

Pat Stayton

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261
papers

19,651
citations

78
h-index

131
g-index

280
ext. papers

20,716
ext. citations

8.1
avg. IF

6.53
L-index

#	Paper	IF	Citations
261	Design and development of polymers for gene delivery. <i>Nature Reviews Drug Discovery</i> , 2005 , 4, 581-93	64.1	2055
260	Control of protein-ligand recognition using a stimuli-responsive polymer. <i>Nature</i> , 1995 , 378, 472-4	50.4	606
259	The design and synthesis of polymers for eukaryotic membrane disruption. <i>Journal of Controlled Release</i> , 1999 , 61, 137-43	11.7	368
258	Poly(N-isopropylacrylamide-co-propylacrylic acid) copolymers that respond sharply to temperature and pH. <i>Biomacromolecules</i> , 2006 , 7, 1381-5	6.9	351
257	Development of a novel endosomolytic diblock copolymer for siRNA delivery. <i>Journal of Controlled Release</i> , 2009 , 133, 221-9	11.7	332
256	Photoresponsive polymer-enzyme switches. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002 , 99, 16592-6	11.5	290
255	Conjugates of stimuli-responsive polymers and proteins. <i>Progress in Polymer Science</i> , 2007 , 32, 922-932	29.6	277
254	Founder's Award, Society for Biomaterials. Sixth World Biomaterials Congress 2000, Kamuela, HI, May 15-20, 2000. Really smart bioconjugates of smart polymers and receptor proteins. <i>Journal of Biomedical Materials Research Part B</i> , 2000 , 52, 577-86		273
253	A conserved residue of cytochrome P-450 is involved in heme-oxygen stability and activation. <i>Journal of the American Chemical Society</i> , 1989 , 111, 9252-9253	16.4	245
252	Hyaluronic acid hydrogels with controlled degradation properties for oriented bone regeneration. <i>Biomaterials</i> , 2010 , 31, 6772-81	15.6	244
251	pH-Responsive nanoparticle vaccines for dual-delivery of antigens and immunostimulatory oligonucleotides. <i>ACS Nano</i> , 2013 , 7, 3912-25	16.7	233
250	Size-dependent control of the binding of biotinylated proteins to streptavidin using a polymer shield. <i>Nature</i> , 2001 , 411, 59-62	50.4	224
249	A new pH-responsive and glutathione-reactive, endosomal membrane-disruptive polymeric carrier for intracellular delivery of biomolecular drugs. <i>Journal of Controlled Release</i> , 2003 , 93, 105-20	11.7	221
248	Design and synthesis of pH-responsive polymeric carriers that target uptake and enhance the intracellular delivery of oligonucleotides. <i>Journal of Controlled Release</i> , 2003 , 89, 365-74	11.7	211
247	Bioinspired pH-responsive polymers for the intracellular delivery of biomolecular drugs. <i>Bioconjugate Chemistry</i> , 2003 , 14, 412-9	6.3	210
246	Poly(2-alkylacrylic acid) polymers deliver molecules to the cytosol by pH-sensitive disruption of endosomal vesicles. <i>Biochemical Journal</i> , 2003 , 372, 65-75	3.8	200
245	Site-directed mutagenesis studies of the high-affinity streptavidin-biotin complex: contributions of tryptophan residues 79, 108, and 120. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1995 , 92, 1754-8	11.5	193

244	Delivery of basic fibroblast growth factor with a pH-responsive, injectable hydrogel to improve angiogenesis in infarcted myocardium. <i>Biomaterials</i> , 2011 , 32, 2407-16	15.6	192
243	pH-responsive polymeric micelle carriers for siRNA drugs. <i>Biomacromolecules</i> , 2010 , 11, 2904-11	6.9	191
242	pH-responsive poly(styrene-alt-maleic anhydride) alkylamide copolymers for intracellular drug delivery. <i>Biomacromolecules</i> , 2006 , 7, 2407-14	6.9	190
241	Molecular Recognition between Genetically Engineered Streptavidin and Surface-Bound Biotin. <i>Journal of the American Chemical Society</i> , 1999 , 121, 6469-6478	16.4	179
240	Spatially organized layers of cardiomyocytes on biodegradable polyurethane films for myocardial repair. <i>Journal of Biomedical Materials Research Part B</i> , 2003 , 66, 586-95		176
239	Site-specific polymer-streptavidin bioconjugate for pH-controlled binding and triggered release of biotin. <i>Bioconjugate Chemistry</i> , 2000 , 11, 78-83	6.3	176
238	Molecular Origins of the Slow Streptavidin-Biotin Dissociation Kinetics. <i>Journal of the American Chemical Society</i> , 1995 , 117, 10622-10628	16.4	176
237	Surface Characterization of Mixed Self-Assembled Monolayers Designed for Streptavidin Immobilization. <i>Langmuir</i> , 2001 , 17, 2807-2816	4	175
236	Binding and Dissociation Kinetics of Wild-Type and Mutant Streptavidins on Mixed Biotin-Containing Alkylthiolate Monolayers. <i>Langmuir</i> , 2000 , 16, 9421-9432	4	173
235	pH-sensitive polymers that enhance intracellular drug delivery in vivo. <i>Journal of Controlled Release</i> , 2002 , 78, 295-303	11.7	171
234	Structural studies of the streptavidin binding loop. <i>Protein Science</i> , 1997 , 6, 1157-66	6.3	162
233	Bioconjugates of smart polymers and proteins: synthesis and applications. <i>Macromolecular Symposia</i> , 2004 , 207, 139-152	0.8	161
232	Structure and dynamics of hydrated statherin on hydroxyapatite as determined by solid-state NMR. <i>Biochemistry</i> , 2001 , 40, 15451-5	3.2	157
231	The relationship between ligand-binding thermodynamics and protein-ligand interaction forces measured by atomic force microscopy. <i>Biophysical Journal</i> , 1995 , 69, 2125-30	2.9	152
230	In vitro generation of differentiated cardiac myofibers on micropatterned laminin surfaces. <i>Journal of Biomedical Materials Research Part B</i> , 2002 , 60, 472-9		150
229	Dual magnetic-/temperature-responsive nanoparticles for microfluidic separations and assays. <i>Langmuir</i> , 2007 , 23, 7385-91	4	148
228	A pH-sensitive polymer that enhances cationic lipid-mediated gene transfer. <i>Bioconjugate Chemistry</i> , 2001 , 12, 906-10	6.3	146
227	Injectable pH- and temperature-responsive poly(N-isopropylacrylamide-co-propylacrylic acid) copolymers for delivery of angiogenic growth factors. <i>Biomacromolecules</i> , 2010 , 11, 1833-9	6.9	143

226	The cytochrome P-450cam binding surface as defined by site-directed mutagenesis and electrostatic modeling. <i>Biochemistry</i> , 1990 , 29, 7381-6	3.2	139
225	Biomaterial topography alters healing in vivo and monocyte/macrophage activation in vitro. <i>Journal of Biomedical Materials Research - Part A</i> , 2010 , 95, 649-57	5.4	137
224	Formation of a novel heparin-based hydrogel in the presence of heparin-binding biomolecules. <i>Biomacromolecules</i> , 2007 , 8, 1979-86	6.9	136
223	Temperature-induced switching of enzyme activity with smart polymer-enzyme conjugates. <i>Bioconjugate Chemistry</i> , 2003 , 14, 517-25	6.3	134
222	Putidaredoxin competitively inhibits cytochrome b5-cytochrome P-450cam association: a proposed molecular model for a cytochrome P-450cam electron-transfer complex. <i>Biochemistry</i> , 1989 , 28, 8201-5	3.2	133
221	Site-specific conjugation of a temperature-sensitive polymer to a genetically-engineered protein. <i>Bioconjugate Chemistry</i> , 1994 , 5, 504-7	6.3	128
220	Synthesis of monodisperse biotinylated p(NIPAAm)-coated iron oxide magnetic nanoparticles and their bioconjugation to streptavidin. <i>Langmuir</i> , 2007 , 23, 6299-304	4	127
219	Controlling the aggregation of conjugates of streptavidin with smart block copolymers prepared via the RAFT copolymerization technique. <i>Biomacromolecules</i> , 2006 , 7, 2736-41	6.9	127
218	PEG-cross-linked heparin is an affinity hydrogel for sustained release of vascular endothelial growth factor. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2006 , 17, 187-97	3.5	126
217	A biomimetic pH-responsive polymer directs endosomal release and intracellular delivery of an endocytosed antibody complex. <i>Bioconjugate Chemistry</i> , 2002 , 13, 996-1001	6.3	125
216	A smart microfluidic affinity chromatography matrix composed of poly(N-isopropylacrylamide)-coated beads. <i>Analytical Chemistry</i> , 2003 , 75, 2943-9	7.8	123
215	Dissociation of tetrameric ions of noncovalent streptavidin complexes formed by electrospray ionization. <i>Journal of the American Society for Mass Spectrometry</i> , 1995 , 6, 459-65	3.5	122
214	Energetic roles of hydrogen bonds at the ureido oxygen binding pocket in the streptavidin-biotin complex. <i>Biochemistry</i> , 1998 , 37, 7657-63	3.2	115
213	Hemolytic activity of pH-responsive polymer-streptavidin bioconjugates. <i>Bioconjugate Chemistry</i> , 1999 , 10, 401-5	6.3	111
212	Cooperative hydrogen bond interactions in the streptavidin-biotin system. <i>Protein Science</i> , 2006 , 15, 459-67	6.3	110
211	Thermosensitive liposomes modified with poly(N-isopropylacrylamide-co-propylacrylic acid) copolymers for triggered release of doxorubicin. <i>Biomacromolecules</i> , 2010 , 11, 1915-20	6.9	107
210	Photoswitching of ligand association with a photoresponsive polymer-protein conjugate. <i>Bioconjugate Chemistry</i> , 2002 , 13, 915-9	6.3	107
209	Application of living free radical polymerization for nucleic acid delivery. <i>Accounts of Chemical Research</i> , 2012 , 45, 1089-99	24.3	102

208	Multiplexed enrichment and detection of malarial biomarkers using a stimuli-responsive iron oxide and gold nanoparticle reagent system. <i>ACS Nano</i> , 2012 , 6, 6776-85	16.7	102
207	Switchable surface traps for injectable bead-based chromatography in PDMS microfluidic channels. <i>Lab on A Chip</i> , 2006 , 6, 843-8	7.2	102
206	Neutral polymer micelle carriers with pH-responsive, endosome-releasing activity modulate antigen trafficking to enhance CD8(+) T cell responses. <i>Journal of Controlled Release</i> , 2014 , 191, 24-33	11.7	101
205	Temperature control of biotin binding and release with A streptavidin-poly(N-isopropylacrylamide) site-specific conjugate. <i>Bioconjugate Chemistry</i> , 1999 , 10, 395-400	6.3	101
204	Intracellular delivery of a protein antigen with an endosomal-releasing polymer enhances CD8 T-cell production and prophylactic vaccine efficacy. <i>Bioconjugate Chemistry</i> , 2010 , 21, 2205-12	6.3	100
203	Reversible meso-scale smart polymer--protein particles of controlled sizes. <i>Bioconjugate Chemistry</i> , 2004 , 15, 747-53	6.3	98
202	A computationally designed inhibitor of an Epstein-Barr viral Bcl-2 protein induces apoptosis in infected cells. <i>Cell</i> , 2014 , 157, 1644-1656	56.2	96
201	Multifunctional triblock copolymers for intracellular messenger RNA delivery. <i>Biomaterials</i> , 2012 , 33, 6868-76	15.6	96
200	Molecular recognition at the protein-hydroxyapatite interface. <i>Critical Reviews in Oral Biology and Medicine</i> , 2003 , 14, 370-6		95
199	Chimeric peptides of statherin and osteopontin that bind hydroxyapatite and mediate cell adhesion. <i>Journal of Biological Chemistry</i> , 2000 , 275, 16213-8	5.4	95
198	Functionalized nanoparticles provide early cardioprotection after acute myocardial infarction. <i>Journal of Controlled Release</i> , 2013 , 170, 287-94	11.7	92
197	Encapsulation and stabilization of indocyanine green within poly(styrene-alt-maleic anhydride) block-poly(styrene) micelles for near-infrared imaging. <i>Journal of Biomedical Optics</i> , 2008 , 13, 014025	3.5	92
196	Internalization of novel non-viral vector TAT-streptavidin into human cells. <i>BMC Biotechnology</i> , 2007 , 7, 1	3.5	92
195	Molecular engineering of proteins and polymers for targeting and intracellular delivery of therapeutics. <i>Journal of Controlled Release</i> , 2000 , 65, 203-20	11.7	92
194	A peptide that inhibits hydroxyapatite growth is in an extended conformation on the crystal surface. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1998 , 95, 12083-7	11.5	92
193	Diblock copolymers with tunable pH transitions for gene delivery. <i>Biomaterials</i> , 2012 , 33, 2301-9	15.6	89
192	Anti-inflammatory drug delivery from hyaluronic acid hydrogels. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2004 , 15, 1111-9	3.5	88
191	Determination of Statherin N-Terminal Peptide Conformation on Hydroxyapatite Crystals. <i>Journal of the American Chemical Society</i> , 2000 , 122, 1709-1716	16.4	88

190	Streptavidin-biotin binding energetics. <i>New Biotechnology</i> , 1999 , 16, 39-44		87
189	Folding of the C-terminal bacterial binding domain in statherin upon adsorption onto hydroxyapatite crystals. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006 , 103, 16083-8	11.5	84
188	Intracellular delivery of a proapoptotic peptide via conjugation to a RAFT synthesized endosomolytic polymer. <i>Molecular Pharmaceutics</i> , 2010 , 7, 468-76	5.6	83
187	Thermoprecipitation of streptavidin via oligonucleotide-mediated self-assembly with poly(N-isopropylacrylamide). <i>Bioconjugate Chemistry</i> , 1999 , 10, 720-5	6.3	82
186	Modulation of macrophage responsiveness to lipopolysaccharide by IRAK-1 manipulation. <i>Shock</i> , 2004 , 21, 182-8	3.4	81
185	Probing the orientation of surface-immobilized protein G B1 using ToF-SIMS, sum frequency generation, and NEXAFS spectroscopy. <i>Langmuir</i> , 2010 , 26, 16434-41	4	80
184	pH-responsive polymeric siRNA carriers sensitize multidrug resistant ovarian cancer cells to doxorubicin via knockdown of polo-like kinase 1. <i>Molecular Pharmaceutics</i> , 2010 , 7, 442-55	5.6	80
183	"Smart" mobile affinity matrix for microfluidic immunoassays. <i>Lab on A Chip</i> , 2004 , 4, 412-5	7.2	77
182	Two-dimensional protein crystallization via metal-ion coordination by naturally occurring surface histidines. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1996 , 93, 4937-41	11.5	74
181	Genetic engineering of redox donor sites: measurement of intracomplex electron transfer between ruthenium-65-cytochrome b5 and cytochrome c. <i>Biochemistry</i> , 1992 , 31, 7237-42	3.2	74
180	Dynamic bioprocessing and microfluidic transport control with smart magnetic nanoparticles in laminar-flow devices. <i>Lab on A Chip</i> , 2009 , 9, 1997-2002	7.2	73
179	Antigen delivery with poly(propylacrylic acid) conjugation enhances MHC-1 presentation and T-cell activation. <i>Bioconjugate Chemistry</i> , 2009 , 20, 241-8	6.3	71
178	'Smart' delivery systems for biomolecular therapeutics. <i>Orthodontics and Craniofacial Research</i> , 2005 , 8, 219-25	3	71
177	Rational design of composition and activity correlations for pH-sensitive and glutathione-reactive polymer therapeutics. <i>Journal of Controlled Release</i> , 2005 , 101, 47-58	11.7	71
176	Structural studies of binding site tryptophan mutants in the high-affinity streptavidin-biotin complex. <i>Journal of Molecular Biology</i> , 1998 , 279, 211-21	6.5	70
175	Ser45 plays an important role in managing both the equilibrium and transition state energetics of the streptavidin-biotin system. <i>Protein Science</i> , 2000 , 9, 878-85	6.3	68
174	Design of "smart" polymers that can "direct" intracellular drug delivery. <i>Polymers for Advanced Technologies</i> , 2002 , 13, 992-999	3.2	67
173	TOF-SIMS 3D imaging of native and non-native species within HeLa cells. <i>Analytical Chemistry</i> , 2013 , 85, 10869-77	7.8	66

172	Core-Cross-Linked Nanoparticles Reduce Neuroinflammation and Improve Outcome in a Mouse Model of Traumatic Brain Injury. <i>ACS Nano</i> , 2017 , 11, 8600-8611	16.7	65
171	Photo-cross-linked hydrogels from thermoresponsive PEGMEMA-PPGMA-EGDMA copolymers containing multiple methacrylate groups: mechanical property, swelling, protein release, and cytotoxicity. <i>Biomacromolecules</i> , 2009 , 10, 2895-903	6.9	65
170	Thermodynamic and structural consequences of flexible loop deletion by circular permutation in the streptavidin-biotin system. <i>Protein Science</i> , 1998 , 7, 848-59	6.3	65
169	Mixed stimuli-responsive magnetic and gold nanoparticle system for rapid purification, enrichment, and detection of biomarkers. <i>Bioconjugate Chemistry</i> , 2010 , 21, 2197-204	6.3	64
168	Determination of Torsion Angles in Proteins and Peptides Using Solid State NMR. <i>Journal of the American Chemical Society</i> , 1999 , 121, 8373-8375	16.4	63
167	Genetic engineering of surface attachment sites yields oriented protein monolayers. <i>Journal of the American Chemical Society</i> , 1992 , 114, 9298-9299	16.4	63
166	Streptavidin and its biotin complex at atomic resolution. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2011 , 67, 813-21		62
165	Surface modification of microfluidic channels by UV-mediated graft polymerization of non-fouling and smart polymers. <i>Radiation Physics and Chemistry</i> , 2007 , 76, 1409-1413	2.5	62
164	Smart polymeric carriers for enhanced intracellular delivery of therapeutic macromolecules. <i>Expert Opinion on Biological Therapy</i> , 2005 , 5, 23-32	5.4	62
163	Thermodynamics of statherin adsorption onto hydroxyapatite. <i>Biochemistry</i> , 2006 , 45, 5576-86	3.2	62
162	"Smart" diblock copolymers as templates for magnetic-core gold-shell nanoparticle synthesis. <i>Nano Letters</i> , 2010 , 10, 85-91	11.5	61
161	Formulation of chitosan-DNA nanoparticles with poly(propyl acrylic acid) enhances gene expression. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2004 , 15, 1405-21	3.5	61
160	In vivo targeting of alveolar macrophages via RAFT-based glycopolymers. <i>Biomaterials</i> , 2012 , 33, 6889-97	15.6	59
159	Biomimetic peptides that engage specific integrin-dependent signaling pathways and bind to calcium phosphate surfaces. <i>Journal of Biomedical Materials Research Part B</i> , 2003 , 67, 69-77		59
158	Structural studies of biomaterials using double-quantum solid-state NMR spectroscopy. <i>Annual Review of Physical Chemistry</i> , 2003 , 54, 531-71	15.7	59
157	Antibody fragments in tumor pretargeting. Evaluation of biotinylated Fab' colocalization with recombinant streptavidin and avidin. <i>Bioconjugate Chemistry</i> , 1996 , 7, 689-702	6.3	59
156	Intramolecular electron transfer in cytochrome b5 labeled with ruthenium(II) polypyridine complexes: rate measurements in the Marcus inverted region. <i>Journal of the American Chemical Society</i> , 1993 , 115, 6820-6824	16.4	59
155	Organic nanoparticles for drug delivery and imaging. <i>MRS Bulletin</i> , 2014 , 39, 219-223	3.2	58

154	Thermodynamic roles of basic amino acids in statherin recognition of hydroxyapatite. <i>Biochemistry</i> , 2007 , 46, 4725-33	3.2	58
153	A Solid State NMR Study of Dynamics in a Hydrated Salivary Peptide Adsorbed to Hydroxyapatite. <i>Journal of the American Chemical Society</i> , 2000 , 122, 7118-7119	16.4	57
152	A structural snapshot of an intermediate on the streptavidin-biotin dissociation pathway. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1999 , 96, 8384-9	11.5	57
151	Nanoparticle distribution during systemic inflammation is size-dependent and organ-specific. <i>Nanoscale</i> , 2015 , 7, 15863-72	7.7	56
150	Synthesis of folate-functionalized RAFT polymers for targeted siRNA delivery. <i>Biomacromolecules</i> , 2011 , 12, 2708-14	6.9	56
149	Surface plasmon resonance measurement of binding and dissociation of wild-type and mutant streptavidin on mixed biotin-containing alkylthiolate monolayers. <i>Sensors and Actuators B: Chemical</i> , 1999 , 54, 137-144	8.5	56
148	Melittin-grafted HPMA-oligolysine based copolymers for gene delivery. <i>Biomaterials</i> , 2013 , 34, 2318-26	15.6	55
147	Determination of cytochrome b5 association reactions. Characterization of metmyoglobin and cytochrome P-450cam binding to genetically engineered cytochrome b5.. <i>Journal of Biological Chemistry</i> , 1988 , 263, 13544-13548	5.4	55
146	Anti-CD22 antibody targeting of pH-responsive micelles enhances small interfering RNA delivery and gene silencing in lymphoma cells. <i>Molecular Therapy</i> , 2011 , 19, 1529-37	11.7	54
145	A REDOR NMR study of a phosphorylated statherin fragment bound to hydroxyapatite crystals. <i>Journal of the American Chemical Society</i> , 2005 , 127, 9350-1	16.4	54
144	Assembly of alpha-helical peptide coatings on hydrophobic surfaces. <i>Journal of the American Chemical Society</i> , 2002 , 124, 6297-303	16.4	54
143	Structural microheterogeneity of a tryptophan residue required for efficient biological electron transfer between putidaredoxin and cytochrome P-450cam. <i>Biochemistry</i> , 1991 , 30, 1845-51	3.2	53
142	Computationally designed high specificity inhibitors delineate the roles of BCL2 family proteins in cancer. <i>ELife</i> , 2016 , 5,	8.9	52
141	A solid-state NMR study of the dynamics and interactions of phenylalanine rings in a statherin fragment bound to hydroxyapatite crystals. <i>Journal of the American Chemical Society</i> , 2006 , 128, 5364-70	16.4	51
140	Contributions of a highly conserved VH/VL hydrogen bonding interaction to scFv folding stability and refolding efficiency. <i>Biophysical Journal</i> , 1998 , 75, 1473-82	2.9	51
139	pH-sensitive hemolysis by random copolymers of alkyl acrylates and acrylic acid. <i>Macromolecular Symposia</i> , 2001 , 172, 49-56	0.8	50
138	A streptavidin-biotin binding system that minimizes blocking by endogenous biotin. <i>Bioconjugate Chemistry</i> , 2002 , 13, 588-98	6.3	49
137	Probing the orientation of electrostatically immobilized Protein G B1 by time-of-flight secondary ion spectrometry, sum frequency generation, and near-edge X-ray adsorption fine structure spectroscopy. <i>Langmuir</i> , 2012 , 28, 2107-12	4	48

136	ToF-SIMS imaging and depth profiling of HeLa cells treated with bromodeoxyuridine. <i>Surface and Interface Analysis</i> , 2011 , 43, 354-357	1.5	47
135	Hyaluronic acid grafting mitigates calcification of glutaraldehyde-fixed bovine pericardium. <i>Journal of Biomedical Materials Research Part B</i> , 2004 , 70, 328-34		47
134	A TAT-streptavidin fusion protein directs uptake of biotinylated cargo into mammalian cells. <i>Protein Engineering, Design and Selection</i> , 2005 , 18, 147-52	1.9	47
133	Simple fluidic system for purifying and concentrating diagnostic biomarkers using stimuli-responsive antibody conjugates and membranes. <i>Bioconjugate Chemistry</i> , 2010 , 21, 1820-6	6.3	45
132	Homonuclear and heteronuclear NMR studies of a statherin fragment bound to hydroxyapatite crystals. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 9324-32	3.4	45
131	Enhancement of MHC-I antigen presentation via architectural control of pH-responsive, endosomolytic polymer nanoparticles. <i>AAPS Journal</i> , 2015 , 17, 358-69	3.7	44
130	Solid State NMR Studies of Molecular Recognition at Protein-Mineral Interfaces. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , 2007 , 50, 71-85	10.4	43
129	End-functionalized polymers and junction-functionalized diblock copolymers via RAFT chain extension with maleimido monomers. <i>Bioconjugate Chemistry</i> , 2009 , 20, 1122-8	6.3	42
128	Affinity separation using an Fv antibody fragment-"smart" polymer conjugate. <i>Biotechnology and Bioengineering</i> , 2002 , 79, 271-6	4.9	42
127	Affinity thermoprecipitation and recovery of biotinylated biomolecules via a mutant streptavidin-smart polymer conjugate. <i>Bioconjugate Chemistry</i> , 2003 , 14, 575-80	6.3	42
126	Design and construction of highly stable, protease-resistant chimeric avidins. <i>Journal of Biological Chemistry</i> , 2005 , 280, 10228-33	5.4	42
125	Development of new biotin/streptavidin reagents for pretargeting. <i>New Biotechnology</i> , 1999 , 16, 113-8		42
124	Neutral polymeric micelles for RNA delivery. <i>Bioconjugate Chemistry</i> , 2013 , 24, 398-407	6.3	41
123	The structure, dynamics, and energetics of protein adsorption-lessons learned from adsorption of statherin to hydroxyapatite. <i>Magnetic Resonance in Chemistry</i> , 2007 , 45 Suppl 1, S32-47	2.1	41
122	Polymer nanostructures synthesized by controlled living polymerization for tumor-targeted drug delivery. <i>Journal of Controlled Release</i> , 2015 , 219, 345-354	11.7	40
121	Mechanistic investigation of smart polymer-protein conjugates. <i>Bioconjugate Chemistry</i> , 2001 , 12, 314-9	6.3	40
120	A ¹³ C{ ³¹ P} REDOR NMR investigation of the role of glutamic acid residues in statherin-hydroxyapatite recognition. <i>Langmuir</i> , 2009 , 25, 12136-43	4	39
119	Antibody targeting facilitates effective intratumoral siRNA nanoparticle delivery to HER2-overexpressing cancer cells. <i>Oncotarget</i> , 2016 , 7, 9561-75	3.3	38

118	Intracellular delivery and trafficking dynamics of a lymphoma-targeting antibody-polymer conjugate. <i>Molecular Pharmaceutics</i> , 2012 , 9, 3506-14	5.6	37
117	Synthesis of statistical copolymers containing multiple functional peptides for nucleic Acid delivery. <i>Biomacromolecules</i> , 2010 , 11, 3007-13	6.9	37
116	Engineered chimeric streptavidin tetramers as novel tools for bioseparations and drug delivery. <i>Nature Biotechnology</i> , 1995 , 13, 1198-1204	44.5	37
115	RAFT polymerization of ciprofloxacin prodrug monomers for the controlled intracellular delivery of antibiotics. <i>Polymer Chemistry</i> , 2016 , 7, 826-837	4.9	36
114	Engineering protein orientation at surfaces to control macromolecular recognition events. <i>Analytical Chemistry</i> , 1993 , 65, 2676-8	7.8	36
113	Rational design of composition and activity correlations for pH-responsive and glutathione-reactive polymer therapeutics. <i>Journal of Controlled Release</i> , 2005 , 104, 417-27	11.7	35
112	Determination of cytochrome b5 association reactions. Characterization of metmyoglobin and cytochrome P-450cam binding to genetically engineered cytochrome b5. <i>Journal of Biological Chemistry</i> , 1988 , 263, 13544-8	5.4	35
111	The Role of Basic Amino Acids in the Molecular Recognition of Hydroxyapatite by Statherin using Solid State NMR. <i>Surface Science</i> , 2010 , 604, L39-L42	1.8	34
110	Polymer-augmented liposomes enhancing antibiotic delivery against intracellular infections. <i>Biomaterials Science</i> , 2018 , 6, 1976-1985	7.4	34
109	Enzyme-Cleavable Polymeric Micelles for the Intracellular Delivery of Proapoptotic Peptides. <i>Molecular Pharmaceutics</i> , 2017 , 14, 1450-1459	5.6	33
108	Macrophage-targeted drugamers with enzyme-cleavable linkers deliver high intracellular drug dosing and sustained drug pharmacokinetics against alveolar pulmonary infections. <i>Journal of Controlled Release</i> , 2018 , 287, 1-11	11.7	32
107	pH-responsive polymer-antigen vaccine bioconjugates. <i>Polymer Chemistry</i> , 2011 , 2, 1499	4.9	32
106	Micro-Scale Cell Patterning on Nonfouling Plasma Polymerized Tetraglyme Coatings by Protein Microcontact Printing. <i>Plasmas and Polymers</i> , 2002 , 7, 171-183		32
105	Solid-state NMR structural studies of peptides immobilized on gold nanoparticles. <i>Langmuir</i> , 2005 , 21, 3002-7	4	32
104	Streptavidin in antibody pretargeting. 2. Evaluation Of methods for decreasing localization of streptavidin to kidney while retaining its tumor binding capacity. <i>Bioconjugate Chemistry</i> , 1998 , 9, 322-30 ^{6.3}		32
103	Engineering the isoelectric point of a renal cell carcinoma targeting antibody greatly enhances scFv solubility. <i>Immunotechnology: an International Journal of Immunological Engineering</i> , 1998 , 4, 107-14		30
102	Heparin-regulated delivery of osteoprotegerin promotes vascularization of implanted hydrogels. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2008 , 19, 1021-34	3.5	30
101	Protein electrostatic surface distribution can determine whether calcium oxalate crystal growth is promoted or inhibited. <i>Calcified Tissue International</i> , 1999 , 64, 516-21	3.9	30

100	Dynamic intracellular delivery of antibiotics via pH-responsive polymersomes. <i>Polymer Chemistry</i> , 2015 , 6, 1255-1266	4.9	29
99	RAFT-synthesized graft copolymers that enhance pH-dependent membrane destabilization and protein circulation times. <i>Journal of Controlled Release</i> , 2011 , 155, 167-74	11.7	29
98	A helical flow, circular microreactor for separating and enriching "smart" polymer-antibody capture reagents. <i>Lab on A Chip</i> , 2010 , 10, 3130-8	7.2	29
97	Theranostic Oxygen Reactive Polymers for Treatment of Traumatic Brain Injury. <i>Advanced Functional Materials</i> , 2016 , 26, 4124-4133	15.6	29
96	Stimuli-Responsive Polymer-Antibody Conjugates via RAFT and Tetrafluorophenyl Active Ester Chemistry.. <i>ACS Macro Letters</i> , 2013 , 2, 132-136	6.6	28
95	Intracellular delivery system for antibody-Peptide drug conjugates. <i>Molecular Therapy</i> , 2015 , 23, 907-917	11.7	28
94	Laboratory-scale protein striping system for patterning biomolecules onto paper-based immunochromatographic test strips. <i>Lab on A Chip</i> , 2010 , 10, 2279-82	7.2	28
93	Retention and biodistribution of microspheres injected into ischemic myocardium. <i>Journal of Biomedical Materials Research - Part A</i> , 2009 , 88, 704-10	5.4	28
92	Mutagenesis of cytochromes P450cam and b5. <i>Methods in Enzymology</i> , 1991 , 206, 31-49	1.7	28
91	Time-resolved fluorescence studies of genetically engineered Escherichia coli glutamine synthetase. Effects of ATP on the tryptophan-57 loop. <i>Biochemistry</i> , 1991 , 30, 3406-16	3.2	28
90	Intelligent Biohybrid Materials for Therapeutic and Imaging Agent Delivery. <i>Proceedings of the IEEE</i> , 2005 , 93, 726-736	14.3	27
89	Incorporation of fluorescent molecules and proteins into calcium oxalate monohydrate single crystals. <i>Journal of Crystal Growth</i> , 2001 , 233, 380-388	1.6	27
88	Investigation of non-covalent ligand binding to the intact streptavidin tetramer by electrospray ionization mass spectrometry. <i>Journal of Mass Spectrometry</i> , 1995 , 30, 1095-1102	2.2	27
87	Dual-affinity avidin molecules. <i>Proteins: Structure, Function and Bioinformatics</i> , 2005 , 61, 597-607	4.2	26
86	X-ray crystallographic studies of streptavidin mutants binding to biotin. <i>New Biotechnology</i> , 1999 , 16, 13-9		26
85	Surface-Linked Molecular Monolayers of an Engineered Myoglobin: Structure, Stability, and Function. <i>Langmuir</i> , 1996 , 12, 1278-1283	4	26
84	Glycan targeted polymeric antibiotic prodrugs for alveolar macrophage infections. <i>Biomaterials</i> , 2019 , 195, 38-50	15.6	26
83	Synthesis and characterization of transferrin-targeted chemotherapeutic delivery systems prepared via RAFT copolymerization of high molecular weight PEG macromonomers. <i>Polymer Chemistry</i> , 2014 , 5, 1791-1799	4.9	25

82	Multi-technique Characterization of Adsorbed Peptide and Protein Orientation: LK3 and Protein G B1. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2010 , 28, C5D1	1.3	25
81	Pretargeted radioimmunotherapy using genetically engineered antibody-streptavidin fusion proteins for treatment of non-hodgkin lymphoma. <i>Clinical Cancer Research</i> , 2011 , 17, 7373-82	12.9	24
80	Differential monocyte/macrophage interleukin-1 β production due to biomaterial topography requires the α integrin signaling pathway. <i>Journal of Biomedical Materials Research - Part A</i> , 2011 , 96, 162-9	5.4	23
79	Role of biotin-binding affinity in streptavidin-based pretargeted radioimmunotherapy of lymphoma. <i>Bioconjugate Chemistry</i> , 2005 , 16, 131-8	6.3	23
78	Early mechanistic events in biotin dissociation from streptavidin. <i>Nature Structural Biology</i> , 2002 , 9, 582-5		23
77	Streptavidin in antibody pretargeting. Comparison of a recombinant streptavidin with two streptavidin mutant proteins and two commercially available streptavidin proteins. <i>Bioconjugate Chemistry</i> , 1998 , 9, 100-7	6.3	22
76	Theoretical and experimental studies of biotin analogues that bind almost as tightly to streptavidin as biotin. <i>Journal of Organic Chemistry</i> , 2002 , 67, 1827-37	4.2	22
75	Temperature-Responsive Magnetic Nanoparticles for Enabling Affinity Separation of Extracellular Vesicles. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 33847-33856	9.5	21
74	A photoinduced nanoparticle separation in microchannels via pH-sensitive surface traps. <i>Langmuir</i> , 2013 , 29, 5388-93	4	21
73	Polymer- α -mannoside conjugates via a combination of RAFT and thiol-ene chemistry. <i>Polymer Chemistry</i> , 2013 , 4, 1153-1160	4.9	21
72	Probing orientation of immobilized humanized anti-lysozyme variable fragment by time-of-flight secondary-ion mass spectrometry. <i>Journal of Biomedical Materials Research - Part A</i> , 2011 , 97, 1-7	5.4	21
71	In situ characterization of the degradation of PLGA microspheres in hyaluronic acid hydrogels by optical coherence tomography. <i>IEEE Transactions on Medical Imaging</i> , 2009 , 28, 74-81	11.7	21
70	Monocyte activation on polyelectrolyte multilayers. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2005 , 16, 237-51	3.5	21
69	Molecular Basis for Ionic Strength Dependence and Crystal Morphology in Two-Dimensional Streptavidin Crystallization. <i>Langmuir</i> , 1998 , 14, 4683-4687	4	21
68	Nanostructured glycopolymer augmented liposomes to elucidate carbohydrate-mediated targeting. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2016 , 12, 2031-2041	6	21
67	Stimuli-responsive reagent system for enabling microfluidic immunoassays with biomarker purification and enrichment. <i>Bioconjugate Chemistry</i> , 2015 , 26, 29-38	6.3	20
66	Efficient Intracellular Delivery of a Pro-Apoptotic Peptide With A pH-Responsive Carrier. <i>Reactive and Functional Polymers</i> , 2011 , 71, 261-265	4.6	18
65	Modification of ricin A chain, by addition of endoplasmic reticulum (KDEL) or Golgi (YQRL) retention sequences, enhances its cytotoxicity and translocation. <i>Cancer Immunology, Immunotherapy</i> , 1998 , 46, 55-60	7.4	18

64	Well-defined single polymer nanoparticles for the antibody-targeted delivery of chemotherapeutic agents. <i>Polymer Chemistry</i> , 2015 , 6, 1286-1299	4.9	17
63	Chemotherapeutic copolymers prepared via the RAFT polymerization of prodrug monomers. <i>Polymer Chemistry</i> , 2016 , 7, 4494-4505	4.9	17
62	Liquid Crystallinity of a Biological Polysaccharide: The Levan/Water Phase Diagram. <i>Macromolecules</i> , 1994 , 27, 953-957	5.5	17
61	Synthetic Macromolecular Antibiotic Platform for Inhalable Therapy against Aerosolized Intracellular Alveolar Infections. <i>Molecular Pharmaceutics</i> , 2017 , 14, 1988-1997	5.6	16
60	Synthesis of zwitterionic, hydrophobic, and amphiphilic polymers via RAFT polymerization induced self-assembly (PISA) in acetic acid. <i>Polymer Chemistry</i> , 2016 , 7, 6133-6143	4.9	16
59	Three-dimensional localization of polymer nanoparticles in cells using ToF-SIMS. <i>Biointerphases</i> , 2015 , 11, 02A304	1.8	16
58	Conjugates of stimuli-responsive polymers and biomolecules: Random and site-specific conjugates of temperature-sensitive polymers and proteins. <i>Macromolecular Symposia</i> , 1997 , 118, 553-562	0.8	16
57	Design of "Smart" Nano-Scale Delivery Systems for Biomolecular Therapeutics. <i>Journal of Biomedical Nanotechnology</i> , 2007 , 3, 213-217	4	16
56	Poly(propylacrylic acid)-mediated serum stabilization of cationic lipoplexes. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2005 , 16, 163-79	3.5	16
55	Quantitative interrogation of micropatterned biomolecules by surface force microscopy. <i>Ultramicroscopy</i> , 2000 , 82, 193-202	3.1	16
54	Structural studies of hydrogen bonds in the high-affinity streptavidin-biotin complex: mutations of amino acids interacting with the ureido oxygen of biotin. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2003 , 59, 1567-73		15
53	Role of N- and C-Terminal Amino Acids in Two-Dimensional Streptavidin Crystal Formation. <i>Langmuir</i> , 2000 , 16, 5199-5204	4	15
52	Smart and biofunctional streptavidin. <i>New Biotechnology</i> , 1999 , 16, 93-9		15
51	Constrained cell recognition peptides engineered into streptavidin. <i>Biotechnology Progress</i> , 1999 , 15, 391-6	2.8	15
50	Bioinspired polymers that control intracellular drug delivery. <i>Biotechnology and Bioprocess Engineering</i> , 2001 , 6, 205-212	3.1	14
49	Structural characterization and comparison of RGD cell-adhesion recognition sites engineered into streptavidin. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2003 , 59, 828-34		13
48	Reloadable multidrug capturing delivery system for targeted ischemic disease treatment. <i>Science Translational Medicine</i> , 2016 , 8, 365ra160	17.5	11
47	Two-dimensional crystallization of streptavidin: in pursuit of the molecular origins of structure, morphology, and thermodynamics. <i>New Biotechnology</i> , 1999 , 16, 29-38		11

46	Effect of polymer surface activity on cavitation nuclei stability against dissolution. <i>Journal of the Acoustical Society of America</i> , 2004 , 116, 721-8	2.2	10
45	Smart polymer-streptavidin conjugates. <i>Methods in Molecular Biology</i> , 2004 , 283, 37-43	1.4	10
44	Semi-interpenetrating network of poly(ethylene glycol) and poly(D,L-lactide) for the controlled delivery of protein drugs. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2005 , 16, 189-201	3.5	10
43	Focused Ultrasound and Poly(2-ethylacrylic acid) Act Synergistically To Disrupt Lipid Bilayers in Vitro. <i>Macromolecules</i> , 2001 , 34, 2400-2401	5.5	10
42	A Stimuli-Responsive, Binary Reagent System for Rapid Isolation of Protein Biomarkers. <i>Analytical Chemistry</i> , 2016 , 88, 10404-10410	7.8	10
41	A distal point mutation in the streptavidin-biotin complex preserves structure but diminishes binding affinity: experimental evidence of electronic polarization effects?. <i>Biochemistry</i> , 2010 , 49, 4568-70	7.0	9
40	Radiant star nanoparticle prodrugs for the treatment of intracellular alveolar infections. <i>Polymer Chemistry</i> , 2018 , 9, 2134-2146	4.9	8
39	pH-Responsive Hyperbranched Copolymers from One-Pot RAFT Copolymerization. <i>Macromolecular Materials and Engineering</i> , 2012 , 297, 1175-1183	3.9	8
38	Fully synthetic macromolecular prodrug chemotherapeutics with EGFR targeting and controlled camptothecin release kinetics. <i>Polymer Chemistry</i> , 2018 , 9, 5224-5233	4.9	8
37	Orientation and conformation of osteocalcin adsorbed onto calcium phosphate and silica surfaces. <i>Biointerphases</i> , 2017 , 12, 02D411	1.8	7
36	Design of smart nanogels that respond to physiologically relevant pH values and temperatures. <i>Journal of Nanoscience and Nanotechnology</i> , 2014 , 14, 2557-62	1.3	7
35	Second-contact shell mutation diminishes streptavidin-biotin binding affinity through transmitted effects on equilibrium dynamics. <i>Biochemistry</i> , 2012 , 51, 597-607	3.2	7
34	Atomic resolution structure of biotin-free Tyr43Phe streptavidin: what is in the binding site?. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 1999 , 55, 1118-26		7
33	Characterization of an anti-CD44 single-chain FV antibody that stimulates natural killer cell activity and induces TNF alpha release. <i>Immunological Investigations</i> , 1995 , 24, 907-26	2.9	7
32	Mechanistic analysis of macrophage response to IRAK-1 gene knockdown by a smart polymer-antisense oligonucleotide therapeutic. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2008 , 19, 1333-46	3.5	6
31	Molecular Basis for Asymmetrical Growth in Two-Dimensional Streptavidin Crystals. <i>Langmuir</i> , 2002 , 18, 7447-7451	4	6
30	In vivo tracking of bioorthogonally labeled T-cells for predicting therapeutic efficacy of adoptive T-cell therapy. <i>Journal of Controlled Release</i> , 2021 , 329, 223-236	11.7	6
29	Fully synthetic injectable depots with high drug content and tunable pharmacokinetics for long-acting drug delivery. <i>Journal of Controlled Release</i> , 2021 , 329, 257-269	11.7	6

28	pH and Salt Effects on Surface Activity and Self-Assembly of Copolymers Containing a Weak Polybase. <i>Langmuir</i> , 2016 , 32, 9286-92	4	5
27	Structural consequences of cutting a binding loop: two circularly permuted variants of streptavidin. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2013 , 69, 968-77		5
26	Delivering the vaccination mail. <i>Trends in Biotechnology</i> , 2003 , 21, 465-7	15.1	5
25	Effects of Interfacial Binding Kinetics on Two-Dimensional Streptavidin Crystallization. <i>Langmuir</i> , 1999 , 15, 7125-7129	4	5
24	Mannose Conjugated Polymer Targeting Biofilms. <i>ACS Infectious Diseases</i> , 2020 , 6, 2866-2871	5.5	5
23	A Streptavidin Binding Site Mutation Yields an Unexpected Result: An Ionized Asp128 Residue Is Not Essential for Strong Biotin Binding. <i>Biochemistry</i> , 2016 , 55, 5201-3	3.2	5
22	Smart pH-Responsive Carriers for Intracellular Delivery of Biomolecular Drugs. <i>Fundamental Biomedical Technologies</i> , 2008 , 143-159		5
21	Engineering two-dimensional protein order at surfaces. <i>Journal of Pharmaceutical Sciences</i> , 1997 , 86, 1204-9	3.9	4
20	Erratum to Rational design of composition and activity correlations for pH-sensitive and glutathione-reactive polymer therapeutics[J. Control. Release 101 (1B) (2005) 47B8]. <i>Journal of Controlled Release</i> , 2005 , 104, 415	11.7	4
19	Expression and characterization of human salivary statherin from Escherichia coli using two different fusion constructs. <i>Protein Expression and Purification</i> , 1999 , 16, 243-50	2	4
18	Improving lateral-flow immunoassay (LFIA) diagnostics via biomarker enrichment for mHealth. <i>Methods in Molecular Biology</i> , 2015 , 1256, 71-84	1.4	4
17	Structure and Dynamics of Proteins Adsorbed to Biomaterial Interfaces 2007 ,		3
16	Well-Defined Mannosylated Polymer for Peptide Vaccine Delivery with Enhanced Antitumor Immunity. <i>Advanced Healthcare Materials</i> , 2021 , e2101651	10.1	3
15	Applications of Smart Polymers as Biomaterials 2020 , 191-203		3
14	Liver-targeted polymeric prodrugs of 8-aminoquinolines for malaria radical cure. <i>Journal of Controlled Release</i> , 2021 , 331, 213-227	11.7	3
13	A macrophage-targeted platform for extending drug dosing with polymer prodrugs for pulmonary infection prophylaxis. <i>Journal of Controlled Release</i> , 2021 , 330, 284-292	11.7	2
12	Really smart bioconjugates of smart polymers and receptor proteins 2000 , 52, 577		2
11	Targeting 2013 , 1028-1036		1

10	pH-Responsive Hyperbranched Copolymers from One-Pot RAFT Copolymerization of Propylacrylic Acid and Poly(ethylene glycol diacrylate). <i>Advances in Science and Technology</i> , 2012 , 77, 333-342	0.1	1
9	Micro and Nanoscale Smart Polymer Technologies in Biomedicine 2006 , 289-304		1
8	Lytic Polyplex Vaccines Enhance Antigen-Specific Cytotoxic T Cell Response through Induction of Local Cell Death. <i>Advanced Therapeutics</i> , 2021 , 4, 2100005	4.9	1
7	Smart Surfaces for Point-of-Care Diagnostics 2012 , 31-70		
6	Control of cavitation-induced hemolysis with a surface-active polymer. <i>Acoustics Research Letters Online: ARLO</i> , 2005 , 6, 201-206		
5	Engineering Proteins for Electrooptical Biomaterials. <i>Advances in Chemistry Series</i> , 1994 , 475-490		
4	Engineered Proteins for Biomaterials. <i>Materials Research Society Symposia Proceedings</i> , 1992 , 292, 77		
3	A nanofiber based antiviral (TAF) prodrug delivery system.. <i>Materials Science and Engineering C</i> , 2022 , 112626	8.3	
2	Think Small for Big Impact. <i>Advanced Functional Materials</i> , 2020 , 30, 1909678	15.6	
1	Arming Immune Cell Therapeutics with Polymeric Prodrugs. <i>Advanced Healthcare Materials</i> , 2021 , e2101944	16.4	