Roger A Laine

List of Publications by Year in descending order

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118 papers 5,185 citations

36 h-index 91884 69 g-index

123 all docs

123
docs citations

123 times ranked

3855 citing authors

#	Article	IF	CITATIONS
1	Catalysis by hen egg-white lysozyme proceeds via a covalent intermediate. Nature, 2001, 412, 835-838.	27.8	588
2	Invited Commentary: A calculation of all possible oligosaccharide isomers both branched and linear yields $1.05\tilde{\mathrm{A}}\!\!-1012$ structures for a reducing hexasaccharide: the Isomer Barrier to development of single-method saccharide sequencing or synthesis systems. Glycobiology, 1994, 4, 759-767.	2.5	407
3	Eicosapentaenoic and Arachidonic Acids from Phytophthora infestans Elicit Fungitoxic Sesquiterpenes in the Potato. Science, 1981, 212, 67-69.	12.6	284
4	Synthesis of homodinuclear macrocyclic complexes of lanthanides and phenolic schiff bases. Inorganica Chimica Acta, 1986, 118, 179-185.	2.4	201
5	[10] Gas-liquid chromatography of carbohydrates. Methods in Enzymology, 1972, 28, 159-167.	1.0	190
6	Cellular blood group substances. IV. Neutral fucoglycolipids having long, branched carbohydrate chains. H-Active and I-active glycosphingolipids of human erthyrocyte membranes. Biochemistry, 1975, 14, 2725-2733.	2.5	140
7	Incorporation of exogenous glycosphingolipids in plasma membranes of cultured hamster cells and concurrent change of growth behavior. Biochemical and Biophysical Research Communications, 1973, 54, 1039-1045.	2.1	137
8	Evaluation of vetiver oil and seven insect-active essential oils against the Formosan subterranean termite. Journal of Chemical Ecology, 2001, 27, 1617-1625.	1.8	137
9	Structures of the asparagine-linked sugar chains of laminin. Biochimica Et Biophysica Acta - General Subjects, 1986, 883, 112-126.	2.4	136
10	Factors Affecting the Elicitation of Sesquiterpenoid Phytoalexin Accumulation by Eicosapentaenoic and Arachidonic Acids in Potato. Plant Physiology, 1982, 70, 1417-1424.	4.8	114
11	Termites fumigate their nests with naphthalene. Nature, 1998, 392, 558-559.	27.8	107
12	O-methyl oximes of sugars. Analysis as O-trimethylsilyl derivatives by gas-liquid chromatography and mass spectrometry. Carbohydrate Research, 1973, 27, 199-213.	2.3	104
13	Nootkatone is a repellent for Formosan subterranean termite (Coptotermes formosanus). Journal of Chemical Ecology, 2001, 27, 523-531.	1.8	98
14	In vitro cytocidal effect of novel lytic peptides on <i>Plasmodium falciparum</i> and <i>Trypanosoma cruzi</i> ¹ . FASEB Journal, 1988, 2, 2878-2883.	0.5	95
15	Analysis of trimethylsilyl O-methyloximes of carbohydrates by combined gas-liquid chromatography-mass spectrometry. Analytical Biochemistry, 1971, 43, 533-538.	2.4	92
16	Linkage position in oligosaccharides by fast atom bombardment ionization, collision-activated dissociation, tandem mass spectrometry and molecular modeling. L-Fucosylp-(.alpha.1.fwdarw.X)-D-N-acetyl-D-glucosaminylp-(.beta.1.fwdarw.3)-D-galactosylp-(.beta.1-O-methyl) where X = 3, 4, or 6. Journal of the American Chemical Society, 1988, 110, 6931-6939.	13.7	86
17	Toxicity and Repellency of Patchouli Oil and Patchouli Alcohol against Formosan Subterranean TermitesCoptotermes formosanusShiraki (Isoptera:Â Rhinotermitidae). Journal of Agricultural and Food Chemistry, 2003, 51, 4585-4588.	5.2	72
18	Carbohydrate structures of three novel phosphoinositol-containing sphingolipids from the yeast Histoplasma capsulatum. Biochemistry, 1984, 23, 5589-5596.	2.5	68

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19	Structure of a major glycophosphoceramide from tobacco leaves, PSL-I: 2-deoxy-2-acetamido-D-glucopyranosyl($\hat{l}\pm1~\hat{a}\dagger'$ 4)-D-glucuronopyranosyl($\hat{l}\pm1~\hat{a}\dagger'$) Tj ETQq1 1 0.784314 rgBT /Ov	erlo zis 10 7	Tf 5 6 6737 Td
20	Mutation of active site residues in the chitin-binding domain ChBDChiA1 from chitinase A1 of Bacillus circulans alters substrate specificity: use of a green fluorescent protein binding assay. Archives of Biochemistry and Biophysics, 2004, 426, 286-297.	3.0	65
21	Formosan Subterranean Termite (Isoptera: Rhinotermitidae) Soldiers Regulate Juvenile Hormone Levels and Caste Differentiation in Workers. Annals of the Entomological Society of America, 2005, 98, 340-345.	2.5	65
22	Conformational Analyses of Native and Permethylated Disaccharides. Journal of Physical Chemistry A, 2002, 106, 4115-4124.	2.5	63
23	Efficacy of Vetiver Oil and Nootkatone as Soil Barriers Against Formosan Subterranean Termite (Isoptera: Rhinotermitidae). Journal of Economic Entomology, 2001, 94, 1532-1537.	1.8	62
24	Glycosphingolipids Covalently Linked to Agarose Gel or Glass Beads. Journal of Biological Chemistry, 1974, 249, 4460-4466.	3.4	59
25	Mechanism of cell contact-dependent glycolipid synthesis: Further studies with glycolipid-glass complex. Biochemical and Biophysical Research Communications, 1974, 59, 591-599.	2.1	58
26	Solubilization of a particulate UDP-glucose: Sterol \hat{l}^2 -glucosyl-transferase in developing cotton fibers and seeds and characterization of steryl 6-acyl-d-glucosides. Archives of Biochemistry and Biophysics, 1974, 161, 248-259.	3.0	56
27	Evidence for a malarial parasite interaction site on the major transmembrane protein of the human erythrocyte. Science, 1985, 228, 75-77.	12.6	54
28	Ceramide di- and trihexosides of wheat flour. Biochemistry, 1974, 13, 2837-2843.	2.5	53
29	Chitin in the epidermal cuticle of a vertebrate (Paralipophrys trigloides, Blenniidae, Teleostei). Experientia, 1993, 49, 317-319.	1.2	51
30	Fast atom bombardment mass spectrometry of low temperature chloroaluminate and chlorogallate melts. Analytical Chemistry, 1988, 60, 2228-2232.	6.5	50
31	Oligosaccharides accumulated in the kidney of a goat with \hat{l}^2 -mannosidosis: Mass spectrometry of intact permethylated derivatives. Archives of Biochemistry and Biophysics, 1981, 211, 485-493.	3.0	47
32	Steryl glucosides in Phaseolus aureus. Use of gas-liquid chromatography and mass spectrometry for structural identification. Biochemistry, 1971, 10, 2547-2553.	2.5	46
33	Enhancement of detection for partially methylated alditol acetates by chemical ionization mass spectrometry. Analytical Biochemistry, 1981, 116, 383-388.	2.4	46
34	Inhibition of Glycosylation by Amphomycin and Sugar Nucleotide Analogs PP36 and PP55 Indicates That Haloferax volcanii 1²-Glucosylates Both Glycoproteins and Glycolipids through Lipid-Linked Sugar Intermediates: Evidence for Three Novel Glycoproteins and a Novel Sulfated Dihexosyl-Archaeol Glycolpid. Archives of Biochemistry and Biophysics, 1995, 319, 355-364.	3.0	46
35	Naphthalene in Formosan Subterranean Termite Carton Nests. Journal of Agricultural and Food Chemistry, 1998, 46, 2337-2339.	5.2	45
36	Comparative effects of vetiver oil, nootkatone and disodium octaborate tetrahydrate on Coptotermes formosanus and its symbiotic fauna. Pest Management Science, 2003, 59, 58-68.	3.4	44

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37	Cell surface ligands for rotavirus: Mouse intestinal glycolipids and synthetic carbohydrate analogs. Virology, 1992, 190, 794-805.	2.4	35
38	Determination of linkage position and anomeric configuration in Hex-Fuc disaccharides using electrospray ionization tandem mass spectrometry. Rapid Communications in Mass Spectrometry, 2004, 18, 1947-1955.	1.5	34
39	Seasonal Variation of Juvenile Hormone Titers of the Formosan Subterranean Termite, <i>Coptotermes formosanus </i> (Rhinotermitidae). Environmental Entomology, 2005, 34, 557-562.	1.4	34
40	[13] Inositol-containing sphingolipids. Methods in Enzymology, 1987, 138, 186-195.	1.0	32
41	Effects of Temperature and Nutrition on Juvenile Hormone Titers of <1>Coptotermes formosanus 1 (Isoptera: Rhinotermitidae). Annals of the Entomological Society of America, 2005, 98, 732-737.	2.5	32
42	Incremented alkyl derivatives enhance collision induced glycosidic bond cleavage in mass spectrometry of disaccharides. Journal of the American Society for Mass Spectrometry, 2003, 14, 63-78.	2.8	31
43	Improving the Detection of Fungi in Eosinophilic Mucin. Otolaryngology - Head and Neck Surgery, 2012, 147, 943-949.	1.9	30
44	Non-reducing terminal linkage position determination in intact and permethylated synthetic oligosaccharides having a penultimate amino sugar: Fast atom bombardment ionization, collisional-induced dissociation and tandem mass spectrometry. Biological Mass Spectrometry, 1991, 20, 505-514.	0.5	29
45	Toxicity and Behavioral Effects of Nootkatone, 1,10-Dihydronootkatone, and Tetrahydronootkatone to the Formosan Subterranean Termite (Isoptera: Rhinotermitidae). Journal of Economic Entomology, 2004, 97, 102-111.	1.8	29
46	Developmental study of human fetal placental fibronectin: Alterations in carbohydrates of tissue fibronectin during gestation. Archives of Biochemistry and Biophysics, 1987, 252, 1-6.	3.0	27
47	Thioglycosides Are Efficient Metabolic Decoys of Glycosylation that Reduce Selectin Dependent Leukocyte Adhesion. Cell Chemical Biology, 2018, 25, 1519-1532.e5.	5.2	27
48	Trehalose-based oligosaccharides isolated from the cytoplasm of Mycobacterium smegmatis. FEBS Journal, 2002, 269, 3142-3149.	0.2	26
49	Structure–Activity of Valencenoid Derivatives and Their Repellence to the Formosan Subterranean Termite. Journal of Chemical Ecology, 2003, 29, 2695-2701.	1.8	26
50	Dolichyl-phosphomannose synthase from the Archae Thermoplasma acidophilum. Glycobiology, 1996, 6, 811-816.	2.5	25
51	Physiology of crapemyrtle bark scale, Acanthococcus lagerstroemiae (Kuwana), associated with seasonally altered cold tolerance. Journal of Insect Physiology, 2019, 112, 1-8.	2.0	25
52	[9] Covalent attachment of glycolipids to solid supports and macromolecules. Methods in Enzymology, 1978, 50, 137-140.	1.0	23
53	Carbohydrate structure of the major glycopeptide from human cold-insoluble globulin. Journal of Supramolecular Structure, 1979, 11, 391-399.	2.3	23
54	Zymogram with Remazol brilliant blue-labeled Micrococcus lysodeikticus cells for the detection of lysozymes: example of a new lysozyme activity in Formosan termite defense secretions. Analytical Biochemistry, 2003, 312, 73-76.	2.4	23

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55	Isolation and Identification of 2-Phenoxyethanol from a Ballpoint Pen Ink as a Trail-Following Substance of Coptotermes formosanus Shiraki and Reticulitermes sp Journal of Entomological Science, 1998, 33, 97-105.	0.3	23
56	Germination of Various Weed Species in Response to Vetiver Oil and Nootkatone. Weed Technology, 2004, 18, 263-267.	0.9	22
57	Screening Method for Inhibitors Against Formosan Subterranean Termite \hat{I}^2 -Glucosidases In Vivo. Journal of Economic Entomology, 2005, 98, 41-46.	1.8	22
58	An Efficient and Economic Asymmetric Synthesis of (+)-Nootkatone, Tetrahydronootkatone, and Derivatives. Organic Letters, 2009, 11, 3530-3533.	4.6	22
59	[29] Glycoconjugates: Overview and strategy. Methods in Enzymology, 1990, 193, 539-553.	1.0	20
60	Thermostable, Salt Tolerant, Wide pH Range Novel Chitobiase from Vibrio parahemolyticus: Isolation, Characterization, Molecular Cloning, and Expression1. Journal of Biochemistry, 1992, 112, 163-167.	1.7	20
61	Linkage position determination in a novel set of permethylated neutral trisaccharides by collisional-induced dissociation and tandem mass spectrometry. Biological Mass Spectrometry, 1992, 21, 479-485.	0.5	20
62	Title is missing!. Journal of Chemical Ecology, 1999, 25, 817-824.	1.8	20
63	Lower Doses of Fructose Extend Lifespan in <i>Caenorhabditis elegans</i> . Journal of Dietary Supplements, 2017, 14, 264-277.	2.6	20
64	Chemistry of Human Erythrocyte Polylactosamine Glycopeptides (Erythroglycans) as Related to ABH Blood Group Antigenic Determinants. Advances in Experimental Medicine and Biology, 1988, 228, 331-347.	1.6	20
65	Effects of Nootkatone and a Borate Compound on Formosan Subterranean Termite (Isoptera:) Tj ETQq1 1 0.784	1314.rgBT 0.3	/Overlock 10
66	Monoglucosyloxyoctadecenoic acid, a glycolipid from Aspergillus niger. Biochemistry, 1972, 11, 2267-2271.	2.5	19
67	Biosynthesis and structure of glycosyl diglycerides, steryl glucosides, and acylated steryl glucosides. Lipids, 1975, 10, 427-436.	1.7	19
68	Phosphorous-containing glycosphingolipids. Chemistry and Physics of Lipids, 1986, 42, 129-135.	3.2	18
69	Vetiver oil and nootkatone effects on the growth of pea and citrus. Industrial Crops and Products, 2006, 23, 327-332.	5.2	18
70	Conformational control of selectivity in the dienone–phenol rearrangement. Tetrahedron Letters, 2007, 48, 6590-6593.	1.4	17
71	Novel gaseous polyatomic binary and ternary lanthanide oxides. Inorganica Chimica Acta, 1988, 141, 131-138.	2.4	15
72	Purification of Acetyllactosamine-Specific Tomato Lectin by Erythroglycan-Sepharose Affinity Chromatography. Preparative Biochemistry and Biotechnology, 1989, 19, 341-350.	0.5	13

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73	Chitovibrin: a chitin-binding lectin from Vibrio parahemolyticus. Glycoconjugate Journal, 1994, 11, 518-526.	2.7	13
74	Potential use of domestic cat (Felis catus) urinary extracts for manipulating the behavior of free-roaming cats and wild small felids. Applied Animal Behaviour Science, 2017, 196, 52-60.	1.9	13
75	Duodenal Bile Acids Among Children. Journal of Pediatric Gastroenterology and Nutrition, 1987, 6, 686-696.	1.8	12
76	Novel free ceramides as components of the soldier defense gland of the Formosan subterranean termite (Coptotermes formosanus). Journal of Lipid Research, 2007, 48, 656-664.	4.2	12
77	Glycophosphoceramides from Plants. ACS Symposium Series, 1980, , 65-78.	0.5	11
78	252Cf plasma-desorption mass spectrometry of lipid a fromEnterobacter agglomerans. Rapid Communications in Mass Spectrometry, 1992, 6, 616-622.	1.5	11
79	Screening Method for Inhibitors Against Formosan Subterranean Termite β-Glucosidases In Vivo. Journal of Economic Entomology, 2005, 98, 41-46.	1.8	11
80	Structural requirements for repellency: norsesquiterpenes and sesquiterpenoid derivatives of nootkatone against the Formosan subterranean termite (<i>lsoptera: Rhinotermitidae</i>). Pest Management Science, 2010, 66, 875-878.	3.4	11
81	Dietary Plant Lectins Appear to Be Transported from the Gut to Gain Access to and Alter Dopaminergic Neurons of Caenorhabditis elegans, a Potential Etiology of Parkinson's Disease. Frontiers in Nutrition, 2016, 3, 7.	3.7	11
82	High ?-amylase activity in the syncytiotrophoblastic cells of first-trimester human placentas. Journal of Cellular Biochemistry, 1983, 22, 47-54.	2.6	10
83	Intrinsic tryptophan fluorescence measurements suggest that polylactosaminyl glycosylation affects the protein conformation of the gelatin-binding domain from human placental fibronectin. FEBS Journal, 1990, 189, 509-516.	0.2	10
84	Synthesis of four novel trisaccharides by induction of loose acceptor specificity in $Gall^231a^4$ 4 transferase (EC 2.4.1.22): $Galp(l^21a^4)Glcp(X)Glc$ where $X = l^21a^4$ 3: l^21a^4 4: l^21a^4 6: l^21a^4 4. $Glycobiology$, 199	92, ² 2 ⁵ ,161-	16 <mark>8</mark> .
85	[13] Tandem mass spectrometry of oligosaccharides. Methods in Enzymology, 1989, 179, 157-164.	1.0	9
86	Novel hyperglycosylated weak gelatin-binding fibronectin from human fetal placenta. Fractionation of a high poly(N-acetyllactosamine) fragment by tomato lectin affinity chromatography. FEBS Journal, 1990, 188, 67-71.	0.2	9
87	The sesquiterpenoid nootkatone and the absolute configuration of a dibromo derivative. Acta Crystallographica Section C: Crystal Structure Communications, 2003, 59, o254-o256.	0.4	9
88	Survivorship, tunneling and feeding behaviors ofCoptotermes formosanus(Isoptera: Rhinotermitidae) in response to 2′-acetonaphthone-treated sand. Pest Management Science, 2004, 60, 746-754.	3.4	9
89	Liquid chromatography–electrospray ionization-mass spectrometric quantitation of juvenile hormone III in whole body extracts of the Formosan subterranean termite. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2009, 877, 3175-3180.	2.3	9
90	Synthesis and Characterization of Complex Mixtures Consisting of Cyclic and Linear Polyamides from Ethyl <i>Bis</i> Ketal Galactarates. Journal of Macromolecular Science - Pure and Applied Chemistry, 2013, 50, 940-952.	2.2	9

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91	Enhancing MSn mass spectrometry strategy for carbohydrate analysis: A b2 ion spectral library. Journal of Proteomics, 2015, 112, 224-249.	2.4	9
92	Discovering Volatile Chemicals from Window Weatherstripping through Solid-Phase Microextraction/Gas Chromatography–Mass Spectrometry. Journal of Chemical Education, 2017, 94, 1784-1789.	2.3	9
93	A Kazal-Type Serine Protease Inhibitor from the Defense Gland Secretion of the Subterranean Termite Coptotermes formosanus Shiraki. PLoS ONE, 2015, 10, e0125376.	2.5	9
94	Evaluation of Vetiver Grass Root Growth, Oil Distribution, and Repellency Against Formosan Subterranean Termites. Hortscience: A Publication of the American Society for Hortcultural Science, 2006, 41, 167-171.	1.0	9
95	Polylactosamines are not obligate receptors for invasion of Plasmodium falciparum malaria as shown in HEMPAS Variant II-gal- erythrocytes. Glycobiology, 1994, 4, 903-908.	2.5	8
96	[24] Preparation of high molecular weight glycopeptides and oligosaccharides (erythroglycan) from Human erythrocytes. Methods in Enzymology, 1982, 83, 311-320.	1.0	7
97	[22] Preparation of placental (fetal tissue) fibronectin and its carbohydrates. Methods in Enzymology, 1987, 144, 420-429.	1.0	6
98	Fatty Acids Differ Significantly in Castes of the Formosan Subterranean Termite (Isoptera:) Tj ETQq0 0 0 rgBT /Ove	erlock 10 T	f ₅ 0 462 Td
99	The case for re-examining glycosylation inhibitors, mimetics, primers and glycosylation decoys as antivirals and anti-inflammatories in COVID19. Glycobiology, 2020, 30, 763-767.	2.5	6
100	Occurrence of an unusual amount of an odd-numbered fatty acid in glycosphingolipids from human cataracts. Current Eye Research, 1987, 6, 1361-1367.	1.5	5
101	CHEMICAL IONIZATION GC-MASS SPECTROMETRY IN THE STRUCTURAL ANALYSIS OF SACCHARIDE CHAINS. , 1980, , 193-198.		5
102	Synthesis of sterically crowded derivatives of anomeric pairs of d-glucose disaccharides. Carbohydrate Research, 2005, 340, 2055-2059.	2.3	4
103	Toxic Effects of 2-Deoxy-d-Galactose on Coptotermes formosanus (Isoptera: Rhinotermitidae) and Symbionts. Journal of Economic Entomology, 2010, 103, 1647-1656.	1.8	4
104	Cyclohexylamine inexplicably induces antennae loss in Formosan subterranean termites (Coptotermes) Tj ETQq0 (Management Science, 2017, 73, 2039-2047.	0 0 rgBT /C 3.4	Overlock 10 ⁻ 4
105	Effects of Menadione on Survival, Feeding, and Tunneling Activity of the Formosan Subterranean Termite. Insects, 2021, 12, 1109.	2.2	3
106	Hydrogenation Selectivity of the Bicyclo [4.4.0] decane Ring System of Valencanes. Synlett, 2010, 2010, 445-448.	1.8	2
107	<l>myo</l>-Inositol and Phytate Are Toxic to Formosan Subterranean Termites (Isoptera:) Tj ETQq $1\ 1\ 0$.	.784314 rg 1.8	gBT /Overloc
108	Sugar-Based Polyamides: Self-Organization in Strong Polar Organic Solvents. Biomacromolecules, 2015, 16, 3062-3072.	5.4	2

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109	[62] UDP-glucose: \hat{l}^2 -sitosterol glucosyltransferase of developing cotton seeds. Methods in Enzymology, 1972, 28, 478-482.	1.0	1
110	Catalytically Inactive Endoglycosidases as Microbial Diagnostic Reagents: Chitinases and Lysozymes as Fungal and Bacterial Capture/Label Agents., 2007,, 373-384.		1
111	Professor Sen-itiroh Hakomori (1929–2020): A tribute to a remarkable glycobiologist, mentor and friend!. Glycobiology, 2021, 31, 708-712.	2.5	1
112	Terpene-Induced Morphological Changes to Exoskeleton of Formosan Subterranean Termites (Isoptera: Rhinotermitidae): Toxic Effects of cis-nerol. Journal of Entomological Science, 2003, 38, 225-233.	0.3	1
113	Structure-activity relationships of naphthalene and 10 related compounds on Coptotermes formosanus (Isoptera: Rhinotermitidae). ACS Symposium Series, 2010, , 19-39.	0.5	O
114	Toxicity and Inhibition of Feeding and Tunneling Response of Naphthalene and 10 Derivatives on the Formosan Subterranean Termite (Isoptera: Rhinotermitidae). Journal of Economic Entomology, 2010, 103, 2132-2139.	1.8	0
115	Increased Search Tunnel Formation by Coptotermes formosanus Shiraki (Isoptera: Rhinotermitidae) in 2-Phenoxyethanol Treated Sand. Journal of Entomological Science, 2005, 40, 327-336.	0.3	O
116	GLYCOSPHINGOLIPIDS WITH BLOOD GROUP A, H, AND I ACTIVITY AND THEIR CHANGES ASSOCIATED WITH ONTOGENESIS AND ONCOGENESIS. , 1977, , 1215-1227.		0
117	STUDIES ON THE MAJOR CARBOHYDRATE FROM HUMAN PLACENTAL CELLULAR FIBRONECTIN. , 1982, , 247-251		0
118	Glycosaminoglycans and Related Structures as Potential Inhibitors for Erythrocyte Infection by Plasmodium Falciparum Malaria., 1996,, 163-170.		0