Andreas Lendlein

List of Publications by Citations

622 papers	22,955 citations	64 h-index	139 g-index
678 ext. papers	25,044 ext. citations	4.9 avg, IF	7.38 L-index

#	Paper	IF	Citations
622	Shape-Memory Polymers. *Angewandte Chemie - International Edition*, **2002**, 41, 2034	16.4	2031
621	Biodegradable, elastic shape-memory polymers for potential biomedical applications. *Science*, **2002** , 296, 1673-6	33.3	1728
620	Light-induced shape-memory polymers. *Nature*, **2005**, 434, 879-82	50.4	1601
619	Shape-memory polymers. *Materials Today*, **2007**, 10, 20-28	21.8	880
618	Multifunctional shape-memory polymers. *Advanced Materials*, **2010**, 22, 3388-410	24	724
617	Initiation of shape-memory effect by inductive heating of magnetic nanoparticles in thermoplastic polymers. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 3540-5	11.5	672
616	Protein interactions with polymer coatings and biomaterials. *Angewandte Chemie - International Edition*, **2014**, 53, 8004-31	16.4	500
615	Polymeric triple-shape materials. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 18043-7	11.5	400
614	Bcl-2 engineered MSCs inhibited apoptosis and improved heart function. *Stem Cells*, **2007**, 25, 2118-27	5.8	376
613	Reversible bidirectional shape-memory polymers. *Advanced Materials*, **2013**, 25, 4466-9	24	321
612	Shape-memory polymers as a technology platform for biomedical applications. *Expert Review of Medical Devices*, **2010**, 7, 357-79	3.5	313
611	Actively moving polymers. *Soft Matter*, **2006**, 3, 58-67	3.6	273
610	Reprogrammable recovery and actuation behaviour of shape-memory polymers. *Nature Reviews Materials*, **2019**, 4, 116-133	73.3	260
609	Temperature-memory polymer actuators. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 12555-9	11.5	235
608	Biodegradable, amorphous copolyester-urethane networks having shape-memory properties. *Angewandte Chemie - International Edition*, **2005**, 44, 1188-92	16.4	212
607	Shape-memory polymer networks from oligo(?-caprolactone)dimethacrylates. *Journal of Polymer Science Part A*, **2005**, 43, 1369-1381	2.5	193
606	Evaluation of a degradable shape-memory polymer network as matrix for controlled drug release. *Journal of Controlled Release*, **2009**, 138, 243-50	11.7	190

605	Reversible triple-shape effect of polymer networks containing polypentadecalactone- and poly(epsilon-caprolactone)-segments. *Advanced Materials*, **2010**, 22, 3424-9	24	181
604	Shape-Memory Hydrogels: Evolution of Structural Principles To Enable Shape Switching of Hydrophilic Polymer Networks. *Accounts of Chemical Research*, **2017**, 50, 723-732	24.3	178
603	Triple-shape polymers. *Journal of Materials Chemistry*, **2010**, 20, 3335		177
602	Design and preparation of polymeric scaffolds for tissue engineering. *Expert Review of Medical Devices*, **2006**, 3, 835-51	3.5	175
601	One-Step Process for Creating Triple-Shape Capability of AB Polymer Networks. *Advanced Functional Materials*, **2009**, 19, 102-108	15.6	152
600	Polymer networks combining controlled drug release, biodegradation, and shape memory capability. *Advanced Materials*, **2009**, 21, 3394-8	24	149
599	Shape-memory polymers. *Angewandte Chemie - International Edition*, **2002**, 41, 2035-57	16.4	133
598	Non-contact actuation of triple-shape effect in multiphase polymer network nanocomposites in alternating magnetic field. *Journal of Materials Chemistry*, **2010**, 20, 3404		130
597	Temperature-memory polymer networks with crystallizable controlling units. *Advanced Materials*, **2011**, 23, 4058-62	24	125
596	The contemporary role of □caprolactone chemistry to create advanced polymer architectures. *Polymer*, **2013**, 54, 4333-4350	3.9	124
595	Dual-shape properties of triple-shape polymer networks with crystallizable network segments and grafted side chains. *Journal of Materials Chemistry*, **2007**, 17, 2885		121
594	Temperature-Memory Effect of Copolyesterurethanes and their Application Potential in Minimally Invasive Medical Technologies. *Advanced Functional Materials*, **2012**, 22, 3057-3065	15.6	118
593	Shape-memory polymers with multiple transitions: complex actively moving polymers. *Soft Matter*, **2013**, 9, 1744-1755	3.6	113
592	Knowledge-based approach towards hydrolytic degradation of polymer-based biomaterials. *Advanced Materials*, **2009**, 21, 3237-45	24	112
591	Shape-memory polymer networks from oligo[(epsilon-hydroxycaproate)-co-glycolate]dimethacrylates and butyl acrylate with adjustable hydrolytic degradation rate. *Biomacromolecules*, **2007**, 8, 1018-27	6.9	112
590	Controlling the switching temperature of biodegradable, amorphous, shape-memory poly(rac-lactide)urethane networks by incorporation of different comonomers. *Biomacromolecules*, **2009**, 10, 975-82	6.9	105
589	Copolymer Networks Based on Poly(□pentadecalactone) and Poly(?-caprolactone)Segments as a Versatile Triple-Shape Polymer System. *Advanced Functional Materials*, **2010**, 20, 3583-3594	15.6	105
588	Degradable shape-memory polymer networks from oligo[(l-lactide)-ran-glycolide]dimethacrylates. *Soft Matter*, **2007**, 3, 901-909	3.6	101

587	Biodegradable multiblock copolymers based on oligodepsipeptides with shape-memory properties. *Macromolecular Bioscience*, **2009**, 9, 45-54	5.5	100
586	Shape-memory capability of binary multiblock copolymer blends with hard and switching domains provided by different components. *Soft Matter*, **2009**, 5, 676-684	3.6	100
585	Degradable, Multifunctional Cardiovascular Implants: Challenges and Hurdles. *MRS Bulletin*, **2010**, 35, 607-613	3.2	97
584	Melt-Processable Shape-Memory Hydrogels with Self-Healing Ability of High Mechanical Strength. *Macromolecules*, **2016**, 49, 7442-7449	5.5	93
583	Nanocarriers for drug delivery into and through the skin - Do existing technologies match clinical challenges?. *Journal of Controlled Release*, **2016**, 242, 3-15	11.7	93
582	Shape memory nanocomposite fibers for untethered high-energy microengines. *Science*, **2019**, 365, 155-158	33.9	90
581	One step creation of multifunctional 3D architectured hydrogels inducing bone regeneration. *Advanced Materials*, **2015**, 27, 1738-44	24	88
580	Investigation of parameters to achieve temperatures required to initiate the shape-memory effect of magnetic nanocomposites by inductive heating. *Smart Materials and Structures*, **2009**, 18, 025011	3.4	88
579	Magnetic Memory Effect of Nanocomposites. *Advanced Functional Materials*, **2012**, 22, 184-191	15.6	85
578	An entropy-elastic gelatin-based hydrogel system. *Journal of Materials Chemistry*, **2010**, 20, 8875		83
577	Recent Trends in the Chemistry of Shape-Memory Polymers. *Macromolecular Chemistry and Physics*, **2013**, 214, 527-536	2.6	80
576	Stretched poly(acrylonitrile) as a scalable alignment medium for DMSO. *Journal of the American Chemical Society*, **2007**, 129, 6080-1	16.4	80
575	AB-polymer networks based on oligo(epsilon-caprolactone) segments showing shape-memory properties. *Proceedings of the National Academy of Sciences of the United States of America*, **2001**, 98, 842-7	11.5	80
574	Kinetics and dynamics of thermally-induced shape-memory behavior of crosslinked short-chain branched polyethylenes. *Polymer*, **2009**, 50, 5490-5498	3.9	78
573	Synthesis, Shape-Memory Functionality and Hydrolytical Degradation Studies on Polymer Networks from Poly(rac-lactide)-b-poly(propylene oxide)-b-poly(rac-lactide) dimethacrylates. *Advanced Engineering Materials*, **2006**, 8, 439-445	3.5	78
572	Characterization Methods for Shape-Memory Polymers. *Advances in Polymer Science*, **2009**, 97-145	1.3	77
571	Tissue-compatible multiblock copolymers for medical applications, controllable in degradation rate and mechanical properties. *Macromolecular Chemistry and Physics*, **1998**, 199, 2785-2796	2.6	77
570	A thermosensitive morphine-containing hydrogel for the treatment of large-scale skin wounds. *International Journal of Pharmaceutics*, **2013**, 444, 96-102	6.5	76

569	Multifunctional hybrid nanocomposites with magnetically controlled reversible shape-memory effect. *Advanced Materials*, **2013**, 25, 5730-3	24	75
568	Shape-memory polymers as drug carriers--a multifunctional system. *Pharmaceutical Research*, **2010**, 27, 527-9	4.5	74
567	Selective enzymatic degradation of poly(epsilon-caprolactone) containing multiblock copolymers. *European Journal of Pharmaceutics and Biopharmaceutics*, **2008**, 68, 46-56	5.7	73
566	Biocompatibility and inflammatory response in vitro and in vivo to gelatin-based biomaterials with tailorable elastic properties. *Biomaterials*, **2014**, 35, 9755-9766	15.6	69
565	Recent advances in degradable lactide-based shape-memory polymers. *Advanced Drug Delivery Reviews*, **2016**, 107, 136-152	18.5	68
564	Formged□htnispolymere. *Angewandte Chemie*, **2002**, 114, 2138	3.6	68
563	Gelatin-based Hydrogel Degradation and Tissue Interaction : Insights from Multimodal Preclinical Imaging in Immunocompetent Nude Mice. *Theranostics*, **2016**, 6, 2114-2128	12.1	68
562	Quantifying the Shape-Memory Effect of Polymers by Cyclic Thermomechanical Tests. *Polymer Reviews*, **2013**, 53, 6-40	14	67
561	Haemocompatibility testing of biomaterials using human platelets. *Clinical Hemorheology and Microcirculation*, **2013**, 53, 97-115	2.5	63
560	Shape-memory nanocomposites with magnetically adjustable apparent switching temperatures. *Advanced Materials*, **2011**, 23, 4157-62	24	63
559	Shape-Memory Polymer Composites. *Advances in Polymer Science*, **2009**, 41-95	1.3	63
558	Progress in depsipeptide-based biomaterials. *Macromolecular Bioscience*, **2010**, 10, 1008-21	5.5	62
557	Amorphous, Elastic AB Copolymer Networks from Acrylates and Poly[(L-lactide)-ran-glycolide]dimethacrylates. *Advanced Engineering Materials*, **2008**, 10, 494-502	3.5	62
556	Shape-Memory Polymers and Shape-Changing Polymers. *Advances in Polymer Science*, **2009**, 1-40	1.3	61
555	Preparation and biological evaluation of multifunctional PLGA-nanoparticles designed for photoacoustic imaging. *Nanomedicine: Nanotechnology, Biology, and Medicine*, **2011**, 7, 228-37	6	59
554	Enhanced thoracic gene delivery by magnetic nanobead-mediated vector. *Journal of Gene Medicine*, **2008**, 10, 897-909	3.5	59
553	Hydroxy-telechelic copolyesters with well defined sequence structure through ring-opening polymerization. *Macromolecular Chemistry and Physics*, **2000**, 201, 1067-1076	2.6	58
552	In vitro cytotoxicity testing of AB-polymer networks based on oligo(epsilon-caprolactone) segments after different sterilization techniques. *Journal of Biomedical Materials Research Part B*, **2003**, 67, 722-31		57

551	Copolymer Networks From Oligo(ε-caprolactone) and n-Butyl Acrylate Enable a Reversible Bidirectional Shape-Memory Effect at Human Body Temperature. *Macromolecular Rapid Communications*, **2015**, 36, 880-4	4.8	56
550	Design principles for polymers as substratum for adherent cells. *Journal of Materials Chemistry*, **2010**, 20, 8789		56
549	Relaxation based modeling of tunable shape recovery kinetics observed under isothermal conditions for amorphous shape-memory polymers. *Polymer*, **2010**, 51, 6212-6218	3.9	55
548	Formation and size distribution of pores in poly(e-caprolactone) foams prepared by pressure quenching using supercritical CO2. *Journal of Supercritical Fluids*, **2012**, 61, 175-190	4.2	54
547	Mechanically active scaffolds from radio-opaque shape-memory polymer-based composites. *Polymers for Advanced Technologies*, **2011**, 22, 180-189	3.2	54
546	Gelatin functionalization with tyrosine derived moieties to increase the interaction with hydroxyapatite fillers. *Acta Biomaterialia*, **2011**, 7, 1693-701	10.8	54
545	Biodegradable Shape-Memory Polymer Networks: Characterization with Solid-State NMR. *Macromolecules*, **2005**, 38, 3793-3799	5.5	54
544	Multifunctional materials: concepts, function-structure relationships, knowledge-based design, translational materials research. *Multifunctional Materials*, **2018**, 1, 010201	5.2	54
543	From Advanced Biomedical Coatings to Multi-Functionalized Biomaterials. *Journal of Macromolecular Science - Reviews in Macromolecular Chemistry and Physics*, **2006**, 46, 347-375		53
542	Multicomponent protein patterning of material surfaces. *Journal of Materials Chemistry*, **2010**, 20, 7322		52
541	Shape-memory properties of magnetically active triple-shape nanocomposites based on a grafted polymer network with two crystallizable switching segments. *EXPRESS Polymer Letters*, **2012**, 6, 26-40	3.4	52
540	Biocompatibility testing of novel multifunctional polymeric biomaterials for tissue engineering applications in head and neck surgery: an overview. *European Archives of Oto-Rhino-Laryngology*, **2006**, 263, 215-22	3.5	52
539	Bone regeneration induced by a 3D architectured hydrogel in a rat critical-size calvarial defect. *Biomaterials*, **2017**, 113, 158-169	15.6	51
538	Shape-memory effect of micro-/nanoparticles from thermoplastic multiblock copolymers. *Small*, **2014**, 10, 83-7	11	51
537	An annulus fibrosus closure device based on a biodegradable shape-memory polymer network. *Biomaterials*, **2013**, 34, 8105-13	15.6	49
536	Hydrolytic Degradation of Phase-Segregated Multiblock Copoly(ester urethane)s Containing Weak Links. *Macromolecular Chemistry and Physics*, **2001**, 202, 2702-2711	2.6	49
535	Polyethylenimine-mediated gene delivery into human bone marrow mesenchymal stem cells from patients. *Journal of Cellular and Molecular Medicine*, **2011**, 15, 1989-98	5.6	48
534	Shape-memory properties of electrospun non-woven fabrics prepared from degradable polyesterurethanes containing poly(ε-pentadecalactone) hard segments. *European Polymer Journal*, **2012**, 48, 1866-1874	5.2	47

533	Intracardiac injection of matrigel induces stem cell recruitment and improves cardiac functions in a rat myocardial infarction model. *Journal of Cellular and Molecular Medicine*, **2011**, 15, 1310-8	5.6	47
532	Influence of tyrosine-derived moieties and drying conditions on the formation of helices in gelatin. *Biomacromolecules*, **2011**, 12, 75-81	6.9	47
531	Controlled Change of Mechanical Properties during Hydrolytic Degradation of Polyester Urethane Networks. *Macromolecular Chemistry and Physics*, **2010**, 211, 182-194	2.6	46
530	Layer-by-layer deposition of polyelectrolytes--a versatile tool for the in vivo repair of blood vessels. *Angewandte Chemie - International Edition*, **2004**, 43, 926-8	16.4	46
529	Efficient synthesis of pure monotosylated beta-cyclodextrin and its dimers. *Carbohydrate Research*, **2013**, 381, 59-63	2.9	45
528	Adjusting shape-memory properties of amorphous polyether urethanes and radio-opaque composites thereof by variation of physical parameters during programming. *Smart Materials and Structures*, **2010**, 19, 065019	3.4	45
527	Thermally induced shape-memory effects in polymers: Quantification and related modeling approaches. *Journal of Polymer Science, Part B: Polymer Physics*, **2013**, 51, 621-637	2.6	44
526	Hydrolytic degradation of poly(rac-lactide) and poly[(rac-lactide)-co-glycolide] at the air□water interface. *Surface and Interface Analysis*, **2007**, 39, 740-746	1.5	43
525	Memory-effects of magnetic nanocomposites. *Nanoscale*, **2012**, 4, 6181-95	7.7	42
524	Poly(ether imide) membranes modified with poly(ethylene imine) as potential carriers for epidermal substitutes. *Macromolecular Bioscience*, **2006**, 6, 274-84	5.5	42
523	Bioperspectives for Shape-Memory Polymers as Shape Programmable, Active Materials. *Biomacromolecules*, **2019**, 20, 3627-3640	6.9	41
522	Cytocompatibility testing of cell culture modules fabricated from specific candidate biomaterials using injection molding. *Journal of Biotechnology*, **2010**, 148, 76-82	3.7	41
521	Determination of water/polymer interaction parameter for membrane-forming systems by sorption measurement and a fitting technique. *Journal of Membrane Science*, **2005**, 265, 1-12	9.6	41
520	Degradable, Multifunctional Polymeric Biomaterials with Shape-Memory. *Materials Science Forum*, **2005**, 492-493, 219-224	0.4	41
519	Engineering biodegradable micelles of polyethylenimine-based amphiphilic block copolymers for efficient DNA and siRNA delivery. *Journal of Controlled Release*, **2016**, 242, 71-79	11.7	41
518	Grafting of poly(ethylene glycol) monoacrylates on polycarbonateurethane by UV initiated polymerization for improving hemocompatibility. *Journal of Materials Science: Materials in Medicine*, **2013**, 24, 61-70	4.5	40
517	Nanoparticles complexed with gene vectors to promote proliferation of human vascular endothelial cells. *Advanced Healthcare Materials*, **2015**, 4, 1225-35	10.1	40
516	Two stages in three-dimensional in vitro growth of tissue generated by osteoblastlike cells. *Biointerphases*, **2010**, 5, 45-52	1.8	40

515	Controlled Drug Release from Biodegradable Shape-Memory Polymers. *Advances in Polymer Science* , **2009**, 177-205	1.3	40
514	Shape-Memory Polymers and Shape-Changing Polymers **2009**, 1		40
513	Fabrication of reprogrammable shape-memory polymer actuators for robotics. *Science Robotics*, **2018**, 3,	18.6	40
512	Magnetically controlled shape-memory effects of hybrid nanocomposites from oligo(ε-pentadecalactone) and covalently integrated magnetite nanoparticles. *Polymer*, **2014**, 55, 5953-5960	3.9	39
511	Shape-memory properties and degradation behavior of multifunctional electro-spun scaffolds. *International Journal of Artificial Organs*, **2011**, 34, 225-30	1.9	39
510	Viability of human mesenchymal stem cells seeded on crosslinked entropy-elastic gelatin-based hydrogels. *Macromolecular Bioscience*, **2012**, 12, 312-21	5.5	38
509	Enzymatic chain scission kinetics of poly(epsilon-caprolactone) monolayers. *Langmuir*, **2007**, 23, 12202-7	4	37
508	Polymere als Implantatwerkstoffe. *Chemie in Unserer Zeit*, **1999**, 33, 279-295	0.2	37
507	Thermally-Induced Triple-Shape Hydrogels: Soft Materials Enabling Complex Movements. *ACS Applied Materials & Interfaces*, **2016**, 8, 28068-28076	9.5	37
506	The Next 100 Years of Polymer Science. *Macromolecular Chemistry and Physics*, **2020**, 221, 2000216	2.6	36
505	Shape-Memory Effect in Polymers. *Macromolecular Chemistry and Physics*, **2013**, 214, 1175-1177	2.6	35
504	Controlling major cellular processes of human mesenchymal stem cells using microwell structures. *Advanced Healthcare Materials*, **2014**, 3, 1991-2003	10.1	35
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502	Interplay between stiffness and degradation of architectured gelatin hydrogels leads to differential modulation of chondrogenesis in vitro and in vivo. *Acta Biomaterialia*, **2018**, 69, 83-94	10.8	34
501	Comparing techniques for drug loading of shape-memory polymer networks--effect on their functionalities. *European Journal of Pharmaceutical Sciences*, **2010**, 41, 136-47	5.1	34
500	Knowledge-based tailoring of gelatin-based materials by functionalization with tyrosine-derived groups. *Macromolecular Rapid Communications*, **2010**, 31, 1534-9	4.8	34
499	Shape-Memory Polymers for Biomedical Applications. *Advances in Science and Technology*, **2008**, 54, 96-102	0.2	34
498	Microwave plasma surface modification of silicone elastomer with allylamine for improvement of biocompatibility. *Journal of Biomedical Materials Research - Part A*, **2008**, 86, 209-19	5.4	34

497	Self-Assembly of Polyethylenimine-Modified Biodegradable Complex Micelles as Gene Transfer Vector for Proliferation of Endothelial Cells. *Macromolecular Chemistry and Physics*, **2014**, 215, 2463-2472	2.6	33
496	Photocrosslinked co-networks from glycidylmethacrylated gelatin and poly(ethylene glycol) methacrylates. *Macromolecular Bioscience*, **2012**, 12, 484-93	5.5	33
495	Adhesion and activation of platelets from subjects with coronary artery disease and apparently healthy individuals on biomaterials. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2016**, 104, 210-7	3.5	32
494	Functionalization of polycarbonate surfaces by grafting PEG and zwitterionic polymers with a multicomb structure. *Macromolecular Bioscience*, **2013**, 13, 1681-8	5.5	32
493	Wechselwirkungen von Proteinen mit Polymerbeschichtungen und Biomaterialien. *Angewandte Chemie*, **2014**, 126, 8138-8169	3.6	32
492	Progress in biopolymer-based biomaterials and their application in controlled drug delivery. *Expert Review of Medical Devices*, **2013**, 10, 813-33	3.5	32
491	Influence of fiber orientation in electrospun polymer scaffolds on viability, adhesion and differentiation of articular chondrocytes. *Clinical Hemorheology and Microcirculation*, **2012**, 52, 325-36	2.5	32
490	Preparation of highly asymmetric hollow fiber membranes from poly(ether imide) by a modified dry□wet phase inversion technique using a triple spinneret. *Journal of Membrane Science*, **2005**, 262, 69-80	9.6	32
489	Surface functionalization of poly(ether imide) membranes with linear, methylated oligoglycerols for reducing thrombogenicity. *Macromolecular Rapid Communications*, **2012**, 33, 1487-92	4.8	31
488	Synthesis and characterization of □dihydroxy-telechelic oligo(p-dioxanone). *Journal of Materials Chemistry*, **2007**, 17, 4050		30
487	Formation of poly(epsilon-caprolactone) scaffolds loaded with small molecules by integrated processes. *Journal of Biomechanics*, **2007**, 40 Suppl 1, S80-8	2.9	29
486	Platelets and coronary artery disease: Interactions with the blood vessel wall and cardiovascular devices. *Biointerphases*, **2016**, 11, 029702	1.8	29
485	Poly(ethylene glycol) grafting to poly(ether imide) membranes: influence on protein adsorption and thrombocyte adhesion. *Macromolecular Bioscience*, **2013**, 13, 1720-9	5.5	28
484	Influence of the addition of water to amorphous switching domains on the simulated shape-memory properties of poly(l-lactide). *Polymer*, **2013**, 54, 4204-4211	3.9	28
483	Shape-Memory Hydrogels with Switching Segments Based on Oligo(□pentadecalactone). *Macromolecular Materials and Engineering*, **2012**, 297, 1184-1192	3.9	27
482	Potential of NOD receptor ligands as immunomodulators in particulate vaccine carriers. *Journal of Controlled Release*, **2012**, 164, 299-306	11.7	27
481	Demonstrating the influence of water on shape-memory polymer networks based on poly[(rac-lactide)-co-glycolide] segments in vitro. *International Journal of Artificial Organs*, **2011**, 34, 172-9	1.9	27
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478	In Vitro Thrombogenicity Testing of Biomaterials. *Advanced Healthcare Materials*, **2019**, 8, e1900527	10.1	25
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476	Triple-shape effect in polymer-based composites by cleverly matching geometry of active component with heating method. *Advanced Materials*, **2013**, 25, 5514-8	24	25
475	Hyaluronic acid-based hydrogels crosslinked by copper-catalyzed azide-alkyne cycloaddition with tailorable mechanical properties. *International Journal of Artificial Organs*, **2011**, 34, 192-7	1.9	25
474	All-atom molecular dynamics simulation studies of fully hydrated gel phase DPPG and DPPE bilayers. *Journal of Molecular Structure*, **2009**, 921, 38-50	3.4	25
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472	Shape-Memory Properties of Polyetherurethane Foams Prepared by Thermally Induced Phase Separation. *Advanced Engineering Materials*, **2012**, 14, 818-824	3.5	24
471	Hemocompatible polyurethane/gelatin-heparin nanofibrous scaffolds formed by a bi-layer electrospinning technique as potential artificial blood vessels. *Frontiers of Chemical Science and Engineering*, **2011**, 5, 392-400	4.5	24
470	Determination of solvent/polymer interaction parameters of moderately concentrated polymer solutions by vapor pressure osmometry. *Polymer*, **2008**, 49, 2587-2594	3.9	24
469	Shape-Memory Polymer Composites **2009**, 41		24
468	Multivalent grafting of hyperbranched oligo- and polyglycerols shielding rough membranes to mediate hemocompatibility. *Journal of Materials Chemistry B*, **2014**, 2, 3626-3635	7.3	23
467	One-way and reversible dual-shape effect of polymer networks based on polypentadecalactone segments. *International Journal of Artificial Organs*, **2011**, 34, 231-7	1.9	23
466	Soft poly(n-butyl acrylate) networks with tailored mechanical properties designed as substrates for in vitro models. *Polymers for Advanced Technologies*, **2011**, 22, 126-132	3.2	23
465	Localized SDF-1alpha gene release mediated by collagen substrate induces CD117 stem cells homing. *Journal of Cellular and Molecular Medicine*, **2010**, 14, 392-402	5.6	23
464	Intracardiac erythropoietin injection reveals antiinflammatory potential and improved cardiac functions detected by Forced Swim Test. *Transplantation Proceedings*, **2008**, 40, 962-6	1.1	23
463	Preparation of aminated microfiltration membranes by degradable functionalization using plain PEI membranes with various morphologies. *Journal of Membrane Science*, **2007**, 292, 145-157	9.6	23
462	Effect of cytochrome P450-dependent epoxyeicosanoids on Ristocetin-induced thrombocyte aggregation. *Clinical Hemorheology and Microcirculation*, **2012**, 52, 403-16	2.5	22

461	Polymers and drugs suitable for the development of a drug delivery drainage system in glaucoma surgery. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2011**, 97, 388-95	3.5	22
460	Enzymatic monolayer degradation study of multiblock copolymers consisting of poly(ε-caprolactone) and poly(p-dioxanone) blocks. *Thin Solid Films*, **2008**, 516, 8821-8828	2.2	22
459	Molecular Modeling Investigations of Dry and Two Water-Swollen States of Biodegradable Polymers. *Advanced Engineering Materials*, **2006**, 8, 434-439	3.5	22
458	Modeling the heat transfer in magneto-sensitive shape-memory polymer nanocomposites with dynamically changing surface area to volume ratios. *Polymer*, **2015**, 65, 215-222	3.9	21
457	Noncontinuously Responding Polymeric Actuators. *ACS Applied Materials & Interfaces*, **2017**, 9, 33559-33564	9.5	21
456	Pro-angiogenic CD14(++) CD16(+) CD163(+) monocytes accelerate the in vitro endothelialization of soft hydrophobic poly (n-butyl acrylate) networks. *Acta Biomaterialia*, **2012**, 8, 4253-9	10.8	21
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454	Simulating the Shape-Memory Behavior of Amorphous Switching Domains of Poly(L-lactide) by Molecular Dynamics. *Macromolecular Chemistry and Physics*, **2013**, 214, 1273-1283	2.6	21
453	Engineering Materials for Regenerative Medicine. *MRS Bulletin*, **2010**, 35, 571-577	3.2	21
452	Hemocompatibility of poly(ether imide) membranes functionalized with carboxylic groups. *Journal of Materials Science: Materials in Medicine*, **2008**, 19, 3203-10	4.5	21
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450	Shape-memory properties of hydrogels having a poly(ε-caprolactone) crosslinker and switching segment in an aqueous environment. *European Polymer Journal*, **2013**, 49, 2457-2466	5.2	20
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447	Gene delivery to the heart by magnetic nanobeads. *Journal of Magnetism and Magnetic Materials*, **2007**, 311, 336-341	2.8	20
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