

# Wenguang Liu

## List of Publications by Citations

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174  
papers

10,569  
citations

59  
h-index

98  
g-index

178  
ext. papers

12,371  
ext. citations

9.6  
avg, IF

6.7  
L-index

#	Paper	IF	Citations
174	Highly luminescent carbon nanodots by microwave-assisted pyrolysis. <i>Chemical Communications</i> , <b>2012</b> , 48, 7955-7	5.8	725
173	Nano-carrier for gene delivery and bioimaging based on carbon dots with PEI-passivation enhanced fluorescence. <i>Biomaterials</i> , <b>2012</b> , 33, 3604-13	15.6	573
172	A Mechanically Strong, Highly Stable, Thermoplastic, and Self-Healable Supramolecular Polymer Hydrogel. <i>Advanced Materials</i> , <b>2015</b> , 27, 3566-71	24	542
171	Bioinspired fabrication of high strength hydrogels from non-covalent interactions. <i>Progress in Polymer Science</i> , <b>2017</b> , 71, 1-25	29.6	269
170	One-step synthesis of surface passivated carbon nanodots by microwave assisted pyrolysis for enhanced multicolor photoluminescence and bioimaging. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 13163		262
169	Dipole-Dipole and H-Bonding Interactions Significantly Enhance the Multifaceted Mechanical Properties of Thermoresponsive Shape Memory Hydrogels. <i>Advanced Functional Materials</i> , <b>2015</b> , 25, 471-480	15.6	242
168	An investigation on the physicochemical properties of chitosan/DNA polyelectrolyte complexes. <i>Biomaterials</i> , <b>2005</b> , 26, 2705-11	15.6	216
167	Water-soluble and phosphorus-containing carbon dots with strong green fluorescence for cell labeling. <i>Journal of Materials Chemistry B</i> , <b>2014</b> , 2, 46-48	7.3	199
166	Paintable and Rapidly Bondable Conductive Hydrogels as Therapeutic Cardiac Patches. <i>Advanced Materials</i> , <b>2018</b> , 30, e1704235	24	198
165	Recombinant human collagen for tissue engineered corneal substitutes. <i>Biomaterials</i> , <b>2008</b> , 29, 1147-58	15.6	181
164	Water-Triggered Hyperbranched Polymer Universal Adhesives: From Strong Underwater Adhesion to Rapid Sealing Hemostasis. <i>Advanced Materials</i> , <b>2019</b> , 31, e1905761	24	174
163	Direct 3D Printing of High Strength Biohybrid Gradient Hydrogel Scaffolds for Efficient Repair of Osteochondral Defect. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1706644	15.6	159
162	Collagen-phosphorylcholine interpenetrating network hydrogels as corneal substitutes. <i>Biomaterials</i> , <b>2009</b> , 30, 1551-9	15.6	153
161	Degradable disulfide core-cross-linked micelles as a drug delivery system prepared from vinyl functionalized nucleosides via the RAFT process. <i>Biomacromolecules</i> , <b>2008</b> , 9, 3321-31	6.9	148
160	A hybrid injectable hydrogel from hyperbranched PEG macromer as a stem cell delivery and retention platform for diabetic wound healing. <i>Acta Biomaterialia</i> , <b>2018</b> , 75, 63-74	10.8	137
159	3D-Printed High Strength Bioactive Supramolecular Polymer/Clay Nanocomposite Hydrogel Scaffold for Bone Regeneration. <i>ACS Biomaterials Science and Engineering</i> , <b>2017</b> , 3, 1109-1118	5.5	133
158	A rapid temperature-responsive sol-gel reversible poly(N-isopropylacrylamide)-g-methylcellulose copolymer hydrogel. <i>Biomaterials</i> , <b>2004</b> , 25, 3005-12	15.6	127

157	Mg/N double doping strategy to fabricate extremely high luminescent carbon dots for bioimaging. <i>RSC Advances</i> , <b>2014</b> , 4, 3201-3205	3.7	126
156	Enhanced gene transfection and serum stability of polyplexes by PDMAEMA-polysulfobetaine diblock copolymers. <i>Biomaterials</i> , <b>2011</b> , 32, 628-38	15.6	122
155	Osteochondral Regeneration with 3D-Printed Biodegradable High-Strength Supramolecular Polymer Reinforced-Gelatin Hydrogel Scaffolds. <i>Advanced Science</i> , <b>2019</b> , 6, 1900867	13.6	121
154	ZnO QD@PMAA-co-PDMAEMA nonviral vector for plasmid DNA delivery and bioimaging. <i>Biomaterials</i> , <b>2010</b> , 31, 3087-94	15.6	119
153	High-strength hydrogels with integrated functions of H-bonding and thermoresponsive surface-mediated reverse transfection and cell detachment. <i>Advanced Materials</i> , <b>2010</b> , 22, 2652-6	24	113
152	An Injectable Supramolecular Polymer Nanocomposite Hydrogel for Prevention of Breast Cancer Recurrence with Theranostic and Mammoplastic Functions. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1801000	15.6	112
151	A facile and versatile approach to biocompatible "fluorescent polymers" from polymerizable carbon nanodots. <i>Chemical Communications</i> , <b>2012</b> , 48, 10431-3	5.8	110
150	Zinc ion uniquely induced triple shape memory effect of dipole-dipole reinforced ultra-high strength hydrogels. <i>Macromolecular Rapid Communications</i> , <b>2012</b> , 33, 225-31	4.8	104
149	Redox-cleavable star cationic PDMAEMA by arm-first approach of ATRP as a nonviral vector for gene delivery. <i>Biomaterials</i> , <b>2010</b> , 31, 559-69	15.6	104
148	A Etonjugation-containing soft and conductive injectable polymer hydrogel highly efficiently rebuilds cardiac function after myocardial infarction. <i>Biomaterials</i> , <b>2017</b> , 122, 63-71	15.6	103
147	A robust, highly stretchable supramolecular polymer conductive hydrogel with self-healability and thermo-processability. <i>Scientific Reports</i> , <b>2017</b> , 7, 41566	4.9	101
146	3D-Bioprinted Osteoblast-Laden Nanocomposite Hydrogel Constructs with Induced Microenvironments Promote Cell Viability, Differentiation, and Osteogenesis both In Vitro and In Vivo. <i>Advanced Science</i> , <b>2018</b> , 5, 1700550	13.6	101
145	An injectable conductive hydrogel encapsulating plasmid DNA-eNOs and ADSCs for treating myocardial infarction. <i>Biomaterials</i> , <b>2018</b> , 160, 69-81	15.6	99
144	Construction of an ultrahigh strength hydrogel with excellent fatigue resistance based on strong dipole-dipole interaction. <i>Soft Matter</i> , <b>2011</b> , 7, 2825	3.6	98
143	Fabrication of a shape memory hydrogel based on imidazole-zinc ion coordination for potential cell-encapsulating tubular scaffold application. <i>Soft Matter</i> , <b>2013</b> , 9, 132-137	3.6	96
142	NIR-responsive cancer cytomembrane-cloaked carrier-free nanosystems for highly efficient and self-targeted tumor drug delivery. <i>Biomaterials</i> , <b>2018</b> , 159, 25-36	15.6	93
141	Polycation-b-polyzwitterion copolymer grafted luminescent carbon dots as a multifunctional platform for serum-resistant gene delivery and bioimaging. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2014</b> , 6, 20487-97	9.5	93
140	Alginate microsphere-collagen composite hydrogel for ocular drug delivery and implantation. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2008</b> , 19, 3365-71	4.5	92

139	Injectable hyperbranched poly(amine ester) hydrogels with on-demand degradation profiles to match wound healing processes. <i>Chemical Science</i> , <b>2018</b> , 9, 2179-2187	9.4	87
138	A Mineralized High Strength and Tough Hydrogel for Skull Bone Regeneration. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1604327	15.6	85
137	NIR-Activated Polydopamine-Coated Carrier-Free "Nanobomb" for In Situ On-Demand Drug Release. <i>Advanced Science</i> , <b>2018</b> , 5, 1800155	13.6	85
136	Recent advances in wet adhesives: Adhesion mechanism, design principle and applications. <i>Progress in Polymer Science</i> , <b>2021</b> , 116, 101388	29.6	85
135	Intermolecular hydrogen bonding strategy to fabricate mechanically strong hydrogels with high elasticity and fatigue resistance. <i>Soft Matter</i> , <b>2013</b> , 9, 6331	3.6	83
134	High Strength Multifunctional Multiwalled Hydrogel Tubes: Ion-Triggered Shape Memory, Antibacterial, and Anti-inflammatory Efficacies. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 16865-72	12.5	80
133	Thermosensitive N-isopropylacrylamide-N-propylacrylamide-vinyl pyrrolidone terpolymers: synthesis, characterization and preliminary application as embolic agents. <i>Biomaterials</i> , <b>2005</b> , 26, 7002-11	15.6	80
132	A Janus Hydrogel Wet Adhesive for Internal Tissue Repair and Anti-Postoperative Adhesion. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 2005689	15.6	79
131	Sea Cucumber-Inspired Autolytic Hydrogels Exhibiting Tunable High Mechanical Performances, Repairability, and Reusability. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 8956-66	9.5	78
130	An anti-inflammatory cell-free collagen/resveratrol scaffold for repairing osteochondral defects in rabbits. <i>Acta Biomaterialia</i> , <b>2014</b> , 10, 4983-4995	10.8	77
129	Mechanically and biologically skin-like elastomers for bio-integrated electronics. <i>Nature Communications</i> , <b>2020</b> , 11, 1107	17.4	75
128	A thermoresponsive chitosan-NIPAAm/vinyl laurate copolymer vector for gene transfection. <i>Bioconjugate Chemistry</i> , <b>2005</b> , 16, 972-80	6.3	73
127	Co-delivery of doxorubicin and tumor-suppressing p53 gene using a POSS-based star-shaped polymer for cancer therapy. <i>Biomaterials</i> , <b>2015</b> , 55, 12-23	15.6	71
126	Radiopaque Highly Stiff and Tough Shape Memory Hydrogel Microcoils for Permanent Embolization of Arteries. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1705962	15.6	71
125	Cationic polymer brush grafted-nanodiamond via atom transfer radical polymerization for enhanced gene delivery and bioimaging. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 7755		71
124	An Autolytic High Strength Instant Adhesive Hydrogel for Emergency Self-Rescue. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1804925	15.6	69
123	Catechol functionalized hyperbranched polymers as biomedical materials. <i>Progress in Polymer Science</i> , <b>2018</b> , 78, 47-55	29.6	67
122	The biocompatibility of fatty acid modified dextran-arginine bioconjugate gene delivery vector. <i>Biomaterials</i> , <b>2012</b> , 33, 604-13	15.6	67

121	Double hydrogen-bonding pH-sensitive hydrogels retaining high-strengths over a wide pH range. <i>Macromolecular Rapid Communications</i> , <b>2013</b> , 34, 63-8	4.8	66
120	Coadministration of an Adhesive Conductive Hydrogel Patch and an Injectable Hydrogel to Treat Myocardial Infarction. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 2039-2048	9.5	65
119	Biological applications of carbon dots. <i>Science China Chemistry</i> , <b>2014</b> , 57, 522-539	7.9	64
118	3D printing of biomimetic vasculature for tissue regeneration. <i>Materials Horizons</i> , <b>2019</b> , 6, 1197-1206	14.4	62
117	Temperature-tuned DNA condensation and gene transfection by PEI-g-(PMEO(2)MA-b-PHEMA) copolymer-based nonviral vectors. <i>Biomaterials</i> , <b>2010</b> , 31, 144-55	15.6	60
116	Toward an understanding of thermoresponsive transition behavior of hydrophobically modified N-isopropylacrylamide copolymer solution. <i>Polymer</i> , <b>2005</b> , 46, 5268-5277	3.9	60
115	Rebuilding Postinfarcted Cardiac Functions by Injecting TIIA@PDA Nanoparticle-Cross-linked ROS-Sensitive Hydrogels. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 2880-2890	9.5	59
114	An inhalable $\beta$ -adrenoceptor ligand-directed guanidinylated chitosan carrier for targeted delivery of siRNA to lung. <i>Journal of Controlled Release</i> , <b>2012</b> , 162, 28-36	11.7	58
113	Effect of Block Order of ABA- and BAB-Type NIPAAm/HEMA Triblock Copolymers on Thermoresponsive Behavior of Solutions. <i>Macromolecular Chemistry and Physics</i> , <b>2007</b> , 208, 1773-1781	2.6	58
112	Enhanced gene delivery by chitosan-disulfide-conjugated LMW-PEI for facilitating osteogenic differentiation. <i>Acta Biomaterialia</i> , <b>2013</b> , 9, 6694-703	10.8	57
111	Conductive Hydrogen Sulfide-Releasing Hydrogel Encapsulating ADSCs for Myocardial Infarction Treatment. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 14619-14629	9.5	54
110	Regeneration of functional nerves within full thickness collagen-phosphorylcholine corneal substitute implants in guinea pigs. <i>Biomaterials</i> , <b>2010</b> , 31, 2770-8	15.6	54
109	Wound dressing change facilitated by spraying zinc ions. <i>Materials Horizons</i> , <b>2020</b> , 7, 605-614	14.4	54
108	A study of thermoresponsive poly(N-isopropylacrylamide)/polyarginine bioconjugate non-viral transgene vectors. <i>Biomaterials</i> , <b>2006</b> , 27, 4984-92	15.6	53
107	Biomaterials-enabled cornea regeneration in patients at high risk for rejection of donor tissue transplantation. <i>Npj Regenerative Medicine</i> , <b>2018</b> , 3, 2	15.8	52
106	High-strength photoresponsive hydrogels enable surface-mediated gene delivery and light-induced reversible cell adhesion/detachment. <i>Langmuir</i> , <b>2014</b> , 30, 11823-32	4	52
105	Hydrogen bonded and ionically crosslinked high strength hydrogels exhibiting Ca-triggered shape memory properties and volume shrinkage for cell detachment. <i>Journal of Materials Chemistry B</i> , <b>2015</b> , 3, 6347-6354	7.3	51
104	Hydrogen-Bonding Toughened Hydrogels and Emerging CO <sub>2</sub> -Responsive Shape Memory Effect. <i>Macromolecular Rapid Communications</i> , <b>2015</b> , 36, 1585-91	4.8	50

103	Multiple H-Bonding Chain Extender-Based Ultrastiff Thermoplastic Polyurethanes with Autonomous Self-Healability, Solvent-Free Adhesiveness, and AIE Fluorescence. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2006944	15.6	50
102	A highly tough and stiff supramolecular polymer double network hydrogel. <i>Polymer</i> , <b>2018</b> , 153, 193-200	3.9	49
101	A High Strength Self-Healable Antibacterial and Anti-Inflammatory Supramolecular Polymer Hydrogel. <i>Macromolecular Rapid Communications</i> , <b>2017</b> , 38, 1600695	4.8	48
100	Nano-silver in situ hybridized collagen scaffolds for regeneration of infected full-thickness burn skin. <i>Journal of Materials Chemistry B</i> , <b>2015</b> , 3, 4231-4241	7.3	48
99	Synthetic neoglycopolymer-recombinant human collagen hybrids as biomimetic crosslinking agents in corneal tissue engineering. <i>Biomaterials</i> , <b>2009</b> , 30, 5403-8	15.6	48
98	Robust MeO2MA/vinyl-4,6-diamino-1,3,5-triazine copolymer hydrogels-mediated reverse gene transfection and thermo-induced cell detachment. <i>Biomaterials</i> , <b>2011</b> , 32, 1943-9	15.6	48
97	Enhanced Therapeutic siRNA to Tumor Cells by a pH-Sensitive Agmatine-Chitosan Bioconjugate. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 8114-24	9.5	47
96	A Reversibly Responsive Fluorochromic Hydrogel Based on Lanthanide-Mannose Complex. <i>Advanced Science</i> , <b>2019</b> , 6, 1802112	13.6	46
95	Zinc ion-triggered two-way macro-/microscopic shape changing and memory effects in high strength hydrogels with pre-programmed unilateral patterned surfaces. <i>Soft Matter</i> , <b>2012</b> , 8, 6846	3.6	44
94	Poly(N-acryloyl glycinamide): a fascinating polymer that exhibits a range of properties from UCST to high-strength hydrogels. <i>Chemical Communications</i> , <b>2018</b> , 54, 10540-10553	5.8	43
93	Antifouling Super Water Absorbent Supramolecular Polymer Hydrogel as an Artificial Vitreous Body. <i>Advanced Science</i> , <b>2018</b> , 5, 1800711	13.6	40
92	Polymerization of N-acryloylsemicarbazide: a facile and versatile strategy to tailor-make highly stiff and tough hydrogels. <i>Materials Horizons</i> , <b>2020</b> , 7, 1160-1170	14.4	39
91	Controlled heterogeneous stem cell differentiation on a shape memory hydrogel surface. <i>Scientific Reports</i> , <b>2014</b> , 4, 5815	4.9	38
90	Local gene delivery via endovascular stents coated with dodecylated chitosan-plasmid DNA nanoparticles. <i>International Journal of Nanomedicine</i> , <b>2010</b> , 5, 1095-102	7.3	35
89	An Ultrasoft Self-Fused Supramolecular Polymer Hydrogel for Completely Preventing Postoperative Tissue Adhesion. <i>Advanced Materials</i> , <b>2021</b> , 33, e2008395	24	35
88	Fabrication of strong hydrogen-bonding induced coacervate adhesive hydrogels with antibacterial and hemostatic activities. <i>Biomaterials Science</i> , <b>2020</b> , 8, 1455-1463	7.4	34
87	Surface passivated carbon nanodots prepared by microwave assisted pyrolysis: effect of carboxyl group in precursors on fluorescence properties. <i>RSC Advances</i> , <b>2014</b> , 4, 18818-18826	3.7	32
86	Directed neural stem cell differentiation on polyaniline-coated high strength hydrogels. <i>Materials Today Chemistry</i> , <b>2016</b> , 1-2, 15-22	6.2	32

85	Guanidinylation: A simple way to fabricate cell penetrating peptide analogue-modified chitosan vector for enhanced gene delivery. <i>Journal of Applied Polymer Science</i> , <b>2011</b> , 121, 3569-3578	2.9	31
84	N-Isopropylacrylamide/2-Hydroxyethyl Methacrylate Star Diblock Copolymers: Synthesis and Thermoresponsive Behavior. <i>Macromolecular Chemistry and Physics</i> , <b>2006</b> , 207, 2329-2335	2.6	30
83	Coaxial Scale-Up Printing of Diameter-Tunable Biohybrid Hydrogel Microtubes with High Strength, Perfusability, and Endothelialization. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 2001485	15.6	30
82	A thermoresponsive supramolecular copolymer hydrogel for the embolization of kidney arteries. <i>Biomaterials Science</i> , <b>2016</b> , 4, 1673-1681	7.4	30
81	Gene-modified cell detachment on photoresponsive hydrogels strengthened through hydrogen bonding. <i>Acta Biomaterialia</i> , <b>2014</b> , 10, 2529-38	10.8	28
80	High-strength hydrogel as a reusable adsorbent of copper ions. <i>Journal of Hazardous Materials</i> , <b>2012</b> , 213-214, 258-64	12.8	28
79	Methyl matters: An autonomic rapid self-healing supramolecular poly(N-methacryloyl glycinamide) hydrogel. <i>Polymer</i> , <b>2017</b> , 126, 1-8	3.9	28
78	Self-aggregation behavior of alkylated chitosan and its effect on the release of a hydrophobic drug. <i>Journal of Biomaterials Science, Polymer Edition</i> , <b>2003</b> , 14, 851-9	3.5	28
77	Harnessing isomerization-mediated manipulation of nonspecific cell/matrix interactions to reversibly trigger and suspend stem cell differentiation. <i>Chemical Science</i> , <b>2016</b> , 7, 333-338	9.4	27
76	High-strength hydrogel-based bioinks. <i>Materials Chemistry Frontiers</i> , <b>2019</b> , 3, 1736-1746	7.8	27
75	Redox-triggered self-rolling robust hydrogel tubes for cell encapsulation. <i>Macromolecular Rapid Communications</i> , <b>2014</b> , 35, 344-9	4.8	25
74	A Fe-crosslinked pyrogallol-tethered gelatin adhesive hydrogel with antibacterial activity for wound healing. <i>Biomaterials Science</i> , <b>2020</b> , 8, 3164-3172	7.4	24
73	A Self-Thickening and Self-Strengthening Strategy for 3D Printing High-Strength and Antiswelling Supramolecular Polymer Hydrogels as Meniscus Substitutes. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2100462	15.6	23
72	ZnO quantum dots-embedded collagen/polyanion composite hydrogels with integrated functions of degradation tracking/inhibition and gene delivery. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 512-519		20
71	Guanidinylated allylamine-N-isopropylacrylamide copolymer nonviral transgene vectors. <i>International Journal of Pharmaceutics</i> , <b>2007</b> , 331, 116-22	6.5	20
70	A high strength pH responsive supramolecular copolymer hydrogel. <i>Science China Technological Sciences</i> , <b>2017</b> , 60, 78-83	3.5	19
69	PDMAEMA-b-polysulfobetaine brushes-modified $\epsilon$ -polylysine as a serum-resistant vector for highly efficient gene delivery. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 23576		19
68	Super-Soft DNA/Dopamine-Grafted-Dextran Hydrogel as Dynamic Wire for Electric Circuits Switched by a Microbial Metabolism Process. <i>Advanced Science</i> , <b>2020</b> , 7, 2000684	13.6	19

67	A conductive and biodegradable hydrogel for minimally delivering adipose-derived stem cells. <i>Science China Technological Sciences</i> , <b>2019</b> , 62, 1747-1754	3.5	17
66	A systemic gene vector constructed by zwitterionic polymer modified low molecular weight PEI. <i>Reactive and Functional Polymers</i> , <b>2013</b> , 73, 993-1000	4.6	17
65	Nanoclay Incorporated Polyethylene-Glycol Nanocomposite Hydrogels for Stimulating and Osteogenesis. <i>Journal of Biomedical Nanotechnology</i> , <b>2018</b> , 14, 662-674	4	17
64	A high strength, anti-fouling, self-healable, and thermoplastic supramolecular polymer hydrogel with low fibrotic response. <i>Science China Technological Sciences</i> , <b>2019</b> , 62, 569-577	3.5	16
63	Fenton reaction-initiated formation of biocompatible injectable hydrogels for cell encapsulation. <i>Journal of Materials Chemistry B</i> , <b>2013</b> , 1, 3932-3939	7.3	16
62	Photoactive Self-Shaping Hydrogels as Noncontact 3D Macro/Microscopic Photoprinting Platforms. <i>Macromolecular Rapid Communications</i> , <b>2015</b> , 36, 2129-36	4.8	16
61	Bacteria activated-macrophage membrane-coated tough nanocomposite hydrogel with targeted photothermal antibacterial ability for infected wound healing. <i>Chemical Engineering Journal</i> , <b>2021</b> , 420, 127638	14.7	16
60	Carrier-free nanodrug-based virus-surface-mimicking nanosystems for efficient drug/gene co-delivery. <i>Biomaterials Science</i> , <b>2018</b> , 6, 3300-3308	7.4	15
59	Stiffness Self-Tuned Shape Memory Hydrogels for Embolization of Aneurysms. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 1910197	15.6	14
58	A pH-Responsive Biodegradable High-Strength Hydrogel as Potential Gastric Resident Filler. <i>Macromolecular Materials and Engineering</i> , <b>2018</b> , 303, 1800290	3.9	14
57	UV light-triggered unpacking of DNA to enhance gene transfection of azobenzene-containing polycations. <i>Journal of Materials Chemistry B</i> , <b>2014</b> , 2, 3868-3878	7.3	14
56	Combining magnetic field/temperature dual stimuli to significantly enhance gene transfection of nonviral vectors. <i>Journal of Materials Chemistry B</i> , <b>2013</b> , 1, 43-51	7.3	14
55	Improved transfection efficiency of CS/DNA complex by co-transfected chitosanase gene. <i>International Journal of Pharmaceutics</i> , <b>2008</b> , 352, 302-8	6.5	14
54	A Short Review on Self-Healing Thermoplastic Polyurethanes. <i>Macromolecular Chemistry and Physics</i> , <b>2021</b> , 222, 2100002	2.6	14
53	An injectable and antifouling self-fused supramolecular hydrogel for preventing postoperative and recurrent adhesions. <i>Chemical Engineering Journal</i> , <b>2021</b> , 404, 127096	14.7	14
52	Repair of volumetric bone defects with a high strength BMP-loaded-mineralized hydrogel tubular scaffold. <i>Journal of Materials Chemistry B</i> , <b>2017</b> , 5, 5588-5596	7.3	13
51	A nucleoside responsive diaminotriazine-based hydrogen bonding strengthened hydrogel. <i>Materials Letters</i> , <b>2015</b> , 142, 71-74	3.3	13
50	Injectable Hyaluronic Acid Hydrogel Loaded with Functionalized Human Mesenchymal Stem Cell Aggregates for Repairing Infarcted Myocardium. <i>ACS Biomaterials Science and Engineering</i> , <b>2020</b> , 6, 6926-6937 <sup>13</sup>	5.5	13



49	A high strength semi-degradable polysaccharide-based hybrid hydrogel for promoting cell adhesion and proliferation. <i>Journal of Materials Science</i> , <b>2018</b> , 53, 6302-6312	4.3	13
48	Ultrastable core-shell structured nanoparticles directly made from zwitterionic polymers. <i>Chemical Communications</i> , <b>2014</b> , 50, 15030-3	5.8	13
47	Cyclodextrin-cross-linked diaminotriazine-based hydrogen bonding strengthened hydrogels for drug and reverse gene delivery. <i>Journal of Biomaterials Science, Polymer Edition</i> , <b>2013</b> , 24, 1869-82	3.5	13
46	Hyperbranched PEG-based multi-NHS polymer and bioconjugation with BSA. <i>Polymer Chemistry</i> , <b>2017</b> , 8, 1283-1287	4.9	12
45	Octaarginine-modified chitosan as a nonviral gene delivery vector: properties and in vitro transfection efficiency. <i>Journal of Nanoparticle Research</i> , <b>2011</b> , 13, 693-702	2.3	12
44	Preparation and characterization of biocompatible poly(L-lactic acid)/gelatin blend membrane. <i>Journal of Applied Polymer Science</i> , <b>2006</b> , 101, 269-276	2.9	12
43	One zwitterionic injectable hydrogel with ion conductivity enables efficient restoration of cardiac function after myocardial infarction. <i>Chemical Engineering Journal</i> , <b>2021</b> , 418, 129352	14.7	12
42	Tea eggs-inspired high-strength natural polymer hydrogels. <i>Bioactive Materials</i> , <b>2021</b> , 6, 2820-2828	16.7	12
41	The Unusual Mechanical Evolution of Biodegradable Double Hydrogen Bonding Strengthened Hydrogels in Response to pH Change. <i>Macromolecular Chemistry and Physics</i> , <b>2015</b> , 216, 164-171	2.6	11
40	Enhancement of transfection efficiency for HeLa cells via incorporating arginine moiety into chitosan. <i>Science Bulletin</i> , <b>2007</b> , 52, 3207-3215		11
39	Modulation of osteoblast function using poly(D,L-lactic acid) surfaces modified with alkylation derivative of chitosan. <i>Journal of Biomaterials Science, Polymer Edition</i> , <b>2002</b> , 13, 53-66	3.5	11
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