Andreas Lendlein

List of Publications by Year
in descending order

646 papers	27,199 citations	11608 70 h-index	7718 150 g-index
678 all docs	678 docs citations	678 times ranked	17934 citing authors

#	Article	IF	Citations
1	Shape-Memory Polymers. Angewandte Chemie - International Edition, 2002, 41, 2034.	7.2	2,287
2	Biodegradable, Elastic Shape-Memory Polymers for Potential Biomedical Applications. Science, 2002, 296, 1673-1676.	6.0	1,971
3	Light-induced shape-memory polymers. Nature, 2005, 434, 879-882.	13.7	1,808
4	Shape-memory polymers. Materials Today, 2007, 10, 20-28.	8.3	1,078
5	Multifunctional Shapeâ€Memory Polymers. Advanced Materials, 2010, 22, 3388-3410.	11.1	835
6	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, 3540-3545.	3.3	735
7	Protein Interactions with Polymer Coatings and Biomaterials. Angewandte Chemie - International Edition, 2014, 53, 8004-8031.	7.2	614
8	Polymers Move in Response to Light. Advanced Materials, 2006, 18, 1471-1475.	11.1	565
9	Reprogrammable recovery and actuation behaviour of shape-memory polymers. Nature Reviews Materials, 2019, 4, 116-133.	23.3	450
10	Polymeric triple-shape materials. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 18043-18047.	3.3	440
11	Bcl-2 Engineered MSCs Inhibited Apoptosis and Improved Heart Function. Stem Cells, 2007, 25, 2118-2127.	1.4	410
12	Reversible Bidirectional Shapeâ€Memory Polymers. Advanced Materials, 2013, 25, 4466-4469.	11.1	410
13	Shape-memory polymers as a technology platform for biomedical applications. Expert Review of Medical Devices, 2010, 7, 357-379.	1.4	382
14	Actively moving polymers. Soft Matter, 2007, 3, 58-67.	1.2	300
15	Temperature-memory polymer actuators. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 12555-12559.	3.3	273
16	Shape-Memory Hydrogels: Evolution of Structural Principles To Enable Shape Switching of Hydrophilic Polymer Networks. Accounts of Chemical Research, 2017, 50, 723-732.	7.6	245
17	Biodegradable, Amorphous Copolyester-Urethane Networks Having Shape-Memory Properties. Angewandte Chemie - International Edition, 2005, 44, 1188-1192.	7.2	226
18	Evaluation of a degradable shape-memory polymer network as matrix for controlled drug release. Journal of Controlled Release, 2009, 138, 243-250.	4.8	215

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19	Shape-memory polymer networks from oligo(?-caprolactone)dimethacrylates. Journal of Polymer Science Part A, 2005, 43, 1369-1381.	2.5	206
20	Design and preparation of polymeric scaffolds for tissue engineering. Expert Review of Medical Devices, 2006, 3, 835-851.	1.4	200
21	Reversible Tripleâ€Shape Effect of Polymer Networks Containing Polypentadecalactoneâ€•and Poly(Îµâ€caprolactone)â€Segments. Advanced Materials, 2010, 22, 3424-3429.	11.1	197
22	Triple-shape polymers. Journal of Materials Chemistry, 2010, 20, 3335.	6.7	186
23	Polymer Networks Combining Controlled Drug Release, Biodegradation, and Shape Memory Capability. Advanced Materials, 2009, 21, 3394-3398.	11.1	163
24	Oneâ€Step Process for Creating Tripleâ€Shape Capability of AB Polymer Networks. Advanced Functional Materials, 2009, 19, 102-108.	7.8	159
25	The contemporary role of Îµ-caprolactone chemistry to create advanced polymer architectures. Polymer, 2013, 54, 4333-4350.	1.8	154
26	Shape memory nanocomposite fibers for untethered high-energy microengines. Science, 2019, 365, 155-158.	6.0	151
27	Shape-memory polymers. Angewandte Chemie - International Edition, 2002, 41, 2035-57.	7.2	149
28	Non-contact actuation of triple-shape effect in multiphase polymer network nanocomposites in alternating magnetic field. Journal of Materials Chemistry, 2010, 20, 3404.	6.7	139
29	Dual-shape properties of triple-shape polymer networks with crystallizable network segments and grafted side chains. Journal of Materials Chemistry, 2007, 17, 2885.	6.7	137
30	Temperatureâ€Memory Polymer Networks with Crystallizable Controlling Units. Advanced Materials, 2011, 23, 4058-4062.	11.1	136
31	Knowledgeâ€Based Approach towards Hydrolytic Degradation of Polymerâ€Based Biomaterials. Advanced Materials, 2009, 21, 3237-3245.	11.1	134
32	Temperatureâ€Memory Effect of Copolyesterurethanes and their Application Potential in Minimally Invasive Medical Technologies. Advanced Functional Materials, 2012, 22, 3057-3065.	7.8	132
33	Shape-memory polymers with multiple transitions: complex actively moving polymers. Soft Matter, 2013, 9, 1744-1755.	1.2	125
34	Shape-Memory Polymer Networks from Oligo[(Îµ-hydroxycaproate)-co-glycolate]dimethacrylates and Butyl Acrylate with Adjustable Hydrolytic Degradation Rate. Biomacromolecules, 2007, 8, 1018-1027.	2.6	121
35	Stimuliâ€Sensitive Polymers. Advanced Materials, 2010, 22, 3344-3347.	11.1	120
36	Melt-Processable Shape-Memory Hydrogels with Self-Healing Ability of High Mechanical Strength. Macromolecules, 2016, 49, 7442-7449.	2.2	120

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37	Copolymer Networks Based on Poly(<i>Ï‰</i>â€pentadecalactone) and Poly(<i>Ïµ</i>â€caprolactone)Segments as a Versatile Tripleâ€Shape Polymer System. Advanced Functional Materials, 2010, 20, 3583-3594.	7.8	119
38	Degradable, Multifunctional Cardiovascular Implants: Challenges and Hurdles. MRS Bulletin, 2010, 35, 607-613.	1.7	116
39	Nanocarriers for drug delivery into and through the skin â€" Do existing technologies match clinical challenges?. Journal of Controlled Release, 2016, 242, 3-15.	4.8	116
40	Controlling the Switching Temperature of Biodegradable, Amorphous, Shape-Memory Poly(<i>rac</i>-lactide)urethane Networks by Incorporation of Different Comonomers. Biomacromolecules, 2009, 10, 975-982.	2.6	113
41	Shape-memory capability of binary multiblock copolymer blends with hard and switching domains provided by different components. Soft Matter, 2009, 5, 676-684.	1.2	110
42	Biodegradable Multiblock Copolymers Based on Oligodepsipeptides with Shapeâ€Memory Properties. Macromolecular Bioscience, 2009, 9, 45-54.	2.1	108
43	Degradable shape-memory polymer networks from oligo[(l-lactide)-ran-glycolide]dimethacrylates. Soft Matter, 2007, 3, 901.	1.2	104
44	AB-polymer networks based on oligo(varepsilon -caprolactone) segments showing shape-memory properties. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 842-847.	3.3	100
45	One Step Creation of Multifunctional 3D Architectured Hydrogels Inducing Bone Regeneration. Advanced Materials, 2015, 27, 1738-1744.	11.1	100
46	Magnetic Memory Effect of Nanocomposites. Advanced Functional Materials, 2012, 22, 184-191.	7.8	98
47	Gelatin-based Hydrogel Degradation and Tissue Interaction <i>in vivo</i>: Insights from Multimodal Preclinical Imaging in Immunocompetent Nude Mice. Theranostics, 2016, 6, 2114-2128.	4.6	96
48	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.	1.8	95
49	An entropyâ€"elastic gelatin-based hydrogel system. Journal of Materials Chemistry, 2010, 20, 8875.	6.7	94
50	Stretched Poly(acrylonitrile) as a Scalable Alignment Medium for DMSO. Journal of the American Chemical Society, 2007, 129, 6080-6081.	6.6	92
51	Recent Trends in the Chemistry of Shapeâ€Memory Polymers. Macromolecular Chemistry and Physics, 2013, 214, 527-536.	1.1	92
52	Biocompatibility and inflammatory response inÂvitro and inÂvivo to gelatin-based biomaterials with tailorable elastic properties. Biomaterials, 2014, 35, 9755-9766.	5.7	89
53	Shape-Memory Polymers as Drug Carriersâ€"A Multifunctional System. Pharmaceutical Research, 2010, 27, 527-529.	1.7	88
54	Characterization Methods for Shape-Memory Polymers. Advances in Polymer Science, 2009, , 97-145.	0.4	87

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55	Tissue-compatible multiblock copolymers for medical applications, controllable in degradation rate and mechanical properties. Macromolecular Chemistry and Physics, 1998, 199, 2785-2796.	1.1	86
56	A thermosensitive morphine-containing hydrogel for the treatment of large-scale skin wounds. International Journal of Pharmaceutics, 2013, 444, 96-102.	2.6	86
57	Multifunctional Hybrid Nanocomposites with Magnetically Controlled Reversible Shapeâ€“Memory Effect. Advanced Materials, 2013, 25, 5730-5733.	11.1	83
58	From Advanced Biomedical Coatings to Multiâ€Functionalized Biomaterials. Journal of Macromolecular Science - Reviews in Macromolecular Chemistry and Physics, 2006, 46, 347-375.	2.2	82
59	Selective enzymatic degradation of poly(Îµ-caprolactone) containing multiblock copolymers. European Journal of Pharmaceutics and Biopharmaceutics, 2008, 68, 46-56.	2.0	82
60	Materials in Regenerative Medicine. Advanced Materials, 2009, 21, 3231-3234.	11.1	82
61	Multifunctional materials: concepts, function-structure relationships, knowledge-based design, translational materials research. Multifunctional Materials, 2018, 1, 010201.	2.4	82
62	Kinetics and dynamics of thermally-induced shape-memory behavior of crosslinked short-chain branched polyethylenes. Polymer, 2009, 50, 5490-5498.	1.8	81
63	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.	1.6	80
64	Haemocompatibility testing of biomaterials using human platelets. Clinical Hemorheology and Microcirculation, 2013, 53, 97-115.	0.9	79
65	Shape-Memory Polymer Composites. Advances in Polymer Science, 2009, , 41-95.	0.4	78
66	Fabrication of reprogrammable shape-memory polymer actuators for robotics. Science Robotics, 2018, 3, .	9.9	78
67	Shape-Memory Polymers and Shape-Changing Polymers. Advances in Polymer Science, 2009, , 1-40.	0.4	77
68	Recent advances in degradable lactide-based shape-memory polymers. Advanced Drug Delivery Reviews, 2016, 107, 136-152.	6.6	77
69	FormgedÃ‚chtnispolymere. Angewandte Chemie, 2002, 114, 2138.	1.6	76
70	Quantifying the Shape-Memory Effect of Polymers by Cyclic Thermomechanical Tests. Polymer Reviews, 2013, 53, 6-40.	5.3	76
71	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, 1310-1318.	1.6	72
72	The Next 100 Years of Polymer Science. Macromolecular Chemistry and Physics, 2020, 221, 2000216.	1.1	69

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73	Progress in Depsipeptideâ€Based Biomaterials. Macromolecular Bioscience, 2010, 10, 1008-1021.	2.1	68
74	Shapeâ€Memory Nanocomposites with Magnetically Adjustable Apparent Switching Temperatures. Advanced Materials, 2011, 23, 4157-4162.	11.1	67
75	Copolymer Networks From Oligo(<i>Îµ</i>-caprolactone) and<i>n</i>-Butyl Acrylate Enable a Reversible Bidirectional Shape-Memory Effect at Human Body Temperature. Macromolecular Rapid Communications, 2015, 36, 880-884.	2.0	67
76	Hydroxy-telechelic copolyesters with well defined sequence structure through ring-opening polymerization. Macromolecular Chemistry and Physics, 2000, 201, 1067-1076.	1.1	66
77	Enhanced thoracic gene delivery by magnetic nanobeadâ€mediated vector. Journal of Gene Medicine, 2008, 10, 897-909.	1.4	66
78	Preparation and biological evaluation of multifunctional PLGA-nanoparticles designed for photoacoustic imaging. Nanomedicine: Nanotechnology, Biology, and Medicine, 2011, 7, 228-237.	1.7	66
79	Bioperspectives for Shape-Memory Polymers as Shape Programmable, Active Materials. Biomacromolecules, 2019, 20, 3627-3640.	2.6	66
80	Relaxation based modeling of tunable shape recovery kinetics observed under isothermal conditions for amorphous shape-memory polymers. Polymer, 2010, 51, 6212-6218.	1.8	64
81	In vitro cytotoxicity testing of AB-polymer networks based on oligo(?-caprolactone) segments after different sterilization techniques. Journal of Biomedical Materials Research Part B, 2003, 67B, 722-731.	3.0	63
82	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, 215-222.	0.8	63
83	Amorphous, Elastic AB Copolymer Networks from Acrylates and Poly[(<scp>L</scp>â€lactide)â€<i>ran</i>â€glycolide]dimethacrylates. Advanced Engineering Materials, 2008, 10, 494-502.	1.6	63
84	Progress in actively moving polymers. Journal of Materials Chemistry, 2010, 20, 3332.	6.7	63
85	Mechanically active scaffolds from radioâ€opaque shapeâ€memory polymerâ€based composites. Polymers for Advanced Technologies, 2011, 22, 180-189.	1.6	62
86	Gelatin functionalization with tyrosine derived moieties to increase the interaction with hydroxyapatite fillers. Acta Biomaterialia, 2011, 7, 1693-1701.	4.1	60
87	Design principles for polymers as substratum for adherent cells. Journal of Materials Chemistry, 2010, 20, 8789.	6.7	59
88	Polyethylenimine-mediated gene delivery into human bone marrow mesenchymal stem cells from patients. Journal of Cellular and Molecular Medicine, 2011, 15, 1989-1998.	1.6	59
89	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.	1.1	58
90	Bone regeneration induced by a 3D architectured hydrogel in a rat critical-size calvarial defect. Biomaterials, 2017, 113, 158-169.	5.7	58

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91	Biodegradable Shape-Memory Polymer Networks:Â Characterization with Solid-State NMR. Macromolecules, 2005, 38, 3793-3799.	2.2	57
92	Formation and size distribution of pores in poly(É›-caprolactone) foams prepared by pressure quenching using supercritical CO2. Journal of Supercritical Fluids, 2012, 61, 175-190.	1.6	57
93	Shapeâ€Memory Effect of Microâ€/Nanoparticles from Thermoplastic Multiblock Copolymers. Small, 2014, 10, 83-87.	5.2	57
94	An annulus fibrosus closure device based on a biodegradable shape-memory polymer network. Biomaterials, 2013, 34, 8105-8113.	5.7	56
95	Efficient synthesis of pure monotosylated beta-cyclodextrin and its dimers. Carbohydrate Research, 2013, 381, 59-63.	1.1	56
96	Hydrolytic Degradation of Phase-Segregated Multiblock Copoly(ester urethane)s Containing Weak Links. Macromolecular Chemistry and Physics, 2001, 202, 2702-2711.	1.1	55
97	Multicomponent protein patterning of material surfaces. Journal of Materials Chemistry, 2010, 20, 7322.	6.7	55
98	Layer-by-Layer Deposition of Polyelectrolytesâ€”A Versatile Tool for the In Vivo Repair of Blood Vessels. Angewandte Chemie - International Edition, 2004, 43, 926-928.	7.2	54
99	In Vitro Thrombogenicity Testing of Biomaterials. Advanced Healthcare Materials, 2019, 8, e1900527.	3.9	54
100	Controlled Change of Mechanical Properties during Hydrolytic Degradation of Polyester Urethane Networks. Macromolecular Chemistry and Physics, 2010, 211, 182-194.	1.1	52
101	Two stages in three-dimensional <i>in vitro</i> growth of tissue generated by osteoblastlike cells. Biointerphases, 2010, 5, 45-52.	0.6	52
102	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.	4.1	52
103	Shape-memory properties of electrospun non-woven fabrics prepared from degradable polyesterurethanes containing poly(Ï‰-pentadecalactone) hard segments. European Polymer Journal, 2012, 48, 1866-1874.	2.6	51
104	Magnetically controlled shape-memory effects of hybrid nanocomposites from oligo(Ï‰-pentadecalactone) and covalently integrated magnetite nanoparticles. Polymer, 2014, 55, 5953-5960.	1.8	51
105	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.	1.8	49
106	Memory-effects of magnetic nanocomposites. Nanoscale, 2012, 4, 6181.	2.8	49
107	Influence of Tyrosine-Derived Moieties and Drying Conditions on the Formation of Helices in Gelatin. Biomacromolecules, 2011, 12, 75-81.	2.6	48
108	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.	1.7	48

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109	Thermally induced shapeâ€memory effects in polymers: Quantification and related modeling approaches. Journal of Polymer Science, Part B: Polymer Physics, 2013, 51, 621-637.	2.4	48
110	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.	4.1	47
111	Degradable, Multifunctional Polymeric Biomaterials with Shape-Memory. Materials Science Forum, 2005, 492-493, 219-224.	0.3	47
112	Engineering biodegradable micelles of polyethylenimine-based amphiphilic block copolymers for efficient DNA and siRNA delivery. Journal of Controlled Release, 2016, 242, 71-79.	4.8	47
113	Poly(ether imide) Membranes Modified with Poly(ethylene imine) as Potential Carriers for Epidermal Substitutes. Macromolecular Bioscience, 2006, 6, 274-284.	2.1	46
114	Reprogrammable, magnetically controlled polymeric nanocomposite actuators. Materials Horizons, 2018, 5, 861-867.	6.4	46
115	Hydrolytic degradation of poly(rac-lactide) and poly[(rac-lactide)-co-glycolide] at the airâ€"water interface. Surface and Interface Analysis, 2007, 39, 740-746.	0.8	44
116	Controlled Drug Release from Biodegradable Shape-Memory Polymers. Advances in Polymer Science, 2009, , 177-205.	0.4	44
117	Cytocompatibility testing of cell culture modules fabricated from specific candidate biomaterials using injection molding. Journal of Biotechnology, 2010, 148, 76-82.	1.9	44
118	Viability of Human Mesenchymal Stem Cells Seeded on Crosslinked Entropyâ€Elastic Gelatinâ€Based Hydrogels. Macromolecular Bioscience, 2012, 12, 312-321.	2.1	44
119	Shape-Memory Properties and Degradation Behavior of Multifunctional Electro-Spun Scaffolds. International Journal of Artificial Organs, 2011, 34, 225-230.	0.7	42
120	Thermally-Induced Triple-Shape Hydrogels: Soft Materials Enabling Complex Movements. ACS Applied Materials & Interfaces, 2016, 8, 28068-28076.	4.0	42
121	Progress in biopolymer-based biomaterials and their application in controlled drug delivery. Expert Review of Medical Devices, 2013, 10, 813-833.	1.4	41
122	Controlling Major Cellular Processes of Human Mesenchymal Stem Cells using Microwell Structures. Advanced Healthcare Materials, 2014, 3, 1991-2003.	3.9	41
123	Nanoparticles Complexed with Gene Vectors to Promote Proliferation of Human Vascular Endothelial Cells. Advanced Healthcare Materials, 2015, 4, 1225-1235.	3.9	41
124	Shape-Memory Polymers and Shape-Changing Polymers. Advances in Polymer Science, 2009, , 1-40.	0.4	41
125	Enzymatic Chain Scission Kinetics of Poly(Îµ-caprolactone) Monolayers. Langmuir, 2007, 23, 12202-12207.	1.6	40
126	Comparing techniques for drug loading of shape-memory polymer networks â€" effect on their functionalities. European Journal of Pharmaceutical Sciences, 2010, 41, 136-147.	1.9	39

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127	Knowledgeâ€Based Tailoring of Gelatinâ€Based Materials by Functionalization with Tyrosineâ€Derived Groups. Macromolecular Rapid Communications, 2010, 31, 1534-1539.	2.0	39
128	Surface Functionalization of Poly(ether imide) Membranes with Linear, Methylated Oligoglycerols for Reducing Thrombogenicity. Macromolecular Rapid Communications, 2012, 33, 1487-1492.	2.0	39
129	Microwave plasma surface modification of silicone elastomer with allylamine for improvement of biocompatibility. Journal of Biomedical Materials Research - Part A, 2008, 86A, 209-219.	2.1	38
130	Functionalization of Polycarbonate Surfaces by Grafting <scp>PEG</scp> and Zwitterionic Polymers with a Multicomb Structure. Macromolecular Bioscience, 2013, 13, 1681-1688.	2.1	38
131	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, 210-217.	1.6	38
132	Influence of fiber orientation in electrospun polymer scaffolds on viability, adhesion and differentiation of articular chondrocytes. Clinical Hemorheology and Microcirculation, 2012, 52, 325-336.	0.9	37
133	Photocrosslinked Coâ€Networks from Glycidylmethacrylated Gelatin and Poly(ethylene glycol) Methacrylates. Macromolecular Bioscience, 2012, 12, 484-493.	2.1	37
134	Roadmap on soft robotics: multifunctionality, adaptability and growth without borders. Multifunctional Materials, 2022, 5, 032001.	2.4	37
135	Preparation of highly asymmetric hollow fiber membranes from poly(ether imide) by a modified dryâ€“wet phase inversion technique using a triple spinneret. Journal of Membrane Science, 2005, 262, 69-80.	4.1	35
136	Shapeâ€Memory Effect in Polymers. Macromolecular Chemistry and Physics, 2013, 214, 1175-1177.	1.1	35
137	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.	1.8	35
138	Cactus-inspired design principles for soft robotics based on 3D printed hydrogel-elastomer systems. Materials and Design, 2021, 202, 109515.	3.3	35
139	Shape-Memory Polymers for Biomedical Applications. Advances in Science and Technology, 2008, 54, 96-102.	0.2	34
140	Selfâ€Assembly of Polyethylenimineâ€Modified Biodegradable Complex Micelles as Gene Transfer Vector for Proliferation of Endothelial Cells. Macromolecular Chemistry and Physics, 2014, 215, 2463-2472.	1.1	34
141	Fundamental insights in PLGA degradation from thin film studies. Journal of Controlled Release, 2020, 319, 276-284.	4.8	34
142	Synthesis and characterization of Î±,Ï‰-dihydroxy-telechelic oligo(p-dioxanone). Journal of Materials Chemistry, 2007, 17, 4050.	6.7	33
143	Formation of poly(Îµ-caprolactone) scaffolds loaded with small molecules by integrated processes. Journal of Biomechanics, 2007, 40, S80-S88.	0.9	33
144	ABâ€polymer Networks with Cooligoester and Poly(<i>n</i>â€butyl acrylate) Segments as a Multifunctional Matrix for Controlled Drug Release. Macromolecular Bioscience, 2010, 10, 1063-1072.	2.1	33

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145	Genetic engineering of mesenchymal stem cells by non-viral gene delivery. Clinical Hemorheology and Microcirculation, 2014, 58, 19-48.	0.9	33
146	Platelets and coronary artery disease: Interactions with the blood vessel wall and cardiovascular devices. Biointerphases, 2016, 11, 029702.	0.6	33
147	mRNA Transfection-Induced Activation of Primary Human Monocytes and Macrophages: Dependence on Carrier System and Nucleotide Modification. Scientific Reports, 2020, 10, 4181.	1.6	33
148	Hyaluronic Acid-Based Hydrogels Crosslinked by Copper-Catalyzed Azide-Alkyne Cycloaddition with Tailorable Mechanical Properties. International Journal of Artificial Organs, 2011, 34, 192-197.	0.7	32
149	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, 172-179.	0.7	31
150	Shapeâ€Memory Hydrogels with Switching Segments Based on Oligo(<i>Ï‰</i>â€pentadecalactone). Macromolecular Materials and Engineering, 2012, 297, 1184-1192.	1.7	31
151	Poly(ethylene glycol) Grafting to Poly(ether imide) Membranes: Influence on Protein Adsorption and Thrombocyte Adhesion. Macromolecular Bioscience, 2013, 13, 1720-1729.	2.1	31
152	Changes in platelet morphology and function during 24 hours of storage. Clinical Hemorheology and Microcirculation, 2014, 58, 159-170.	0.9	31
153	Biofunction of Polydopamine Coating in Stem Cell Culture. ACS Applied Materials & Interfaces, 2021, 13, 10748-10759.	4.0	31
154	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.	2.3	30
155	Shape-Memory Polymer Composites. Advances in Polymer Science, 2009, , 41-95.	0.4	30
156	Hemocompatibility of poly(ether imide) membranes functionalized with carboxylic groups. Journal of Materials Science: Materials in Medicine, 2008, 19, 3203-3210.	1.7	29
157	Interaction of Human Plasma Proteins with Thin Gelatin-Based Hydrogel Films: A QCM-D and ToF-SIMS Study. Biomacromolecules, 2014, 15, 2398-2406.	2.6	29
158	Localized SDFâ€1alpha gene release mediated by collagen substrate induces CD117⁺ stem cells homing. Journal of Cellular and Molecular Medicine, 2010, 14, 392-402.	1.6	28
159	Pro-angiogenic CD14++ CD16+ CD163+ monocytes accelerate the in vitro endothelialization of soft hydrophobic poly(n-butyl acrylate) networks. Acta Biomaterialia, 2012, 8, 4253-4259.	4.1	28
160	Potential of NOD receptor ligands as immunomodulators in particulate vaccine carriers. Journal of Controlled Release, 2012, 164, 299-306.	4.8	28
161	Shapeâ€Memory Properties of Polyetherurethane Foams Prepared by Thermally Induced Phase Separation. Advanced Engineering Materials, 2012, 14, 818-824.	1.6	28
162	Evaluating polymeric biomaterialâ€“environment interfaces by Langmuir monolayer techniques. Journal of the Royal Society Interface, 2017, 14, 20161028.	1.5	28

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163	All-atom molecular dynamics simulation studies of fully hydrated gel phase DPPG and DPPE bilayers. Journal of Molecular Structure, 2009, 921, 38-50.	1.8	27
164	Soft poly(<i>n</i>â€butyl acrylate) networks with tailored mechanical properties designed as substrates for <i>in vitro</i> models. Polymers for Advanced Technologies, 2011, 22, 126-132.	1.6	27
165	Tripleâ€Shape Effect in Polymerâ€Based Composites by Cleverly Matching Geometry of Active Component with Heating Method. Advanced Materials, 2013, 25, 5514-5518.	11.1	27
166	Synthesis of high molecular weight polyglycolide in supercritical carbon dioxide. RSC Advances, 2014, 4, 35099.	1.7	27
167	Temperature-controlled reversible pore size change of electrospun fibrous shape-memory polymer actuator based meshes. Smart Materials and Structures, 2019, 28, 055037.	1.8	27
168	Determination of solvent/polymer interaction parameters of moderately concentrated polymer solutions by vapor pressure osmometry. Polymer, 2008, 49, 2587-2594.	1.8	26
169	Polymers in Biomedicine. Macromolecular Bioscience, 2010, 10, 993-997.	2.1	26
170	Interaction of thrombocytes with poly(ether imide): The influence of processing. Clinical Hemorheology and Microcirculation, 2010, 46, 239-250.	0.9	26
171	One-Way and Reversible Dual-Shape Effect of Polymer Networks Based on Polypentadecalactone Segments. International Journal of Artificial Organs, 2011, 34, 231-237.	0.7	26
172	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, 97B, 388-395.	1.6	26
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