Jayachandran N Kizhakkedathu

List of Publications by Year
in descending order

173 papers	8,725 citations	41344 49 h-index	53230 85 g-index
177 all docs	177 docs citations	177 times ranked	10995 citing authors

#	Article	IF	Citations
1	Antimicrobial Peptides: Diversity, Mechanism of Action and Strategies to Improve the Activity and Biocompatibility In Vivo. Biomolecules, 2018, 8, 4.	4.0	735
2	Isotopic labeling of terminal amines in complex samples identifies protein N-termini and protease cleavage products. Nature Biotechnology, 2010, 28, 281-288.	17.5	510
3	The biocompatibility and biofilm resistance of implant coatings based on hydrophilic polymer brushes conjugated with antimicrobial peptides. Biomaterials, 2011, 32, 3899-3909.	11.4	351
4	Multilayered coating on titanium for controlled release of antimicrobial peptides for the prevention of implant-associated infections. Biomaterials, 2013, 34, 5969-5977.	11.4	296
5	Identifying and quantifying proteolytic events and the natural N terminome by terminal amine isotopic labeling of substrates. Nature Protocols, 2011, 6, 1578-1611.	12.0	291
6	Blood compatibility of novel water soluble hyperbranched polyglycerol-based multivalent cationic polymers and their interaction with DNA. Biomaterials, 2006, 27, 5377-5390.	11.4	237
7	Anti-adhesive antimicrobial peptide coating prevents catheter associated infection in a mouse urinary infection model. Biomaterials, 2017, 116, 69-81.	11.4	203
8	Synthesis of Well-Defined Environmentally Responsive Polymer Brushes by Aqueous ATRP. Macromolecules, 2004, 37, 734-743.	4.8	196
9	Polyvalent choline phosphate as a universal biomembrane adhesive. Nature Materials, 2012, 11, 468-476.	27.5	154
10	Antibacterial Surfaces Based on Polymer Brushes: Investigation on the Influence of Brush Properties on Antimicrobial Peptide Immobilization and Antimicrobial Activity. Biomacromolecules, 2011, 12, 3715-3727.	5.4	132
11	Influence of architecture of high molecular weight linear and branched polyglycerols on their biocompatibility and biodistribution. Biomaterials, 2012, 33, 9135-9147.	11.4	132
12	Reversible hemostatic properties of sulfabetaine/quaternary ammonium modified hyperbranched polyglycerol. Biomaterials, 2016, 86, 42-55.	11.4	120
13	Polymer brush-based approaches for the development of infection-resistant surfaces. Journal of Materials Chemistry B, 2014, 2, 4968.	5.8	118
14	Hyperbranched polyglycerols: recent advances in synthesis, biocompatibility and biomedical applications. Journal of Materials Chemistry B, 2017, 5, 9249-9277.	5.8	113
15	Self-Assembled Monothiol-Terminated Hyperbranched Polyglycerols on a Gold Surface:â€‰ A Comparative Study on the Structure, Morphology, and Protein Adsorption Characteristics with Linear Poly(ethylene glycol)s. Langmuir, 2008, 24, 4907-4916.	3.5	112
16	Antibacterial Properties of hLf1â€“11 Peptide onto Titanium Surfaces: A Comparison Study Between Silanization and Surface Initiated Polymerization. Biomacromolecules, 2015, 16, 483-496.	5.4	110
17	Branched Multifunctional Polyether Polyketals: Variation of Ketal Group Structure Enables Unprecedented Control over Polymer Degradation in Solution and within Cells. Journal of the American Chemical Society, 2012, 134, 14945-14957.	13.7	97
18	Synthesis of Poly(N,N-dimethylacrylamide) Brushes from Charged Polymeric Surfaces by Aqueous ATRP:Â Effect of Surface Initiator Concentration. Macromolecules, 2003, 36, 591-598.	4.8	96

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19	Hydrophobically derivatized hyperbranched polyglycerol as a human serum albumin substitute. Biomaterials, 2008, 29, 1693-1704.	11.4	93
20	Effect of Extreme Wettability on Platelet Adhesion on Metallic Implants: From Superhydrophilicity to Superhydrophobicity. ACS Applied Materials & Interfaces, 2016, 8, 17631-17641.	8.0	91
21	In vitro chelating, cytotoxicity, and blood compatibility of degradable poly(ethylene glycol)-based macromolecular iron chelators. Biomaterials, 2009, 30, 638-648.	11.4	83
22	Red blood cell membrane grafting of multi-functional hyperbranched polyglycerols. Biomaterials, 2010, 31, 4167-4178.	11.4	79
23	Nontoxic polyphosphate inhibitors reduce thrombosis while sparing hemostasis. Blood, 2014, 124, 3183-3190.	1.4	77
24	Intravenously Injected Human Apolipoprotein Aâ€‰Rapidly Enters the Central Nervous System via the Choroid Plexus. Journal of the American Heart Association, 2014, 3, e001156.	3.7	75
25	Toward Infection-Resistant Surfaces: Achieving High Antimicrobial Peptide Potency by Modulating the Functionality of Polymer Brush and Peptide. ACS Applied Materials & Interfaces, 2015, 7, 28591-28605.	8.0	73
26	Poly(oligo(ethylene glycol)acrylamide) Brushes by Surface Initiated Polymerization: Effect of Macromonomer Chain Length on Brush Growth and Protein Adsorption from Blood Plasma. Langmuir, 2009, 25, 3794-3801.	3.5	72
27	Synthesis and Characterization of Carboxylic Acid Conjugated, Hydrophobically Derivatized, Hyperbranched Polyglycerols as Nanoparticulate Drug Carriers for Cisplatin. Biomacromolecules, 2011, 12, 145-155.	5.4	72
28	A Novel Functional Polymer with Tunable LCST. Macromolecules, 2008, 41, 5393-5405.	4.8	70
29	Design of Long Circulating Nontoxic Dendritic Polymers for the Removal of Iron in Vivo. ACS Nano, 2013, 7, 10704-10716.	14.6	70
30	Complexes of Poly(ethylene glycol)-Based Cationic Random Copolymer and Calf Thymus DNA:Â A Complete Biophysical Characterization. Langmuir, 2004, 20, 2386-2396.	3.5	69
31	Affinity-based design of a synthetic universal reversal agent for heparin anticoagulants. Science Translational Medicine, 2014, 6, 260ra150.	12.4	69
32	Modulation of Complement Activation and Amplification on Nanoparticle Surfaces by Glycopolymer Conformation and Chemistry. ACS Nano, 2014, 8, 7687-7703.	14.6	69
33	Hyperbranched Glycopolymers for Blood Biocompatibility. Bioconjugate Chemistry, 2012, 23, 1050-1058.	3.6	67
34	Surface Engineering for Cell-Based Therapies: Techniques for Manipulating Mammalian Cell Surfaces. ACS Biomaterials Science and Engineering, 2018, 4, 3658-3677.	5.2	67
35	Understanding the Interaction of Polyelectrolyte Architectures with Proteins and Biosystems. Angewandte Chemie - International Edition, 2021, 60, 3882-3904.	13.8	65
36	Surface modification approaches for prevention of implant associated infections. Colloids and Surfaces B: Biointerfaces, 2020, 193, 111116.	5.0	62

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37	N-Terminomics TAILS Identifies Host Cell Substrates of Poliovirus and Coxsackievirus B3 3C Proteinases That Modulate Virus Infection. Journal of Virology, 2018, 92, .	3.4	61
38	Enhanced Cell Surface Polymer Grafting in Concentrated and Nonreactive Aqueous Polymer Solutions. Journal of the American Chemical Society, 2010, 132, 3423-3430.	13.7	60
39	Mechanistic insights into COVID-19 by global analysis of the SARS-CoV-2 3CLpro substrate degradome. Cell Reports, 2021, 37, 109892.	6.4	60
40	Antimicrobial Peptideâ€“Polymer Conjugates with High Activity: Influence of Polymer Molecular Weight and Peptide Sequence on Antimicrobial Activity, Proteolysis, and Biocompatibility. ACS Applied Materials & Interfaces, 2017, 9, 37575-37586.	8.0	59
41	Blood circulation of soft nanomaterials is governed by dynamic remodeling of protein opsonins at nano-biointerface. Nature Communications, 2020, 11, 3048.	12.8	59
42	Surface Modification of Polyvinyl Chloride Sheets via Growth of Hydrophilic Polymer Brushes. Macromolecules, 2009, 42, 3258-3268.	4.8	58
43	The induction of thrombus generation on nanostructured neutral polymer brush surfaces. Biomaterials, 2010, 31, 6710-6718.	11.4	56
44	An enzymatic pathway in the human gut microbiome that converts A to universal O type blood. Nature Microbiology, 2019, 4, 1475-1485.	13.3	56
45	The proteome microenvironment determines the protective effect of preconditioning in cisplatin-induced acute kidney injury. Kidney International, 2019, 95, 333-349.	5.2	55
46	Synthesis and characterization of well-defined hydrophilic block copolymer brushes by aqueous ATRP. Polymer, 2004, 45, 7471-7489.	3.8	54
47	Synthesis of Functional Polymer Brushes Containing Carbohydrate Residues in the Pyranose Form and Their Specific and Nonspecific Interactions with Proteins. Biomacromolecules, 2010, 11, 3073-3085.	5.4	54
48	Transient blood thinning during extracorporeal blood purification via the inactivation of coagulation factors by hydrogel microspheres. Nature Biomedical Engineering, 2021, 5, 1143-1156.	22.5	54
49	Toward Efficient Enzymes for the Generation of Universal Blood through Structure-Guided Directed Evolution. Journal of the American Chemical Society, 2015, 137, 5695-5705.	13.7	53
50	Towards Robust Delivery of Antimicrobial Peptides to Combat Bacterial Resistance. Molecules, 2020, 25, 3048.	3.8	53
51	Barrier Capacity of Hydrophilic Polymer Brushes To Prevent Hydrophobic Interactions: Effect of Graft Density and Hydrophilicity. Macromolecules, 2009, 42, 4817-4828.	4.8	51
52	Secretome and degradome profiling shows that Kallikreinâ€related peptidases 4, 5, 6, and 7 induce TGFÎ²â€1 signaling in ovarian cancer cells. Molecular Oncology, 2014, 8, 68-82.	4.6	51
53	Enhancement of biological reactions on cell surfaces via macromolecular crowding. Nature Communications, 2014, 5, 4683.	12.8	51
54	Polymerâ€“Nanoparticle Interaction as a Design Principle in the Development of a Durable Ultrathin Universal Binary Antibiofilm Coating with Long-Term Activity. ACS Nano, 2018, 12, 11881-11891.	14.6	51

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55	Evaluation of an Atomic Force Microscopy Pull-Off Method for Measuring Molecular Weight and Polydispersity of Polymer Brushes:Â Effect of Grafting Density. Langmuir, 2004, 20, 6238-6245.	3.5	50
56	An allosteric MALT1 inhibitor is a molecular corrector rescuing function in an immunodeficient patient. Nature Chemical Biology, 2019, 15, 304-313.	8.0	50
57	RAFT Synthesis of Acrylic Copolymers Containing Poly(ethylene glycol) and Dioxolane Functional Groups: Toward Well-Defined Aldehyde Containing Copolymers for Bioconjugation. Macromolecules, 2008, 41, 5272-5282.	4.8	49
58	Biodegradable polyglycerols with randomly distributed ketal groups as multi-functional drug delivery systems. Biomaterials, 2013, 34, 6068-6081.	11.4	49
59	Engineering biomaterials surfaces to modulate the host response. Colloids and Surfaces B: Biointerfaces, 2014, 124, 69-79.	5.0	49
60	In Vivo Assessment of Protease Dynamics in Cutaneous Wound Healing by Degradomics Analysis of Porcine Wound Exudates. Molecular and Cellular Proteomics, 2015, 14, 354-370.	3.8	48
61	Aurein-Derived Antimicrobial Peptides Formulated with Pegylated Phospholipid Micelles to Target Methicillin-Resistant Staphylococcus aureus Skin Infections. ACS Infectious Diseases, 2019, 5, 443-453.	3.8	48
62	InÂvivo circulation, clearance, and biodistribution of polyglycerol grafted functional red blood cells. Biomaterials, 2012, 33, 3047-3057.	11.4	46
63	Macroscopic Evidence of the Liquidlike Nature of Nanoscale Polydimethylsiloxane Brushes. ACS Nano, 2021, 15, 13559-13567.	14.6	45
64	Comparison of reversal activity and mechanism of action of UHRA, andexanet, and PER977 on heparin and oral FXa inhibitors. Blood Advances, 2018, 2, 2104-2114.	5.2	43
65	InÂvivo efficacy, toxicity and biodistribution of ultra-long circulating desferrioxamine based polymeric iron chelator. Biomaterials, 2016, 102, 58-71.	11.4	42
66	Biomembrane Interactions Reveal the Mechanism of Action of Surface-Immobilized Host Defense IDR-1010 Peptide. Chemistry and Biology, 2012, 19, 199-209.	6.0	41
67	N-Degradomic Analysis Reveals a Proteolytic Network Processing the Podocyte Cytoskeleton. Journal of the American Society of Nephrology: JASN, 2017, 28, 2867-2878.	6.1	41
68	Solventâ€assisted anionic ring opening polymerization of glycidol: Toward medium and high molecular weight hyperbranched polyglycerols. Journal of Polymer Science Part A, 2013, 51, 2614-2621.	2.3	38
69	The size-dependent efficacy and biocompatibility of hyperbranched polyglycerol in peritoneal dialysis. Biomaterials, 2014, 35, 1378-1389.	11.4	38
70	Synthesis, Characterization, and Biocompatibility of Biodegradable Hyperbranched Polyglycerols from Acid-Cleavable Ketal Group Functionalized Initiators. Biomacromolecules, 2012, 13, 3018-3030.	5.4	37
71	Carbohydrate Structure Dependent Hemocompatibility of Biomimetic Functional Polymer Brushes on Surfaces. Advanced Healthcare Materials, 2012, 1, 199-213.	7.6	37
72	Conjugation of Aurein 2.2 to HPG Yields an Antimicrobial with Better Properties. Biomacromolecules, 2015, 16, 913-923.	5.4	37

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73	Polymeric nanocarriers for the treatment of systemic iron overload. Molecular and Cellular Therapies, 2015, 3, 3.	0.2	37
74	Influence of dynamic flow conditions on adsorbed plasma protein corona and surface-induced thrombus generation on antifouling brushes. Biomaterials, 2018, 166, 79-95.	11.4	37
75	Molecular Weight and Polydispersity Estimation of Adsorbing Polymer Brushes by Atomic Force Microscopy. Langmuir, 2004, 20, 3297-3303.	3.5	36
76	Electric field and vibration-assisted nanomolecule desorption and anti-biofouling for biosensor applications. Colloids and Surfaces B: Biointerfaces, 2007, 59, 67-73.	5.0	36
77	Lectin Interactions on Surface-Grafted Glycostructures: Influence of the Spatial Distribution of Carbohydrates on the Binding Kinetics and Rupture Forces. Analytical Chemistry, 2013, 85, 7786-7793.	6.5	34
78	Hyperbranched Polyglycerol is an Efficacious and Biocompatible Novel Osmotic Agent in a Rodent Model of Peritoneal Dialysis. Peritoneal Dialysis International, 2013, 33, 15-27.	2.3	33
79	Matrix Metalloproteinase 10 Degradomics in Keratinocytes and Epidermal Tissue Identifies Bioactive Substrates With Pleiotropic Functions*. Molecular and Cellular Proteomics, 2015, 14, 3234-3246.	3.8	33
80	Global Profiling of Proteolysis from the Mitochondrial Amino Terminome during Early Intrinsic Apoptosis Prior to Caspase-3 Activation. Journal of Proteome Research, 2018, 17, 4279-4296.	3.7	33
81	Alteration of blood clotting and lung damage by protamine are avoided using the heparin and polyphosphate inhibitor UHRA. Blood, 2017, 129, 1368-1379.	1.4	32
82	Choline phosphate functionalized cellulose membrane: A potential hemostatic dressing based on a unique bioadhesion mechanism. Acta Biomaterialia, 2016, 40, 212-225.	8.3	30
83	Ex vivo enzymatic treatment converts blood type A donor lungs into universal blood type lungs. Science Translational Medicine, 2022, 14, eabm7190.	12.4	30
84	Chain Length and Grafting Density Dependent Enhancement in the Hydrolysis of Ester-Linked Polymer Brushes. Langmuir, 2015, 31, 6463-6470.	3.5	29
85	Influence of polymer architecture on antigens camouflage, CD47 protection and complement mediated lysis of surface grafted red blood cells. Biomaterials, 2012, 33, 7871-7883.	11.4	28
86	Comparative Degradomics of Porcine andÂHuman Wound Exudates Unravels Biomarker Candidates for Assessment ofÂWound Healing Progression in TraumaÂPatients. Journal of Investigative Dermatology, 2018, 138, 413-422.	0.7	27
87	Design of Safe Nanotherapeutics for the Excretion of Excess Systemic Toxic Iron. ACS Central Science, 2019, 5, 917-926.	11.3	27
88	A Polymer Therapeutic Having Universal Heparin Reversal Activity: Molecular Design and Functional Mechanism. Biomacromolecules, 2017, 18, 3343-3358.	5.4	26
89	Water-Soluble Complexes from Random Copolymer and Oppositely Charged Surfactant. 2. Complexes of Poly(ethylene glycol)-Based Cationic Random Copolymer and Bile Salts. Langmuir, 2004, 20, 8468-8475.	3.5	25
90	Inhibitory Effect of Hydrophilic Polymer Brushes on Surfaceâ€Induced Platelet Activation and Adhesion. Macromolecular Bioscience, 2010, 10, 1432-1443.	4.1	25

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91	Nonbiofouling Polymer Brush with Latent Aldehyde Functionality as a Template for Protein Micropatterning. Biomacromolecules, 2010, 11, 284-293.	5.4	25
92	Bending and Stretching Actuation of Soft Materials through Surfaceâ€Initiated Polymerization. Angewandte Chemie - International Edition, 2011, 50, 5116-5119.	13.8	25
93	Linear and hyperbranched phosphorylcholine based homopolymers for blood biocompatibility. Polymer Chemistry, 2013, 4, 3140.	3.9	25
94	Hemocompatibility studies on a degradable polar hydrophobic ionic polyurethane (D-PHI). Acta Biomaterialia, 2017, 48, 368-377.	8.3	25
95	Mega macromolecules as single molecule lubricants for hard and soft surfaces. Nature Communications, 2020, 11, 2139.	12.8	25
96	Profiling of Protein N-Termini and Their Modifications in Complex Samples. Methods in Molecular Biology, 2017, 1574, 35-50.	0.9	24
97	Thiol-Reactive Polymers for Titanium Interfaces: Fabrication of Antimicrobial Coatings. ACS Applied Polymer Materials, 2019, 1, 1308-1316.	4.4	24
98	A facile colorimetric method for the quantification of labile iron pool and total iron in cells and tissue specimens. Scientific Reports, 2021, 11, 6008.	3.3	24
99	Laser-Light-Scattering Study of Internal Motions of Polymer Chains Grafted on Spherical Latex Particles. Journal of Physical Chemistry B, 2004, 108, 18479-18484.	2.6	23
100	Plasma protein adsorption to surfaces grafted with dense homopolymer and copolymer brushes containing poly(N-isopropylacrylamide). Journal of Biomaterials Science, Polymer Edition, 2004, 15, 1121-1135.	3.5	22
101	Selfâ€Limiting Mussel Inspired Thin Antifouling Coating with Broadâ€Spectrum Resistance to Biofilm Formation to Prevent Catheterâ€Associated Infection in Mouse and Porcine Models. Advanced Healthcare Materials, 2021, 10, e2001573.	7.6	22
102	High Molecular Weight Polyglycerol-Based Multivalent Mannose Conjugates. Biomacromolecules, 2010, 11, 2567-2575.	5.4	21
103	Abnormal blood clot formation induced by temperature responsive polymers by altered fibrin polymerization and platelet binding. Biomaterials, 2014, 35, 2518-2528.	11.4	21
104	Monitoring matrix metalloproteinase activity at the epidermalâ€“dermal interface by SILACâ€TRAQâ€TAILS. Proteomics, 2015, 15, 2491-2502.	2.2	21
105	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. Journal of Proteome Research, 2019, 18, 4167-4179.	3.7	21
106	Role of Iron in the Molecular Pathogenesis of Diseases and Therapeutic Opportunities. ACS Chemical Biology, 2021, 16, 945-972.	3.4	21
107	Rapid Assembly of Infection-Resistant Coatings: Screening and Identification of Antimicrobial Peptides Works in Cooperation with an Antifouling Background. ACS Applied Materials & Interfaces, 2021, 13, 36784-36799.	8.0	21
108	Therapeutic Cells via Functional Modification: Influence of Molecular Properties of Polymer Grafts on In Vivo Circulation, Clearance, Immunogenicity, and Antigen Protection. Biomacromolecules, 2013, 14, 2052-2062.	5.4	20

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109	Interaction of blood components with cathelicidins and their modified versions. Biomaterials, 2015, 69, 201-211.	11.4	20
110	Blood Components Interactions to Ionic and Nonionic Glyconanogels. Biomacromolecules, 2015, 16, 2990-2997.	5.4	20
111	The Mouse Heart Mitochondria N Terminome Provides Insights into ClpXP-Mediated Proteolysis. Molecular and Cellular Proteomics, 2020, 19, 1330-1345.	3.8	20
112	Atom Transfer Radical Polymerization Using Multidentate Amine Ligands Supported on Soluble Hyperbranched Polyglycidol. Macromolecular Chemistry and Physics, 2004, 205, 567-573.	2.2	19
113	The influence of poly-N-[(2,2-dimethyl-1,3-dioxolane)methyl]acrylamide onÂfibrin polymerization, cross-linking and clot structure. Biomaterials, 2010, 31, 5749-5758.	11.4	19
114	A silicone-based microfluidic chip grafted with carboxyl functionalized hyperbranched polyglycerols for selective protein capture. Microfluidics and Nanofluidics, 2010, 9, 199-209.	2.2	19
115	Hyperbranched polyglycerol is superior to glucose for long-term preservation of peritoneal membrane in a rat model of chronic peritoneal dialysis. Journal of Translational Medicine, 2016, 14, 338.	4.4	19
116	Hemocompatibility of Degrading Polymeric Biomaterials: Degradable Polar Hydrophobic Ionic Polyurethane versus Poly(lactic-co-glycolic) Acid. Biomacromolecules, 2017, 18, 2296-2305.	5.4	19
117	Development of Antifouling and Bactericidal Coatings for Platelet Storage Bags Using Dopamine Chemistry. Advanced Healthcare Materials, 2018, 7, 1700839.	7.6	19
118	Clinically Approved Iron Chelators Influence Zebrafish Mortality, Hatching Morphology and Cardiac Function. PLoS ONE, 2014, 9, e109880.	2.5	19
119	A planar model of the vessel wall from cellularized-collagen scaffolds: focus on cellâ€“matrix interactions in mono-, bi- and tri-culture models. Biomaterials Science, 2017, 5, 153-162.	5.4	18
120	Nontransformed and Cancer Cells Can Utilize Different Endocytic Pathways To Internalize Dendritic Nanoparticle Variants: Implications on Nanocarrier Design. Biomacromolecules, 2017, 18, 2427-2438.	5.4	18
121	Approaches to prevent bleeding associated with anticoagulants: current status and recent developments. Drug Delivery and Translational Research, 2018, 8, 928-944.	5.8	18
122	Durable Surfaces from Film-Forming Silver Assemblies for Long-Term Zero Bacterial Adhesion without Toxicity. ACS Central Science, 2022, 8, 546-561.	11.3	18
123	Skin Barrier Defects Caused by Keratinocyte-Specific Deletion of ADAM17 or EGFR Are Based on Highly Similar Proteome and Degradome Alterations. Journal of Proteome Research, 2016, 15, 1402-1417.	3.7	17
124	Biomaterial and cellular implants: foreign surfaces where immunity and coagulation meet. Blood, 2022, 139, 1987-1998.	1.4	17
125	Water-Soluble Nanoparticles from Random Copolymer and Oppositely Charged Surfactant, 3. Macromolecular Bioscience, 2005, 5, 549-558.	4.1	16
126	N-Terminomics/TAILS Profiling of Proteases and Their Substrates in Ulcerative Colitis. ACS Chemical Biology, 2019, 14, 2471-2483.	3.4	16

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127	Hyperbranched Polyglycerol as a Colloid in Cold Organ Preservation Solutions. PLoS ONE, 2015, 10, e0116595.	2.5	16
128	In Vivo Biological Evaluation of High Molecular Weight Multifunctional Acid-Degradable Polymeric Drug Carriers with Structurally Different Ketals. Biomacromolecules, 2016, 17, 3683-3693.	5.4	15
129	Formalin-Fixed, Paraffin-Embedded Tissues (FFPE) as a Robust Source for the Profiling of Native and Protease-Generated Protein Amino Termini. Molecular and Cellular Proteomics, 2016, 15, 2203-2213.	3.8	15
130	Iron Binding and Iron Removal Efficiency of Desferrioxamine Based Polymeric Iron Chelators: Influence of Molecular Size and Chelator Density. Macromolecular Bioscience, 2017, 17, 1600244.	4.1	15
131	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. Journal of Proteome Research, 2019, 18, 3419-3428.	3.7	15
132	Mucinâ€Inspired, High Molecular Weight Virus Binding Inhibitors Show Biphasic Binding Behavior to Influenza A Viruses. Small, 2020, 16, e2004635.	10.0	15
133	Bioreducible hyperbranched polyglycerols with disulfide linkages: Synthesis and biocompatibility evaluation. Journal of Polymer Science Part A, 2015, 53, 2104-2115.	2.3	13
134	Design of Polyphosphate Inhibitors: A Molecular Dynamics Investigation on Polyethylene Glycol-Linked Cationic Binding Groups. Biomacromolecules, 2018, 19, 1358-1367.	5.4	12
135	Prevention of vascular-allograft rejection by protecting the endothelial glycocalyx with immunosuppressive polymers. Nature Biomedical Engineering, 2021, 5, 1202-1216.	22.5	12
136	Hybrid Polyglycerols with Long Blood Circulation: Synthesis, Biocompatibility, and Biodistribution. Macromolecular Bioscience, 2014, 14, 1469-1482.	4.1	11
137	Investigation of hydrophobically derivatized hyperbranched polyglycerol with PEGylated shell as a nanocarrier for systemic delivery of chemotherapeutics. Nanomedicine: Nanotechnology, Biology, and Medicine, 2015, 11, 1785-1795.	3.3	11
138	An improved in vitro model for studying the structural and functional properties of the endothelial glycocalyx in arteries, capillaries and veins. FASEB Journal, 2021, 35, e21643.	0.5	10
139	An investigation of vibration-induced protein desorption mechanism using a micromachined membrane and PZT plate. Biomedical Microdevices, 2008, 10, 701-708.	2.8	9
140	Development of Soluble Ester-Linked Aldehyde Polymers for Proteomics. Analytical Chemistry, 2011, 83, 6500-6510.	6.5	9
141	Design Considerations for Developing Hyperbranched Polyglycerol Nanoparticles as Systemic Drug Carriers. Journal of Biomedical Nanotechnology, 2016, 12, 1089-1100.	1.1	9
142	Oncotically Driven Control over Glycocalyx Dimension for Cell Surface Engineering and Protein Binding in the Longitudinal Direction. Scientific Reports, 2018, 8, 7581.	3.3	9
143	MANTI: Automated Annotation of Protein N-Termini for Rapid Interpretation of N-Terminome Data Sets. Analytical Chemistry, 2021, 93, 5596-5605.	6.5	9
144	The mechanism and modulation of complement activation on polymer grafted cells. Acta Biomaterialia, 2016, 31, 252-263.	8.3	8

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145	Polyglycerol-Based Macromolecular Iron Chelator Adjuvants for Antibiotics To Treat Drug-Resistant Bacteria. ACS Applied Materials & Interfaces, 2020, 12, 37834-37844.	8.0	8
146	Wechselwirkung von Polyelektrolytâ€Architekturen mit Proteinen und Biosystemen. Angewandte Chemie, 2021, 133, 3926-3950.	2.0	8
147	Enzymatically releasable polyethylene glycol â€“ host defense peptide conjugates with improved activity and biocompatibility. Journal of Controlled Release, 2021, 339, 220-231.	9.9	8
148	Peritoneal and Systemic Responses of Obese Type <scp>II</scp> Diabetic Rats to Chronic Exposure to a Hyperbranched Polyglycerolâ€Based Dialysis Solution. Basic and Clinical Pharmacology and Toxicology, 2018, 123, 494-503.	2.5	7
149	Molecular Dynamics Simulations on Nucleic Acid Binding Polymers Designed To Arrest Thrombosis. ACS Applied Materials & Interfaces, 2018, 10, 28399-28411.	8.0	7
150	Targeting Biological Polyanions in Blood: Strategies toward the Design of Therapeutics. Biomacromolecules, 2020, 21, 2595-2621.	5.4	7
151	Synthesis of Poly(N,N-Dimethylacrylamide) Brushes from Functionalized Latex Surfaces by Aqueous Atom Transfer Radical Polymerization. ACS Symposium Series, 2003, , 316-330.	0.5	6
152	Stimuliâ€responsive cationic terpolymers by RAFT polymerization: Synthesis, characterization, and protein interaction studies. Journal of Polymer Science Part A, 2008, 46, 4021-4029.	2.3	6
153	Antigens Protected Functional Red Blood Cells By The Membrane Grafting Of Compact Hyperbranched Polyglycerols. Journal of Visualized Experiments, 2013, , .	0.3	5
154	Advantages of replacing hydroxyethyl starch in University of Wisconsin solution with hyperbranched polyglycerol for cold kidney perfusion. Journal of Surgical Research, 2016, 205, 59-69.	1.6	5
155	Cold preservation with hyperbranched polyglycerol-based solution improves kidney functional recovery with less injury at reperfusion in rats. American Journal of Translational Research (discontinued), 2017, 9, 429-441.	0.0	5
156	Simplified high yield TAILS terminomics using a new HPG-ALD 800K-2000 polymer with precipitation. Methods in Enzymology, 2019, 626, 429-446.	1.0	4
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