CITATION REPORT List of articles citing

Hydrogels: from controlled release to pH-responsive drug delivery

DOI: 10.1016/s1359-6446(02)02255-9 Drug Discovery Today, 2002, 7, 569-79.

Source: https://exaly.com/paper-pdf/34484252/citation-report.pdf

Version: 2024-04-10

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
1365	A photo-crosslinked poly(vinyl alcohol) hydrogel growth factor release vehicle for wound healing applications. 2003 , 5, E33		84
1364	Smart polymeric materials: emerging biochemical applications. 2003 , 10, 1161-71		286
1363	Stimulus-sensitive hydrogels and their applications in chemical (micro)analysis. 2003 , 128, 325-31		174
1362	Modeling of the pH-sensitive behavior of an ionic gel in the presence of diffusion. 2004 , 39, 1301-1318		23
1361	A novel pH-sensitive gelatin D NA semi-interpenetrating polymer network hydrogel. 2004 , 53, 675-680		18
1360	A Cyclodextrin Microgel for Controlled Release Driven by Inclusion Effects. 2004 , 25, 1912-1916		71
1359	Dual-stimuli-responsive hydrogels based on poly(N-isopropylacrylamide)/chitosan semi-interpenetrating networks. 2004 , 269, 185-94		84
1358	Modified chitosan 4. Superabsorbent hydrogels from poly(acrylic acid-co-acrylamide) grafted chitosan with salt- and pH-responsiveness properties. 2004 , 40, 1399-1407		438
1357	Stimuli-reponsive polymers and their bioconjugates. 2004 , 29, 1173-1222		2042
1356	Study of chemically induced pressure generation of hydrogels under isochoric conditions using a microfabricated device. 2004 , 121, 2746-51		29
1355	Iron availability from whey protein hydrogels: an in vitro study. 2004 , 52, 8137-43		92
1354	Fast Biodegradable Polymers. 2004 ,		
1353	Shunt infection. 2005 , 103, 293; author reply 293-4		1
1352	Vinyl ether/acrylic acid terpolymer hydrogels synthesized by Fradiation: characterization, thermosensitivity and pH-sensitivity. 2005 , 73, 272-279		13
1351	Superabsorbent hydrogels from poly(aspartic acid) with salt-, temperature- and pH-responsiveness properties. 2005 , 46, 5368-5376		249
1350	The use of colloidal microgels as a (trans)dermal drug delivery system. 2005 , 292, 137-47		138
1349	Dynamic swelling behavior of gamma-radiation induced polyelectrolyte poly(AAm-co-CA) hydrogels in urea solutions. 2005 , 301, 102-11		39

(2006-2005)

1348	Conducting polymerflydrogel composites for electrochemical release devices: Synthesis and characterization of semi-interpenetrating polyanilinepolyacrylamide networks. 2005 , 7, 717-723	147
1347	Surface morphology and wetting properties of surfaces coated with an amphiphilic diblock copolymer. 2005 , 575, 125-135	20
1346	Optical and morphological characterization of polyacrylamide hydrogel and liquid crystal systems. 2005 , 41, 2134-2141	44
1345	Spontaneously forming hydrogel from water-soluble random- and block-type phospholipid polymers. 2005 , 26, 6853-62	27
1344	Preparation and characterization of pH sensitive poly(N-vinyl-2-pyrrolidone/itaconic acid) copolymer hydrogels. 2005 , 91, 484-489	61
1343	Protecting substrates from enzymatic cleavage: hydrogels of low molecular weight gelators do the trick. 2005 , 101, 287-90	6
1342	Controlling release from the lipidic cubic phase by selective alkylation. 2005 , 102, 441-61	83
1341	Equilibrium swelling studies of highly swollen acrylamide/mesaconic acid hydrogels. 2005 , 96, 2253-2259	8
1340	pH effects on the complexation, miscibility and radiation-induced crosslinking in poly(acrylic acid)-poly(vinyl alcohol) blends. 2005 , 5, 424-32	36
1339	Novel hydrogel membrane based on copoly(hydroxyethyl methacrylate/p-vinylbenzyl-poly(ethylene oxide)) for biomedical applications: properties and drug release characteristics. 2005 , 5, 983-92	39
1338	Water uptake in chemically crosslinked poly(acrylamide-co-crotonic acid) hydrogels. 2005, 26, 265-270	43
1337	Novel materials for bioanalytical and biomedical applications: Environmental response and binding/release capabilities of amphiphilic hydrogels with shape-persistent dendritic junctions. 2005 , 43, 4017-4029	42
1336	Modified Carrageenan. 1. H-CarragPAM, a Novel Biopolymer-Based Superabsorbent Hydrogel. 2005 , 20, 475-490	54
1335	Electrochemical investigation of Pb2+ binding and transport through a polymerized crystalline colloidal array hydrogel containing benzo-18-crown-6. 2005 , 77, 185-92	30
1334	Influence of Additives on the Thermoresponsive Behavior of Polymers in Aqueous Solution. 2005 , 38, 10155-10163	122
1333	Transient rheology of solvent-responsive complex fluids by integrating microrheology and microfluidics. 2006 , 50, 1-19	35
1332	Nanobiomaterials: a review of the existing science and technology, and new approaches. 2006 , 17, 1241-68	70
1331	An investigation into the influence of hydrogel composition on swelling behavior and drug release from poly(acrylamide-co-itaconic acid) hydrogels in various media. 2006 , 13, 1-7	26

1330	Synthesis of poly(acrylamide-co-methyl methacrylate) chemically cross-linked hydrogels and their application in controlled release of model drugs. 2006 , 9, 477-490	6
1329	Controlled Dissolution of Organosilica Sol L els as a Means for Water-Regulated Release/Delivery of Actives in Fabric Care Applications. 2006 , 18, 4055-4064	3
1328	Swelling Characterization of Polyelectrolyte Poly(Hydroxamic Acid) Hydrogels in Aqueous Thiazin Dye Solutions. 2006 , 45, 729-734	6
1327	Photo-cross-linked hydrogels with polysaccharide-poly(amino acid) structure: new biomaterials for pharmaceutical applications. <i>Biomacromolecules</i> , 2006 , 7, 1302-10	54
1326	Novel dually responsive hydrogel with rapid deswelling rate. 2006 , 55, 1407-1412	18
1325	Immobilizing Cu,Zn-superoxide dismutase in hydrogels of carboxymethylcellulose improves its stability and wound healing properties. 2006 , 71, 1324-8	15
1324	Hydrophobic modification of high molar mass polyglycidol to thermosensitive polymers. 2006 , 42, 2497-2506	42
1323	MBA-crosslinked Na-Alg/CMC as a smart full-polysaccharide superabsorbent hydrogels. 2006 , 66, 386-395	172
1322	The swelling behavior and network parameters of guar gum/poly(acrylic acid) semi-interpenetrating polymer network hydrogels. 2006 , 66, 473-479	94
1321	Degradation behavior of dextran hydrogels composed of positively and negatively charged microspheres. 2006 , 27, 4141-8	45
1320	A new polymer/clay nano-composite hydrogel with improved response rate and tensile mechanical properties. 2006 , 42, 2125-2132	141
1319	pH-sensitive hydrogels based on bovine serum albumin for oral drug delivery. 2006 , 312, 151-7	74
1318	Solid lipid nanoparticles incorporated in dextran hydrogels: a new drug delivery system for oral formulations. 2006 , 325, 140-6	71
1317	Heat and mass transfer scale-up issues during freeze-drying, III: control and characterization of dryer differences via operational qualification tests. 2006 , 7, E39	63
1316	Uptake of Basic Blue 17 from aqueous solutions by using chemically crosslinked polyelectrolyte AAm/AASS hydrogels. 2006 , 12, 77-88	17
1315	Polymeric absorbent for water sorption based on chemically crosslinked poly (acrylamide/2-acrylamido-2-methyl-1-propanesulfonic acid sodium salt) hydrogels. 2006 , 57, 703-712	11
1314	Synthesis and characterization of pH-sensitivity semi-IPN hydrogel based on hydrogen bond between poly(N-vinylpyrrolidone) and poly(acrylic acid). 2006 , 47, 1526-1532	124
1313	External stimuli response on a novel chitosan hydrogel crosslinked with formaldehyde. 2006 , 29, 233-238	147

(2007-2006)

1312	Slow release of molecules in self-assembling peptide nanofiber scaffold. 2006 , 115, 18-25	263
1311	Synthetic polymeric absorbent for dye based on chemically crosslinked acrylamide/mesaconic acid hydrogels. 2006 , 101, 405-413	32
1310	Preparation and characterization of highly swelling smart grafted polymer networks of poly(vinyl alcohol) and poly(acrylic acidfloffcrylamide). 2006 , 102, 84-95	18
1309	Trapping norovirus by glycosylated hydrogels: a potential oral antiviral drug. 2006 , 1, 1361-6	17
1308	The Fabrication of a Photoresponsive Molecularly Imprinted Polymer for the Photoregulated Uptake and Release of Caffeine. 2006 , 16, 1759-1767	119
1307	The role and significance of extracellular polymers in activated sludge. Part I: Literature review. 2006 , 34, 411-424	98
1306	A New Sorbent Chemically Cross-linked Highly Swollen Copolymeric Hydrogels for Dye Uptake. 2006 , 45, 1277-1283	12
1305	Biomaterials: An Overview. 2006 ,	
1304	Bioadhesive controlled release systems of ornidazole for vaginal delivery. 2006, 11, 477-84	34
1303	Molecular dynamics of polystyrene solutions in microwave fields. 2006 , 124, 204904	12
1302	pH-sensitive hydrogel based on a polyaspartamide derivative. 2006 , 16, 77-84	18
1301	Introduction to polymeric drug delivery systems. 2007 , 33-56	13
1300	FT-IR and 2D-IR spectroscopic studies on the effect of ions on the phase separation behavior of PVME aqueous solution. 2007 , 23, 823-7	18
1299	Biodegradable dextran hydrogels for protein delivery applications. 2007 , 4, 147-64	183
1298	Azo compounds in colon-specific drug delivery. 2007 , 4, 547-60	63
1297	Silica-based mesoporous materials as drug delivery system for methotrexate release. 2007 , 14, 491-5	59
1296	Release mechanisms for polyelectrolyte capsules. 2007 , 36, 636-49	452
1295	Influence of Macromolecular Architecture on the Thermal Response Rate of Amphiphilic Copolymers, Based on Poly(N-isopropylacrylamide) and Poly(oxyethylene), in Water. 2007 , 40, 3765-3772	51

1294	Gastroretentive Dosage Forms for Prolonging Gastric Residence Time. 2007, 21, 157-171		8
1293	Amphiphilic Model Conetworks Based on Combinations of Methacrylate, Acrylate, and Styrenic Units: Synthesis by RAFT Radical Polymerization and Characterization of the Swelling Behavior. 2007 , 40, 5575-5581		73
1292	Phase transformations in aqueous low molar mass poly(vinyl methyl ether) solutions: theoretical prediction and experimental validation of the peculiar solvent melting line, bimodal LCST, and (adjacent) UCST miscibility gaps. 2007 , 111, 1288-95		43
1291	Modulation of the supramolecular structure of G-quartet assemblies by dynamic covalent decoration. 2007 , 129, 10058-9		42
1290	Effect of silk fibroin interpenetrating networks on swelling/deswelling kinetics and rheological properties of poly(N-isopropylacrylamide) hydrogels. <i>Biomacromolecules</i> , 2007 , 8, 258-64	6.9	65
1289	Temperature and pH-Sensitive Polymers with Hydrophobic Spacers for the Controlled Delivery of Drugs. 2007 , 254, 292-299		7
1288	Swelling and dye sorption studies of AAm/SA hydrogels crosslinked by glutaraldehyde and divinylbenzene. 2007 , 105, 2646-2654		14
1287	Shell-in-shell microcapsules: a novel tool for integrated, spatially confined enzymatic reactions. 2007 , 46, 5605-8		265
1286	Reversible surface switching of nanogel triggered by external stimuli. 2007, 46, 7104-7		59
1285	Effiziente Kopplung rümlich getrennter Enzymreaktionen in Bhell-in-shellEMikrokapseln. 2007 , 119, 5702-5705		25
1284	Reversible Surface Switching of Nanogel Triggered by External Stimuli. 2007 , 119, 7234-7237		6
1283	Confinement of Thermoresponsive Hydrogels in Nanostructured Porous Silicon Dioxide Templates. 2007 , 17, 1153-1162		100
1282	Multiresponsive Surfaces Change Between Superhydrophilicity and Superhydrophobicity. 2007 , 19, 252	0-252	4 184
1281	Radiation synthesis of poly(ethylene glycol)/acrylic acid hydrogel as carrier for site specific drug delivery. 2007 , 81, 168-74		11
1280	Temperature-Responsive Water-Soluble Copolymers Based on 2-Hydroxyethyl Acrylate and Butyl Acrylate. 2007 , 208, 979-987		44
1279	Temperature and pH-Sensitive Swelling Behavior of Binary DMAEMA/4VP Grafts on Poly(propylene) Films. 2007 , 292, 214-219		68
1278	Adsorption and controlled release of Chlortetracycline HCl by using multifunctional polymeric hydrogels. 2007 , 43, 468-477		25
1277	Synthesis and water sorption studies of pH sensitive poly(acrylamide-co-itaconic acid) hydrogels. 2007 , 43, 4830-4838		79

(2008-2007)

1276	Preparation of a novel pH-responsive silver nanoparticle/poly(HEMA B EGMA M AA) composite hydrogel. 2007 , 43, 4178-4187	133
1275	Swelling and drug release behavior of poly(2-hydroxyethyl methacrylate/itaconic acid) copolymeric hydrogels obtained by gamma irradiation. 2007 , 76, 801-810	67
1274	Polyampholytic hydrogels: Poly(N-isopropylacrylamide)-based stimuli-responsive networks with poly(ethyleneimine). 2007 , 67, 144-155	56
1273	Swelling characterization of novel ternary semi-IPNs: acrylamide/1-vinylimidazole/PEG hydrogels. 2007 , 18, 483-489	7
1272	Electric-field-controlled synthesis of HPMA hydrogels containing self-organized arrays of micro-channels. 2007 , 45, 2593-2600	1
1271	Swelling behaviour of hydrogels from methacrylic acid and poly(ethylene glycol) side chains by magnetic resonance imaging. 2007 , 56, 506-511	16
1270	Synthesis, characterization, mechanical properties and biocompatibility of interpenetrating polymer network uper-porous hydrogel containing sodium alginate. 2007 , 56, 1563-1571	54
1269	Photocrosslinking of dextran and polyaspartamide derivatives: a combination suitable for colon-specific drug delivery. 2007 , 119, 328-38	52
1268	Preparation and characterization of polyvinyl alcohol-gelatin hydrogel membranes for biomedical applications. 2007 , 8, 21	248
1267	Biomedical evaluation of polyvinyl alcohol-gelatin esterified hydrogel for wound dressing. 2007 , 18, 1889-94	66
1266	Swelling characterization of poly (acrylamide-co-N-vinylimidazole) hydrogels crosslinked by TMPTA and semi-IPNB with PEG. 2007 , 14, 483-488	15
1265	Pore-covered thermoresponsive membranes for repeated on-demand drug release. 2008 , 322, 243-248	45
1264	Controlled release of drugs from multi-component biomaterials. 2008, 4, 1788-96	38
1263	Biodegradable thermo- and ph-responsive hydrogels based on amphiphilic polyaspartamide derivatives containingN,N-Diisopropylamine pendants. 2008 , 16, 489-491	27
1262	Controlled release and interaction of protein using self-assembling peptide RATEA16 nanofiber hydrogels. 2008 , 46, 4927-4933	9
1261	Synthesis of poly(cystine bisamide)-PEG block copolymers grafted with 1-(3-aminopropyl)imidazole and their phase transition behaviors. 2008 , 19, 1558	4
1260	Complexation hydrogels for oral insulin delivery: effects of polymer dosing on in vivo efficacy. 2008 , 97, 2607-18	24
1259	Preparation of pH-Responsive Hydrophilic Core-Shell Particles for Encapsulation of Water-Soluble Material. 2008 , 209, 938-943	5

1258	Polyvinyl alcohol-poly(caprolactone) semi IPN scaffold with implication for cartilage tissue engineering. 2008 , 84, 584-94	52
1257	Immobilization of Myoglobin from Horse Skeletal Muscle in Hydrophilic Polymer Networks. 2008 , 107, 881-890	10
1256	Synthesis of pH dependent chitosan-EPI hydrogel films and their application for in vitro release of promethazine hydrochloride. 2008 , 109, 683-690	9
1255	Preparation, characterization, and drug release properties of poly(2-hydroxyethyl methacrylate) hydrogels having Eyclodextrin functionality. 2008 , 109, 1360-1368	38
1254	Synthesis and characterization of novel thermo- and pH-responsive copolymers based on amphiphilic polyaspartamides. 2008 , 111, NA-NA	2
1253	Stimuli-Responsive Polymeric Systems for Biomedical Applications. 2008 , 10, 515-527	528
1252	The effects of irradiation on controlled drug delivery/controlled drug release systems. 2008, 77, 288-344	39
1251	Swelling and dye sorption studies of acrylamide/2-acrylamido-2-methyl-1-propanesulfonic acid/bentonite highly swollen composite hydrogels. 2008 , 68, 458-473	82
1250	Synthesis and characterization of poly (2-hydroxyethyl methacrylate)-polyaniline based hydrogel composites. 2008 , 68, 1239-1244	41
1249	Polymeric electro-mechanic devices applied to antibiotic-controlled release. 2008 , 130, 638-644	19
1248	Influence of the degree of methacrylation on hyaluronic acid hydrogels properties. 2008, 29, 1739-49	195
1247	Synthesis and characterization of new hydrogels through copolymerization of N-acryloyl-tris-(hydroxymethyl)aminomethane and different crosslinking agents. 2008 , 44, 3548-3555	20
1246	Supercritical solvent impregnation of ophthalmic drugs on chitosan derivatives. 2008, 44, 245-257	90
1245	Structural selection in G-quartet-based hydrogels and controlled release of bioactive molecules. 2008 , 3, 134-9	73
1244	Controlled drug delivery in tissue engineering. 2008 , 60, 229-42	327
1243	Hydrogel nanoparticles in drug delivery. 2008 , 60, 1638-49	1401
1242	In situ gelling stimuli-sensitive block copolymer hydrogels for drug delivery. 2008 , 127, 189-207	693
1241	Use of cysteine branched PGA in hydrogel microparticulate delivery systems. 2008 , 132, e66-e68	1

(2009-2008)

1240	pH-Responsive biomineralization onto chitosan grafted biodegradable substrates. 2008 , 18, 2493	45
1239	pH-sensitive hydrogels of dextran: synthesis, characterization and in vivo studies. 2008 , 16, 649-59	13
1238	Wettability switching between high hydrophilicity at low pH and high hydrophobicity at high pH on surface based on pH-responsive polymer. 2008 , 1199-201	84
1237	Effect of particle size and charge on the network properties of microsphere-based hydrogels. 2008 , 70, 522-30	39
1236	Drug delivery systems in children. 2008 , 10, 351-5	О
1235	Photoresponsive Molecularly Imprinted Hydrogels for the Photoregulated Release and Uptake of Pharmaceuticals in the Aqueous Media. 2008 , 20, 1353-1358	117
1234	Sustained Release of Metoprolol Tartarate from Radiation-Grafted pH-Responsive Hydrogels. 2008 , 58, 32-48	15
1233	Thin Films of Poly(N-isopropylacrylamide) End-Capped with n-Butyltrithiocarbonate. 2008 , 41, 3209-3218	59
1232	Elucidation of the Mechanism of Enhanced Insulin Uptake and Release from pH Responsive Hydrogels. 2008 , 266, 101-107	2
1231	Bio-Responsive Hydrogel Membranes. 2008 , 473-492	
	Bio-Responsive Hydrogel Membranes. 2008, 473-492 . 2009,	171
		171
1230	. 2009, Preparation and optimization of superabsorbent hydrogel micromatrices based on poly(acrylic	171 3
1230	. 2009, Preparation and optimization of superabsorbent hydrogel micromatrices based on poly(acrylic acid), partly sodium salt-g-poly(ethylene oxide) for modified release of indomethacin. 2009, 35, 756-67	3
1230 1229 1228	. 2009, Preparation and optimization of superabsorbent hydrogel micromatrices based on poly(acrylic acid), partly sodium salt-g-poly(ethylene oxide) for modified release of indomethacin. 2009, 35, 756-67 Equilibrium Swelling Studies of Highly Swollen Acrylamide/Thiosinamine Hydrogels. 2009, 48, 152-157 Design and evaluation of novel fast forming pilocarpine-loaded ocular hydrogels for sustained	3 7
1230 1229 1228	. 2009, Preparation and optimization of superabsorbent hydrogel micromatrices based on poly(acrylic acid), partly sodium salt-g-poly(ethylene oxide) for modified release of indomethacin. 2009, 35, 756-67 Equilibrium Swelling Studies of Highly Swollen Acrylamide/Thiosinamine Hydrogels. 2009, 48, 152-157 Design and evaluation of novel fast forming pilocarpine-loaded ocular hydrogels for sustained pharmacological response. 2009, 137, 152-9 Soy protein cold-set hydrogels as controlled delivery devices for nutraceutical compounds. 2009,	3 7 65
1230 1229 1228 1227	. 2009, Preparation and optimization of superabsorbent hydrogel micromatrices based on poly(acrylic acid), partly sodium salt-g-poly(ethylene oxide) for modified release of indomethacin. 2009, 35, 756-67 Equilibrium Swelling Studies of Highly Swollen Acrylamide/Thiosinamine Hydrogels. 2009, 48, 152-157 Design and evaluation of novel fast forming pilocarpine-loaded ocular hydrogels for sustained pharmacological response. 2009, 137, 152-9 Soy protein cold-set hydrogels as controlled delivery devices for nutraceutical compounds. 2009, 23, 1647-1653 A New Approach for Adipose Tissue Regeneration Based on Human Mesenchymal Stem Cells in	3 7 65 127

1222	Fluorescent nanogel of arsenic sulfide nanoclusters. 2009 , 48, 6282-5	40
1221	Fabrication of pH-responsive molecularly imprinted polyethersulfone particles for bisphenol-A uptake. 2009 , 113, 916-921	29
1220	A monolithic polymeric microdevice for pH-responsive drug delivery. 2009 , 11, 1251-7	31
1219	Swelling behaviour and paracetamol release from poly(N-isopropylacrylamide-itaconic acid) hydrogels. 2009 , 63, 197-211	46
1218	Synthesis and characterization of poly(2-hydroxyethyl methacrylate/itaconic acid) copolymeric hydrogels. 2009 , 63, 837-851	34
1217	Swelling and hydrolytic degradation behaviour of pH-responsive hydrogels of poly[(N-isopropylacrylamide)-co-(methacrylic acid)] crosslinked by biodegradable polycaprolactone chains. 2009 , 58, 362-367	20
1216	Swelling and viscoelastic properties of new magnesium acrylate hydrogels. 2009 , 49, 964-969	4
1215	Cellular automata model for swelling-controlled drug release. 2009 , 380, 25-32	18
1214	pH- and electro-responsive characteristics of silk fibroin-hyaluronic acid polyelectrolyte complex membranes. 2009 , 380, 120-6	16
1213	Synthesis, swelling and drug release behavior of poly(N,N-diethylacrylamide-co-N-hydroxymethyl acrylamide) hydrogel. 2009 , 29, 2116-2123	56
1212	Self-assembled prodrugs: an enzymatically triggered drug-delivery platform. 2009 , 30, 383-93	131
1211	Stimuli-responsive interfaces and systems for the control of protein-surface and cell-surface interactions. 2009 , 30, 1827-50	394
121 0	In situ steady state fluorescence (SSF) technique to study drying of PAAm hydrogels made of various cross-linker contents. 2009 , 48, 600-605	13
1209	Investigation of swelling and network parameters of poly(ethylene glycol)-crosslinked poly(methyl vinyl ether-co-maleic acid) hydrogels. 2009 , 45, 1239-1249	93
1208	Dynamic swelling of hydrogels based on random terpolymers of N-isopropylacrylamide, methacrylic acid and poly(ethylene glycol) macromonomer. 2009 , 50, 2065-2074	23
1207	Synthesis of glucose-sensitive self-assembled films and their application in controlled drug delivery. 2009 , 50, 4205-4211	58
1206	Nanostructured hybrid hydrogels prepared by a combination of atom transfer radical polymerization and free radical polymerization. 2009 , 30, 5270-8	110
1205	Frontal polymerization as a new method for developing drug controlled release systems (DCRS) based on polyacrylamide. 2009 , 45, 690-699	56

(2009-2009)

1204	Structural parameters of polyacrylamide hydrogels obtained by the Equilibrium Swelling Theory. 2009 , 45, 1232-1238		36
1203	Swelling behaviour of thermo-sensitive hydrogels based on oligo(ethylene glycol) methacrylates. 2009 , 45, 3418-3425		46
1202	Synthesis and characterization of low molecular weight hyaluronic acid-based cationic micelles for efficient siRNA delivery. 2009 , 77, 95-104		31
1201	Poly(MAA-co-AN) hydrogels with improved mechanical properties for theophylline controlled delivery. 2009 , 5, 316-27		53
1200	Self-assembly of a swollen chitosan/chondroitin sulfate hydrogel by outward diffusion of the chondroitin sulfate chains. 2009 , 5, 2601-9		51
1199	A modeling study of the effect of environmental ionic valence on the mechanical characteristics of pH-electrosensitive hydrogel. 2009 , 5, 2920-8		10
1198	Probing the Inner Cavities of Hydrogels by Proton Diffusion. 2009 , 113, 19500-19505		25
1197	Controlled release and entrapment of enantiomers in self-assembling scaffolds composed of beta-sheet peptides. <i>Biomacromolecules</i> , 2009 , 10, 3266-72	6.9	13
1196	Nanotechnology controlled drug delivery for treating bone diseases. 2009 , 6, 851-64		69
1195	Thermally responsive hydrogel films studied by surface plasmon diffraction. 2009, 81, 2611-7		18
1194	Stimuli-Sensitive Nanotechnology for Drug Delivery. 2009 , 545-578		7
1193	Biopolymers in Controlled-Release Delivery Systems. 2009 , 519-557		8
1192	Water Sorption and Dye Uptake Studies of Highly Swollen AAm/AMPS Hydrogels and Semi-IPNs with PEG. 2009 , 48, 1217-1229		35
1191	Stimuli-responsive polymers and their applications in drug delivery. 2009 , 4, 022001		456
1190	Compatibility of hyaluronic acid hydrogel and skeletal muscle myoblasts. 2009 , 4, 025011		22
1189	Study of Phase Separation of Poly(vinyl methyl ether) Aqueous Solutions with Rayleigh Scattering Technique. 2009 , 42, 1720-1725		42
1188	Modulating growth factor release from hydrogels via a protein conformational change. 2009 , 5, 2399		35
1187	Advanced nanogel engineering for drug delivery. 2009 , 5, 707-715		404

1186	Synthesis by AGET ATRP of degradable nanogel precursors for in situ formation of nanostructured hyaluronic acid hydrogel. <i>Biomacromolecules</i> , 2009 , 10, 2499-507	89
1185	Multiphoton writing of three-dimensional fluidic channels within a porous matrix. 2009 , 131, 11294-5	28
1184	Biomaterial Applications in the Adult Skeletal Muscle Satellite Cell Niche: Deliberate Control of Muscle Stem Cells and Muscle Regeneration in the Aged Niche. 2010 , 275-308	1
1183	Mucoadhesive microspheres for nasal administration of an antiemetic drug, metoclopramide: in-vitro/ex-vivo studies. 2005 , 57, 287-94	83
1182	Comparison of chitosan nanoparticles and chitosan hydrogels for vaccine delivery. 2010 , 60, 1591-1600	42
1181	Structural and rheological properties of chitosan semi-interpenetrated networks. 2010 , 32, 109-18	11
1180	Cyclodextrin-assisted assembly of stimuli-responsive polymers in aqueous media. 2010 , 6, 4613	88
1179	An Investigation into the Influence of Crosslinker Type and Solvent Composition on Physical Properties and Phase Transition Behavior of Poly(N-isopropylacrylamide) Hydrogels. 2010 , 167-180	
1178	Encapsulation of bovine serum albumin within Etyclodextrin/gelatin-based polymeric hydrogel for controlled protein drug release. 2010 , 31, 234-241	26
1177	Supramolecular hydrogels for enzymatically triggered self-immolative drug delivery. 2010 , 66, 2614-2618	41
1176	Luminescent N-isopropylacrylamideBurfmer copolymer hydrogels prepared upon electrostatic self-assembly of 1-pyrenesulfonate. 2010 , 288, 1479-1484	6
1175	Development of pectin based hydrogel membranes for biomedical applications. 2010 , 14, 213	23
1174	Development of a pH-responsive drug delivery system for enantioselective-controlled delivery of racemic drugs. 2010 , 142, 122-31	91
1173	Hydrogels of collagen-inspired telechelic triblock copolymers for the sustained release of proteins. 2010 , 147, 298-303	34
1172	Glutaraldehyde-crosslinked poly(vinyl alcohol) hydrogel discs for the controlled release of antidiabetic drug. 2010 , 116, NA-NA	5
1171	Synthesis and physical gels of pH- and thermo-responsive tertiary amine methacrylate based ABA triblock copolymers and drug release studies. 2010 , 51, 3618-3626	54
1170	Preparation and gelling properties of sugar-contained low-molecular-mass gelators: Combination of cholesterol and linear glucose. 2010 , 66, 2961-2968	30
1169	A novel controlled drug delivery system based on pH-responsive hydrogels included in soft gelatin capsules. 2010 , 6, 4650-6	38

1168	Synthesis and properties of polyelectrolyte microgel particles. 2010 , 158, 15-20	29
1167	Temperature and pH responsive polymers based on chitosan: Applications and new graft copolymerization strategies based on living radical polymerization. 2010 , 80, 618-630	99
1166	Synthesis of cross-linked N-(2-carboxybenzyl)chitosan pH sensitive polyelectrolyte and its use for drug controlled delivery. 2010 , 82, 181-188	40
1165	Drug Release Behaviors of a Novel Ph/Temperature Responsive Hydrogel with Jujube Cake-Like Structure. 2010 , 148-149, 994-997	
1164	Characterization and Evaluation of Acrylic Acid Co-2-acrylamido-2-methylpropane-1-sulfonic Acid Hydrogels for Uranium Recovery. 2010 , 31, 1415-1422	26
1163	Influence of the coating process parameters on the quality of PUR/PVP hydrogel coatings for PVC medical devices. 2010 , 12, 38-45	5
1162	Triggered drug delivery from biomaterials. 2010 , 7, 605-16	64
1161	A smart supramolecular hydrogel of N(alpha)-(4-n-alkyloxybenzoyl)-L-histidine exhibiting pH-modulated properties. 2010 , 26, 7761-7	60
1160	Biomaterials as Stem Cell Niche: Cardiovascular Stem Cells. 2010 , 173-193	
1159	Intrinsically Conducting Polymer Platforms for Electrochemically Controlled Drug Delivery. 2010 , 481-512	1
1158	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
1157	Equilibrium Swelling Studies of Chemically Cross-Linked Highly Swollen Acrylamide-Sodium Acrylate Hydrogels in Various Water-Solvent Mixtures. 2010 , 49, 609-616	21
1156	Bio-Inspired/-Functional Colloidal Core-Shell Polymeric-Based NanoSystems: Technology Promise in Tissue Engineering, Bioimaging and NanoMedicine. 2010 , 2, 323-352	54
1155	Thermoresponsive Copolymer Hydrogels on the Basis of N-Isopropylacrylamide and a Non-Ionic Surfactant Monomer: Swelling Behavior, Transparency and Rheological Properties. 2010 , 43, 9964-9971	28
1154	Designable Coordination Bonding in Mesopores as a pH-Responsive Release System. 2010 , 22, 5437-5444	72
1153	Acidic pH-responsive nanogels as smart cargo systems for the simultaneous loading and release of short oligonucleotides and magnetic nanoparticles. 2010 , 26, 10315-24	49
1152	Preparation and Characterization of Novel Amphiphilic Hydrogels with Covalently Attached Drugs and Fluorescent Markers. 2010 , 43, 10017-10030	61
1151	Comparison of the Thermoresponsive Deswelling Kinetics of Poly(2-(2-methoxyethoxy)ethyl methacrylate) Hydrogels Prepared by ATRP and FRP. 2010 , 43, 4791-4797	75

1150	Photopolymerized thermosensitive poly(HPMAlactate)-PEG-based hydrogels: effect of network design on mechanical properties, degradation, and release behavior. <i>Biomacromolecules</i> , 2010 , 11, 2143-51	50
1149	Maillard-Type Cross-Linked Soy Protein Hydrogels as Devices for the Release of Ionic Compounds: An In Vitro Study. 2010 , 43, 2349-2355	21
1148	Electrochemical study of gelatin as a matrix for the immobilization of horse heart cytochrome c. 2010 , 82, 1980-5	23
1147	Nanofibrous scaffold from self-assembly of beta-sheet peptides containing phenylalanine for controlled release. 2010 , 142, 354-60	30
1146	Biorefinery: a design tool for molecular gelators. 2010 , 26, 17843-51	88
1145	Electrified selective "sponges" made of Au nanoparticles. 2010 , 132, 9373-82	42
1144	Biomaterials as Stem Cell Niche. 2010 ,	1
1143	Electrically-driven hydrogel actuators in microfluidic channels: fabrication, characterization, and biological application. 2010 , 10, 1604-10	71
1142	Chain collapse and revival thermodynamics of poly(N-isopropylacrylamide) hydrogel. 2010, 114, 9761-70	87
1141	Synthesis of Stimuli-responsive Nanoparticles by Solution Polymerization. 2010 , 48, 135-141	
1140	Highly distensible nanostructured elastic hydrogels from AB diblock and ABA triblock copolymer melt blends. 2010 , 6, 4807	27
1139	Improvement of elasticity and strength of poly(N-isopropylacrylamide) hydrogels upon copolymerization with cationic surfmers. 2011 , 7, 6590	25
1138	Microfluidic dialysis cell for characterization of macromolecule interactions. 2011 , 7, 4762	13
1137	Synthesis of stimuli-responsive microgels for in vitro release of diclofenac diethyl ammonium. 2011 , 22, 823-44	16
1136	A novel pH-sensitive (⊞)-⊞-tocopherol-5-fluorouracil adduct with antioxidant and anticancer properties. 2011 , 47, 10713-5	8
1135	pH-responsive mitoxantrone (MX) delivery using mesoporous silica nanoparticles (MSN). 2011 , 21, 9483	50
1134	Rheology and thermal stability of pH-dependent hydrogels of N-acyl-L-carnosine amphiphiles: effect of the alkoxy tail length. 2011 , 7, 10369	26
1133	Acid-responsive microcapsules: the loading-unloading processes. 2011 , 47, 11975-7	22

1132	Synthesis of Cationic and Ampholytic Starch Graft Acrylamide and their Aqueous Salt Absorption. 2011 , 48, 454-461		9
1131	Physiologically relevant oxidative degradation of oligo(proline) cross-linked polymeric scaffolds. <i>Biomacromolecules</i> , 2011 , 12, 4357-66	6.9	83
1130	Low swelling hyperbranched poly(amine-ester) hydrogels for pH-modulated differential release of anticancer drugs. 2011 , 21, 13530		30
1129	Xylan-rich hemicelluloses-graft-acrylic acid ionic hydrogels with rapid responses to pH, salt, and organic solvents. 2011 , 59, 8208-15		127
1128	Monodisperse core-shell chitosan microcapsules for pH-responsive burst release of hydrophobic drugs. 2011 , 7, 4821		129
1127	Responsive organometallic polymer grafts: electrochemical switching of surface properties and current mediation behavior. 2011 , 27, 6822-9		19
1126	Mucoadhesive hydrogel microparticles based on poly (methacrylic acid-vinyl pyrrolidone)-chitosan for oral drug delivery. 2011 , 18, 227-35		20
1125	Protein diffusion in photopolymerized poly(ethylene glycol) hydrogel networks. 2011 , 6, 055006		41
1124	Release of photoactivatable drugs from plasmonic nanoparticles for targeted cancer therapy. 2011 , 5, 7796-804		193
1123	Active Implants and Scaffolds for Tissue Regeneration. 2011 ,		11
1122	pH-responsive, dynamically restructuring hydrogels formed by reversible crosslinking of PVA with phenylboronic acid functionalised PPOPEOPPO spacers (Jeffamines i). 2011 , 7, 11111		55
1121	pH-responsive lyotropic liquid crystals for controlled drug delivery. 2011 , 27, 5296-303		249
1120	Coordination Bonding-Based Mesoporous Silica for pH-Responsive Anticancer Drug Doxorubicin Delivery. 2011 , 115, 16803-16813		67
1119	A one-step strategy for thermal- and pH-responsive graphene oxide interpenetrating polymer hydrogel networks. 2011 , 21, 4095		231
1118	Superparamagnetic iron oxide nanoparticles (SPIONs): development, surface modification and applications in chemotherapy. 2011 , 63, 24-46		1309
1117	Hydrogel Biomaterials. 2011 ,		23
1116	Pilot randomized trial for treatment of bacterial vaginosis using in situ forming metronidazole vaginal gel. 2011 , 37, 874-81		10
1115	Release behavior of active material from poly(vinyl amine)/polyelectrolyte composite hollow particles. 2011 , 31, 1290-1294		5

1114	The forthcoming applications of gold nanoparticles in drug and gene delivery systems. 2011 , 149, 65-71	514
1113	Phenylboronate-diol crosslinked polymer gels with reversible sol-gel transition. 2011 , 52, 4268-4276	48
1112	Chitosan-Derivative Based Hydrogels as Drug Delivery Platforms: Applications in Drug Delivery and Tissue Engineering. 2011 , 351-376	5
1111	Poly(N-isopropylacrylamide) hydrogel: Effect of hydrophilicity on controlled release of ibuprofen at different pH. 2011 , 124, n/a-n/a	3
1110	Thermoresponsive hydrogel scaffolds with tailored hydrophilic pores. 2011 , 6, 128-36	31
1109	Drug delivery in soft tissue engineering. 2011 , 8, 1175-88	49
1108	Review on gold nanoparticles and their applications. 2011 , 3, 193-205	118
1107	Recent advances in materials for extended-release antibiotic delivery system. 2011 , 64, 625-34	183
1106	Biopolymer-based hydrogels as scaffolds for tissue engineering applications: a review. <i>Biomacromolecules</i> , 2011 , 12, 1387-408	1282
1105	pH- and sugar-sensitive layer-by-layer films and microcapsules for drug delivery. 2011 , 63, 809-21	154
1104	Crosslinking of gelatin-based drug carriers by genipin induces changes in drug kinetic profiles in vitro. 2011 , 22, 115-23	46
1103	Control release of some pesticides from Starch/(Ethylene glycol-co-Methacrylic acid) copolymers prepared by Erradiation. 2011 , 18, 1605-1615	7
1102	Preparation and characterization of magnetic nanoparticles embedded in hydrogels for protein purification and metal extraction. 2011 , 18, 2285-2294	45
1101	pH-responsive swelling behavior, elasticity and molecular characteristics of poly(N,N-dimethylaminoethyl methacrylate) gels at various initial monomer concentrations. 2011 , 67, 1347-1366	26
1100	Lyophilized silk fibroin hydrogels for the sustained local delivery of therapeutic monoclonal antibodies. 2011 , 32, 2642-50	194
1099	Sensing the cardiac environment: exploiting cues for regeneration. 2011 , 4, 616-30	12
1098	Poly(2-hydroxyethyl methacrylate) nanocomposites: From a nonionic gel to pH sensitivity. 2011 , 32, 2062-20	69 ₇
1097	Thermo- and pH-sensitive hydrogels based on 2-(2-methoxyethoxy)ethyl methacrylate and methacrylic acid. 2011 , 60, 178-185	16

1096	Design of polyphosphazene hydrogels with improved structural properties by use of star-shaped multithiol crosslinkers. 2011 , 11, 689-99	15
1095	Enhanced Water Retention by Using Polymeric Microcapsules to Confer High Proton Conductivity on Membranes at Low Humidity. 2011 , 21, 971-978	88
1094	Microchemomechanical Systems. 2011 , 21, 2395-2410	53
1093	Synthesis and characterization of poly{N-[3-(dimethylamino) propyl] methacrylamide-co-itaconic acid} hydrogels for drug delivery. 2011 , 119, 3199-3206	25
1092	Release of fluorescent markers from phase-separated gelatin-maltodextrin hydrogels. 2011 , 121, 2662-2673	9
1091	Drug loading into and drug release from pH- and temperature-responsive cylindrical hydrogels. 2011 , 27, 1442-54	10
1090	Gel formulation containing mixed surfactant and lipids associating with carboplatin. 2011, 8, 2195-210	1
1089	Hyaluronic acid hydrogel particles with tunable charges as potential drug delivery devices. 2011 , 84, 1306-1313	53
1088	Facile formation of dynamic hydrogel microspheres for triggered growth factor delivery. 2011 , 7, 975-85	37
1087	The effects of fixed electrical charge on chondrocyte behavior. 2011 , 7, 2080-90	55
1086	Novel amphoteric pH-sensitive hydrogels derived from ethylenediaminetetraacetic dianhydride, butanediamine and amino-terminated poly(ethylene glycol): Design, synthesis and swelling behavior. 2011 , 47, 40-47	16
1085	Fabrication and characterization of superparamagnetic and thermoresponsive hydrogels based on oleic-acid-coated Fe3O4 nanoparticles, hexa(ethylene glycol) methyl ether methacrylate and 2-(acetoacetoxy)ethyl methacrylate. 2011 , 323, 557-563	54
1084	Inhomogeneous deformation of elastomer gels in equilibrium under saturated and unsaturated conditions. 2011 , 59, 561-582	50
1083	Recent advances in the design of drug-loaded polymeric implants for the treatment of solid tumors. 2011 , 8, 1323-40	15
1082	Fabrication and caffeine release from Fe3O4/P(MAA-co-NVP) magnetic microspheres with controllable core-shell architecture. 2011 , 22, 557-76	8
1081	Superabsorbents and their medical applications. 2011 , 505-546	4
1080	Polymers and Biopolymers in Pharmaceutical Technology. 2011 , 525-558	
1079	Development and Characterization of Sodium Alginate-Hydroxypropyl Methylcellulose-Polyester Multilayered Hydrogel Membranes for Drug Delivery through Skin. 2011 , 50, 490-497	12

Biodegradable In Situ Gel-Forming Controlled Drug Delivery System Based on Thermosensitive Poly(Eaprolactone)-Poly(ethylene glycol)-Poly(Eaprolactone) Hydrogel. 2012 , 2012, 976879	11
1077 Nanotools for the delivery of antimicrobial peptides. 2012 , 13, 1158-72	44
1076 A controlled biochemical release device with embedded nanofluidic channels. 2012 , 100, 153510	10
$_{1075}$ Materials of marine origin: a review on polymers and ceramics of biomedical interest. 2012 , 57, 276-306	5 146
Conformational Effects of Adsorbed Polymer on the Swelling Behavior of Engineered Clay Minerals. 2012 , 60, 363-373	7
1073 Sol-gel phosphate-based glass for drug delivery applications. 2012 , 26, 613-22	29
1072 A Thermoresponsive Hydrogel Based Controlled Drug Delivery Device. 2012 ,	
Characterization of Adsorbed Polymer Conformational Response Using Spectroscopic Ellipsometry. 2012 ,	1
1070 A Controlled-Release Drug Delivery System on a Chip Using Electrolysis. 2012 , 59, 1578-1587	19
1069 Hydrogels in mucosal delivery. 2012 , 3, 535-55	13
Hydrogels in mucosal delivery. 2012, 3, 535-55 Wound pH-responsive sustained release of therapeutics from a poly(NIPAAm-co-AAc) hydrogel. 2012, 23, 111-32	13 36
Wound pH-responsive sustained release of therapeutics from a poly(NIPAAm-co-AAc) hydrogel.	
Wound pH-responsive sustained release of therapeutics from a poly(NIPAAm-co-AAc) hydrogel. 2012, 23, 111-32 Engineered contractile skeletal muscle tissue on a microgrooved methacrylated gelatin substrate.	36
Wound pH-responsive sustained release of therapeutics from a poly(NIPAAm-co-AAc) hydrogel. 2012, 23, 111-32 Engineered contractile skeletal muscle tissue on a microgrooved methacrylated gelatin substrate. 2012, 18, 2453-65 FTIR and Raman Spectroscopic Investigations of a Norfloxacin/Carbopol934 Polymeric Suspension.	36 169
Wound pH-responsive sustained release of therapeutics from a poly(NIPAAm-co-AAc) hydrogel. 2012, 23, 111-32 Engineered contractile skeletal muscle tissue on a microgrooved methacrylated gelatin substrate. 2012, 18, 2453-65 FTIR and Raman Spectroscopic Investigations of a Norfloxacin/Carbopol934 Polymeric Suspension. 2012, 4, 138-45 Hydrogel particles and other novel protein-based methods for food ingredient and nutraceutical	36 169 67
Wound pH-responsive sustained release of therapeutics from a poly(NIPAAm-co-AAc) hydrogel. 2012, 23, 111-32 Engineered contractile skeletal muscle tissue on a microgrooved methacrylated gelatin substrate. 2012, 18, 2453-65 FTIR and Raman Spectroscopic Investigations of a Norfloxacin/Carbopol934 Polymeric Suspension. 2012, 4, 138-45 Hydrogel particles and other novel protein-based methods for food ingredient and nutraceutical delivery systems. 2012, 412-450	36 169 67
Wound pH-responsive sustained release of therapeutics from a poly(NIPAAm-co-AAc) hydrogel. 2012, 23, 111-32 Engineered contractile skeletal muscle tissue on a microgrooved methacrylated gelatin substrate. 2012, 18, 2453-65 FTIR and Raman Spectroscopic Investigations of a Norfloxacin/Carbopol934 Polymeric Suspension. 2012, 4, 138-45 Hydrogel particles and other novel protein-based methods for food ingredient and nutraceutical delivery systems. 2012, 412-450 Formation of graphene oxide gel via the Estacked supramolecular self-assembly. 2012, 2, 12204 Mesostructured chitosan-silica hybrid as a biodegradable carrier for a pH-responsive drug delivery	36 169 67 6

1060 Responsive hydrogels produced via organic sol-gel chemistry for cell culture a	pplications. 2012 , 8, 2919-31 6
Rheological, water uptake and controlled release properties of a novel self-ge functionalized chitosan. 2012 , 90, 894-900	lling aldehyde 27
Kinetics and mechanism of thermal degradation of pentose- and hexose-based polymers. 2012 , 90, 1386-93	d carbohydrate 33
1057 Smart polymers and interfaces for dynamic cell-biomaterials interactions. 2012	2 , 37, 836-846
1056 Functional block copolymer nanoparticles: toward the next generation of deliv	very vehicles. 2012 , 3, 1618-1628 ₅ 1
1055 CoreBhell Polymeric Nanomaterials and Their Biomedical Applications. 2012 ,	
1054 Nanocomposites for Drug Delivery. 2012 ,	
1053 Nanotechnology in therapeutics: a focus on nanoparticles as a drug delivery sy	ystem. 2012 , 7, 1253-71 387
Temperature-responsive electrospun nanofibers for 'on-off' switchable release 13, 064203	e of dextran. 2012 , 55
$_{ m 1051}$ Preliminary assessment of the safety evaluation of novel pH-sensitive hydroge	el. 2012 , 82, 332-9 15
Competitive swelling forces and interpolymer complexation in pH- and temper interpenetrating network hydrogels. 2012 , 8, 8137	rature-sensitive 21
1049 Enzyme-gelatin electrochemical biosensors: scaling down. 2012 , 2, 101-13	12
1048 Shear-thinning hydrogels for biomedical applications. 2012 , 8, 260-272	570
1047 Hydrogels for protein delivery. 2012 , 112, 2853-88	836
Amino/quaternary ammonium groups bifunctionalized large pore mesoporous pH-responsive large drug delivery. 2012 , 2, 4421	s silica for 29
1045 Tunable Separations, Reactions, and Nanoparticle Synthesis in Functionalized	Membranes. 2012 , 97-142 5
Characterization and drug release behavior of highly responsive chip-like elect reduced graphene oxidepoly(vinyl alcohol) membranes. 2012 , 22, 17311	trically modulated 79
1043 Drug Delivery Using Stimuli-Responsive Polymer Gel Spheres. 2012 , 51, 1741-1	1755 26

1042	On-chip sample preparation by controlled release of antibodies for simple CD4 counting. 2012 , 12, 167-73	26
1041	Pluronicfi F-127 and Pluronic Lecithin Organogel (PLO): main features and their applications in topical and transdermal administration of drugs. 2012 , 15, 592-605	61
1040	ECyclodextrin hydrogel incorporating hydrophobically modified poly(N-isopropylacrylamide) for a temperature-dependent release. 2012 , 23, 425-430	8
1039	Cell encapsulation and cryostorage in PVA-gelatin cryogels: incorporation of carboxylated Epoly-L-lysine as cryoprotectant. 2012 , 6, 280-90	23
1038	Polymer hydrogels of 2-hydroxyethyl acrylate and acrylic acid obtained by frontal polymerization. 2012 , 50, 1515-1520	28
1037	Synthesis and characterization of graphene-containing thermoresponsive nanocomposite hydrogels of poly(N-vinylcaprolactam) prepared by frontal polymerization. 2012 , 50, 4110-4118	55
1036	Nanodiamond-therapeutic complexes embedded within poly(ethylene glycol) diacrylate hydrogels mediating sequential drug elution. 2012 , 209, 1811-1818	15
1035	Controlled drug delivery from mesoporous silica using a pH-response release system. 2012 , 36, 1616	24
1034	Nanomaterials for ocular drug delivery. 2012 , 12, 608-20	121
1033	Production methodologies of polymeric and hydrogel particles for drug delivery applications. 2012 , 9, 231-48	87
1032	Stimuli-sensitive synthetic polypeptide-based materials for drug and gene delivery. 2012 , 1, 48-78	278
1031	Investigation of the properties of conductive hydrogel composite containing Zn particles. 2012 , 126, 436-441	7
1030	Pore Length Effect on Drug Uptake and Delivery by Mesoporous Silicas. 2012 , 77, 817-831	9
1029	Development of oral food-grade delivery systems: current knowledge and future challenges. 2012 , 3, 10-21	86
1028	Functional nanoporous membranes for drug delivery. 2012 , 22, 14814	129
1027	Effects of crosslinking ratio, model drugs, and electric field strength on electrically controlled release for alginate-based hydrogel. 2012 , 23, 999-1010	39
1026	Photopolymerised thermo-responsive poly(N,N-diethylacrylamide)-based copolymer hydrogels for potential drug delivery applications. 2012 , 19, 1	23
1025	Synthesis and characterization of thermo- and pH-responsive bacterial cellulose/acrylic acid hydrogels for drug delivery. 2012 , 88, 465-473	281

1024	A general method to determine ionization constants of responsive polymer thin films. 2012 , 365, 178-83	12
1023	Optoelectrowettability conversion on superhydrophobic CdS QDs sensitized TiO2 nanotubes. 2012 , 366, 1-7	14
1022	Can sonication enhance release from liquid-core capsules with a hydrogel membrane?. 2012 , 368, 648-54	9
1021	Study on formulation variables of methotrexate loaded mesoporous MCM-41 nanoparticles for dissolution enhancement. 2012 , 45, 8-18	54
1020	Electrochemical determination of hydrogen peroxide with cytochrome c peroxidase and horse heart cytochrome c entrapped in a gelatin hydrogel. 2012 , 83, 15-8	34
1019	PEG derived hydrogel: A novel synthesis route under mild condition. 2012 , 67, 215-218	7
1018	Dual stimuli responsive poly(N-isopropylacrylamide) coated chitosan scaffolds for controlled release prepared from a non residue technology. 2012 , 66, 398-404	28
1017	Bioactive hydrogels demonstrate mediated release of a chromophore by chymotrypsin. 2012 , 160, 41-7	15
1016	Influence of environmental solution pH and microstructural parameters on mechanical behavior of amphoteric pH-sensitive hydrogels. 2012 , 35, 36	16
1015	Respirable rifampicin-based microspheres containing isoniazid for tuberculosis treatment. 2012 , 100, 536-42	14
1014	Stimuli-responsive polymers and their applications in nanomedicine. 2012 , 7, 9	309
1013	Dual-responsive release behavior of pH-sensitive PVA/PAAc hydrogels containing temperature-sensitive PVA/PNIPAAm microcapsules. 2012 , 68, 1109-1119	16
1012	Thermo- and pH-sensitive behavior of hydrogels based on oligo (ethylene glycol) methacrylates and acrylic acid. 2012 , 47, 1280-1288	21
1011	Modeling of absorption kinetics of poly(acrylamide) hydrogels crosslinked by EGDMA and PEGDMAs. 2013 , 39, 907-919	10
1010	Reagents in microfluidics: an 'in' and 'out' challenge. 2013 , 42, 8494-516	64
1009	Evaluation of isophorone diisocyanate crosslinked gelatin as a carrier for controlled delivery of drugs. 2013 , 70, 733-753	13
1008	Biodegradable nanogel based on all-trans retinoic acid/pullulan conjugate for anti-cancer drug delivery. 2013 , 43, 63-69	22
1007	Macroscale delivery systems for molecular and cellular payloads. 2013 , 12, 1004-17	217

1006	Frequency-dependent magnetic susceptibility of magnetite and cobalt ferrite nanoparticles embedded in PAA hydrogel. 2013 , 14, 10162-77	47
1005	Composite hydrogels as a vehicle for releasing drugs with a wide range of hydrophobicities. 2013 , 9, 8815-22	26
1004	Stimuli-Responsive Smart Organic Hybrid Metal Nanoparticles. 2013 , 293-333	2
1003	Equilibrium swelling of a polyampholytic pH-sensitive hydrogel. 2013 , 36, 27	14
1002	Hydrogel-Based Controlled Release Formulations: Designing Considerations, Characterization Techniques and Applications. 2013 , 52, 1391-1422	41
1001	The influence of pH and ionic strength on the swelling of dense protein particles. 2013 , 9, 4598	27
1000	The role of crystallization and phase separation in the formation of physically cross-linked PVA hydrogels. 2013 , 9, 826-833	152
999	Characterization of Small Molecule Controlled Release From Silk Films. 2013 , 214, 280-294	12
998	Double hydrogen-bonding pH-sensitive hydrogels retaining high-strengths over a wide pH range. 2013 , 34, 63-8	66
997	Toward mucoadhesive hydrogel formulations for the management of xerostomia: the physicochemical, biological, and pharmacological considerations. 2013 , 101, 3327-38	6
996	PEG-Based Microgels to Modify Biomaterials Surfaces. 2013 , 329, 35-40	7
995	Sustained delivery of amphotericin B and vancomycin hydrochloride by an injectable thermogelling tri-block copolymer. 2013 , 67, 135-45	18
994	Barriers to drug delivery in interventional oncology. 2013 , 24, 1201-7	41
993	Thermosensitive Ecyclodextrin modified poly(Ecaprolactone)-poly(ethylene glycol)-poly(Ecaprolactone) micelles prolong the anti-inflammatory effect of indomethacin following local injection. 2013 , 9, 6953-63	20
992	The systems containing clays and clay minerals from modified drug release: a review. 2013, 103, 642-51	151
991	Coordination bonding based pH-responsive drug delivery systems. 2013 , 257, 1933-1944	104
990	Ionic-covalent entanglement hydrogels from gellan gum, carrageenan and an epoxy-amine. 2013, 9, 3009	70
989	Bioaccessibility of nutrients and micronutrients from dispersed food systems: impact of the multiscale bulk and interfacial structures. 2013 , 53, 76-108	46

988	New hydrogel obtained from a novel dendritic monomer as a promising candidate for biomedical applications. 2013 , 101, 3372-81	7
987	An implantable thermoresponsive drug delivery system based on Peltier device. 2013, 447, 109-14	10
986	Biopolymers in Controlled-Release Delivery Systems. 2013 , 329-363	10
985	Hydrogels: an interesting strategy for smart drug delivery. 2013 , 4, 157-60	15
984	Photoisomerizable and thermoresponsive N-isopropylacrylamide-surfmer copolymer hydrogels prepared upon electrostatic self-assembly of an azobenzene bolaamphiphile. 2013 , 34, 393-8	7
983	Shrinking Kinetics of Polymer Gels with Alternating Hydrophilic/Thermoresponsive Prepolymer Units. 2013 , 46, 4114-4119	14
982	Controlled morphology of thin film silicon integrated with environmentally responsive hydrogels. 2013 , 29, 6495-501	4
981	Switchable antimicrobial and antifouling hydrogels with enhanced mechanical properties. 2013 , 2, 1096-102	112
980	Electrospun composite nanofiber-based transmucosal patch for anti-diabetic drug delivery. 2013 , 1, 3410-341	1 8 70
979	Poly methacrylic acid modified CDHA nanocomposites as potential pH responsive drug delivery vehicles. 2013 , 108, 219-28	13
978	Multifunctional nanoparticles for drug delivery and molecular imaging. 2013, 15, 253-82	369
977	Preparation and swelling properties of <code>dlick[hydrogel</code> from polyaspartamide derivatives using tri-arm PEG and PEG-co-poly(amino urethane) azides as crosslinking agents. 2013 , 54, 1341-1349	19
976	Effect of charge density on water sorption and elasticity of stimuli-responsive poly(acrylamideltaconic acid) and poly(N,N-dimethylacrylamideltaconic acid) hydrogels: Comparison of experiment with theory. 2013 , 28, 3234-3244	7
975	Bioadhesives: A Review. 2013 , 7, 573-587	56
974	Preparation, Characterization, and Drug-Release Behaviors of a pH-Sensitive Composite Hydrogel Bead Based on Guar Gum, Attapulgite, and Sodium Alginate. 2013 , 62, 369-376	46
973	Effect of drying technique on some physical properties of cross-linked high amylose/pectin mixtures. 2013 , 39, 284-9	4
972	Microbicide dosage forms. 2014 , 383, 27-54	17
971	Monodisperse pH-sensitive protamine hollow microspheres as carriers for drug delivery. 2013 , 129, 568-576	3

970	Synthesis, characterization, and acute oral toxicity evaluation of pH-sensitive hydrogel based on MPEG, poly(Laprolactone), and itaconic acid. 2013 , 2013, 239838	15
969	A facile in situ morphological characterization of smart genipin-crosslinked chitosan p oly(vinyl pyrrolidone) hydrogels. 2013 , 28, 2401-2408	16
968	Biomedical Devices Based on Smart Polymers. 2013 , 105-122	
967	Nanoparticles laden in situ gelling system for ocular drug targeting. 2013 , 4, 9-17	25
966	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
965	Microelectromechanical systems (MEMS) for in vivo applications. 2013 , 331-358	4
964	Synthesis of Polyvinyl Alcohol/Maleic Acid Hydrogels by Electron Beam Irradiation for Dye Uptake. 2013 , 50, 6-17	9
963	Inwards Interweaving of Polymeric Layers within Hydrogels: Assembly of Spherical Multi-Shells with Discrete Porosity Differences. 2013 , 23, 5108-5115	14
962	Conjugated polymer-coated bacteria for multimodal intracellular and extracellular anticancer activity. 2013 , 25, 1203-8	61
961	Pharmaceutical development. 2013 , 227-238	
961 960	Pharmaceutical development. 2013, 227-238 . 2013,	112
		112
960	. 2013,	
960 959	. 2013, . 2014, A medusa-like Etyclodextrin with 1-methyl-2-(2'-carboxyethyl) maleic anhydrides, a potential	5
960 959 958	. 2013, . 2014, A medusa-like Etyclodextrin with 1-methyl-2-(2'-carboxyethyl) maleic anhydrides, a potential carrier for pH-sensitive drug delivery. 2014, 22, 658-68	7
960 959 958 957	. 2013, . 2014, A medusa-like Etyclodextrin with 1-methyl-2-(2'-carboxyethyl) maleic anhydrides, a potential carrier for pH-sensitive drug delivery. 2014, 22, 658-68 Novel formulations for antimicrobial peptides. 2014, 15, 18040-83	5797
960 959 958 957	. 2014, A medusa-like Ecyclodextrin with 1-methyl-2-(2'-carboxyethyl) maleic anhydrides, a potential carrier for pH-sensitive drug delivery. 2014, 22, 658-68 Novel formulations for antimicrobial peptides. 2014, 15, 18040-83 Smart materials based on DNA aptamers: taking aptasensing to the next level. 2014, 14, 3156-71	579748

952	pH-sensitive keratin-based polymer hydrogel and its controllable drug-release behavior. 2014 , 132, n/a-n/a	7
951	Oral insulin delivery Ithallenges and strategies. 2014 , 113-168	2
950	Remote-controlled peristaltic locomotion in free-floating pnipam hydrogels. 2014 , 131, n/a-n/a	7
949	Etyclodextrin/poly(vinyl alcohol) hydrogels containing phenylpropionic acid and naphthylamine: dual pH-sensitive release. 2014 , 63, 989-996	5
948	Responsive and "smart" antibacterial surfaces: common approaches and new developments (Review). 2014 , 9, 029005	47
947	Entrapment characteristics of hydrosoluble vitamins loaded into chitosan and N,N,N-trimethyl chitosan nanoparticles. 2014 , 22, 1261-1267	17
946	Synthesis, characterization, and in vitro biocompatibility study of novel disulfide cross-linked hydrogels based on poly(amic acid). 2014 , 131, n/a-n/a	
945	pH and Thermo Sensitive Superabsorbent Poly (N-Hydroxymethylacrylamide-co-Itaconic Acid) Hydrogels: Synthesis, Characterization and Kinetic Studies. 2014 , 51, 983-989	7
944	Blood pH optrode based on evanescent waves and refractive index change. 2014 ,	1
943	Folic acid conjugated cross-linked acrylic polymer (FA-CLAP) hydrogel for site specific delivery of hydrophobic drugs to cancer cells. 2014 , 12, 25	48
942	Stimuli-responsive bacterial cellulose-g-poly(acrylic acid-co-acrylamide) hydrogels for oral controlled release drug delivery. 2014 , 40, 1340-9	46
941	Radiation-induced synthesis of thermo-sensitive, gradient hydrogels based on 2-(2-methoxyethoxy)ethyl methacrylate. 2014 , 100, 23-31	10
940	Biomedical applications of shape-memory polymers: how practically useful are they?. 2014 , 57, 476-489	38
939	Sustained release drug delivery using supramolecular hydrogels of the triblock copolymer PCL P EG P CL and ∃-cyclodextrin. 2014 , 69, 166-171	16
938	Stimuli-responsive theragrippers for chemomechanical controlled release. 2014 , 53, 8045-8049	146
937	The development of low-molecular weight hydrogels for applications in cancer therapy. 2014 , 6, 3474-82	74
936	Investigation of pH-sensitive galactopyranoside glycol hydrogels as effective vehicles for oral drug delivery. 2014 , 21, 1	14
935	Heterogeneous Fenton catalytic degradation of phenol based on controlled release of magnetic nanoparticles. 2014 , 242, 1-9	72

934	Smart nanocontainers: progress on novel stimuli-responsive polymer vesicles. 2014 , 35, 767-79		101
933	pH and glutathion-responsive hydrogel for localized delivery of paclitaxel. 2014 , 116, 247-56		25
932	Bell-shaped superhydrophilic-superhydrophobic-superhydrophilic double transformation on a pH-responsive smart surface. 2014 , 26, 306-10		111
931	Water-soluble drug partitioning and adsorption in HEMA/MAA hydrogels. 2014 , 35, 620-9		36
930	Hydrogels in a historical perspective: from simple networks to smart materials. 2014 , 190, 254-73		535
929	Degradable coronas comprising polyelectrolyte complexes of PDMAEMA and gelatin for pH-triggered antibiotic release. 2014 , 55, 2678-2687		9
928	Preparation and characterization of pH-controlled-release intelligent corrosion inhibitor. 2014 , 116, 318-3	321	14
927	Coordinate bonding strategy for molecularly imprinted hydrogels: toward pH-responsive doxorubicin delivery. 2014 , 103, 643-51		25
926	In situ gelling systems: a strategy to improve the bioavailability of ophthalmic pharmaceutical formulations. <i>Drug Discovery Today</i> , 2014 , 19, 400-12	3.8	142
925	Stimuli-responsive chemomechanical actuation: a hybrid materials approach. 2014 , 47, 530-9		72
924	pH-Responsive supramolecular hydrogels for codelivery of hydrophobic and hydrophilic anticancer drugs. 2014 , 4, 58982-58989		21
923	Stimuli-Responsive Theragrippers for Chemomechanical Controlled Release. 2014 , 126, 8183-8187		36
922	Dynamic uptake and release from poly(methacryloyl hydrazide) microgel particles through reversible hydrazide-aldehyde chemistry. 2014 , 5, 6789-6796		7
921	pH-responsive drug release from porous zinc sulfide nanospheres based on coordination bonding. 2014 , 4, 33391-33398		6
920	Dilute self-healing hydrogels of silk-collagen-like block copolypeptides at neutral pH. Biomacromolecules, 2014 , 15, 699-706	 9	48
919	Bone substitutes based on biomineralization. 2014 , 3-29		7
918	Supramolecular polymer networks of building blocks prepared via RAFT polymerization. 2014 , 5, 2142		18
917	Fluidity and water in nanoscale domains define coacervate hydrogels. 2014 , 5, 58-67		40

916	Preparation and characterization of triple shape memory composite foams. 2014, 10, 8066-74	25
915	A peptide dendron-based shrinkable metallo-hydrogel for charged species separation and stepwise release of drugs. 2014 , 20, 15419-25	31
914	Spectroscopic investigation of the pH controlled inclusion of doxycycline and oxytetracycline antibiotics in cationic micelles and their magnesium driven release. 2014 , 118, 8601-13	41
913	Controlled release of lidocaine hydrochloride from polymerized drug-based deep-eutectic solvents. 2014 , 2, 7495-7501	52
912	Three component terpolymer and IPN hydrogels with response to stimuli. 2014 , 55, 5305-5313	10
911	Drug-releasing implants: current progress, challenges and perspectives. 2014 , 2, 6157-6182	88
910	Porous polymer-based monolithic layers enabling pH triggered switching between superhydrophobic and superhydrophilic properties. 2014 , 50, 13809-12	16
909	Characterization of biodegradable polyurethane nanoparticles and thermally induced self-assembly in water dispersion. 2014 , 6, 5685-94	72
908	Supramolecular gels based on a gemini imidazolium amphiphile as molecular material for drug delivery. 2014 , 2, 5419-5429	45
907	Synthesis of Gum tragacanth and acrylic acid based hydrogel: its evaluation for controlled release of antiulcerative drug pantoprazole sodium. 2014 , 2, 110-117	28
906	Encapsulation of Acetyl Ginsenoside Rb1 within Monodisperse Poly(dl-lactide-co-glycolide) Microspheres Using a Microfluidic Device. 2014 , 53, 11333-11344	11
905	Correlation study of structural parameters of bioadhesive polymers in designing a tunable drug delivery system. 2014 , 30, 8580-91	12
904	Synthesis of pH-Responsive Nanocapsules via Inverse Miniemulsion Periphery RAFT Polymerization and Post-Polymerization Reaction. 2014 , 3, 935-939	36
903	Novel pH switchable gelatin based hydrogel for the controlled delivery of the anti cancer drug 5-fluorouracil. 2014 , 4, 12109	56
902	Molecular dynamics simulation of wetting and interfacial behaviors of argon fluid confined in smooth and groove-patterned rough nano-channels. 2014 , 95, 121-128	6
901	Dextran-based hydrogel microspheres obtained in w/o emulsion: preparation, characterisation and in vivo studies. 2014 , 31, 440-7	4
900	pH sensitive halloysite-sodium hyaluronate/poly(hydroxyethyl methacrylate) nanocomposites for colon cancer drug delivery. 2014 , 97-98, 33-42	82
899	Applications of shape memory polymers (SMPs) in mechanobiology and bone repair. 2014 , 111-146	2

898	Electrically controlled release of benzoic acid from poly(3,4-ethylenedioxythiophene)/alginate matrix: effect of conductive poly(3,4-ethylenedioxythiophene) morphology. 2014 , 118, 9263-71		26
897	pH- and electro-response characteristics of bacterial cellulose nanofiber/sodium alginate hybrid hydrogels for dual controlled drug delivery. 2014 , 4, 47056-47065		118
896	pH responsive polymers with amino acids in the side chains and their potential applications. 2014 , 131, n/a-n/a		61
895	Smart instructive polymer substrates for tissue engineering. 2014 , 301-326		4
894	pH-responsive polymers: properties, synthesis and applications. 2014 , 45-92		36
893	Short peptide based self-assembled nanostructures: implications in drug delivery and tissue engineering. 2014 , 5, 4431-4449		128
892	Smart hydrogels as functional biomimetic systems. 2014 , 2, 603-618		159
891	Exploring pH-Sensitive Hydrogels Using an Ionic Soft Contact Lens: An Activity Using Common Household Materials. 2014 , 91, 1671-1674		11
890	Formulation and evaluation of pH sensitive hydrogel of camptothecin with enhanced solubility by using Eyclodextrin. 2014 , 44, 265-272		1
889	Tough stimuli-responsive supramolecular hydrogels with hydrogen-bonding network junctions. 2014 , 136, 6969-77		435
888	Photoreconfigurable polymers for biomedical applications: chemistry and macromolecular engineering. <i>Biomacromolecules</i> , 2014 , 15, 3474-94	6.9	63
887	In situ gelling pH- and temperature-sensitive biodegradable block copolymer hydrogels for drug delivery. 2014 , 193, 214-27		222
886	The dynamics of shrinking and expanding drug-loaded microspheres: A semi-empirical approach. 2014 , 58, 55-62		2
885	Augmenting protein release from layer-by-layer functionalized agarose hydrogels. 2014 , 103, 377-84		15
884	Bioresponsive nanohydrogels based on HEAA and NIPA for poorly soluble drugs delivery. 2014 , 470, 107-19		17
883	Cross-linkable, thermo-responsive Pluronicfi building blocks for biomedical applications: Synthesis and physico-chemical evaluation. 2014 , 53, 126-138		16
882	Agarose drug delivery systems upgraded by surfactants inclusion: critical role of the pore architecture. 2014 , 103, 359-68		31
881	Controlled release from a mechanically-stimulated thermosensitive self-heating composite hydrogel. 2014 , 35, 450-5		38

880	Hydrogels: Properties, Preparation, Characterization and Biomedical, Applications in Tissue Engineering, Drug, Delivery and Wound Care. 2014 , 295-357	14
879	Analytical solution of a model for shrinking drug-loaded microspheres. 2014 ,	
878	Bio-inspired responsive polymer pillar arrays. 2015 , 5, 97-114	28
877	Recent Advances in and Applications of Encapsulated Microbial and Non-Microbial Active Agents in Food and Beverage Manufacture. 2015 , 635-680	1
876	Tuning methods and mechanical modelling of hydrogels. 2015 , 4, 140-154	2
875	Drug Delivery Systems Controlled by Irradiation of Near Infrared Light. 2015 , 28, 705-710	6
874	Permeability of small molecules through vapor deposited polymer membranes. 2015 , 132, n/a-n/a	14
873	Biodegradable and stimuli sensitive amphiphilic graft copolymers and their solgel phase transition behavior. 2015 , 26, 399-407	7
872	In vitro evaluation of biopolymer networks based on crosslinked cellulose with various diamines. 2015 , 132, n/a-n/a	1
871	A Light-Controlled Release System Based on Molecular Recognition of Cyclodextrins. 2015 , 36, 2055-9	16
870	Pharmacokinetic Assessment of Novel Controlled Release Formulations of Ricobendazole Intended for Oral Administration in Dogs. 2015 , 05,	0
869	Hydrogel-Based Drug Delivery Systems for Poorly Water-Soluble Drugs. 2015 , 20, 20397-408	108
868	Synthesis and Properties of pH-, Thermo-, and Salt-Sensitive Modified Poly(aspartic acid)/Poly(vinyl alcohol) IPN Hydrogel and Its Drug Controlled Release. 2015 , 2015, 236745	17
867	Scope of Nanotechnology in Drug Delivery. 2015 , 08,	1
866	Design of bilayer tablets using modified Dioscorea starches as novel excipients for immediate and sustained release of aceclofenac sodium. 2014 , 5, 294	3
865	Design of a novel crosslinked HEC-PAA porous hydrogel composite for dissolution rate and solubility enhancement of efavirenz. 2015 , 490, 429-37	20
864	pH-sensitive interpenetrating network hydrogels based on pachyman and its carboxymethylated derivatives for oral drug delivery. 2015 , 22, 1	3
863	Physicochemical properties of pH-sensitive hydrogels based on hydroxyethyl cellulose-hyaluronic acid and for applications as transdermal delivery systems for skin lesions. 2015 , 92, 146-54	90

862	Novel use of an osmotic self-inflating tissue expander for hypospadias revision surgery. 2015 , 85, 924-6	3
861	Drug encapsulation and release behavior of telechelic nanoparticles. 2015 , 26, 415703	4
860	Development and characterization of a hydrogel containing silver sulfadiazine for antimicrobial topical applications. 2015 , 104, 2241-54	27
859	Functionalization of hybrid poly(n-isopropylacrylamide) hydrogels for Escherichia coli cell capture via adsorbed intermediate dye molecule. 2015 , 132, n/a-n/a	5
858	Mechanical properties and antibacterial activities of novel nanobiocomposite films of chitosan and starch. 2015 , 46, 112-124	102
857	Stimuli-sensitive Systems-an emerging delivery system for drugs. 2015 , 43, 299-310	21
856	Glow discharge electrolysis plasma initiated preparation of temperature/pH dual sensitivity reed hemicellulose-based hydrogels. 2015 , 122, 11-7	21
855	Drug Delivery Systems: Smart Polymeric Materials. 2015 , 341-370	1
854	Facile synthesis of monodisperse poly(MAA/EGDMA)/Fe3O4 hydrogel microspheres with hollow structures for drug delivery systems: the hollow structure formation mechanism and effects of various metal ions on structural changes. 2015 , 5, 10081-10088	19
853	Tunable chemical release from polyester thin film by photocatalytic zinc oxide and doped LiYF4 upconverting nanoparticles. <i>Biomacromolecules</i> , 2015 , 16, 364-73	17
852	Bone cement based on vancomycin loaded mesoporous silica nanoparticle and calcium sulfate composites. 2015 , 49, 210-216	18
851	A simple approach to hybrid inorganic-organic step-growth hydrogels with scalable control of physicochemical properties and biodegradability. 2015 , 6, 2183-2187	26
850	Nanogels for delivery, imaging and therapy. 2015 , 7, 509-33	80
849	Role of polymer-drug conjugates in organ-specific delivery systems. 2015 , 23, 387-416	13
848	Classification, processing and application of hydrogels: A review. 2015 , 57, 414-33	690
847	Nanotechnology-controlled drug delivery for treating bone diseases. 2015 , 141-161	1
846	Glycosaminoglycans in Tendon Physiology, Pathophysiology, and Therapy. 2015 , 26, 1237-51	32

(2015-2015)

844	One-pot microfluidic fabrication of graphene oxide-patched hollow hydrogel microcapsules with remarkable shell impermeability. 2015 , 51, 12756-9	16
843	Remote modulation of neural activities via near-infrared triggered release of biomolecules. 2015 , 65, 76-85	49
842	Improved antitumor effect of paclitaxel administered in vivo as pH and glutathione-sensitive nanohydrogels. 2015 , 492, 10-9	10
841	Responsive Hydrogel Nanoparticles for Pulmonary Delivery. 2015 , 29, 143-151	14
840	Past, Present, and Future of Lipid Resuscitation Therapy. 2015 , 39, 72S-83S	27
839	Artificial Peroxidase/Oxidase Multiple Enzyme System Based on Supramolecular Hydrogel and Its Application as a Biocatalyst for Cascade Reactions. 2015 , 7, 16694-705	46
838	Lysozyme adsorption in pH-responsive hydrogel thin-films: the non-trivial role of acid-base equilibrium. 2015 , 11, 6669-79	23
837	Development of chitosan-nanofiber-based hydrogels exhibiting high mechanical strength and pH-responsive controlled release. 2015 , 67, 50-56	24
836	Superabsorbent hydrogels based on polysaccharides for application in agriculture as soil conditioner and nutrient carrier: A review. 2015 , 72, 365-385	357
835	Polyacrylic acid polymers hydrogels intended to topical drug delivery: preparation and characterization. 2015 , 20, 490-6	68
834	Stimulus-responsive hydrogels: Theory, modern advances, and applications. 2015 , 93, 1-49	592
833	Electro-stimulated release from a reduced graphene oxide composite hydrogel. 2015 , 3, 2530-2537	41
832	A non-covalent strategy for montmorillonite/xylose self-healing hydrogels. 2015 , 5, 41006-41012	18
831	Dual stimulus responsive drug release under the interaction of pH value and pulsatile electric field for a bacterial cellulose/sodium alginate/multi-walled carbon nanotube hybrid hydrogel. 2015 , 5, 41820-41829	₃ 36
830	High strength nanocomposite hydrogel bilayer with bidirectional bending and shape switching behaviors for soft actuators. 2015 , 5, 13167-13170	36
829	Advances in carrier-bound and carrier-free immobilized nanobiocatalysts. 2015 , 135, 21-32	34
828	Compact Saloplastic Membranes of Natural Polysaccharides for Soft Tissue Engineering. 2015 , 27, 7490-7502	47
827	Biocompatible and multi-responsive poly(N-vinylcaprolactam)-based microgels: The role of acidic comonomers in the colloidal properties and phase transition as a function of temperature and ph. 2015 , 73, 191-201	13

826	Ultra-small mesoporous silica nanoparticles as efficient carriers for pH responsive releases of anti-cancer drugs. 2015 , 44, 20186-92		22
825	Advances in Mechanics of Soft Materials: A Review of Large Deformation Behavior of Hydrogels. 2015 , 07, 1530001		161
824	Effect of Polymer Hydration State on In-Gel Immunoassays. 2015 , 87, 11030-8		14
823	Biocompatible Collagen Paramagnetic Scaffold for Controlled Drug Release. <i>Biomacromolecules</i> , 2015 , 16, 2599-608	6.9	37
822	Facile transformation of superhydrophobicity to hydrophilicity by silica/poly(e-caprolactone) composite film. 2015 , 359, 209-214		6
821	Smart Polymers in Drug Delivery. 2015 , 169-199		6
820	Preparation and properties of hydrogels based on PEG and isosorbide building blocks with phosphate linkages. 2015 , 78, 212-218		8
819	Encapsulation of polyphenols into pHEMA e-spun fibers and determination of their antioxidant activities. 2015 , 494, 278-87		25
818	pH-responsive poly(N,N-dimethylaminoethyl methacrylate-co-2-acrylamido-2-methyl-propanosulfonic acid) cryogels: swelling, elasticity and diffusive properties. 2015 , 5, 77235-77247		12
817	Synthesis and characterization of acrylic acid-2-hydroxyethyl methacrylate IPN hydrogels. 2015 , 5, 75870)-7588	3 Q 1
816	Biodegradable pH-Sensitive Poly(ethylene glycol) Nanocarriers for Allergen Encapsulation and Controlled Release. <i>Biomacromolecules</i> , 2015 , 16, 3103-11	6.9	28
815	N-succinyl chitosan preparation, characterization, properties and biomedical applications: a state of the art review. 2015 , 31,		36
814	Polymer-based vehicles for therapeutic peptide delivery. 2015 , 6, 1279-96		4
813	Injectable composites of loose microfibers and gelatin with improved interfacial interaction for soft tissue engineering. 2015 , 74, 224-234		9
812	Substrate-Independent Robust and Heparin-Mimetic Hydrogel Thin Film Coating via Combined LbL Self-Assembly and Mussel-Inspired Post-Cross-linking. 2015 , 7, 26050-62		70
811	Development and characterization of gelatin-based hydrogels, emulsion hydrogels, and bigels: A comparative study. 2015 , 132, n/a-n/a		25
810	Biomedical applications of hydrogels: A review of patents and commercial products. 2015 , 65, 252-267		1422
809	Preparation of magnetic pH-sensitive microcapsules with an alginate base as colon specific drug delivery systems through an entirely green route. 2015 , 5, 4628-4638		31

(2016-2015)

808	Phase behavior of electrostatically complexed polyelectrolyte gels using an embedded fluctuation model. 2015 , 11, 1214-25	47
807	Synthesis, Characterization, and drug release study of acrylamide-co-itaconic acid based smart hydrogel. 2015 , 55, 113-122	27
806	pH-responsive drug-delivery systems. 2015 , 10, 284-305	100
805	Swelling enhanced remanent magnetization of hydrogels cross-linked with magnetic nanoparticles. 2015 , 31, 442-50	9
804	Advanced Polymers in Medicine. 2015,	15
803	Subunit Vaccine Delivery. 2015 ,	4
802	Advances and new technologies applied in controlled drug delivery system. 2015, 41, 2165-2200	25
801	pH-responsive hydrogels to protect IgY from gastric conditions: in vitro evaluation. 2015 , 52, 3117-22	8
800	pH-sensitive superabsorbent polymers: a potential candidate material for self-healing concrete. 2015 , 50, 970-979	84
799	The crosslinking of polysaccharides with polyamines and dextran-polyallylamine antibacterial hydrogels. 2015 , 72, 88-93	24
798	Preparation and drug release behavior of pH-responsive bovine serum albumin-loaded chitosan microspheres. 2015 , 21, 1389-1397	69
797	pH-responsive controlled release characteristics of solutes with different molecular weights diffusing across membranes of Ca-alginate/protamine/silica hybrid capsules. 2015 , 474, 233-243	22
796	Visible-light-induced synthesis of pH-responsive composite hydrogels for controlled delivery of the anticonvulsant drug pregabalin. 2015 , 11, 151-61	38
795	Assessment of the drug loading, in vitro and in vivo release behavior of novel pH-sensitive hydrogel. 2016 , 23, 174-84	14
794	Punica granatum L. Hydrogel for Wound Care Treatment: From Case Study to Phytomedicine Standardization. 2016 , 21,	17
793	Bioanalytical Method Development Using Liquid Chromatography with Amperometric Detection for the Pharmacokinetic Evaluation of Forsythiaside in Rats. 2016 , 21,	2
792	. 2016,	5
791	Polylactic Acid Based Nanocomposites: Promising Safe and Biodegradable Materials in Biomedical Field. 2016 , 2016, 1-11	63

790	A Smart pH-Responsive Three Components Luminescent Hydrogel. 2016 , 7,	7
789	Drug-releasing textiles. 2016 , 119-154	7
788	Microfabrication for Drug Delivery. 2016 , 9,	23
787	Recent Advances in Self-Oscillating Polymer Material Systems. 2016 , 16, 1852-67	37
786	Poly (vinyl alcohol)/chitosan cryogels as PH responsive ciprofloxacin carriers. 2016, 23, 1	9
785	Calcium carbonate hydrogel construct with cynnamaldehyde incorporated to control inflammation during surgical procedure. 2016 , 104, 768-774	11
784	Amino Acid Based Hydrogels with Dual Responsiveness for Oral Drug Delivery. 2016 , 16, 1258-64	8
783	Chiral, pH responsive hydrogels constructed by N-Acryloyl-alanine and PEGDA/\(\perpsilon\)-CD inclusion complex: preparation and chiral release ability. 2016 , 27, 169-177	9
782	Synthesis of dual responsive cyclotriphosphazene-based IPN hydrogels for controlled release of chemotherapeutic agent. 2016 , 27, 374-381	6
781	High porosity, responsive hydrogel copolymers from emulsion templating. 2016 , 65, 280-289	48
7 ⁸ 0	Molecular structure and properties of click hydrogels with controlled dangling end defect. 2016 , 54, 1227-1236	8
779	Dual-Shell Fluorescent Nanoparticles for Self-Monitoring of pH-Responsive Molecule-Releasing in a Visualized Way. 2016 , 8, 19084-91	12
778	Microvessel manifold for perfusion and media exchange in three-dimensional cell cultures. 2016 , 10, 054109	11
777	In vitro cytotoxicity assessment of intelligent acrylate based hydrogels with incorporated copper in wound management. 2016 , 175, 158-163	7
776	Salt-responsive polyzwitterionic materials for surface regeneration between switchable fouling and antifouling properties. 2016 , 40, 62-69	64
775	Characterization and behavior of composite hydrogel prepared from bamboo shoot cellulose and Etyclodextrin. 2016 , 89, 527-34	22
774	The Characteristics of the Smart Polymeras Temperature or pH-responsive Hydrogel. 2016 , 19, 406-409	14
773	Smart Polymeric Nanoparticles as Emerging Tools for ImagingThe Parallel Evolution of Materials. 2016 , 22, 3612-20	14

772	Molecular Dynamics of a Water-Absorbent Nanoscale Material Based on Chitosan. 2016, 120, 3754-64	8
771	Properties and in vitro drug release of hyaluronic acid-hydroxyethyl cellulose hydrogels for transdermal delivery of isoliquiritigenin. 2016 , 147, 473-481	85
770	Self-organization of hydrophobic-capped triblock copolymers with a polyelectrolyte midblock: a coarse-grained molecular dynamics simulation study. 2016 , 12, 4611-20	23
769	Preparation of biodegradable xanthan-glycerol hydrogel, foam, film, aerogel and xerogel at room temperature. 2016 , 148, 243-50	23
768	Ultrasound stimulated release of mimosa medicine from cellulose hydrogel matrix. 2016 , 32, 398-406	36
767	pH Dependent Controlled Release of CTAB Incorporated Dipyridamole Drug from Agar-Based Hydrogel. 2016 , 55, 403-413	7
766	Three-dimensional culture systems in cancer research: Focus on tumor spheroid model. 2016 , 163, 94-108	441
765	Injectable hydrogels by inclusion complexation between a three-armed star copolymer (mPEG-acetal-PCL-acetal-)3 and ⊞-cyclodextrin for pH-triggered drug delivery. 2016 , 6, 40858-40868	14
764	Antimicrobial activity of poly(vinyl alcohol)-poly(acrylic acid) electrospun nanofibers. 2016, 146, 144-51	37
763	Snapshot of phase transition in thermoresponsive hydrogel PNIPAM: Role in drug delivery and tissue engineering. 2016 , 24, 297-304	110
762	Actuating Fibers: Design and Applications. 2016 , 8, 24281-94	64
761	Controlled-Release Technology: Pharmaceutical. 2016 , 1-18	
760	Preparation and Timed Release Properties of Self-Rupturing Gels. 2016, 8, 29015-29024	7
759	Swelling behavior of cross-linked dextran hydrogels and preliminary Gliclazide release behavior. 2016 , 93, 978-987	10
758	Magnetotactic bacterial cages as safe and smart gene delivery vehicles. 2016 , 1, 36-45	13
757	High mechanical strength and stability of alginate hydrogel induced by neodymium ions coordination. 2016 , 133, 1-7	12
756	Macromolecule and Particle Dynamics in Confined Media. 2016 , 49, 5755-5772	83
755	Molecular imprinting of 5-fluorouracil in particles with surface RAFT grafted functional brushes. 2016 , 107, 35-45	22

754	Role of Mechanical Factors in Applications of Stimuli-Responsive Polymer Gels - Status and Prospects. 2016 , 101, 415-449	24
753	Engineering responsive supramolecular biomaterials: Toward smart therapeutics. 2016 , 1, 252-266	36
75 ²	Chitosan-functionalised poly(2-hydroxyethyl methacrylate) core-shell microgels as drug delivery carriers: salicylic acid loading and release. 2016 , 33, 563-568	3
751	Natural Polymers: Drug Delivery. 2016 , 5603-5618	1
75°	Review of Adaptive Programmable Materials and Their Bioapplications. 2016 , 8, 33351-33370	91
749	Diffusion of water-soluble sorptive drugs in HEMA/MAA hydrogels. 2016 , 239, 242-8	20
748	Bioactivities of Chitosan and Its Derivatives. 2016 , 119-188	2
747	Protein Engineering Strategies for Modular, Responsive, and Spatially Organized Biomaterials. 2016 , 287-314	1
746	Design and fabrication of hydrogel-based nanoparticulate systems for in vivo drug delivery. 2016 , 243, 269-282	63
745	Nanotechnology and Nanomaterials in Ophthalmic Drug Delivery. 2016 , 83-109	5
744	Micellized \oplus -Cyclodextrin-Based Supramolecular Hydrogel Exhibiting pH-Responsive Sustained Release and Corresponding Oscillatory Shear Behavior Analysis. 2016 , 2, 2185-2195	17
743	An In Situ Gelling Drug Delivery System for Improved Recovery after Spinal Cord Injury. 2016 , 5, 1513-21	22
742	A smart multifunctional drug delivery nanoplatform for targeting cancer cells. 2016 , 8, 12723-8	48
741	Stimulus responsive nanogel with innate near IR fluorescent capability for drug delivery and bioimaging. 2016 , 146, 84-96	10
740	Magnetic field-responsive release of transforming growth factor beta 1 from heparin-modified alginate ferrogels. 2016 , 151, 467-473	34
739	Hydrogel nanoparticles and nanocomposites for nasal drug/vaccine delivery. 2016 , 39, 1181-92	55
738	Preparation and characterization of pH responsive poly(methacrylic acid-acrylamide-N-hydroxyethyl acrylamide) hydrogels for drug delivery systems. 2016 , 133, n/a-n/a	16
737	A novel polyvinyl alcohol E ragacanth/nano silver hydrogel on polyester fabric through in situ synthesis method. 2016 , 45, 1635-1651	19

(2016-2016)

736	Evaluation of pH/temperature double responsivity of copolymerized methacrylate-based networks: Solvent diffusion analysis with adjustable swelling kinetics. 2016 , 75, 371-387	7
735	Folate-decorated carboxymethyl cellulose for controlled doxorubicin delivery. 2016 , 294, 199-206	16
734	Effect of multiwalled carbon nanotube-grafted polymer brushes on the mechanical and swelling properties of polyacrylamide composite hydrogels. 2016 , 85, 67-76	33
733	Rheological behavior and Ibuprofen delivery applications of pH responsive composite alginate hydrogels. 2016 , 139, 211-8	33
732	Emerging and Traditional Technologies for Safe, Healthy and Quality Food. 2016,	5
731	Preparation and characterization of PVA-PEEK/PVA-ETCP bilayered hydrogels for articular cartilage tissue repair. 2016 , 128, 58-64	29
730	Sterilization of tissue scaffolds. 2016 , 225-244	10
729	Diffusion of macromolecules in a polymer hydrogel: from microscopic to macroscopic scales. 2016 , 18, 12860-76	43
728	Reduction and pH dual-responsive nanoparticles based chitooligosaccharide-based graft copolymer for doxorubicin delivery. 2016 , 497, 8-15	14
727	Simultaneous production assessment of triacylglycerols for biodiesel and exopolysaccharides as valuable co-products in Navicula cincta. 2016 , 15, 120-128	20
726	Cellulose conjugated FITC-labelled mesoporous silica nanoparticles: intracellular accumulation and stimuli responsive doxorubicin release. 2016 , 8, 5089-97	47
7 2 5	Kinetic modeling of the copolymerization of acrylic acid and trimethylolpropane triacrylate over pre and post-gelation periods. 2016 , 74, 264-278	3
724	Ion-stimuli responsive dimethylaminoethyl methacrylate/hydroxyethyl methacrylate copolymeric hydrogels: mutual influence of reaction parameters on the swelling and mechanical strength. 2016 , 23, 1	9
723	Natural Hydrogels. 2016 , 1-16	1
722	Controlling Hydrogel Biodegradability. 2016 , 131-173	1
721	Pharmaceutical Applications of Natural Polymers. 2016 , 263-313	1
720	Nanoparticle-Hydrogel: A Hybrid Biomaterial System for Localized Drug Delivery. 2016 , 44, 2049-61	109
719	Encapsulation Technologies for Food Industry. 2016 , 329-382	8

718	Prolonged Release of Bioactive Model Proteins from Anionic Microgels Fabricated with a New Microemulsion Approach. 2016 , 33, 879-92	3
717	Near infrared light-responsive and injectable supramolecular hydrogels for on-demand drug delivery. 2016 , 52, 978-81	115
716	Novel two-step method to form silk fibroin fibrous hydrogel. 2016 , 59, 185-192	33
715	Encapsulation of Folic Acid in Zeolite Y for Controlled Release via Electric Field. 2016 , 13, 155-62	18
714	Colloidal chitin nanogels: A plethora of applications under one shell. 2016 , 136, 609-17	24
713	Preliminary study of light-cured hydrogel for endodontic drug delivery vehicle. 2016 , 7, 87-92	14
712	Preparation, Characterization and Assessment of the Novel GelatinEamarind Gum/Carboxymethyl Tamarind Gum-Based Phase-Separated Films for Skin Tissue Engineering Applications. 2017 , 56, 141-152	10
711	Preparation of a calcium carbonate-based bone substitute with cinnamaldehyde crosslinking agent with potential anti-inflammatory properties. 2017 , 105, 1055-1062	10
710	Macroporous Hydrogel Scaffolds for Three-Dimensional Cell Culture and Tissue Engineering. 2017 , 23, 451-461	61
709	Chitosan cross-linked poly(acrylic acid) hydrogels: Drug release control and mechanism. 2017 , 152, 252-259	95
708	pH and temperature responsiveness in AgNPs stabilized by a new poly(vinylidene fluoride) random graft copolymer. 2017 , 55, 960-970	3
707	Colloid electrochemistry of conducting polymer: towards potential-induced in-situ drug release. 2017 , 228, 407-412	12
706	Recent advances in light-responsive on-demand drug-delivery systems. 2017, 8, 89-107	114
705	Nanogel-Integrated pH-Responsive Composite Hydrogels for Controlled Drug Delivery. 2017 , 3, 370-380	61
704	Smart Carriers for Controlled Drug Delivery: Thermosensitive Polymers Embedded in Ordered Mesoporous Carbon. 2017 , 106, 1545-1552	7
703	Alginate-polyvinyl alcohol based interpenetrating polymer network for prolonged drug therapy, Optimization and in-vitro characterization. 2017 , 166, 183-194	73
702	Revisiting structure-property relationship of pH-responsive polymers for drug delivery applications. 2017 , 253, 46-63	168
701	Student Award for Outstanding Research Winner in the Undergraduate Category for the 2017 Society for Biomaterials Annual Meeting and Exposition, April 5-8, 2017, Minneapolis, Minnesota: Development and characterization of stimuli-responsive hydrogel microcarriers for oral protein	8

(2017-2017)

700	GelatinEtarrageenan polyelectrolyte complex hydrogel compositions for the design and development of extended-release pellets. 2017 , 66, 812-823	12
699	Microfluidic fabrication of responsive hierarchical microscale particles from macroscale materials and nanoscale particles. 2017 , 247, 78-91	17
698	Thermoresponsive polymers based on oligo(ethylene glycol) methyl ether methacrylate and modified substrates with thermosensitivity. 2017 , 25, 206-213	13
697	pH-Responsive Aminoproline-Containing Collagen Triple Helices. 2017 , 23, 7938-7944	17
696	Supramolecular Amino Acid Based Hydrogels: Probing the Contribution of Additive Molecules using NMR Spectroscopy. 2017 , 23, 8014-8024	28
695	From Master-Slave to Peer-to-Peer Coupling in Chemical Reaction Networks. 2017 , 121, 3192-3198	5
694	Chitosan-dextran sulfate hydrogels as a potential carrier for probiotics. 2017, 172, 175-183	41
693	Antimicrobial Hydrogels. 2017 , 179-204	1
692	Nanohydrogels: History, Development, and Applications in Drug Delivery. 2017, 297-330	9
691	Cellulose-Based Nanohydrogels for Tissue Engineering Applications. 2017 , 67-90	
690	Design of Isoniazid Smart Nanogel by Gamma Radiation-Induced Template Polymerization for Biomedical Application. 2017 , 34, 1872-1885	7
689	Smart Microparticles with a pH-responsive Macropore for Targeted Oral Drug Delivery. 2017 , 7, 3059	23
688	Nanomaterials engineering for drug delivery: a hybridization approach. 2017 , 5, 3995-4018	79
687	Effect of the synthesis method on the performance of Fe3O4[hositol hexaphosphate as a drug delivery vehicle for combination therapeutics with doxorubicin. 2017 , 41, 5305-5312	6
686	HydrogelCarbon Nanotubes Composites for Protection of Egg Yolk Antibodies. 2017, 501-531	
685	pH-responsive self-healing injectable hydrogel based on N-carboxyethyl chitosan for hepatocellular carcinoma therapy. 2017 , 58, 168-180	301
684	Chemically coded time-programmed self-assembly. 2017 , 2, 274-282	24
683	Exploring the role of molecular chirality in the photo-responsiveness of dipeptide-based gels. 2017 , 5, 3163-3171	15

682	Synthesis and characterization of lignosulfonate- graft -poly (acrylic acid)/hydroxyethyl cellulose semi-interpenetrating hydrogels. 2017 , 115, 28-35	26
681	Hydrogel Based Biosensors for In Vitro Diagnostics of Biochemicals, Proteins, and Genes. 2017 , 6, 1601475	83
68o	Characterization of methacrylated polysaccharides in combination with amine-based monomers for application in mortar. 2017 , 168, 173-181	10
679	Self-assembled photoadditives in polyester films allow stop and go chemical release. 2017 , 54, 186-200	10
678	Spermatozoa as Functional Components of Robotic Microswimmers. 2017 , 29, 1606301	84
677	Preparation and swelling properties of poly(acrylic acid-co-acrylamide) composite hydrogels. 2017 , 17, 95-106	59
676	Lithography-based methods to manufacture biomaterials at small scales. 2017 , 2, 1-14	54
675	Development of amine-based pH-responsive superabsorbent polymers for mortar applications. 2017 , 132, 556-564	17
674	Hydrazone linkages in pH responsive drug delivery systems. 2017 , 99, 45-65	141
673	Hydrogels that listen to cells: a review of cell-responsive strategies in biomaterial design for tissue regeneration. 2017 , 4, 1020-1040	106
672	Preparation and characterization of pH-responsive poly(N,N -dimethyl acrylamide- co -methacryloyl sulfadimethoxine) hydrogels for application as food freshness indicators. 2017 , 120, 57-65	12
671	Applications of graphene-based composite hydrogels: a review. 2017 , 7, 51008-51020	42
670	New perspectives in nanotherapeutics for chronic respiratory diseases. 2017 , 9, 793-803	36
669	Embedding Well-Defined Responsive Hydrogels with Nanocontainers: Tunable Materials from Telechelic Polymers and Cyclodextrins. 2017 , 2, 6658-6667	19
668	Bioinspired Antioxidant Defense System Constructed by Antioxidants-Eluting Electrospun F127-Based Fibers. 2017 , 9, 38313-38322	15
667	Quantitative modeling of the dynamics and intracellular trafficking of far-red light-activatable prodrugs: implications in stimuli-responsive drug delivery system. 2017 , 44, 521-536	8
666	Quantitative analysis on compressional behavior and swelling kinetics modeling of weakly ionic poly(N,N-dimethylacrylamide-co-acrylic/methacrylic acid or sodium acrylate) gels. 2017 , 295, 2217-2231	2
665	Chitosan-based self-healing hydrogel for bioapplications. 2017 , 28, 2053-2057	35

(2017-2017)

664	release. 2017 , 532, 269-280	56
663	Recent Progress of Graphene-Containing Polymer Hydrogels: Preparations, Properties, and Applications. 2017 , 302, 1700184	34
662	Effects of solution pH on ion distribution and drug release behaviors of a weak polyelectrolyte hydrogel. 2017 , 66, 1662-1668	3
661	Impermeable Robust Hydrogels via Hybrid Lamination. 2017 , 6, 1700520	47
660	Aggregation-induced emission active luminescent polymeric nanoparticles: Non-covalent fabrication methodologies and biomedical applications. 2017 , 9, 145-160	135
659	Smart Hydrogels: Application in Bioethanol Production. 2017 , 79-105	1
658	Sum frequency generation vibrational spectroscopy of methacrylate-based functional monomers at the hydrophilic solid-liquid interface. 2017 , 19, 21818-21828	15
657	Controllable synthesis and characterisation of palladium (II) anticancer complex-loaded colloidal gelatin nanoparticles as a novel sustained-release delivery system in cancer therapy. 2017 , 11, 591-596	3
656	Folding driven self-assembly of a stimuli-responsive peptide-hyaluronan hybrid hydrogel. 2017 , 7, 7013	28
655	Correlation between collective and molecular dynamics in pH-responsive cyclodextrin-based hydrogels. 2017 , 19, 22555-22563	10
654	Transient flows in active porous media. 2017 , 95, 062608	
653	Triggerable tough hydrogels for gastric resident dosage forms. 2017 , 8, 124	74
652	Hydrogels: Stimuli Responsive to on-Demand Drug Delivery Systems. 2017 , 117-130	4
651	Advances in Personalized Nanotherapeutics. 2017,	10
650	Mesoporous carbon nanomaterials in drug delivery and biomedical application. 2017, 24, 94-107	88
649	pH and glutathione dual-triggered supramolecular assemblies as synergistic and controlled drug release carriers. 2017 , 8, 7260-7270	12
648	Preparation and characterization of pH sensitive crosslinked Linseed polysaccharides-co-acrylic acid/methacrylic acid hydrogels for controlled delivery of ketoprofen. 2017 , 20, 485-495	20
647	A facile method to fabricate hybrid hydrogels with mechanical toughness using a novel multifunctional cross-linker. 2017 , 7, 35311-35319	21

646	Polyelectrolyte/silica-layered hydrogel microcapsules as vehicles with remarkable shell impermeability. 2017 , 46, 192-198	4
645	Mechanoresponsive materials for drug delivery: Harnessing forces for controlled release. 2017 , 108, 68-82	61
644	Bioresponsive materials. 2017 , 2,	828
643	A novel pH and temperature-sensitive maleate poly(vinyl alcohol)-graft-isopropylacrylamide/natural rubber blend: preparation and properties. 2017 , 74, 803-821	6
642	Dual responsive zein hydrogel membrane with selective protein adsorption and sustained release property. 2017 , 70, 347-356	28
641	Photo-crosslinked poly(ethylene glycol) diacrylate (PEGDA) hydrogels from low molecular weight prepolymer: Swelling and permeation studies. 2017 , 134,	58
640	Development of a P((MAA-co-NVP)-g-EG) Hydrogel Platform for Oral Protein Delivery: Effects of Hydrogel Composition on Environmental Response and Protein Partitioning. 2017 , 17, 1600266	14
639	Polymers against Microorganisms. 2017 ,	8
638	Reversibly Actuating Solid Janus Polymeric Fibers. 2017 , 9, 4873-4881	24
637	The structural, morphological and thermal properties of grafted pH-sensitive interpenetrating highly porous polymeric composites of sodium alginate/acrylic acid copolymers for controlled delivery of diclofenac potassium. 2017 , 20, 308-324	24
636	A Hydrogel-Based Localized Release of Colistin for Antimicrobial Treatment of Burn Wound Infection. 2017 , 17, 1600320	39
635	Base triggered release of insecticide from bentonite reinforced citric acid crosslinked carboxymethyl cellulose hydrogel composites. 2017 , 156, 303-311	47
634	Incorporation of soft shaped hydrogel sheets into microfluidic systems using a simple adhesion masking process. 2017 , 111, 263705	3
633	Stimuli-Controlled Fluid Control and Microvehicle Movement in Microfluidic Channels. 2017,	1
632	Food-derived biopolymers for nutrient delivery. 2017 , 251-291	7
631	Crack Mitigation in Concrete: Superabsorbent Polymers as Key to Success?. 2017 , 10,	74
630	Artificial Auricular Cartilage Using Silk Fibroin and Polyvinyl Alcohol Hydrogel. 2017, 18,	43
629	Xylan-Modified-Based Hydrogels with Temperature/pH Dual Sensitivity and Controllable Drug Delivery Behavior. 2017 , 10,	18

	Unique Roles of Gold Nanoparticles in Drug Delivery, Targeting and Imaging Applications. 2017 , 22,	265
627	Thermo-Responsive Poly(N-Isopropylacrylamide)-Cellulose Nanocrystals Hybrid Hydrogels for Wound Dressing. 2017 , 9,	86
626	pH Sensitive Hydrogels in Drug Delivery: Brief History, Properties, Swelling, and Release Mechanism, Material Selection and Applications. 2017 , 9,	246
625	Preparation and Characterization of Breathable Hemostatic Hydrogel Dressings and Determination of Their Effects on Full-Thickness Defects. 2017 , 9,	26
624	pH responsive cross-linked polymeric matrices based on natural polymers: effect of process variables on swelling characterization and drug delivery properties. 2017 , 7, 177-192	19
623	Nanogels for biomedical applications: Drug delivery, imaging, tissue engineering, and biosensors. 2017 , 87-124	6
622	Advances in the Fabrication of Antimicrobial Hydrogels for Biomedical Applications. 2017, 10,	49
621	Novel gels: implications for drug delivery. 2017 , 379-412	7
620	Hydrogels for Biomedical Applications: Their Characteristics and the Mechanisms behind Them. 2017 , 3,	390
619	Stimuli-Responsive Soft Untethered Grippers for Drug Delivery and Robotic Surgery. 2017, 3,	69
619	Stimuli-Responsive Soft Untethered Grippers for Drug Delivery and Robotic Surgery. 2017 , 3, Magnetic nanoparticles and cancer. 2017 , 105-137	69 4
618	Magnetic nanoparticles and cancer. 2017 , 105-137 On-chip detection of gel transition temperature using a novel micro-thermomechanical method.	4
618	Magnetic nanoparticles and cancer. 2017 , 105-137 On-chip detection of gel transition temperature using a novel micro-thermomechanical method. 2017 , 12, e0183492 pH responsive N-succinyl chitosan/Poly (acrylamide-co-acrylic acid) hydrogels and in vitro release of	3
618 617 616	Magnetic nanoparticles and cancer. 2017, 105-137 On-chip detection of gel transition temperature using a novel micro-thermomechanical method. 2017, 12, e0183492 pH responsive N-succinyl chitosan/Poly (acrylamide-co-acrylic acid) hydrogels and in vitro release of 5-fluorouracil. 2017, 12, e0179250	4 3 44
618617616615	Magnetic nanoparticles and cancer. 2017, 105-137 On-chip detection of gel transition temperature using a novel micro-thermomechanical method. 2017, 12, e0183492 pH responsive N-succinyl chitosan/Poly (acrylamide-co-acrylic acid) hydrogels and in vitro release of 5-fluorouracil. 2017, 12, e0179250 Targeted Drug Delivery Based on Gold Nanoparticle Derivatives. 2017, 23, 2918-2929 pH-responsive physically and chemically cross-linked glutamic-acid-based hydrogels and nanogels.	4 3 44 42
618617616615614	Magnetic nanoparticles and cancer. 2017, 105-137 On-chip detection of gel transition temperature using a novel micro-thermomechanical method. 2017, 12, e0183492 pH responsive N-succinyl chitosan/Poly (acrylamide-co-acrylic acid) hydrogels and in vitro release of 5-fluorouracil. 2017, 12, e0179250 Targeted Drug Delivery Based on Gold Nanoparticle Derivatives. 2017, 23, 2918-2929 pH-responsive physically and chemically cross-linked glutamic-acid-based hydrogels and nanogels. 2018, 101, 341-349 Acid-sensitive polymeric vector targeting to hepatocarcinoma cells via glycyrrhetinic acid	4 3 44 42 21

610	Biocompatible hydrogels for the controlled delivery of anti-hypertensive agent: development, characterization and in vitro evaluation. 2018 , 21, 18-32	19
609	Tuning the Mechanical Properties of BIEE-Crosslinked Semi-Interpenetrating, Double-Hydrophilic Hydrogels. 2018 , 303, 1700643	1
608	Pharmacokinetic evaluation of quetiapine fumarate controlled release hybrid hydrogel: a healthier treatment of schizophrenia. 2018 , 25, 916-927	11
607	Porosity in Biomaterials: A Key Factor in the Development of Applied Materials in Biomedicine. 2018 , 1-20	1
606	Advances in transformable drug delivery systems. 2018 , 178, 546-558	48
605	Self-Healing Phase Change Salogels with Tunable Gelation Temperature. 2018 , 10, 14786-14795	17
604	Hollow polymer nanocapsules: synthesis, properties, and applications. 2018 , 9, 2059-2081	45
603	Evaluation of wound healing effect of alginate films containin g Aloe vera (Aloe barbadensis Miller) gel. 2018 , 32, 1212-1221	21
602	Advances in Carbon Nanotubes-Hydrogel Hybrids in Nanomedicine for Therapeutics. 2018, 7, e1701213	86
601	Biomedical Applications of Recombinant Silk-Based Materials. 2018 , 30, e1704636	140
600	Biomedical Applications of Recombinant Silk-Based Materials. 2018, 30, e1704636 Radiation preparation of L-arginine/acrylic acid hydrogel matrix patch for transdermal delivery of propranolol HCl in hypertensive rats. 2018, 8, 525-535	140
	Radiation preparation of L-arginine/acrylic acid hydrogel matrix patch for transdermal delivery of	
600	Radiation preparation of L-arginine/acrylic acid hydrogel matrix patch for transdermal delivery of propranolol HCl in hypertensive rats. 2018 , 8, 525-535	2
600 599	Radiation preparation of L-arginine/acrylic acid hydrogel matrix patch for transdermal delivery of propranolol HCl in hypertensive rats. 2018 , 8, 525-535 Release of small bioactive molecules from physical gels. 2018 , 47, 1484-1515	110
600 599 598	Radiation preparation of L-arginine/acrylic acid hydrogel matrix patch for transdermal delivery of propranolol HCl in hypertensive rats. 2018, 8, 525-535 Release of small bioactive molecules from physical gels. 2018, 47, 1484-1515 Drug Delivery Vehicles from Stimuli-Responsive Block Copolymers. 2018, 239-261 Modification of montmorillonite nanolayers as a pH-responsive carrier of biomolecules: Delivery of	110
600599598597	Radiation preparation of L-arginine/acrylic acid hydrogel matrix patch for transdermal delivery of propranolol HCl in hypertensive rats. 2018, 8, 525-535 Release of small bioactive molecules from physical gels. 2018, 47, 1484-1515 Drug Delivery Vehicles from Stimuli-Responsive Block Copolymers. 2018, 239-261 Modification of montmorillonite nanolayers as a pH-responsive carrier of biomolecules: Delivery of vitamin B12. 2018, 84, 19-27 A Tough Composite Hydrogel can Controllably Deliver Hydrophobic Drugs under Ultrasound. 2018,	2 110 1
600599598597596	Radiation preparation of L-arginine/acrylic acid hydrogel matrix patch for transdermal delivery of propranolol HCl in hypertensive rats. 2018, 8, 525-535 Release of small bioactive molecules from physical gels. 2018, 47, 1484-1515 Drug Delivery Vehicles from Stimuli-Responsive Block Copolymers. 2018, 239-261 Modification of montmorillonite nanolayers as a pH-responsive carrier of biomolecules: Delivery of vitamin B12. 2018, 84, 19-27 A Tough Composite Hydrogel can Controllably Deliver Hydrophobic Drugs under Ultrasound. 2018, 303, 1700483 Development of pH-responsive chitosan-based hydrogel modified with bone ash for controlled	2 110 1 9

(2018-2018)

592	Injectable and body temperature sensitive hydrogels based on chitosan and hyaluronic acid for pH sensitive drug release. 2018 , 186, 82-90	99
591	Cubic polyhedral oligomeric silsesquioxane nano-cross-linked hybrid hydrogels: Synthesis, characterization, swelling and dye adsorption properties. 2018 , 128, 47-57	33
590	In vitro and In vivo characterization of quercetin loaded multiphase hydrogel for wound healing application. 2018 , 115, 1211-1217	32
589	Nanocomposites based on pH-sensitive hydrogels and chitosan decorated carbon nanotubes with antibacterial properties. 2018 , 90, 461-467	26
588	Polyhistidine-Based Metal Coordination Hydrogels with Physiologically Relevant pH Responsiveness and Enhanced Stability through a Novel Synthesis. 2018 , 39, e1800109	12
587	Controlled release of phosphorous fertilizer bound to carboxymethyl starch-g-polyacrylamide and maintaining a hydration level for the plant. 2018 , 116, 224-231	29
586	Polymer Nanosheet Containing Star-Like Copolymers: A Novel Scalable Controlled Release System. 2018 , 14, e1800115	4
585	Influence of additives on thermoresponsive polymers in aqueous media: a case study of poly(N-isopropylacrylamide). 2018 , 20, 9717-9744	29
584	Bioactive films of zein/magnetite magnetically stimuli-responsive for controlled drug release. 2018 , 458, 355-364	7
583	Semi-IPN superabsorbent nanocomposite based on sodium alginate and montmorillonite: Reaction parameters and swelling characteristics. 2018 , 190, 295-306	49
582	Micelle directed chemical polymerization of polypyrrole particles for the electrically triggered release of dexamethasone base and dexamethasone phosphate. 2018 , 543, 38-45	10
581	Injectable antibacterial conductive hydrogels with dual response to an electric field and pH for localized "smart" drug release. 2018 , 72, 55-69	214
580	Bacterial cellulose/hyaluronic acid composite hydrogels with improved viscoelastic properties and good thermodynamic stability. 2018 , 47, 165-175	13
579	Fabrication and in vitro evaluation of novel pH-sensitive poly (2-methoxyethyl methacrylate-co-itaconic acid) microgels. 2018 , 37, 1268-1277	4
578	Cross-Linked Sodium Alginate-g-poly(Acrylic Acid) Structure: A Potential Hydrogel Network for Controlled Delivery of Loxoprofen Sodium. 2018 , 37, 985-995	37
577	A review of recent developments on micro/nanostructured pharmaceutical systems for intravesical therapy of the bladder cancer. 2018 , 23, 1-12	15
576	BmartIPolymers: Physicochemical Characteristics and Applications in Bio-Separation Strategies. 2018 , 47, 199-213	9
575	Water based PHEMA hydrogels for controlled drug delivery. 2018 , 43, 228-239	2

574	Controlled release of an optically active compound by hydrogels of acrylic acid and its online detection. 2018 , 96, 1221-1227	2
573	Biomedical applications of acrylic-based nanohydrogels. 2018 , 53, 2303-2325	12
572	Pressure responsive nanogel base on Alginate-Cyclodextrin with enhanced apoptosis mechanism for colon cancer delivery. 2018 , 106, 349-359	34
571	High Strength Astringent Hydrogels Using Protein as the Building Block for Physically Cross-linked Multi-Network. 2018 , 10, 7593-7601	72
570	Injectable hydrogels for delivering biotherapeutic molecules. 2018 , 110, 17-29	103
569	Frontal polymerization and characterization of interpenetrating polymer networks composed of poly(N-isopropylacrylamide) and polyvinylpyrrolidone. 2018 , 296, 165-172	4
568	Development of visible-light responsive and mechanically enhanced "smart" UCST interpenetrating network hydrogels. 2017 , 14, 151-160	21
567	Application of guar gum in brine clarification and oily water treatment. 2018 , 108, 119-126	24
566	Building a polysaccharide hydrogel capsule delivery system for control release of ibuprofen. 2018 , 29, 309-324	11
565	Polymeric Biomaterials Based on Polylactide, Chitosan and Hydrogels in Medicine. 2018 , 119-147	
564	Recent Progress in Smart Polymers: Behavior, Mechanistic Understanding and Application. 2018 , 57, 945-957	11
563	Peptide dendrimer-crosslinked inorganic-organic hybrid supramolecular hydrogel for efficient anti-biofouling. 2018 , 29, 501-504	10
562	A novel ⊞ligand-modified HPMA copolymers for anticancer drug delivery. 2018 , 26, 231-241	2
561	Applications of Synthetically Produced Materials in Clinical Medicine. 2018,	1
560	Design, synthesis, and characterization of an Fe(II)-polymer of a redox non-innocent, heteroatomic, polydentate Schiff's base ligand: negative differential resistance and memory behaviour. 2018 , 42, 19090-1970	108
559	Application of New Sodium Vinyl Sulfonate?co-2-Acrylamido-2-me[thylpropane Sulfonic Acid Sodium Salt-Magnetite Cryogel Nanocomposites for Fast Methylene Blue Removal from Industrial Waste Water. 2018 , 8,	5
558	. 2018,	2
557	Conformation-Dependent Affinity of Thermoresponsive Biodegradable Hydrogels for Multifunctional Ligands: A Differential Scanning Calorimetry Approach. 2018 , 34, 14378-14387	3

(2018-2018)

556	Guar-Based Injectable Thermoresponsive Hydrogel as a Scaffold for Bone Cell Growth and Controlled Drug Delivery. 2018 , 3, 15158-15167	20
555	Controlled and sustained drug release performance of calcium sulfate cement porous TiO microsphere composites. 2018 , 13, 7491-7501	4
554	Preparation, optimization and swelling study of carboxymethyl sago starch (CMSS)-acid hydrogel. 2018 , 12, 133	7
553	Novel Bacterial Cellulose-Poly (Acrylic Acid) Hybrid Hydrogels with Controllable Antimicrobial Ability as Dressings for Chronic Wounds. 2018 , 10,	25
552	Advanced Hydrogel Structures. 2018 , 1-27	
551	A pH-Responsive Amphiphilic Hydrogel Based on Pseudopeptides and Poly(ethylene glycol) for Oral Delivery of Hydrophobic Drugs. 2018 , 4, 4236-4243	12
550	Smart pH responsive drug delivery system based on poly(HEMA-co-DMAEMA) nanohydrogel. 2018 , 552, 301-311	47
549	Environmentally friendly polymer latex. 2018 , 30, 927-936	1
548	Fabrication and characterization of electrospun nanofibers from Moringa stenopetala seed protein. 2018 , 5, 125015	13
547	Shape Memory Hydrogels Based on Noncovalent Interactions. 2018,	Ο
546	Viscoelastic characterization of pH-sensitive 2-hydroxyethyl methacrylate (2-dimethylamino) ethyl methacrylate HEMA-DMAEMA hydrogels. 2018 , 72, 372-376	8
545	Self-Healing Green Polymers and Composites. 2018 , 135-185	3
544	New Polyampholyte Polymers Based on Polypropylene Glycol Fumarate with Acrylic Acid and Dimethylaminoethyl Methacrylate. 2018 , 91, 1145-1152	3
543	Site-specific tunable drug release from biocompatible tragacanth-cl-polyacrylamide polymer networks. 2018 , 22, 291-311	1
542	Functional biomimetic nanoparticles for drug delivery and theranostic applications in cancer treatment. 2018 , 19, 771-790	40
541	Measurement of the stiffening parameter for stimuli-responsive hydrogels. 2018 , 229, 3715-3725	1
540	Engineering cancer vaccines using stimuli-responsive biomaterials. 2018 , 11, 5355-5371	21
539	Hydrogels in Regenerative Medicine. 2018,	3

538	Hybrid Conducting Composite Films Based on Polypyrrole and Poly(2-(diethylamino)ethyl methacrylate) Hydrogel Nanoparticles for Electrochemically Controlled Drug Delivery. 2018 , 5, 1800968	1
537	Lidocaine/Etyclodextrin inclusion complex as drug delivery system. 2018 , 108, 304-310	32
536	Intermolecular Interactions in Selected Polymer-Water Systems as Seen by Raman Spectroscopy. 2018 ,	
535	Self-Reporting Colorimetric Analysis of Drug Release by Molecular Imprinted Structural Color Contact Lens. 2018 , 10, 34611-34617	37
534	Synthesis and Functionalization of Nanomaterials. 2018, 15-55	6
533	In situ gelling and mucoadhesive polymers: why do they need each other?. 2018 , 15, 1007-1019	36
532	Structural and molecular response in cyclodextrin-based pH-sensitive hydrogels by the joint use of Brillouin, UV Raman and Small Angle Neutron Scattering techniques. 2018 , 271, 738-746	3
531	Controllable drug release from nano-layered hollow carrier by non-human enzyme. 2018 , 10, 18228-18237	13
530	Alginate hydrogel beads as a carrier of low density lipoprotein/pectin nanogels for potential oral delivery applications. 2018 , 120, 859-864	31
529	Intelligent Hydrogels as Drug Delivery Systems. 2018 , 1-28	1
528	Deproteinized Natural Rubber as an Electrically Controllable, Transdermal Drug-Delivery Patch. 2018 , 26, 3745-3753	4
527	Elastomeric and pH-responsive hydrogels based on direct crosslinking of the poly(glycerol sebacate) pre-polymer and gelatin. 2018 , 9, 3727-3740	19
526	Smart Anisotropic Wetting Surfaces with Reversed pH-Responsive Wetting Directions. 2018 , 28, 1802001	25
525	3D printing of methylcellulose-based hydrogels. 2018 , 10, e00024	30
524	Novel nanohydrogel based on itaconic acid grafted tragacanth gum for controlled release of ampicillin. 2018 , 196, 262-271	36
523	A thermo-/pH-responsive hydrogel (PNIPAM-PDMA-PAA) with diverse nanostructures and gel behaviors as a general drug carrier for drug release. 2018 , 9, 4063-4072	51
522	Hydrogels for the Application of Articular Cartilage Tissue Engineering: A Review of Hydrogels. 2018 , 2018, 1-13	25
521	Surface-Selective Control of Cell Orientation on Cyanobacterial Liquid Crystalline Gels. 2018 , 3, 6554-6559	3

(2018-2018)

520	Schiff base-containing dextran nanogel as pH-sensitive drug delivery system of doxorubicin: Synthesis and characterization. 2018 , 33, 170-181	28
519	Responsive cyclodextrins as polymeric carriers for drug delivery applications. 2018 , 555-580	6
518	Smart polymeric gels. 2018 , 179-230	2
517	Stimuli-responsive polymeric hydrogels and nanogels for drug delivery applications. 2018, 343-374	4
516	Particle-loaded gels. 2018 , 143-178	
515	Polymeric gels for the controlled drug delivery applications. 2018 , 331-356	3
514	Hydrogels: Biomedical uses. 2018 , 509-554	1
513	Preparation and characterization of pH-sensitive semi-interpenetrating network hybrid hydrogels with sodium humate and kaolin. 2018 , 162, 311-316	7
512	Polymer Gels. 2018 ,	2
511	Pharmapolymers in the 21st century: Synthetic polymers in drug delivery applications. 2018 , 87, 107-164	107
510	Cellulose-Based Hydrogels in Topical Drug Delivery: A Challenge in Medical Devices. 2018 , 1-29	1
509	Polysaccharide Containing Gels for Pharmaceutical Applications. 2018 , 231-278	1
508	The History of Drug Delivery Systems. 2018 , 1-8	
507	A Review on Recent Advances in Stabilizing Peptides/Proteins upon Fabrication in Hydrogels from Biodegradable Polymers. 2018 , 10,	62
506	Thermoresponsive Hydrogels and Their Biomedical Applications: Special Insight into Their Applications in Textile Based Transdermal Therapy. 2018 , 10,	66
505	Study on process parameters and optimization of microencapsulation based on phase separation. 2018 , 122, 273-280	2
505 504		8

502	Characterization study and optimization of swelling behavior for p(HEMA-co-Eudragit L-100) hydrogels by using Taguchi Method. 2018 , 29, 191-203	2
501	Hydrogel Actuators and Sensors for Biomedical Soft Robots: Brief Overview with Impending Challenges. 2018 , 3,	116
500	Near-Infrared Photothermal Release of siRNA from the Surface of Colloidal Gold-Silver-Gold Core-Shell-Shell Nanoparticles Studied with Second-Harmonic Generation. 2018 , 122, 19699-19704	21
499	Exploration of the unusual two-step volume phase transition of the poly(N-vinylcaprolactam-co-hydroxyethyl methacrylate) hydrogel. 2018 , 20, 23013-23024	8
498	Tailoring Formulations for Intranasal Nose-to-Brain Delivery: A Review on Architecture, Physico-Chemical Characteristics and Mucociliary Clearance of the Nasal Olfactory Mucosa. 2018 , 10,	140
497	Functionalized Magnetic Nanostructures for Anticancer Therapy. 2018 , 19, 239-247	5
496	Therapeutic protein and drug imprinted nanostructures as controlled delivery tools. 2018, 439-473	5
495	Oral controlled and sustained drug delivery systems. 2018 , 567-626	20
494	Monolayer grafting of aminosilane on magnetic nanoparticles: An efficient approach for targeted drug delivery system. 2018 , 529, 415-425	36
493	Chitosan oligosaccharide coated mesoporous silica nanoparticles for pH-stimuli responsive drug delivery applications. 2019 , 26, 217-226	16
492	pH-triggered Release of Boron and Thiamethoxam from Boric Acid Crosslinked Carboxymethyl Cellulose Hydrogel Based Formulations. 2019 , 58, 83-96	11
491	pH-responsive smart gels of block copolymer [pluronic F127-co-poly(acrylic acid)] for controlled delivery of Ivabradine hydrochloride: its toxicological evaluation. 2019 , 26, 1	16
490	Dual-responsive (pH/temperature) Pluronic F-127 hydrogel drug delivery system for textile-based transdermal therapy. 2019 , 9, 11658	63
489	ENZYMATICALLY SYNTHESIZED pH-RESPONSIVE IPN FOR IN-SITU RELEASE OF PANTOPRAZOLE SODIUM. 2019 , 98-103	1
488	Thermo-sensitive hydrogels for delivering biotherapeutic molecules: A review. 2019 , 27, 990-999	68
487	Chemical Modification of Alginate for Controlled Oral Drug Delivery. 2019 , 67, 10481-10488	33
486	Stimuli-Responsive Hydrogels: An Interdisciplinary Overview. 2019 ,	3
485	Novel PNIPAm-based electrospun nanoBres used directly as a drug carrier for "on-off" switchable drug release. 2019 , 182, 110347	16

484 Design of hydrogel-based nanoparticles for intervention execution. **2019**, 73-84

483	Review of Stimuli-Responsive Polymers in Drug Delivery and Textile Application. 2019 , 24,	72
482	Role of acid treatment combined with the use of urea in forming cellulose hydrogel. 2019 , 223, 115059	5
481	Dynamic DNA nanostructures in biomedicine: Beauty, utility and limits. 2019 , 315, 166-185	18
480	Specialized tablets: ancient history to modern developments. 2019 , 615-664	2
479	. 2019,	1
478	Bioactuators based on stimulus-responsive hydrogels and their emerging biomedical applications. 2019 , 11,	100
477	Electrodeposited surfaces with reversibly switching interfacial properties. 2019 , 5, eaax0380	29
476	Applications of Biopolymeric Gels in Medical Biotechnology. 2019 , 77-94	
475	Soft Robotics Programmed with Double Crosslinking DNA Hydrogels. 2019 , 29, 1905911	37
474	Reversible inhibition of efflux transporters by hydrogel microdevices. 2019 , 145, 76-84	12
473	Static DNA Nanostructures For Cancer Theranostics: Recent Progress In Design And Applications. 2019 , 12, 25-46	20
472	Acrylamide based hydrogels in swelling and uptake of methylene blue from aqueous solutions. 2019 , 18, 281-290	1
471	Fluorescence microscopy of biophysical protein dynamics in nanoporous hydrogels. 2019 , 126, 081101	8
470	In Situ Forming Depot as Sustained-Release Drug Delivery Systems. 2019 , 36, 93-136	9
469	Bioresponse Inspired Nanomaterials for Targeted Drug and Gene Delivery. 2019 , 7, 220-233	32
468	Toll-Like Receptors and Relevant Emerging Therapeutics with Reference to Delivery Methods. 2019 , 11,	12
467	Synthesis and Characterisation of Novel Temperature and pH Sensitive Physically Cross-Linked Poly (N-vinylcaprolactam-co-itaconic Acid) Hydrogels for Drug Delivery. 2019 , 5,	9

466	Biodegradable pH-sensitive prospidine-loaded dextran phosphate based hydrogels for local tumor therapy. 2019 , 226, 115308	13
465	Proceedings of the International Conference on Nanomedicine (ICON-2019). 2019 ,	
464	Preparation of injectable forms of immobilized protein drugs using UV-curable gelatin derivatives. 2019 , 80, 877-885	3
463	Encapsulation of florfenicol by in situ crystallization into novel alginate-Eudragit RSfi blended matrix for pH modulated release. 2019 , 54, 101241	4
462	Preparation of near-infrared laser responsive hydrogels with enhanced laser marking performance. 2019 , 15, 2950-2959	18
461	A pH-responsive self-healing hydrogel based on multivalent coordination of Ni with polyhistidine-terminated PEG and IDA-modified oligochitosan. 2019 , 7, 30-42	22
460	Influence of pH on Dynamic Magnetic Susceptibility of Iron-Oxide Nanoparticles in a Chitosan Hydrogel Matrix. 2019 , 55, 1-4	1
459	Stimuli-responsive carbon nanotubes for targeted drug delivery. 2019 , 321-344	12
458	Logical design and application of prodrug platforms. 2019 , 10, 306-324	48
457	Recent progress in multienzymes co-immobilization and multienzyme system applications. 2019 , 373, 1254-1278	163
456	pH responsive chitosan and hyaluronic acid layer by layer film for drug delivery applications. 2019 , 135, 240-247	17
455	A review on latest innovations in natural gums based hydrogels: Preparations & applications. 2019 , 136, 870-890	104
454	Polysaccharide-based stimuli-sensitive graft copolymers for drug delivery. 2019 , 155-177	5
453	Polysaccharide hydrogel films/membranes for transdermal delivery of therapeutics. 2019 , 639-684	6
452	Synthesis of poly(acrylic acid)He3+/gelatin/poly(vinyl alcohol) triple-network supramolecular hydrogels with high toughness, high strength and self-healing properties. 2019 , 68, 1710-1721	15
451	Novel dual-responsive semi-interpenetrating polymer network hydrogels for controlled release of anticancer drugs. 2019 , 107, 2327-2339	12
450	Clinical significance of three-dimensional printed biomaterials and biomedical devices. 2019 , 44, 494-504	14
449	Fabrication and Characterization of One Interpenetrating Network Hydrogel Based on Sodium Alginate and Polyvinyl Alcohol. 2019 , 34, 744-751	10

448	Using green emitting pH-responsive nanogels to report environmental changes within hydrogels: a nanoprobe for versatile sensing. 2019 , 11, 11484-11495	7
447	Stimuli-responsive poly(hydroxyethyl methacrylate) hydrogels from carboxylic acid-functionalized crosslinkers. 2019 , 107, 2013-2025	11
446	4D Printing of Shape-Memory Hydrogels for Soft-Robotic Functions. <i>Advanced Materials Technologies</i> , 2019 , 4, 1900071	62
445	Natural and Synthetic Materials in Regenerative Medicine: Progress Over the Past Five Years: Hydrogels: An Insight. 2019 , 113-113	0
444	Modeling a pH-sensitive Zeinacrylic acid hybrid hydrogels loaded 5-fluorouracil and rutin for enhanced anticancer efficacy by oral delivery. 2019 , 9, 185	19
443	Synthesis of AMPSA Polymeric Derivatives Monitored by Electrical Conductivity and Evaluation of Thermosensitive Properties of Resulting Microspheres. 2019 , 24,	2
442	Molecular Modeling of Complex Cross-Linked Networks of PEGDA Nanogels. 2019 , 123, 4129-4138	6
441	Intestine-penetrating, pH-sensitive and double-layered nanoparticles for oral delivery of doxorubicin with reduced toxicity. 2019 , 7, 3692-3703	7
440	Superabsorbent polymers: A review on the characteristics and applications of synthetic, polysaccharide-based, semi-synthetic and EmartIderivatives. 2019 , 117, 165-178	81
439	Binding Interaction of Gemini Surfactants with Nanotubes of ECyclodextrin and Controlled Release of Guest Molecules: Effect of Spacer Chain Length and Concentration of Surfactants. 2019 , 4, 4190-4202	7
438	Pnipam-covered gold nanodots for reversible adsorption of biomolecules. 2019 , 8, 44-48	1
437	Ionic-strength-responsive polymers for drug delivery applications. 2019 , 393-409	7
436	Droplet-based microfluidics systems in biomedical applications. 2019 , 40, 1580-1590	34
435	The preparation of ⊞-chitin nanowhiskers-poly (vinyl alcohol) hydrogels for drug release. 2019 , 131, 336-342	19
434	Alginate in Biomedical Applications. 2019 , 79-93	1
433	Self-assembling of Thermo-Responsive Block Copolymers: Structural, Thermal and Dielectric Investigations. 2019 , 397-444	1
432	Hydrogel Dressings for Advanced Wound Management. 2018 , 25, 5782-5797	74
431	Molecular design, synthesis and biomedical applications of stimuli-responsive shape memory hydrogels. 2019 , 114, 380-396	29

430	Influence of Solution pH on Drug Release from Ionic Hydrogel Lens. 2019 , 27, 191-197	8
429	Evaluation of Clay-Functionalized Wafers and Films for Nicotine Replacement Therapy via Buccal Mucosa. 2019 , 11,	23
428	Fabrication of an Original Transparent PVA/Gelatin Hydrogel: In Vitro Antimicrobial Activity against Skin Pathogens. 2019 , 2019, 1-11	18
427	Thermodynamics and Biophysics of Biomedical Nanosystems. 2019,	3
426	Modified montmorillonite nanolayers for nano-encapsulation of biomolecules. 2019 , 5, e01379	2
425	Formulation and Evaluation of pH Sensitive Sustained Release Hydrogel of Methotrexate. 2019 , 5, 105-112	
424	Cellulosic medicine hydrogels with cyto- and biocompatible properties for ultrasound stimulidrug release materials. 2019 , 165-181	1
423	Carboxymethyl cellulose-based oral delivery systems. 2019 , 133, 21-29	80
422	Polymers for extended-release administration. 2019 , 21, 45	10
421	Controlled release of dexamethasone from poly(vinyl alcohol) hydrogel. 2019 , 24, 839-848	8
420	Advanced Hydrogel Structures. 2019 , 279-305	0
419	Smart Polymer Gels: Properties, Synthesis, and Applications. 2019 , 279-321	4
418	Smart Instructive Polymer Substrates for Tissue Engineering. 2019 , 411-438	6
417	Modulating Thiol p K Promotes Disulfide Formation at Physiological pH: An Elegant Strategy To Design Disulfide Cross-Linked Hyaluronic Acid Hydrogels. <i>Biomacromolecules</i> , 2019 , 20, 1412-1420	39
416	Polymeric Biomaterials for Management of Pathological Scarring. 2019 , 1, 612-624	5
415	Synthesis of Hydrogels by Modification of Natural Polysaccharides Through Radiation Cross-Linking Polymerization for Use in Drug Delivery. 2019 , 269-292	2
414	Controlling methacryloyl substitution of chondroitin sulfate: injectable hydrogels with tunable long-term drug release profiles. 2019 , 7, 2151-2161	27
413	Effect of solventhatrix interactions on structures and mechanical properties of micelle-crosslinked gels. 2019 , 57, 473-483	6

412	Biocompatible in-situ gelling polymer hydrogels for treating ocular infection. 2019 , 46, 93-114	8
411	Conducting Polymers, Hydrogels and Their Composites: Preparation, Properties and Bioapplications. 2019 , 11,	88
410	Targeted drug delivery technology using untethered microrobots: a review. 2019 , 29, 053002	40
409	Structural changes in nanoparticle-hydrogel composites at very low filler concentrations. 2019 , 150, 064908	7
408	Mechanics of controlled release of insulin entrapped in polyacrylic acid gels via variable electrical stimuli. 2019 , 9, 783-794	7
407	Novel Drug Delivery Technologies. 2019,	2
406	Development of Smart Polymer Microparticles through Suspension Polymerization for Treatment of Schistosomiasis. 2019 , 13, 1900028	1
405	Preparation, Classification, and Applications of Smart Hydrogels. 2019 , 337-364	1
404	Facile one pot synthesis of strong epoxy/agar hybrid hydrogels. 2019 , 26, 1	2
403	Smart antimicrobial efficacy employing pH-sensitive ZnO-doped diamond-like carbon coatings. 2019 , 9, 17246	11
402	Fully amino acid-based hydrogel as potential scaffold for cell culturing and drug delivery. 2019 , 10, 2579-2593	6
401	Towards feedback-controlled nanomedicines for smart, adaptive delivery. 2019 , 244, 283-293	6
400	Comparative studies of chemical crosslinking reactions and applications of bio-based hydrogels. 2019 , 76, 2683-2710	17
399	Super Mechanical Stimuli Responsive Hydrogel: Dynamic Cues for Cell Applications 2019 , 2, 277-283	5
398	Drug release kinetics of pH-responsive microgels of different glass-transition temperatures. 2019 , 136, 47284	3
397	Controlled and Tunable Loading and Release of Vesicles by Using Gigahertz Acoustics. 2019 , 58, 159-163	16
396	Controlled and Tunable Loading and Release of Vesicles by Using Gigahertz Acoustics. 2019 , 131, 165-169	2
395	pH/NIR-responsive semiconducting polymer nanoparticles for highly effective photoacoustic image guided chemo-photothermal synergistic therapy. 2019 , 293, 94-103	27

394 Stimuli-Responsive Membranes for Separations. **2019**, 1-18

393	Cellulose-Based Hydrogels in Topical Drug Delivery: A Challenge in Medical Devices. 2019 , 1205-1233	2
392	In Situ Incorporation of Praziquantel in Polymer Microparticles through Suspension Polymerization for Treatment of Schistosomiasis. 2019 , 13, 1800064	5
391	Onion-structure bionic hydrogel capsules based on chitosan for regulating doxorubicin release. 2019 , 209, 152-160	22
390	Deformation Behavior of Fiber-Reinforced Hydrogel Structures. 2019 , 19, 1950032	14
389	Efficient Nanocarriers for Drug-Delivery Systems. 2019 , 1-41	9
388	Stimuli-responsive polymer wormlike micelles. 2019 , 89, 108-132	42
387	Expanding intestinal segment using osmotic hydrogel: An in vivo study. 2019 , 107, 1304-1309	2
386	Hydrogels containing caffeine and based on Beetosanfi proecological chitosan preparation, characterization, and in vitro cytotoxicity. 2019 , 68, 931-935	3
385	Non-invasive delivery strategies for biologics. 2019 , 18, 19-40	223
384	Anionic carboxymethylagarose-based pH-responsive smart superabsorbent hydrogels for controlled release of anticancer drug. 2019 , 124, 1220-1229	29
383	Architecture-transformable polymers: Reshaping the future of stimuli-responsive polymers. 2019 , 89, 61-75	132
382	CO2-responsive poly(N,N-dimethylaminoethyl methacrylate) hydrogels with fast responsive rate. 2019 , 94, 135-142	8
381	Study of thermal-sensitive alginate-Ca2+/poly(N-isopropylacrylamide) hydrogels supported by cotton fabric for wound dressing applications. 2019 , 89, 801-813	7
380	pH-responsive delivery of Griffithsin from electrospun fibers. 2019 , 138, 64-74	16
379	Improved Solubility of Morin Using p-sulphonatocalix[4]arene as Encapsulating Agent: HPLC Analysis and their Molecular Modelling. 2020 , 40, 609-621	1
378	Characterization of individual particle movement during in vitro gastric digestion in the Human Gastric Simulator (HGS). 2020 , 264, 109674	16
377	Fabrication and evaluation studies of novel polyvinylpyrrolidone and 2-acrylamido-2-methylpropane sulphonic acid-based crosslinked matrices for controlled release of acyclovir. 2020 , 77, 1869-1891	9

(2020-2020)

376	Superabsorbent polymers in agriculture and other applications: a review. 2020 , 59, 341-356	29
375	Synthesis of magnetic gold coated poly (Ecaprolactonediol) based polyurethane/poly(N-isopropylacrylamide)-grafted-chitosan core-shell nanofibers for controlled release of paclitaxel and 5-FU. 2020 , 150, 1130-1140	24
374	Carboxymethylcellulose/layered double hydroxides bio-nanocomposite hydrogel: A controlled amoxicillin nanocarrier for colonic bacterial infections treatment. 2020 , 155, 1401-1409	37
373	Mechanistic investigations into the encapsulation and release of small molecules and proteins from a supramolecular nucleoside gel in vitro and in vivo. 2020 , 317, 118-129	4
372	Biomedical Applications of DNA-Based Hydrogels. 2020 , 30, 1906253	86
371	Fabrication of pH-responsive TA-keratin bio-composited hydrogels encapsulated with photoluminescent GO quantum dots for improved bacterial inhibition and healing efficacy in wound care management: In vivo wound evaluations. 2020 , 202, 111676	23
370	An Insight into Structural and Mechanical Properties of Ideal-Networked Poly(Ethylene Glycol)Peptide Hydrogels from Molecular Dynamics Simulations. 2020, 221, 1900326	4
369	Imparting Functionality to the Hydrogel by Magnetic-Field-Induced Nano-assembly and Macro-response. 2020 , 12, 5177-5194	34
368	AB2-type amphiphilic block copolymer containing a pH-cleavable hydrazone linkage for targeted antibiotic delivery. 2020 , 575, 118948	16
367	Acid-Cleavable Poly(ethylene glycol) Hydrogels Displaying Protein Release at pH 5. 2020 , 26, 2947-2953	2
366	Glutathione-responsive multifunctionalizable hydrogels via amine-epoxy ElickEhemistry. 2020 , 123, 109441	15
365	Drop-by-drop solvent hot antisolvent interaction method for engineering nanocrystallization of sulfamethoxazole to enhanced water solubility and bioavailability. 2020 , 55, 101359	7
364	Injectable hydrogels for targeted delivering of therapeutic molecules for tissue engineering and disease treatment. 2020 , 31, 192-203	6
363	Synthesis and biological evaluation of surface-modified nanocellulose hydrogel loaded with paclitaxel. 2020 , 241, 117137	25
362	Fabrication and characterization of bioactive chitosan microspheres incorporated with mesoporous silica nanoparticles for biomedical applications. 2020 , 27, 555-562	4
361	Cytocompatible, thermostable hydrogel with utility to release drug over skin. 2020 , 94, 616-627	1
360	Hydrogels from xylan/chitosan complexes for the controlled release of diclofenac sodium. 2020 , 27, 1465-1481	9
359	Design of chitosan-based particle systems: A review of the physicochemical foundations for tailored properties. 2020 , 250, 116968	14

358	Thermo-Tunable Pores and Antibiotic Gating Properties of Bovine Skin Gelatin Gels Prepared with Poly(n-isopropylacrylamide) Network. 2020 , 12,	2
357	Design and in vitro evaluation of pH-sensitive crosslinked chitosan-grafted acrylic acid copolymer (CS-co-AA) for targeted drug delivery. 2020 , 1-13	4
356	Advancing the stimuli response of polymer-based drug delivery systems for ocular disease treatment. 2020 , 11, 6988-7008	27
355	Use of Microfluidics to Fabricate Bioerodable Lipid Hybrid Nanoparticles Containing Hydromorphone or Ketamine for the Relief of Intractable Pain. 2020 , 37, 211	5
354	Alendronate-functionalized poly(amido amine) cryogels of high-toughness for biomedical applications. 2020 , 190, 122248	5
353	Multiscale Experimental Evaluation of Agarose-Based Semi-Interpenetrating Polymer Network Hydrogels as Materials with Tunable Rheological and Transport Performance. 2020 , 12,	2
352	Carbon nanomaterials: synthesis, functionalization, and properties. 2020 , 137-179	2
351	pH-Sensitive Biomaterials for Drug Delivery. 2020 , 25,	28
350	Biointerface Engineering: Prospects in Medical Diagnostics and Drug Delivery. 2020,	3
349	Advances and limitations of drug delivery systems formulated as eye drops. 2020 , 321, 1-22	86
348	Hydrogel Nanoparticle as a Functional Coating Layer in Biosensing, Tissue Engineering, and Drug Delivery. 2020 , 10, 663	6
347	Ex-situ modification of bacterial cellulose for immediate and sustained drug release with insights into release mechanism. 2020 , 249, 116816	16
346	Effect of gelatin concentration on the characterizations and hemocompatibility of polyvinyl alcohol-gelatin hydrogel. 2020 , 31, 225-234	O
345	Structure and Rheology of Hydrogels: Applications in Drug Delivery. 2020 , 75-99	
344	Advanced Hydrogels as Wound Dressings. 2020 , 10,	113
343	Injectable pH and redox dual responsive hydrogels based on self-assembled peptides for anti-tumor drug delivery. 2020 , 8, 5415-5426	17
342	Crosslinking of hydrophilic polymers using polyperoxides. 2020 , 298, 1699-1713	2
341	Synthesis and characterization of novel semi-IPN nanocomposite hydrogels based on guar gum, partially hydrolyzed poly(acrylamide), and pristine montmorillonite. 2020 , 78, 5923	5

340	Polyelectrolyte multilayers for drug delivery. 2020 , 183-209	3
339	Triple Thermoresponsiveness of a TADDOL-Based Homopolymer through the Formation of Supramolecular Complexes with Chiral Guest Molecules at Variable Ratios. 2020 , 2, 4415-4424	2
338	NEW DOSAGE FORMS FOR THE DELAYED RELEASE OF MESALAZINE TO THE COLON. 2020 , 192-196	
337	What Does a Brain Feel Like?. 2020 , 97, 4078-4083	O
336	Design and fabrication of novel core-shell nanoparticles for theranostic applications. 2020 , 298, 1433-1442	2
335	Low molecular weight self-assembling peptide-based materials for cell culture, antimicrobial, anti-inflammatory, wound healing, anticancer, drug delivery, bioimaging and 3D bioprinting applications. 2020 , 16, 10065-10095	26
334	Magnetic Resonance Methods as a Prognostic Tool for the Biorelevant Behavior of Xanthan Tablets. 2020 , 25,	О
333	Hydroxypropyl Methylcellulose-Based Hydrogel Copolymeric for Controlled Delivery of Galantamine Hydrobromide in Dementia. 2020 , 8, 1350	6
332	Bacterial Cellulose-Based Composite Scaffolds for Biomedical Applications: A Review. 2020 , 8, 7536-7562	150
331	Development of nanoemulsion gel drug delivery systems of cetirizine; factorial optimisation of composition, evaluation and clinical study. 2020 , 37, 413-430	3
330	Regenerative medicine for spinal cord injury: focus on stem cells and biomaterials. 2020, 20, 1203-1213	9
329	Tunable biohybrid hydrogels from coacervation of hyaluronic acid and PEO-based block copolymers. 2020 , 58, 1276-1287	1
328	Recent advances in combinatorial cancer therapy via multifunctionalized gold nanoparticles. 2020 , 15, 1221-1237	15
327	Stimuli-Responsive Hydrogels for Local Post-Surgical Drug Delivery. 2020 , 6,	17
326	In Vitro Release of 5-Fluorouracil and Methotrexate from Different Thermosensitive Chitosan Hydrogel Systems. 2020 , 21, 131	14
325	Nanocellulose and nanohydrogel matrices as sustainable biomass materials: structure, properties, present status, and future prospects in construction and other engineering. 2020 , 177-195	1
324	Stimuli-responsive hydrogels as a model of the dynamic cellular microenvironment. 2020 , 52, 861-870	28
323	Study of FluidBtructure Interaction in a Functionally Graded pH-Sensitive Hydrogel Micro-Valve. 2020 , 12, 2050057	5

322	Real-time characterization of hydrogel viscoelastic properties and sol-gel phase transitions using cantilever sensors. 2020 , 64, 837-850		4
321	Influence of Concentration on Release and Permeation Process of Model Peptide Substance-Corticotropin-From Semisolid Formulations. 2020 , 25,		4
320	Chick embryo chorioallantoic membrane as a suitable in vivo model to evaluate drug delivery systems for cancer treatment: A review. 2020 , 153, 273-284		13
319	Acrylamide based hydrogels in swelling and uptake of methylene blue from aqueous solutions. 2020 , 19, 51-60		
318	Preparation and Characterization of pH Sensitive Chitosan/3-Glycidyloxypropyl Trimethoxysilane (GPTMS) Hydrogels by Sol-Gel Method. 2020 , 12,		7
317	Comparative study of robotic artificial actuators and biological muscle. 2020 , 12, 168781402093340		14
316	Phomopsidione-Loaded Chitosan Polyethylene Glycol (PEG) Nanocomposite Dressing for Pressure Ulcers. 2020 , 109, 2884-2890		
315	Modification of relevant polymeric materials for medical applications and devices. 2020 , 3, e10073		2
314	Corn fiber gum-soybean protein isolate double network hydrogel as oral delivery vehicles for thermosensitive bioactive compounds. 2020 , 107, 105865		22
313	Poly(ethylene glycol)-interpenetrated genipin-crosslinked chitosan hydrogels: Structure, pH responsiveness, gelation kinetics, and rheology. 2020 , 137, 49259		9
312	Hydroxybutyl Chitosan Centered Biocomposites for Potential Curative Applications: A Critical Review. <i>Biomacromolecules</i> , 2020 , 21, 1351-1367	6.9	18
311	Hydrogel Actuator with a Built-In Stimulator Using Liquid Metal for Local Control. 2020 , 2, 2000008		8
310	A multifunctional nanocomposite spray dressing of Kappa-carrageenan-polydopamine modified ZnO/L-glutamic acid for diabetic wounds. 2020 , 111, 110837		24
309	Smart and Intelligent Stimuli Responsive Materials: An Innovative Step in Drug Delivery System. 2020 , 6, 41-52		2
308	Initiated Chemical Vapor Deposition of Crosslinked Organic Coatings for Controlling Gentamicin Delivery. 2020 , 12,		7
307	Carbon family nanomaterials for drug delivery applications. 2020 , 421-445		7
306	Design and evaluation of pH-responsive hydrogel for oral delivery of amifostine and study on its radioprotective effects. 2020 , 195, 111200		7
305	Inflammation targeted chitosan-based hydrogel for controlled release of diclofenac sodium. 2020 , 162, 175-187		33

(2020-2020)

304	Gelatin Methacryloyl Hydrogels Control the Localized Delivery of Albumin-Bound Paclitaxel. 2020 , 12,	19
303	Autonomous Drug Release Systems with Disease Symptom-Associated Triggers. 2020 , 2, 1900124	6
302	Composite guar gum-silver nanoparticle hydrogels as self-healing, injectable, and antibacterial biomaterials. 2020 , 24, 100992	24
301	Gelatin Microcartridges for Onboard Activation and Antioxidant Protection of Sperm 2020 , 3, 1616-1627	5
300	3D printing of hydrogels: Rational design strategies and emerging biomedical applications. 2020 , 140, 100543	241
299	Halloysite nanotubes@polydopamine reinforced polyacrylamide-gelatin hydrogels with NIR light triggered shape memory and self-healing capability. 2020 , 191, 108071	21
298	Multivariate curve resolution-alternating least squares to study the simultaneous release of Sumatriptan and Naproxen from the polymeric substrate. 2020 , 17, 953-962	1
297	pH-sensitive drug delivery systems. 2020 , 259-278	5
296	Modulating sustained drug release from nanocellulose hydrogel by adjusting the inner geometry of implantable capsules. 2020 , 57, 101625	15
295	Alkylation of EAzaproline Creates Conformationally Adaptable Proline Derivatives for pH-Responsive Collagen Triple Helices. 2020 , 26, 5070-5074	1
294	Transparent and tough poly(2-hydroxyethyl methacrylate) hydrogels prepared in water/IL mixtures. 2020 , 44, 4092-4098	4
293	Surface Structures, Particles, and Fibers of Shape-Memory Polymers at Micro-/Nanoscale. 2020 , 2020, 1-16	1
292	Hydrogels assembled from ovotransferrin fibrils and xanthan gum as dihydromyricetin delivery vehicles. 2020 , 11, 1478-1488	12
291	Hydrogel machines. 2020 , 36, 102-124	268
290	Strategies toward development of biodegradable hydrogels for biomedical applications. 2020 , 59, 911-927	3
289	Design Considerations for Hydrogel Wound Dressings: Strategic and Molecular Advances. 2020 , 26, 230-248	61
288	Research progress in bio-based self-healing materials. 2020 , 129, 109651	27
287	A 3D printed drug delivery implant formed from a dynamic supramolecular polyurethane formulation. 2020 , 11, 3453-3464	9

286	Microwave Characterization of Chitosan Hydrogel and Its Use as a Wireless pH Sensor in Smart Packaging Applications. 2020 , 20, 8990-8996	14
285	Injectable and Self-Healing Nanocomposite Hydrogels with Ultrasensitive pH-Responsiveness and Tunable Mechanical Properties: Implications for Controlled Drug Delivery. <i>Biomacromolecules</i> , 2020 6.9 , 21, 2409-2420	51
284	Nanofibrillated cellulose/cyclodextrin based 3D scaffolds loaded with raloxifene hydrochloride for bone regeneration. 2020 , 156, 704-716	23
283	Preparation and Characterizations Graft Copolymer of Poly(acrylamide-aniline)-Grafted Gum Ghatti. 2020 , 21, 1856-1861	O
282	An overview of hydrogels and their role in transdermal drug delivery. 2021 , 70, 574-584	18
281	Thermo-responsive poly(N-isopropyl acrylamide) hydrogel with increased response rate. 2021 , 78, 3183-3198	5
280	Preparation of internally-crosslinked alginate microspheres: Optimization of process parameters and study of pH-responsive behaviors. 2021 , 255, 117336	8
279	Comparative studies of directly loaded and cyclodextrin-mediated release of Theophylline and evaluation of biodegradation studies of HPNs. 2021 , 78, 4227-4249	1
278	Effects of beta-tricalcium phosphate nanoparticles on the properties of a thermosensitive chitosan/collagen hydrogel and controlled release of quercetin. 2021 , 109, 1147-1159	3
277	Nanocomposite hydrogel based on carrageenan-coated starch/cellulose nanofibers as a hemorrhage control material. 2021 , 251, 117013	22
276	A three dimensional in vivo model of breast cancer using a thermosensitive chitosan-based hydrogel and 4 T1 cell line in Balb/c. 2021 , 109, 1275-1285	11
275	Smart Titanium Coating Composed of Antibiotic Conjugated Peptides as an Infection-Responsive Antibacterial Agent. 2021 , 21, e2000194	7
274	Applications of Polymers in Gastric Drug Delivery. 2021 , 77-104	1
273	3D integration of pH-cleavable drug-hydrogel conjugates on magnetically driven smart microtransporters. 2021 , 197, 109212	8
272	Lab-on-a-chip: Systems integration at the microscale. 2021 , 63-87	1
271	Hydrogel beads-based nanocomposites in novel drug delivery platforms: Recent trends and developments. 2021 , 288, 102316	13
270	Interpenetrating polymer network hydrogels of soy protein isolate and sugar beet pectin as a potential carrier for probiotics. 2021 , 113, 106453	19
269	Biomimetic anti-freezing polymeric hydrogels: keeping soft-wet materials active in cold environments. 2021 , 8, 351-369	85

268	Stimuli-Responsive Polysaccharide Hydrogels for Biomedical Applications: a Review. 2021 , 7, 91-114	22
267	Formulation and evaluation of interpenetrating network of xanthan gum and polyvinylpyrrolidone as a hydrophilic matrix for controlled drug delivery system. 2021 , 78, 59-80	17
266	Stimulus-Responsive Polymers. 2021 , 109-125	0
265	Three Dimensional (3D) Printable Gel-Inks for Skin Tissue Regeneration. 2021 , 191-227	
264	MIP as Drug Delivery Systems of Anticancer Agents. 2021 , 133-152	
263	Stimuli-responsive polymersomes of poly [2-(dimethylamino) ethyl methacrylate]-b-polystyrene. 1	Ο
262	Biodegradable Polymeric Materials for Medicinal Applications. 2021 , 351-372	1
261	Multifunctional materials based on smart hydrogels for biomedical and 4D applications. 2021 , 407-467	Ο
260	3D printing of highly stretchable hydrogel with diverse UV curable polymers. 2021, 7,	70
259	Cucurbit[8]uril-based supramolecular hydrogels for biomedical applications. 2021 , 12, 722-729	3
258	Stimuli-Controlled Fluid Control and Microvehicle Movement in Microfluidic Channels. 2021 , 128-128	
257	Hydrogel, a novel therapeutic and delivery strategy, in the treatment of intrauterine adhesions. 2021 , 9, 6536-6552	2
256	Mono and Multi-Stimuli Responsive Polymers: Application as Intelligent Nano-Drug Delivery Systems. 2021 , 237-265	4
255	Chapter 19:Nanobiomaterials for Smart Delivery. 2021 , 475-498	
254	Nanocomposite nanofibers of conducting polymers: Multi-functional nanostructured materials. 2021 , 157-183	
253	Understanding and Regulating Cell-Matrix Interactions Using Hydrogels of Designable Mechanical Properties. 2021 , 17, 149-168	O
252	pH-sensitive polymers: Classification and some fine potential applications. 2021 , 32, 1455-1484	35
251	Poly (hydroxyethyl methacrylate-co-hydroxyethyl acrylate) soft contact lenses for acetazolamide release. 1	1

250	TEMPO-Oxidized Cellulose Beads as Potential pH-Responsive Carriers for Site-Specific Drug Delivery in the Gastrointestinal Tract. 2021 , 26,	3
249	Encryption/decryption and microtarget capturing by pH-driven Janus microstructures fabricated by the same femtosecond laser printing parameters. 2021 , 3, 025001	5
248	Fabrication of natural polysaccharide based hydrogel with utility to entrap pollutants. 2021 , 1797, 012060	1
247	Soft and Stretchable Optical Waveguide: Light Delivery and Manipulation at Complex Biointerfaces Creating Unique Windows for On-Body Sensing. 2021 , 6, 1446-1460	6
246	The Influence of Initiator Concentration on Selected Properties of Thermosensitive Poly(Acrylamide-co-2-Acrylamido-2-Methyl-1-Propanesulfonic Acid) Microparticles. 2021 , 13,	2
245	Nanotechnology and its use in imaging and drug delivery (Review). 2021 , 14, 42	25
244	Visual detection of alkaline phosphatase based on ascorbic acid-triggered gel-sol transition of alginate hydrogel. 2021 , 1148, 238193	4
243	Superabsorbent hydrogels enhanced by quaternized tunicate cellulose nanocrystals with adjustable strength and swelling ratio. 2021 , 28, 3723-3732	2
242	Thermo- and ROS-Responsive Self-Assembled Polymer Nanoparticle Tracers for F MRI Theranostics. <i>Biomacromolecules</i> , 2021 , 22, 2325-2337	8
241	Design of new drug delivery platform based on surface functionalization of black phosphorus nanosheet with a smart polymer for enhancing the efficiency of doxorubicin in the treatment of cancer. 2021 , 109, 1912-1921	2
240	Advanced applications of chitosan-based hydrogels: From biosensors to intelligent food packaging system. 2021 , 110, 822-832	25
239	The effect of ion pairs on coacervate-driven self-assembly of block polyelectrolytes. 2021 , 154, 144903	О
238	Metallic nanoparticles as drug delivery system for the treatment of cancer. 2021 , 18, 1261-1290	15
237	Hydrogels as potential drug-delivery systems: network design and applications. 2021 , 12, 375-396	8
236	Genipin-crosslinked chitosan hydrogels: Preliminary evaluation of the in vitro biocompatibility and biodegradation. 2021 , 138, 50848	4
235	Synthesis of magnetic multi walled carbon nanotubes hydrogel nanocomposite based on poly (acrylic acid) grafted onto salep and its application in the drug delivery of tetracyceline hydrochloride. 2021 , 616, 126350	6
234	Designing gelatin-based swellable hydrogels system for controlled delivery of salbutamol sulphate: characterization and toxicity evaluation. 1	3
233	Engineering (Bio)Materials through Shrinkage and Expansion. 2021 , 10, e2100380	4

232	Swelling and Diffusion in Polymerized Ionic Liquids-Based Hydrogels. 2021 , 13,	3
231	pH sensitive composite hydrogels based on gelatin and reinforced with cellulose microcrystals: In depth physicochemical and microstructural analyses for controlled release of vitamin B2. 2021 , 27, 102334	2
230	An Overview on Starch-Based Sustainable Hydrogels: Potential Applications and Aspects. 1	9
229	Theragnostic nanomotors: Successes and upcoming challenges. 2021 , 13, e1736	O
228	Development of cress seed gum hydrogel and investigation of its potential application in the delivery of curcumin. 2021 , 101, 6505-6513	4
227	Designing Inherently Photodegradable Cell-Adhesive Hydrogels for 3D Cell Culture. 2021 , 10, e2100632	2
226	Synthesis of lignin-containing polymer hydrogels with tunable properties and their application in sorption of nickel(II) ions. 2021 , 164, 113354	3
225	Cell encapsulated and microenvironment modulating microbeads containing alginate hydrogel system for bone tissue engineering. 2021 , 10, 131-150	2
224	Preparation, Properties and Cell Biocompatibility of Room Temperature LCST-Hydrogels Based on Thermoresponsive PEO Stars. 2021 , 7,	1
223	Methotrexate-Loaded Gelatin and Polyvinyl Alcohol (Gel/PVA) Hydrogel as a pH-Sensitive Matrix. 2021 , 13,	10
222	Fabrication, Evaluation, In Vivo Pharmacokinetic and Toxicological Analysis of pH-Sensitive Eudragit S-100-Coated Hydrogel Beads: a Promising Strategy for Colon Targeting. 2021 , 22, 209	5
222		5
	S-100-Coated Hydrogel Beads: a Promising Strategy for Colon Targeting. 2021 , 22, 209	
221	S-100-Coated Hydrogel Beads: a Promising Strategy for Colon Targeting. 2021 , 22, 209 Self-healing Hydrogels and Underlying Reversible Intermolecular Interactions. 2021 , 39, 1246-1261 Biobased dynamic hydrogels by reversible imine bonding for controlled release of thymopentin.	4
221	S-100-Coated Hydrogel Beads: a Promising Strategy for Colon Targeting. 2021, 22, 209 Self-healing Hydrogels and Underlying Reversible Intermolecular Interactions. 2021, 39, 1246-1261 Biobased dynamic hydrogels by reversible imine bonding for controlled release of thymopentin. 2021, 127, 112210	4
221 220 219	S-100-Coated Hydrogel Beads: a Promising Strategy for Colon Targeting. 2021, 22, 209 Self-healing Hydrogels and Underlying Reversible Intermolecular Interactions. 2021, 39, 1246-1261 Biobased dynamic hydrogels by reversible imine bonding for controlled release of thymopentin. 2021, 127, 112210 Tuning the response of fluid filled hydrogel core-shell structures. 2021, 120, 104605 Remote Temperature-Responsive Parafilm Dermal Patch for On-Demand Topical Drug Delivery.	4
221 220 219 218	S-100-Coated Hydrogel Beads: a Promising Strategy for Colon Targeting. 2021, 22, 209 Self-healing Hydrogels and Underlying Reversible Intermolecular Interactions. 2021, 39, 1246-1261 Biobased dynamic hydrogels by reversible imine bonding for controlled release of thymopentin. 2021, 127, 112210 Tuning the response of fluid filled hydrogel core-shell structures. 2021, 120, 104605 Remote Temperature-Responsive Parafilm Dermal Patch for On-Demand Topical Drug Delivery. 2021, 12, An optimized preparation of nanofiber hydrogels derived from natural carbohydrate polymers and	4 4 1

214	Printability during projection-based 3D bioprinting 2022 , 11, 254-267	6
213	Development and Characterization of Conducting-Polymer-Based Hydrogel Dressing for Wound Healing. 2021 , 18, 483-491	1
212	A novel rechargeable zinclopper battery without a separator. 2021 , 42, 103109	О
211	Polymer incorporated magnetic nanoparticles: Applications for magnetoresponsive targeted drug delivery. 2021 , 272, 115358	13
210	Devices for drug delivery in the gastrointestinal tract: A review of systems physically interacting with the mucosa for enhanced delivery. 2021 , 177, 113926	7
209	Preparation of triamcinolone acetonide-loaded chitosan/fucoidan hydrogel and its potential application as an oral mucosa patch. 2021 , 272, 118493	22
208	Multifunctional stimuli-responsive niosomal nanoparticles for co-delivery and co-administration of gene and bioactive compound: In vitro and in vivo studies. 2022 , 429, 132090	10
207	Infection-Triggered, Self-Cleaning Surfaces with On-Demand Cleavage of Surface-Localized Surfactant Moieties. 2021 , 7, 586-594	1
206	Chapter 22:Stimuli-responsive Drug Delivery Hydrogels. 2021 , 542-565	1
205	Synthesis, Structural Modification and Physiochemical Response of Chitosan Built Nanohydrogel for Control Drug Delivery Applications. 2021 , 263-280	
204	Biomedical applications of smart polymer composites. 2021 , 183-204	1
203	Chapter 8:Hydrogel Processing Techniques and Vascular Tissue Engineering. 2021 , 207-237	
202	Synthesis of Dual-Responsive Alginate-Inspired Hydrocomposites for the Absorption of Blue Methylene. 2021 , 29, 1643-1650	2
201	PDEGMA-b-PDIPAEMA copolymers via RAFT polymerization and their pH and thermoresponsive schizophrenic self-assembly in aqueous media. 2020 , 58, 1867-1880	5
200	Controlled-Release Systems. 2014 , 7-62	2
199	Manufacturing Process and Thermal Stability of Nanophotonic Soft Contact Lenses. 2020 , 184-199	1
198	Influence of Salt and pH on the Swelling Equilibrium of Ionizable N-IPAAm Based Hydrogels: Experimental Results and Modeling. 2013 , 163-173	1
197	Biomedical Applications of Polyolefins. 2016 , 247-264	1

(2020-2019)

196	Porosity in Biomaterials: A Key Factor in the Development of Applied Materials in Biomedicine. 2019 , 3503-3522	1
195	Stimuli-Responsive Membranes for Separations. 2019 , 491-508	1
194	Updates on Stimuli-Responsive Polymers: Synthesis Approaches and Features. 2018, 129-146	2
193	Physical and chemical crosslinked microcrystalline cellulose-polyvinyl alcohol hydrogel: freezethaw mediated synthesis, characterization and in vitro delivery of 5-fluorouracil. 2020 , 27, 6521-6535	13
192	Chapter 11:Injectable Nanogels in Drug Delivery. 2017 , 181-209	1
191	Chapter 18:Intelligent Chitosan-based Hydrogels as Multifunctional Materials. 2007 , 447-463	1
190	CHAPTER 18:pH- and Temperature-responsive Hydrogels in Drug Delivery. 2013 , 153-179	3
189	Dynamic covalent bonds in self-healing, shape memory, and controllable stiffness hydrogels. 2020 , 11, 1410-1423	60
188	Recent advancements in conducting polymer bionanocomposites and hydrogels for biomedical applications. 1-18	25
187	Synthesis and characterisation of stimuli-responsive drug delivery system using ZnFe2O4 and Ag1-XZnxFe2O4 nanoparticles. 2021 , 36, 347-355	10
186	Acid hydrogel matrixes as reducing/stabilizing agent for the in-situ synthesis of Ag-nanocomposites by UV irradiation: pH effect. 2019 , 6, 055021	7
185	3D printing for drug manufacturing: A perspective on the future of pharmaceuticals. 2018, 4, 119	10
184	Smart electrospun nanofibers for controlled drug release: recent advances and new perspectives. 2015 , 21, 1944-59	118
183	Development of a Novel Oral Delivery Vehicle for Probiotics. 2020 , 26, 3134-3140	2
182	Octadecyltrichlorosilane Incorporated Alginate Micro-granules as Sustained-Release Carriers for Small Hydrophilic Molecules. 2020 , 17, 333-342	4
181	Bio-Inspired Strategies against Diabetes and Associated Complications: A Review. 2019 , 13, 273-282	1
180	Mechanical characterization of calcium pectinate hydrogel for controlled drug delivery. 2003, 57, 611-616	4
179	Four-Dimensional (Bio-)printing: A Review on Stimuli-Responsive Mechanisms and Their Biomedical Suitability. 2020 , 10, 9143	8

178	Small Peptide-Doxorubicin Co-Assembly for Synergistic Cancer Therapy. 2020 , 25,	2
177	Smart Hydrogels for Pharmaceutical Applications. 2017 , 278-310	1
176	A Novel Targeting Drug Delivery System Based on Self-Assembled Peptide Hydrogel. 2011 , 02, 622-625	6
175	Zero-Order Release Profiles from A Multistimuli Responsive Electro-Conductive Hydrogel. 2012 , 03, 262-268	15
174	Sol-Gel Silica Matrix as Reservoir for Controlled Release of Paracetamol: Characterization and Kinetic Analysis. 2016 , 06, 47-55	4
173	Synthesis and Properties of Partially Hydrolyzed Acrylonitrile-co-Acrylamide Superabsorbent Hydrogel. 2010 , 31, 3163-3172	15
172	Effect of pH on Swelling Property of Hyaluronic Acid Hydrogels for Smart Drug Delivery Systems. 2012 , 21, 256-262	10
171	Recent Advances on Nanotechnology Applications to Cancer Drug Therapy.	1
170	Comparison between effects of free curcumin and curcumin loaded NIPAAm-MAA nanoparticles on telomerase and PinX1 gene expression in lung cancer cells. 2014 , 15, 8931-6	42
169	Synthesis, classification and properties of hydrogels: their applications in drug delivery and agriculture. 2021 ,	9
168	In situ forming hydrogels based on oxidized hydroxypropyl cellulose and Jeffamines. 2021 , 28, 11367	1
167	Synchrotron-Based UV Resonance R aman Spectroscopy for Polymer Characterization. 2021 , 183-225	
166	Biomedical applications of hydrogels in drug delivery system: An update. 2021 , 66, 102914	11
165	INVESTIGATION OF YUNNAN BAIYAO RELEASE BEHAVIOR FROM PVA/WATER-SOLUBLE CHITOSAN/GLYCEROL HYDROGELS PREPARED BY IRRADIATION FOLLOWED BY FREEZE-THAWING. 2009 , 009, 1198-1204	
164	Feedback Control Systems Using Environmentally and Enzymatically Sensitive Hydrogels. 2010, 45-64	1
163	Smart Thermo-Responsive Nanoparticles. 2010 , 197-221	
162	Polymer-Based Colloidal Aggregates as a New Class of Drug Delivery Systems. 2013 , 659-682	
161	Clinically Applied Biomaterials. 2013, 379-392	

Smart Nanofibers. 2014, 189-235 160 Changes in Drug Elution Concentration and Physical Characteristics of Soft Contact Lenses 159 Depending on the Initiator and Crosslinker. 2014, 19, 145-151 Synthesis of Shape Reconfigurable Janus Particles by External pH Stimuli. 2014, 20, 226-231 158 Gels as Vaccine Delivery Systems. 2015, 203-220 157 Field-Based Simulations of Nanostructured Polyelectrolyte Gels. 2016, 1-9 156 Stimuli-Responsive Polymers. 7663-7674 155 Colloidal Aggregates, Polymer-Based: Drug Delivery Systems. 1901-1916 154 Nanomedicine: Review and Perspectives. 5393-5413 153 Colonic Drug Delivery: Biopolymers and Enteric Polymers. 1917-1926 152 Acrylic-Based Hydrogels. 1-12 151 Smart Hydrogels for Pharmaceutical Applications. 2017, 1133-1164 150 Chapter 13: Future of Nanogels for Sensing Applications. 2017, 261-282 149 148 Hydrogels for Vaginal Drug Delivery. 2017, 259-302 Design of Stimuli-Responsive Drug Delivery Hydrogels: Synthesis and Applications. 2017, 1-23 147 Hydrogels for Pulmonary Drug Delivery. 2017, 327-352 146 Stimuli-Responsive Hydrogels for Parenteral Drug Delivery. **2017**, 234-258 145 Nanomedicine: Review and Perspectives. 2017, 1088-1108 144 Biodegradable antimicrobial hydrogels and their use in biomedical purposes. 2019, 23-52 143

142	In-Vitro Wound Healing and Release Kinetics of Ecyclodextrin Encapsulated Curcumin Loaded Carrageenan Hydrogel Film: An Efficient Wound Dressing Material. 2019 , 107-119	O
141	Parenteral Controlled and Prolonged Drug Delivery Systems: Therapeutic Needs and Formulation Strategies. 2019 , 183-260	1
140	Cell-free genetic devices confer autonomic and adaptive properties to hydrogels.	O
139	Carrageenan hydrogel loaded with Pluronicfi F68/Curcumin: An efficient dressing material for chronic wounds. 2020 ,	
138	Synthesis, characterization of ECD based novel hydrogels with dual objectives of drug release and dye removal. 2020 , 29, 615-623	2
137	Gelatin and Glycerine-Based Bioadhesive Vaginal Hydrogel. 2020 , 17, 303-311	2
136	Swelling behavior of acrylamide and sodium acrylate copolymer hydrogel in aqueous solutions of copper (II) chloride with amino acids additives. 2020 , 56, 339-351	
135	Recent advances in three-dimensional bioprinted nanocellulose-based hydrogel scaffolds for biomedical applications. 2021 , 38, 2171-2194	O
134	Linear Copolymers Based on Choline Ionic Liquid Carrying Anti-Tuberculosis Drugs: Influence of Anion Type on Physicochemical Properties and Drug Release. 2020 , 22,	2
133	Bioreducible and pH-responsive shell crosslinked polymeric micelles from a star-shaped terpolymer as drug delivery system. 1-12	2
132	Swelling Behavior and Antibacterial Property of Sericin/NIPAAm/AgNPs Semi-IPN Hydrogel. 2020 , 1935-1941	
131	Ligneous biochar research and development of technology for enhanced adsorption of potentially toxic elements. 2020 ,	
130	Development of Novel Superabsorbent Hybrid Hydrogels by E-Beam Crosslinking. 2021, 7,	2
129	FSI and non-FSI studies on a functionally graded temperature-responsive hydrogel bilayer in a micro-channel.	O
128	Intracellular degradation of microspheres based on cross-linked dextran hydrogels or amphiphilic block copolymers: a comparative raman microscopy study. 2007 , 2, 241-52	4
127	Superparamagnetic iron oxide nanoparticles: promises for diagnosis and treatment of cancer. 2011 , 2, 367-90	61
126	Drug delivery and in vitro biocompatibility studies of gelatin-nanocellulose smart hydrogels cross-linked with gamma radiation. 2021 ,	О
125	pH-responsive drug delivery systems as intelligent carriers for targeted drug therapy: Brief history, properties, synthesis, mechanism and application. 2021 , 102987	3

124	Advanced biomedical hydrogels: molecular architecture and its impact on medical applications 2021 , 8, rbab060	5
123	Design of a dual pH and temperature responsive hydrogel based on esterified cellulose nanocrystals for potential drug release 2022 , 278, 118925	8
122	Size-Adjustable Nano-Drug Delivery Systems for Enhanced Tumor Retention and Penetration. 03,	
121	Hollow microcapsule with pH-sensitive chitosan/polymer shell for in vitro delivery of curcumin and gemcitabine. 2021 , 162, 110887	5
120	Novel Routes for the Synthesis of a Thermoresponsive Polymer: A Comparative Approach. 2021 , 6, 12796-128	305
119	Hydrazone conjugated and DOX loaded PEGylated-Fe3O4 mesoporous magnetic nanoclusters (MNCs): hyperthermia and in vitro chemotherapy. 2021 , 45, 21646-21656	4
118	Novel Synthesis, Characterization and Amoxicillin Release Study of pH-Sensitive Nanosilica/Poly(acrylic acid) Macroporous Hydrogel with High Swelling 2022 , 15,	1
117	Bioinspired tunable hydrogels: An update on methods of preparation, classification, and biomedical and therapeutic applications 2021 , 612, 121368	4
116	SHARP hydrogel for the treatment of inflammatory bowel disease 2021 , 613, 121392	1
115	pH- and Ion-Sensitive Materials for Controlled Drug Delivery. 2021 , 269-290	
114	Hemicellulose-Based Delivery Systems: Focus on Pharmaceutical and Biomedical Applications. 2022 , 467-507	O
113	Engineering optimal vaccination strategies: effects of physical properties of the delivery system on functions 2022 ,	O
112	Design, Preparation, and Evaluation of Enteric Coating Formulation of HPMC and Eudragit L100 on Carboxylated Agarose Hydrogel by Using Drug Tartrazine 2022 , 2022, 1042253	
111	Drug Delivery Based on Stimuli-Responsive Injectable Hydrogels for Breast Cancer Therapy: A Review 2022 , 8,	4
110	Pluronic F127-co-poly (2 acrylamido-2-methylpropane sulphonic acid) crosslinked matrices as potential controlled release carrier for an anti-depressant drug: in vitro and in vivo attributes. 1	O
109	Transport phenomena in drug delivery membrane systems. 2022 , 231-245	
108	Size-selective characterization of porous media via tortuous network analysis. 2022 , 66, 219-233	O
107	Catalytic Reduction of Environmental Pollutants with Biopolymer Hydrogel Cross-Linked Gelatin Conjugated Tin-Doped Gadolinium Oxide Nanocomposites 2022 , 8,	1

106	Formulation and evaluation of polyethylene glycol/Xanthan gum-co-poly (Acrylic acid) interpenetrating network for controlled release of venlafaxine. 1	О
105	Preparation, properties and drug controlled release of chitin-based hydrogels: An updated review 2022 , 283, 119177	7
104	Polymer-solvent interaction and conformational changes at a molecular level: Implication to solvent-assisted deformation and aggregation at the polymer surface 2022 , 616, 221-233	О
103	Advanced Hydrogels for the Controlled Delivery of Insulin 2021 , 13,	2
102	Plasma surface engineering for manmade soft materials: a review. 2022 , 55, 173002	2
101	Microstructure and Biological Properties of Electrospun In Situ Polymerization of Polycaprolactone-Graft-Polyacrylic Acid Nanofibers and Its Composite Nanofiber Dressings. 2021 , 13,	2
100	Stimuli-Responsive Hydrogels in Drug Delivery. 2022 , 75-103	
99	Chitosan-Based Gels for Ocular Drug Delivery. 2022 , 281-315	
98	Microsphere: A Wander around Drug Delivery. 2022 , 7, 1-11	1
97	pH-Sensitive poly (acrylic acid-co-acrylamide) anionic hydrogels for jejunum targeted drug delivery systems. 1	
96	Nanocellulose/Nisin Hydrogel Microparticles as Sustained Antimicrobial Coatings for Paper Packaging. 2022 , 4, 2664-2673	2
95	Emerging Fabrication Strategies of Hydrogels and Its Applications 2022, 8,	2
94	Smart Injectable Chitosan Hydrogels Loaded with 5-Fluorouracil for the Treatment of Breast Cancer 2022 , 14,	4
93	An insight into Synthetic, Physiological aspect of Superabsorbent Hydrogels based on Carbohydrate type polymers for various Applications: A Review. 2022 , 100202	1
92	Diffusional characteristics of food protein-based materials as nutraceutical delivery systems: A review. 2022 , 122, 201-210	0
91	Tunable Properties Composition Modulations of Poly(vinyl alcohol)/Xanthan Gum/Oxalic Acid Hydrogels 2022 , 15,	4
90	Polymerized ECyclodextrin-Based Injectable Hydrogel for Sustained Release of 5-Fluorouracil/Methotrexate Mixture in Breast Cancer Management: In Vitro and In Vivo Analytical Validations 2022 , 14,	2
89	Ionic liquid-based non-releasing antibacterial, anti-inflammatory, high-transparency hydrogel coupled with electrical stimulation for infected diabetic wound healing. 2022 , 236, 109804	3

88	Co-encapsulation systems for delivery of bioactive ingredients 2022 , 155, 111073	1
87	Ionic liquids enhancement of hydrogels and impact on biosensing applications. 2022, 357, 119075	3
86	Advances in pH-responsive drug delivery systems. 2021 , 5, 100031	4
85	Poly(lactic acid) (PLA)-Based Nanosystems in Biomedical Applications. 2022 , 63-89	1
84	Nanotechnology in Pulmonary Disease Diagnosis. 2022 , 195-205	
83	Gastroretentive Drug Delivery System: An Overview. 2022 , 1343-1347	
82	Naringenin solubilizing and pH dependent releasing properties of water soluble p-sulphonatocalix[4]arene. 1-11	
81	Hyaluronic acid-based self-repairing hydrogel preparation and 3D cell culture. 2022 , 29, 1	
80	Islet Encapsulation: New Developments for the Treatment of Type 1 Diabetes 2022, 13, 869984	3
79	Injectable and self-healing double network polysaccharide hydrogel as a minimally-invasive delivery platform. 2022 , 119585	4
78	Amphiphilic block copolymers: From synthesis including living polymerization methods to applications in drug delivery. 2022 , 172, 111224	2
77	Applications of responsive hydrogel to enhance the water recovery via membrane distillation and forward osmosis: A review. 2022 , 47, 102828	O
76	Engineered Extracellular Vesicles as Intelligent Nanosystem for Next-Generation of Nanomedicine.	3
75	Cationic Polyelectrolytes Containing Perfluorinated Groups: Synthesis and Self-Assembly Properties in Aqueous Solutions. 2022 , 2, 194-210	1
74	pH-thermoresponsive hydrogel-treated fabric for treating reinfected wounds. 2022 , 411-456	
73	Synthesis of N-vinylcaprolactam and methacrylic acid based hydrogels and investigation of drug release characteristics.	O
72	pH-Responsive Hydrogel Beads Based on Alginate, ECarrageenan and Poloxamer for Enhanced Curcumin, Natural Bioactive Compound, Encapsulation and Controlled Release Efficiency. 2022 , 27, 4045	3
71	Microorganism-derived biological macromolecules for tissue engineering.	O

70 Functionalization of Nanomaterials: Synthesis and Characterization. 1-26

69	Multiresponsive Fluorinated Polymers as a Theragnostic Platform Using 19F MRI. 2022 , 111381		1
68	Nanocarriers: A boon to the drug delivery systems. 2022 , 555-584		
67	Recent Advances in Stimuli-Responsive Shape-Morphing Hydrogels. 2203323		4
66	Chitosan and carrageenan-based biocompatible hydrogel platforms for cosmeceutical, drug delivery and biomedical applications. <i>Starch/Staerke</i> , 2200052	2.3	O
65	Fundamentals of Hydrogel-Based Valves and Chemofluidic Transistors for Lab-on-a-Chip Technology: A Tutorial Review. <i>Advanced Materials Technologies</i> , 2200417	6.8	3
64	Facile Construction of a Two-in-One Injectable Micelleplex-Loaded Thermogel System for the Prolonged Delivery of Plasmid DNA. <i>Biomacromolecules</i> ,	6.9	1
63	Hydrogels as functional components in artificial cell systems. <i>Nature Reviews Chemistry</i> ,	34.6	5
62	Functional Principal of Nanotechnology in Clinical Research. 2022 , 33-73		
61	Recent advances in synthesis, properties and applications of pH, light-responsive and functionalized surface active ionic liquids. 2022 , 2, 100046		O
60	Advanced antifouling and antibacterial hydrogels enabled by the controlled thermo-responses of a biocompatible polymer composite.		О
59	Recent Trends in Sense-and-Release Platforms Employing Electrochemically-Triggered Payload (Drugs) Release 🖪 Review.		O
58	Mucoadhesive Polymers and Their Applications in Drug Delivery Systems for the Treatment of Bladder Cancer. 2022 , 8, 587		1
57	Interpenetrating polymeric network (IPNs) in ophthalmic drug delivery: Breaking the barriers.		O
56	In situ forming thermosensitive vaginal hydrogels containing curcumin-loaded polymeric nanoparticles with their sustained release: rheological measurements and cytotoxicity effect on cervix cancer cell.		0
55	Biodegradable Superabsorbent Materials. 2022 , 141-171		O
54	Viscoelastic properties of pNIPAM-hydrogels: A mode-coupling theory study. 2022 , 157, 114901		0
53	Research progress and clinical application of stimuli-responsive hydrogels in cervical cancer. 14, 188-19	8	O

52	4D Printing of Hydrogels: Innovation in Material Design and Emerging Smart Systems for Drug Delivery. 2022 , 15, 1282	4
51	pH variation in medical implant biofilms: Causes, measurements, and its implications for antibiotic resistance. 13,	1
50	Carboxymethyl cellulose-based semi-IPN hydrogel nanocomposite with improved physicochemical and mechanical properties. 2022 , 29,	О
49	Hydrogel interfaces for merging humans and machines.	11
48	PREPARATION AND SWELLING PROPERTIES OF POLY(3,4 ETHYLENEDIOXYTHIOPHENE)/POLY(ACRYLIC ACID)/BENTONITE COMPOSITE HYDROGELS.	О
47	Translating controlled release systems from biomedicine to agriculture. 1,	2
46	Controlled gel expansion through colloid oscillation. 2022 , 106,	О
45	Nanoparticle release from anionic nanocellulose hydrogel matrix. 2022 , 29, 9707-9717	O
44	Synthesis, properties, and applications of chitosan hydrogels as anti-inflammatory drug delivery system.	Ο
43	ROS-responsive PPGF nanofiber membrane as a drug delivery system for long-term drug release in attenuation of osteoarthritis. 2022 , 7,	Ο
42	Silk-elastinlike protein-based hydrogels for drug delivery and embolization. 2022, 191, 114579	1
41	Application of single and cooperative different delivery systems for the treatment of intervertebral disc degeneration. 10,	Ο
40	Introduction to smart polymers and their application. 2023 , 1-46	Ο
39	Research Progress of Collagen Material in Burn Wound Repair. 2022 , 12, 11451-11454	O
38	Fabrication of pH responsive hydrogel blends of chondroitin sulfate/pluronic F-127 for the controlled release of ketorolac: its characterization and acute oral toxicity study. 1-12	О
37	Promising Delivery Platform for Smart Pest Control with High Water-Retaining Capacity. 2022 , 14, 55062-55	074
36	Fabrication and characterization of a bilayered system enabling sustained release of bioflavonoids derived from mandarin biomass. 2022 , 100114	O
35	Core-shell structured MCM-48-type silica-polymer hybrid material synthesis and characterization. 2023 , 25,	О

34	Bioresponsive Immunotherapeutic Materials. 2209778	O
33	Hemicellulose-based hydrogels for advanced applications. 10,	O
32	Recent Advances in Cellulose-Based Hydrogels: Food Applications. 2023 , 12, 350	1
31	Development of highly-reproducible hydrogel based bioink for regeneration of skin-tissues via 3-D bioprinting technology. 2023 , 230, 123131	O
30	Hydrogels for additive manufacturing in scaffolding applications: A review. 2023, 103-129	0
29	Current State of Cold Atmospheric Plasma and Cancer-Immunity Cycle: Therapeutic Relevance and Overcoming Clinical Limitations Using Hydrogels. 2205803	O
28	Polyphosphazenes Promising Candidate for Drug Delivery, Bioimaging, and Tissue Engineering: A Review. 2200553	O
27	Porous Carbon Materials Enhanced the Therapeutic Efficacy of Anticancer Drugs. 2023 , 939-954	O
26	THE EFFECT OF POLYMERIC HYDROGEL APPLICATION ON GERMINATION UNDER SALINE IRRIGATION WATER: CASE STUDY OF BARLEY.	0
25	Synthesis of modified tannic acid hydrogel for the transdermal delivery of curcumin. 2023 , 11, 109862	O
24	4D printed untethered milli-gripper fabricated using a biodegradable and biocompatible electroand magneto-active hydrogel. 2023 , 384, 133654	0
23	Porous Hydrogels: Present Challenges and Future Opportunities. 2023 , 39, 2092-2111	O
22	Enzyme-responsive polycationic silver nanocluster-loaded PCL nanocomposites for antibacterial applications. 2023 , 28, 101376	0
21	Injectable Thermosensitive Nanocomposites Based on Poly(N-vinylcaprolactam) and Silica Particles for Localized Release of Hydrophilic and Hydrophobic Drugs. 2023 , 39, 2380-2388	O
20	Nutrients Delivery for Management and Prevention of Diseases. 2023, 491-519	0
19	Polymer Gels: Classification and Recent Developments in Biomedical Applications. 2023 , 9, 161	1
18	Mucoadhesive chitosan/polyvinylpyrrolidone-co-poly (2-acrylamide-2-methylpropane sulphonic acid) based hydrogels of captopril with adjustable properties as sustained release carrier: Formulation design and toxicological evaluation. 2023 , 81, 104291	0
17	CoreBhell Particles: From Fabrication Methods to Diverse Manipulation Techniques. 2023 , 14, 497	O

16	Bacterial cellulose hydrogel for sensors. 2023 , 461, 142062	2
15	Poly(ethylene glycol) diacrylate based hydrogel filled micropore with enhanced sensing capability. 2023 , 1251, 341000	O
14	AKILLI MALZEME OLARAK POLMERLER VE UYGULAMALARI. 274-299	O
13	Therapeutic Efficacy of Polymeric Biomaterials in Treating Diabetic Wounds&n Upcoming Wound Healing Technology. 2023 , 15, 1205	Ο
12	Smart stimuli-responsive chitosan hydrogel for drug delivery: A review. 2023 , 235, 123902	O
11	pH-activated antibiofilm strategies for controlling dental caries. 13,	O
10	Temperature-Responsive Double-Network Cooling Hydrogels. 2023, 5, 2562-2574	O
9	Fabrication and characterization of novel semi-IPN hydrogels based on xanthan gum and polyvinyl pyrrolidone-co-poly (2-acrylamido-2-methyl propane sulfonic acid) for the controlled delivery of venlafaxine. 2022 , 61, 577-592	0
8	Rheological and low field NMR characterization of hydrophobically-modified PEG hydrogels for drug delivery. 2023 , 637, 122882	O
7	Synthesis of NVCL-NIPAM Hydrogels Using PEGDMA as a Chemical Crosslinker for Controlled Swelling Behaviours in Potential Shapeshifting Applications. 2023 , 9, 248	O
6	Photodegradation Investigation Points to Aloe Vera as a Photoprotector for Poly(Lactic Acid).	O
5	Nanofluorapatite Hydrogels in the Treatment of Dentin Hypersensitivity: A Study of Physiochemical Properties and Fluoride Release. 2023 , 9, 271	O
4	Large amplitude oscillatory shear studies on dense PNIPAM microgel colloidal glasses.	O
3	Injectable Hydrogels Based on Cyclodextrin/Cholesterol Inclusion Complexation and Loaded with 5-Fluorouracil/Methotrexate for Breast Cancer Treatment. 2023 , 9, 326	O
2	Soft Hydrogel Shapeability via Supportive Bath Matching in Embedded 3D Printing.	O
1	Bio-nanomaterials and their applications. 2023 , 461-473	O