

Jayachandran N Kizhakkedathu

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#	Paper	IF	Citations
172	Antimicrobial Peptides: Diversity, Mechanism of Action and Strategies to Improve the Activity and Biocompatibility In Vivo. <i>Biomolecules</i> , 2018 , 8,	5.9	418
171	Isotopic labeling of terminal amines in complex samples identifies protein N-termini and protease cleavage products. <i>Nature Biotechnology</i> , 2010 , 28, 281-8	44.5	403
170	The biocompatibility and biofilm resistance of implant coatings based on hydrophilic polymer brushes conjugated with antimicrobial peptides. <i>Biomaterials</i> , 2011 , 32, 3899-909	15.6	308
169	Multilayered coating on titanium for controlled release of antimicrobial peptides for the prevention of implant-associated infections. <i>Biomaterials</i> , 2013 , 34, 5969-77	15.6	254
168	Blood compatibility of novel water soluble hyperbranched polyglycerol-based multivalent cationic polymers and their interaction with DNA. <i>Biomaterials</i> , 2006 , 27, 5377-90	15.6	230
167	Identifying and quantifying proteolytic events and the natural N terminome by terminal amine isotopic labeling of substrates. <i>Nature Protocols</i> , 2011 , 6, 1578-611	18.8	221
166	Synthesis of Well-Defined Environmentally Responsive Polymer Brushes by Aqueous ATRP. <i>Macromolecules</i> , 2004 , 37, 734-743	5.5	185
165	Anti-adhesive antimicrobial peptide coating prevents catheter associated infection in a mouse urinary infection model. <i>Biomaterials</i> , 2017 , 116, 69-81	15.6	145
164	Polyvalent choline phosphate as a universal biomembrane adhesive. <i>Nature Materials</i> , 2012 , 11, 468-76	27	130
163	Antibacterial surfaces based on polymer brushes: investigation on the influence of brush properties on antimicrobial peptide immobilization and antimicrobial activity. <i>Biomacromolecules</i> , 2011 , 12, 3715-27	6.9	115
162	Influence of architecture of high molecular weight linear and branched polyglycerols on their biocompatibility and biodistribution. <i>Biomaterials</i> , 2012 , 33, 9135-47	15.6	112
161	Self-assembled monothiol-terminated hyperbranched polyglycerols on a gold surface: a comparative study on the structure, morphology, and protein adsorption characteristics with linear poly(ethylene glycol)s. <i>Langmuir</i> , 2008 , 24, 4907-16	4	100
160	Polymer brush-based approaches for the development of infection-resistant surfaces. <i>Journal of Materials Chemistry B</i> , 2014 , 2, 4968-4978	7.3	99
159	Antibacterial properties of hLf1-11 peptide onto titanium surfaces: a comparison study between silanization and surface initiated polymerization. <i>Biomacromolecules</i> , 2015 , 16, 483-96	6.9	90
158	Synthesis of Poly(N,N-dimethylacrylamide) Brushes from Charged Polymeric Surfaces by Aqueous ATRP: Effect of Surface Initiator Concentration. <i>Macromolecules</i> , 2003 , 36, 591-598	5.5	90
157	Hydrophobically derivatized hyperbranched polyglycerol as a human serum albumin substitute. <i>Biomaterials</i> , 2008 , 29, 1693-704	15.6	89
156	Branched multifunctional polyether polyketals: variation of ketal group structure enables unprecedented control over polymer degradation in solution and within cells. <i>Journal of the American Chemical Society</i> , 2012 , 134, 14945-57	16.4	85

155	Reversible hemostatic properties of sulfobetaine/quaternary ammonium modified hyperbranched polyglycerol. <i>Biomaterials</i> , 2016 , 86, 42-55	15.6	80
154	Hyperbranched polyglycerols: recent advances in synthesis, biocompatibility and biomedical applications. <i>Journal of Materials Chemistry B</i> , 2017 , 5, 9249-9277	7.3	79
153	In vitro chelating, cytotoxicity, and blood compatibility of degradable poly(ethylene glycol)-based macromolecular iron chelators. <i>Biomaterials</i> , 2009 , 30, 638-48	15.6	76
152	Effect of Extreme Wettability on Platelet Adhesion on Metallic Implants: From Superhydrophilicity to Superhydrophobicity. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 17631-41	9.5	69
151	Synthesis and characterization of carboxylic acid conjugated, hydrophobically derivatized, hyperbranched polyglycerols as nanoparticulate drug carriers for cisplatin. <i>Biomacromolecules</i> , 2011 , 12, 145-55	6.9	68
150	Red blood cell membrane grafting of multi-functional hyperbranched polyglycerols. <i>Biomaterials</i> , 2010 , 31, 4167-78	15.6	67
149	Nontoxic polyphosphate inhibitors reduce thrombosis while sparing hemostasis. <i>Blood</i> , 2014 , 124, 3183-90		66
148	Complexes of poly(ethylene glycol)-based cationic random copolymer and calf thymus DNA: a complete biophysical characterization. <i>Langmuir</i> , 2004 , 20, 2386-96	4	66
147	A Novel Functional Polymer with Tunable LCST. <i>Macromolecules</i> , 2008 , 41, 5393-5405	5.5	65
146	Hyperbranched glycopolymers for blood biocompatibility. <i>Bioconjugate Chemistry</i> , 2012 , 23, 1050-8	6.3	64
145	Poly(oligo(ethylene glycol)acrylamide) brushes by surface initiated polymerization: effect of macromonomer chain length on brush growth and protein adsorption from blood plasma. <i>Langmuir</i> , 2009 , 25, 3794-801	4	64
144	Modulation of complement activation and amplification on nanoparticle surfaces by glycopolymer conformation and chemistry. <i>ACS Nano</i> , 2014 , 8, 7687-703	16.7	60
143	Design of long circulating nontoxic dendritic polymers for the removal of iron in vivo. <i>ACS Nano</i> , 2013 , 7, 10704-16	16.7	59
142	Toward Infection-Resistant Surfaces: Achieving High Antimicrobial Peptide Potency by Modulating the Functionality of Polymer Brush and Peptide. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 28591-605	16.5	57
141	Surface Modification of Polyvinyl Chloride Sheets via Growth of Hydrophilic Polymer Brushes. <i>Macromolecules</i> , 2009 , 42, 3258-3268	5.5	56
140	Enhanced cell surface polymer grafting in concentrated and nonreactive aqueous polymer solutions. <i>Journal of the American Chemical Society</i> , 2010 , 132, 3423-30	16.4	54
139	The induction of thrombus generation on nanostructured neutral polymer brush surfaces. <i>Biomaterials</i> , 2010 , 31, 6710-6718	15.6	53
138	Affinity-based design of a synthetic universal reversal agent for heparin anticoagulants. <i>Science Translational Medicine</i> , 2014 , 6, 260ra150	17.5	52

137	Intravenously injected human apolipoprotein A-I rapidly enters the central nervous system via the choroid plexus. <i>Journal of the American Heart Association</i> , 2014 , 3, e001156	6	52
136	Synthesis of functional polymer brushes containing carbohydrate residues in the pyranose form and their specific and nonspecific interactions with proteins. <i>Biomacromolecules</i> , 2010 , 11, 3073-85	6.9	51
135	Biodegradable polyglycerols with randomly distributed ketal groups as multi-functional drug delivery systems. <i>Biomaterials</i> , 2013 , 34, 6068-81	15.6	49
134	Barrier Capacity of Hydrophilic Polymer Brushes To Prevent Hydrophobic Interactions: Effect of Graft Density and Hydrophilicity. <i>Macromolecules</i> , 2009 , 42, 4817-4828	5.5	48
133	Toward Efficient Enzymes for the Generation of Universal Blood through Structure-Guided Directed Evolution. <i>Journal of the American Chemical Society</i> , 2015 , 137, 5695-705	16.4	47
132	Antimicrobial Peptide-Polymer Conjugates with High Activity: Influence of Polymer Molecular Weight and Peptide Sequence on Antimicrobial Activity, Proteolysis, and Biocompatibility. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 37575-37586	9.5	46
131	Secretome and degradome profiling shows that Kallikrein-related peptidases 4, 5, 6, and 7 induce TGF β 1 signaling in ovarian cancer cells. <i>Molecular Oncology</i> , 2014 , 8, 68-82	7.9	46
130	Synthesis and characterization of well-defined hydrophilic block copolymer brushes by aqueous ATRP. <i>Polymer</i> , 2004 , 45, 7471-7489	3.9	46
129	RAFT Synthesis of Acrylic Copolymers Containing Poly(ethylene glycol) and Dioxolane Functional Groups: Toward Well-Defined Aldehyde Containing Copolymers for Bioconjugation. <i>Macromolecules</i> , 2008 , 41, 5272-5282	5.5	45
128	Evaluation of an atomic force microscopy pull-off method for measuring molecular weight and polydispersity of polymer brushes: effect of grafting density. <i>Langmuir</i> , 2004 , 20, 6238-45	4	43
127	Engineering biomaterials surfaces to modulate the host response. <i>Colloids and Surfaces B: Biointerfaces</i> , 2014 , 124, 69-79	6	42
126	In vivo circulation, clearance, and biodistribution of polyglycerol grafted functional red blood cells. <i>Biomaterials</i> , 2012 , 33, 3047-57	15.6	41
125	N-Terminomics TAILS Identifies Host Cell Substrates of Poliovirus and Coxsackievirus B3 3C Proteinases That Modulate Virus Infection. <i>Journal of Virology</i> , 2018 , 92,	6.6	39
124	Enhancement of biological reactions on cell surfaces via macromolecular crowding. <i>Nature Communications</i> , 2014 , 5, 4683	17.4	39
123	Surface Engineering for Cell-Based Therapies: Techniques for Manipulating Mammalian Cell Surfaces. <i>ACS Biomaterials Science and Engineering</i> , 2018 , 4, 3658-3677	5.5	38
122	In vivo assessment of protease dynamics in cutaneous wound healing by degradomics analysis of porcine wound exudates. <i>Molecular and Cellular Proteomics</i> , 2015 , 14, 354-70	7.6	37
121	N-Degradomic Analysis Reveals a Proteolytic Network Processing the Podocyte Cytoskeleton. <i>Journal of the American Society of Nephrology: JASN</i> , 2017 , 28, 2867-2878	12.7	37
120	Synthesis, characterization, and biocompatibility of biodegradable hyperbranched polyglycerols from acid-cleavable ketal group functionalized initiators. <i>Biomacromolecules</i> , 2012 , 13, 3018-30	6.9	37

119	In vivo efficacy, toxicity and biodistribution of ultra-long circulating desferrioxamine based polymeric iron chelator. <i>Biomaterials</i> , 2016 , 102, 58-71	15.6	36
118	The size-dependent efficacy and biocompatibility of hyperbranched polyglycerol in peritoneal dialysis. <i>Biomaterials</i> , 2014 , 35, 1378-89	15.6	35
117	Carbohydrate structure dependent hemocompatibility of biomimetic functional polymer brushes on surfaces. <i>Advanced Healthcare Materials</i> , 2012 , 1, 199-213	10.1	34
116	Solvent-assisted anionic ring opening polymerization of glycidol: Toward medium and high molecular weight hyperbranched polyglycerols. <i>Journal of Polymer Science Part A</i> , 2013 , 51, 2614-2621	2.5	34
115	Biomembrane interactions reveal the mechanism of action of surface-immobilized host defense IDR-1010 peptide. <i>Chemistry and Biology</i> , 2012 , 19, 199-209		33
114	Aurein-Derived Antimicrobial Peptides Formulated with Pegylated Phospholipid Micelles to Target Methicillin-Resistant Staphylococcus aureus Skin Infections. <i>ACS Infectious Diseases</i> , 2019 , 5, 443-453	5.5	33
113	Conjugation of aurein 2.2 to HPG yields an antimicrobial with better properties. <i>Biomacromolecules</i> , 2015 , 16, 913-23	6.9	32
112	Hyperbranched polyglycerol is an efficacious and biocompatible novel osmotic agent in a rodent model of peritoneal dialysis. <i>Peritoneal Dialysis International</i> , 2013 , 33, 15-27	2.8	32
111	Molecular weight and polydispersity estimation of adsorbing polymer brushes by atomic force microscopy. <i>Langmuir</i> , 2004 , 20, 3297-303	4	32
110	Lectin interactions on surface-grafted glycostructures: influence of the spatial distribution of carbohydrates on the binding kinetics and rupture forces. <i>Analytical Chemistry</i> , 2013 , 85, 7786-93	7.8	31
109	Polymer-Nanoparticle Interaction as a Design Principle in the Development of a Durable Ultrathin Universal Binary Antibiofilm Coating with Long-Term Activity. <i>ACS Nano</i> , 2018 , 12, 11881-11891	16.7	31
108	An allosteric MALT1 inhibitor is a molecular corrector rescuing function in an immunodeficient patient. <i>Nature Chemical Biology</i> , 2019 , 15, 304-313	11.7	30
107	Electric field and vibration-assisted nanomolecule desorption and anti-biofouling for biosensor applications. <i>Colloids and Surfaces B: Biointerfaces</i> , 2007 , 59, 67-73	6	30
106	Comparison of reversal activity and mechanism of action of UHRA, andexanet, and PER977 on heparin and oral FXa inhibitors. <i>Blood Advances</i> , 2018 , 2, 2104-2114	7.8	30
105	An enzymatic pathway in the human gut microbiome that converts A to universal O type blood. <i>Nature Microbiology</i> , 2019 , 4, 1475-1485	26.6	28
104	The proteome microenvironment determines the protective effect of preconditioning in cisplatin-induced acute kidney injury. <i>Kidney International</i> , 2019 , 95, 333-349	9.9	28
103	Alteration of blood clotting and lung damage by protamine are avoided using the heparin and polyphosphate inhibitor UHRA. <i>Blood</i> , 2017 , 129, 1368-1379	2.2	26
102	Matrix Metalloproteinase 10 Degradomics in Keratinocytes and Epidermal Tissue Identifies Bioactive Substrates With Pleiotropic Functions. <i>Molecular and Cellular Proteomics</i> , 2015 , 14, 3234-46	7.6	26

101	Chain Length and Grafting Density Dependent Enhancement in the Hydrolysis of Ester-Linked Polymer Brushes. <i>Langmuir</i> , 2015 , 31, 6463-70	4	24
100	Polymeric nanocarriers for the treatment of systemic iron overload. <i>Molecular and Cellular Therapies</i> , 2015 , 3, 3		24
99	Surface modification approaches for prevention of implant associated infections. <i>Colloids and Surfaces B: Biointerfaces</i> , 2020 , 193, 111116	6	24
98	Influence of dynamic flow conditions on adsorbed plasma protein corona and surface-induced thrombus generation on antifouling brushes. <i>Biomaterials</i> , 2018 , 166, 79-95	15.6	24
97	Influence of polymer architecture on antigens camouflage, CD47 protection and complement mediated lysis of surface grafted red blood cells. <i>Biomaterials</i> , 2012 , 33, 7871-83	15.6	24
96	Bending and stretching actuation of soft materials through surface-initiated polymerization. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 5116-9	16.4	24
95	Nonbiofouling polymer brush with latent aldehyde functionality as a template for protein micropatterning. <i>Biomacromolecules</i> , 2010 , 11, 284-93	6.9	24
94	Hemocompatibility studies on a degradable polar hydrophobic ionic polyurethane (D-PHI). <i>Acta Biomaterialia</i> , 2017 , 48, 368-377	10.8	23
93	Inhibitory effect of hydrophilic polymer brushes on surface-induced platelet activation and adhesion. <i>Macromolecular Bioscience</i> , 2010 , 10, 1432-43	5.5	23
92	Water-soluble complexes from random copolymer and oppositely charged surfactant. 2. Complexes of poly(ethylene glycol)-based cationic random copolymer and bile salts. <i>Langmuir</i> , 2004 , 20, 8468-75	4	23
91	Laser-Light-Scattering Study of Internal Motions of Polymer Chains Grafted on Spherical Latex Particles. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 18479-18484	3.4	22
90	Plasma protein adsorption to surfaces grafted with dense homopolymer and copolymer brushes containing poly(N-isopropylacrylamide). <i>Journal of Biomaterials Science, Polymer Edition</i> , 2004 , 15, 1121-35	3.5	22
89	Towards Robust Delivery of Antimicrobial Peptides to Combat Bacterial Resistance. <i>Molecules</i> , 2020 , 25,	4.8	21
88	Choline phosphate functionalized cellulose membrane: A potential hemostatic dressing based on a unique bioadhesion mechanism. <i>Acta Biomaterialia</i> , 2016 , 40, 212-225	10.8	21
87	Understanding the Interaction of Polyelectrolyte Architectures with Proteins and Biosystems. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 3882-3904	16.4	21
86	Abnormal blood clot formation induced by temperature responsive polymers by altered fibrin polymerization and platelet binding. <i>Biomaterials</i> , 2014 , 35, 2518-28	15.6	20
85	Linear and hyperbranched phosphorylcholine based homopolymers for blood biocompatibility. <i>Polymer Chemistry</i> , 2013 , 4, 3140	4.9	20
84	High molecular weight polyglycerol-based multivalent mannose conjugates. <i>Biomacromolecules</i> , 2010 , 11, 2567-75	6.9	20

83	Blood circulation of soft nanomaterials is governed by dynamic remodeling of protein opsonins at nano-biointerface. <i>Nature Communications</i> , 2020 , 11, 3048	17.4	18
82	Profiling of Protein N-Termini and Their Modifications in Complex Samples. <i>Methods in Molecular Biology</i> , 2017 , 1574, 35-50	1.4	17
81	Interaction of blood components with cathelicidins and their modified versions. <i>Biomaterials</i> , 2015 , 69, 201-11	15.6	17
80	Blood Components Interactions to Ionic and Nonionic Glyconanogels. <i>Biomacromolecules</i> , 2015 , 16, 2990-7	6.7	17
79	A Polymer Therapeutic Having Universal Heparin Reversal Activity: Molecular Design and Functional Mechanism. <i>Biomacromolecules</i> , 2017 , 18, 3343-3358	6.9	17
78	Monitoring matrix metalloproteinase activity at the epidermal-dermal interface by SILAC-iTRAQ-TAILS. <i>Proteomics</i> , 2015 , 15, 2491-502	4.8	17
77	Therapeutic cells via functional modification: influence of molecular properties of polymer grafts on in vivo circulation, clearance, immunogenicity, and antigen protection. <i>Biomacromolecules</i> , 2013 , 14, 2052-62	6.9	17
76	A silicone-based microfluidic chip grafted with carboxyl functionalized hyperbranched polyglycerols for selective protein capture. <i>Microfluidics and Nanofluidics</i> , 2010 , 9, 199-209	2.8	17
75	Clinically approved iron chelators influence zebrafish mortality, hatching morphology and cardiac function. <i>PLoS ONE</i> , 2014 , 9, e109880	3.7	17
74	Thiol-Reactive Polymers for Titanium Interfaces: Fabrication of Antimicrobial Coatings. <i>ACS Applied Polymer Materials</i> , 2019 , 1, 1308-1316	4.3	16
73	Comparative Degradomics of Porcine and Human Wound Exudates Unravels Biomarker Candidates for Assessment of Wound Healing Progression in Trauma Patients. <i>Journal of Investigative Dermatology</i> , 2018 , 138, 413-422	4.3	16
72	Hyperbranched polyglycerol is superior to glucose for long-term preservation of peritoneal membrane in a rat model of chronic peritoneal dialysis. <i>Journal of Translational Medicine</i> , 2016 , 14, 338	8.5	16
71	Nontransformed and Cancer Cells Can Utilize Different Endocytic Pathways To Internalize Dendritic Nanoparticle Variants: Implications on Nanocarrier Design. <i>Biomacromolecules</i> , 2017 , 18, 2427-2438	6.9	16
70	Atom Transfer Radical Polymerization Using Multidentate Amine Ligands Supported on Soluble Hyperbranched Polyglycidol. <i>Macromolecular Chemistry and Physics</i> , 2004 , 205, 567-573	2.6	16
69	Design of Safe Nanotherapeutics for the Excretion of Excess Systemic Toxic Iron. <i>ACS Central Science</i> , 2019 , 5, 917-926	16.8	15
68	In Vivo Biological Evaluation of High Molecular Weight Multifunctional Acid-Degradable Polymeric Drug Carriers with Structurally Different Ketals. <i>Biomacromolecules</i> , 2016 , 17, 3683-3693	6.9	15
67	The influence of poly-N-[(2,2-dimethyl-1,3-dioxolane)methyl]acrylamide on fibrin polymerization, cross-linking and clot structure. <i>Biomaterials</i> , 2010 , 31, 5749-58	15.6	15
66	Water-soluble nanoparticles from random copolymer and oppositely charged surfactant, 3a. Nanoparticles of poly(ethylene glycol)-based cationic random copolymer and fatty acid salts. <i>Macromolecular Bioscience</i> , 2005 , 5, 549-58	5.5	15

65	Hyperbranched polyglycerol as a colloid in cold organ preservation solutions. <i>PLoS ONE</i> , 2015 , 10, e0116595	5.9	15
64	Hemocompatibility of Degrading Polymeric Biomaterials: Degradable Polar Hydrophobic Ionic Polyurethane versus Poly(lactic-co-glycolic) Acid. <i>Biomacromolecules</i> , 2017 , 18, 2296-2305	6.9	14
63	A planar model of the vessel wall from cellularized-collagen scaffolds: focus on cell-matrix interactions in mono-, bi- and tri-culture models. <i>Biomaterials Science</i> , 2016 , 5, 153-162	7.4	14
62	Development of Antifouling and Bactericidal Coatings for Platelet Storage Bags Using Dopamine Chemistry. <i>Advanced Healthcare Materials</i> , 2018 , 7, 1700839	10.1	14
61	Global Profiling of Proteolysis from the Mitochondrial Amino Terminome during Early Intrinsic Apoptosis Prior to Caspase-3 Activation. <i>Journal of Proteome Research</i> , 2018 , 17, 4279-4296	5.6	14
60	Proteomic and N-Terminomic TAILS Analyses of Human Alveolar Bone Proteins: Improved Protein Extraction Methodology and LysargiNase Digestion Strategies Increase Proteome Coverage and Missing Protein Identification. <i>Journal of Proteome Research</i> , 2019 , 18, 4167-4179	5.6	13
59	Approaches to prevent bleeding associated with anticoagulants: current status and recent developments. <i>Drug Delivery and Translational Research</i> , 2018 , 8, 928-944	6.2	13
58	Iron Binding and Iron Removal Efficiency of Desferrioxamine Based Polymeric Iron Chelators: Influence of Molecular Size and Chelator Density. <i>Macromolecular Bioscience</i> , 2017 , 17, 1600244	5.5	12
57	Mega macromolecules as single molecule lubricants for hard and soft surfaces. <i>Nature Communications</i> , 2020 , 11, 2139	17.4	11
56	N-Terminomics/TAILS Profiling of Proteases and Their Substrates in Ulcerative Colitis. <i>ACS Chemical Biology</i> , 2019 , 14, 2471-2483	4.9	11
55	Hybrid polyglycerols with long blood circulation: synthesis, biocompatibility, and biodistribution. <i>Macromolecular Bioscience</i> , 2014 , 14, 1469-82	5.5	11
54	Bioreducible hyperbranched polyglycerols with disulfide linkages: Synthesis and biocompatibility evaluation. <i>Journal of Polymer Science Part A</i> , 2015 , 53, 2104-2115	2.5	11
53	Mechanistic insights into COVID-19 by global analysis of the SARS-CoV-2 3CL substrate degradome. <i>Cell Reports</i> , 2021 , 37, 109892	10.6	11
52	Skin Barrier Defects Caused by Keratinocyte-Specific Deletion of ADAM17 or EGFR Are Based on Highly Similar Proteome and Degradome Alterations. <i>Journal of Proteome Research</i> , 2016 , 15, 1402-17	5.6	11
51	Macroscopic Evidence of the Liquidlike Nature of Nanoscale Polydimethylsiloxane Brushes. <i>ACS Nano</i> , 2021 ,	16.7	11
50	Formalin-Fixed, Paraffin-Embedded Tissues (FFPE) as a Robust Source for the Profiling of Native and Protease-Generated Protein Amino Termini. <i>Molecular and Cellular Proteomics</i> , 2016 , 15, 2203-13	7.6	10
49	Investigation of hydrophobically derivatized hyperbranched polyglycerol with PEGylated shell as a nanocarrier for systemic delivery of chemotherapeutics. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2015 , 11, 1785-95	6	10
48	Transient blood thinning during extracorporeal blood purification via the inactivation of coagulation factors by hydrogel microspheres. <i>Nature Biomedical Engineering</i> , 2021 , 5, 1143-1156	19	10

47	Design Considerations for Developing Hyperbranched Polyglycerol Nanoparticles as Systemic Drug Carriers. <i>Journal of Biomedical Nanotechnology</i> , 2016 , 12, 1089-100	4	9
46	Development of soluble ester-linked aldehyde polymers for proteomics. <i>Analytical Chemistry</i> , 2011 , 83, 6500-10	7.8	9
45	Mucin-Inspired, High Molecular Weight Virus Binding Inhibitors Show Biphasic Binding Behavior to Influenza A Viruses. <i>Small</i> , 2020 , 16, e2004635	11	9
44	Rapid Assembly of Infection-Resistant Coatings: Screening and Identification of Antimicrobial Peptides Works in Cooperation with an Antifouling Background. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 36784-36799	9.5	9
43	The Mouse Heart Mitochondria N Terminome Provides Insights into ClpXP-Mediated Proteolysis. <i>Molecular and Cellular Proteomics</i> , 2020 , 19, 1330-1345	7.6	8
42	Deep Profiling of the Cleavage Specificity and Human Substrates of Snake Venom Metalloprotease HF3 by Proteomic Identification of Cleavage Site Specificity (PICS) Using Proteome Derived Peptide Libraries and Terminal Amine Isotopic Labeling of Substrates (TAILS) N-Terminomics. <i>Journal of Proteome Research</i> , 2019 , 18, 2118-2126	5.6	8
41	An investigation of vibration-induced protein desorption mechanism using a micromachined membrane and PZT plate. <i>Biomedical Microdevices</i> , 2008 , 10, 701-8	3.7	8
40	Design of Polyphosphate Inhibitors: A Molecular Dynamics Investigation on Polyethylene Glycol-Linked Cationic Binding Groups. <i>Biomacromolecules</i> , 2018 , 19, 1358-1367	6.9	7
39	The mechanism and modulation of complement activation on polymer grafted cells. <i>Acta Biomaterialia</i> , 2016 , 31, 252-263	10.8	7
38	Peritoneal and Systemic Responses of Obese Type II Diabetic Rats to Chronic Exposure to a Hyperbranched Polyglycerol-Based Dialysis Solution. <i>Basic and Clinical Pharmacology and Toxicology</i> , 2018 , 123, 494-503	3.1	6
37	Molecular Dynamics Simulations on Nucleic Acid Binding Polymers Designed To Arrest Thrombosis. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 28399-28411	9.5	6
36	Stimuli-responsive cationic terpolymers by RAFT polymerization: Synthesis, characterization, and protein interaction studies. <i>Journal of Polymer Science Part A</i> , 2008 , 46, 4021-4029	2.5	6
35	A facile colorimetric method for the quantification of labile iron pool and total iron in cells and tissue specimens. <i>Scientific Reports</i> , 2021 , 11, 6008	4.9	6
34	Oncotically Driven Control over Glycocalyx Dimension for Cell Surface Engineering and Protein Binding in the Longitudinal Direction. <i>Scientific Reports</i> , 2018 , 8, 7581	4.9	6
33	Advantages of replacing hydroxyethyl starch in University of Wisconsin solution with hyperbranched polyglycerol for cold kidney perfusion. <i>Journal of Surgical Research</i> , 2016 , 205, 59-69	2.5	5
32	Synthesis of Poly(N,N-Dimethylacrylamide) Brushes from Functionalized Latex Surfaces by Aqueous Atom Transfer Radical Polymerization. <i>ACS Symposium Series</i> , 2003 , 316-330	0.4	5
31	Self-Limiting Mussel Inspired Thin Antifouling Coating with Broad-Spectrum Resistance to Biofilm Formation to Prevent Catheter-Associated Infection in Mouse and Porcine Models. <i>Advanced Healthcare Materials</i> , 2021 , 10, e2001573	10.1	5
30	Polyglycerol-Based Macromolecular Iron Chelator Adjuvants for Antibiotics To Treat Drug-Resistant Bacteria. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 37834-37844	9.5	4

29	Simplified high yield TAILS terminomics using a new HPG-ALD 800K-2000 polymer with precipitation. <i>Methods in Enzymology</i> , 2019 , 626, 429-446	1.7	4
28	Antigens protected functional red blood cells by the membrane grafting of compact hyperbranched polyglycerols. <i>Journal of Visualized Experiments</i> , 2013 ,	1.6	4
27	Cold preservation with hyperbranched polyglycerol-based solution improves kidney functional recovery with less injury at reperfusion in rats. <i>American Journal of Translational Research (discontinued)</i> , 2017 , 9, 429-441	3	4
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25	Master Sculptor at Work: Enteropathogenic Escherichia coli Infection Uniquely Modifies Mitochondrial Proteolysis during Its Control of Human Cell Death. <i>MSystems</i> , 2020 , 5,	7.6	3
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