Kevin H Mayo

List of Publications by Year in descending order

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66343 82547 5,997 126 42 72 citations h-index g-index papers 129 129 129 5577 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	What is the Sugar Code?. ChemBioChem, 2022, 23, .	2.6	20
2	Targeting platelet-derived CXCL12 impedes arterial thrombosis. Blood, 2022, 139, 2691-2705.	1.4	13
3	Comparative study of water-soluble polysaccharides isolated from leaves and roots of Isatis indigotica Fort International Journal of Biological Macromolecules, 2022, 206, 642-652.	7.5	10
4	Structure and antioxidant activity of six mushroom-derived heterogalactans. International Journal of Biological Macromolecules, 2022, 209, 1439-1449.	7.5	14
5	Galactofuranose side chains in galactomannans from Penicillium spp. modulate galectin-8-mediated bioactivity. Carbohydrate Polymers, 2022, 292, 119677.	10.2	3
6	Emodin inhibits aggregation of amyloidâ€Î² peptide 1–42 and improves cognitive deficits in Alzheimer's disease transgenic mice. Journal of Neurochemistry, 2021, 157, 1992-2007.	3.9	17
7	Structure–function studies of galectinâ€14, an important effector molecule in embryology. FEBS Journal, 2021, 288, 1041-1055.	4.7	18
8	Targeting the CRD Fâ€face of Human Galectinâ€3 and Allosterically Modulating Glycan Binding by Angiostatic PTX008 and a Structurally Optimized Derivative. ChemMedChem, 2021, 16, 713-723.	3.2	8
9	Topsy-turvy binding of negatively charged homogalacturonan oligosaccharides to galectin-3. Glycobiology, 2021, 31, 341-350.	2.5	7
10	Human galectin-16 has a pseudo ligand binding site and plays a role in regulating c-Rel-mediated lymphocyte activity. Biochimica Et Biophysica Acta - General Subjects, 2021, 1865, 129755.	2.4	17
11	Galectin-3 N-terminal tail prolines modulate cell activity and glycan-mediated oligomerization/phase separation. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118 , .	7.1	24
12	Actin binding to galectin-13/placental protein-13 occurs independently of the galectin canonical ligand-binding site. Glycobiology, 2021, 31, 1219-1229.	2.5	5
13	Pectic polysaccharides from Radix Sophorae Tonkinensis exhibit significant antioxidant effects. Carbohydrate Polymers, 2021, 262, 117925.	10.2	34
14	Comparative study on the structures of intra- and extra-cellular polysaccharides from Penicillium oxalicum and their inhibitory effects on galectins. International Journal of Biological Macromolecules, 2021, 181, 793-800.	7.5	9
15	Characterizing ligand-induced conformational changes in clinically relevant galectin-1 by HN/H2O (D2O) exchange. Biochimie, 2021, 187, 48-56.	2.6	3
16	Simulating cellular galectin networks by mixing galectins in vitro reveals synergistic activity. Biochemistry and Biophysics Reports, 2021, 28, 101116.	1.3	2
17	The marriage of chemokines and galectins as functional heterodimers. Cellular and Molecular Life Sciences, 2021, 78, 8073-8095.	5.4	13
18	Biochemical Characterization of Two Rhamnogalacturonan Lyases From Bacteroides ovatus ATCC 8483 With Preference for RG-I Substrates. Frontiers in Microbiology, 2021, 12, 799875.	3.5	6

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19	Galectin-13/placental protein 13: redox-active disulfides as switches for regulating structure, function and cellular distribution. Glycobiology, 2020, 30, 120-129.	2.5	11
20	Structural insight into the binding of human galectins to corneal keratan sulfate, its desulfated form and related saccharides. Scientific Reports, 2020, 10, 15708.	3.3	15
21	Co-crystal Structure of Thermosynechococcus elongatus Sucrose Phosphate Synthase With UDP and Sucrose-6-Phosphate Provides Insight Into Its Mechanism of Action Involving an Oxocarbenium Ion and the Glycosidic Bond. Frontiers in Microbiology, 2020, 11 , 1050 .	3.5	13
22	Injectable hydrogel-loaded nano-hydroxyapatite that improves bone regeneration and alveolar ridge promotion. Materials Science and Engineering C, 2020, 116, 111158.	7.3	51
23	Chemokines and galectins form heterodimers to modulate inflammation. EMBO Reports, 2020, 21, e47852.	4.5	63
24	Pro4 prolyl peptide bond isomerization in human galectin-7 modulates the monomer-dimer equilibrum to affect function. Biochemical Journal, 2020, 477, 3147-3165.	3.7	11
25	A traditional Chinese Medicine, YXQN, Reduces Amyloid-induced Cytotoxicity by Inhibiting A \hat{I}^2 42 Aggregation and Fibril Formation. Current Pharmaceutical Design, 2020, 26, 780-789.	1.9	2
26	Hybrid ligands with calixarene and thiodigalactoside groups: galectin binding and cytotoxicity. Organic Chemistry Frontiers, 2019, 6, 2981-2990.	4.5	4
27	NMR-based insight into galectin-3 binding to endothelial cell adhesion molecule CD146: Evidence for noncanonical interactions with the lectin's CRD β-sandwich F-face. Glycobiology, 2019, 29, 608-618.	2.5	15
28	A new regulatory mechanism for Raf kinase activation, retinoic acid-bound Crabp1. Scientific Reports, 2019, 9, 10929.	3.3	23
29	SUMO3 modification by PIAS1 modulates androgen receptor cellular distribution and stability. Cell Communication and Signaling, 2019, 17, 153.	6.5	15
30	Galectin-3 binds selectively to the terminal, non-reducing end of $\hat{l}^2(1\hat{a}\dagger^24)$ -galactans, with overall affinity increasing with chain length. Glycobiology, 2019, 29, 74-84.	2.5	12
31	An improved conjugate vaccine technology; induction of antibody responses to the tumor vasculature. Vaccine, 2018, 36, 3054-3060.	3.8	21
32	Adhesion/growth-regulatory galectins tested in combination: evidence for formation of hybrids as heterodimers. Biochemical Journal, 2018, 475, 1003-1018.	3.7	32
33	Treatment of B-cell precursor acute lymphoblastic leukemia with the Galectin-1 inhibitor PTX008. Journal of Experimental and Clinical Cancer Research, 2018, 37, 67.	8.6	36
34	Resetting the ligand binding site of placental protein $13/g$ alectin- 13 recovers its ability to bind lactose. Bioscience Reports, 2018, 38, .	2.4	10
35	Galectins as Molecular Targets for Therapeutic Intervention. International Journal of Molecular Sciences, 2018, 19, 905.	4.1	83
36	Preparation of individual galactan oligomers, their prebiotic effects, and use in estimating galactan chain length in pectin-derived polysaccharides. Carbohydrate Polymers, 2018, 199, 526-533.	10.2	24

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37	Chemokine interactome mapping enables tailored intervention in acute and chronic inflammation. Science Translational Medicine, 2017, 9, .	12.4	121
38	Novel polysaccharide binding to the N-terminal tail of galectin-3 is likely modulated by proline isomerization. Glycobiology, 2017, 27, 1038-1051.	2.5	19
39	Macromolecular assemblies of complex polysaccharides with galectin-3 and their synergistic effects on function. Biochemical Journal, 2017, 474, 3849-3868.	3.7	37
40	Chemokines from a Structural Perspective. International Journal of Molecular Sciences, 2017, 18, 2088.	4.1	161
41	Probing Functional Heteromeric Chemokine Protein–Protein Interactions through Conformationâ€Assisted Oxime Ligation. Angewandte Chemie - International Edition, 2016, 55, 14963-14966.	13.8	16
42	Binding of polysaccharides to human galectin-3 at a noncanonical site in its carbohydrate recognition domain. Glycobiology, 2016, 26, 88-99.	2.5	59
43	Intra- and intermolecular interactions of human galectin-3: assessment by full-assignment-based NMR. Glycobiology, 2016, 26, 888-903.	2.5	66
44	Structural significance of galectin design: impairment of homodimer stability by linker insertion and partial reversion by ligand presence. Protein Engineering, Design and Selection, 2015, 28, 199-210.	2.1	28
45	1H, 13C, and 15N backbone and side-chain chemical shift assignments for the 36 proline-containing, full length 29ÂkDa human chimera-type galectin-3. Biomolecular NMR Assignments, 2015, 9, 59-63.	0.8	20
46	Defining the Potential of Aglycone Modifications for Affinity/Selectivity Enhancement against Medically Relevant Lectins: Synthesis, Activity Screening, and HSQCâ€Based NMR Analysis. ChemBioChem, 2015, 16, 126-139.	2.6	16
47	Novel analogs of antitumor agent calixarene 0118: Synthesis, cytotoxicity, click labeling with 2-[18F]fluoroethylazide, and inÂvivo evaluation. European Journal of Medicinal Chemistry, 2015, 89, 279-295.	5.5	38
48	Evaluation of 111In-labeled Anginex as Potential SPECT Tracer for Imaging of Tumor Angiogenesis. Anticancer Research, 2015, 35, 5945-54.	1.1	3
49	Peptides derived from human galectin-3 N-terminal tail interact with its carbohydrate recognition domain in a phosphorylation-dependent manner. Biochemical and Biophysical Research Communications, 2014, 443, 126-131.	2.1	24
50	Polycationic calixarene PTX013, a potent cytotoxic agent against tumors and drug resistant cancer. Investigational New Drugs, 2013, 31, 1142-1150.	2.6	44
51	Bacterial membrane disrupting dodecapeptide SC4 improves survival of mice challenged with Pseudomonas aeruginosa. Biochimica Et Biophysica Acta - General Subjects, 2013, 1830, 3454-3457.	2.4	8
52	Protein lysineâ€Nζ alkylation and <i>O</i> àâ€phosphorylation mediated by DTTâ€generated reactive oxygen species. Protein Science, 2013, 22, 327-346.	7.6	2
53	Structure-Based Optimization of Angiostatic Agent 6DBF7, an Allosteric Antagonist of Galectin-1. Journal of Pharmacology and Experimental Therapeutics, 2013, 344, 589-599.	2.5	36
54	Lactose binding to human galectin-7 (p53-induced gene 1) induces long-range effects through the protein resulting in increased dimer stability and evidence for positive cooperativity. Glycobiology, 2013, 23, 508-523.	2.5	42

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55	Structural features for α-galactomannan binding to galectin-1. Glycobiology, 2012, 22, 543-551.	2.5	30
56	Antitumor Agent Calixarene 0118 Targets Human Galectin-1 as an Allosteric Inhibitor of Carbohydrate Binding. Journal of Medicinal Chemistry, 2012, 55, 5121-5129.	6.4	113
57	From Carbohydrate to Peptidomimetic Inhibitors of Galectins. ACS Symposium Series, 2012, , 61-77.	0.5	6
58	1H, 13C, and 15N backbone and side-chain chemical shift assignments for the 31ÂkDa human galectin-7 (p53-induced gene 1) homodimer, a pro-apoptotic lectin. Biomolecular NMR Assignments, 2012, 6, 127-129.	0.8	15
59	Synthesis of [¹⁸ F]anginex with high specific activity [¹⁸ F]fluorobenzaldehyde for targeting angiogenic activity in solid tumors. Journal of Labelled Compounds and Radiopharmaceuticals, 2011, 54, 708-713.	1.0	3
60	Structural aspects of binding of \hat{l}_{\pm} -linked digalactosides to human galectin-1. Glycobiology, 2011, 21, 1627-1641.	2.5	43
61	Enhancement of T-cell–Mediated Antitumor Response: Angiostatic Adjuvant to Immunotherapy against Cancer. Clinical Cancer Research, 2011, 17, 3134-3145.	7.0	64
62	Tumour thermotolerance, a physiological phenomenon involving vessel normalisation. International Journal of Hyperthermia, 2011, 27, 42-52.	2.5	24
63	Inhibiting Tumor Growth by Targeting Tumor Vasculature with Galectin-1 Antagonist Anginex Conjugated to the Cytotoxic Acylfulvene, 6-Hydroxylpropylacylfulvene. Bioconjugate Chemistry, 2010, 21, 20-27.	3.6	40
64	Lactose Binding to Galectin-1 Modulates Structural Dynamics, Increases Conformational Entropy, and Occurs with Apparent Negative Cooperativity. Journal of Molecular Biology, 2010, 397, 1209-1230.	4.2	95
65	Repression of Multiple Myeloma Growth and Preservation of Bone with Combined Radiotherapy and Anti-angiogenic Agent. Radiation Research, 2010, 173, 809-817.	1.5	13
66	The Â-galactomannan Davanat binds galectin-1 at a site different from the conventional galectin carbohydrate binding domain. Glycobiology, 2009, 19, 1034-1045.	2.5	84
67	Disrupting functional interactions between platelet chemokines inhibits atherosclerosis in hyperlipidemic mice. Nature Medicine, 2009, 15, 97-103.	30.7	404
68	Using pulse field gradient NMR diffusion measurements to define molecular size distributions in glycan preparations. Carbohydrate Research, 2009, 344, 1205-1212.	2.3	25
69	The carbohydrate-binding domain on galectin-1 is more extensive for a complex glycan than for simple saccharides: implications for galectin–glycan interactions at the cell surface. Biochemical Journal, 2009, 421, 211-221.	3.7	55
70	1H, 13C, and 15N backbone and side-chain chemical shift assignments for the 29ÂkDa human galectin-1 protein dimer. Biomolecular NMR Assignments, 2008, 2, 203-205.	0.8	32
71	Ovarian tumor growth regression using a combination of vascular targeting agents anginex or topomimetic 0118 and the chemotherapeutic irofulven. Cancer Letters, 2008, 265, 270-280.	7.2	48
72	CXC and CC Chemokines Form Mixed Heterodimers. Journal of Biological Chemistry, 2008, 283, 24155-24166.	3.4	65

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73	Probing structure–activity relationships in bactericidal peptide βpep-25. Biochemical Journal, 2008, 414, 143-150.	3.7	8
74	Scheduling of Radiation with Angiogenesis Inhibitors Anginex and Avastin Improves Therapeutic Outcome via Vessel Normalization. Clinical Cancer Research, 2007, 13, 3395-3402.	7.0	270
75	A Journey in Structure-Based Drug Discovery: From Designed Peptides to Protein Surface Topomimetics as Antibiotic and Antiangiogenic Agents. Accounts of Chemical Research, 2007, 40, 1057-1065.	15.6	39
76	Antiangiogenesis therapy using a novel angiogenesis inhibitor, anginex, following radiation causes tumor growth delay. International Journal of Clinical Oncology, 2007, 12, 42-47.	2.2	33
77	Topomimetics of Amphipathic \hat{l}^2 -Sheet and Helix-Forming Bactericidal Peptides Neutralize Lipopolysaccharide Endotoxins. Journal of Medicinal Chemistry, 2006, 49, 7754-7765.	6.4	56
78	Design of Nonpeptidic Topomimetics of Antiangiogenic Proteins With Antitumor Activities. Journal of the National Cancer Institute, 2006, 98, 932-936.	6.3	102
79	Epigenetic Regulation of Tumor Endothelial Cell Anergy: Silencing of Intercellular Adhesion Molecule-1 by Histone Modifications. Cancer Research, 2006, 66, 10770-10777.	0.9	139
80	Galectin-1 is essential in tumor angiogenesis and is a target for antiangiogenesis therapy. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 15975-15980.	7.1	424
81	Antiâ€angiogenesis therapy can overcome endothelial cell anergy and promote leukocyteâ€endothelium interactions and infiltration in tumors. FASEB Journal, 2006, 20, 621-630.	0.5	237
82	Anginex synergizes with radiation therapy to inhibit tumor growth by radiosensitizing endothelial cells. International Journal of Cancer, 2005, 115, 312-319.	5.1	81
83	Platelet Factor 4 and Interleukin-8 CXC Chemokine Heterodimer Formation Modulates Function at the Quaternary Structural Level. Journal of Biological Chemistry, 2005, 280, 4948-4958.	3.4	86
84	Measuring protein self-diffusion in protein–protein mixtures using a pulsed gradient spin-echo technique with WATERGATE and isotope filtering. Journal of Magnetic Resonance, 2004, 166, 129-133.	2.1	14
85	Acylation of SC4 dodecapeptide increases bactericidal potency against Gram-positive bacteria, including drug-resistant strains. Biochemical Journal, 2004, 378, 93-103.	3.7	75
86	Comparison of 13Cî±H and 15NH backbone dynamics in protein GB1. Protein Science, 2003, 12, 914-922.	7.6	16
87	15NH Backbone Dynamics of Protein GB1:  Comparison of Order Parameters and Correlation Times Derived Using Various "Model-Free―Approaches. Journal of Physical Chemistry B, 2003, 107, 2602-2609.	2.6	22
88	Anti-tumor activity of the novel angiogenesis inhibitor anginex. Cancer Letters, 2003, 194, 55-66.	7.2	65
89	Design of a Partial Peptide Mimetic of Anginex with Antiangiogenic and Anticancer Activity. Journal of Biological Chemistry, 2003, 278, 45746-45752.	3.4	62
90	beta-Sheet is the bioactive conformation of the anti-angiogenic anginex peptide. Biochemical Journal, 2003, 373, 281-288.	3.7	51

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91	Platelet factor 4 promotes adhesion of hematopoietic progenitor cells and binds IL-8: novel mechanisms for modulation of hematopoiesis. Blood, 2003, 101, 4687-4694.	1.4	103
92	The designed angiostatic peptide anginex synergistically improves chemotherapy and antiangiogenesis therapy with angiostatin. Cancer Research, 2003, 63, 382-5.	0.9	85
93	The designer antiangiogenic peptide anginex targets tumor endothelial cells and inhibits tumor growth in animal models. FASEB Journal, 2002, 16, 1991-1993.	0.5	96
94	Residues inMethylosinus trichosporiumOB3b Methane Monooxygenase Component B Involved in Molecular Interactions with Reduced- and Oxidized-Hydroxylase Component: A Role for the N-Terminusâ€. Biochemistry, 2001, 40, 9539-9551.	2.5	49
95	Conformational Exchange on the Microsecond Time Scale in α-Helix and β-Hairpin Peptides Measured by 13C NMR Transverse Relaxationâ€. Biochemistry, 2001, 40, 2844-2853.	2.5	18
96	Environmental Scanning Electron Microscopy of the Dehydration of Gel Materials. Microscopy and Microanalysis, 2001, 7, 792-793.	0.4	0
97	Anginex, a designed peptide that inhibits angiogenesis. Biochemical Journal, 2001, 354, 233.	3.7	109
98	Folding of \hat{l}^2 pep-4 \hat{l}^2 -sheet sandwich dimers and tetramers is influenced by aliphatic hydrophobic residues at the intersubunit interface. Biochemical Journal, 2001, 357, 739-747.	3.7	5
99	Anginex, a designed peptide that inhibits angiogenesis. Biochemical Journal, 2001, 354, 233-242.	3.7	158
100	Structure–function relationships in novel peptide dodecamers with broad-spectrum bactericidal and endotoxin-neutralizing activities. Biochemical Journal, 2000, 349, 717-728.	3.7	27
101	Internal motional amplitudes and correlated bond rotations in an î±â€helical peptide derived from ¹³ C and ¹⁵ N NMR relaxation. Protein Science, 2000, 9, 2118-2127.	7.6	11
102	Heparin Dodecasaccharide Binding to Platelet Factor-4 and Growth-related Protein-α. Journal of Biological Chemistry, 1999, 274, 25317-25329.	3.4	71
103	Angiogenesis inhibitors overcome tumor induced endothelial cell anergy. , 1999, 80, 315-319.		67
104	Using the Model Free Approach to Analyze NMR Relaxation Data in Cases of Anisotropic Molecular Diffusion. Journal of Physical Chemistry B, 1999, 103, 6829-6834.	2.6	22
105	Structure and Dynamics of Peptideâ^'Amphiphiles Incorporating Triple-Helical Proteinlike Molecular Architecture. Biochemistry, 1999, 38, 1659-1668.	2.5	115
106	NMR structure and dynamics of monomeric neutrophil-activating peptide 2. Biochemical Journal, 1999, 338, 591-598.	3.7	17
107	A folding pathway for βpepâ€4 peptide 33mer: From unfolded monomers and βâ€sheet sandwich dimers to wellâ€structured tetramers. Protein Science, 1998, 7, 358-368.	7.6	26
108	Motional dynamics of residues in a \hat{l}^2 -hairpin peptide measured by 13 C-NMR relaxation. Protein Science, 1998, 7, 720-729.	7.6	18

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109	Designed \hat{l}^2 -sheet-forming peptide 33mers with potent human bactericidal/permeability increasing protein-like bactericidal and endotoxin neutralizing activities. Biochimica Et Biophysica Acta - General Subjects, 1998, 1425, 81-92.	2.4	40
110	NMR Structure of a de Novo Designed, Peptide 33mer with Two Distinct, Compact \hat{l}^2 -Sheet Folds. Biochemistry, 1997, 36, 5245-5250.	2.5	58
111	A Pulsed-Field Gradient NMR Study of Bovine Pancreatic Trypsin Inhibitor Self-Associationâ€. Biochemistry, 1997, 36, 3383-3388.	2.5	63
112	Backbone and sideâ€chain dynamics of residues in a partially folded βâ€sheet peptide from platelet factorâ€4. Protein Science, 1997, 6, 355-363.	7.6	16
113	RGD induces conformational transition in purified platelet integrin GPIIb/IIIa-SDS system yielding multiple binding states for fibrinogen \hat{I}^3 -chain C-terminal peptide. FEBS Letters, 1996, 378, 79-82.	2.8	11
114	NMR and x-ray studies of collagen model peptides. Biopolymers, 1996, 40, 359-370.	2.4	37
115	A recipe for designing waterâ€soluble, βâ€sheetâ€forming peptides. Protein Science, 1996, 5, 1301-1315.	7.6	87
116	Stability and Conformational Analysis of Tc-RC160 and Re-RC160:Â Experimental and Theoretical Analysis of the Influence of Metal Complexation on the Structural Requisites for Activity. The Journal of Physical Chemistry, 1996, 100, 14630-14636.	2.9	2
117	NMR solution structure of the 32-kDa platelet factor 4 ELR-motif N-terminal chimera: a symmetric tetramer. Biochemistry, 1995, 34, 11399-11409.	2.5	62
118	Quarternary structure amplification of protein folding differences observed in †native†platelet factor-4. FEBS Letters, 1995, 357, 301-304.	2.8	2
119	Alcohol-induced protein folding transitions in platelet factor 4: The O-state. Biochemistry, 1993, 32, 8661-8671.	2.5	10
120	Carbon-13 nuclear magnetic resonance relaxation-derived .psi., .PHI. bond rotational energy barriers and rotational restrictions for glycine 13C.alphamethylenes in a GXX-repeat hexadecapeptide. Biochemistry, 1993, 32, 10580-10590.	2.5	31
121	Cell adhesion promoting peptide GVKGDKGNPGWPGAP from the collagen type IV triple helix: cis/trans proline-induced multiple proton NMR conformations and evidence for a KG/PG multiple turn repeat motif in the all-trans proline state. Biochemistry, 1991, 30, 8251-8267.	2.5	57
122	Low-affinity platelet factor 4 proton NMR derived aggregate equilibria indicate a physiologic preference for monomers over dimers and tetramers. Biochemistry, 1991, 30, 925-934.	2.5	28
123	Human platelet factor 4 subunit association/dissociation thermodynamics and kinetics. Biochemistry, 1991, 30, 6402-6411.	2.5	30
124	Human platelet factor 4 monomer-dimer-tetramer equilibria investigated by proton NMR spectroscopy. Biochemistry, 1989, 28, 9469-9478.	2.5	102
125	Understanding Galectin Structure–Function Relationships to Design Effective Antagonists. , 0, , 33-69.		15
126	Determining Methyl-Esterification Patterns in Plant-Derived Homogalacturonan Pectins. Frontiers in Nutrition, 0, 9, .	3.7	5