Seema Agarwal

List of Publications by Citations

232 papers	11,257 citations	52 h-index	99 g-index
241 ext. papers	12,596 ext. citations	6.4 avg, IF	7 L-index

#	Paper	IF	Citations
232	Use of electrospinning technique for biomedical applications. *Polymer*, **2008**, 49, 5603-5621	3.9	1337
231	Functional materials by electrospinning of polymers. *Progress in Polymer Science*, **2013**, 38, 963-991	29.6	653
230	Polymers with upper critical solution temperature in aqueous solution. *Macromolecular Rapid Communications*, **2012**, 33, 1898-920	4.8	403
229	Progress in the field of electrospinning for tissue engineering applications. *Advanced Materials*, **2009**, 21, 3343-51	24	395
228	Electrospun nanofiber reinforced composites: a review. *Polymer Chemistry*, **2018**, 9, 2685-2720	4.9	336
227	Electrospun and solution blown three-dimensional carbon fiber nonwovens for application as electrodes in microbial fuel cells. *Energy and Environmental Science*, **2011**, 4, 1417	35.4	268
226	Biocompatible, Thermoresponsive, and Biodegradable: Simple Preparation of "All-in-One" Biorelevant Polymers. *Macromolecules*, **2007**, 40, 8540-8543	5.5	254
225	PDMAEMA based gene delivery materials. *Materials Today*, **2012**, 15, 388-393	21.8	218
224	First Example of a Universal and Cost-Effective Approach: Polymers with Tunable Upper Critical Solution Temperature in Water and Electrolyte Solution. *Macromolecules*, **2012**, 45, 3910-3918	5.5	209
223	Electrospinning of Manmade and Biopolymer Nanofibers: Progress in Techniques, Materials, and Applications. *Advanced Functional Materials*, **2009**, 19, 2863-2879	15.6	208
222	Unusual and Superfast Temperature-Triggered Actuators. *Advanced Materials*, **2015**, 27, 4865-70	24	200
221	Upper Critical Solution Temperature of Poly(N-acryloyl glycinamide) in Water: A Concealed Property. *Macromolecules*, **2012**, 45, 374-384	5.5	163
220	Controlled antibody/(bio-) conjugation of inorganic nanoparticles for targeted delivery. *Advanced Drug Delivery Reviews*, **2013**, 65, 677-88	18.5	155
219	Polymers with Upper Critical Solution Temperature in Aqueous Solution: Unexpected Properties from Known Building Blocks.. *ACS Macro Letters*, **2013**, 2, 597-600	6.6	151
218	Ultralight, Thermally Insulating, Compressible Polyimide Fiber Assembled Sponges. *ACS Applied Materials & Interfaces*, **2017**, 9, 32308-32315	9.5	147
217	Chemistry, chances and limitations of the radical ring-opening polymerization of cyclic ketene acetals for the synthesis of degradable polyesters. *Polymer Chemistry*, **2010**, 1, 953	4.9	141
216	Low-Density Open Cellular Sponges as Functional Materials. *Angewandte Chemie - International Edition*, **2017**, 56, 15520-15538	16.4	136

215	Ultralight, Soft Polymer Sponges by Self-Assembly of Short Electrospun Fibers in Colloidal Dispersions. *Advanced Functional Materials*, **2015**, 25, 2850-2856	15.6	134
214	Spin-Crossover Iron(II) Coordination Polymer with Fluorescent Properties: Correlation between Emission Properties and Spin State. *Journal of the American Chemical Society*, **2018**, 140, 700-709	16.4	131
213	On the way to clean and safe electrospinning—green electrospinning: emulsion and suspension electrospinning. *Polymers for Advanced Technologies*, **2011**, 22, 372-378	3.2	127
212	Biocompatible drug delivery system for photo-triggered controlled release of 5-Fluorouracil. *Biomacromolecules*, **2011**, 12, 3684-91	6.9	115
211	Non-Ionic Homo- and Copolymers with H-Donor and H-Acceptor Units with an UCST in Water. *Macromolecular Chemistry and Physics*, **2010**, 211, 2109-2117	2.6	111
210	Fate of So-Called Biodegradable Polymers in Seawater and Freshwater. *Global Challenges*, **2017**, 1, 1700048	4.8	110
209	Electrospun PLLA nanofiber scaffolds and their use in combination with BMP-2 for reconstruction of bone defects. *PLoS ONE*, **2011**, 6, e25462	3.7	107
208	Rare earth metal initiated ring-opening polymerization of lactones. *Macromolecular Rapid Communications*, **2000**, 21, 195-212	4.8	104
207	Polyimide Nanofibers by "Green" Electrospinning via Aqueous Solution for Filtration Applications. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 4797-4804	8.3	104
206	Giving Direction to Motion and Surface with Ultra-Fast Speed Using Oriented Hydrogel Fibers. *Advanced Functional Materials*, **2016**, 26, 1021-1027	15.6	96
205	High strength in combination with high toughness in robust and sustainable polymeric materials. *Science*, **2019**, 366, 1376-1379	33.3	89
204	Highly flexible and tough concentric triaxial polystyrene fibers. *ACS Applied Materials & Interfaces*, **2014**, 6, 5918-23	9.5	86
203	Chemistry on electrospun polymeric nanofibers: merely routine chemistry or a real challenge?. *Macromolecular Rapid Communications*, **2010**, 31, 1317-31	4.8	84
202	Tough and transparent nylon-6 electrospun nanofiber reinforced melamine-formaldehyde composites. *ACS Applied Materials & Interfaces*, **2012**, 4, 2597-603	9.5	81
201	Combining 3D Printing with Electrospinning for Rapid Response and Enhanced Designability of Hydrogel Actuators. *Advanced Functional Materials*, **2018**, 28, 1800514	15.6	77
200	Wood-Inspired Anisotropic Cellulose Nanofibril Composite Sponges for Multifunctional Applications. *ACS Applied Materials & Interfaces*, **2020**, 12, 35513-35522	9.5	77
199	Short electrospun polymeric nanofibers reinforced polyimide nanocomposites. *Composites Science and Technology*, **2013**, 88, 57-61	8.6	69
198	Electrospun carbon fiber mat with layered architecture for anode in microbial fuel cells. *Electrochemistry Communications*, **2011**, 13, 1026-1029	5.1	69

197	Electrospinning of Fluorinated Polymers: Formation of Superhydrophobic Surfaces. *Macromolecular Materials and Engineering*, **2006**, 291, 592-601	3.9	68
196	High-density Fibrous Polyimide Sponges with Superior Mechanical and Thermal Properties. *ACS Applied Materials & Interfaces*, **2020**, 12, 19006-19014	9.5	66
195	Synthesis and Characterization of Copolymers of 5,6-Benzo-2-methylene-1,3-dioxepane and Styrene. *Macromolecules*, **2003**, 36, 6152-6159	5.5	64
194	LCST and UCST in One: Double Thermoresponsive Behavior of Block Copolymers of Poly(ethylene glycol) and Poly(acrylamide-co-acrylonitrile). *Langmuir*, **2015**, 31, 8940-6	4	62
193	Homopolymers and Random Copolymers of 5,6-Benzo-2-methylene-1,3-dioxepane and Methyl Methacrylate:Structural Characterization Using 1D and 2D NMR. *Macromolecules*, **2003**, 36, 2397-2403	5.5	62
192	Controlled/Living Ring-Closing Cyclopolymerization of Diallyldimethylammonium Chloride via the Reversible Addition Fragmentation Chain Transfer Process. *Macromolecules*, **2007**, 40, 3907-3913	5.5	59
191	Polymeric Nanosprings by Bicomponent Electrospinning. *Macromolecular Materials and Engineering*, **2009**, 294, 265-271	3.9	57
190	Nanofibers by green electrospinning of aqueous suspensions of biodegradable block copolyesters for applications in medicine, pharmacy and agriculture. *Macromolecular Rapid Communications*, **2010**, 31, 2077-83	4.8	57
189	Poly(amino acid)-Based Gel Fibers with pH Responsivity by Coaxial Reactive Electrospinning. *Macromolecular Rapid Communications*, **2017**, 38, 1700147	4.8	56
188	Amidometallate von Seltenerdelementen. Synthese und Kristallstrukturen von [Na(12-Krone-4)2][M{N(SiMe3)2}3(OSiMe3)] (M = Sm, Yb), [Na(THF)3Sm{N(SiMe3)2}3(C?CPh)], [Na(THF)6][Lu2(NH2)(NSiMe3){N(SiMe3)2}4] sowie von [NaN(SiMe3)2(THF)]2. Anwendungen der Seltenerdkomplexe als Polymerisationskatalysatoren. *Zeitschrift Für Anorganische Und*	1.3	56
187	Progress in the Field of Water- and/or Temperature-Triggered Polymer Actuators. *Macromolecular Materials and Engineering*, **2019**, 304, 1800548	3.9	56
186	Biodegradable Polymers: Present Opportunities and Challenges in Providing a Microplastic-Free Environment. *Macromolecular Chemistry and Physics*, **2020**, 221, 2000017	2.6	55
185	Controlled radical polymerization of N-acryloylglycinamide and UCST-type phase transition of the polymers. *Journal of Polymer Science Part A*, **2012**, 50, 4920-4928	2.5	54
184	Short nylon-6 nanofiber reinforced transparent and high modulus thermoplastic polymeric composites. *Composites Science and Technology*, **2013**, 87, 164-169	8.6	53
183	One-Component Dual Actuation: Poly(NIPAM) Can Actuate to Stable 3D Forms with Reversible Size Change. *Advanced Materials*, **2016**, 28, 9792-9796	24	53
182	Let There be Light: Polymeric Micelles with Upper Critical Solution Temperature as Light-Triggered Heat Nanogenerators for Combating Drug-Resistant Cancer. *Small*, **2018**, 14, e1802420	11	52
181	Novel layer-by-layer procedure for making nylon-6 nanofiber reinforced high strength, tough, and transparent thermoplastic polyurethane composites. *ACS Applied Materials & Interfaces*, **2012**, 4, 4366-72	9.5	52
180	Novel 'nano in nano' composites for sustained drug delivery: biodegradable nanoparticles encapsulated into nanofiber non-wovens. *Macromolecular Bioscience*, **2010**, 10, 1527-35	5.5	52

179	Exploration of Macroporous Polymeric Sponges As Drug Carriers. *Biomacromolecules*, **2017**, 18, 3215-3226	6.19	50
178	Microwave-Assisted Controlled Ring-Closing Cyclopolymerization of Diallyldimethylammonium Chloride Via the RAFT Process. *Macromolecular Rapid Communications*, **2007**, 28, 1923-1928	4.8	50
177	Biocompatible and degradable poly(2-hydroxyethyl methacrylate) based polymers for biomedical applications. *Polymer Chemistry*, **2012**, 3, 2752	4.9	47
176	Degradable blends of semi-crystalline and amorphous branched poly(caprolactone): Effect of microstructure on blend properties. *Polymer*, **2010**, 51, 1024-1032	3.9	46
175	Tea-bag-like polymer nanoreactors filled with gold nanoparticles. *Angewandte Chemie - International Edition*, **2014**, 53, 4972-5	16.4	45
174	Low-Density Self-Assembled Poly(N-Isopropyl Acrylamide) Sponges with Ultrahigh and Extremely Fast Water Uptake and Release. *Macromolecular Rapid Communications*, **2018**, 39, e1700838	4.8	44
173	Synthesis of Degradable Materials Based on Caprolactone and Vinyl Acetate Units Using Radical Chemistry. *Polymer Journal*, **2009**, 41, 650-660	2.7	44
172	Delignified wood with unprecedented anti-oil properties for the highly efficient separation of crude oil/water mixtures. *Journal of Materials Chemistry A*, **2019**, 7, 16735-16741	13	42
171	Antibacterial 45S5 Bioglass -based scaffolds reinforced with genipin cross-linked gelatin for bone tissue engineering. *Journal of Materials Chemistry B*, **2015**, 3, 3367-3378	7.3	42
170	Exploration of the Electrical Conductivity of Double-Network Silver Nanowires/Polyimide Porous Low-Density Compressible Sponges. *ACS Applied Materials & Interfaces*, **2017**, 9, 34286-34293	9.5	41
169	Design and biophysical characterization of bioresponsive degradable poly(dimethylaminoethyl methacrylate) based polymers for in vitro DNA transfection. *Biomacromolecules*, **2012**, 13, 313-22	6.9	40
168	Effect of Different Bicomponent Electrospinning Techniques on the Formation of Polymeric Nanosprings. *Macromolecular Materials and Engineering*, **2009**, 294, 781-786	3.9	40
167	Synthesis, Characterization, and Properties Evaluation of Poly[(N-isopropylacrylamide)-co-ester]s. *Macromolecular Chemistry and Physics*, **2007**, 208, 245-253	2.6	40
166	Millisecond Response of Shape Memory Polymer Nanocomposite Aerogel Powered by Stretchable Graphene Framework. *ACS Nano*, **2019**, 13, 5549-5558	16.7	39
165	Composite Polymeric Membranes with Directionally Embedded Fibers for Controlled Dual Actuation. *Macromolecular Rapid Communications*, **2018**, 39, e1800082	4.8	39
164	Ultraporous, Compressible, Wettable Polylactide/Polycaprolactone Sponges for Tissue Engineering. *Biomacromolecules*, **2018**, 19, 1663-1673	6.9	39
163	Ultralight open cell polymer sponges with advanced properties by PPX CVD coating. *Polymer Chemistry*, **2016**, 7, 2759-2764	4.9	39
162	Ring opening polymerisations of cyclic esters and carbonate by rare-earth LnCp3. *European Polymer Journal*, **2002**, 38, 2365-2371	5.2	38

161	Thermophilic films and fibers from photo cross-linkable UCST-type polymers. *Polymer Chemistry*, **2015**, 6, 2769-2776	4.9	37
160	Design and proof of reversible micelle-to-vesicle multistimuli-responsive morphological regulations. *Journal of Polymer Science Part A*, **2012**, 50, 451-457	2.5	37
159	Short Electrospun Fibers by UV Cutting Method. *Macromolecular Materials and Engineering*, **2008**, 293, 895-899	3.9	37
158	Functionalisation of PLLA nanofiber scaffolds using a possible cooperative effect between collagen type I and BMP-2: impact on growth and osteogenic differentiation of human mesenchymal stem cells. *Journal of Materials Science: Materials in Medicine*, **2011**, 22, 1753-62	4.5	36
157	Microstructural Characterisation and Properties Evaluation of Poly (methyl methacrylate-co-ester)s. *Polymer Journal*, **2007**, 39, 163-174	2.7	36
156	SmI2/Sm-Based Buyrolactone Caprolactone Copolymers: Microstructural Characterization Using One- and Two-Dimensional NMR Spectroscopy. *Macromolecules*, **2003**, 36, 3545-3549	5.5	36
155	Ring-opening polymerization of caprolactone and valerolactone using new Sm(III) halo-bis(trimethylsilyl)amido complexes. *Journal of Applied Polymer Science*, **1999**, 73, 1669-1674	2.9	36
154	Two-in-One Composite Fibers With Side-by-Side Arrangement of Silk Fibroin and Poly(l-lactide) by Electrospinning. *Macromolecular Materials and Engineering*, **2016**, 301, 48-55	3.9	36
153	Low Density, Thermally Stable, and Intrinsic Flame Retardant Poly(bis(benzimidazo)Benzophenanthroline-dione) Sponge. *Macromolecular Materials and Engineering*, **2018**, 303, 1700615	3.9	35
152	Biobased Polycarbonate as a Gas Separation Membrane and Breathing Glass for Energy Saving Applications. *Advanced Materials Technologies*, **2017**, 2, 1700026	6.8	34
151	Novel amphiphilic, biodegradable, biocompatible, cross-linkable copolymers: synthesis, characterization and drug delivery applications. *Polymer Chemistry*, **2012**, 3, 2785	4.9	34
150	Polymer grafted silver and copper nanoparticles with exceptional stability against aggregation by a high yield one-pot synthesis. *Polymer*, **2011**, 52, 912-920	3.9	34
149	Water-stable all-biodegradable microparticles in nanofibers by electrospinning of aqueous dispersions for biotechnical plant protection. *Biomacromolecules*, **2012**, 13, 439-44	6.9	33
148	Synthesis and Microstructural Characterization of Ethylene Carbonate Caprolactone/l-Lactide Copolymers Using One- and Two-Dimensional NMR Spectroscopy. *Macromolecules*, **2002**, 35, 7713-7717	5.5	33
147	Importance of compositional homogeneity of macromolecular chains for UCST-type transitions in water: Controlled versus conventional radical polymerization. *Journal of Polymer Science Part A*, **2014**, 52, 1878-1884	2.5	32
146	Effect of guanidinylation on the properties of poly(2-aminoethylmethacrylate)-based antibacterial materials. *Macromolecular Bioscience*, **2013**, 13, 242-55	5.5	32
145	Low volume shrinkage of polymers by photopolymerization of 1,1-bis(ethoxycarbonyl)-2-vinylcyclopropanes. *Polymer Chemistry*, **2015**, 6, 2297-2304	4.9	30
144	A Polymeric Drug Depot Based on 7-(2?-Methacryloyloxyethoxy)-4-methylcoumarin Copolymers for Photoinduced Release of 5-Fluorouracil Designed for the Treatment of Secondary Cataracts. *Macromolecular Chemistry and Physics*, **2010**, 211, 1857-1867	2.6	30

143	Plastic Pollution: A Material Problem?. *Macromolecules*, **2021**, 54, 4455-4469	5.5	30
142	Atom transfer radical polymerization as a tool for making poly(N-acryloylglycinamide) with molar mass independent UCST-type transitions in water and electrolytes. *Polymer Chemistry*, **2013**, 4, 3123	4.9	29
141	pH dependent thermoresponsive behavior of acrylamide□acrylonitrile UCST-type copolymers in aqueous media. *Polymer Chemistry*, **2016**, 7, 1979-1986	4.9	28
140	Diiodosamarium based polymerisations. *Journal of the Chemical Society, Perkin Transactions 1*, **2002**, 2033-2042		27
139	Large Multipurpose Exceptionally Conductive Polymer Sponges Obtained by Efficient Wet-Chemical Metallization. *Advanced Functional Materials*, **2015**, 25, 6182-6188	15.6	26
138	Functional Poly(Dimethyl Aminoethyl Methacrylate) by Combination of Radical Ring-Opening Polymerization and Click Chemistry for Biomedical Applications. *Macromolecular Chemistry and Physics*, **2012**, 213, 1643-1654	2.6	26
137	Polymer/bacteria composite nanofiber non-wovens by electrospinning of living bacteria protected by hydrogel microparticles. *Macromolecular Bioscience*, **2011**, 11, 333-7	5.5	26
136	A Non-ionic Thermophilic Hydrogel with Positive Thermosensitivity in Water and Electrolyte Solution. *Macromolecular Chemistry and Physics*, **2014**, 215, 1466-1472	2.6	25
135	Oligomeric dual functional antibacterial polycaprolactone. *Polymer Chemistry*, **2014**, 5, 2453	4.9	25
134	Closing one of the last gaps in polyionene compositions: alkyloxyethylammonium ionenes as fast-acting biocides. *Macromolecular Bioscience*, **2012**, 12, 341-9	5.5	25
133	Tunable, concentration-independent, sharp, hysteresis-free UCST phase transition from poly(N-acryloyl glycinamide-acrylonitrile) system. *Journal of Polymer Science Part A*, **2017**, 55, 274-279	2.5	25
132	Biobased Polymers from Plant-Derived Tulipalin A. *ACS Symposium Series*, **2012**, 197-212	0.4	25
131	Synthesis, Characterization, and Properties Evaluation of Methylcoumarin End-Functionalized Poly(methyl methacrylate) for Photoinduced Drug Release. *Macromolecules*, **2008**, 41, 3460-3467	5.5	25
130	Bioplastic Fibers from Gum Arabic for Greener Food Wrapping Applications. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 5900-5911	8.3	25
129	High-Barrier, Biodegradable Food Packaging. *Macromolecular Materials and Engineering*, **2018**, 303, 1800333	3.9	25
128	Quantitative Comparison of the Antimicrobial Efficiency of Leaching versus Nonleaching Polymer Materials. *Macromolecular Bioscience*, **2016**, 16, 647-54	5.5	24
127	Chameleon Nonwovens by Green Electrospinning. *Advanced Functional Materials*, **2013**, 23, 3156-3163	15.6	24
126	Free-Radical Copolymerization Behavior of 5,6-Benzo-2-methylene-1,3-dioxepane and Methacrylic Acid via the in Situ Generation of 3-Methyl-1,5-dihydrobenzo[e][1,3]dioxepin-3-yl Methacrylate and 2-(Acetoxymethyl)benzyl Methacrylate. *Macromolecules*, **2007**, 40, 7834-7841	5.5	24

125	Tree Gum Graphene Oxide Nanocomposite Films as Gas Barriers. *ACS Applied Nano Materials*, **2020**, 3, 633-640	5.6	24
124	Hyperbranched polyesters as biodegradable and antibacterial additives. *Journal of Materials Chemistry B*, **2017**, 5, 6827-6834	7.3	23
123	Synthesis of New Thermoplastic Elastomers by Silver Nanoparticles as Cross-Linker. *Macromolecules*, **2011**, 44, 5036-5042	5.5	23
122	Carboxylated wood-based sponges with underoil superhydrophilicity for deep dehydration of crude oil. *Journal of Materials Chemistry A*, **2020**, 8, 11354-11361	13	22
121	Electrospinning and cutting of ultrafine bioerodible poly(lactide-co-ethylene oxide) tri- and multiblock copolymer fibers for inhalation applications. *Polymers for Advanced Technologies*, **2009**, 22, n/a-n/a	3.2	22
120	Kristallstrukturen der Samarium-Amido-Komplexe [Sm(l-X){N(SiMe3)2}2(THF)]2 mit X = Cl, Br. *Zeitschrift Fur Anorganische Und Allgemeine Chemie*, **1999**, 625, 1405-1407	1.3	22
119	Tailoring the Morphology of Responsive Bioinspired Bicomponent Fibers. *Macromolecular Materials and Engineering*, **2018**, 303, 1700248	3.9	22
118	Thermoresponsive Gold Nanoparticles with Positive UCST-Type Thermoresponsivity. *Macromolecular Chemistry and Physics*, **2015**, 216, 460-465	2.6	21
117	Breathable and Flexible Polymer Membranes with Mechanoresponsive Electric Resistance. *Advanced Functional Materials*, **2020**, 30, 1907555	15.6	21
116	Living Composites of Bacteria and Polymers as Biomimetic Films for Metal Sequestration and Bioremediation. *Macromolecular Bioscience*, **2015**, 15, 1052-9	5.5	20
115	Enzymatically Degradable Polyester-Based Adhesives. *ACS Biomaterials Science and Engineering*, **2015**, 1, 971-977	5.5	20
114	Functional 2-methylene-1,3-dioxepane terpolymer: a versatile platform to construct biodegradable polymeric prodrugs for intracellular drug delivery. *Polymer Chemistry*, **2014**, 5, 4061-4068	4.9	20
113	Renaissance for low shrinking resins: all-in-one solution by bi-functional vinylcyclopropane-amides. *Chemical Communications*, **2015**, 51, 11899-902	5.8	20
112	Functional Degradable Polymers via Radical Ring-Opening Polymerization and Click Chemistry. *Macromolecular Chemistry and Physics*, **2011**, 212, 2573-2582	2.6	20
111	Radical Ring Opening and Vinyl Copolymerization of 2,3,4,5,6-pentafluorostyrene with 5,6-Benzo-2-methylene-1,3-dioxepane: Synthesis and Structural Characterization Using 1D and 2D NMR Techniques. *Journal of Polymer Research*, **2007**, 13, 403-412	2.7	20
110	Synthesis and microstructural characterisation of copolymers of L-lactide and trimethylene carbonate prepared using the SmI2/Sm initiator system. *Polymer International*, **2005**, 54, 1422-1428	3.3	20
109	Amphiphilic iron(II) spin crossover coordination polymers: crystal structures and phase transition properties. *Journal of Materials Chemistry C*, **2019**, 7, 1151-1163	7.1	19
108	Recycling non-food-grade tree gum wastes into nanoporous carbon for sustainable energy harvesting. *Green Chemistry*, **2020**, 22, 1198-1208	10	19

107	Tenside-Free Biodegradable Polymer Nanofiber Nonwovens by Green Electrospinning. *Macromolecules*, **2013**, 46, 7034-7042	5.5	19
106	Antimicrobial hydantoin-grafted poly(ε-caprolactone) by ring-opening polymerization and click chemistry. *Macromolecular Bioscience*, **2012**, 12, 1721-30	5.5	19
105	Synthesis of High-Molecular-Weight Tulipalin-A-Based Polymers by Simple Mixing and Heating of Comonomers. *Macromolecular Chemistry and Physics*, **2011**, 212, 603-612	2.6	19
104	Compaction and Transmembrane Delivery of pDNA: Differences between l-PEI and Two Types of Amphiphilic Block Copolymers. *Biomacromolecules*, **2017**, 18, 808-818	6.9	17
103	Functionalisation of PLLA nanofiber scaffolds using a possible cooperative effect between collagen type I and BMP-2: impact on colonization and bone formation in vivo. *Journal of Materials Science: Materials in Medicine*, **2012**, 23, 2227-33	4.5	17
102	Synthetic Route and Characterization of Main Chain Ester-Containing Hydrolytically Degradable Poly(N,N-dimethylaminoethyl methacrylate)-Based Polycations. *Macromolecular Chemistry and Physics*, **2010**, 211, 905-915	2.6	17
101	Thermally stable optically transparent copolymers of 2-methylene-1,3-dioxepane and N-phenyl maleimide with degradable ester linkages. *E-Polymers*, **2015**, 15, 217-226	2.7	16
100	Reversible gold nanorod alignment in mechano-responsive elastomers. *Polymer*, **2015**, 66, 167-172	3.9	16
99	Designed enzymatically degradable amphiphilic conetworks by radical ring-opening polymerization. *Polymer Chemistry*, **2015**, 6, 6409-6415	4.9	16
98	Preparation of continuous gold nanowires by electrospinning of high-concentration aqueous dispersions of gold nanoparticles. *Small*, **2012**, 8, 1436-41	11	16
97	Antimicrobial hydantoin-containing polyesters. *Macromolecular Bioscience*, **2012**, 12, 1068-76	5.5	16
96	Low dielectric constant polyimide nanomats by electrospinning. *Polymers for Advanced Technologies*, **2012**, 23, 951-957	3.2	16
95	Reactivity of Sm(II) compounds as ring-opening polymerization initiators for lactones. *Macromolecular Rapid Communications*, **1999**, 20, 274-278	4.8	16
94	Synthesis of Biobased Polycarbonate by Copolymerization of Menth-2-ene Oxide and CO2 with Exceptional Thermal Stability. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 14690-14693	8.3	16
93	Assembly of Gold Nanoparticles on Gold Nanorods Using Functionalized Poly(N-isopropylacrylamide) as Polymeric Glue. *Particle and Particle Systems Characterization*, **2016**, 33, 698-702	3.1	16
92	Tuning the Phase Transition from UCST-Type to LCST-Type by Composition Variation of Polymethacrylamide Polymers. *Macromolecular Rapid Communications*, **2018**, 39, e1800640	4.8	16
91	Polymer/Nanoparticle Hybrid Materials of Precise Dimensions by Size-Exclusive Fishing of Metal Nanoparticles. *Advanced Materials*, **2015**, 27, 3888-93	24	15
90	One-Step Preparation of Reduction-Responsive Biodegradable Polymers as Efficient Intracellular Drug Delivery Platforms. *Macromolecular Chemistry and Physics*, **2014**, 215, 1848-1854	2.6	15

89	Synthesis, characterization, and property evaluations of copolymers of diamantyl methacrylate with methyl methacrylate. *Journal of Applied Polymer Science*, **2009**, 114, 2109-2115	2.9	15
88	Synthesis, characterization and properties evaluation of copolymers of 2,3,4,5,6-pentafluorostyrene and N-phenylmaleimide. *Polymer International*, **2005**, 54, 1620-1625	3.3	15
87	Dendrons as active clicking tool for generating non-leaching antibacterial materials. *Polymer Chemistry*, **2016**, 7, 5322-5330	4.9	14
86	Living characteristics of the free-radical ring-closing polymerization of diallyldimethylammonium chloride. *European Polymer Journal*, **2011**, 47, 111-114	5.2	14
85	Synthesis, characterization and properties of a new polymerisable surfactant: 12-methacryloyl dodecylphosphocholine. *Chemistry and Physics of Lipids*, **2010**, 163, 367-72	3.7	14
84	Mesostructured Nonwovens with Penguin Downy Feather-Like Morphology Top-Down Combined with Bottom-Up. *Advanced Functional Materials*, **2019**, 29, 1903166	15.6	13
83	Ultralight, Structurally Stable Electrospun Sponges with Tailored Hydrophilicity as a Novel Material Platform. *ACS Applied Materials & Interfaces*, **2020**, 12, 18002-18011	9.5	13
82	Degradable and biocompatible poly(N,N-dimethylaminoethyl methacrylate-co-caprolactone)s as DNA transfection agents. *Macromolecular Bioscience*, **2013**, 13, 1267-75	5.5	13
81	Degradable Elastomeric Block Copolymers Based on Polycaprolactone by Free-Radical Chemistry. *Macromolecular Chemistry and Physics*, **2011**, 212, 1327-1334	2.6	13
80	Quick Polymerization from Electrospun Macroinitiators for Making Thermoresponsive Nanofibers. *Macromolecular Materials and Engineering*, **2011**, 296, 858-864	3.9	13
79	Synthesis and Enzymatic Degradation of Soft Aliphatic Polyesters. *Macromolecular Bioscience*, **2016**, 16, 207-13	5.5	13
78	Hierarchically Porous Bio-Based Sustainable Conjugate Sponge for Highly Selective Oil/Organic Solvent Absorption. *Advanced Functional Materials*, **2021**, 31, 2100640	15.6	13
77	Nanofibre preparation of non-processable polymers by solid-state polymerization of molecularly self-assembled monomers. *Nanoscale*, **2017**, 9, 18169-18174	7.7	12
76	Blocked bacteria escape by ATRP grafting of a PMMA shell on PVA microparticles. *Macromolecular Bioscience*, **2014**, 14, 537-45	5.5	12
75	Template Assisted Change in Morphology from Particles to Nanofibers by Side-by-Side Electrospinning of Block Copolymers. *Macromolecular Materials and Engineering*, **2014**, 299, 1298-1305	3.9	12
74	Precisely Designed Gold Nanoparticles by Surface Polymerization Artificial Molecules as Building Blocks for Novel Materials. *Advanced Functional Materials*, **2011**, 21, 3753-3759	15.6	12
73	Photo-polymerizable, low shrinking modular construction kit with high efficiency based on vinylcyclopropanes. *Polymer Chemistry*, **2016**, 7, 3100-3106	4.9	12
72	Generalized and feasible strategy to prepare ultra-porous, low density, compressible carbon nanoparticle sponges. *Carbon*, **2019**, 154, 363-369	10.4	11

71	Polymer Cages as Universal Tools for the Precise Bottom-Up Synthesis of Metal Nanoparticles. *Angewandte Chemie - International Edition*, **2015**, 54, 14539-44	16.4	11
70	Unlocking the Processability and Recyclability of Biobased Poly(limonene carbonate). *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 6442-6448	8.3	10
69	Ultrasound-mediated synthesis of high-molecular weight polystyrene-grafted silver nanoparticles by facile ligand exchange reactions in suspension. *Small*, **2014**, 10, 201-8	11	10
68	Thermo-switchable antibacterial activity. *Macromolecular Bioscience*, **2012**, 12, 1401-12	5.5	10
67	Vinyl-Type Polymerization of Alkylester-Substituted Norbornenes Without Endo/Exo Separation. *Macromolecular Chemistry and Physics*, **2010**, 211, 1595-1601	2.6	10
66	Protection of Vine Plants against Esca Disease by Breathable Electrospun Antifungal Nonwovens. *Macromolecular Bioscience*, **2016**, 16, 1391-7	5.5	10
65	Smart secondary polyurethane dispersions. *Polymer International*, **2013**, 62, 1750-1757	3.3	9
64	Die Reaktion von mer-[ScCl3(H2O)3] mit Pyridin. Kristallstruktur von [Sc2Cl4(μ-OH)2(Py)4]·4Py. *Zeitschrift Fur Anorganische Und Allgemeine Chemie*, **2009**, 635, 1910-1914	1.3	9
63	Anisotropic microfibres of a liquid-crystalline diketopyrrolopyrrole by self-assembly-assisted electrospinning. *Nanoscale Horizons*, **2019**, 4, 169-174	10.8	8
62	Vinyl-functionalized gold nanoparticles as artificial monomers for the free radical copolymerization with methyl methacrylate. *Polymer*, **2012**, 53, 1632-1639	3.9	8
61	Preparation of Gold Nanoparticle–Poly(L-menthyl methacrylate) Conjugates via ATRP Polymerization. *Macromolecular Chemistry and Physics*, **2011**, 212, 2551-2557	2.6	8
60	In situ formation of Sm(III) initiator from SmI2/MMA for ring opening polymerization of cyclic esters. *European Polymer Journal*, **2004**, 40, 2143-2152	5.2	8
59	Biodegradable aliphatic–aromatic polyester with antibacterial property. *Polymer Engineering and Science*, **2016**, 56, 1146-1152	2.3	8
58	Unlocking Nanocarriers for the Programmed Release of Antimalarial Drugs. *Global Challenges*, **2017**, 1, 1600011	4.3	7
57	Filter-Through Method of Making Highly Efficient Polymer-Clay Nanocomposite Membranes. *Macromolecular Materials and Engineering*, **2019**, 304, 1800779	3.9	7
56	Preparing a pseudo-solid by the reinforcement of a polydentate thioether using silver nanoparticles. *Nanoscale*, **2015**, 7, 1977-83	7.7	7
55	Buckling and unraveling Poly(N-isopropyl acrylamide)-Thermoplastic Polyurethane bilayers. *Polymer*, **2016**, 97, 604-613	3.9	7
54	Solvent-Free Aqueous Dispersions of Block Copolyesters for Electrospinning of Biodegradable Nonwoven Mats for Biomedical Applications. *Macromolecular Materials and Engineering*, **2014**, 299, 1445–1454	3.9	7

53	Phantom ring-closing condensation polymerization: towards antibacterial oligoguanidines. *Macromolecular Rapid Communications*, **2011**, 32, 994-9	4.8	7
52	Samarium(III)-mediated graft polymerization of ?-caprolactone and L-lactide on functionalized poly(p-xylylene)s: model studies and polymerizations. *Polymers for Advanced Technologies*, **1999**, 10, 528-534	3.2	7
51	Self-Rolled Porous Hollow Tubes Made up of Biodegradable Polymers. *Macromolecular Rapid Communications*, **2017**, 38, 1700034	4.8	6
50	A fast degrading odd-odd aliphatic polyester-5,7 made by condensation polymerization for biomedical applications. *Journal of Biomaterials Science, Polymer Edition*, **2012**, 23, 1539-51	3.5	6
49	Breathable and Flexible Dual-Sided Nonwovens with Adjustable Infrared Optical Performances for Smart Textile. *Advanced Functional Materials*,2108808	15.6	6
48	Antibacterial and Biocompatible Hydrogel Dressing Based on Gelatin- and Castor-Oil-Derived Biocidal Agent. *ACS Biomaterials Science and Engineering*, **2021**, 7, 3633-3647	5.5	6
47	Alkenyl succinic anhydride modified tree-gum kondagogu: A bio-based material with potential for food packaging. *Carbohydrate Polymers*, **2021**, 266, 118126	10.3	6
46	Nanofibrous Structures **2019**, 93-122		5
45	Impact of the Fiber Length Distribution on Porous Sponges Originating from Short Electrospun Fibers Made from Polymer Yarn. *Macromolecular Materials and Engineering*, **2020**, 305, 1900629	3.9	5
44	Exploring suitable oligoamines for phantom ring-closing condensation polymerization with guanidine hydrochloride. *Polymer Chemistry*, **2013**, 4, 707-716	4.9	5
43	Polymer-bound 4-methylcoumarin/1-heptanoyl-5-fluorouracil photodimers: NMR elucidation of dimer structure. *Magnetic Resonance in Chemistry*, **2011**, 49, 70-5	2.1	5
42	High Barrier Nanocomposite Film with Accelerated Biodegradation by Clay Swelling Induced Fragmentation. *Macromolecular Materials and Engineering*,2100727	3.9	5
41	Synthesis and properties evaluation of quaternized polyurethanes as antibacterial adhesives. *Journal of Polymer Science Part A*, **2019**, 57, 752-757	2.5	4
40	Wolf-Lamb-type Catalysis in One Pot Using Electrospun Polymeric Catalyst Membranes. *Macromolecular Rapid Communications*, **2019**, 40, e1900148	4.8	4
39	Gradient-Structured Nonflammable Flexible Polymer Membranes. *ACS Applied Materials & Interfaces*, **2019**, 11, 11876-11883	9.5	4
38	Layering-Triggered Delayering with Exfoliated High-Aspect Ratio Layered Silicate for Enhanced Gas Barrier, Mechanical Properties, and Degradability of Biodegradable Polymers. *Global Challenges*, **2020**, 4, 2000030	4.3	4
37	In Vitro Study of Dexamethasone Release From Poly(p-xylylene) Films. *Macromolecular Chemistry and Physics*, **2010**, 211, 265-269	2.6	4
36	Virtually Wall-Less Tubular Sponges as Compartmentalized Reaction Containers. *Research*, **2019**, 2019, 4152536	7.8	4

35	Balancing Degradability and Physical Properties of Amorphous Poly(d,l-Lactide) by Making Blends. *Macromolecular Materials and Engineering*,2100602	3.9	4
34	Poly(p-xylylene) Nanotubes Decorated with Nonagglomerated Gold Nanoparticles for the Alcoholysis of Dimethylphenylsilane. *ACS Applied Nano Materials*, **2020**, 3, 2766-2773	5.6	3
33	Precise 2D-Patterned Incompatible Catalysts for Reactions in One-Pot. *Chemistry - A European Journal*, **2019**, 25, 13640-13646	4.8	3
32	A rare example of the formation of polystyrene-grafted aliphatic polyester in one-pot by radical polymerization. *Chemistry - A European Journal*, **2014**, 20, 7419-28	4.8	3
31	Polymere Nanofasern durch Elektrospinnen Materialien f neue Anwendungen. *Chemie-Ingenieur-Technik*, **2008**, 80, 1671-1676	0.8	3
30	Perfusion Cultivation of Artificial Liver Extracellular Matrix in Fibrous Polymer Sponges Biomimicking Scaffolds for Tissue Engineering. *Biomacromolecules*, **2020**, 21, 4094-4104	6.9	3
29	Poly(Vinyl Alcohol)-Hydrogel Microparticles with Soft Barrier Shell for the Encapsulation of Micrococcus luteus. *Macromolecular Bioscience*, **2021**, 21, e2000419	5.5	3
28	Favorable Antibacterial, Antibiofilm, Antiadhesion to Cells, and Biocompatible Polyurethane by Facile Surface Functionalization.. *ACS Applied Bio Materials*, **2021**, 4, 4629-4640	4.1	3
27	Self-Organization of Gold Nanoparticle Assemblies with 3D Spatial Order and Their External Stimuli Responsiveness. *Macromolecular Rapid Communications*, **2016**, 37, 215-20	4.8	3
26	Applied precise Multivariable control theory on shunt dynamic power filter using sliding mode controller **2016**,		3
25	Electrospun Bacteria-Gold Nanoparticle/Polymer Composite Mesofiber Nonwovens for Catalytic Application. *Macromolecular Chemistry and Physics*, **2019**, 220, 1900007	2.6	3
24	Flexible, Mechanically Stable, Porous Self-Standing Microfiber Network Membranes of Covalent Organic Frameworks: Preparation Method and Characterization. *Advanced Functional Materials*,2106507	15.6	3
23	Design of Soft Materials from Liquid Triblock Co-Oligomers and Metal Nanoparticles. *Chemistry of Materials*, **2014**, 26, 4805-4811	9.6	2
22	Ultra-long palladium nanoworms by polymer grafts. *Journal of Nanoparticle Research*, **2012**, 14, 1	2.3	2
21	Stimuli-Responsive Elastic Polyurethane-Based Superabsorber Nanomat Composites. *Macromolecular Materials and Engineering*, **2011**, 296, 517-523	3.9	2
20	N-Acryloyl glycinamide. *Acta Crystallographica Section E: Structure Reports Online*, **2011**, 67, o2170		2
19	Synthesis and properties of novel poly(p-xylylene)s with aliphatic substituents. *E-Polymers*, **2002**, 2,	2.7	2
18	Synthesis of OH-functionalized poly(p-xylylene)s by reductive coupling polymerization of aromatic dialdehydes with stoichiometric amounts of divalent samarium compounds. *Acta Polymerica*, **1999**, 50, 35-39		2

17	Fast Hydrolyzable Constitutional Isomer of Poly(butylene terephthalate) and Its Copolyesters with 1,4-Butanediol. *ACS Applied Polymer Materials*,	4.3	2
16	Modulation of Transaminase Activity by Encapsulation in Temperature-Sensitive Poly(N-acryloyl glycinamide) Hydrogels. *ChemBioChem*, **2021**, 22, 3452-3461	3.8	2
15	Sustainable block copolymers of poly(limonene carbonate). *Polymer Chemistry*, **2021**, 12, 903-910	4.9	2
14	Use of Reactive and Functional Hydrophobes (Hydrophobins) in the Miniemulsion Polymerization of Styrene and Methyl Methacrylate. *Macromolecular Chemistry and Physics*, **2011**, 212, 391-400	2.6	1
13	2D NMR characterisation of 5-norbornene-2-nonaneacidethylester and 5-norbornene-2-hexane. *Designed Monomers and Polymers*, **2005**, 8, 237-248	3.1	1
12	Quick atom transfer radical polymerization of N,N-diisopropyl ammonium acrylate in the presence of air. *Designed Monomers and Polymers*, **2005**, 8, 673-678	3.1	1
11	Controlled-Release LCST-Type Nonwoven Depots via Squeezing-Out Thermal Response. *Macromolecular Materials and Engineering*, **2019**, 304, 1800606	3.9	1
10	Interpenetrating thermophobic and thermophilic dual responsive networks. *Journal of Polymer Science Part A*, **2019**, 57, 539-544	2.5	1
9	Redispersible Gold Nanoparticle/Polymer Composite Powders Ready for Ligand Exchange Reactions. *ChemNanoMat*, **2019**, 5, 181-186	3.5	1
8	Theoretical and Experimental Study of Monofunctional Vinyl Cyclopropanes Bearing Hydrogen Bond Enabling Side Chains. *Macromolecules*, **2021**, 54, 11-21	5.5	1
7	pH-Responsive Biohybrid Carrier Material for Phenol Decontamination in Wastewater. *Biomacromolecules*, **2018**, 19, 3224-3232	6.9	1
6	Structural Insights into Polymethacrylamide-Based LCST Polymers in Solution: A Small-Angle Neutron Scattering Study. *Macromolecules*, **2021**, 54, 7632-7641	5.5	1
5	Polyurethanes from Hydrophobic Elastic Materials to Hydrogels with Potent Nonleaching Biocidal and Antibiofilm Activity. *ACS Applied Polymer Materials*, **2021**, 3, 4695-4707	4.3	1
4	Tailor-made compostable polyurethanes. *Polymer Chemistry*, **2022**, 13, 622-630	4.9	0
3	Post-Process-Functionalized Catalytic Electrospun and 2D-Printed Structures for Wolf□amb-Type Catalysis. *ACS Applied Polymer Materials*, **2021**, 3, 1349-1357	4.3	0
2	Structural Exploration of Phantom Oligoguanidine from Asymmetric Diamine and Guanidine Hydrochloride. *Macromolecular Chemistry and Physics*, **2016**, 217, 1834-1841	2.6	
1	High Barrier, Biodegradable Nanocomposite Films Based on Clay-Coated and Chemically Modified Gum Kondagogu. *Macromolecular Materials and Engineering*,2200008	3.9	