Karl Kratz

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/6811725/publications.pdf Version: 2024-02-01



KADI KDATZ

#	Article	IF	CITATIONS
1	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.	7.1	735
2	Reversible Bidirectional Shapeâ€Memory Polymers. Advanced Materials, 2013, 25, 4466-4469.	21.0	410
3	Influence of charge density on the swelling of colloidal poly(N-isopropylacrylamide-co-acrylic acid) microgels. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2000, 170, 137-149.	4.7	337
4	Temperature-memory polymer actuators. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 12555-12559.	7.1	273
5	Structural changes in PNIPAM microgel particles as seen by SANS, DLS, and EM techniques. Polymer, 2001, 42, 6631-6639.	3.8	236
6	Colloidal crystals made of poly(N-isopropylacrylamide) microgel particles. Colloid and Polymer Science, 2000, 278, 972-978.	2.1	197
7	PNIPAM-co-polystyrene Coreâ^'Shell Microgels:Â Structure, Swelling Behavior, and Crystallization. Langmuir, 2004, 20, 4330-4335.	3.5	161
8	Shape memory nanocomposite fibers for untethered high-energy microengines. Science, 2019, 365, 155-158.	12.6	151
9	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
10	Temperatureâ€Memory Polymer Networks with Crystallizable Controlling Units. Advanced Materials, 2011, 23, 4058-4062.	21.0	136
11	Knowledgeâ€Based Approach towards Hydrolytic Degradation of Polymerâ€Based Biomaterials. Advanced Materials, 2009, 21, 3237-3245.	21.0	134
12	Temperatureâ€Memory Effect of Copolyesterurethanes and their Application Potential in Minimally Invasive Medical Technologies. Advanced Functional Materials, 2012, 22, 3057-3065.	14.9	132
13	Characterization Methods for Shape-Memory Polymers. Advances in Polymer Science, 2009, , 97-145.	0.8	87
14	Multifunctional Hybrid Nanocomposites with Magnetically Controlled Reversible Shape–Memory Effect. Advanced Materials, 2013, 25, 5730-5733.	21.0	83
15	Selective enzymatic degradation of poly(ε-caprolactone) containing multiblock copolymers. European Journal of Pharmaceutics and Biopharmaceutics, 2008, 68, 46-56.	4.3	82
16	Kinetics and dynamics of thermally-induced shape-memory behavior of crosslinked short-chain branched polyethylenes. Polymer, 2009, 50, 5490-5498.	3.8	81
17	Quantifying the Shape-Memory Effect of Polymers by Cyclic Thermomechanical Tests. Polymer Reviews, 2013, 53, 6-40.	10.9	76
18	Volume transition and structure of triethyleneglycol dimethacrylate, ethylenglykol dimethacrylate, and N,N′-methylene bis-acrylamide cross-linked poly(N-isopropyl acrylamide) microgels: a small angle neutron and dynamic light scattering study. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2002, 197, 55-67.	4.7	71

#	Article	IF	CITATIONS
19	Shapeâ€Memory Nanocomposites with Magnetically Adjustable Apparent Switching Temperatures. Advanced Materials, 2011, 23, 4157-4162.	21.0	67
20	Preparation and biological evaluation of multifunctional PLGA-nanoparticles designed for photoacoustic imaging. Nanomedicine: Nanotechnology, Biology, and Medicine, 2011, 7, 228-237.	3.3	66
21	Relaxation based modeling of tunable shape recovery kinetics observed under isothermal conditions for amorphous shape-memory polymers. Polymer, 2010, 51, 6212-6218.	3.8	64
22	Mechanically active scaffolds from radioâ€opaque shapeâ€memory polymerâ€based composites. Polymers for Advanced Technologies, 2011, 22, 180-189.	3.2	62
23	Swelling properties of colloidal poly(Nâ€Isopropylacrylamide) microgels in solution. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1998, 102, 848-854.	0.9	61
24	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.	2.1	58
25	Multicomponent protein patterning of material surfaces. Journal of Materials Chemistry, 2010, 20, 7322.	6.7	55
26	Effect of connectivity and charge density on the swelling and local structural and dynamic properties of colloidal PNIPAM microgels. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1998, 102, 1603-1608.	0.9	52
27	Two stages in three-dimensional <i>in vitro</i> growth of tissue generated by osteoblastlike cells. Biointerphases, 2010, 5, 45-52.	1.6	52
28	Shape-memory properties of electrospun non-woven fabrics prepared from degradable polyesterurethanes containing poly(ω-pentadecalactone) hard segments. European Polymer Journal, 2012, 48, 1866-1874.	5.4	51
29	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.	3.5	49
30	Thermally induced shapeâ€memory effects in polymers: Quantification and related modeling approaches. Journal of Polymer Science, Part B: Polymer Physics, 2013, 51, 621-637.	2.1	48
31	Reprogrammable, magnetically controlled polymeric nanocomposite actuators. Materials Horizons, 2018, 5, 861-867.	12.2	46
32	Internal dynamics in colloidal PNIPAM microgel particles immobilised in mesoscopic crystals. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2002, 202, 223-232.	4.7	45
33	Cytocompatibility testing of cell culture modules fabricated from specific candidate biomaterials using injection molding. Journal of Biotechnology, 2010, 148, 76-82.	3.8	44
34	Shape-Memory Properties and Degradation Behavior of Multifunctional Electro-Spun Scaffolds. International Journal of Artificial Organs, 2011, 34, 225-230.	1.4	42
35	Controlling Major Cellular Processes of Human Mesenchymal Stem Cells using Microwell Structures. Advanced Healthcare Materials, 2014, 3, 1991-2003.	7.6	41
36	Enzymatic Chain Scission Kinetics of Poly(Îμ-caprolactone) Monolayers. Langmuir, 2007, 23, 12202-12207.	3.5	40

#	Article	IF	CITATIONS
37	Influence of fiber orientation in electrospun polymer scaffolds on viability, adhesion and differentiation of articular chondrocytes. Clinical Hemorheology and Microcirculation, 2012, 52, 325-336.	1.7	37
38	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.	3.8	35
39	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.	8.3	28
40	Shapeâ€Memory Properties of Polyetherurethane Foams Prepared by Thermally Induced Phase Separation. Advanced Engineering Materials, 2012, 14, 818-824.	3.5	28
41	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.	3.2	27
42	Tripleâ€6hape Effect in Polymerâ€Based Composites by Cleverly Matching Geometry of Active Component with Heating Method. Advanced Materials, 2013, 25, 5514-5518.	21.0	27
43	Temperature-controlled reversible pore size change of electrospun fibrous shape-memory polymer actuator based meshes. Smart Materials and Structures, 2019, 28, 055037.	3.5	27
44	Simulating the Shapeâ€Memory Behavior of Amorphous Switching Domains of Poly(<scp>L</scp> ″actide) by Molecular Dynamics. Macromolecular Chemistry and Physics, 2013, 214, 1273-1283.	2.2	26
45	Modeling the heat transfer in magneto-sensitive shape-memory polymer nanocomposites with dynamically changing surface area to volume ratios. Polymer, 2015, 65, 215-222.	3.8	26
46	Immuno-compatibility of soft hydrophobic poly (n-butyl acrylate) networks with elastic moduli for regeneration of functional tissues. Clinical Hemorheology and Microcirculation, 2012, 50, 131-142.	1.7	25
47	Reversible Actuation of Thermoplastic Multiblock Copolymers with Overlapping Thermal Transitions of Crystalline and Glassy Domains. Macromolecules, 2018, 51, 4624-4632.	4.8	25
48	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.	5.4	24
49	Tripleâ€Shape Effect with Adjustable Switching Temperatures in Crosslinked Poly[ethyleneâ€ <i>co</i> â€{vinyl acetate)]. Macromolecular Chemistry and Physics, 2014, 215, 2446-2456.	2.2	24
50	Enzymatic monolayer degradation study of multiblock copolymers consisting of poly(ε-caprolactone) and poly(p-dioxanone) blocks. Thin Solid Films, 2008, 516, 8821-8828.	1.8	23
51	Noncontinuously Responding Polymeric Actuators. ACS Applied Materials & Interfaces, 2017, 9, 33559-33564.	8.0	23
52	The influence of polymer scaffolds on cellular behaviour of bone marrow derived human mesenchymal stem cells. Clinical Hemorheology and Microcirculation, 2012, 52, 357-373.	1.7	21
53	Water-Blown Polyurethane Foams Showing a Reversible Shape-Memory Effect. Polymers, 2016, 8, 412.	4.5	21
54	Viability, Morphology and Function of Primary Endothelial Cells on Poly(n-Butyl Acrylate) Networks Having Elastic Moduli Comparable to Arteries. Journal of Biomaterials Science, Polymer Edition, 2012, 23, 901-915.	3.5	20

#	Article	IF	CITATIONS
55	Viability, proliferation and adhesion of smooth muscle cells and human umbilical vein endothelial cells on electrospun polymer scaffolds. Clinical Hemorheology and Microcirculation, 2012, 50, 101-112.	1.7	19
56	Hemocompatibility of soft hydrophobic poly(n-butyl acrylate) networks with elastic moduli adapted to the elasticity of human arteries. Clinical Hemorheology and Microcirculation, 2011, 49, 375-390.	1.7	18
57	Quantitative Evaluation of Adhesion of Osteosarcoma Cells to Hydrophobic Polymer Substrate with Tunable Elasticity. Journal of Physical Chemistry B, 2012, 116, 8024-8030.	2.6	18
58	Two-Level Shape Changes of Polymeric Microcuboids Prepared from Crystallizable Copolymer Networks. Macromolecules, 2017, 50, 2518-2527.	4.8	18
59	Controlling Actuation Performance in Physically Cross-Linked Polylactone Blends Using Polylactide Stereocomplexation. Biomacromolecules, 2020, 21, 338-348.	5.4	18
60	Influence of fibre diameter and orientation of electrospun copolyetheresterurethanes on smooth muscle and endothelial cell behaviour. Clinical Hemorheology and Microcirculation, 2013, 55, 513-522.	1.7	16
61	Nanostructural changes in crystallizable controlling units determine the temperature-memory of polymers. Journal of Materials Chemistry A, 2015, 3, 8284-8293.	10.3	16
62	Influence of deformation temperature on structural variation and shape-memory effect of a thermoplastic semi-crystalline multiblock copolymer. EXPRESS Polymer Letters, 2015, 9, 624-635.	2.1	16
63	Influence of surface roughness on neural differentiation of human induced pluripotent stem cells. Clinical Hemorheology and Microcirculation, 2017, 64, 355-366.	1.7	16
64	Immunological evaluation of polystyrene and poly(ether imide) cell culture inserts with different roughness. Clinical Hemorheology and Microcirculation, 2012, 52, 375-389.	1.7	15
65	Shapeâ€memory properties of degradable electrospun scaffolds based on hollow microfibers. Polymers for Advanced Technologies, 2015, 26, 1468-1475.	3.2	15
66	Generating Aptamers Interacting with Polymeric Surfaces for Biofunctionalization. Macromolecular Bioscience, 2016, 16, 1776-1791.	4.1	15
67	Pore‣ize Distribution Controls Shapeâ€Memory Properties on the Macro―and Microscale of Polymeric Foams. Macromolecular Chemistry and Physics, 2013, 214, 1184-1188.	2.2	14
68	Polymer architecture versus chemical structure as adjusting tools for the enzymatic degradation of oligo(Îμ-caprolactone) based films at the air-water interface. Polymer Degradation and Stability, 2016, 131, 114-121.	5.8	14
69	<i>In vivo</i> biocompatibility assessment of poly (ether imide) electrospun scaffolds. Journal of Tissue Engineering and Regenerative Medicine, 2017, 11, 1034-1044.	2.7	14
70	Characterization Methods for Shape-Memory Polymers. Advances in Polymer Science, 2009, , 97-145.	0.8	14
71	In Situ Xâ€Ray Scattering Studies of Poly(<i>ε</i> â€caprolactone) Networks with Grafted Poly(ethylene) Tj ETÇ Macromolecular Rapid Communications, 2010, 31, 1546-1553.)q1 1 0.78 3.9	4314 rgBT /(13
72	Atomistic Simulation of the Shapeâ€Memory Effect in Dry and Water Swollen Poly[(<i>rac</i> ″actide)â€ <i>co</i> â€glycolide] and Copolyester Urethanes Thereof. Macromolecular Chemistry and Physics, 2014, 215, 65-75.	2.2	13

#	Article	IF	CITATIONS
73	Integrin β1 activation by micro-scale curvature promotes pro-angiogenic secretion of human mesenchymal stem cells. Journal of Materials Chemistry B, 2017, 5, 7415-7425.	5.8	13
74	Polymeric sheet actuators with programmable bioinstructivity. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 1895-1901.	7.1	13
75	Strain recovery and stress relaxation behaviour of multiblock copolymer blends physically cross-linked with PLA stereocomplexation. Polymer, 2020, 209, 122984.	3.8	13
76	Shape-Memory Properties of Radiopaque Micro-Composites from Amorphous Polyether Urethanes Designed for Medical Application. Materials Research Society Symposia Proceedings, 2009, 1190, 1.	0.1	12
77	Near-Infrared Dye-Loaded Plga Nanoparticles Prepared by Spray Drying for Photoacoustic Applications. International Journal of Artificial Organs, 2011, 34, 249-254.	1.4	12
78	Inflammatory responses of primary human dendritic cells towards polydimethylsiloxane and polytetrafluoroethylene. Clinical Hemorheology and Microcirculation, 2017, 64, 899-910.	1.7	12
79	Implementing and Quantifying the Shapeâ€Memory Effect of Single Polymeric Micro/Nanowires with an Atomic Force Microscope. ChemPhysChem, 2018, 19, 2078-2084.	2.1	12
80	Coaxial electrospinning of PEEU/gelatin to fiber meshes with enhanced mesenchymal stem cell attachment and proliferation. Clinical Hemorheology and Microcirculation, 2020, 74, 53-66.	1.7	12
81	Fiber diameter as design parameter for tailoring the macroscopic shape-memory performance of electrospun meshes. Materials and Design, 2021, 202, 109546.	7.0	12
82	Thermomechanical Behaviour of Biodegradable Shape-memory Polymer Foams. Materials Research Society Symposia Proceedings, 2009, 1190, 94.	0.1	11
83	In vivo evaluation of the angiogenic effects of the multiblock copolymer PDC using the hen's egg chorioallantoic membrane test. Clinical Hemorheology and Microcirculation, 2010, 46, 233-238.	1.7	11
84	The interaction of adipose-derived human mesenchymal stem cells and polyether ether ketone. Clinical Hemorheology and Microcirculation, 2015, 61, 301-321.	1.7	11
85	Integrated process for preparing porous, surface functionalized polyetherimide microparticles. Polymers for Advanced Technologies, 2015, 26, 1447-1455.	3.2	11
86	Influence of programming strain rates on the shapeâ€memory performance of semicrystalline multiblock copolymers. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 1935-1943.	2.1	11
87	Collagen type-IV Langmuir and Langmuir–SchÃfer layers as model biointerfaces to direct stem cell adhesion. Biomedical Materials (Bristol), 2019, 14, 024101.	3.3	11
88	Electrical Actuation of Coated and Composite Fibers Based on Poly[ethylene―co â€{vinyl acetate)]. Macromolecular Materials and Engineering, 2021, 306, 2000579.	3.6	11
89	Shapeâ€Memory Capability of Copolyetheresterurethane Microparticles Prepared via Electrospraying. Macromolecular Materials and Engineering, 2015, 300, 522-530.	3.6	10
90	Adsorption capacity of poly(ether imide) microparticles to uremic toxins. Clinical Hemorheology and Microcirculation, 2016, 61, 657-665.	1.7	10

#	Article	IF	CITATIONS
91	Extractable Free Polymer Chains Enhance Actuation Performance of Crystallizable Poly(ε-caprolactone) Networks and Enable Self-Healing. Polymers, 2018, 10, 255.	4.5	10
92	The influence of poly(n-butyl acrylate) networks on viability and function of smooth muscle cells and vascular fibroblasts. Clinical Hemorheology and Microcirculation, 2012, 52, 283-294.	1.7	9
93	Cultivation and spontaneous differentiation of rat bone marrow-derived mesenchymal stem cells on polymeric surfaces. Clinical Hemorheology and Microcirculation, 2013, 55, 143-156.	1.7	9
94	Influence of Compression Direction on the Shape-Memory Effect of Micro-Cylinder Arrays Prepared from Semi-Crystalline Polymer Networks. MRS Advances, 2016, 1, 1985-1993.	0.9	9
95	Effect of extracts of poly(ether imide) microparticles on cytotoxicity, ROS generation and proinflammatory effects on human monocytic (THP-1) cells. Clinical Hemorheology and Microcirculation, 2016, 61, 667-680.	1.7	9
96	Endothelial cell migration, adhesion and proliferation on different polymeric substrates. Clinical Hemorheology and Microcirculation, 2019, 70, 511-529.	1.7	9
97	Current Status of Langmuir Monolayer Degradation of Polymeric Biomaterials. International Journal of Artificial Organs, 2011, 34, 123-128.	1.4	8
98	Viability, Adhesion and Differentiated Phenotype of Articular Chondrocytes on Degradable Polymers and Electro-Spun Structures Thereof. Macromolecular Symposia, 2011, 309-310, 28-39.	0.7	8
99	Influence of Different Heating Regimes on the Shape-Recovery Behavior of Poly(L-Lactide) in Simulated Thermomechanical Tests. Journal of Applied Biomaterials and Functional Materials, 2012, 10, 259-264.	1.6	8
100	Behaviour of fibroblasts on water born acrylonitrile-based copolymers containing different cationic and anionic moieties. Clinical Hemorheology and Microcirculation, 2012, 52, 295-311.	1.7	8
101	Interaction of Angiogenically Stimulated Intermediate CD163 ⁺ Monocytes/Macrophages With Soft Hydrophobic Poly(<i>n</i> â€Butyl Acrylate) Networks With Elastic Moduli Matched to That of Human Arteries. Artificial Organs, 2012, 36, E28-38.	1.9	8
102	The influence of polystyrene and poly(ether imide) inserts with different roughness, on the activation of dendritic cells. Clinical Hemorheology and Microcirculation, 2013, 55, 157-168.	1.7	8
103	Surface pressureâ€induced isothermal 2D―to 3Dâ€transitions in Langmuir films of poly(<i>ε</i> â€caprolactone)s and oligo(<i>ε</i> â€caprolactone) based polyesterurethanes. Polymers for Advanced Technologies, 2015, 26, 1411-1420.	3.2	8
104	In vivo biocompatibility study of degradable homo- versus multiblock copolymers and their (micro)structure compared to an established biomaterial. Clinical Hemorheology and Microcirculation, 2020, 75, 163-176.	1.7	8
105	Origami hand for soft robotics driven by thermally controlled polymeric fiber actuators. MRS Communications, 2021, 11, 476-482.	1.8	8
106	Molecular Modeling and Experimental Investigation of Hydrolytically Degradable Polymeric Biomaterials. Advances in Science and Technology, 0, , .	0.2	7
107	Degradation of and angiogenesis around multiblock copolymers containing poly(p-dioxanone)- and poly(ε-caprolactone)-segments subcutaneously implanted in the rat neck. Clinical Hemorheology and Microcirculation, 2010, 45, 117-122.	1.7	7
108	Shape-Memory Properties of Electrospun Non-wovens Prepared from Amorphous Polyetherurethanes Under Stress-free and Constant Strain Conditions. Materials Research Society Symposia Proceedings, 2012, 1403, 49.	0.1	7

#	Article	IF	CITATIONS
109	Adherence and viability of primary human keratinocytes and primary human dermal fibroblasts on acrylonitrile-based copolymers with different concentrations of positively charged functional groups. Clinical Hemorheology and Microcirculation, 2012, 52, 391-401.	1.7	7
110	Test system for evaluating the influence of polymer properties on primary human keratinocytes and fibroblasts in mono- and coculture. Journal of Biotechnology, 2013, 166, 58-64.	3.8	7
111	Characterization of Langmuir Films Prepared from Copolyesterurethanes Based on Oligo(ωâ€pentadecalactone) and Oligo(εâ€caprolactone) Segments. Macromolecular Chemistry and Physics, 2014, 215, 2437-2445.	2.2	7
112	Single and competitive protein adsorption on polymeric surfaces. Polymers for Advanced Technologies, 2015, 26, 1387-1393.	3.2	7
113	Reversible shapeâ€memory properties of surface functionalizable, crystallizable crosslinked terpolymers. Polymers for Advanced Technologies, 2015, 26, 1421-1427.	3.2	7
114	Cell-based detection of microbial biomaterial contaminations. Clinical Hemorheology and Microcirculation, 2015, 60, 51-63.	1.7	7
115	The relevance of hydrophobic segments in multiblock copolyesterurethanes for their enzymatic degradation at the air-water interface. Polymer, 2016, 102, 92-98.	3.8	7
116	Strategy for the hemocompatibility testing of microparticles. Clinical Hemorheology and Microcirculation, 2017, 64, 345-353.	1.7	7
117	The influence of thermal treatment on the morphology in differently prepared films of a oligodepsipeptide based multiblock copolymer. Polymers for Advanced Technologies, 2017, 28, 1339-1345.	3.2	7
118	Torsional Fiber Actuators from Shape-memory Polymer. MRS Advances, 2018, 3, 3861-3868.	0.9	7
119	Simulation of Volumetric Swelling of Degradable Poly[(Rac-Lactide)-Co-Glycolide] Based Polyesterurethanes Containing Different Urethane-Linkers. Journal of Applied Biomaterials and Functional Materials, 2012, 10, 293-301.	1.6	6
120	Smooth muscle and endothelial cell behaviour on degradable copolyetheresterurethane films. Clinical Hemorheology and Microcirculation, 2012, 52, 313-323.	1.7	6
121	Effect of polystyrene and polyether imide cell culture inserts with different roughness on chondrocyte metabolic activity and gene expression profiles of aggrecan and collagen. Clinical Hemorheology and Microcirculation, 2013, 55, 523-533.	1.7	6
122	Universal relations in linear thermoelastic theories of thermally-responsive shape memory polymers. International Journal of Engineering Science, 2014, 82, 140-158.	5.0	6
123	Influence of intermediate degradation products on the hydrolytic degradation of poly[(<i>rac</i> ″actide)â€ <i>co</i> â€glycolide] at the air–water interface. Polymers for Advanced Technologies, 2015, 26, 1402-1410.	3.2	6
124	The effect of stiffness variation of electrospun fiber meshes of multiblock copolymers on the osteogenic differentiation of human mesenchymal stem cells. Clinical Hemorheology and Microcirculation, 2019, 73, 219-228.	1.7	6
125	Temperature-induced evolution of microstructures on poly[ethylene-co-(vinyl acetate)] substrates switches their underwater wettability. Materials and Design, 2019, 163, 107530.	7.0	6
126	Triple-Shape Capability of Thermo-sensitive Nanocomposites from Multiphase Polymer Networks and Magnetic Nanoparticles. Materials Research Society Symposia Proceedings, 2009, 1190, 87.	0.1	5

#	Article	IF	CITATIONS
127	Melt-processable hydrophobic acrylonitrile-based copolymer systems with adjustable elastic properties designed for biomedical applications. Clinical Hemorheology and Microcirculation, 2010, 45, 401-411.	1.7	5
128	Influence of Diurethane Linkers on the Langmuir Layer Behavior of Oligo[(rac″actide)â€ <i>co</i> â€glycolide]â€based Polyesterurethanes. Macromolecular Rapid Communications, 2015, 36, 1910-1915.	3.9	5
129	Langmuir–Schaefer films of fibronectin as designed biointerfaces for culturing stem cells. Polymers for Advanced Technologies, 2017, 28, 1305-1311.	3.2	5
130	Response of encapsulated cells to a gelatin matrix with varied bulk and microenvironmental elastic properties. Polymers for Advanced Technologies, 2017, 28, 1245-1251.	3.2	5
131	Albumin solder covalently bound to a polymer membrane: New approach to improve binding strength in laser tissue soldering in-vitro. Clinical Hemorheology and Microcirculation, 2018, 69, 317-326.	1.7	5
132	Influence of different surface treatments of poly(n-butyl acrylate) networks on fibroblasts adhesion, morphology and viability. Clinical Hemorheology and Microcirculation, 2018, 69, 305-316.	1.7	5
133	Comparison of two substrate materials used as negative control in endothelialization studies: Glass versus polymeric tissue culture plate. Clinical Hemorheology and Microcirculation, 2018, 69, 437-445.	1.7	5
134	Evaluation of human mesenchymal stem cell senescence, differentiation and secretion behavior cultured on polycarbonate cell culture inserts. Clinical Hemorheology and Microcirculation, 2019, 70, 573-583.	1.7	5
135	Elasticity of fiber meshes from multiblock copolymers influences endothelial cell behavior. Clinical Hemorheology and Microcirculation, 2020, 74, 405-415.	1.7	5
136	Influence of a Polyester Coating of Magnetic Nanoparticles on Magnetic Heating Behavior of Shape-Memory Polymer-Based Composites. Journal of Applied Biomaterials and Functional Materials, 2012, 10, 203-209.	1.6	4
137	Influence of expansion cooling regime on morphology of poly(<i>ε</i> â€ɛaprolactone) foams prepared by pressure quenching using supercritical CO ₂ . Polymers for Advanced Technologies, 2014, 25, 1349-1355.	3.2	4
138	Shapeâ€Memory Polymer Networks Prepared from Starâ€6haped Poly[(<i>L</i> ″actide)â€ <i>co</i> â€glycolide] Precursors. Macromolecular Symposia, 2014, 345, 98-104.	0.7	4
139	Relation -between Nanostructural Changes and Macroscopic Effects during Reversible Temperature-Memory Effect under Stress-Free Conditions in Semicrystalline Polymer Networks. Materials Research Society Symposia Proceedings, 2015, 1718, 41-48.	0.1	4
140	Modeling of stress relaxation of a semi-crystalline multiblock copolymer and its deformation behavior. Clinical Hemorheology and Microcirculation, 2015, 60, 109-120.	1.7	4
141	Mechanical characterization of electrospun polyesteretherurethane (PEEU) meshes by atomic force microscopy. Clinical Hemorheology and Microcirculation, 2019, 73, 229-236.	1.7	4
142	Modulating human mesenchymal stem cells using poly(n-butyl acrylate) networks in vitro with elasticity matching human arteries. Clinical Hemorheology and Microcirculation, 2019, 71, 277-289.	1.7	4
143	Polymeric Microcuboids Programmable for Temperatureâ€Memory. Macromolecular Materials and Engineering, 2020, 305, 2000333.	3.6	4
144	Anisotropy Effects in the Shapeâ€Memory Performance of Polymer Foams. Macromolecular Materials and Engineering, 2021, 306, 2000730.	3.6	4

#	Article	IF	CITATIONS
145	In vivo degradation behavior of PDC multiblock copolymers containing poly(para-dioxanone) hard segments and crystallizable poly(epsilon-caprolactone) switching segments. Materials Research Society Symposia Proceedings, 2009, 1190, 120.	0.1	3
146	X-ray Scattering Studies to Investigate Triple-shape Capability of Polymer Networks Based on poly(ε-caprolactone) and poly(cyclohexyl methacrylate) Segments. Materials Research Society Symposia Proceedings, 2009, 1190, 75.	0.1	3
147	Preparation of Threeâ€Dimensional Scaffolds from Degradable Poly(ether)esterurethane by Thermallyâ€Induced Phase Separation. Macromolecular Symposia, 2011, 309-310, 76-83.	0.7	3
148	Thermal Properties and Crystallinity of Grafted Copolymer Networks containing a Crystallizable Poly(ε-caprolactone) Crosslinker in an aqueous environment. Materials Research Society Symposia Proceedings, 2012, 1403, 7.	0.1	3
149	POLYMER SCAFFOLDS FOR REGENERATIVE THERAPIES — DESIGN OF HIERARCHICALLY ORGANIZED STRUCTURES AND THEIR MORPHOLOGICAL CHARACTERIZATION. Nano LIFE, 2012, 02, 1230005.	0.9	3
150	Culture surface influence on T-cell phenotype and function. Clinical Hemorheology and Microcirculation, 2013, 55, 501-512.	1.7	3
151	Preparation of Magneto‧ensitive Polymer Nanocomposite Microparticles from Copolyesterurethanes via Electrospraying. Macromolecular Symposia, 2014, 345, 66-74.	0.7	3
152	Polymeric inserts differing in their chemical composition as substrates for dendritic cell cultivation. Clinical Hemorheology and Microcirculation, 2015, 61, 347-357.	1.7	3
153	Morphological analysis of differently sized highly porous poly(ether imide) microparticles by mercury porosimetry. Polymers for Advanced Technologies, 2017, 28, 1269-1277.	3.2	3
154	Predictive topography impact model for Electrical Discharge Machining (EDM) of metal surfaces. MRS Advances, 2020, 5, 621-632.	0.9	3
155	Non-woven shape-memory polymer blend actuators. MRS Advances, 2021, 6, 781-785.	0.9	3
156	In Vivo Performance of a Cell and Factor Free Multifunctional Fiber Mesh Modulating Postinfarct Myocardial Remodeling. Advanced Functional Materials, 2022, 32, .	14.9	3
157	Dicarboxy-telechelic cooligomers with sequence structure tunable light absorption. Reactive and Functional Polymers, 2012, 72, 533-541.	4.1	2
158	Thermomechanical Characterization of a Series of Crosslinked Poly[ethylene-co-(vinyl acetate)] (PEVA) Copolymers. Materials Research Society Symposia Proceedings, 2015, 1718, 123-130.	0.1	2
159	Encasement of metallic cardiovascular stents with endothelial cellâ€selective copolyetheresterurethane microfibers. Polymers for Advanced Technologies, 2015, 26, 1209-1216.	3.2	2
160	Influence of film thickness on the crystalline morphology of a copolyesterurethane comprising crystallizable poly(É›-caprolactone) soft segments. Clinical Hemorheology and Microcirculation, 2015, 60, 77-87.	1.7	2
161	Characterization of bi-layered magnetic nanoparticles synthesized via two-step surface-initiated ring-opening polymerization. Pure and Applied Chemistry, 2015, 87, 1085-1097.	1.9	2
162	An ellipsometric approach towards the description of inhomogeneous polymer-based Langmuir layers. Beilstein Journal of Nanotechnology, 2016, 7, 1156-1165.	2.8	2

#	Article	IF	CITATIONS
163	Programming structural functions in phase-segregated polymers by implementing a defined thermomechanical history. Polymer, 2016, 102, 54-62.	3.8	2
164	Surface geometry of poly(ether imide) boosts mouse pluripotent stem cell spontaneous cardiomyogenesis via modulating the embryoid body formation process. Clinical Hemorheology and Microcirculation, 2017, 64, 367-382.	1.7	2
165	Influence of nanoporous poly(ether imide) particle extracts on human aortic endothelial cells (HAECs). Clinical Hemorheology and Microcirculation, 2017, 64, 931-940.	1.7	2
166	Modulation of the mesenchymal stem cell migration capacity via preconditioning with topographic microstructure. Clinical Hemorheology and Microcirculation, 2017, 67, 267-278.	1.7	2
167	Programmable microscale stiffness pattern of flat polymeric substrates by temperature-memory technology. MRS Communications, 2019, 9, 181-188.	1.8	2
168	Substrate-enzyme affinity-based surface modification strategy for endothelial cell-specific binding under shear stress. Clinical Hemorheology and Microcirculation, 2019, 75, 1-14.	1.7	2
169	Surface hydrophilization of highly porous poly(ether imide) microparticles by covalent attachment of poly(vinyl pyrrolidone). Polymer, 2020, 210, 123045.	3.8	2
170	Shape-Memory Actuation of Individual Micro-/Nanofibers. MRS Advances, 2020, 5, 2391-2399.	0.9	2
171	On Demand Sequential Release of (Sub)Micron Particles Controlled by Size and Temperature. Small, 2022, 18, e2104621.	10.0	2
172	The influence of the co-monomer ratio of poly[acrylonitrile-co-(N-vinylpyrrolidone)]s on primary human monocyte-derived dendritic cells. Materials Research Society Symposia Proceedings, 2013, 1569, 21-26.	0.1	1
173	Influence of Coupling Agent on the Morphology of Multifunctional, Degradable Shape-Memory Polymers. Materials Research Society Symposia Proceedings, 2013, 1569, 57-64.	0.1	1
174	Bacterial attachment on poly[acrylonitrile-co-(2-methyl-2-propene-1-sulfonic acid)] surfaces. Materials Research Society Symposia Proceedings, 2013, 1569, 85-90.	0.1	1
175	Effect of the Fixation Temperature <i>T</i> _{low} on the Crystallization Behavior and Shapeâ€Memory Performance of Crystallizable Copolyesterurethanes. Macromolecular Symposia, 2014, 345, 75-82.	0.7	1
176	Crystallization Behavior of Copolyesterurethanes Containing Different Weight Contents of Crystallizable Poly(<i>ε</i> â€caprolactone) Segments. Macromolecular Symposia, 2014, 345, 59-65.	0.7	1
177	Crystallization and Phase Segregation of Multifunctional Multiblock Copolymers in Spin Coated Thin Films Altered by Diurethane Junction Units. Macromolecular Symposia, 2014, 345, 83-90.	0.7	1
178	Microwell Geometry Modulates Interleukin-6 Secretion in Human Mesenchymal Stem Cells. MRS Advances, 2017, 2, 2561-2570.	0.9	1
179	Effects of extracts prepared from modified porous poly(ether imide) microparticulate absorbers on cytotoxicity, macrophage differentiation and proinflammatory behavior of human monocytic (THP-1) cells. Clinical Hemorheology and Microcirculation, 2018, 69, 175-185.	1.7	1
180	Investigating the Phase-Morphology of PLLA-PCL Multiblock Copolymer / PDLA Blends Cross-linked Using Stereocomplexation. MRS Advances, 2020, 5, 699-707.	0.9	1

#	Article	IF	CITATIONS
181	Fine-tuning of Rat Mesenchymal Stem Cell Senescence via Microtopography of Polymeric Substrates. MRS Advances, 2020, 5, 643-653.	0.9	1
182	Design and fabrication of fiber mesh actuators. Applied Materials Today, 2022, 29, 101562.	4.3	1
183	Degradation of and angiogenesis around multiblock copolymers containing poly(p-dioxanone)-and poly(ε-caprolactone)-segments subcutaneously implanted in the rat neck s. Clinical Hemorheology and Microcirculation, 2012, 50, 153-153.	1.7	0
184	Comparison of memory effects in multiblock copolymers and covalently crosslinked multiphase polymer networks composed of the same types of oligoester segments and urethane linker. Materials Research Society Symposia Proceedings, 2013, 1569, 123-128.	0.1	0
185	Impact of Molecular Architectures on the Thermal and Mechanical Properties of Multi-Phase Polymer Networks. Macromolecular Symposia, 2014, 346, 82-90.	0.7	0
186	Immunological evaluation of polystyrene and poly(ether imide) cell culture inserts with different roughness. Clinical Hemorheology and Microcirculation, 2014, 56, 285-286.	1.7	0
187	Transparent Substrates Prepared From Different Amorphous Polymers Can Directly Modulate Primary Human B cell functions. Biotechnology Journal, 2017, 12, 1700334.	3.5	Ο
188	Investigating the Roles of Crystallizable and Glassy Switching Segments within Multiblock Copolymer Shape-Memory Materials. MRS Advances, 2018, 3, 3741-3749.	0.9	0
189	Einfluss von Deformations- und Separationstemperatur auf das Formgedähtnisverhalten von polymeren Mikroquadern. Chemie-Ingenieur-Technik, 2018, 90, 1331-1332.	0.8	Ο
190	Thin hydrogel coatings formation catalyzed by immobilized enzyme horseradish peroxidase. MRS Advances, 2020, 5, 773-783.	0.9	0
191	Controlled Actuation of Shape-Memory nanocomposites by Application of an Alternating Magnetic Field. , 2008, , .		0