Jie Zheng

List of Publications by Citations

253 papers	13,948 citations	64 h-index	109 g-index
261 ext. papers	16,287 ext. citations	6.8 avg, IF	6.82 L-index

#	Paper	IF	Citations
253	Surface hydration: Principles and applications toward low-fouling/nonfouling biomaterials. *Polymer* , **2010**, 51, 5283-5293	3.9	1140
252	Strong resistance of phosphorylcholine self-assembled monolayers to protein adsorption: insights into nonfouling properties of zwitterionic materials. *Journal of the American Chemical Society*, **2005**, 127, 14473-8	16.4	814
251	A robust, one-pot synthesis of highly mechanical and recoverable double network hydrogels using thermoreversible sol-gel polysaccharide. *Advanced Materials*, **2013**, 25, 4171-6	24	485
250	Protein adsorption on oligo(ethylene glycol)-terminated alkanethiolate self-assembled monolayers: The molecular basis for nonfouling behavior. *Journal of Physical Chemistry B*, **2005**, 109, 2934-41	3.4	421
249	A Novel Design Strategy for Fully Physically Linked Double Network Hydrogels with Tough, Fatigue Resistant, and Self-Healing Properties. *Advanced Functional Materials*, **2015**, 25, 1598-1607	15.6	411
248	Fundamentals of double network hydrogels. *Journal of Materials Chemistry B*, **2015**, 3, 3654-3676	7.3	329
247	Strong repulsive forces between protein and oligo (ethylene glycol) self-assembled monolayers: a molecular simulation study. *Biophysical Journal*, **2005**, 89, 158-66	2.9	278
246	Molecular simulation study of water interactions with oligo (ethylene glycol)-terminated alkanethiol self-assembled monolayers. *Langmuir*, **2004**, 20, 8931-8	4	256
245	Bulk heterojunction perovskite hybrid solar cells with large fill factor. *Energy and Environmental Science*, **2015**, 8, 1245-1255	35.4	223
244	Adsorption removal of ciprofloxacin by multi-walled carbon nanotubes with different oxygen contents from aqueous solutions. *Chemical Engineering Journal*, **2016**, 285, 588-595	14.7	178
243	Improvement of Mechanical Strength and Fatigue Resistance of Double Network Hydrogels by Ionic Coordination Interactions. *Chemistry of Materials*, **2016**, 28, 5710-5720	9.6	176
242	Effect of film thickness on the antifouling performance of poly(hydroxy-functional methacrylates) grafted surfaces. *Langmuir*, **2011**, 27, 4906-13	4	173
241	Alginate/graphene double-network nanocomposite hydrogel beads with low-swelling, enhanced mechanical properties, and enhanced adsorption capacity. *Journal of Materials Chemistry A*, **2016**, 4, 10885-10892	13	170
240	A Novel Design of Multi-Mechanoresponsive and Mechanically Strong Hydrogels. *Advanced Materials*, **2017**, 29, 1606900	24	156
239	Tanshinones inhibit amyloid aggregation by amyloid-β peptide, disaggregate amyloid fibrils, and protect cultured cells. *ACS Chemical Neuroscience*, **2013**, 4, 1004-15	5.7	156
238	Modeling the Alzheimer Abeta17-42 fibril architecture: tight intermolecular sheet-sheet association and intramolecular hydrated cavities. *Biophysical Journal*, **2007**, 93, 3046-57	2.9	154
237	Models of beta-amyloid ion channels in the membrane suggest that channel formation in the bilayer is a dynamic process. *Biophysical Journal*, **2007**, 93, 1938-49	2.9	153

236	Molecular Simulation Studies of the Orientation and Conformation of Cytochrome c Adsorbed on Self-Assembled Monolayers. *Journal of Physical Chemistry B*, **2004**, 108, 17418-17424	3.4	132
235	Amyloid Oligomers: A Joint Experimental/Computational Perspective on Alzheimer's Disease, Parkinson's Disease, Type II Diabetes, and Amyotrophic Lateral Sclerosis. *Chemical Reviews*, **2021**, 121, 2545-2647	68.1	128
234	Super Bulk and Interfacial Toughness of Physically Crosslinked Double-Network Hydrogels. *Advanced Functional Materials*, **2017**, 27, 1703086	15.6	126
233	New structures help the modeling of toxic amyloidbeta ion channels. *Trends in Biochemical Sciences*, **2008**, 33, 91-100	10.3	123
232	Structural stability and dynamics of an amyloid-forming peptide GNNQQNY from the yeast prion sup-35. *Biophysical Journal*, **2006**, 91, 824-33	2.9	122
231	Salt-Responsive Zwitterionic Polymer Brushes with Tunable Friction and Antifouling Properties. *Langmuir*, **2015**, 31, 9125-33	4	119
230	Transport of a liquid water and methanol mixture through carbon nanotubes under a chemical potential gradient. *Journal of Chemical Physics*, **2005**, 122, 214702	3.9	118
229	Design of LVFFARK and LVFFARK-functionalized nanoparticles for inhibiting amyloid β protein fibrillation and cytotoxicity. *ACS Applied Materials & Interfaces*, **2015**, 7, 5650-62	9.5	115
228	Water-enhanced Removal of Ciprofloxacin from Water by Porous Graphene Hydrogel. *Scientific Reports*, **2015**, 5, 13578	4.9	112
227	Binding characteristics between polyethylene glycol (PEG) and proteins in aqueous solution. *Journal of Materials Chemistry B*, **2014**, 2, 2983-2992	7.3	110
226	Fracture of the Physically Cross-Linked First Network in Hybrid Double Network Hydrogels. *Macromolecules*, **2014**, 47, 2140-2148	5.5	108
225	High strength and self-healable gelatin/polyacrylamide double network hydrogels. *Journal of Materials Chemistry B*, **2017**, 5, 7683-7691	7.3	105
224	Simultaneous Enhancement of Stiffness and Toughness in Hybrid Double-Network Hydrogels via the First, Physically Linked Network. *Macromolecules*, **2015**, 48, 8003-8010	5.5	100
223	Synthesis and characterization of poly(N-hydroxyethylacrylamide) for long-term antifouling ability. *Biomacromolecules*, **2011**, 12, 4071-9	6.9	99
222	Comparative Study of Heparin-Poloxamer Hydrogel Modified bFGF and aFGF for in Vivo Wound Healing Efficiency. *ACS Applied Materials & Interfaces*, **2016**, 8, 18710-21	9.5	97
221	Engineering of Tough Double Network Hydrogels. *Macromolecular Chemistry and Physics*, **2016**, 217, 1022-1036	2.6	95
220	Structure-thermodynamics-antioxidant activity relationships of selected natural phenolic acids and derivatives: an experimental and theoretical evaluation. *PLoS ONE*, **2015**, 10, e0121276	3.7	93
219	Dual Salt- and Thermoresponsive Programmable Bilayer Hydrogel Actuators with Pseudo-Interpenetrating Double-Network Structures. *ACS Applied Materials & Interfaces*, **2018**, 10, 21642-21653	9.5	92

218	Origin of repulsive force and structure/dynamics of interfacial water in OEG-protein interactions: a molecular simulation study. *Physical Chemistry Chemical Physics*, **2008**, 10, 5539-44	3.6	92
217	Cholesterol promotes the interaction of Alzheimer β-amyloid monomer with lipid bilayer. *Journal of Molecular Biology*, **2012**, 421, 561-71	6.5	88
216	Comparative Study of Graphene Hydrogels and Aerogels Reveals the Important Role of Buried Water in Pollutant Adsorption. *Environmental Science & Technology*, **2017**, 51, 12283-12292	10.3	87
215	Structural, morphological, and kinetic studies of β-amyloid peptide aggregation on self-assembled monolayers. *Physical Chemistry Chemical Physics*, **2011**, 13, 15200-10	3.6	85
214	Salt-Responsive Bilayer Hydrogels with Pseudo-Double-Network Structure Actuated by Polyelectrolyte and Antipolyelectrolyte Effects. *ACS Applied Materials & Interfaces*, **2017**, 9, 20843-20851	9.5	84
213	Dual functionality of antimicrobial and antifouling of poly(N-hydroxyethylacrylamide)/salicylate hydrogels. *Langmuir*, **2013**, 29, 1517-24	4	82
212	Achieving highly effective nonfouling performance for surface-grafted poly(HPMA) via atom-transfer radical polymerization. *Langmuir*, **2010**, 26, 17375-82	4	81
211	Design of novel lanthanide-doped core-shell nanocrystals with dual up-conversion and down-conversion luminescence for anti-counterfeiting printing. *Dalton Transactions*, **2019**, 48, 6971-6983	4.3	79
210	Dual physically crosslinked double network hydrogels with high toughness and self-healing properties. *Soft Matter*, **2017**, 13, 911-920	3.6	76
209	Molecular Understanding and Structural-Based Design of Polyacrylamides and Polyacrylates as Antifouling Materials. *Langmuir*, **2016**, 32, 3315-30	4	74
208	Comparative molecular dynamics study of human islet amyloid polypeptide (IAPP) and rat IAPP oligomers. *Biochemistry*, **2013**, 52, 1089-100	3.2	74
207	Molecular understanding of a potential functional link between antimicrobial and amyloid peptides. *Soft Matter*, **2014**, 10, 7425-51	3.6	73
206	From design to applications of stimuli-responsive hydrogel strain sensors. *Journal of Materials Chemistry B*, **2020**, 8, 3171-3191	7.3	72
205	Heparin-Based Coacervate of FGF2 Improves Dermal Regeneration by Asserting a Synergistic Role with Cell Proliferation and Endogenous Facilitated VEGF for Cutaneous Wound Healing. *Biomacromolecules*, **2016**, 17, 2168-77	6.9	72
204	Enhanced Thermoelectric Properties of Poly(3,4-ethylenedioxythiophene):poly(styrenesulfonate) by Binary Secondary Dopants. *ACS Applied Materials & Interfaces*, **2015**, 7, 8984-9	9.5	70
203	Sulfated zwitterionic poly(sulfobetaine methacrylate) hydrogels promote complete skin regeneration. *Acta Biomaterialia*, **2018**, 71, 293-305	10.8	70
202	Magnetic iron oxide nanoparticles functionalized multi-walled carbon nanotubes for toluene, ethylbenzene and xylene removal from aqueous solution. *Chemosphere*, **2016**, 146, 162-72	8.4	70
201	Surface zwitterionization of expanded poly(tetrafluoroethylene) membranes via atmospheric plasma-induced polymerization for enhanced skin wound healing. *ACS Applied Materials & Interfaces*, **2013**, 5, 6732-42	9.5	70

200	Highly porous ZIF-8 nanocrystals prepared by a surfactant mediated method in aqueous solution with enhanced adsorption kinetics. *ACS Applied Materials & Interfaces*, **2014**, 6, 14994-9	9.5	69
199	Synthesis and characterization of pH-sensitive poly(N-2-hydroxyethyl acrylamide)-acrylic acid (poly(HEAA/AA)) nanogels with antifouling protection for controlled release. *Soft Matter*, **2012**, 8, 7848	3.6	68
198	Structure, orientation, and surface interaction of Alzheimer amyloid- peptides on the graphite. *Langmuir*, **2012**, 28, 6595-605	4	68
197	Annular structures as intermediates in fibril formation of Alzheimer Abeta17-42. *Journal of Physical Chemistry B*, **2008**, 112, 6856-65	3.4	68
196	General Principle for Fabricating Natural Globular Protein-Based Double-Network Hydrogels with Integrated Highly Mechanical Properties and Surface Adhesion on Solid Surfaces. *Chemistry of Materials*, **2019**, 31, 179-189	9.6	68
195	Probing structure-antifouling activity relationships of polyacrylamides and polyacrylates. *Biomaterials*, **2013**, 34, 4714-24	15.6	67
194	Release of Cytochrome C from Bax Pores at the Mitochondrial Membrane. *Scientific Reports*, **2017**, 7, 2635	4.9	67
193	Mechanically strong hybrid double network hydrogels with antifouling properties. *Journal of Materials Chemistry B*, **2015**, 3, 5426-5435	7.3	66
192	Surface zwitterionization of titanium for a general bio-inert control of plasma proteins, blood cells, tissue cells, and bacteria. *Langmuir*, **2014**, 30, 7502-12	4	66
191	Engineering antimicrobial peptides with improved antimicrobial and hemolytic activities. *Journal of Chemical Information and Modeling*, **2013**, 53, 3280-96	6.1	66
190	Integration of antifouling and antibacterial properties in salt-responsive hydrogels with surface regeneration capacity. *Journal of Materials Chemistry B*, **2018**, 6, 950-960	7.3	64
189	Inhibition of amyloid- aggregation in Alzheimer disease. *Current Pharmaceutical Design*, **2014**, 20, 1223-43	3.3	64
188	Salt-responsive polyzwitterionic materials for surface regeneration between switchable fouling and antifouling properties. *Acta Biomaterialia*, **2016**, 40, 62-69	10.8	64
187	Upconversion Nanoparticles@Carbon Dots@Meso-SiO Sandwiched Core-Shell Nanohybrids with Tunable Dual-Mode Luminescence for 3D Anti-Counterfeiting Barcodes. *Langmuir*, **2019**, 35, 11503-11511	4	62
186	Highly stretchable, self-adhesive, biocompatible, conductive hydrogels as fully polymeric strain sensors. *Journal of Materials Chemistry A*, **2020**, 8, 20474-20485	13	62
185	Design of a Molecular Hybrid of Dual Peptide Inhibitors Coupled on AuNPs for Enhanced Inhibition of Amyloid Protein Aggregation and Cytotoxicity. *Small*, **2017**, 13, 1601666	11	61
184	General Strategy To Fabricate Strong and Tough Low-Molecular-Weight Gelator-Based Supramolecular Hydrogels with Double Network Structure. *Chemistry of Materials*, **2018**, 30, 1743-1754	9.6	60
183	Genistein: A Dual Inhibitor of Both Amyloid and Human Islet Amylin Peptides. *ACS Chemical Neuroscience*, **2018**, 9, 1215-1224	5.7	59

182	Introducing mixed-charge copolymers as wound dressing biomaterials. *ACS Applied Materials & Interfaces*, **2014**, 6, 9858-70	9.5	59
181	Cross-Seeding Interaction between Amyloid and Human Islet Amyloid Polypeptide. *ACS Chemical Neuroscience*, **2015**, 6, 1759-68	5.7	56
180	Probing the weak interaction of proteins with neutral and zwitterionic antifouling polymers. *Acta Biomaterialia*, **2014**, 10, 751-60	10.8	56
179	Synthesis and characterization of antifouling poly(N-acryloylaminoethoxyethanol) with ultralow protein adsorption and cell attachment. *Langmuir*, **2014**, 30, 10398-409	4	56
178	Conformational basis for asymmetric seeding barrier in filaments of three- and four-repeat tau. *Journal of the American Chemical Society*, **2012**, 134, 10271-8	16.4	56
177	Cross-seeding and conformational selection between three- and four-repeat human Tau proteins. *Journal of Biological Chemistry*, **2012**, 287, 14950-9	5.4	54
176	Salt-responsive zwitterionic polymer brushes with anti-polyelectrolyte property. *Current Opinion in Chemical Engineering*, **2018**, 19, 86-93	5.4	53
175	Dual-stimulus bilayer hydrogel actuators with rapid, reversible, bidirectional bending behaviors. *Journal of Materials Chemistry C*, **2019**, 7, 4970-4980	7.1	52
174	Molecular dynamics simulations of low-ordered alzheimer amyloid oligomers from dimer to hexamer on self-assembled monolayers. *Langmuir*, **2011**, 27, 14876-87	4	52
173	Fundamentals of cross-seeding of amyloid proteins: an introduction. *Journal of Materials Chemistry B*, **2019**, 7, 7267-7282	7.3	52
172	Structural Dependence of Salt-Responsive Polyzwitterionic Brushes with an Anti-Polyelectrolyte Effect. *Langmuir*, **2018**, 34, 97-105	4	51
171	Zwitterionic poly(sulfobetaine methacrylate) hydrogels with optimal mechanical properties for improving wound healing in vivo. *Journal of Materials Chemistry B*, **2019**, 7, 1697-1707	7.3	49
170	Principles of nanostructure design with protein building blocks. *Proteins: Structure, Function and Bioinformatics*, **2007**, 68, 1-12	4.2	49
169	Solution-processed broadband polymer photodetectors with a spectral response of up to 2.5 μm by a low bandgap donor–acceptor conjugated copolymer. *Journal of Materials Chemistry C*, **2018**, 6, 3634-3641	7.1	48
168	Fundamentals and applications of zwitterionic antifouling polymers. *Journal Physics D: Applied Physics*, **2019**, 52, 403001	3	48
167	Tabersonine inhibits amyloid fibril formation and cytotoxicity of Aβ(1-42). *ACS Chemical Neuroscience*, **2015**, 6, 879-88	5.7	46
166	Structural polymorphism of human islet amyloid polypeptide (hIAPP) oligomers highlights the importance of interfacial residue interactions. *Biomacromolecules*, **2011**, 12, 210-20	6.9	46
165	Biophysical processes underlying cross-seeding in amyloid aggregation and implications in amyloid pathology. *Biophysical Chemistry*, **2021**, 269, 106507	3.5	46

164	Probing the structural dependence of carbon space lengths of poly(N-hydroxyalkyl acrylamide)-based brushes on antifouling performance. *Biomacromolecules*, **2014**, 15, 2982-91	6.9	45
163	A comparative study of the mechanical properties of hybrid double-network hydrogels in swollen and as-prepared states. *Journal of Materials Chemistry B*, **2016**, 4, 5814-5824	7.3	44
162	Functional polymer thin films designed for antifouling materials and biosensors. *Chemical Papers*, **2012**, 66,	1.9	44
161	Polymorphic structures of Alzheimer Q amyloid globulomers. *PLoS ONE*, **2011**, 6, e20575	3.7	43
160	Tanshinones inhibit hIAPP aggregation, disaggregate preformed hIAPP fibrils, and protect cultured cells. *Journal of Materials Chemistry B*, **2018**, 6, 56-67	7.3	43
159	Consensus features in amyloid fibrils: sheet-sheet recognition via a (polar or nonpolar) zipper structure. *Physical Biology*, **2006**, 3, P1-4	3	42
158	Transport diffusion of liquid water and methanol through membranes. *Journal of Chemical Physics*, **2002**, 117, 808-818	3.9	42
157	Molecular interactions of Alzheimer amyloid- oligomers with neutral and negatively charged lipid bilayers. *Physical Chemistry Chemical Physics*, **2013**, 15, 8878-89	3.6	41
156	Probing ion channel activity of human islet amyloid polypeptide (amylin). *Biochimica Et Biophysica Acta - Biomembranes*, **2012**, 1818, 3121-30	3.8	39
155	Core/Shell Piezoelectric Nanofibers with Spatial Self-Orientated Phase Nanocrystals for Real-Time Micropressure Monitoring of Cardiovascular Walls. *ACS Nano*, **2019**, 13, 10062-10073	16.7	38
154	The energy dissipation and Mullins effect of tough polymer/graphene oxide hybrid nanocomposite hydrogels. *Polymer Chemistry*, **2017**, 8, 4659-4672	4.9	38
153	Alzheimer Abeta(1-42) monomer adsorbed on the self-assembled monolayers. *Langmuir*, **2010**, 26, 12722-32	4	38
152	De novo design of self-assembled hexapeptides as amyloid (A) peptide inhibitors. *ACS Chemical Neuroscience*, **2014**, 5, 972-81	5.7	37
151	Zwitterionic Modifications for Enhancing the Antifouling Properties of Poly(vinylidene fluoride) Membranes. *Langmuir*, **2016**, 32, 4113-24	4	37
150	Structure by design: from single proteins and their building blocks to nanostructures. *Trends in Biotechnology*, **2006**, 24, 449-54	15.1	36
149	Comparative molecular dynamics study of Abeta adsorption on the self-assembled monolayers. *Langmuir*, **2010**, 26, 3308-16	4	35
148	Beta2-microglobulin amyloid fragment organization and morphology and its comparison to Abeta suggests that amyloid aggregation pathways are sequence specific. *Biochemistry*, **2008**, 47, 2497-509	3.2	35
147	Nanostructure design using protein building blocks enhanced by conformationally constrained synthetic residues. *Biochemistry*, **2007**, 46, 1205-18	3.2	35

146	HP-Cyclodextrin as an inhibitor of amyloid-aggregation and toxicity. *Physical Chemistry Chemical Physics*, **2016**, 18, 20476-85	3.6	34
145	Design of core/active-shell NaYF4:Ln3+@NaYF4:Yb3+ nanophosphors with enhanced red-green-blue upconversion luminescence for anti-counterfeiting printing. *Composites Part B: Engineering*, **2019**, 179, 107504	10	34
144	Molecular simulation studies of the structure of phosphorylcholine self-assembled monolayers. *Journal of Chemical Physics*, **2006**, 125, 174714	3.9	34
143	Single mutations in tau modulate the populations of fibril conformers through seed selection. *Angewandte Chemie - International Edition*, **2014**, 53, 1590-3	16.4	33
142	Designing a nanotube using naturally occurring protein building blocks. *PLoS Computational Biology* , **2006**, 2, e42	5	33
141	Molecular simulations and understanding of antifouling zwitterionic polymer brushes. *Journal of Materials Chemistry B*, **2020**, 8, 3814-3828	7.3	32
140	Molecular modeling of two distinct triangular oligomers in amyloid beta-protein. *Journal of Physical Chemistry B*, **2010**, 114, 463-70	3.4	32
139	Membrane Interactions of hIAPP Monomer and Oligomer with Lipid Membranes by Molecular Dynamics Simulations. *ACS Chemical Neuroscience*, **2017**, 8, 1789-1800	5.7	31
138	Non-selective ion channel activity of polymorphic human islet amyloid polypeptide (amylin) double channels. *Physical Chemistry Chemical Physics*, **2014**, 16, 2368-77	3.6	31
137	Molecular Understanding of AhIAPP Cross-Seeding Assemblies on Lipid Membranes. *ACS Chemical Neuroscience*, **2017**, 8, 524-537	5.7	31
136	Molecular insights into the reversible formation of tau protein fibrils. *Chemical Communications*, **2013**, 49, 3582-4	5.8	31
135	Heterogeneous triangular structures of human islet amyloid polypeptide (amylin) with internal hydrophobic cavity and external wrapping morphology reveal the polymorphic nature of amyloid fibrils. *Biomacromolecules*, **2011**, 12, 1781-94	6.9	31
134	Design of salt-responsive and regenerative antibacterial polymer brushes with integrated bacterial resistance, killing, and release properties. *Journal of Materials Chemistry B*, **2019**, 7, 5762-5774	7.3	30
133	Antifouling and biodegradable poly(N-hydroxyethyl acrylamide) (polyHEAA)-based nanogels. *RSC Advances*, **2013**, 3, 19991	3.7	30
132	Double-Network Physical Cross-Linking Strategy To Promote Bulk Mechanical and Surface Adhesive Properties of Hydrogels. *Macromolecules*, **2019**, 52, 9512-9525	5.5	30
131	Polymorphic cross-seeding amyloid assemblies of amyloid-and human islet amyloid polypeptide. *Physical Chemistry Chemical Physics*, **2015**, 17, 23245-56	3.6	29
130	Ac-LVFFARK-NH conjugation to Cyclodextrin exhibits significantly enhanced performance on inhibiting amyloid Eprotein fibrillogenesis and cytotoxicity. *Biophysical Chemistry*, **2018**, 235, 40-47	3.5	29
129	Structural and energetic insight into the cross-seeding amyloid assemblies of human IAPP and rat IAPP. *Journal of Physical Chemistry B*, **2014**, 118, 7026-36	3.4	29

128	Discovery of a novel native bacterium of Providencia sp. with high biosorption and oxidation ability of manganese for bioleaching of heavy metal contaminated soils. *Chemosphere*, **2020**, 241, 125039	8.4	28
127	Micellar-incorporated hydrogels with highly tough, mechanoresponsive, and self-recovery properties for strain-induced color sensors. *Journal of Materials Chemistry C*, **2018**, 6, 11536-11551	7.1	28
126	Neurogenic differentiation of adipose derived stem cells on graphene-based mat. *Materials Science and Engineering C*, **2018**, 90, 685-692	8.3	27
125	Strong resistance of poly (ethylene glycol) based L-tyrosine polyurethanes to protein adsorption and cell adhesion. *Polymer International*, **2012**, 61, 616-621	3.3	27
124	Synthesis and Characterization of Ultralow Fouling Poly(N-acryloyl-glycinamide) Brushes. *Langmuir*, **2017**, 33, 13964-13972	4	26
123	Iminodiacetic acid-conjugated nanoparticles as a bifunctional modulator against Zn-mediated amyloid β protein aggregation and cytotoxicity. *Journal of Colloid and Interface Science*, **2017**, 505, 973-982	9.3	26
122	Corrosion inhibition of mild steel by an imidazolium ionic liquid compound: the effect of pH and surface pre-corrosion. *RSC Advances*, **2015**, 5, 95160-95170	3.7	25
121	Design of high conductive and piezoelectric poly (3,4-ethylenedioxythiophene)/chitosan nanofibers for enhancing cellular electrical stimulation. *Journal of Colloid and Interface Science*, **2020**, 559, 65-75	9.3	25
120	A General Crosslinker Strategy to Realize Intrinsic Frozen Resistance of Hydrogels. *Advanced Materials*, **2021**, 33, e2104006	24	25
119	Importance of zwitterionic incorporation into polymethacrylate-based hydrogels for simultaneously improving optical transparency, oxygen permeability, and antifouling properties. *Journal of Materials Chemistry B*, **2017**, 5, 4595-4606	7.3	24
118	All-Solid-State Asymmetric Supercapacitors with Metal Selenides Electrodes and Ionic Conductive Composites Electrolytes. *Advanced Functional Materials*, **2019**, 29, 1904182	15.6	24
117	Mimicking the binding and unbinding of Fe3+ with transferrin using a single biomimetic nanochannel. *Chemical Communications*, **2013**, 49, 9317-9	5.8	24
116	Molecular Simulations of Amyloid Structures, Toxicity, and Inhibition. *Israel Journal of Chemistry*, **2017**, 57, 586-601	3.4	24
115	Molecular simulation aspects of amyloid peptides at membrane interface. *Biochimica Et Biophysica Acta - Biomembranes*, **2018**, 1860, 1906-1916	3.8	23
114	How Does Hyperphopsphorylation Promote Tau Aggregation and Modulate Filament Structure and Stability?. *ACS Chemical Neuroscience*, **2016**, 7, 565-75	5.7	23
113	Polymorphic Associations and Structures of the Cross-Seeding of Aβ1-42 and hIAPP1-37 Polypeptides. *Journal of Chemical Information and Modeling*, **2015**, 55, 1628-39	6.1	22
112	Interfacial interaction and lateral association of cross-seeding assemblies between hIAPP and rIAPP oligomers. *Physical Chemistry Chemical Physics*, **2015**, 17, 10373-82	3.6	22
111	Highly Aligned Electrospun Collagen/Polycaprolactone Surgical Sutures with Sustained Release of Growth Factors for Wound Regeneration.. *ACS Applied Bio Materials*, **2020**, 3, 965-976	4.1	22

110	Ginnalin A Inhibits Aggregation, Reverses Fibrillogenesis, and Alleviates Cytotoxicity of Amyloid (1-42). *ACS Chemical Neuroscience*, **2020**, 11, 638-647	5.7	22
109	Multiple Physical Cross-Linker Strategy To Achieve Mechanically Tough and Reversible Properties of Double-Network Hydrogels in Bulk and on Surfaces. *ACS Applied Polymer Materials*, **2019**, 1, 701-713	4.3	22
108	Magnetic Janus particles as a multifunctional drug delivery system for paclitaxel in efficient cancer treatment. *Materials Science and Engineering C*, **2019**, 104, 110001	8.3	21
107	Structural determination of Abeta25-35 micelles by molecular dynamics simulations. *Biophysical Journal*, **2010**, 99, 666-74	2.9	21
106	Multiple Physical Bonds to Realize Highly Tough and Self-Adhesive Double-Network Hydrogels. *ACS Applied Polymer Materials*, **2020**, 2, 1031-1042	4.3	21
105	Grafting zwitterionic polymer onto cryogel surface enhances protein retention in steric exclusion chromatography on cryogel monolith. *Journal of Chromatography A*, **2015**, 1389, 104-11	4.5	20
104	Cross-sequence interactions between human and rat islet amyloid polypeptides. *Langmuir*, **2014**, 30, 5193-201	4	20
103	Water-soluble CdTe quantum dots as an anode interlayer for solution-processed near infrared polymer photodetectors. *Nanoscale*, **2013**, 5, 12474-9	7.7	20
102	Concepts and schemes for the re-engineering of physical protein modules: generating nanodevices via targeted replacements with constrained amino acids. *Physical Biology*, **2006**, 3, S54-62	3	20
101	Promotional effect of Ti doping on the ketonization of acetic acid over a CeO2 catalyst. *RSC Advances*, **2017**, 7, 22017-22026	3.7	19
100	Micro- and macroscopically structured zwitterionic polymers with ultralow fouling property. *Journal of Colloid and Interface Science*, **2020**, 578, 242-253	9.3	19
99	A Universal Coating Strategy for Controllable Functionalized Polymer Surfaces. *Advanced Functional Materials*, **2020**, 30, 2004633	15.6	19
98	Lipase-catalyzed synthesis mechanism of tri-acetylated phloridzin and its antiproliferative activity against HepG2 cancer cells. *Food Chemistry*, **2019**, 277, 186-194	8.5	19
97	Seed-Induced Heterogeneous Cross-Seeding Self-Assembly of Human and Rat Islet Polypeptides. *ACS Omega*, **2017**, 2, 784-792	3.9	18
96	Acoustic signal analysis for detecting defects inside an arc magnet using a combination of variational mode decomposition and beetle antennae search. *ISA Transactions*, **2020**, 102, 347-364	5.5	18
95	Novel Quasi-2D Perovskites for Stable and Efficient Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2020**, 12, 51744-51755	9.5	17
94	Design principles and fundamental understanding of biosensors for amyloid- detection. *Journal of Materials Chemistry B*, **2020**, 8, 6179-6196	7.3	17
93	Simple Thermal Pretreatment Strategy to Tune Mechanical and Antifouling Properties of Zwitterionic Hydrogels. *Langmuir*, **2019**, 35, 1828-1836	4	17

92	Insights into the adsorption of simple benzene derivatives on carbon nanotubes. *RSC Advances*, **2014**, 4, 58036-58046	3.7	17
91	Molecular dynamics simulations of Alzheimer Abeta40 elongation and lateral association. *Frontiers in Bioscience - Landmark*, **2008**, 13, 3919-30	2.8	17
90	Computational Investigation of Antifouling Property of Polyacrylamide Brushes. *Langmuir*, **2020**, 36, 2757-2766	4	16
89	Design of nonapeptide LVFFARKHH: A bifunctional agent against Cu -mediated amyloid protein aggregation and cytotoxicity. *Journal of Molecular Recognition*, **2018**, 31, e2697	2.6	16
88	Hemocompatible biomaterials of zwitterionic sulfobetaine hydrogels regulated with pH-responsive DMAEMA random sequences. *International Journal of Polymeric Materials and Polymeric Biomaterials*, **2016**, 65, 65-74	3	16
87	Changing the charge distribution of beta-helical-based nanostructures can provide the conditions for charge transfer. *Biophysical Journal*, **2007**, 93, 245-53	2.9	16
86	Branched NaYF4:Yb, Er Up-Conversion Phosphors with Luminescent Properties for Anti-Counterfeiting Application. *Science of Advanced Materials*, **2017**, 9, 2223-2233	2.3	16
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