1065	Design and properties of supramolecular polymer gels. **2012**, 8, 6416	138
1064	Hybrid hydrogels of hyperbranched poly(ether amine)s (hPEAs) for selective adsorption of guest molecules and separation of dyes. **2012**, 22, 10055	56
1063	Perturbation induced formation of a 3D-network of microcrystals producing soft materials. **2012**, 2, 5605	10
1062	Advances in biomimetic regeneration of elastic matrix structures. **2012**, 2, 323-50	22
1061	Cell attachment to hydrogel-electrospun fiber mat composite materials. **2012**, 3, 497-513	27
1060	. **2012**,	4
1059	Hydrogel Films on Optical Fiber Core: Properties, Challenges, and Prospects for Future Applications. **2012**,	

1058	Physico-Chemical Properties and Lysozyme Activities of Egg White Film. **2012**, 69, 20-26	
1057	Preparation of PHEMA Copolymers Containing Cell-binding Peptides as Graft Chains and Their Cell Adhesive Properties. **2012**, 37, 533-536	3
1056	. **2012**,	44
1055	Surgical techniques: past, present and future. **2012**, 2, e9	2
1054	Minimally invasive cell-seeded biomaterial systems for injectable/epicardial implantation in ischemic heart disease. **2012**, 7, 5969-94	31
1053	Novel bioresorbable hydrogels prepared from chitosan-graft-polylactide copolymers. **2012**, 61, 74-81	29
1052	Advancing nasal reconstructive surgery: the application of tissue engineering technology. **2012**, 6, 757-68	17
1051	Hydrogels for in vivo-like three-dimensional cellular studies. **2012**, 4, 351-65	72
1050	Synthesis of pH-responsive photocrosslinked hyaluronic acid-based hydrogels for drug delivery. **2012**, 50, 3507-3516	20
1049	Microfluidic encapsulation of cells in polymer microgels. **2012**, 8, 1633-42	195
1048	Synthesis and properties of amphiphilic photoresponsive gelators for aromatic solvents. **2012**, 14, 748-51	94
1047	Development of a biostable replacement for PEGDA hydrogels. **2012**, 13, 779-86	69
1046	Chemical and Mechano Responsive Metal□Organic Gels of Bis(benzimidazole)-Based Ligands with Cd(II) and Cu(II) Halide Salts: Self Sustainability and Gas and Dye Sorptions. **2012**, 24, 1165-1173	125
1045	LbL Assemblies Using van der Waals or Affinity Interactions and Their Applications. **2012**, 99-133	2
1044	Amphiphiles based on D-glucose: efficient low molecular weight gelators. **2012**, 14, 3826-9	30
1043	Synthesis of fluorinated oxadiazoles with gelation and oxygen storage ability. **2012**, 10, 3044-52	29
1042	Alginate and alginate/gelatin microspheres for human adipose-derived stem cell encapsulation and differentiation. **2012**, 4, 025007	95
1041	Collagen microsphere production on a chip. **2012**, 12, 3277-80	61

1040	Preparation of poly(acrylic acid)/graphite oxide superabsorbent nanocomposites. **2012**, 22, 4811	54
1039	A microfluidic approach to encapsulate living cells in uniform alginate hydrogel microparticles. **2012**, 12, 946-51	86
1038	A highly efficient self-assembly of responsive C(2) -cyclohexane-derived gelators. **2012**, 33, 1535-41	20
1037	Studies of in situ-forming hydrogels by blending PLA-PEG-PLA copolymer with silk fibroin solution. **2012**, 100, 1983-9	25
1036	Induction of the early inflammatory-mediated cellular responses of fracture healing in vitro using platelet releasate-containing alginate/CaPO4 biomaterials for early osteoarthritis prevention. **2012**, 100, 1107-14	4
1035	Preparation, characterization, and in vitro enzymatic degradation of chitosan-gelatine hydrogel scaffolds as potential biomaterials. **2012**, 100, 1655-67	65
1034	Nano-/microfiber scaffold for tissue engineering: physical and biological properties. **2012**, 100, 3051-8	11
1033	Osteoblasts responses to three-dimensional nanofibrous gelatin scaffolds. **2012**, 100, 3029-41	20
1032	Preparation and bioactive properties of novel bone-repair bionanocomposites based on hydroxyapatite and bioactive glass nanoparticles. **2012**, 100, 1672-82	27
1031	Peptide- and Protein-Based Hydrogels. **2012**, 24, 759-773	350
1030	Mesoporous organohydrogels from thermogelling photocrosslinkable nanoemulsions. **2012**, 11, 344-52	116
1029	Mechanical Properties of End-Linked PEG/PDMS Hydrogels. **2012**, 45, 6104-6110	71
1028	Mannan Loaded Biodegradable and Injectable Thermosensitive PCL-PEG-PCL Hydrogel for Vaccine Delivery. **2012**, 10, 472-486	22
1027	Functional Human Vascular Network Generated in Photocrosslinkable Gelatin Methacrylate Hydrogels. **2012**, 22, 2027-2039	484
1026	Cationic Hybrid Hydrogels from Amino-Acid-Based Poly(ester amide): Fabrication, Characterization, and Biological Properties. **2012**, 22, 3815-3823	82
1025	Crystal Growth of Calcium Carbonate in Hydrogels as a Model of Biomineralization. **2012**, 22, 2891-2914	157
1024	A Universal Molecular Stent Method to Toughen any Hydrogels Based on Double Network Concept. **2012**, 22, 4426-4432	141
1023	A novel injectable and in situ crosslinked hydrogel based on hyaluronic acid and polyaspartylhydrazide. **2012**, 125, 1116-1126	14

1022	(S)-2-(ethyl propionate)-(O-ethyl xanthate)- and (S)-2-(Ethyl isobutyrate)-(O-ethyl xanthate)-mediated RAFT polymerization of vinyl acetate. **2012**, 125, 2946-2955	18
1021	Cerium oxide nanoparticle-mediated self-assembly of hybrid supramolecular hydrogels. **2012**, 48, 7934-6	26
1020	Bottom-up approach to build osteon-like structure by cell-laden photocrosslinkable hydrogel. **2012**, 48, 3170-2	25
1019	Co-delivery of adipose-derived stem cells and growth factor-loaded microspheres in RGD-grafted N-methacrylate glycol chitosan gels for focal chondral repair. **2012**, 13, 2490-502	59
1018	Advances in bioactive hydrogels to probe and direct cell fate. **2012**, 3, 421-44	257
1017	Synthesis of novel poly(N,N-diethylacrylamide-co-acrylic acid) (P(DEA-co-AA)) microgels as carrier of horseradish peroxidase immobilization for pollution treatment. **2012**, 20, 484-489	17
1016	Characterization of methacrylated type-I collagen as a dynamic, photoactive hydrogel. **2012**, 7, 25	57
1015	Angiogenic therapy for cardiac repair based on protein delivery systems. **2012**, 17, 449-73	37
1014	Stability of alginate microbead properties in vitro. **2012**, 23, 903-12	40
1013	Viscoelastic properties of mineralized alginate hydrogel beads. **2012**, 23, 1619-27	20
1012	Liver tissue engineering: Recent advances in the development of a bio-artificial liver. **2012**, 17, 427-438	24
1011	Effect of monomeric sequence on transport properties of d-glucose and ascorbic acid in poly(VP-co-HEMA) hydrogels with various water contents: molecular dynamics simulation approach. **2012**, 131, 1	10
1010	In situ guided tissue regeneration in musculoskeletal diseases and aging : Implementing pathology into tailored tissue engineering strategies. **2012**, 347, 725-35	20
1009	An in situ forming collagen-PEG hydrogel for tissue regeneration. **2012**, 8, 124-32	116
1008	Photopolymerization of cell-encapsulating hydrogels: crosslinking efficiency versus cytotoxicity. **2012**, 8, 1838-48	235
1007	Sodium dodecyl sulfate-induced rapid gelation of silk fibroin. **2012**, 8, 2185-92	99
1006	In situ forming polysaccharide-based 3D-hydrogels for cell delivery in regenerative medicine. **2012**, 87, 1013-1019	45
1005	Synthesis and characterization of methylcellulose/PVA based porous composite. **2012**, 88, 1364-1372	76

1004	A novel approach for the use of hyaluronic acid-based hydrogel nanoparticles as effective carriers for transdermal delivery systems. **2012**, 402, 80-87	25
1003	Thermo-responsive Hercosett/Poly(N-isopropylacrylamide) films: a new, fast, optically responsive coating. **2012**, 369, 231-7	8
1002	A non-enzymatic hydrogen peroxide sensor based on poly(vinyl alcohol)–multiwalled carbon nanotubes–platinum nanoparticles hybrids modified glassy carbon electrode. **2012**, 70, 266-271	91
1001	Injectable shear-thinning hydrogels engineered with a self-assembling Dock-and-Lock mechanism. **2012**, 33, 2145-53	155
1000	The mechanical properties and cytotoxicity of cell-laden double-network hydrogels based on photocrosslinkable gelatin and gellan gum biomacromolecules. **2012**, 33, 3143-52	289
999	Modulation of mesenchymal stem cell chondrogenesis in a tunable hyaluronic acid hydrogel microenvironment. **2012**, 33, 3835-45	218
998	Injectable and thermo-sensitive PEG-PCL-PEG copolymer/collagen/n-HA hydrogel composite for guided bone regeneration. **2012**, 33, 4801-9	190
997	A review of trends and limitations in hydrogel-rapid prototyping for tissue engineering. **2012**, 33, 6020-41	882
996	Oxygen plasma assisted end-opening and field emission enhancement in vertically aligned multiwall carbon nanotubes. **2012**, 134, 425-429	13
995	PEG derived hydrogel: A novel synthesis route under mild condition. **2012**, 67, 215-218	7
994	Riboflavin and collagen: New crosslinking methods to tailor the stiffness of hydrogels. **2012**, 74, 58-61	53
993	Synthesis and characterization of biodegradable pH-sensitive poly(acrylic acid) hydrogels crosslinked by 2-hydroxyethyl methacrylate modified poly(L-glutamic acid). **2012**, 77, 74-77	27
992	Enhancing water permeability of fouling-resistant POSS–PEGM hydrogels using addition–extraction of sacrificial additives. **2012**, 401-402, 306-312	25
991	Super tough double network hydrogels and their application as biomaterials. **2012**, 53, 1805-1822	488
990	Alginate: properties and biomedical applications. **2012**, 37, 106-126	4151
989	Hydrophobic and oleophobic surface modification using gelling agents derived from amino acids. **2012**, 135, 187-194	7
988	Mechanical characterization and non-linear elastic modeling of poly(glycerol sebacate) for soft tissue engineering. **2012**, 11, 3-15	29
987	Hyperelastic mechanical behavior of chitosan hydrogels for nucleus pulposus replacement-experimental testing and constitutive modeling. **2012**, 8, 143-53	49

986	Cyclic tensile strain upon human mesenchymal stem cells in 2D and 3D culture differentially influences CCNL2, WDR61 and BAHCC1 gene expression levels. **2012**, 11, 82-91	11
985	Bone tissue engineering using bone marrow stromal cells and an injectable sodium alginate/gelatin scaffold. **2012**, 100, 1044-50	52
984	Biological glucose metabolism regulated peptide self-assembly as a simple visual biosensor for glucose detection. **2012**, 33, 426-31	60
983	Tough Bio-Based Elastomer Nanocomposites with High Performance for Engineering Applications. **2012**, 14, 112-118	74
982	Density gradient multilayer polymerization for creating complex tissue. **2012**, 24, 1466-70	39
981	Layer-by-layer assembly through weak interactions and their biomedical applications. **2012**, 24, 454-74	140
980	Microfabricated biomaterials for engineering 3D tissues. **2012**, 24, 1782-804	310
979	Controlled release of nutrients to mammalian cells cultured in shake flasks. **2012**, 28, 188-95	15
978	Interesting correlation between structure, physicomechanical, swelling and sustained transdermal release behavior of diltiazem hydrochloride in various poly(vinyl alcohol) hydrogel membranes. **2012**, 124, E177-E189	8
977	Controlled mechanical and swelling properties of poly(vinyl alcohol)/sodium alginate blend hydrogels prepared by freeze□thaw followed by Ca2+ crosslinking. **2012**, 124, 823-831	52
976	Chondrocyte 3D-culture in RGD-modified crosslinked hydrogel with temperature-controllable modulus. **2012**, 20, 106-111	16
975	Trivalent metal-mediated gelation of novel supergiant sulfated polysaccharides extracted from Aphanothece stagnina. **2012**, 290, 163-172	14
974	Assessment of multicomponent hydrogel scaffolds of poly(acrylic acid-2-hydroxy ethyl methacrylate)/gelatin for tissue engineering applications. **2013**, 27, 848-61	34
973	Synthesis and characterization of glucosamine modified poly(ethylene glycol) hydrogels via photopolymerization. **2013**, 128, 89-96	11
972	Chemical and topographical patterning of hydrogels for neural cell guidance in vitro. **2013**, 7, 253-70	25
971	Immobilization of Enzymes and Cells. **2013**,	37
970	Bioscaffolds: Fabrication and Performance. **2013**, 161-188	3
969	Encapsulation of cells in alginate gels. **2013**, 1051, 313-25	9

968	Amino acid and amino-alcohol conjugation of a nonsteroidal anti-inflammatory drug (NSAID) imparts hydrogelation displaying remarkable biostability, biocompatibility, and anti-inflammatory properties. **2013**, 29, 10254-63	28
967	Kinetics of Free-Radical Cross-Linking Polymerization: Comparative Experimental and Numerical Study. **2013**, 46, 5831-5841	18
966	Boronic acid-containing hydrogels: synthesis and their applications. **2013**, 42, 8106-21	310
965	Genipin-cross-linked poly(L-lysine)-based hydrogels: synthesis, characterization, and drug encapsulation. **2013**, 111, 423-31	31
964	Mechanical and Chemical Signaling in Angiogenesis. **2013**,	1
963	In situ formation of silver nanoparticles in poly(methacrylic acid) hydrogel for antibacterial applications. **2013**, 53, 1751-1759	22
962	Combinatorial biomatrix/cell-based therapies for restoration of host tissue architecture and function. **2013**, 2, 1544-63	12
961	Preparation of polyacrylamide based microgels with different charges for drug encapsulation. **2013** , 49, 1479-1486	6
960	Corneal Regenerative Medicine. **2013**,	6
959	A phase diagram of neutral polyampholyte - from solution to tough hydrogel. **2013**, 1, 4555-4562	62
958	Mechanically strong hydrogels with reversible behaviour under cyclic compression with MPa loading. **2013**, 9, 2869	44
957	Glucose-cored poly(aryl ether) dendron based low molecular weight gels: pH controlled morphology and hybrid hydrogel formation. **2013**, 49, 6758-60	22
956	Surface Microdynamics Phase Transition and Internal Structure of High-Density, Ultrathin PHEMA-b-PNIPAM Diblock Copolymer Brushes on Silicone Rubber. **2013**, 46, 5260-5278	26
955	Lipogels: surface-adherent composite hydrogels assembled from poly(vinyl alcohol) and liposomes. **2013**, 5, 6758-66	29
954	Sequential delivery of TAT-HSP27 and VEGF using microsphere/hydrogel hybrid systems for therapeutic angiogenesis. **2013**, 166, 38-45	35
953	Dual growth factor releasing multi-functional nanofibers for wound healing. **2013**, 9, 9351-9	296
952	Light-activated, in situ forming gel for sustained suprachoroidal delivery of bevacizumab. **2013**, 10, 2858-67	69
951	Poloxamer-based hydrogels hardening at body core temperature as carriers for cell based therapies: in vitro and in vivo analysis. **2013**, 24, 2223-34	14

950	Microfluidic Formation of Cell-Laden Hydrogel Modules for Tissue Engineering. **2013**, 183-201	
949	Characterization of the Adhesive Interactions Between Cells and Biomaterials. **2013**, 159-182	
948	Effect of methylcellulose on the formation and drug release behavior of silk fibroin hydrogel. **2013**, 98, 1179-85	29
947	Responsive nanotubular organo-gelator. **2013**, 54, 4948-4954	9
946	Drug Delivery Systems: Advanced Technologies Potentially Applicable in Personalised Treatment. **2013**,	6
945	Culture and differentiation of rat neural stem/progenitor cells in a three-dimensional collagen scaffold. **2013**, 170, 406-19	28
944	A study of hybrid organic/inorganic hydrogel films based on in situ-generated TiO2 nanoparticles and methacrylated gelatin. **2013**, 14, 982-989	14
943	Starch-Based Hydrogels: Present Status and Applications. **2013**, 62, 411-420	165
942	Synthesis of functionalized-thermo responsive-water soluble co-polymer for conjugation to protein for biomedical applications. **2013**, 1498, 121-125	
941	Hybrid polymer and low molecular weight gels □dynamic two-component soft materials with both responsive and robust nanoscale networks. **2013**, 9, 8730	79
940	Evaluation of BSA protein release from hollow hydroxyapatite microspheres into PEG hydrogel. **2013**, 33, 2245-50	15
939	Microengineered PEG hydrogels: 3D scaffolds for guided cell growth. **2013**, 13, 562-72	10
938	Paracrine exchanges of molecular signals between alginate-encapsulated pericytes and freely suspended endothelial cells within a 3D protein gel. **2013**, 34, 8899-908	22
937	Alginate hydrogels containing cell-interactive beads for bone formation. **2013**, 27, 4844-52	28
936	Composite three-dimensional woven scaffolds with interpenetrating network hydrogels to create functional synthetic articular cartilage. **2013**, 23, 5833-5839	175
935	Synthesis and characterization of positively charged interpenetrating double-network hydrogel matrices for biomedical applications. **2013**, 73, 1493-1499	16
934	A fluorescence study on the local environment of hydrogels: Double-network hydrogels having extraordinarily high mechanical strength and its constituent single-network hydrogels. **2013**, 419, 172-177	6
933	Hydrogel Composite Materials for Tissue Engineering Scaffolds. **2013**, 65, 505-516	61

932	Effect of amide hydrogen bonding on spontaneously formed gel-emulsions by two pyridyl carboxylic acid based amphiphiles, sodium salt of 2-dodecylpyridine-5-carboxylic acid and sodium salt of [2-dodecylpyridine-5-carboxylic]glycine: entrapment and release of vitamin B. **2013**, 1, 5588-5601	23
931	A microgel construction kit for bioorthogonal encapsulation and pH-controlled release of living cells. **2013**, 52, 13538-43	128
930	Preparation of cell-encapsulation devices in confined microenvironment. **2013**, 65, 1533-55	53
929	Glutathione-triggered formation of molecular hydrogels for 3D cell culture. **2013**, 108, 352-7	33
928	Performance and biocompatibility of extremely tough alginate/polyacrylamide hydrogels. **2013**, 34, 8042-8	213
927	Biologically Responsive Biomaterials for Tissue Engineering. **2013**,	7
926	Preparation and characterization of keratin-based biocomposite hydrogels prepared by electron beam irradiation. **2013**, 33, 5051-7	47
925	3D graphene oxide-polymer hydrogel: near-infrared light-triggered active scaffold for reversible cell capture and on-demand release. **2013**, 25, 6737-43	179
924	Multilayered Blood Capillary Analogs in Biodegradable Hydrogels for In Vitro Drug Permeability Assays. **2013**, 23, 1736-1742	46
923	Linear versus dendritic molecular binders for hydrogel network formation with clay nanosheets: studies with ABA triblock copolyethers carrying guanidinium ion pendants. **2013**, 135, 15650-5	134
922	Peptide-functionalized oxime hydrogels with tunable mechanical properties and gelation behavior. **2013**, 14, 3749-58	88
921	The Advent of the Golden Era of Animal Alternatives. **2013**, 49-73	1
920	Biomedical Applications of Clay. **2013**, 66, 1315	21
919	Cryopreservation of cell laden natural origin hydrogels for cartilage regeneration strategies. **2013**, 9, 875-885	29
918	Microfluidic Vascular Networks for Engineered Tissues. **2013**, 223-245	0
917	Composite hydrogels as a vehicle for releasing drugs with a wide range of hydrophobicities. **2013**, 9, 8815-22	26
916	Stretchable, transparent, ionic conductors. **2013**, 341, 984-7	1133
915	Synthesis, Structure, and Properties of Biopolymers (Natural and Synthetic). **2013**, 11-107	5

914	Fatigue prediction in fibrin poly-ε-caprolactone macroporous scaffolds. **2013**, 28, 55-61	18
913	Agarose hydrogels embedded with pH-responsive diblock copolymer micelles for triggered release of substances. **2013**, 14, 2713-23	33
912	Primary ammonium monocarboxylate synthon in designing supramolecular gels: a new series of chiral low-molecular-weight gelators derived from simple organic salts that are capable of generating and stabilizing gold nanoparticles. **2013**, 8, 3022-31	16
911	Injectable biodegradable hydrogels: progress and challenges. **2013**, 1, 5371-5388	212
910	Co-delivery of vascular endothelial growth factor and angiopoietin-1 using injectable microsphere/hydrogel hybrid systems for therapeutic angiogenesis. **2013**, 30, 2157-65	16
909	Macrocyclic gelators. **2013**, 25, 555-566	8
908	Influence of plasma protein–hydrogel interaction moderated by absorption of water on long-term cell viability in amphiphilic biosynthetic hydrogels. **2013**, 3, 24509	32
907	Cucurbit[8]uril inducing supramolecular hydrogels by adjusting pH. **2013**, 3, 3031	23
906	Replenishable dendrimer-nanoparticle hybrid membranes for sustained release of therapeutics. **2013**, 5, 7805-8	8
905	pH-responsive physical gels from poly(meth)acrylic acid-containing crosslinked particles: the relationship between structure and mechanical properties. **2013**, 1, 4065-4078	25
904	Biofabrication under fluorocarbon: a novel freeform fabrication technique to generate high aspect ratio tissue-engineered constructs. **2013**, 2, 374-84	69
903	A strategy for antimicrobial regulation based on fluorescent conjugated oligomer-DNA hybrid hydrogels. **2013**, 49, 5574-6	18
902	The influence of pH and ionic strength on the swelling of dense protein particles. **2013**, 9, 4598	27
901	Dynamically crosslinked materials via recognition of amino acids by cucurbit[8]uril. **2013**, 1, 2904-2910	48
900	The synthesis and lectin-binding properties of novel mannose-functionalised polymers. **2013**, 3, 15435	7
899	Multicellular aggregation of maltol-modified cells triggered by Fe(3+) ions. **2013**, 49, 10148-50	7
898	Self-assembly of sodium glycyrrhetinate into a hydrogel: characterisation and properties. **2013**, 3, 24906	15
897	Mechanical reinforcement of C2-phenyl-derived hydrogels for controlled cell adhesion. **2013**, 9, 3750	45

896	The importance of hydrophobic moieties in ice recrystallization inhibitors. **2013**, 3, 3232	36
895	pH- and thermo-responsive poly(N-isopropylacrylamide-co-acrylic acid derivative) copolymers and hydrogels with LCST dependent on pH and alkyl side groups. **2013**, 1, 5578-5587	98
894	Evolution of nano- to microsized spherical assemblies of fluorogenic biscalix[4]arenes into supramolecular organogels. **2013**, 49, 3037-9	22
893	State of the art composites comprising electrospun fibres coupled with hydrogels: a review. **2013**, 9, 322-35	104
892	Preparation of polyacrylamide/graphite oxide superabsorbent nanocomposites with salt tolerance and slow release properties. **2013**, 129, 2328-2334	14
891	The role of crystallization and phase separation in the formation of physically cross-linked PVA hydrogels. **2013**, 9, 826-833	152
890	Bioresponsive hydrogels. **2013**, 2, 520-32	38
889	Hydrogels. **2013**, 166-179	10
888	Structure and properties of cholesterol-based hydrogelators with varying hydrophilic terminals: biocompatibility and development of antibacterial soft nanocomposites. **2013**, 29, 316-27	35
887	How smart do biomaterials need to be? A translational science and clinical point of view. **2013**, 65, 581-603	350
886	Recent progress of in situ formed gels for biomedical applications. **2013**, 38, 672-701	309
885	Charge transfer dye-based PHEMA hydrogel sensor: its fluorescence responses to pH, metal ion, and humidity. **2013**, 70, 71-79	6
884	Biocompatible materials for continuous glucose monitoring devices. *Chemical Reviews*, **2013**, 113, 2528-68.1	221
883	Fabrication and in vivo test of P(LLA-CL) tubular grafts loaded with heparin. **2013**, 172, e144-e145	
882	Hierarchically designed interpenetrating network hydrogels of oxidized dextran, amino gelatin, and poly(ethylene glycol) diacrylate for tissue engineering. **2013**, 172, e143-e144	
881	Stiffness and adhesivity control aortic valve interstitial cell behavior within hyaluronic acid based hydrogels. **2013**, 9, 7640-50	106
880	Visual optical biosensors based on DNA-functionalized polyacrylamide hydrogels. **2013**, 64, 292-8	35
879	Towards constructing extracellular matrix-mimetic hydrogels: an elastic hydrogel constructed from tandem modular proteins containing tenascin FnIII domains. **2013**, 9, 6481-91	39

878	Inhomogeneous large deformation study of temperature-sensitive hydrogel. **2013**, 50, 2610-2619	64
877	Solvent-dependent truxene-based nanostructures. **2013**, 19, 16080-6	14
876	Phase transfer-catalyzed synthesis of highly acrylated hyaluronan. **2013**, 93, 438-41	13
875	Synthesis and unusual volume phase transition behavior of poly(N-isopropylacrylamide)–poly(2-hydroxyethyl methacrylate) interpenetrating polymer network microgel. **2013**, 9, 1678-1684	19
874	Effects of allogenous periosteal-derived cells transfected with adenovirus-mediated BMP-2 on repairing defects of the mandible in rabbits. **2013**, 71, 1789-99	8
873	Short-term ventricular restraint attenuates post-infarction remodeling in rats. **2013**, 165, 278-84	10
872	Co-assembly of CdTe quantum dots and magnetic nanoparticles in imprinted matrices for magnetic separation and specific recognition of endocrine disrupting chemicals. **2013**, 172, e144	
871	Approaches in extracellular matrix engineering for determination of adhesion molecule mediated single cell function. **2013**, 8, 32-49	
870	A supramolecular hydrogel based on an original pseudopeptidic catanionic surfactant. **2013**, 37, 559-562	12
869	Switchable catalytic acrylamide hydrogels cross-linked by hemin/G-quadruplexes. **2013**, 13, 1298-302	139
868	Carbon-based nanomaterials for tissue engineering. **2013**, 2, 244-60	160
867	Orthogonality in organic, polymer, and supramolecular chemistry: from Merrifield to click chemistry. **2013**, 49, 1679-95	239
866	Host–guest chemistry of linked β-cyclodextrin trimers and adamantyl substituted poly(acrylate)s in aqueous solution. **2013**, 4, 820-829	14
865	Recent advances on the development of wound dressings for diabetic foot ulcer treatment--a review. **2013**, 9, 7093-114	442
864	Fabrication and properties of chitin/hydroxyapatite hybrid hydrogels as scaffold nano-materials. **2013**, 91, 7-13	101
863	Intra- and intermolecular hydrogen bonds enhance the fluoride-responsiveness of functionalized glycolipid-based gelators. **2013**, 1, 819-827	10
862	Advances in growth factor delivery for therapeutic angiogenesis. **2013**, 50, 35-51	45
861	Engineered multilayer ovarian tissue that secretes sex steroids and peptide hormones in response to gonadotropins. **2013**, 34, 2412-20	35

860	Synthesis of ultrahigh molar mass poly(2-hydroxyethyl methacrylate) by single-electron transfer living radical polymerization. **2013**, 4, 2760	52
859	WITHDRAWN: An overview on stimuli responsive hydrogels as drug delivery system. **2013**,	5
858	Exploring the Future of Hydrogels in Rapid Prototyping: A Review on Current Trends and Limitations. **2013**, 201-249	1
857	Manipulating biological agents and cells in micro-scale volumes for applications in medicine. **2013**, 42, 5788-808	82
856	Biomaterials for Cell-Based Therapeutic Angiogenesis. **2013**, 247-259	
855	Functional modification of agarose: a facile synthesis of a fluorescent agarose-tryptophan based hydrogel. **2013**, 97, 165-71	21
854	Peptide hydrogels. **2013**, 3, 9117	222
853	Bioresponsive hydrogel scaffolding systems for 3D constructions in tissue engineering and regenerative medicine. **2013**, 8, 655-68	29
852	Designing degradable hydrogels for orthogonal control of cell microenvironments. **2013**, 42, 7335-72	473
851	Smart wormlike micelles. **2013**, 42, 7174-203	352
850	Photocrosslinked nanocomposite hydrogels from PEG and silica nanospheres: structural, mechanical and cell adhesion characteristics. **2013**, 33, 1800-7	92
849	Polymeric cantilever sensors functionalized with multiamine supramolecular hydrogel. **2013**, 178, 47-52	11
848	Peptide self-assembly driven by oxo-ester mediated native chemical ligation. **2013**, 49, 4815-7	20
847	Preparation and properties of linear low-density polyethylene-g-poly (acrylic acid)/organo-montmorillonite superabsorbent hydrogel composites. **2013**, 32, 502-512	63
846	Cryogels for biomedical applications. **2013**, 1, 2682-2695	184
845	Physical cues of biomaterials guide stem cell differentiation fate. *Chemical Reviews*, **2013**, 113, 3297-32868.1	329
844	Toward Strong and Tough Glass and Ceramic Scaffolds for Bone Repair. **2013**, 23, 5461-5476	143
843	A robust, one-pot synthesis of highly mechanical and recoverable double network hydrogels using thermoreversible sol-gel polysaccharide. **2013**, 25, 4171-6	485

842	Collagen and collagen mimetic peptide conjugates in polymer science. **2013**, 49, 2986-2997	35
841	Nanocomposite hydrogels with high strength cross-linked by titania. **2013**, 3, 7233	52
840	pH-controlled nanoaggregation in amphiphilic polymer co-networks. **2013**, 7, 2693-704	29
839	A cyclic selenium-based reversible addition-fragmentation chain transfer agent mediated polymerization of vinyl acetate. **2013**, 51, 1656-1663	14
838	In vivo bio-safety evaluations and diagnostic/therapeutic applications of chemically designed mesoporous silica nanoparticles. **2013**, 25, 3144-76	554
837	Bioinspired, calcium-free alginate hydrogels with tunable physical and mechanical properties and improved biocompatibility. **2013**, 14, 2004-13	197
836	Environmentally responsive hydrogels with dynamically tunable properties as extracellular matrix mimetic. **2013**, 29,	9
835	Advances in smart materials: Stimuli-responsive hydrogel thin films. **2013**, 51, 1084-1099	123
834	Study on the potential of RGD- and PHSRN-modified alginates as artificial extracellular matrices for engineering bone. **2013**, 16, 284-93	42
833	Applications and emerging trends of hyaluronic acid in tissue engineering, as a dermal filler and in osteoarthritis treatment. **2013**, 9, 7081-92	292
832	Biodegradable and electrically conducting polymers for biomedical applications. **2013**, 38, 1263-1286	455
831	Wet-Spun Stimuli-Responsive Composite Fibers with Tunable Electrical Conductivity. **2013**, 23, 5903-5909	24
830	Pickering Emulsions Based on Supramolecular Hydrogels: Application to Higher Olefins Hydroformylation. **2013**, 3, 1618-1621	59
829	Transdermal regulation of vascular network bioengineering using a photopolymerizable methacrylated gelatin hydrogel. **2013**, 34, 6785-96	128
828	Bioactive hydrogels with enhanced initial and sustained cell interactions. **2013**, 14, 2225-33	27
827	Reversible maleimide-thiol adducts yield glutathione-sensitive poly(ethylene glycol)-heparin hydrogels. **2013**, 4, 133-143	125
826	Thermal analysis of some natural polysaccharide materials by isoconversional method. **2013**, 140, 178-82	33
825	Biofabrication of Hydrogel Constructs. **2013**, 225-254	7

824	Gelation of amino acid-based amphiphiles in water-based mixed solvent systems: reusable catalytic templates for nanostructured silica and silica–zirconia photocatalyst. **2013**, 9, 5293	8
823	Biofabrication: an overview of the approaches used for printing of living cells. **2013**, 97, 4243-58	180
822	Bio-ink properties and printability for extrusion printing living cells. **2013**, 1, 763-773	371
821	Tailoring the dependency between rigidity and water uptake of a microfabricated hydrogel with the conformational rigidity of a polymer cross-linker. **2013**, 14, 1361-9	13
820	Stimuli-responsive self-assembling peptides made from antibacterial peptides. **2013**, 5, 6413-21	56
819	A bio-inspired platform to modulate myogenic differentiation of human mesenchymal stem cells through focal adhesion regulation. **2013**, 2, 442-9	38
818	Ureteral tissue engineering: where are we and how to proceed?. **2013**, 19, 413-9	21
817	Recent advances in bio-based polymers and composites. **2013**, 49, 1146-1150	8
816	Biomimetically-mineralized composite coatings on titanium functionalized with gelatin methacrylate hydrogels. **2013**, 279, 293-299	50
815	Cholesterol-/estradiol-appended alkynylplatinum(II) complexes as supramolecular gelators: synthesis, characterization, photophysical and gelation studies. **2013**, 19, 9987-94	26
814	Development of amphiphilic, enzymatically-degradable PEG-peptide conjugate as cell crosslinker for spheroid formation. **2013**, 101, 223-7	11
813	Structure–property correlation of benzoyl thiourea derivatives as organogelators. **2013**, 1031, 43-48	11
812	Bioresorbable surface-adhered enzymatic microreactors based on physical hydrogels of poly(vinyl alcohol). **2013**, 29, 344-54	27
811	Extending Primary Ammonium Dicarboxylate (PAD) to Diprimary Ammonium Dicarboxylate (DPAD) Synthon and Its Implication in Supramolecular Gelation. **2013**, 13, 4559-4570	10
810	Synthesis and pH-responsive "schizophrenic" aggregation of a linear-dendron-like polyampholyte based on oppositely charged polypeptides. **2013**, 14, 4320-30	48
809	Bioorthogonal Click Chemistry: An Indispensable Tool to Create Multifaceted Cell Culture Scaffolds. **2013**, 2, 5-9	187
808	Comparison of dipolar, H-bonding, and dispersive interactions on gelation efficiency of positional isomers of keto and hydroxy substituted octadecanoic acids. **2013**, 29, 6467-75	28
807	Morphology, interfacial interaction, and properties of a novel bioelastomer reinforced by silica and carbon black. **2013**, 129, 1546-1554	17

806	Patterned cell arrays and patterned co-cultures on polydopamine-modified poly(vinyl alcohol) hydrogels. **2013**, 5, 045009	21
805	A contemporary review on polymer stereocomplexes and its biomedical application. **2013**, 5,	49
804	Structural and molecular micropatterning of dual hydrogel constructs for neural growth models using photochemical strategies. **2013**, 15, 49-61	24
803	Efficient production of l-sorbose from d-sorbitol by whole cell immobilization of Gluconobacter oxydans WSH-003. **2013**, 77, 171-176	24
802	Synthesis and Self-Assembly of Well-Defined Block Copolypeptides via Controlled NCA Polymerization. **2013**, 1-37	15
801	Stress−Strain Relationship of Highly Stretchable Dual Cross-Link Gels: Separability of Strain and Time Effect. **2013**, 2, 1065-1068	140
800	Biscalix[4]arene derivative as a very efficient phase selective gelator for oil spill recovery. **2013**, 15, 5830-3	56
799	A strong and stretchable self-healing film with self-activated pressure sensitivity for potential artificial skin applications. **2013**, 3, 3138	98
798	Fabrication and Characterization of Macroporous Poly(Ethylene Glycol) Hydrogels Generated by Several Types of Porogens. **2013**, 62, 502-508	11
797	Cardiac cell culture model as a left ventricle mimic for cardiac tissue generation. **2013**, 85, 8773-9	20
796	Synthesis and fabrication of a degradable poly(N-isopropyl acrylamide) scaffold for tissue engineering applications. **2013**, 101, 775-86	32
795	Magnetic Hydrogels and Their Potential Biomedical Applications. **2013**, 23, 660-672	431
794	Modular multifunctional poly(ethylene glycol) hydrogels for stem cell differentiation. **2013**, 23, 575-582	47
793	Histological techniques for preservation of alginate bead structural integrity using glycolmethacrylate. **2013**, 36, 100-105	2
792	Desmosine-inspired cross-linkers for hyaluronan hydrogels. **2013**, 3, 2043	12
791	A Green Approach to Synthesize Silver Nanoparticles in Starch-co-Poly(acrylamide) Hydrogels by Tridax procumbens Leaf Extract and Their Antibacterial Activity. **2013**, 2013, 1-10	14
790	A facile in situ morphological characterization of smart genipin-crosslinked chitosan−poly(vinyl pyrrolidone) hydrogels. **2013**, 28, 2401-2408	16
789	Simulation of the Transient Behavior of Gels Based on an Analogy Between Diffusion and Heat Transfer. **2013**, 80,	23

788	Alginate-Based Biomaterials for Regenerative Medicine Applications. **2013**, 6, 1285-1309	787
787	Thermo-responsive metallo-supramolecular gels based on terpyridine end-functionalized amphiphilic diblock copolymers. **2013**, 1499, 1	1
786	Hydrogel scaffolds for tissue engineering: Progress and challenges. **2013**, 2013, 316-42	438
785	Tailored Macromolecules Versus Nanoparticles as Additives for Mechanical Reinforcement of NCO-sP(EO-stat-PO) Hydrogels. **2013**, 77-89	1
784	Structure of polymer and particle aggregates in hydrogel composites. **2013**, 51, 421-429	13
783	Engineering three-dimensional constructs of the periodontal ligament in hyaluronan-gelatin hydrogel films and a mechanically active environment. **2013**, 48, 790-801	14
782	Synthesis of Poly(?-caprolactone-co-methacrylic acid) Copolymer via Phosphazene-Catalyzed Hybrid Copolymerization. **2013**, 214, 378-385	23
781	The role of electrostatics and temperature on morphological transitions of hydrogel nanostructures self-assembled by peptide amphiphiles via molecular dynamics simulations. **2013**, 2, 1388-400	38
780	Polyelectrolyte assemblies for drug storage and delivery: multilayers, nanocapsules and multicapsules. **2013**, 94-145	0
779	Bioprinting and Tissue Engineering: Recent Advances and Future Perspectives. **2013**, 53, 795-804	30
778	Bioactive polyacrylamide hydrogels with gradients in mechanical stiffness. **2013**, 110, 1508-19	24
777	Ionic networks derived from the protonation of dendritic amines with carboxylic acid end-functionalized PEGs. **2013**, 51, 1359-1371	26
776	Seleno-containing poly(vinyl acetate) prepared by diselenocarbonates-mediated controlled free radical polymerizations. **2013**, 51, 3159-3165	14
775	Entropic effects in the self-assembly of open lattices from patchy particles. **2013**, 87, 062319	24
774	Phase II angiogenesis stimulators. **2013**, 22, 1157-66	8
773	Tuning the Poisson's Ratio of Biomaterials for Investigating Cellular Response. **2013**, 23, 3226	74
772	Gelatin embedding for the preparation of thermoreversible or delicate scaffolds for histological analysis. **2013**, 8, 041001	3
771	Active cross-linkers that lead to active gels. **2013**, 52, 11494-8	33

770	Bio-inspired soft polystyrene nanotube substrate for rapid and highly efficient breast cancer-cell capture. **2013**, 5, e63-e63	107
769	Hyaluronic acid hydrogels for vocal fold wound healing. **2013**, 3,	41
768	Impact of artificial plaque composition on drug transport. **2013**, 102, 1905-1914	17
767	Ein Mikrogelbaukasten f□die bioorthogonale Verkapselung und pH-gesteuerte Freisetzung von lebenden Zellen. **2013**, 125, 13780-13785	14
766	Bone regeneration of tibial defects in rats with enzymatic hydrogelation of gelatin derivative and recombinant human platelet-derived growth factor-BB complex. **2013**, 28, 1377-85	1
765	Cytotoxicity, in vitro models and preliminary in vivo study of dual physical and chemical gels for endovascular embolization of cerebral aneurysms. **2013**, 101, 2515-25	17
764	POSS/gelatin-polyglutamic acid hydrogel composites: Preparation, biological and mechanical characterization. **2013**, 129, 699-706	22
763	Effective tuning of ligand incorporation and mechanical properties in visible light photopolymerized poly(ethylene glycol) diacrylate hydrogels dictates cell adhesion and proliferation. **2013**, 8, 025001	26
762	Application of Microfluidics in Stem Cell and Tissue Engineering. **2013**, 241-291	
761	Biochemically and topographically engineered poly(ethylene glycol) diacrylate hydrogels with biomimetic characteristics as substrates for human corneal epithelial cells. **2013**, 101, 1184-94	35
760	Active Cross-Linkers that Lead to Active Gels. **2013**, 125, 11708-11712	6
759	Encapsulated islet transplantation: strategies and clinical trials. **2013**, 13, 235-9	47
758	Microfabricated gels for tissue engineering. 317-331	
757	Biodegradable sodium alginate and lignosulphonic acid blends: characterization and swelling studies. **2013**, 23, 13-18	13
756	The conjugation of nonsteroidal anti-inflammatory drugs (NSAID) to small peptides for generating multifunctional supramolecular nanofibers/hydrogels. **2013**, 9, 908-17	60
755	. **2013**,	9
754	Peptide hydrogelation and cell encapsulation for 3D culture of MCF-7 breast cancer cells. **2013**, 8, e59482	79
753	Preparation and Characterization of Poly(vinyl alcohol)-chondroitin Sulphate Hydrogel as Scaffolds for Articular Cartilage Regeneration. **2013**, 2013, 1-8	19

752	Systems for ex-vivo Isolation and Culturing of Neural Stem Cells. **2013**,	1
751	Growth factor delivery on scaffolds. 377-390	
750	Fumarate-based hydrogels in regenerative medicine applications. 279-294	
749	Endogenous stem/progenitor cell recruitment for tissue regeneration. 405-418	
748	Natural and Synthetic Biodegradable Polymers: Different Scaffolds for Cell Expansion and Tissue Formation. **2014**, 37, 187-205	191
747	Effects of surface functionalization on the adsorption of human serum albumin onto nanoparticles - a fluorescence correlation spectroscopy study. **2014**, 5, 2036-47	73
746	Exploring the complex mechanical properties of xanthan scaffolds by AFM-based force spectroscopy. **2014**, 5, 365-373	4
745	Current progress, challenges, and future prospects of testis organoids **2021**, 104, 942-961	3
744	Constitutive modeling of bond breaking and healing kinetics of physical Polyampholyte (PA) gel. **2021**, 43, 101184	5
743	Integration of Soft Electronics and Biotissues. **2021**, 2, 100074	7
742	Fabrication of natural polysaccharide based hydrogel with utility to entrap pollutants. **2021**, 1797, 012060	1
741	Cyclic Thiosulfinates as a Novel Class of Disulfide Cleavable Cross-Linkers for Rapid Hydrogel Synthesis. **2021**, 32, 584-594	0
740	Surface-Triggered In Situ Gelation for Tunable Conformal Hydrogel Coating of Therapeutic Cells and Biomedical Devices. **2021**, 31, 2010169	1
739	Supramolecular Synthon Approach in Designing Organic Sulfonates as Supramolecular Gelators: An Easily Accessible Topical Gel with Antibacterial Properties. **2021**, 33, 2274-2288	1
738	Progress in DNA-based hydrogels for biosensing. 1-16	
737	Cardiac tissue engineering, biomaterial scaffolds, and their fabrication techniques. **2021**, 32, 2290-2305	9
736	Hydroxypropyl chitosan-based dual self-healing hydrogel for adsorption of chromium ions. **2021**, 174, 89-100	14
735	Tough Hydrogels Based on Maleic Anhydride, Bulk Properties Study and Microfiber Formation by Electrospinning. **2021**, 13,	1

734	Matrix stiffness primes lymphatic tube formation directed by vascular endothelial growth factor-C. **2021**, 35, e21498		10
733	Applications of Biomaterials in 3D Cell Culture and Contributions of 3D Cell Culture to Drug Development and Basic Biomedical Research. **2021**, 22,		15
732	High-Throughput Methods in the Discovery and Study of Biomaterials and Materiobiology. *Chemical Reviews*, **2021**, 121, 4561-4677	68.1	45
731	Biomaterials and strategies for repairing spinal cord lesions. **2021**, 144, 104973		8
730	UV-Assisted Li-Catalyzed Radical Grafting Polymerization of Vinyl Ethers: A New Strategy for Creating Hydrolysis-Resistant and Long-Lived Polymer Brushes as a "Smart" Surface Coating. **2021**, 37, 4102-4111		1
729	Prediction of mechanical and thermal properties of particle reinforced hydrogel composites using the structural genome approach. **2021**, 10, 2150004		0
728	Advances in biofabrication techniques for collagen-based 3D in vitro culture models for breast cancer research. **2021**, 122, 111944		7
727	Bioinspired Highly Anisotropic, Ultrastrong and Stiff, and Osteoconductive Mineralized Wood Hydrogel Composites for Bone Repair. **2021**, 31, 2010068		26
726	Engineered Hydrogels. **2021**, 89-114		1
725	Hydrogels as Emerging Materials for Cornea Wound Healing. **2021**, 17, e2006335		15
724	Physicochemical characteristics of thermo-responsive gelatin membranes containing carboxymethyl chitosan and poly(N-isopropylacrylamide-co-acrylic acid). **2021**, 28, 1		1
723	The Use of Microfabrication Techniques for the Design and Manufacture of Artificial Stem Cell Microenvironments for Tissue Regeneration. **2021**, 8,		2
722	Soft Materials by Design: Unconventional Polymer Networks Give Extreme Properties. *Chemical Reviews*, **2021**, 121, 4309-4372	68.1	145
721	Ion Conductive Phytic Acid-G Quadruplex Hydrogel as Electrolyte for Flexible Electrochromic Device. **2021**, 7, 613-619		1
720	Mutual influence of selenium nanoparticles and FGF2-STAB on biocompatible properties of collagen/chitosan 3D scaffolds: in vitro and ex ovo evaluation. **2021**, 19, 103		3
719	Influence of Hydrogen Peroxide-Mediated Cross-Linking and Degradation on Cell-Adhesive Gelatin Hydrogels.. **2021**, 4, 4184-4190		1
718	Guest-Host Supramolecular Assembly of Injectable Hydrogel Nanofibers for Cell Encapsulation. **2021**, 7, 4164-4174		5
717	Pulsed Microfluid Force-Based On-Chip Modular Fabrication for Liver Lobule-Like 3D Cellular Models. **2021**, 2021, 1-12		3

716	Methods of Generating Dielectrophoretic Force for Microfluidic Manipulation of Bioparticles. **2021**, 7, 2043-2063		5
715	Ligament-Inspired Tough and Anisotropic Fibrous Gel Belt with Programed Shape Deformations Dynamic Stretching. **2021**, 13, 19291-19300		5
714	Clip Chemistry: Diverse (Bio)(macro)molecular and Material Function through Breaking Covalent Bonds. *Chemical Reviews*, **2021**, 121, 7059-7121	68.1	19
713	Biomaterials as therapeutic agents for treatment of cancer: A review. **2021**, 1116, 012037		2
712	Direct-ink-write printing of hydrogels using dilute inks. **2021**, 24, 102319		4
711	Development of bioresorbable smart injectable hydrogels based on thermo-responsive copolymer integrated bovine serum albumin bioconjugates for accelerated healing of excisional wounds. **2021**, 96, 345-355		8
710	Spatiotemporal patterning of photoresponsive DNA-based hydrogels to tune local cell responses. **2021**, 12, 2364		15
709	Impact of the Type of Crosslinking Agents on the Properties of Modified Sodium Alginate/Poly(vinyl Alcohol) Hydrogels. **2021**, 26,		7
708	Seaweed Polysaccharide Based Products and Materials: An Assessment on Their Production from a Sustainability Point of View. **2021**, 26,		9
707	Development of a Cleavable Biotin-Drug Conjugate Hydrogelator for the Controlled and Dual Delivery of Anticancer Drugs. **2021**, 6, 3256-3261		1
706	Enhanced Biomechanical Properties of Polyvinyl Alcohol-Based Hybrid Scaffolds for Cartilage Tissue Engineering. **2021**, 9, 730		7
705	Recent Advances in Design Strategies for Tough and Stretchable Hydrogels. **2021**, 86, 601-611		7
704	Shape-Stable Hydrated Salts/Polyacrylamide Phase-Change Organohydrogels for Smart Temperature Management. **2021**, 13, 21810-21821		11
703	Controlling Surface-Induced Platelet Activation by Agarose and Gelatin-Based Hydrogel Films. **2021**, 6, 10963-10974		5
702	A tissue-engineered human trabecular meshwork hydrogel for advanced glaucoma disease modeling. **2021**, 205, 108472		12
701	3D Printing Unique Nanoclay-Incorporated Double-Network Hydrogels for Construction of Complex Tissue Engineering Scaffolds. **2021**, 10, e2100036		15
700	andeffect of polycaprolactone nanofiber coating on polyethylene glycol diacrylate scaffolds for intervertebral disc repair. **2021**, 16,		4
699	Biosensing by Direct Observation of Leaky Waveguide Modes. **2021**, 1919, 012002		

698	High-strength nanocomposite self-regenerating hydrogels reinforced by additional crosslinking with trivalent metal cations. **2021**, 28, 1		1
697	Biaxial Loading Effects on Strain Energy Release Rate and Crack-Tip Strain Field in Elastic Hydrogels. **2021**, 54, 4792-4801		4
696	Assessing monocyte phenotype in poly(-glutamic acid) hydrogels formed by orthogonal thiol-norbornene chemistry. **2021**, 16,		3
695	Effect of cross-linkable bacterial cellulose nanocrystals on the physicochemical properties of silk sericin films. **2021**, 97, 107161		3
694	Evaluation of Composition Effects on the Physicochemical and Biological Properties of Polypeptide-Based Hydrogels for Potential Application in Wound Healing. **2021**, 13,		2
693	Tendon tissue engineering: Cells, growth factors, scaffolds and production techniques. **2021**, 333, 448-486		14
692	Hydrogels: A Promising Vehicle for the Topical Management of Atopic Dermatitis. **2021**, 4, 2100028		3
691	A Snapshot of Microfluidics in Point-of-Care Diagnostics: Multifaceted Integrity with Materials and Sensors. **2021**, 6, 2100049		13
690	A Comprehensive Review on Ulvan Based Hydrogel and Its Biomedical Applications. **2021**, 69, 432-443		7
689	Recent Advances in Metal-Phenolic Networks for Cancer Theranostics. **2021**, 17, e2100314		18
688	Synthesis of carboxymethyl Xanthan/ double-walled carbon nanotube hybrid hydrogel nanocomposite for transdermal release of drug. 1-15		0
687	Design Challenges in Polymeric Scaffolds for Tissue Engineering. **2021**, 9, 617141		15
686	Simple and Fast One-Pot Cellulose Gel Preparation in Aqueous Pyrrolidinium Hydroxide Solution-Cellulose Solvent and Antibacterial Agent. **2021**, 13,		2
685	Structurally Dynamic Hydrogels for Biomedical Applications: Pursuing a Fine Balance between Macroscopic Stability and Microscopic Dynamics. *Chemical Reviews*, **2021**, 121, 11149-11193	68.1	30
684	Theragnostic nanomotors: Successes and upcoming challenges. **2021**, 13, e1736		0
683	Recent Advances on Bioprinted Gelatin Methacrylate-Based Hydrogels for Tissue Repair. **2021**, 27, 679-702		17
682	A narrative overview of utilizing biomaterials to recapitulate the salient regenerative features of dental-derived mesenchymal stem cells. **2021**, 13, 22		1
681	Polymeric biomaterials for 3D printing in medicine: An overview. **2021**, 2, 100011		18

680	Relaxation and Recovery in Hydrogel Friction on Smooth Surfaces. 1	0
679	Effect of mesenchymal stromal cells encapsulated within polyethylene glycol-collagen hydrogels formed in situ on alkali-burned corneas in an ex vivo organ culture model. **2021**, 23, 500-509	2
678	A novel methodology for hydrogel water content determination by EPR: The basis for real-time monitoring of controlled drug release and hydrogel swelling and degradation. **2021**, 98, 107187	1
677	Construction of hydrogels based on the homogeneous carboxymethylated chitin from Hericium erinaceus residue: Role of carboxymethylation degree. **2021**, 262, 117953	5
676	Oxi-HA/ADH Hydrogels: A Novel Approach in Tissue Engineering and Regenerative Medicine. **2021**, 2, 477-496	1
675	Isolation of Circulating Biomarkers for Liquid Biopsy using Immunoaffinity-Based Stimuli-Responsive Hybrid Hydrogel Beads. **2021**, 1, 117-129	1
674	Alginate enriched with phytic acid for hydrogels preparation. **2021**, 181, 561-571	6
673	Recent advances in PLGA-based biomaterials for bone tissue regeneration. **2021**, 127, 56-79	24
672	Hybrid Methacrylated Gelatin and Hyaluronic Acid Hydrogel Scaffolds. Preparation and Systematic Characterization for Prospective Tissue Engineering Applications. **2021**, 22,	17
671	Tripeptide based nontoxic hydrogelators as carrier of vitamin B12 and doxorubicin. **2021**, 618, 126483	0
670	UV- and Thermally-Active Bifunctional Gelators Create Surface-Anchored Polymer Networks. **2021**, 42, e2100266	3
669	A Lubricated Nonimmunogenic Neural Probe for Acute Insertion Trauma Minimization and Long-Term Signal Recording. **2021**, 8, e2100231	7
668	Tailoring Therapeutic Responses via Engineering Microenvironments with a Novel Synthetic Fluid Gel. **2021**, 10, e2100622	1
667	Adaptive and multifunctional hydrogel hybrid probes for long-term sensing and modulation of neural activity. **2021**, 12, 3435	36
666	Glucuronoxylan-based quince seed hydrogel: A promising scaffold for tissue engineering applications. **2021**, 180, 729-738	7
665	Meso/macro-scale ultra-soft materials' mechanical property evaluation device and testbed. **2021**, 92, 073904	
664	Hydrogels with Tunable Physical Cues and Their Emerging Roles in Studies of Cellular Mechanotransduction. **2021**, 1, 2100059	1
663	Composite Materials by Building Block Chemistry Using Weak Interaction. **2021**, 94, 1903-1921	6

662	Additive manufacturing techniques for the fabrication of tissue engineering scaffolds: a review. **2021**, 27, 1230-1272	8
661	Garland, Flower, and Petals via a Hierarchical Self-Assembly of Ursane-Type Triterpenoid Uvaol. **2021**, 6, 20560-20568	1
660	Chitosan/PVA Based Membranes Processed by Gamma Radiation as Scaffolding Materials for Skin Regeneration. **2021**, 11,	1
659	High-precision, gelatin-based, hybrid, bilayer scaffolds using melt electro-writing to repair cartilage injury. **2021**, 6, 2173-2186	11
658	Non-Biofouling Performance and Binding Capabilities of Amylose Film Coated on Glass Surface. **2021**, 42, 1191-1194	0
657	Cryogel biomaterials for neuroscience applications. **2021**, 147, 105012	12
656	TGF regulates human trabecular meshwork cell contractility via ERK and ROCK pathways with distinct signaling crosstalk dependent on the culture substrate.	1
655	Efficiently Boosting Moisture Retention Capacity of Porous Superprotonic Conducting MOF-802 at Ambient Humidity via Forming a Hydrogel Composite Strategy. **2021**, 13, 37231-37238	5
654	Thermally controlled large deformation in temperature-sensitive hydrogels bilayers. 1-22	2
653	Precise Tuning of Polymeric Fiber Dimensions to Enhance the Mechanical Properties of Alginate Hydrogel Matrices. **2021**, 13,	3
652	Recent Progress on Heat-Set Molecular Gels. **2021**, 99-125	
651	Revisiting the Flory Rehner equation: taking a closer look at the Flory Huggins interaction parameter and its functionality with temperature and concentration with NIPA as a case example. 1	1
650	Peptide-based supramolecular hydrogels for local drug delivery. **2021**, 174, 482-503	18
649	Recent Advances in Microfluidic Platforms for Programming Cell-Based Living Materials. **2021**, 33, e2005944	4
648	Growth factor delivery using extracellular matrix-mimicking substrates for musculoskeletal tissue engineering and repair. **2021**, 6, 1945-1956	18
647	Bioinspired mineral-polymeric hybrid hyaluronic acid/poly (glutamic acid) hydrogels as tunable scaffolds for stem cells differentiation. **2021**, 264, 118048	6
646	Hyaluronic acid hydrogels reinforced with laser spun bioactive glass micro- and nanofibres doped with lithium. **2021**, 126, 112124	3
645	Hydrogel-Based Scaffolds in Oral Tissue Engineering. **2021**, 8,	2

644	A Simple Way to Synthesize a Protective "Skin" around Any Hydrogel. **2021**, 13, 37645-37654	1
643	Diversity Models and Applications of 3D Breast Tumor-on-a-Chip. **2021**, 12,	1
642	Dextran hydrogels via disulfide-containing Schiff base formation: Synthesis, stimuli-sensitive degradation and release behaviors. **2021**, 265, 118085	13
641	The impact of zirconium oxide nanoparticles content on alginate dialdehyde-gelatin scaffolds in cartilage tissue engineering. **2021**, 335, 116531	4
640	Cellulose nanocrystals reinforced highly stretchable thermal-sensitive hydrogel with ultra-high drug loading. **2021**, 266, 118122	9
639	Natural Polymeric Scaffolds for Tissue Engineering Applications. **2021**, 32, 2144-2194	12
638	Transparent, conductive cellulose hydrogel for flexible sensor and triboelectric nanogenerator at subzero temperature. **2021**, 265, 118078	28
637	Recent advances and prospects of hyaluronan as a multifunctional therapeutic system. **2021**, 336, 598-620	16
636	Self-Healing All-in-One Energy Storage for Flexible Self-Powering Ammonia Smartsensors.	4
635	An Integrated Smart Sensor Dressing for Real-Time Wound Microenvironment Monitoring and Promoting Angiogenesis and Wound Healing. **2021**, 9, 701525	6
634	Temperature-responsive biodegradable injectable polymers with tissue adhesive properties. **2021**, 135, 318-330	2
633	White-Light-Emitting Supramolecular Polymer Gel Based on -CD and NDI Host-Guest Inclusion Complex. **2021**, 13,	1
632	Finite Deformation of Swollen pH-Sensitive Hydrogel Cylinder under Extension and Torsion and its Poynting Effect: Analytical Solution and Numerical Verification.	3
631	Tuning the response of fluid filled hydrogel core-shell structures. **2021**, 120, 104605	1
630	Algae-derived materials for tissue engineering and regenerative medicine applications: current trends and future perspectives. 1	3
629	Natural polymer-based hydrogels as prospective tissue equivalent materials for radiation therapy and dosimetry. **2021**, 1	0
628	Biomaterial-based immunotherapeutic strategies for rheumatoid arthritis. **2021**, 11, 2371-2393	2
627	Strategies for inclusion of growth factors into 3D printed bone grafts. **2021**, 65, 569-585	2

626	Closed-Loop Controlled Photopolymerization of Hydrogels. **2021**, 13, 40365-40378	0
625	An optimized preparation of nanofiber hydrogels derived from natural carbohydrate polymers and their drug release capacity under different pH surroundings. **2021**, 265, 118008	12
624	Wavelength-Selective Softening of Hydrogel Networks. **2021**, 33, e2102184	10
623	Composite polymer hydrogels with high and reversible elongation under magnetic stimuli. **2021**, 230, 124093	0
622	An injectable bioink with rapid prototyping in the air andmild polymerization for 3D bioprinting. **2021**, 13,	7
621	Electrospinning and Electrospraying with Cells for Applications in Biomanufacturing. 2141003	
620	Skin-like hydrogel devices for wearable sensing, soft robotics and beyond. **2021**, 24, 103174	13
619	Rheology of wormlike micellar gels formed by long-chained zwitterionic surfactants. **2021**, 65, 1065-1080	2
618	Hydrogels: potential aid in tissue engineering review. 1	0
617	Chitosan hydrogel synthesis to remove arsenic and fluoride ions from groundwater. **2021**, 417, 126070	7
616	Photo-cross-linked Gelatin Glycidyl Methacrylate/N-Vinylpyrrolidone Copolymeric Hydrogel with Tunable Mechanical Properties for Ocular Tissue Engineering Applications.. **2021**, 4, 7682-7691	5
615	Oxygen-generating microparticles in chondrocytes-laden hydrogels by facile and versatile click chemistry strategy. **2021**, 205, 111850	4
614	Multiple Stimuli-Responsive Supramolecular Hydrogels Constructed by Decamethylcucurbit[5]uril-para-phenylenediamine Exclusion Complex. **2021**, 42, e2100431	1
613	Remote Spatiotemporal Control of a Magnetic and Electroconductive Hydrogel Network via Magnetic Fields for Soft Electronic Applications. **2021**, 13, 42486-42501	1
612	Controllable Release of Povidone-Iodine from Networked Pectin@Carboxymethyl Pullulan Hydrogel. **2021**, 13,	6
611	Architecture and Composition Dictate Viscoelastic Properties of Organ-Derived Extracellular Matrix Hydrogels. **2021**, 13,	2
610	3D Printing of Polysaccharide-Based Self-Healing Hydrogel Reinforced with Alginate for Secondary Cross-Linking. **2021**, 9,	4
609	Thermo-Responsive Hydrogel-Based Soft Valves with Annular Actuation Calibration and Circumferential Gripping. **2021**, 8,	1

608	Polymeric materials reinforced by noncovalent aggregates of polymer chains. **2021**, 2, e109	5
607	Advances in bioactive glass-containing injectable hydrogel biomaterials for tissue regeneration. **2021**, 136, 1-36	13
606	Extracellular Electron Transfer Enables Cellular Control of Cu(I)-catalyzed Alkyne-Azide Cycloaddition.	1
605	Viscoelasticity and Adhesion Signaling in Biomaterials Control Human Pluripotent Stem Cell Morphogenesis in 3D Culture. **2021**, 33, e2101966	7
604	A General Crosslinker Strategy to Realize Intrinsic Frozen Resistance of Hydrogels. **2021**, 33, e2104006	25
603	Nonlinear poroviscoelastic behavior of gelatin-based hydrogel. **2021**, 158, 104650	1
602	Highly-toughened PVA/nanocellulose hydrogels with anti-oxidative and antibacterial properties triggered by lignin-Ag nanoparticles. **2021**, 129, 112385	11
601	A new mussel-inspired highly self-adhesive & conductive poly (vinyl alcohol)-based hydrogel for wearable sensors. **2021**, 562, 150162	8
600	Viscoelastic behaviour of rapid and slow self-healing hydrogels formed by densely branched arabinoxylans from Plantago ovata seed mucilage. **2021**, 269, 118318	2
599	Chemically and physically crosslinked lignin hydrogels with antifouling and antimicrobial properties. **2021**, 170, 113759	4
598	DNA mediated graphene oxide (GO)-nanosheets dispersed supramolecular GO-DNA hydrogel: An efficient soft-milieu for simplistic synthesis of Ag-NPs@GO-DNA and Gram + ve/-ve bacteria-based Ag-NPs@GO-DNA-bacteria nano-bio composites. **2021**, 342, 117482	3
597	Diffusion-controlled release of the theranostic protein-photosensitizer Azulitox from composite of Fmoc-Phenylalanine Fibrils encapsulated with BSA hydrogels. **2021**, 341, 51-62	3
596	Applications of halloysite in tissue engineering. **2021**, 214, 106291	6
595	Tuning gelatin-based hydrogel towards bioadhesive ocular tissue engineering applications. **2021**, 6, 3947-3961	25
594	3D Printing of dynamic tissue scaffold by combining self-healing hydrogel and self-healing ferrogel. **2021**, 208, 112108	3
593	Recent progress in preparation of functional microparticles based on microfluidic technique. **2021**, 29, 102740	1
592	Influence of water content on the mechanical behavior of gelatin based hydrogels: Synthesis, characterization, and modeling. **2021**, 233, 111219	6
591	Three dimensional printed nanostructure biomaterials for bone tissue engineering. **2021**, 18, 102-111	10

590	Multifunctional GelMA platforms with nanomaterials for advanced tissue therapeutics. **2022**, 8, 267-295	30
589	Synthetic Meniscal Substitutes. **2022**, 231-240	
588	gelling and dissolvable hydrogels for use as on-demand wound dressings for burns. **2021**, 9, 6842-6850	3
587	Therapeutic Angiogenesis in Regenerative Medicine. **2021**, 79-100	
586	Dually cross-linked single networks: structures and applications. **2021**, 50, 8147-8177	12
585	Composite hydrogels of pectin and alginate. **2021**, 507-533	
584	Injectable Hydrogels for Improving Cardiac Cell Therapy-In Vivo Evidence and Translational Challenges. **2021**, 7,	14
583	Transplantable scaffolds. **2021**, 199-222	
582	Cancer theranostic platforms based on injectable polymer hydrogels. **2021**, 9, 3543-3575	4
581	Functional hydrogel-based supercapacitors for wearable bioelectronic devices.	4
580	Chitosan nanocrystals synthesis via aging and application towards alginate hydrogels for sustainable drug release. **2021**, 23, 6527-6537	5
579	Exploiting the role of nanoparticles for use in hydrogel-based bioprinting applications: concept, design, and recent advances. **2021**, 9, 6337-6354	9
578	3D printing of functional microrobots. **2021**, 50, 2794-2838	73
577	Controlled-Release Systems for Biologics. 1-22	1
576	Application of Hydrogel Biocomposites for Multiple Drug Delivery. 139-165	4
575	Gel: A Potential Material as Artificial Soft Tissue. 2689-2717	3
574	PEG/HA Hybrid Hydrogels for Biologically and Mechanically Tailorable Bone Marrow Organoids. **2020**, 30, 1910282	20
573	Advances in Molecular Hydrogels. **2006**, 613-647	4

572	Fibrin in tissue engineering. **2006**, 585, 379-92	27
571	Injectable synthetic extracellular matrices for tissue engineering and repair. **2006**, 585, 125-33	53
570	Biomimetic and Bio-responsive Materials in Regenerative Medicine. **2009**, 1-58	1
569	Natural and Synthetic Polymeric Scaffolds. **2009**, 415-442	11
568	From Drug Cocktails to Tissue Engineering: Synthesis of ROMP Polymers for Biomedical Applications. **2007**, 285-303	4
567	Microenvironmental Regulation of Tumor Angiogenesis: Biological and Engineering Considerations. **2011**, 167-202	1
566	Oxygen Supply for Tissue Engineering. **2012**, 41-86	6
565	Adhesion Behavior of Soft Materials. **2012**, 89-125	2
564	Mechanical Characterization of Polyethylene Glycol Diacrylate (PEGDA) for Tissue Engineering Applications. **2013**, 189-195	1
563	3D Neural Culture in Dual Hydrogel Systems. **2017**, 1612, 225-237	3
562	Encapsulation of human articular chondrocytes into 3D hydrogel: phenotype and genotype characterization. **2011**, 695, 167-81	3
561	Regenerating Heart Valves. **2011**, 403-442	3
560	Encapsulation and culture of mammalian cells including corneal cells in alginate hydrogels. **2013**, 1014, 201-10	6
559	Biodegradable Orthopedic Implants. **2007**, 55-68	10
558	Gellan. **2015**, 1627-1682	6
557	The Evolution of Cell Printing. **2009**, 613-631	2
556	Encyclopedia of Polymeric Nanomaterials. **2014**, 1-6	2
555	Designing Charge-Assisted Hydrogen Bonded Supramolecular Gelators. **2015**, 101-131	4

554	Biomaterials-Enabled Regenerative Medicine in Corneal Applications. **2013**, 557-580	2
553	Intracellular Protein Delivery Using Self-Assembled Amphiphilic Polysaccharide Nanogels. **2014**, 265-274	1
552	Updates on Stimuli-Responsive Polymers: Synthesis Approaches and Features. **2018**, 129-146	2
551	Bio Mimicking of Extracellular Matrix. **2019**, 1174, 371-399	6
550	Alginate Hydrogels: A Tool for 3D Cell Encapsulation, Tissue Engineering, and Biofabrication. **2020**, 1250, 49-61	5
549	Physical and chemical crosslinked microcrystalline cellulose-polyvinyl alcohol hydrogel: freeze□thaw mediated synthesis, characterization and in vitro delivery of 5-fluorouracil. **2020**, 27, 6521-6535	13
548	Nanocomposite hydrogels for tissue engineering applications. **2020**, 499-528	3
547	Regenerative Medicine in the Cornea. **2011**, 911-924	2
546	Nanocellulose and nanohydrogels for the development of cleaner energy and future sustainable materials. **2020**, 81-113	1
545	Three-Dimensional Printing of Porous Polylactic-Acid Scaffolds for Tissue Engineering. **2020**,	1
544	Cell-Synthetic Surface Interactions. **2002**, 751-770	1
543	Synthesis and characterization of arginine-NIPAAm hybrid hydrogel as wound dressing: In vitro and in vivo study. **2018**, 65, 305-316	79
542	Two-step self-assembly of liposome-multidomain peptide nanofiber hydrogel for time-controlled release. **2014**, 15, 3587-95	61
541	Capillarity ion concentration polarization as spontaneous desalting mechanism. **2016**, 7, 11223	32
540	CHAPTER 9:Towards Cyclodextrin-Based Supramolecular Materials. **2016**, 154-177	4
539	Chapter 14:Materials for Tissue Engineering and 3D Cell Culture. **2016**, 460-489	1
538	CHAPTER 20:Multiple Stimuli-responsive Hydrogels Based on □Amino Acid Residues for Drug Delivery. **2013**, 199-227	1
537	Viscoelastic hydrogels for 3D cell culture. **2017**, 5, 1480-1490	150

536	Biomechanical factors in three-dimensional tissue bioprinting. **2020**, 7, 041319	13
535	Stimuli-Responsive Materials. 7622-7634	1
534	Photo-crosslinked alginate nano-hydroxyapatite paste for bone tissue engineering. **2020**, 15, 055019	7
533	Angiogenic factors secreted from human ASC spheroids entrapped in an alginate-based hierarchical structure via combined 3D printing/electrospinning system. **2020**, 12, 045028	10
532	Vocal Fold Tissue Repairin VivoUsing a Synthetic Extracellular Matrix. **2006**, 060913044658025	2
531	Capillary thinning of elastic and viscoelastic threads: From elastocapillarity to phase separation. **2020**, 5,	13
530	Nonlinear Visco-Poroelasticity of Gels With Different Rheological Parts. **2020**, 87,	8
529	Controllability Over Wall Thickness of Tubular Structures and Encapsulation During Co-Axial Extrusion of a Thermal-Crosslinking Hydrogel. **2020**, 142,	3
528	Biodegradable Hydrogels as Drug Controlled Release Vehicles. **2003**,	3
527	Polymeric Scaffolds for Tissue Engineering Applications. **2007**, 8-1-8-18	3
526	Injectable Systems for Cartilage Tissue Engineering. **2005**, 169-188	3
525	Polymeric Scaffolds for Gene Delivery and Regenerative Medicine. **2005**, 317-334	1
524	Polysaccharide-Based Hydrogels in Tissue Engineering. **2004**,	1
523	Characterization of Macroporous Gels. **2009**, 211-235	1
522	Polyphosphazenes as Biomaterials. **2013**, 83-134	2
521	Supramolecular protein-mediated assembly of brain extracellular matrix glycans. **2018**, 7, 1827	7
520	In silico Mechano-Chemical Model of Bone Healing for the Regeneration of Critical Defects: The Effect of BMP-2. **2015**, 10, e0127722	43
519	Experimental Demonstration of Hydrophobicity Variation in Carbon Nanotubes by Surface Modifications. **2009**, 7, 334-336	2

518	Vital Pulp Therapy an Insight Over the Available Literature and Future Expectations. **2020**, 5, 46-53	10
517	Biomimetic polymer scaffolds to promote stem cell-mediated osteogenesis. **2013**, 6, 87-91	14
516	Peculiarities of the development of hydrogels based on chitosan and poly(ethylene glycol) disuccinate at elevated temperature. **2014**, 128-137	1
515	Characteristics of novel polymer based on pseudo-polyamino acids GluLa-DPG-PEG600: binding of albumin, biocompatibility, biodistribution and potential crossing the blood-brain barrier in rats. **2017**, 89, 13-21	7
514	Hydrogels for Cardiac Tissue Repair and Regeneration. 049-057	4
513	SYNTHESIS AND CHARACTERIZATION STUDIES OF A SERIES OF N-VINYL IMIDAZOLE-BASED HYDROGEL. **2016**, 17, 974-974	1
512	Bio-ink Materials for 3D Bio-printing. **2016**, 3, 49-59	5
511	TISSUE-ENGINEERED OSTEOCHONDRAL CONSTRUCTS IN THE SHAPE OF AN ARTICULAR CONDYLE. **2005**, 87, 936-944	25
510	A Perspective on Bioactive Cell Microencapsulation. **2012**, 26, 283	2
509	The Application of Hydrogels Based on Natural Polymers for Tissue Engineering. **2020**, 27, 2658-2680	21
508	Cyclodextrin-Based Nanosystems as Drug Carriers for Cancer Therapy. **2020**, 20, 1327-1339	1
507	Complexation of poly(ethylene glycol) with poly(ethyl methacrylate-co-N-vinyl-2-pyrrolidone) gel based on hydrogen bonds. **2013**, 15, 85-90	4
506	Synthetic polymer scaffolds for soft tissue engineering. **2018**, 67, S335-S348	39
505	Organic electrode coatings for next-generation neural interfaces. **2014**, 7, 15	171
504	Injectable, Biodegradable Hydrogels for Tissue Engineering Applications. **2010**, 3, 1746-1767	448
503	PREPARATION OF A HYDROGEN BONDED SUPRAMOLECULAR HYDROGELS WITH TWO DIMENSIONAL AGGREGATE STRUCTURE. **2009**, 007, 397-400	2
502	THE FIBROUS AGGREGATION STRUCTURE-PROPERTY CORRELATION OF SUPRAMOLECULAR HYDROGEL OF PYROMELLITIC ACID/4-HYDROXYPYRIDINE. **2008**, 008, 192-196	1
501	GRAFT POLYMERIZATION OF 2-HYDROXYETHYL METHACRYLATE ON SOY PROTEIN ISOLATE via ATOM TRANSFER RADICAL POLYMERIZATION. **2008**, 008, 424-429	3

500	Mechanical Augmentation With Absorbable Alginate Sheet Enhances Healing of the Rotator Cuff. **2019**, 42, e104-e110	5
499	Gelatin methacrylate-alginate hydrogel with tunable viscoelastic properties. **2017**, 4, 363-369	10
498	Applications of polymers in intraocular drug delivery systems. **2017**, 10, 3-8	28
497	Polydopamine Particles Effect on Melanoma Cells Proliferation and Melanin Secretion. **2013**, 03, 1-10	3
496	A Novel Design Strategy for Temperature-Responsive IPN Hydrogels Based on a Copolymer of Acrylamide and N-(1,1-Dimethyl-3-Oxobutyl)-Acrylamide. **2018**, 08, 255-270	2
495	A Novel Targeting Drug Delivery System Based on Self-Assembled Peptide Hydrogel. **2011**, 02, 622-625	6
494	A Review: On Smart Materials Based on Some Polysaccharides; within the Contextual Bigger Data, Insiders, Improvisation and Said Artificial Intelligence Trends. **2019**, 10, 41-77	5
493	Dental stem cells: The role of biomaterials and scaffolds in developing novel therapeutic strategies. **2020**, 12, 897-921	13
492	Synthesis and Swelling Behavior of Sodium Alginate/Poly(vinyl alcohol) Hydrogels. **2019**, 16, 252-260	9
491	Development of soft nanocomposite materials and their applications in cell culture and tissue engineering. **2012**, 8, 2-11	16
490	Preparation of Biodegradable Thermo-responsive Polyaspartamides with N-Isopropylamine Pendent Groups (I). **2006**, 27, 1981-1984	16
489	Preparation and Properties of Novel Biodegradable Hydrogel based on Cationic Polyaspartamide Derivative. **2006**, 27, 981-985	26
488	Novel Superabsorbent Hydrogel Based on Natural Hybrid Backbone: Optimized Synthesis and its Swelling Behavior. **2009**, 30, 2680-2686	21
487	Effect of the Mechanical Properties of Cell-Interactive Hydrogels on a Control of Cell Phenotype. **2015**, 39, 412-417	3
486	Hydrogel-Based Therapies for Cardiovascular Diseases. **2021**, 399-427	
485	Chitosan-Based Hydrogels for Tissue Engineering. **2021**, 519-571	0
484	Recent advances in materials for hemostatic management. **2021**, 9, 7343-7378	5
483	Synthesis, classification and properties of hydrogels: their applications in drug delivery and agriculture. **2021**,	9

482	Understanding the metal free alginate gelation process.. **2021**, 11, 34449-34455	0
481	3D Bioprinting of Cell-Laden Hydrogels for Improved Biological Functionality. **2021**, e2103691	16
480	Near-Infrared-Light-Modulated Lubricating Coating Enabled by Photothermal Microgels. **2021**, 13, 49322-49330	1
479	Composites of functional polymers: Toward physical intelligence using flexible and soft materials. 1	0
478	Self-Assembly of Dendritic DNA into a Hydrogel: Application in Three-Dimensional Cell Culture. **2021**, 13, 49705-49712	4
477	Injectable Magnetic-Responsive Short-Peptide Supramolecular Hydrogels: Ex Vivo and In Vivo Evaluation. **2021**, 13, 49692-49704	2
476	TEMPO/TCC as a Chemo Selective Alternative for the Oxidation of Hyaluronic Acid. **2021**, 26,	2
475	Extracellular matrix-derived hydrogels to augment dermal wound healing: a systematic review. **2021**,	1
474	Impact of edge functionalization on electron field-emission characteristics of carbon nanotubes: A theoretical approach. **2021**, 413491	2
473	Pericapsular fibrotic overgrowth mitigated in immunocompetent mice through microbead formulations based on sulfated or intermediate G alginates. **2021**, 137, 172-172	1
472	Ion-Conducting Hydrogels and Their Applications in Bioelectronics. 2100173	4
471	Cell Adhesion□Dependent Signaling Pathways on Biomaterials Surfaces. **2002**,	
470	Modified Alginates for Tissue Engineering. **2005**, 301-315	
469	Drug Delivery. **2007**, 13-1-13-24	
468	Biomaterials for Cartilage Reconstruction and Repair. **2008**, 659-678	
467	Nanoscale Control of Hetero-biointerfaces. **2009**, 30, 193-201	
466	Investigation of Cell-Matrix Interactions Using a FRET Technique. **2009**, 30, 1817-1820	
465	Biopolymeric Nanofibers for Tissue Engineering. **2009**, 157-191	1

464 INVESTIGATION OF YUNNAN BAIYAO RELEASE BEHAVIOR FROM PVA/WATER-SOLUBLE CHITOSAN/GLYCEROL HYDROGELS PREPARED BY IRRADIATION FOLLOWED BY FREEZE-THAWING. **2009**, 009, 1198-1204

463 Biointerface Technology. **2011**, 523-546

462 MgO nanoparticles affect on the osteoblast cell function and adhesion strength of engineered tissue constructs. **2011**, 295-299

461 Polymers for Biomedical Applications. **2011**, 21-44

460 The mechanical behavior and elastic response of a non-uniformly swollen cylindrical sample of polymer gel with axisymmetrical distribution of a solvent. **2012**, 5, 178-183

459 Thermo-Sensitive Injectable Scaffolds for Regenerative Medicine. **2012**, 127-141

458 Hydrogel as Stem Cell Niche for In Vivo Applications in Regenerative Medicine. **2012**, 31-54

457 Biointerface Technology. **2013**, 611-634

456 Islet Encapsulation. **2013**, 1-13

455 Bioactive Rosette Nanotubes for Bone Tissue Engineering and Drug Delivery. 313-357

454 STRUCTURE AND PROPERTIES OF AN ORGANIC ACYLHYDRAZONE LIGAND AND ITS METALLOGELS. **2013**, 013, 414-418

453 PREPARATION AND CHARACTERIZATION OF MAGNETIC HYDROGELS WITH HIGH STRENGTH BASED ON PICKERING EMULSION. **2013**, 013, 504-510

452 Clinically Applied Biomaterials. **2013**, 379-392

451 Laser Micro-/Nanofabrication and Applications Based on Multiphoton Process. **2014**, 81-151

450 PREPARATION AND PROPERTIES OF ANTIBACTERIAL mZnO/PAAm NANOCOPOSITE HYDROGELS WITH CONTROLLABLE PHYSICAL/CHEMICAL DOUBLE CROSS-LINKED STRUCTURE. **2013**, 013, 1270-1276

449 Islet Encapsulation. **2014**, 1-12

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

447 Gellan. **2014**, 1-46

446 Tissue Engineering. **1996**, 709-749

445 Islet Encapsulation. **2015**, 1297-1309

444 Hydrogel-Based Supports. **2014**, 1-18

443 Pore Structure of Poly(2-Hydroxyethyl Methacrylate) Scaffolds. **2014**, 79-99

442 Growth Factor Delivery Matrices for Cardiovascular Regeneration. **2015**, 159-214

441 Nanotechnology and Its Use in Tissue Engineering. **2015**, 372-387

440 Advances in Molecular Design of Polymer Surfaces with Antimicrobial, Anticoagulant, and Antifouling Properties. **2015**, 53-80 1

439 Gellan. **2015**, 1-48

438 Advanced Dynamic Gels. 357-384

437 Nanofibers: Biopolymeric Nanofibers for Tissue Engineering. 5162-5177

436 Cell Encapsulation. 1348-1358

435 Corneas: Tissue Engineering. 2210-2217

434 Scaffolds, Polymeric: Tissue Engineering. 7072-7084

433 Tissue Engineering, Cartilage: Injectable Systems. 7972-7985

432 Acrylic-Based Hydrogels. 1-12

431 Nanocomposite Films and Gels: Polymer–Clay. 5101-5122

430 Cationic Polymers: Stimuli-Responsive. 1334-1343

429 Biointerface Technology. **2016**, 151-183

428 Preparation of Self-Assembled Chitin Nanofibers and Nanocomposites Using Ionic Liquid. **2016**, 515-536

427 Nanotechnology Approaches to Regenerative Engineering. **2016**, 3-12

426 HYBRID SELECTIVE SORBENTS BASED ON ACETALS OF POLYVINYL ALCOHOL AND ACRYLIC HYDROGELS. **2016**, 16, 14-23 1

425 The Potential Tissues and Their Properties. **2017**, 179-223

424 Telechelic Polyethers by Living Polymerizations and Precise Macromolecular Engineering. **2017**, 309-400

423 Biomedical Applications of Alginate Biopolymer. **2017**, 453-469

422 Hybrid porous polymers based on derivatives of polyvinyl alcohol and acrylic hydrogels. **2017**, 69-76

421 Hydrogels in Tissue Engineering. 59-78

420 Hydrogels: Classification, Synthesis, Characterization, and Applications. **2017**, 685-698

419 Stimuli-Responsive Materials. **2017**, 1480-1492

418 Comparison of intraosseous implantation between paste type mineral trioxide aggregates (MTA) and powder-liquid mix type MTA. **2017**, 44, 229-246 3

417 Self-Assembled Organic Nanotubes: Novel Bionanomaterials for Orthopedics and Tissue Engineering. **2017**, 17-46

416 Antibacterial activity of complex of enrofloxacin with nanopolymer GluLa-DPG-PEG600. **2017**, 19, 83-87 2

415 Nanotechnology and Its Use in Tissue Engineering. **2018**, 1299-1315

414 Chapter 3:Polyester-based Biodegradable Thermogelling Systems as Emerging Materials for Therapeutic Applications. **2018**, 40-75

413 Biodegradable antimicrobial hydrogels and their use in biomedical purposes. **2019**, 23-52

412 Chapter 13:Recent Advances in Antimicrobial Hydrogels. **2019**, 348-369

411 Therapeutic Use of Bioengineered Materials for Myocardial Infarction. **2019**, 161-193 2

410	Vascularization in Oral and Maxillofacial Tissue Engineering. **2019**, 97-122	
409	Nanopolymer GluLa-DPG-PEG600-F Can Penetrate into Cells and Deposite in Rats Body. **2019**, 138-142	
408	Biofabrication of Organotypic Full-Thickness Skin Constructs. **2019**, 249-261	
407	Biomaterials in Medicine. 11-46	
406	Protein-mediated gelation and nano-scale assembly of unfunctionalized hyaluronic acid and chondroitin sulfate. 7, 1827	
405	Additive manufacturing of catalytically active living material hydrogels. **2019**,	
404	Understanding the Diffusion and Rheology of Unentangled Associating Polymers with Simulations. **2020**, 118-122	
403	Protein-mediated gelation and nano-scale assembly of unfunctionalized hyaluronic acid and chondroitin sulfate. **2018**, 7, 1827	3
402	Liposomes-in-Chitosan Hydrogels: Challenges and Opportunities for Biomedical Applications. 1-32	
401	Therapeutic Angiogenesis in Regenerative Medicine. **2020**, 1-22	
400	Therapeutic Angiogenesis in Regenerative Medicine. **2020**, 1-22	
399	Drug/Gene Delivery Platform Based on Supramolecular Interactions: Hyaluronic Acid and Folic Acid as Targeting Units. **2020**, 1465-1495	
398	Biomedical cell product model for preclinical studies carried out on a large laboratory animal. **2020**, 22, 142-156	
397	In situ Crosslinking System of Gelatin with Acrylated □cyclodextrin Towards the Fabrication of Hydrogels for Sustained Drug Release. 597-608	
396	Three-dimensional bioprinting of polysaccharide-based self-healing hydrogels with dual cross-linking. **2021**,	1
395	Application of Temporary, Cell-Containing Alginate Microcarriers to Facilitate the Fabrication of Spatially Defined Cell Pockets in 3D Collagen Hydrogels. **2021**, e2100319	1
394	Fabrication and evaluation of homogeneous alginate/polyacrylamide□chitosan□gelatin composite hydrogel scaffolds based on the interpenetrating networks for tissue engineering.	2
393	Recombination of Poly(Acrylic Acid) Radicals in Acidic Aqueous Solutions: A Pulse Radiolysis Study. **2021**, 11, 10142	1

392	Natural and Synthetic Polymeric Scaffolds. **2021**, 257-283	
391	Hydrogels: A Novel Drug Delivery System. **2020**, 1, 439-451	1
390	Amyloid fibril-based hydrogels for high-throughput tumor spheroid modeling.	0
389	Bio-inspired green light crosslinked alginate-heparin hydrogels support HUVEC tube formation. **2022**, 125, 104932	0
388	The latest achievements in plant cellulose-based biomaterials for tissue engineering focusing on skin repair. **2021**, 288, 132529	6
387	Preparation and Characterization of Hydroxyapatite/Poly(Ethylene Oxide) Nanocomposite Nanofibers. **2019**, 7, 25-33	
386	Chapter 1:Gels. **2020**, 1-44	
385	Amino-alcohol Bio-conjugate of Naproxen Exhibits Anti-inflammatory Activity through NF-Β Signaling Pathway.	1
384	An ion pair-induced environment-responsive metalΒrganic gel: en route to smart materials for volatile salt-based nitrogen (VBN) sensing. **2020**, 4, 1192-1197	
383	Histidine-based hydrogels singlet-oxygen photooxidation. **2021**,	0
382	Actuation of Hydrogel Architectures Prepared by Electrophoretic Adhesion of Thermoresponsive Microgels. **2021**,	1
381	Review of Recent Advances and Their Improvement in the Effectiveness of Hydrogel-Based Targeted Drug Delivery: A Hope for Treating Cancer.. **2021**, 4, 8080-8109	1
380	Polysaccharide peptide conjugates: Chemistry, properties and applications.. **2022**, 280, 118875	3
379	Colloidal hydrogels made of gelatin nanoparticles exhibit fast stress relaxation at strains relevant for cell activity. **2021**,	4
378	A sandcastle worm-inspired strategy to functionalize wet hydrogels. **2021**, 12, 6331	4
377	A tissue-engineered human trabecular meshwork hydrogel for advanced glaucoma disease modeling.	
376	Nanofibers and Nanostructured Scaffolds for Nervous System Lesions. **2021**, 61-101	1
375	Bioinspired Sensors and Actuators Based on Stimuli-Responsive Hydrogels for Underwater Soft Robotics. **2021**, 99-115	1

374	Biopolymers in Regenerative Medicine: Overview, Current Advances, and Future Trends. **2021**, 357-380	0
373	Thermoresponsive hydrogels as a new ocular drug delivery platform to the posterior segment of the eye. **2008**, 106, 206-13; discussion 213-4	56
372	Nanoparticles for biomedical imaging: fundamentals of clinical translation. **2010**, 9, 291-310	168
371	Sodium alginate/heparin composites on PVC surfaces inhibit the thrombosis and platelet adhesion: applications in cardiac surgery. **2013**, 6, 259-68	11
370	Tissue engineering for skeletal muscle regeneration. **2012**, 2, 230-4	31
369	Preparation of sustained-release composite coating formed by dexamethasone and oxidated sodium alginate. **2014**, 7, 3053-61	1
368	[Effects of the injectable glycol-chitosan based hydrogel on the proliferation and differentiation of human dental pulp cells]. **2020**, 52, 10-17	
367	Natural polymeric biomaterials for tissue engineering. **2022**, 75-110	
366	Investigation of 2D WS2 nanosheet-reinforced tough DNA hydrogel as a biomedical scaffold: preparation and in vitro characterization.	3
365	Polymer optical fiber for monitoring human physiological and body function: A comprehensive review on mechanisms, materials, and applications. **2022**, 147, 107626	9
364	Recent advances on bioprinting of hydrogels containing carbon materials. **2022**, 23, 100617	3
363	Regulating the Homogeneity of Thiol-Maleimide Michael-Type Addition-Based Hydrogels Using Amino Biomolecules. **2021**, 7,	0
362	Tyrosinase-mediated hydrogel crosslinking for tissue engineering. 51887	5
361	3D Cell Culture Systems: Tumor Application, Advantages, and Disadvantages. **2021**, 22,	13
360	Photoinduced Gelatin-Methacrylate Scaffolds to Examine the Impact of Extracellular Environment on Trabecular Meshwork Cells.	1
359	Graphene-Lined Porous Gelatin Glycidyl Methacrylate Hydrogels: Implications for Tissue Engineering.. **2021**, 4, 12650-12662	3
358	Biocompatibility of electrospun cell culture scaffolds made from balangu seed mucilage/PVA composites. **2021**, 33,	0
357	Graphene family nanomaterials- opportunities and challenges in tissue engineering applications. **2021**, 30, 100315	3

356	Desired properties and corresponding improvement measures of electrospun nanofibers for membrane distillation, reinforcement, and self-healing applications.		0
355	Development of alginate-chitosan composite scaffold incorporation of bacterial cellulose for bone tissue engineering. 1-12		1
354	Design and characterization of an in vivo injectable hydrogel with effervescently generated porosity for regenerative medicine applications. **2021**, 140, 324-324		3
353	Bletilla striata polysaccharide cryogel scaffold for spatial control of foreign-body reaction. **2021**, 16, 131		
352	Property modulation of the alginate-based hydrogel via semi-interpenetrating polymer network (semi-IPN) with poly(vinyl alcohol). **2021**, 193, 1068-1077		5
351	Electroresponsive Hydrogels for Therapeutic Applications in the Brain. **2021**, e2100355		3
350	Tough, Transparent, 3D printable and Self-healing Polyethylene Glycol-Gel (PEGgel). **2021**, e2107791		7
349	Bioinspired tunable hydrogels: An update on methods of preparation, classification, and biomedical and therapeutic applications.. **2021**, 612, 121368		4
348	Smart/stimuli-responsive hydrogels: Cutting-edge platforms for tissue engineering and other biomedical applications.. **2022**, 13, 100186		19
347	In situ graphene oxide-gelatin hydrogels with enhanced mechanical property for tissue adhesive and regeneration.. **2022**, 592, 24-30		1
346	Chemical stimuli-induced reversible bond cleavage in covalently crosslinked hydrogels. **2022**, 455, 214368		8
345	Chapter 10. Supramolecular Membranes for Liquid Separation. **2021**, 232-255		
344	Supramolecular Adhesive Hydrogels for Tissue Engineering Applications.. *Chemical Reviews*, **2022**,	68.1	28
343	Extracellular Electron Transfer Enables Cellular Control of Cu(I)-Catalyzed Alkyne-Azide Cycloaddition.. **2022**, 8, 246-257		1
342	Drug and gene delivery for musculoskeletal tissues. **2022**, 305-317		
341	Stimuli-responsive destructible polymeric hydrogels based on irreversible covalent bond dissociation. **2022**, 13, 161-192		6
340	Universal Strategy for Growing Tenacious Hydrogel Coating from a Sticky Initiation Layer (SIL).. **2022**, e2108889		2
339	Application of biomaterials and tissue engineering in bladder regeneration.. **2022**, 8853282211048574		2

338	Linear shrinkage of hydrogel coatings exposed to flow: interplay between dissolution of water and advective transport. **2021**,	
337	Multiparametric Material Functionality of Microtissue-Based In Vitro Models as Alternatives to Animal Testing.. **2022**, e2105319	2
336	Alginates - A Seaweed Product: Its Properties and Applications.	1
335	Bioadhesive and conductive hydrogel-integrated brain-machine interfaces for conformal and immune-evasive contact with brain tissue. **2022**,	15
334	Nanostructured Lipid Carriers-Hydrogels System for Drug Delivery: Nanohybrid Technology Perspective.. **2022**, 27,	2
333	Iron(iii)-cross-linked alginate hydrogels: a critical review.	3
332	Stretchable Hydrogels with Low Hysteresis and High Fracture Toughness for Flexible Electronics.. **2021**, e2100716	0
331	Responsive biomaterials for 3D bioprinting: A review. **2022**,	8
330	Super Adhesive MXene-based Nanocomposite Hydrogel with Self-Healable and Conductivity Properties via Radiation Synthesis. 2101692	1
329	High strength HA-PEG/NAGA-Gelma double network hydrogel for annulus fibrosus rupture repair. **2022**, 3, 128-138	1
328	An Overview on Recent Progress of the Hydrogels: From Material Resources, Properties to Functional Applications.. **2022**, e2100785	5
327	Ratiometric Flapping Force Probe That Works in Polymer Gels.. **2022**,	9
326	Fully Biobased Vitrimers: Future Direction toward Sustainable Cross-Linked Polymers. 2100494	9
325	Impact of Supramolecular Interactions on Delivery of Dexamethasone from a Physical Network of Gelatin/ZnHAp Composite Scaffold.. **2022**, 615, 121520	2
324	Preparation, properties and drug controlled release of chitin-based hydrogels: An updated review.. **2022**, 283, 119177	7
323	Shaping soft materials via digital light processing-based 3D printing: A review. **2022**, 6, 100074	5
322	3D printed GelMA/carboxymethyl chitosan composite scaffolds for vasculogenesis. 1-13	1
321	Supramolecular Hydrogels Developed from Mafenide and Indomethacin as a Plausible Multidrug Self-Delivery System as Antibacterial and Anti-inflammatory Topical Gels.. **2022**,	2

320	Resilient and Self-Healing Hyaluronic Acid/Chitosan Hydrogel With Ion Conductivity, Low Water Loss, and Freeze-Tolerance for Flexible and Wearable Strain Sensor.. **2022**, 10, 837750	1
319	Nanohydrogels: Advanced Polymeric Nanomaterials in the Era of Nanotechnology for Robust Functionalization and Cumulative Applications.. **2022**, 23,	1
318	Design of functional hydrogels using smart polymer based on elastin-like polypeptides. **2022**, 435, 135155	1
317	Polymeric Materials for Hemostatic Wound Healing.. **2021**, 13,	4
316	Layer-by-Layer Biomimetic Microgels for 3D Cell Culture and Nonviral Gene Delivery. **2021**,	1
315	Hydrogel tapes for fault-tolerant strong wet adhesion. **2021**, 12, 7156	19
314	A Transformable and Biocompatible Polymer Series Using Ring-Opening Polymerization of Cyclic Silane for More Effective Transdermal Drug Delivery.	
313	PEG-based cleavable hydrogel microparticles with controlled porosity for permiselective trafficking of biomolecular complexes in biosensing applications.. **2022**,	0
312	d-Mannitol based surfactants for cosmetic and food applications and hydrogels to produce stabilized Ag nanoparticles. **2022**, 46, 6193-6200	1
311	Engineering mammary tissue microenvironments in vitro. **2022**,	
310	Graphene oxide based crosslinker for simultaneous enhancement of mechanical toughness and self-healing capability of conventional hydrogels.. **2022**, 12, 7453-7463	0
309	Cone cracks in tissue-mimicking hydrogels during hypodermic needle insertion: the role of water content.. **2022**,	1
308	A high-performance GelMA-GelMA homogeneous double-network hydrogel assisted by 3D printing.. **2022**,	0
307	Recent advances in the 3D printing of electrically conductive hydrogels for flexible electronics. **2022**, 10, 5380-5399	0
306	Protein-Based Hydrogels: Promising Materials for Tissue Engineering.. **2022**, 14,	5
305	4D printing of core–shell hydrogel capsules for smart controlled drug release. **2022**, 5, 294-304	2
304	Review on Multicomponent Hydrogel Bioinks Based on Natural Biomaterials for Bioprinting 3D Liver Tissues.. **2022**, 10, 764682	1
303	Cellulosic-Based Conductive Hydrogels for Electro-Active Tissues: A Review Summary.. **2022**, 8,	1

302	PROBLEMS OF THE MECHANICS OF POLYMER GELS WITH UNILATERAL CONSTRAINTS.	
301	Influence of Extracellular Cues of Hydrogel Biomaterials on Stem Cell Fate.. **2022**, 1-22	
300	Spinal cord bioelectronic interfaces: opportunities in neural recording and clinical challenges.. **2022**,	
299	Three-Dimensional Printing Self-Healing Dynamic/Photocrosslinking Gelatin-Hyaluronic Acid Double-Network Hydrogel for Tissue Engineering.. **2022**, 7, 12076-12088	3
298	The Added Value of the "Co" in Co-Culture Systems in Research on Osteoarthritis Pathology and Treatment Development.. **2022**, 10, 843056	
297	Tough Hydrogels Based on Sacrificial Bond Principle. 1-28	
296	Material-Assisted Strategies for Osteochondral Defect Repair.. **2022**, e2200050	3
295	Biosurfactant-Stabilized Micropore-Forming GelMA Inks Enable Improved Usability for 3D Printing Applications. 1	0
294	Influence of network defects on the conformational structure of nanogel particles: From "closed compact" to "open fractal" nanogel particles.. **2022**, 156, 094903	1
293	Light-induced synthesis and characterization of Clickable polyacrylamide hydrogels. **2022**, 167, 111062	1
292	Applications of Polymer Bioconjugates. 1-47	
291	Engineered Living Hydrogels.. **2022**, e2201326	5
290	Graphene oxide-based multi-component antimicrobial hydrogels.	1
289	Polymer Networks *. 1-52	
288	A universally dispersible graphene-based ink modifier facilitates 3D printing of multi-functional tissue-engineered scaffolds. **2022**, 216, 110551	0
287	Organic Feedstock as Biomaterial for Tissue Engineering. **2022**, 247-260	
286	Tuning Polymer Hydrophilicity to Regulate Gel Mechanics and Encapsulated Cell Morphology.. **2022**, e2200011	3
285	Thermosensitive hydrogels functionalized with pH sensitive COOH groups for bone cell harvesting. **2022**, 169, 111131	0

284	Lymphatic Tissue Bioengineering for the Treatment of Postsurgical Lymphedema.. **2022**, 9,	0
283	Bacterial Cellulose and ECM Hydrogels: An Innovative Approach for Cardiovascular Regenerative Medicine.. **2022**, 23,	1
282	Effects of dynamic mechanical stimulations on the regeneration of in vitro and in vivo cartilage tissue based on silk fibroin scaffold. **2022**, 235, 109764	3
281	Fish skin gelatin nanofibrous scaffolds spun using alternating field electrospinning and in-vitro tested with tdTomato mice fibroblasts. **2022**, 31, 103417	
280	Preparation and properties of O-chitosan quaternary ammonium salt/polyvinyl alcohol/graphene oxide dual self-healing hydrogel.. **2022**, 287, 119318	1
279	A transformable and biocompatible polymer series using ring-opening polymerization of cyclic silane for more effective transdermal drug delivery. **2022**, 440, 135989	1
278	Effectiveness of a Nanohydroxyapatite-Based Hydrogel on Alveolar Bone Regeneration in Post-Extraction Sockets of Dogs with Naturally Occurring Periodontitis.. **2021**, 9,	0
277	Hierarchical Multiscale Hydrogels with Identical Compositions Yet Disparate Properties via Tunable Phase Separation. **2022**, 32, 2110277	1
276	A Safe, Fibrosis-Mitigating, and Scalable Encapsulation Device Supports Long-Term Function of Insulin-Producing Cells.. **2021**, e2104899	0
275	Nitric Oxide-Releasing Gelatin Methacryloyl/Silk Fibroin Interpenetrating Polymer Network Hydrogels for Tissue Engineering Applications. **2021**,	1
274	Macromolecular modulation of a 3D hydrogel construct differentially regulates human stem cell tissue-to-tissue interface.. **2021**, 112611	0
273	Tuning Rheological Behaviors of Supramolecular Aqueous Gels via Charge Transfer Interactions. **2021**,	0
272	Structural Rationale towards Designing Coordination Polymer Based Metallogels Displaying Anti-Cancer and Anti-Bacterial Properties. **2021**, 6, 13992-14004	0
271	Bio-Nanocomposite of Carrageenan Incorporating Titanium Dioxide Nanoparticles Scaffold and Hydrogel for Tissue Engineering Applications. **2022**, 295-321	1
270	Hyaluronic acid based nanomedicines as promising wound healers for acute-to-chronic wounds: a review of recent updates and emerging trends. 1-19	1
269	3D bioprinting for meniscus tissue engineering: a review of key components, recent developments and future opportunities. **2021**, 5, 213-233	0
268	Anisotropic Responsive Microgels Based on the Cholesteric Phase of Chitin Nanocrystals.. **2022**, 11, 96-102	1
267	Efficacy of hydrogels for repair of traumatic spinal cord injuries: A systematic review and meta-analysis.. **2021**,	

266	An efficient photothermal-chemotherapy platform based on a polyacrylamide/phytic acid/polydopamine hydrogel.. **2022**,	1
265	Injectable adipose-derived stem cells-embedded alginate-gelatin microspheres prepared by electrospray for cartilage tissue regeneration.. **2022**, 33, 174-185	0
264	Consumer Acceptance and Production of In Vitro Meat: A Review. **2022**, 14, 4910	
263	A Brief Overview of Bioinspired Robust Hydrogel Based Shape Morphing Functional Structure for Biomedical Soft Robotics. **2022**, 9,	1
262	Viscoelastic Biomaterials for Tissue Regeneration.. **2022**,	0
261	Printability and Cell Viability in Extrusion-Based Bioprinting from Experimental, Computational, and Machine Learning Views.. **2022**, 13,	7
260	Polyvinyl Alcohol/Graphene Oxide Conductive Hydrogels via the Synergy of Freezing and Salting Out for Strain Sensors.. **2022**, 22,	1
259	Data_Sheet_1.PDF. **2020**,	
258	Data_Sheet_1.DOCX. **2018**,	
257	Table_1.DOCX. **2019**,	
256	Soft double-network polydimethylsiloxane: Fast healing of fracture toughness.	3
255	Water-soluble/visible-light-sensitive naphthalimide derivative-based photoinitiating systems: 3D printing of antibacterial hydrogels.	3
254	Advances in modified hyaluronic acid-based hydrogels for skin wound healing.. **2022**,	2
253	Hydrogel Scaffolds Based on Alginate, Gelatin, and 2-Hydroxyethyl Methacrylate for Tissue Regeneration. **2022**, 173-204	
252	Regulation of Substrate Dissipation via Tunable Linear Elasticity Controls Cell Activity. 2200309	0
251	Effect of magnesium oxide nanoparticles, hydroxyapatite and hydrogel on regeneration of transverse fracture of distal radius. 5094-5106	
250	Controlled Silylation of Polysaccharides: Attractive Building Blocks for Biocompatible Foams and Cell-Laden Hydrogels.	1
249	TGF Regulates Human Trabecular Meshwork Cell Contractility ERK and ROCK Pathways with Distinct Signaling Crosstalk Dependent on the Culture Substrate.. **2022**, 1-14	3

248	In vitro culture of hematopoietic stem cell niche using angiopoietin-1-coupled alginate hydrogel.. **2022**,		1
247	Hydroxyapatite-Integrated, Heparin- and Glycerol-Functionalized Chitosan-Based Injectable Hydrogels with Improved Mechanical and Proangiogenic Performance. **2022**, 23, 5370		2
246	Review of the application of environmentally responsive gels in drilling and oil recovery engineering: Synthetic materials, mechanism, and application prospect. **2022**, 110581		0
245	Recent Development of Conductive Hydrogels for Tissue Engineering: Review and Perspective.. **2022**, e2200051		1
244	Advances in three-dimensional bioprinted stem cell-based tissue engineering for cardiovascular regeneration.. **2022**, 169, 13-27		0
243	3D Printing of Noncytotoxic High-Resolution Microchannels in Bisphenol-A Ethoxylate Dimethacrylate Tissue-Mimicking Materials.		
242	Short Peptide Hydrogels for Biomedical Applications. **2022**, 127-147		
241	Multifunctional Granular Hydrogels for Tissue-Specific Repair. **2022**, 295-321		
240	Self-Assembled Hydrogel Microparticle-Based Tooth-Germ Organoids. **2022**, 9, 215		0
239	Tissue engineered drug delivery vehicles: Methods to monitor and regulate the release behavior.. **2022**,		4
238	Guiding cell migration in 3D with high-resolution photografting. **2022**, 12,		1
237	A review on hydrogels classification and recent developments in biomedical applications. 1-11		3
236	Hydrogel composite mimics biological tissues.		0
235	Hydrogelated Virus Nanoparticles in Tissue Engineering. **2022**, 18,		
234	Gelatin-based rechargeable antibacterial hydrogel paint coating for reducing cross-contamination and biofilm formation on stainless steel. **2022**, 109113		0
233	Hydrogels for Tissue Engineering: Addressing Key Design Needs Toward Clinical Translation. **2022**, 10,		1
232	Polyelectrolyte Complex-Covalent Interpenetrating Polymer Network Hydrogels.		0
231	Nanochitin: Chemistry, Structure, Assembly, and Applications. *Chemical Reviews*,	68.1	4

230	3D printed magnetic polymer composite hydrogels for hyperthermia and magnetic field driven structural manipulation. **2022**, 101574	6
229	Polydopamine Biomaterials for Skin Regeneration.	3
228	Phase-selective low molecular weight organogelators derived from allylated d-mannose. **2022**, 518, 108596	0
227	Alginate in Usage Biomedical Areas.	
226	circ_0003204 regulates the osteogenic differentiation of human adipose-derived stem cells via miR-370-3p/HDAC4 axis. **2022**, 14,	1
225	Strong, Tough Bioactive Glasses and Composite Scaffolds. **2022**, 147-172	
224	Co-axial Printing of Convoluted Proximal Tubule for Kidney Disease Modeling.	0
223	Multistimuli-Responsive Hydrogels with Both Anisotropic Mechanical Performance and Anisotropic Luminescent Behavior. **2022**, 137718	0
222	Nitrile-Containing Terpyridyl Zn(II)-Coordination Polymer-Based Metallogelators Displaying Helical Structures: Synthesis, Structures, and Druglike Action against B16-F10 Melanoma Cells.	2
221	Tunable Synthesis of Hydrogel Microfibers via Interfacial Tetrazine Ligation.	0
220	Hydrogel. 1-37	
219	Nanoclay-reinforced HA/alginate scaffolds as cell carriers and SDF-1 delivery-platforms for bone tissue engineering. **2022**, 623, 121895	
218	Chitosan-based composites reinforced with antibacterial flexible wood membrane for rapid hemostasis. **2022**, 215, 450-464	0
217	Emerging trends in Poly(lactic-co-glycolic) acid bionanoarchitectures and applications. **2022**, 5, 100102	4
216	Development of gelatin hydrogel nonwoven fabrics (Genocel) as a novel skin substitute in murine skin defects. **2022**, 21, 96-103	2
215	Natural-based biomaterials for drug delivery wound healing patches. **2022**, 51-73	
214	Multi-layered alginate hydrogel structures and bacteria encapsulation.	0
213	Recent Advances in Various Stimuli-Responsive Hydrogels: From Synthetic Designs to Emerging Healthcare Applications.	9

212	Investigation of Hydrogel and Gelatin Bath Formulations for Extrusion-Based 3D Bioprinting using Deep Learning. **2022**, 110, 360-365	0
211	Elastically-mediated collective organisation of magnetic microparticles.	
210	Synthesis and Gelling Performances of 4-Biphenylcarboxy Protected Dipeptide.	
209	Portable and flexible water-evaporation-generator based on hydrogel.	
208	Bioinspired mineral MXene hydrogels for tensile strain sensing and radionuclide adsorption applications. **2022**, 17,	0
207	Transient swelling of cylindrical hydrogels under coupled extension-torsion: Analytical and 3D FEM solutions. 1045389X2211115	0
206	New Carbamates and Ureas: Comparative Ability to Gel Organic Solvents. **2022**, 8, 440	
205	A Tough, Slippery, and Anticoagulant Double-Network Hydrogel Coating.	0
204	Polysaccharides, as biological macromolecule-based platforms in skeletal muscle tissue engineering: a systematic review. 1-24	
203	Horizon of exosome-mediated bone tissue regeneration: The all-rounder role in biomaterial engineering. **2022**, 100355	1
202	Self-actuating multilayer scaffold for skeletal muscle tissue engineering.	
201	Simple synthesis of cellulose hydrogels based on the direct dissolution of cellulose in tetrabutylphosphonium hydroxide followed by crosslinking.	0
200	Tough, aorta-inspired soft composites. **2022**, 119,	3
199	Topology mediates transport of nanoparticles in macromolecular networks. **2022**, 13,	1
198	Technological advances in ocular trabecular meshwork in vitro models for glaucoma research.	
197	A thermo-sensitive hydrogel composed of methylcellulose/hyaluronic acid/silk fibrin as a biomimetic extracellular matrix to simulate breast cancer malignancy. **2022**, 176, 111421	0
196	Fabrication and photophysical assessment of quinoxaline based chemosensor: Selective determination of picric acid in hydrogel and aqueous medium. **2022**, 363, 119816	1
195	Stretchable and self-healable hyaluronate-based hydrogels for three-dimensional bioprinting. **2022**, 295, 119846	1

194	Ultra-robust, repairable and smart physical hydrogels enabled by nano-domain reconfiguration of network topology. **2022**, 450, 138085	0
193	EQUILIBRIUM OF POLYMER GELS IN THE FIELD OF BODY FORCES. **2022**, 57, 683-700	
192	Redox-triggerable firefly luciferin-bioinspired hydrogels as injectable and cell-encapsulating matrices.	0
191	Novel Drug Delivery Systems as an Emerging Platform for Stomach Cancer Therapy. **2022**, 14, 1576	2
190	Role of Biomaterials in Cardiac Repair and Regeneration: Therapeutic Intervention for Myocardial Infarction. **2022**, 8, 3271-3298	2
189	Dynamic and Self-Healable Chitosan/Hyaluronic Acid-Based In Situ-Forming Hydrogels. **2022**, 8, 477	0
188	Creating a Functional Biomimetic Cartilage Implant Using Hydrogels Based on Methacrylated Chondroitin Sulfate and Hyaluronic Acid. **2022**, 8, 457	0
187	Polymeric Hydrogelator-Based Molecular Gels Containing Polyaniline/Phosphoric Acid Systems. **2022**, 8, 469	
186	Highly Resilient Dual-Crosslinked Hydrogel Adhesives Based on a Dopamine-Modified Crosslinker. **2022**, 14, 36304-36314	1
185	Correlation between cyclic topology and shape memory properties of an amine-based thermoset shape memory polymer: A coarse-grained molecular dynamics study.	1
184	Electroceuticals for peripheral nerve regeneration.	2
183	Inflammation-triggered dual release of nitroxide radical and growth factor from heparin mimicking hydrogel-tissue composite as cardiovascular implants for anti-coagulation, endothelialization, anti-inflammation, and anti-calcification. **2022**, 121761	0
182	Chemically Modified Dipeptide Based Hydrogel Supports Three-Dimensional Growth and Functions of Primary Hepatocytes.	
181	Programmable Processing toward Stiff Composite Hydrogels. **2022**, 55, 7071-7079	0
180	Tyramine-Functionalized Alginate-Collagen Hybrid Hydrogel Inks for 3D-Bioprinting. **2022**, 14, 3173	2
179	Hofmeister effect-enhanced gelatin/oxidized dextran hydrogels with improved mechanical properties and biocompatibility for wound healing. **2022**,	0
178	An anisotropic constitutive model for fiber reinforced salt-sensitive hydrogels. 1-14	2
177	Advances in DNA Supramolecular Hydrogels for Tissue Engineering. 2200152	0

176	Application of 3DP & 3DBP for promoting cutaneous wound regeneration. **2022**, e00230	0
175	Supramolecular Gels from Bis-amides of L -Phenylalanine: Synthesis, Structure and Material Applications.	1
174	Biomimetic Hydrogels in the Study of Cancer Mechanobiology: Overview, Biomedical Applications, and Future Perspectives. **2022**, 8, 496	0
173	Self-Healing Injectable Hydrogels for Tissue Regeneration.	9
172	Replica-mold nanopatterned PHEMA hydrogel surfaces for ophthalmic applications. **2022**, 12,	1
171	Protein-Based Nanostructures. **2022**, 269-283	
170	Unbreakable Hydrogels with Self-Recoverable 10200% Stretchability. 2206904	1
169	Towards a chemo-mechanical coupled theory of physical hydrogel for sol–gel transition identified by crosslink density. **2022**, 254-255, 111921	
168	Three-dimensional mechanical characterization of murine skeletal muscle using quantitative micro-elastography.	0
167	Simultaneously stimulated osteogenesis and anti-bacteria of physically cross-linked double-network hydrogel loaded with MgO-Ag2O nanocomposites. **2022**, 141, 213123	0
166	Rational design in functional hydrogels towards biotherapeutics. **2022**, 223, 111086	0
165	Food gels: Gelling process and new applications. **2023**, 365-384	0
164	Molecular dynamics study of the swelling and osmotic properties of compact nanogel particles. **2022**, 18, 6278-6290	0
163	Producing shape-engineered alginate particles using viscoplastic fluids. **2022**, 18, 6848-6856	0
162	Multiscale modeling of hydrogels. **2022**, 187-222	0
161	Modeling of stimuli-responsive hydrogels: a transient analysis. **2022**, 223-268	0
160	Biomaterials for in vitro models in lung research. **2022**, 91-107	0
159	Mechanically driven phase transition of physical hydrogels. **2022**, 269-288	0

158	Self-healing polyacrylamide (PAAm) gels at room temperature based on complementary guanine and cytosine base pairs. **2022**, 18, 7394-7401	0
157	A multi-functional zwitterionic hydrogel with unique micro-structure, high elasticity and low modulus. **2022**, 12, 27907-27911	0
156	Constitutive modeling for hydrogel with chain entanglements and application to adaptive hydrogel composite structures. 1-15	1
155	Hydrogel-Based Flexible Electronics. 2205326	6
154	Investigation of Mechanical Properties in PVA Hydrogels Due to Cation Interactions Described by Reactive Forcefield Based Molecular Dynamics Simulations.	0
153	Dual-Crosslinked Alginate-Based Hydrogels with Tunable Mechanical Properties for Cultured Meat. **2022**, 11, 2829	0
152	Recent Trends in Sense-and-Release Platforms Employing Electrochemically-Triggered Payload (Drugs) Release a Review.	0
151	The marriage of Xenes and Hydrogels: Fundamentals, Applications, and Outlook. **2022**, 100327	0
150	Spatially resolved mapping of hydrogel stiffness during enzymatic degradation. 1-10	0
149	Making Highly Elastic and Tough Hydrogels from Doughs. 2206577	4
148	Advances in Biomaterials for Promoting Vascularization.	0
147	Stimuli-responsive Hydrogels: Smart State of-the-art Platforms for Cardiac Tissue Engineering.	1
146	Hydrogels as promising carriers for the delivery of food bioactive ingredients. 9,	0
145	Adhesive Hybrid Interpenetrating Network Hydrogel-Based Detector to Monitor Solar Radiation Dose Required for Plant Growth. 2201118	2
144	Design of Hydrogel-based Scaffolds for in vitro Three-dimensional Human Skin Model Reconstruction. **2022**,	0
143	Facile Fabrication of Injectable Alginate and Poly (3,4-ethylenedioxythiophene) Based Soft Electrodes Towards the Goal of Neuro-regenerative Applications. 2201164	0
142	The design of multi-responsive nanohydrogel networks of chitosan for controlled drug delivery. **2022**, 298, 120143	1
141	Self-snapping hydrogel-based electroactive microchannels as nerve guidance conduits. **2022**, 16, 100437	0

140	Iron-Based Magnetic Nanosystems for Diagnostic Imaging and Drug Delivery: Towards Transformative Biomedical Applications. **2022**, 14, 2093	1
139	Current Concepts and Methods in Tissue Interface Scaffold Fabrication. **2022**, 7, 151	2
138	Aloe-vera-based biopolymeric composite scaffolds for bone tissue engineering: A review. **2022**,	0
137	Insights into the Role of Natural Polysaccharide-Based Hydrogel Wound Dressings in Biomedical Applications. **2022**, 8, 646	0
136	Rate-Independent Self-Healing Double Network Hydrogels Using a Thixotropic Sacrificial Network.	1
135	Hydrogel interfaces for merging humans and machines.	11
134	Biopolymers and their derivatives: Key components of advanced biomedical technologies. **2022**, 108056	0
133	Synthetic Thermo-Responsive Terpolymers as Tunable Scaffolds for Cell Culture Applications. **2022**, 14, 4379	0
132	Design and properties of alginate/gelatin/cellulose nanocrystals interpenetrating polymer network composite hydrogels based on in situ cross-linking.	0
131	Acceleration of bone formation by octacalcium phosphate composite in a rat tibia critical-sized defect. **2022**, 37, 100-112	0
130	Physicochemical Properties of Cellulose-Based Hydrogel for Biomedical Applications. **2022**, 14, 4669	0
129	Silk-elastinlike protein-based hydrogels for drug delivery and embolization. **2022**, 191, 114579	1
128	Bio-inspired hydrogel-polymer brush bi-layered coating dramatically boosting the lubrication and wear-resistance. **2023**, 177, 108000	0
127	Investigation of the dielectric and optic properties of rosehip seed extract loaded hydrogels. **2023**, 1274, 134480	0
126	Biomaterials. **2022**, 23-45	0
125	Repulsive Osmotic Delamination: 1D Dissolution of 2D Materials. 2200553	1
124	Toughening Polyamidoamine Hydrogels through Covalent Grafting of Short Silk Fibers. **2022**, 27, 7808	1
123	Biomaterial inks and bioinks for fabricating 3D biomimetic lung tissue: A delicate balancing act between biocompatibility and mechanical printability. **2022**, e00255	1

122	Electrically Conductive Hydrogels for Articular Cartilage Tissue Engineering. **2022**, 8, 710	1
121	Polysaccharide-based hydrogels: New insights and futuristic prospects in wound healing. **2022**,	0
120	Photocurable Thiolyne Alginate Hydrogels for Regenerative Medicine Purposes. **2022**, 14, 4709	1
119	Characterization of a bioscaffold containing polysaccharide acemannan and native collagen for pulp tissue regeneration. **2022**,	0
118	Understanding the diffusive transport of nanoparticles inagarose hydrogels.	0
117	Tailoring the elasticity of nerve implants for regulating peripheral nerve regeneration. **2022**,	0
116	3D bioprinting optimization of human mesenchymal stromal cell laden gelatin-alginate-collagen bioink.	0
115	Supramolecular hydrogels as drug delivery systems for nerve regeneration and wound healing. **2023**, 59-84	0
114	Synthetic strain-stiffening hydrogels towards mechanical adaptability.	1
113	A transparent self-healable multistimuli-responsive novel supramolecular Co(II)-metallogel derived from adipic acid: Effective hole transport layer for polymer solar cells. **2023**, 370, 121020	0
112	Quasi-elastic neutron scattering study on dynamics of polymer gels with controlled inhomogeneity under uniaxial deformation. **2022**, 19, 147-152	0
111	Sodium alginate hydrogel containing platelet-rich plasmafor wound healing. **2023**, 222, 113096	6
110	Investigation of the time-dependent friction behavior of polyacrylamide hydrogels. **2023**, 659, 130753	0
109	Photoreactive Hydrogels Based on Type I Collagen Extracted from Different Sources as Scaffolds for Tissue Engineering Applications: A Comparative Study. **2023**, 27, 101651	0
108	Nature-Inspired Biomimetic Polymeric Materials and Their Applications. **2022**, 1-31	0
107	Electrospun-Reinforced Suturable Biodegradable Artificial Cornea. **2022**, 5, 5716-5727	0
106	Scaffold Fabrication Techniques of Biomaterials for Bone Tissue Engineering: A Critical Review. **2022**, 9, 728	4
105	Hydrogel Nanocomposite Adsorbents and Photocatalysts for Sustainable Water Purification. 2201375	2

104	Effect of Radiation Etching on Swelling Ratio of Cellulose Microgels. **2022**,	0
103	Design, characterization and evaluation of the homogeneous oxidized sodium alginate/polyacrylamide-gelatin composite hydrogels constructed via the interpenetrating network technology.	0
102	Comparative Study of Physicochemical Properties of Alginate Composite Hydrogels Prepared by the Physical Blending and Electrostatic Assembly Methods. **2022**, 8, 799	0
101	Development of Growth Factor Releasing Hyaluronic Acid-Based Hydrogel for Pulp Regeneration: A Preliminary Study. **2022**, 8, 825	0
100	High-performance organohydrogel artificial muscle with compartmentalized anisotropic actuation under micro-domain confinement. 2202193	0
99	Hyaluronic Acid as a Modern Approach in Anticancer Therapy-Review. **2023**, 24, 103	3
98	A Novel Approach for the Manufacturing of Gelatin-Methacryloyl. **2022**, 14, 5424	0
97	Self-Forming Norbornene-Tetrazine Hydrogels with Independently Tunable Properties. 2200425	0
96	Bio-inspired conductive adhesive based on calcium-free alginate hydrogels for bioelectronic interfaces. **2023**, 18, 015020	0
95	Alginates Combined with Natural Polymers as Valuable Drug Delivery Platforms. **2023**, 21, 11	0
94	Tuning the Mechanical Properties of Multiarm RAFT-Based Block Copolyelectrolyte Hydrogels via Ionic Cross-Linking for 3D Cell Cultures.	1
93	High-Performance Hydrogels via Alternate Compression□Decompression.	0
92	Biocompatibility Analysis of GelMa Hydrogel and Silastic RTV 9161 Elastomer for Encapsulation of Electronic Devices for Subdermal Implantable Devices. **2023**, 13, 19	0
91	The Role of Extracellular Matrix and Hydrogels in Mesenchymal Stem Cell Chondrogenesis and Cartilage Regeneration. **2022**, 12, 2066	0
90	Tuning Peptide-Based Hydrogels: Co-Assembly with Composites Driving the Highway to Technological Applications. **2023**, 24, 186	0
89	The Impact of the Cellular Environment and Aging on Modeling Alzheimer's Disease in 3D Cell Culture Models. 2205037	0
88	Synthesis of pH-Sensitive CMC /Chitosan Hydrogels by Gamma Irradiation□ **2014**, 2, 22-30	0
87	Hierarchical encapsulation of bacteria in functional hydrogel beads for inter- and intra- species communication. **2023**,	0

86	Mechanics of gelatin-based hydrogels during finite strain tension, compression and shear. 10,	0
85	Magnetic-responsive covalent adaptable networks: a brief review.	0
84	Chitosan-Based Hydrogels for Bioelectronic Sensing: Recent Advances and Applications in Biomedicine and Food Safety. **2023**, 13, 93	1
83	Cryo-Induced Cellulose-Based Nanogel from Elaeis guineensis for Antibiotic Delivery Platform. **2023**, 24, 1230	1
82	Jammed microgels fabricated via various methods for biological studies.	0
81	Non-affine dissipation in polymer fracture. **2023**, 101955	0
80	Porous Scaffolds Based on Polydopamine/Chondroitin Sulfate/Polyvinyl Alcohol Composite Hydrogels. **2023**, 15, 271	1
79	Poly(N-allyl acrylamide) as a Reactive Platform toward Functional Hydrogels. **2023**, 12, 79-85	0
78	Single-Component Physical Hydrogels of Dendritic Molecules. **2023**, 7, 26	2
77	Assessing cell migration in hydrogels: An overview of relevant materials and methods. **2023**, 18, 100537	0
76	Study of the synergistic influence of zwitterionic interactions and graphene oxide on water diffusion mechanism and mechanical properties in hybrid hydrogel network. **2023**, 314, 137710	0
75	Progress in self-healing hydrogels and their applications in bone tissue engineering. **2023**, 146, 213274	0
74	Tissue Engineering in Neuroscience: Applications and Perspectives.	0
73	Supramolecular Host□Guest Hydrogel Based on □Cyclodextrin and Carboxybenzyl Viologen Showing Reversible Photochromism and Photomodulable Fluorescence. **2023**, 15, 2479-2485	0
72	Reconfigurable A-motif, i-motif and triplex nucleic acids for smart pH-responsive DNA hydrogels. **2022**,	1
71	Update on Chitosan-Based Hydrogels: Preparation, Characterization, and Its Antimicrobial and Antibiofilm Applications. **2023**, 9, 35	0
70	Stimulus-Responsive Transport Properties of Nanocolloidal Hydrogels.	0
69	A Reversible Adhesive Hydrogel Tape. 2213150	0

68	Cell microencapsulation. **2023**, 459-482	0
67	Structure-property-function relationships of sustainable hydrogels. **2023**, 79-111	0
66	Micelle-crosslinked hydrogels with stretchable, self-healing, and selectively adhesive properties: Random copolymers work as dynamic yet self-sorting domains.	0
65	Tools and techniques for characterizing sustainable hydrogels. **2023**, 47-77	0
64	One-Step Soaking Strategy toward Anti-Swelling Hydrogels with a Stiff Armor 2206242	0
63	Neural Drug Delivery. **2023**, 651-691	0
62	Cutting Edge Aquatic-Based Collagens in Tissue Engineering. **2023**, 21, 87	0
61	Advances in cryostructures and their applications in biomedical and pharmaceutical products.	0
60	Establishment of different aliphatic amines-based rapid self-healing Mg(OH)2 metallogels: Exploring the morphology, rheology and intriguing Semiconducting Schottky Diode characteristics.	0
59	Photo-crosslinked gelatin methacryloyl hydrogel strengthened with calcium phosphate-based nanoparticles for early healing of rabbit calvarial defects. 53,	0
58	Emerging Role of Injectable Dipeptide Hydrogels in Biomedical Applications. **2023**, 8, 3551-3570	1
57	Dynamics of Acrylamide Hydrogels, Polymers, and Monomers in Water Measured with Optical Heterodyne-Detected Optical Kerr Effect Spectroscopy. **2023**, 127, 1276-1286	0
56	Recent development in multizonal scaffolds for osteochondral regeneration. **2023**, 25, 122-159	0
55	Fabrication of an ion-enhanced low-temperature tolerant graphene/PAA/KCl hydrogel and its application for skin sensors. **2023**, 15, 5938-5947	0
54	Nano-Strategies for Lignin Biomaterials toward Cancer Therapy.	0
53	Chemically identical gels I nder-crosslinked networks. **2023**, 175, 105278	0
52	Marine polysaccharide-based hydrogels for critical materials selective removal and recovery: A review. **2023**, 482, 215054	0
51	Cracking modes in layered hyperelastic structures. **2023**, 174, 105254	0

50	Biomaterial approaches for engineering and analyzing structure and metabolic states of microbial consortia within biofilms. **2023**, 81, 102916	0
49	Cyclodextrin regulated natural polysaccharide hydrogels for biomedical applications-a review. **2023**, 313, 120760	0
48	Biologically Responsive Polymers. **2016**, 199-253	0
47	Visible light laser direct-writing of high-resolution, biocompatible, super-multifunctional and tough hydrogels without photoinitiators in 30□s. **2023**, 147, 213318	0
46	Engineering injectable, biocompatible, and highly elastic bioadhesive cryogels. **2023**, 19, 100572	0
45	Temperature- and pH-Responsive Schizophrenic Copolymer Brush Coatings with Enhanced Temperature Response in Pure Water. **2023**, 15, 8676-8690	1
44	3D-Printed Soft Membrane for Periodontal Guided Tissue Regeneration. **2023**, 16, 1364	1
43	Chitosan and Pectin Hydrogels for Tissue Engineering and In Vitro Modeling. **2023**, 9, 132	0
42	Physico-mechanical and ex vivo analysis of aloe-alginate hydrogels for cervical cancer treatment. **2023**, 38, 158-177	0
41	Electrospun Nanofibers in Drug Delivery. **2023**, 263-278	0
40	Electrochemical study of agarose hydrogels for natural convection on macroelectrodes and ultramicroelectrodes. **2023**, 14,	0
39	Electroactive and Stretchable Hydrogels of 3,4-Ethylenedioxythiophene/thiophene Copolymers. **2023**, 8, 6753-6761	0
38	The diversified hydrogels for biomedical applications and their imperative roles in tissue regeneration. **2023**, 11, 2639-2660	0
37	Enhanced Rupture Force in a Cut-Dispersed Double-Network Hydrogel. **2023**, 9, 158	0
36	Organic Dots-PVA as a Platform for Wound Dressing.	0
35	Wetting-Enabled Three-Dimensional Interfacial Polymerization (WET-DIP) for Bioinspired Anti-Dehydration Hydrogels. 2208157	0
34	Cross-linkable star-hyperbranched unimolecular micelles for the enhancement of the anticancer activity of clotrimazole.	0
33	Nanoengineering/technology for tissue engineering and organ printing. **2023**, 35-54	0

32	Multi-physics coupling reinforced polyvinyl alcohol/cellulose nanofibrils based multifunctional hydrogel sensor for human motion monitoring. **2023**, 235, 123841	0
31	Systematic Comparison of Commercial Hydrogels Revealed That a Synergy of Laminin and Strain-Stiffening Promotes Directed Migration of Neural Cells. **2023**, 15, 12678-12695	0
30	Multiphoton Lithography as a Promising Tool for Biomedical Applications. 2212641	0
29	Template-Based Porous Hydrogel Microparticles as Carriers for Therapeutic Proteins.	0
28	3D bioprinting of human mesenchymal stem cells-laden hydrogels incorporating MXene for spontaneous osteodifferentiation. **2023**, 9, e14490	0
27	FORMULATION AND EVALUATION OF SUPERABSORBENT HYDROGEL FROM NATURAL POLYMER. 166-172	0
26	Polymeric DNA Hydrogels and Their Applications in Drug Delivery for Cancer Therapy. **2023**, 9, 239	0
25	Alginate-Based Biomaterials in Tissue Engineering and Regenerative Medicine. **2023**, 21, 189	0
24	Biomimetic Mineralization: From Microscopic to Macroscopic Materials and Their Biomedical Applications.	0
23	Placenta Powder-Infused Thiol-Ene PEG Hydrogels as Potential Tissue Engineering Scaffolds. **2023**, 24, 1617-1626	0
22	Doped Carbon Quantum Dots Reinforced Hydrogels for Sustained Delivery of Molecular Cargo. **2023**, 14, 166	0
21	Advances in graphene-based flexible and wearable strain sensors. **2023**, 464, 142576	0
20	Plasma-Derived Fibrin Hydrogels Containing Graphene Oxide for Infections Treatment. **2023**, 5, 1245-1255	0
19	Printability Evaluation of UV-Curable Aqueous Laponite/Urethane-Based PEG Inks. **2023**, 5, 2345-2358	0
18	A Nanoparticle Ink Allowing the High Precision Visualization of Tissue Engineered Scaffolds by MRI.	0
17	Effect of a Hydrophobic Branching Agent in Physically Cross-Linked Hydrogels with Shape-Memory and Self-healing Abilities.	0
16	Synergistic Effect of Thermoresponsive and Photocuring Methacrylated Chitosan-Based Hybrid Hydrogels for Medical Applications. **2023**, 15, 1090	0
15	Mineralization of Bone Extracellular Matrix-like Scaffolds Fabricated as Silk Sericin-Functionalized Dense Collagen–Fibrin Hybrid Hydrogels. **2023**, 15, 1087	0

14	Accelerating bone regeneration in cranial defects using an injectable organic–inorganic composite hydrogel.	0
13	Electropatterning—Contemporary developments for selective particle arrangements employing electrokinetics.	0
12	Swelling under Constraints: Exploiting 3D-Printing to Optimize the Performance of Gel-Based Devices.	0
11	Hydrophobized Hydrogels: Construction Strategies, Properties, and Biomedical Applications.	0
10	Naturally sourced hydrogels: emerging fundamental materials for next-generation healthcare sensing.	0
9	Poro-viscoelastic material parameter identification of brain tissue-mimicking hydrogels. 11,	0
8	Cryopreservation of Cell Sheets for Regenerative Therapy: Application of Vitrified Hydrogel Membranes. **2023**, 9, 321	0
7	Effect of the xanthan gum on the rheological properties of alginate hydrogels. **2023**, 142, 108768	0
6	Additive manufacturing of hydroxyapatite-based composites for bioengineering applications. **2023**, e00278	0
5	Encapsulation of natural materials. **2023**, 39-92	0
4	Anisotropic aerogel induced gelatin hydrogel actuator with favourable mechanical properties and multiple solvent responsiveness. **2023**, 390, 133932	0
3	Treatment of Psoriasis with the Help of Curcumin Hydrogel. **2023**, 2, 224-230	0
2	Phase-separation facilitated one-step fabrication of multiscale heterogeneous two-aqueous-phase gel. **2023**, 14,	0
1	Multifunctional dendrimer@nanoceria engineered GelMA hydrogel accelerates bone regeneration through orchestrated cellular responses. **2023**, 20, 100664	0