Ashutosh Chilkoti

List of Publications by Year in descending order

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231 papers

24,354 citations

83 h-index 148

g-index

243 all docs

243
docs citations

times ranked

243

18814 citing authors

#	Article	IF	CITATIONS
1	A Colorimetric Gold Nanoparticle Sensor To Interrogate Biomolecular Interactions in Real Time on a Surface. Analytical Chemistry, 2002, 74, 504-509.	6.5	881
2	Purification of recombinant proteins by fusion with thermally-responsive polypeptides. Nature Biotechnology, 1999, 17, 1112-1115.	17.5	776
3	Control of protein–ligand recognition using a stimuli-responsive polymer. Nature, 1995, 378, 472-474.	27.8	674
4	"Non-Fouling―Oligo(ethylene glycol)- Functionalized Polymer Brushes Synthesized by Surface-Initiated Atom Transfer Radical Polymerization. Advanced Materials, 2004, 16, 338-341.	21.0	654
5	Controlled-reflectance surfaces with film-coupled colloidal nanoantennas. Nature, 2012, 492, 86-89.	27.8	639
6	Targeted drug delivery by thermally responsive polymers. Advanced Drug Delivery Reviews, 2002, 54, 613-630.	13.7	540
7	Self-assembling chimeric polypeptide–doxorubicin conjugate nanoparticles that abolish tumours after a single injection. Nature Materials, 2009, 8, 993-999.	27.5	532
8	In Pursuit of Zero: Polymer Brushes that Resist the Adsorption of Proteins. Advanced Materials, 2009, 21, 2441-2446.	21.0	501
9	Genetically Encoded Synthesis of Protein-Based Polymers with Precisely Specified Molecular Weight and Sequence by Recursive Directional Ligation:Â Examples from the Elastin-like Polypeptide System. Biomacromolecules, 2002, 3, 357-367.	5.4	500
10	Label-Free Biosensing by Surface Plasmon Resonance of Nanoparticles on Glass:Â Optimization of Nanoparticle Size. Analytical Chemistry, 2004, 76, 5370-5378.	6.5	485
11	Quantification of the Effects of Chain Length and Concentration on the Thermal Behavior of Elastin-like Polypeptides. Biomacromolecules, 2004, 5, 846-851.	5.4	447
12	Drug targeting using thermally responsive polymers and local hyperthermia. Journal of Controlled Release, 2001, 74, 213-224.	9.9	392
13	Elastinâ€like polypeptides: Biomedical applications of tunable biopolymers. Biopolymers, 2010, 94, 60-77.	2.4	352
14	Sequence heuristics to encode phase behaviour in intrinsically disordered protein polymers. Nature Materials, 2015, 14, 1164-1171.	27.5	341
15	Temperature Triggered Self-Assembly of Polypeptides into Multivalent Spherical Micelles. Journal of the American Chemical Society, 2008, 130, 687-694.	13.7	333
16	Applications of elastin-like polypeptides in tissue engineering. Advanced Drug Delivery Reviews, 2010, 62, 1479-1485.	13.7	298
17	Plasmonic Detection of a Model Analyte in Serum by a Gold Nanorod Sensor. Analytical Chemistry, 2007, 79, 5278-5283.	6.5	285
18	Effects of Hofmeister Anions on the Phase Transition Temperature of Elastin-like Polypeptides. Journal of Physical Chemistry B, 2008, 112, 13765-13771.	2.6	277

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19	Label-Free Plasmonic Detection of Biomolecular Binding by a Single Gold Nanorod. Analytical Chemistry, 2008, 80, 984-989.	6.5	271
20	Synthesis and in Vitro Evaluation of Enzymatically Cross-Linked Elastin-Like Polypeptide Gels for Cartilaginous Tissue Repair. Tissue Engineering, 2005, 11, 1768-1779.	4.6	267
21	Peptide-based biopolymers in biomedicine and biotechnology. Materials Science and Engineering Reports, 2008, 62, 125-155.	31.8	264
22	Swelling and Mechanical Behaviors of Chemically Cross-Linked Hydrogels of Elastin-like Polypeptides. Biomacromolecules, 2003, 4, 572-580.	5.4	250
23	Design of thermally responsive, recombinant polypeptide carriers for targeted drug delivery. Advanced Drug Delivery Reviews, 2002, 54, 1093-1111.	13.7	249
24	Programming molecular self-assembly of intrinsically disordered proteins containing sequences of low complexity. Nature Chemistry, 2017, 9, 509-515.	13.6	247
25	Plasmonic Waveguide Modes of Film-Coupled Metallic Nanocubes. Nano Letters, 2013, 13, 5866-5872.	9.1	238
26	Rational Selection of Gold Nanorod Geometry for Label-Free Plasmonic Biosensors. ACS Nano, 2009, 3, 795-806.	14.6	233
27	Evaluation of an elastin-like polypeptide–doxorubicin conjugate for cancer therapy. Journal of Controlled Release, 2003, 91, 31-43.	9.9	221
28	Surface-Initiated Atom Transfer Radical Polymerization of Oligo(ethylene glycol) Methyl Methacrylate from a Mixed Self-Assembled Monolayer on Gold. Advanced Functional Materials, 2006, 16, 640-648.	14.9	219
29	Protein-Resistant Polymer Coatings on Silicon Oxide by Surface-Initiated Atom Transfer Radical Polymerization. Langmuir, 2006, 22, 3751-3756.	3.5	212
30	Elastinâ€like polypeptides as models of intrinsically disordered proteins. FEBS Letters, 2015, 589, 2477-2486.	2.8	209
31	Site-directed mutagenesis studies of the high-affinity streptavidin-biotin complex: contributions of tryptophan residues 79, 108, and 120 Proceedings of the National Academy of Sciences of the United States of America, 1995, 92, 1754-1758.	7.1	205
32	Recursive Directional Ligation by Plasmid Reconstruction Allows Rapid and Seamless Cloning of Oligomeric Genes. Biomacromolecules, 2010, 11, 944-952.	5.4	203
33	Applications of elastin-like polypeptides in drug delivery. Journal of Controlled Release, 2014, 190, 314-330.	9.9	198
34	Rapid Cross-Linking of Elastin-like Polypeptides with (Hydroxymethyl)phosphines in Aqueous Solution. Biomacromolecules, 2007, 8, 1463-1470.	5.4	191
35	Drug delivery to solid tumors by elastin-like polypeptides. Advanced Drug Delivery Reviews, 2010, 62, 1456-1467.	13.7	185
36	Stimulus responsive elastin biopolymers: applications in medicine and biotechnology. Current Opinion in Chemical Biology, 2006, 10, 652-657.	6.1	179

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37	Targeting a genetically engineered elastin-like polypeptide to solid tumors by local hyperthermia. Cancer Research, 2001, 61, 1548-54.	0.9	179
38	A paclitaxel-loaded recombinant polypeptide nanoparticle outperforms Abraxane in multiple murine cancer models. Nature Communications, 2015, 6, 7939.	12.8	173
39	Recent trends in protein and peptide-based biomaterials for advanced drug delivery. Advanced Drug Delivery Reviews, 2020, 156, 133-187.	13.7	173
40	A Unified Model for <i>De Novo</i> Design of Elastin-like Polypeptides with Tunable Inverse Transition Temperatures. Biomacromolecules, 2013, 14, 2866-2872.	5.4	171
41	Plasmon Ruler with Angstrom Length Resolution. ACS Nano, 2012, 6, 9237-9246.	14.6	170
42	A thermally responsive biopolymer for intra-articular drug delivery. Journal of Controlled Release, 2006, 115, 175-182.	9.9	169
43	Structural optimization of a "smart―doxorubicin–polypeptide conjugate for thermally targeted delivery to solid tumors. Journal of Controlled Release, 2006, 110, 362-369.	9.9	165
44	Advances in Understanding Stimulus-Responsive Phase Behavior of Intrinsically Disordered Protein Polymers. Journal of Molecular Biology, 2018, 430, 4619-4635.	4.2	164
45	The relationship between ligand-binding thermodynamics and protein-ligand interaction forces measured by atomic force microscopy. Biophysical Journal, 1995, 69, 2125-2130.	0.5	162
46	In situ growth of a stoichiometric PEG-like conjugate at a protein's N-terminus with significantly improved pharmacokinetics. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 15231-15236.	7.1	159
47	Simple Fabrication of Antibody Microarrays on Nonfouling Polymer Brushes with Femtomolar Sensitivity for Protein Analytes in Serum and Blood. Advanced Materials, 2009, 21, 1968-1971.	21.0	158
48	De novo engineering of intracellular condensates using artificial disordered proteins. Nature Chemistry, 2020, 12, 814-825.	13.6	157
49	Label Free Colorimetric Biosensing Using Nanoparticles. Journal of Fluorescence, 2004, 14, 377-389.	2.5	156
50	Elastin-Like Polypeptides for Biomedical Applications. Annual Review of Biomedical Engineering, 2020, 22, 343-369.	12.3	154
51	In Situ Cross-Linking of Elastin-like Polypeptide Block Copolymers for Tissue Repair. Biomacromolecules, 2008, 9, 222-230.	5.4	151
52	Expression and purification of recombinant proteins from Escherichia coli: Comparison of an elastin-like polypeptide fusion with an oligohistidine fusion. Protein Science, 2009, 13, 3274-3284.	7.6	151
53	Protein–polymer conjugation — moving beyond PEGylation. Current Opinion in Chemical Biology, 2015, 28, 181-193.	6.1	150
54	Interfacial Phase Transition of an Environmentally Responsive Elastin Biopolymer Adsorbed on Functionalized Gold Nanoparticles Studied by Colloidal Surface Plasmon Resonance. Journal of the American Chemical Society, 2001, 123, 8197-8202.	13.7	149

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55	Molecular Description of the LCST Behavior of an Elastin-Like Polypeptide. Biomacromolecules, 2014, 15, 3522-3530.	5.4	146
56	Protein Purification by Fusion with an Environmentally Responsive Elastin-Like Polypeptide: Effect of Polypeptide Length on the Purification of Thioredoxin. Biotechnology Progress, 2001, 17, 720-728.	2.6	144
57	In situ growth of a PEG-like polymer from the CÂterminus of an intein fusion protein improves pharmacokinetics and tumor accumulation. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 16432-16437.	7.1	143
58	Thermal Cycling Enhances the Accumulation of a Temperature-Sensitive Biopolymer in Solid Tumors. Cancer Research, 2007, 67, 4418-4424.	0.9	142
59	Development and characterization of a fusion protein between thermally responsive elastinâ€ike polypeptide and interleukinâ€i receptor antagonist: Sustained release of a local antiinflammatory therapeutic. Arthritis and Rheumatism, 2007, 56, 3650-3661.	6.7	140
60	Injectable tissue integrating networks from recombinant polypeptides with tunable order. Nature Materials, 2018, 17, 1154-1163.	27.5	132
61	Strong, Tough, Stretchable, and Selfâ€Adhesive Hydrogels from Intrinsically Unstructured Proteins. Advanced Materials, 2017, 29, 1604743.	21.0	130
62	Dissociation of tetrameric ions of noncovalent streptavidin complexes formed by electrospray ionization. Journal of the American Society for Mass Spectrometry, 1995, 6, 459-465.	2.8	128
63	Effect of protein fusion on the transition temperature of an environmentally responsive elastin-like polypeptide: a role for surface hydrophobicity?. Protein Engineering, Design and Selection, 2004, 17, 57-66.	2.1	128
64	Tumor accumulation, degradation and pharmacokinetics of elastin-like polypeptides in nude mice. Journal of Controlled Release, 2006, 116, 170-178.	9.9	125
65	Selfâ€Assembly of Thermally Responsive Nanoparticles of a Genetically Encoded Peptide Polymer by Drug Conjugation. Angewandte Chemie - International Edition, 2013, 52, 1683-1687.	13.8	123
66	Injectable protease-operated depots of glucagon-like peptide-1 provide extended and tunable glucose control. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 2792-2797.	7.1	120
67	Microstamping on an Activated Polymer Surface:Â Patterning Biotin and Streptavidin onto Common Polymeric Biomaterials. Langmuir, 2001, 17, 6358-6367.	3.5	117
68	Quantitative Model of the Phase Behavior of Recombinant pH-Responsive Elastin-Like Polypeptides. Biomacromolecules, 2010, 11, 2873-2879.	5.4	116
69	Elastinâ€Like Polypeptides as a Purification Tag for Recombinant Proteins. Current Protocols in Protein Science, 2010, 61, Unit 6.11.	2.8	110
70	Ultra-High Expression of a Thermally Responsive Recombinant Fusion Protein in E. coli. Biotechnology Progress, 2006, 22, 638-646.	2.6	105
71	Injectable intratumoral depot of thermally responsive polypeptide–radionuclide conjugates delays tumor progression in a mouse model. Journal of Controlled Release, 2010, 144, 2-9.	9.9	102
72	Protein polymer hydrogels by in situ, rapid and reversible self-gelation. Biomaterials, 2012, 33, 5451-5458.	11.4	102

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73	A brush-polymer/exendin-4 conjugate reduces blood glucose levels for up to five days and eliminates poly(ethylene glycol) antigenicity. Nature Biomedical Engineering, 2017, 1 , .	22.5	101
74	Predicting Transition Temperatures of Elastin-Like Polypeptide Fusion Proteins. Biomacromolecules, 2013, 14, 1514-1519.	5.4	96
75	Amplified On-Chip Fluorescence Detection of DNA Hybridization by Surface-Initiated Enzymatic Polymerization. Analytical Chemistry, 2011, 83, 5153-5159.	6.5	95
76	Digital Switching of Local Arginine Density in a Genetically Encoded Self-Assembled Polypeptide Nanoparticle Controls Cellular Uptake. Nano Letters, 2012, 12, 3322-3328.	9.1	94
77	Triple Stimulus-Responsive Polypeptide Nanoparticles That Enhance Intratumoral Spatial Distribution. Nano Letters, 2012, 12, 2165-2170.	9.1	94
78	Morphing Low-Affinity Ligands into High-Avidity Nanoparticles by Thermally Triggered Self-Assembly of a Genetically Encoded Polymer. ACS Nano, 2010, 4, 2217-2227.	14.6	93
79	A depot-forming glucagon-like peptide-1 fusion protein reduces blood glucose for five days with a single injection. Journal of Controlled Release, 2013, 172, 144-151.	9.9	92
80	Enhanced uptake of a thermally responsive polypeptide by tumor cells in response to its hyperthermia-mediated phase transition. Cancer Research, 2001, 61, 7163-70.	0.9	92
81	<i>In Situ</i> Crosslinking Elastin-Like Polypeptide Gels for Application to Articular Cartilage Repair in a Goat Osteochondral Defect Model. Tissue Engineering - Part A, 2008, 14, 1133-1140.	3.1	91
82	One-week glucose control via zero-order release kinetics from an injectable depot of glucagon-like peptide-1 fused to a thermosensitive biopolymer. Nature Biomedical Engineering, 2017, 1 , .	22.5	87
83	Surface-Initiated Free Radical Polymerization of Polystyrene Micropatterns on a Self-Assembled Monolayer on Gold. Macromolecules, 2001, 34, 5644-5652.	4.8	86
84	Elastin-like Polypeptide Diblock Copolymers Self-Assemble into Weak Micelles. Macromolecules, 2015, 48, 4183-4195.	4.8	86
85	A highly parallel method for synthesizing DNA repeats enables the discovery of â€~smart' proteinÂpolymers. Nature Materials, 2011, 10, 141-148.	27.5	85
86	"Smart―DNA interfaces. Chemical Society Reviews, 2014, 43, 1612-1626.	38.1	83
87	Connecting Coil-to-Globule Transitions to Full Phase Diagrams for Intrinsically Disordered Proteins. Biophysical Journal, 2020, 119, 402-418.	0.5	82
88	Enzymatic Fabrication of DNA Nanostructures:Â Extension of a Self-assembled Oligonucleotide Monolayer on Gold Arrays. Journal of the American Chemical Society, 2005, 127, 14122-14123.	13.7	79
89	Hydrogen Bonding of β-Turn Structure Is Stabilized in D ₂ 0. Journal of the American Chemical Society, 2009, 131, 15188-15193.	13.7	79
90	Genetically encoded lipid–polypeptide hybrid biomaterials that exhibit temperature-triggered hierarchical self-assembly. Nature Chemistry, 2018, 10, 496-505.	13.6	79

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91	Fusions of Elastin-Like Polypeptides to Pharmaceutical Proteins. Methods in Enzymology, 2012, 502, 215-237.	1.0	76
92	Microstamping of a Biological Ligand onto an Activated Polymer Surface. Advanced Materials, 2000, 12, 413-417.	21.0	74
93	Sustained intra-articular delivery of IL-1Ra from a thermally-responsive elastin-like polypeptide as a therapy for post-traumatic arthritis., 2015, 29, 124-140.		74
94	Biomedical and Biotechnological Applications of Elastin-Like Polypeptides. Polymer Reviews, 2007, 47, 121-154.	10.9	73
95	Active Targeting of Cancer Cells by Nanobody Decorated Polypeptide Micelle with Bio-orthogonally Conjugated Drug. Nano Letters, 2019, 19, 247-254.	9.1	72
96	Unexpected Multivalent Display of Proteins by Temperature Triggered Self-Assembly of Elastin-like Polypeptide Block Copolymers. Biomacromolecules, 2012, 13, 1598-1605.	5.4	70
97	Doxorubicin-conjugated chimeric polypeptide nanoparticles that respond to mild hyperthermia. Journal of Controlled Release, 2012, 159, 362-367.	9.9	70
98	Inkjet-printed point-of-care immunoassay on a nanoscale polymer brush enables subpicomolar detection of analytes in blood. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E7054-E7062.	7.1	70
99	Convergence of Artificial Protein Polymers and Intrinsically Disordered Proteins. Biochemistry, 2018, 57, 2405-2414.	2.5	70
100	Fusion order controls expression level and activity of elastinâ€like polypeptide fusion proteins. Protein Science, 2009, 18, 1377-1387.	7.6	69
101	Long circulating genetically encoded intrinsically disordered zwitterionic polypeptides for drug delivery. Biomaterials, 2019, 192, 475-485.	11.4	68
102	From Composition to Cure: A Systems Engineering Approach to Anticancer Drug Carriers. Angewandte Chemie - International Edition, 2017, 56, 6712-6733.	13.8	65
103	Intrinsically disordered proteins access a range of hysteretic phase separation behaviors. Science Advances, 2019, 5, eaax5177.	10.3	64
104	In vivo tumor targeting by a NGR-decorated micelle of a recombinant diblock copolypeptide. Journal of Controlled Release, 2011, 155, 144-151.	9.9	63
105	Versatile synthesis and micropatterning of nonfouling polymer brushes on the wafer scale. Biointerphases, 2009, 4, FA50-FA57.	1.6	62
106	Micellar Self-Assembly of Recombinant Resilin-/Elastin-Like Block Copolypeptides. Biomacromolecules, 2017, 18, 2419-2426.	5.4	62
107	Coâ€opting biology to deliver drugs. Biotechnology and Bioengineering, 2014, 111, 1699-1716.	3.3	60
108	Noncanonical Self-Assembly of Highly Asymmetric Genetically Encoded Polypeptide Amphiphiles into Cylindrical Micelles. Nano Letters, 2014, 14, 6590-6598.	9.1	59

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109	Bioinspired Reversibly Crossâ€linked Hydrogels Comprising Polypeptide Micelles Exhibit Enhanced Mechanical Properties. Advanced Functional Materials, 2015, 25, 3122-3130.	14.9	59
110	Ultraflat Nanosphere Lithography: A New Method to Fabricate Flat Nanostructures. Advanced Materials, 2000, 12, 1515-1519.	21.0	57
111	Sortaseâ€Catalyzed Initiator Attachment Enables High YieldÂGrowth of a Stealth Polymer from the C Terminus of a Protein. Macromolecular Rapid Communications, 2013, 34, 1256-1260.	3.9	57
112	Rational Design of "Heat Seeking―Drug Loaded Polypeptide Nanoparticles That Thermally Target Solid Tumors. Nano Letters, 2014, 14, 2890-2895.	9.1	57
113	Threeâ€inâ€One Chromatographyâ€Free Purification, Tag Removal, and Siteâ€Specific Modification of Recombinant Fusion Proteins Using Sortaseâ€A and Elastinâ€like Polypeptides. Angewandte Chemie - International Edition, 2013, 52, 3703-3708.	13.8	56
114	Injectable polypeptide micelles that form radiation crosslinked hydrogels in situ for intratumoral radiotherapy. Journal of Controlled Release, 2016, 228, 58-66.	9.9	56
115	Photoâ€Crosslinkable Unnatural Amino Acids Enable Facile Synthesis of Thermoresponsive Nano―to Microgels of Intrinsically Disordered Polypeptides. Advanced Materials, 2018, 30, 1704878.	21.0	56
116	Micropatterns of a Cell-Adhesive Peptide on an Amphiphilic Comb Polymer Film. Langmuir, 2002, 18, 2975-2979.	3.5	53
117	Combinatorial codon scrambling enables scalable gene synthesis and amplification of repetitiveAproteins. Nature Materials, 2016, 15, 419-424.	27.5	53
118	Recombinant Synthesis of Hybrid Lipid–Peptide Polymer Fusions that Selfâ€Assemble and Encapsulate Hydrophobic Drugs. Angewandte Chemie - International Edition, 2017, 56, 13979-13984.	13.8	53
119	Nanoparticle formulation improves doxorubicin efficacy by enhancing host antitumor immunity. Journal of Controlled Release, 2018, 269, 364-373.	9.9	52
120	Engineered Ribonucleoprotein Granules Inhibit Translation in Protocells. Molecular Cell, 2019, 75, 66-75.e5.	9.7	52
121	Architectural Modification of Conformal PEGâ€Bottlebrush Coatings Minimizes Antiâ€PEG Antigenicity While Preserving Stealth Properties. Advanced Healthcare Materials, 2019, 8, e1801177.	7.6	52
122	Doxorubicin-conjugated polypeptide nanoparticles inhibit metastasis in two murine models of carcinoma. Journal of Controlled Release, 2015, 208, 52-58.	9.9	50
123	Versatile biomanufacturing through stimulus-responsive cell–material feedback. Nature Chemical Biology, 2019, 15, 1017-1024.	8.0	50
124	Controlled Apoptosis by a Thermally Toggled Nanoscale Amplifier of Cellular Uptake. Nano Letters, 2014, 14, 2058-2064.	9.1	49
125	Controlled release of biologics for the treatment of type 2 diabetes. Journal of Controlled Release, 2016, 240, 151-164.	9.9	49
126	Brachytherapy Using Injectable Seeds That Are Self-Assembled from Genetically Encoded Polypeptides <i>In Situ</i> . Cancer Research, 2012, 72, 5956-5965.	0.9	48

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127	Phase Behavior and Self-Assembly of Perfectly Sequence-Defined and Monodisperse Multiblock Copolypeptides. Biomacromolecules, 2017, 18, 599-609.	5.4	47
128	Engineering the Architecture of Elastinâ€Like Polypeptides: From Unimers to Hierarchical Selfâ€Assembly. Advanced Therapeutics, 2020, 3, 1900164.	3.2	47
129	A genetically engineered thermally responsive sustained release curcumin depot to treat neuroinflammation. Journal of Controlled Release, 2013, 171, 38-47.	9.9	46
130	Cellâ€Based Biohybrid Drug Delivery Systems: The Best of the Synthetic and Natural Worlds. Macromolecular Bioscience, 2017, 17, 1600361.	4.1	46
131	Rheological Properties of Cysteine-Containing Elastin-Like Polypeptide Solutions and Hydrogels. Biomacromolecules, 2012, 13, 2315-2321.	5.4	45
132	In Pursuit of Zero 2.0: Recent Developments in Nonfouling Polymer Brushes for Immunoassays. Advanced Materials, 2020, 32, e1903285.	21.0	45
133	Engineered Chimeric Streptavidin Tetramers as Novel Tools for Bioseparations and Drug Delivery. Nature Biotechnology, 1995, 13, 1198-1204.	17.5	43
134	Multiplexed, quantitative serological profiling of COVID-19 from blood by a point-of-care test. Science Advances, 2021, 7, .	10.3	42
135	Fabrication of Biofunctionalized Quasi-Three-Dimensional Microstructures of a Nonfouling Comb Polymer Using Soft Lithography. Advanced Functional Materials, 2005, 15, 529-540.	14.9	41
136	Purification of an elastin-like fusion protein by microfiltration. Biotechnology and Bioengineering, 2006, 95, 424-432.	3.3	41
137	Direct Fluorescence Detection of RNA on Microarrays by Surface-Initiated Enzymatic Polymerization. Analytical Chemistry, 2013, 85, 426-433.	6.5	41
138	Bio-inspired synthesis of hybrid silica nanoparticles templated from elastin-like polypeptide micelles. Nanoscale, 2015, 7, 12038-12044.	5.6	41
139	Tracking the in vivo fate of recombinant polypeptides by isotopic labeling. Journal of Controlled Release, 2006, 114, 184-192.	9.9	40
140	Growing polymers from peptides and proteins: a biomedical perspective. Polymer Chemistry, 2014, 5, 266-276.	3.9	40
141	Conjugate of Doxorubicin to Albuminâ€Binding Peptide Outperforms Aldoxorubicin. Small, 2019, 15, e1804452.	10.0	40
142	Quantitative Study of the Interaction of Multivalent Ligand-Modified Nanoparticles with Breast Cancer Cells with Tunable Receptor Density. ACS Nano, 2020, 14, 372-383.	14.6	40
143	Sustained release of a GLP-1 and FGF21 dual agonist from an injectable depot protects mice from obesity and hyperglycemia. Science Advances, 2020, 6, eaaz9890.	10.3	40
144	Complex microparticle architectures from stimuli-responsive intrinsically disordered proteins. Nature Communications, 2020, 11, 1342.	12.8	40

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145	Plasmonic Fluorescence Enhancement in Diagnostics for Clinical Tests at Pointâ€of are: A Review of Recent Technologies. Advanced Materials, 2023, 35, e2107986.	21.0	40
146	Fusion of fibroblast growth factor 21 to a thermally responsive biopolymer forms an injectable depot with sustained anti-diabetic action. Journal of Controlled Release, 2018, 277, 154-164.	9.9	39
147	Enhanced TOF-SIMS Imaging of a Micropatterned Protein by Stable Isotope Protein Labeling. Analytical Chemistry, 2001, 73, 143-150.	6.5	38
148	Niclosamide-conjugated polypeptide nanoparticles inhibit Wnt signaling and colon cancer growth. Nanoscale, 2017, 9, 12709-12717.	5.6	38
149	Genetically Encoded Stealth Nanoparticles of a Zwitterionic Polypeptide-Paclitaxel Conjugate Have a Wider Therapeutic Window than Abraxane in Multiple Tumor Models. Nano Letters, 2020, 20, 2396-2409.	9.1	38
150	Protein Phase Separation Arising from Intrinsic Disorder: First-Principles to Bespoke Applications. Journal of Physical Chemistry B, 2021, 125, 6740-6759.	2.6	38
151	Genetically Encoding Albumin Binding into Chemotherapeutic-loaded Polypeptide Nanoparticles Enhances Their Antitumor Efficacy. Nano Letters, 2018, 18, 7784-7793.	9.1	36
152	Surface-Initiated Enzymatic Polymerization of DNA. Langmuir, 2007, 23, 11712-11717.	3.5	35
153	Allosteric Actuation of Inverse Phase Transition of a Stimulus-Responsive Fusion Polypeptide by Ligand Binding. Journal of the American Chemical Society, 2008, 130, 17867-17873.	13.7	35
154	Spatiotemporally photoradiation-controlled intratumoral depot for combination of brachytherapy and photodynamic therapy for solid tumor. Biomaterials, 2016, 79, 79-87.	11.4	35
155	Highâ€Molecularâ€Weight Polynucleotides by Transferaseâ€Catalyzed Living Chainâ€Growth Polycondensation. Angewandte Chemie - International Edition, 2017, 56, 6778-6782.	13.8	35
156	Sequence Directionality Dramatically Affects LCST Behavior of Elastin-Like Polypeptides. Biomacromolecules, 2018, 19, 2496-2505.	5.4	35
157	Genetically Encoded Cholesterol-Modified Polypeptides. Journal of the American Chemical Society, 2019, 141, 945-951.	13.7	35
158	Prediction of solvent-induced morphological changes of polyelectrolyte diblock copolymer micelles. Soft Matter, 2015, 11, 8236-8245.	2.7	34
159	Hydration Layer Coupling and Cooperativity in Phase Behavior of Stimulus Responsive Peptide Polymers. Journal of the American Chemical Society, 2013, 135, 11299-11308.	13.7	33
160	Structural Evolution of a Stimulus-Responsive Diblock Polypeptide Micelle by Temperature Tunable Compaction of its Core. Macromolecules, 2015, 48, 6617-6627.	4.8	33
161	A quantitative study of the intracellular fate of pH-responsive doxorubicin-polypeptide nanoparticles. Journal of Controlled Release, 2017, 260, 100-110.	9.9	33
162	Micro- and Nanostructured Poly[oligo(ethylene glycol)methacrylate] Brushes Grown From Photopatterned Halogen Initiators by Atom Transfer Radical Polymerization. Biointerphases, 2011, 6, 8-15.	1.6	32

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163	Nanoparticle–Film Plasmon Ruler Interrogated with Transmission Visible Spectroscopy. ACS Photonics, 2014, 1, 974-984.	6.6	32
164	Enzymatic Polymerization of High Molecular Weight DNA Amphiphiles That Selfâ€Assemble into Starâ€Like Micelles. Advanced Materials, 2014, 26, 3050-3054.	21.0	31
165	Characterizing the Switching Thresholds of Magnetophoretic Transistors. Advanced Materials, 2015, 27, 6176-6180.	21.0	31
166	Avidity and Cell Uptake of Integrin-Targeting Polypeptide Micelles is Strongly Shape-Dependent. Nano Letters, 2019, 19, 6124-6132.	9.1	31
167	Non-chromatographic Purification of Recombinant Elastin-like Polypeptides and their Fusions with Peptides and Proteins from Escherichia coli . Journal of Visualized Experiments, 2014, , .	0.3	30
168	A Modular Method for the Highâ€Yield Synthesis of Siteâ€Specific Protein–Polymer Therapeutics. Angewandte Chemie - International Edition, 2016, 55, 10296-10300.	13.8	30
169	Maleimideâ€Functionalized Poly(2â€Oxazoline)s and Their Conjugation to Elastinâ€Like Polypeptides. Macromolecular Bioscience, 2016, 16, 322-333.	4.1	30
170	Genetically Encoded Elastinâ€Like Polypeptides for Drug Delivery. Advanced Healthcare Materials, 2021, 10, e2100209.	7.6	30
171	Investigation of non-covalent ligand binding to the intact streptavidin tetramer by electrospray ionization mass spectrometry. Journal of Mass Spectrometry, 1995, 30, 1095-1102.	1.6	29
172	Self-assembled hybrid elastin-like polypeptide/silica nanoparticles enable triggered drug release. Nanoscale, 2017, 9, 6178-6186.	5.6	29
173	Design of intrinsically disordered proteins that undergo phase transitions with lower critical solution temperatures. APL Materials, 2021, 9, .	5.1	29
174	Siteâ€Specific Zwitterionic Polymer Conjugates of a Protein Have Long Plasma Circulation. ChemBioChem, 2015, 16, 2451-2455.	2.6	28
175	Sediment challenge to promising ultra-low fouling hydrophilic surfaces in the marine environment. Biofouling, 2019, 35, 454-462.	2.2	28
176	Encapsulating a Hydrophilic Chemotherapeutic into Rod‣ike Nanoparticles of a Genetically Encoded Asymmetric Triblock Polypeptide Improves Its Efficacy. Advanced Functional Materials, 2017, 27, 1605421.	14.9	27
177	Ultrabright Fluorescence Readout of an Inkjet-Printed Immunoassay Using Plasmonic Nanogap Cavities. Nano Letters, 2020, 20, 4330-4336.	9.1	27
178	Magnetophoretic Conductors and Diodes in a 3D Magnetic Field. Advanced Functional Materials, 2016, 26, 4026-4034.	14.9	26
179	Chain Stiffness of Elastin-Like Polypeptides. Biomacromolecules, 2010, 11, 3216-3218.	5.4	25
180	Quantitative Mapping of the Spatial Distribution of Nanoparticles in Endo-Lysosomes by Local pH. Nano Letters, 2017, 17, 1226-1232.	9.1	25

#	Article	IF	CITATIONS
181	Characterisation of hydration and nanophase separation during the temperature response in hydrophobic/hydrophilic elastin-like polypeptide (ELP) diblock copolymers. Soft Matter, 2017, 13, 1816-1822.	2.7	24
182	Poly(oligo(ethylene glycol) methyl ether methacrylate) Brushes on High-κ Metal Oxide Dielectric Surfaces for Bioelectrical Environments. ACS Applied Materials & Interfaces, 2017, 9, 5522-5529.	8.0	23
183	Magnetophoretic transistors in a tri-axial magnetic field. Lab on A Chip, 2016, 16, 4181-4188.	6.0	22
184	Ultrasensitive point-of-care immunoassay for secreted glycoprotein detects Ebola infection earlier than PCR. Science Translational Medicine, 2021, 13 , .	12.4	22
185	Site-Specific and Stoichiometric Stealth Polymer Conjugates of Therapeutic Peptides and Proteins. Bioconjugate Chemistry, 2017, 28, 713-723.	3.6	21
186	Enzymatic Synthesis of Nucleobase-Modified Single-Stranded DNA Offers Tunable Resistance to Nuclease Degradation. Biomacromolecules, 2018, 19, 3525-3535.	5.4	21
187	Rapid test to assess the escape of SARS-CoV-2 variants of concern. Science Advances, 2021, 7, eabl7682.	10.3	21
188	Polyethylene Glycolâ€Like Brush Polymer Conjugate of a Protein Drug Does Not Induce an Antipolymer Immune Response and Has Enhanced Pharmacokinetics than Its Polyethylene Glycol Counterpart. Advanced Science, 2022, 9, e2103672.	11.2	20
189	PEGâ€Like Brush Polymer Conjugate of RNA Aptamer That Shows Reversible Anticoagulant Activity and Minimal Immune Response. Advanced Materials, 2022, 34, e2107852.	21.0	19
190	Genetically encoded elastin-like polypeptide nanoparticles for drug delivery. Current Opinion in Biotechnology, 2022, 74, 146-153.	6.6	18
191	In situ growth of a thermoresponsive polymer from a genetically engineered elastin-like polypeptide. Polymer Chemistry, 2011, 2, 1561.	3.9	16
192	Molecular and Materials Engineering for Delivery of Peptide Drugs to Treat Type 2 Diabetes. Advanced Healthcare Materials, 2019, 8, 1801509.	7.6	16
193	The Weak Link: Optimization of the Ligand–Nanoparticle Interface To Enhance Cancer Cell Targeting by Polymer Micelles. Nano Letters, 2017, 17, 5995-6005.	9.1	15
194	Intratumoral delivery of brachytherapy and immunotherapy by a thermally triggered polypeptide depot. Journal of Controlled Release, 2022, 343, 267-276.	9.9	15
195	Cargo self-assembly rescues affinity of cell-penetrating peptides to lipid membranes. Scientific Reports, 2017, 7, 43963.	3.3	14
196	Engineering the Surface Properties of a Zwitterionic Polymer Brush to Enable the Simple Fabrication of Inkjet-Printed Point-of-Care Immunoassays. Langmuir, 2019, 35, 1379-1390.	3.5	13
197	Modular complement assemblies for mitigating inflammatory conditions. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	13
198	Concentration-Independent Multivalent Targeting of Cancer Cells by Genetically Encoded Core-Crosslinked Elastin/Resilin-like Polypeptide Micelles. Biomacromolecules, 2021, 22, 4347-4356.	5.4	12

#	Article	IF	Citations
199	Functional Modification of Silica through Enhanced Adsorption of Elastin-Like Polypeptide Block Copolymers. Biomacromolecules, 2018, 19, 298-306.	5.4	11
200	Genomically informed small-molecule drugs overcome resistance to a sustained-release formulation of an engineered death receptor agonist in patient-derived tumor models. Science Advances, 2019, 5, eaaw9162.	10.3	11
201	Inducible Fibril Formation of Silk–Elastin Diblocks. ACS Omega, 2019, 4, 9135-9143.	3.5	10
202	A Modular Method for the Highâ€Yield Synthesis of Siteâ€Specific Protein–Polymer Therapeutics. Angewandte Chemie, 2016, 128, 10452-10456.	2.0	9
203	Highâ€Molecularâ€Weight Polynucleotides by Transferaseâ€Catalyzed Living Chainâ€Growth Polycondensation. Angewandte Chemie, 2017, 129, 6882-6886.	2.0	9
204	Developing Precisely Defined Drug‣oaded Nanoparticles by Ringâ€Opening Polymerization of a Paclitaxel Prodrug. Advanced Healthcare Materials, 2016, 5, 1868-1873.	7.6	8
205	Creating cellular patterns using genetically engineered, gold- and cell-binding polypeptides. Biointerphases, 2016, 11, 021009.	1.6	8
206	Von der Zusammensetzung zur Heilung: ein systemtechnischer Ansatz zur Entwicklung von TrÄ g ern fļr Tumortherapeutika. Angewandte Chemie, 2017, 129, 6814-6837.	2.0	8
207	Cellphone enabled point-of-care assessment of breast tumor cytology and molecular HER2 expression from fine-needle aspirates. Npj Breast Cancer, 2021, 7, 85.	5.2	8
208	Recombinant Synthesis of Hybrid Lipid–Peptide Polymer Fusions that Selfâ€Assemble and Encapsulate Hydrophobic Drugs. Angewandte Chemie, 2017, 129, 14167-14172.	2.0	7
209	Enzymatic synthesis and modification of high molecular weight DNA using terminal deoxynucleotidyl transferase. Methods in Enzymology, 2019, 627, 163-188.	1.0	7
210	Nanoscopic Dynamics Dictate the Phase Separation Behavior of Intrinsically Disordered Proteins. Biomacromolecules, 2021, 22, 1015-1025.	5.4	7
211	Genetically encoded "smart―peptide polymers for biomedicine. MRS Bulletin, 2014, 39, 35-43.	3.5	6
212	2.5 Elastin-Like Polypeptides â~†. , 2017, , 90-108.		6
213	Heuristics for the Optimal Presentation of Bioactive Peptides on Polypeptide Micelles. Nano Letters, 2019, 19, 7977-7987.	9.1	6
214	Tumor Subtype Determines Therapeutic Response to Chimeric Polypeptide Nanoparticle–based Chemotherapy in ⟨i>Pten⟨/i>-deleted Mouse Models of Sarcoma. Clinical Cancer Research, 2020, 26, 5036-5047.	7.0	6
215	Technologies for Frugal and Sensitive Point-of-Care Immunoassays. Annual Review of Analytical Chemistry, 2022, 15, 123-149.	5.4	6
216	Nature of Amorphous Hydrophilic Block Affects Self-Assembly of an Artificial Viral Coat Polypeptide. Biomacromolecules, 2019, 20, 3641-3647.	5.4	5

#	Article	IF	Citations
217	Microphase Separation of Resilin-like and Elastin-like Diblock Copolypeptides in Concentrated Solutions. Biomacromolecules, 2021, 22, 3827-3838.	5.4	5
218	Genetically Engineered Nanoparticles of Asymmetric Triblock Polypeptide with a Platinum(IV) Cargo Outperforms a Platinum(II) Analog and Free Drug in a Murine Cancer Model. Nano Letters, 2022, 22, 5898-5908.	9.1	4
219	A two-step chondrocyte recovery system based on thermally sensitive elastin-like polypeptide scaffolds for cartilage tissue engineering. , 0, , .		3
220	The Language of Protein Polymers. ACS Symposium Series, 2014, , 15-33.	0.5	2
221	Recombinant Fusion of Glucagonâ€Like Peptideâ€1 and an Albumin Binding Domain Provides Glycemic Control for a Week in Diabetic Mice. Advanced Therapeutics, 2020, 3, 2000073.	3.2	2
222	A colorimetric gold nanoparticle biosensor: effect of particle size on sensitivity., 0,,.		1
223	Engineered Proteins for Biomaterials. Materials Research Society Symposia Proceedings, 1992, 292, 77.	0.1	0
224	A genetically-engineered polypeptide carrier for thermal targeting of therapeutics. , 0, , .		0
225	Elastin-like polypeptide-doxorubicin conjugates for cancer therapy. , 0, , .		0
226	Measurement system for the high-throughput characterization of metal nanoparticles for biosensors. , 2005, , .		0
227	Polypeptide-Solvent Interactions Measured by Single Molecule Force Spectroscopy. Materials Research Society Symposia Proceedings, 2005, 898, 1.	0.1	0
228	Encapsulation of Stimuli-Responsive Fusion Proteins in Silica: Thermally Responsive Metal Ion-Sensitive Hybrid Membranes. Materials Research Society Symposia Proceedings, 2013, 1498, 169-175.	0.1	0
229	Macromol. Biosci. 3/2016. Macromolecular Bioscience, 2016, 16, 464-464.	4.1	0
230	Glucagon Like Peptide 1 Attenuates Airway Hyperresponsiveness in a Mouse Model of Obese Allergic Asthma. , 2020, , .		0
231	Smartphone Enabled Point-of-Care Detection of Serum Biomarkers. Methods in Molecular Biology, 2022, 2393, 343-365.	0.9	0