

Rolf G Boot

List of Publications by Year in descending order

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91
papers

8,257
citations

57758

44
h-index

45317

90
g-index

93
all docs

93
docs citations

93
times ranked

6663
citing authors

#	ARTICLE	IF	CITATIONS
1	HEPES-buffering of bicarbonate-containing culture medium perturbs lysosomal glucocerebrosidase activity. <i>Journal of Cellular Biochemistry</i> , 2022, 123, 893-905.	2.6	2
2	Consequences of excessive glucosylsphingosine in glucocerebrosidase-deficient zebrafish.. <i>Journal of Lipid Research</i> , 2022, , 100199.	4.2	9
3	Human glucocerebrosidase mediates formation of xylosyl-cholesterol by β -xylosidase and transxylosidase reactions. <i>Journal of Lipid Research</i> , 2021, 62, 100018.	4.2	5
4	Fabry Disease: Molecular Basis, Pathophysiology, Diagnostics and Potential Therapeutic Directions. <i>Biomolecules</i> , 2021, 11, 271.	4.0	50
5	Xylose-Configured Cyclophellitols as Selective Inhibitors for Glucocerebrosidase. <i>ChemBioChem</i> , 2021, 22, 3090-3098.	2.6	4
6	Manno- <i>epi</i> -cyclophellitols Enable Activity-Based Protein Profiling of Human β -Mannosidases and Discovery of New Golgi Mannosidase II Inhibitors. <i>Journal of the American Chemical Society</i> , 2020, 142, 13021-13029.	13.7	24
7	Lyso-glycosphingolipids: presence and consequences. <i>Essays in Biochemistry</i> , 2020, 64, 565-578.	4.7	37
8	Functionalized Cyclophellitols Are Selective Glucocerebrosidase Inhibitors and Induce a Bona Fide Neuropathic Gaucher Model in Zebrafish. <i>Journal of the American Chemical Society</i> , 2019, 141, 4214-4218.	13.7	28
9	Role of β -glucosidase 2 in aberrant glycosphingolipid metabolism: model of glucocerebrosidase deficiency in zebrafish. <i>Journal of Lipid Research</i> , 2019, 60, 1851-1867.	4.2	29
10	Glycoprotein Non-Metastatic Protein B: An Emerging Biomarker for Lysosomal Dysfunction in Macrophages. <i>International Journal of Molecular Sciences</i> , 2019, 20, 66.	4.1	58
11	Chemical Proteomic Analysis of Serine Hydrolase Activity in Niemann-Pick Type C Mouse Brain. <i>Frontiers in Neuroscience</i> , 2018, 12, 440.	2.8	11
12	Stabilization of Glucocerebrosidase by Active Site Occupancy. <i>ACS Chemical Biology</i> , 2017, 12, 1830-1841.	3.4	24
13	A Specific Activity-Based Probe to Monitor Family GH59 Galactosylceramidase, the Enzyme Deficient in Krabbe Disease. <i>ChemBioChem</i> , 2017, 18, 402-412.	2.6	18
14	A Fluorescence Polarization Activity-Based Protein Profiling Assay in the Discovery of Potent, Selective Inhibitors for Human Nonlysosomal Glucosylceramidase. <i>Journal of the American Chemical Society</i> , 2017, 139, 14192-14197.	13.7	50
15	Human Alpha Galactosidases Transiently Produced in <i>Nicotiana benthamiana</i> Leaves: New Insights in Substrate Specificities with Relevance for Fabry Disease. <i>Frontiers in Plant Science</i> , 2017, 8, 1026.	3.6	12
16	Investigations on therapeutic glucocerebrosidases through paired detection with fluorescent activity-based probes. <i>PLoS ONE</i> , 2017, 12, e0170268.	2.5	9
17	Elevation of glycoprotein nonmetastatic melanoma protein B in type 1 Gaucher disease patients and mouse models. <i>FEBS Open Bio</i> , 2016, 6, 902-913.	2.3	59
18	Lysosomal glycosphingolipid catabolism by acid ceramidase: formation of glycosphingoid bases during deficiency of glycosidases. <i>FEBS Letters</i> , 2016, 590, 716-725.	2.8	106

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19	Detection of Active Mammalian GH31 β -Glucosidases in Health and Disease Using In-Class, Broad-Spectrum Activity-Based Probes. <i>ACS Central Science</i> , 2016, 2, 351-358.	11.3	45
20	Endo- β -Glucosidase Tag Allows Dual Detection of Fusion Proteins by Fluorescent Mechanism-Based Probes and Activity Measurement. <i>ChemBioChem</i> , 2016, 17, 1698-1704.	2.6	2
21	Hydrophobic Interactions Contribute to Conformational Stabilization of Endoglycoceramidase II by Mechanism-Based Probes. <i>Biochemistry</i> , 2016, 55, 4823-4835.	2.5	6
22	Glucosylated cholesterol in mammalian cells and tissues: formation and degradation by multiple cellular β -glucosidases. <i>Journal of Lipid Research</i> , 2016, 57, 451-463.	4.2	61
23	Increased YKL-40 and Chitotriosidase in Asthma and Chronic Obstructive Pulmonary Disease. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2016, 193, 131-142.	5.6	107
24	Visualization of Active Glucocerebrosidase in Rodent Brain with High Spatial Resolution following In Situ Labeling with Fluorescent Activity Based Probes. <i>PLoS ONE</i> , 2015, 10, e0138107.	2.5	28
25	Mass spectrometric quantification of glucosylsphingosine in plasma and urine of type 1 Gaucher patients using an isotope standard. <i>Blood Cells, Molecules, and Diseases</i> , 2015, 54, 307-314.	1.4	54
26	Development of an acid ceramidase activity-based probe. <i>Chemical Communications</i> , 2015, 51, 6161-6163.	4.1	20
27	In vitro and in vivo comparative and competitive activity-based protein profiling of GH29 β -fucosidases. <i>Chemical Science</i> , 2015, 6, 2782-2789.	7.4	44
28	Reducing GBA2 Activity Ameliorates Neuropathology in Niemann-Pick Type C Mice. <i>PLoS ONE</i> , 2015, 10, e0135889.	2.5	61
29	A Sensitive Gel-based Method Combining Distinct Cyclophellitol-based Probes for the Identification of Acid/Base Residues in Human Retaining β -Glucosidases. <i>Journal of Biological Chemistry</i> , 2014, 289, 35351-35362.	3.4	20
30	Gaucher disease and Fabry disease: New markers and insights in pathophysiology for two distinct glycosphingolipidoses. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2014, 1841, 811-825.	2.4	92
31	Design and synthesis of 4-O-alkyl-chitobiosyl-4-methylumbelliferone as human chitinase fluorogenic substrates. <i>Carbohydrate Research</i> , 2014, 399, 26-37.	2.3	1
32	Potent and Selective Activity-Based Probes for GH27 Human Retaining β -Galactosidases. <i>Journal of the American Chemical Society</i> , 2014, 136, 11622-11625.	13.7	45
33	Exploring functional cyclophellitol analogues as human retaining beta-glucosidase inhibitors. <i>Organic and Biomolecular Chemistry</i> , 2014, 12, 7786-7791.	2.8	24
34	Phenotype diversity in type 1 Gaucher disease: discovering the genetic basis of Gaucher disease/hematologic malignancy phenotype by individual genome analysis. <i>Blood</i> , 2012, 119, 4731-4740.	1.4	39
35	Novel Activity-Based Probes for Broad-Spectrum Profiling of Retaining β -Exoglucosidases In Situ and In Vivo. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 12529-12533.	13.8	104
36	Cell surface associated glycohydrolases in normal and Gaucher disease fibroblasts. <i>Journal of Inherited Metabolic Disease</i> , 2012, 35, 1081-1091.	3.6	35

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37	Synthesis of Eight 1-Deoxynojirimycin Isomers from a Single Chiral Cyanohydrin. <i>European Journal of Organic Chemistry</i> , 2012, 2012, 3437-3446.	2.4	13
38	Assessment of Partially Deoxygenated Deoxynojirimycin Derivatives as Glucosylceramide Synthase Inhibitors. <i>ACS Medicinal Chemistry Letters</i> , 2011, 2, 519-522.	2.8	23
39	Identification of Potent and Selective Glucosylceramide Synthase Inhibitors from a Library of N-Alkylated Iminosugars. <i>ACS Medicinal Chemistry Letters</i> , 2011, 2, 119-123.	2.8	32
40	The cytosolic β -glucosidase GBA3 does not influence type 1 Gaucher disease manifestation. <i>Blood Cells, Molecules, and Diseases</i> , 2011, 46, 19-26.	1.4	45
41	Biomarkers in the diagnosis of lysosomal storage disorders: proteins, lipids, and inhibodies. <i>Journal of Inherited Metabolic Disease</i> , 2011, 34, 605-619.	3.6	93
42	A Concise Synthesis of Globotriaosylsphingosine. <i>European Journal of Organic Chemistry</i> , 2011, 2011, 1652-1663.	2.4	17
43	Activity-Based Profiling of Retaining β -Glucosidases: A Comparative Study. <i>ChemBioChem</i> , 2011, 12, 1263-1269.	2.6	32
44	Elevated plasma glucosylsphingosine in Gaucher disease: relation to phenotype, storage cell markers, and therapeutic response. <i>Blood</i> , 2011, 118, e118-e127.	1.4	224
45	Glycosphingolipids and Insulin Resistance. <i>Advances in Experimental Medicine and Biology</i> , 2011, 721, 99-119.	1.6	48
46	Differential expression of the EGF-TM7 family members CD97 and EMR2 in lipid-laden macrophages in atherosclerosis, multiple sclerosis and Gaucher disease. <i>Immunology Letters</i> , 2010, 129, 64-71.	2.5	20
47	Curdlan-mediated regulation of human phagocyte-specific chitotriosidase. <i>FEBS Letters</i> , 2010, 584, 3165-3169.	2.8	14
48	A Preparative Synthesis of Human Chitinase Fluorogenic Substrate (4-Deoxychitobiosyl)-4-methylumbelliferone. <i>European Journal of Organic Chemistry</i> , 2010, 2010, 2565-2570.	2.4	5
49	Ultrasensitive in situ visualization of active glucocerebrosidase molecules. <i>Nature Chemical Biology</i> , 2010, 6, 907-913.	8.0	196
50	Dual-Action Lipophilic Iminosugar Improves Glycemic Control in Obese Rodents by Reduction of Visceral Glycosphingolipids and Buffering of Carbohydrate Assimilation. <i>Journal of Medicinal Chemistry</i> , 2010, 53, 689-698.	6.4	90
51	Synthesis of <i>l</i> -1-Deoxynojirimycin, <i>d</i> -1-Deoxynojirimycin, and <i>galacto</i> -1-Deoxynojirimycin from a Single Chiral Cyanohydrin. <i>Organic Letters</i> , 2010, 12, 3957-3959.	4.6	35
52	Plasma chitotriosidase and CCL18 as surrogate markers for granulomatous macrophages in sarcoidosis. <i>Clinica Chimica Acta</i> , 2010, 411, 31-36.	1.1	65
53	Differential Enzymatic Activity of Common Haplotypic Versions of the Human Acidic Mammalian Chitinase Protein. <i>Journal of Biological Chemistry</i> , 2009, 284, 19650-19658.	3.4	54
54	Reduction of glycosphingolipid biosynthesis stimulates biliary lipid secretion in mice. <i>Hepatology</i> , 2009, 49, 637-645.	7.3	19

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55	Modulation of glycosphingolipid metabolism significantly improves hepatic insulin sensitivity and reverses hepatic steatosis in mice. <i>Hepatology</i> , 2009, 50, 1431-1441.	7.3	79
56	Glycosphingolipids Nature, Function, and Pharmacological Modulation. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 8848-8869.	13.8	245
57	Common G102S polymorphism in chitotriosidase differentially affects activity towards 4-methylumbelliferyl substrates. <i>FEBS Journal</i> , 2009, 276, 5678-5688.	4.7	33
58	Detection of chitinase activity by 2-aminobenzoic acid labeling of chito-oligosaccharides. <i>Analytical Biochemistry</i> , 2009, 384, 191-193.	2.4	8
59	Gaucher disease: a model disorder for biomarker discovery. <i>Expert Review of Proteomics</i> , 2009, 6, 411-419.	3.0	31
60	A single histidine residue modulates enzymatic activity in acidic mammalian chitinase. <i>FEBS Letters</i> , 2008, 582, 931-935.	2.8	18
61	Biomarkers for lysosomal storage disorders: identification and application as exemplified by chitotriosidase in Gaucher disease. <i>Acta Paediatrica, International Journal of Paediatrics</i> , 2008, 97, 7-14.	1.5	60
62	Chitotriosidase is the primary active chitinase in the human lung and is modulated by genotype and smoking habit. <i>Journal of Allergy and Clinical Immunology</i> , 2008, 122, 944-950.e3.	2.9	99
63	Elevated globotriaosylsphingosine is a hallmark of Fabry disease. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 2812-2817.	7.1	597
64	The Glucosylceramide Synthase Inhibitor N-(5-Adamantane-1-yl-methoxy-pentyl)-deoxynojirimycin Induces Sterol Regulatory Element-Binding Protein-Regulated Gene Expression and Cholesterol Synthesis in HepG2 Cells. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2008, 326, 849-855.	2.5	15
65	Identification of the Non-lysosomal Glucosylceramidase as β -Glucosidase 2. <i>Journal of Biological Chemistry</i> , 2007, 282, 1305-1312.	3.4	156
66	Evolution of Mammalian Chitinase(-Like) Members of Family 18 Glycosyl Hydrolases. <i>Genetics</i> , 2007, 177, 959-970.	2.9	248
67	N-Azidoacetylmannosamine-mediated chemical tagging of gangliosides. <i>Journal of Lipid Research</i> , 2007, 48, 1417-1421.	4.2	23
68	Increased plasma macrophage inflammatory protein (MIP)-1 α and MIP-1 β levels in type 1 Gaucher disease. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2007, 1772, 788-796.	3.8	96
69	TLR and NOD2 dependent regulation of human phagocyte specific chitotriosidase. <i>FEBS Letters</i> , 2007, 581, 5389-5395.	2.8	34
70	Beyond the Primary Biochemical Defect in Type 1 Gaucher Disease. <i>Clinical Therapeutics</i> , 2007, 29, S77-S78.	2.5	0
71	The Biology of the Gaucher Cell: The Cradle of Human Chitinases. <i>International Review of Cytology</i> , 2006, 252, 71-128.	6.2	84
72	Substrate reduction therapy of glycosphingolipid storage disorders. <i>Journal of Inherited Metabolic Disease</i> , 2006, 29, 449-456.	3.6	110

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73	CCL18: A urinary marker of Gaucher cell burden in Gaucher patients. <i>Journal of Inherited Metabolic Disease</i> , 2006, 29, 564-571.	3.6	29
74	Myelin-laden macrophages are anti-inflammatory, consistent with foam cells in multiple sclerosis. <i>Brain</i> , 2006, 129, 517-526.	7.6	330
75	Specificity and Affinity of Natural Product Cyclopentapeptide Inhibitors against <i>A. fumigatus</i> , Human, and Bacterial Chitinases. <i>Chemistry and Biology</i> , 2005, 12, 65-76.	6.0	109
76	Marked Differences in Tissue-specific Expression of Chitinases in Mouse and Man. <i>Journal of Histochemistry and Cytochemistry</i> , 2005, 53, 1283-1292.	2.5	127
77	Characterization of human phagocyte-derived chitotriosidase, a component of innate immunity. <i>International Immunology</i> , 2005, 17, 1505-1512.	4.0	272
78	Clinical evaluation of chemokine and enzymatic biomarkers of Gaucher disease. <i>Blood Cells, Molecules, and Diseases</i> , 2005, 35, 259-267.	1.4	111
79	Gaucher Cells Demonstrate a Distinct Macrophage Phenotype and Resemble Alternatively Activated Macrophages. <i>American Journal of Clinical Pathology</i> , 2004, 122, 359-369.	0.7	239
80	Marked elevation of the chemokine CCL18/PARC in Gaucher disease: a novel surrogate marker for assessing therapeutic intervention. <i>Blood</i> , 2004, 103, 33-39.	1.4	297
81	Biochemistry of glycosphingolipid storage disorders: implications for therapeutic intervention. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2003, 358, 905-914.	4.0	67
82	Transglycosidase Activity of Chitotriosidase. <i>Journal of Biological Chemistry</i> , 2003, 278, 40911-40916.	3.4	138
83	Crystal Structures of Allosamidin Derivatives in Complex with Human Macrophage Chitinase. <i>Journal of Biological Chemistry</i> , 2003, 278, 20110-20116.	3.4	71
84	Structure of Human Chitotriosidase. <i>Journal of Biological Chemistry</i> , 2002, 277, 25537-25544.	3.4	185
85	Identification of a Novel Acidic Mammalian Chitinase Distinct from Chitotriosidase. <i>Journal of Biological Chemistry</i> , 2001, 276, 6770-6778.	3.4	442
86	Strong Induction of Members of the Chitinase Family of Proteins in Atherosclerosis. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 1999, 19, 687-694.	2.4	301
87	Chitotriosidase, a chitinase, and the 39 kDa human cartilage glycoprotein, a chitin-binding lectin, are homologues of family 18 glycosyl hydrolases secreted by human macrophages. <i>FEBS Journal</i> , 1998, 251, 504-509.	0.2	336
88	The Human Chitotriosidase Gene. <i>Journal of Biological Chemistry</i> , 1998, 273, 25680-25685.	3.4	360
89	Synthesis, Sorting, and Processing into Distinct Isoforms of Human Macrophage Chitotriosidase. <i>FEBS Journal</i> , 1997, 244, 279-285.	0.2	149
90	Glucocerebrosidase genotype of Gaucher patients in The Netherlands: Limitations in prognostic value. <i>Human Mutation</i> , 1997, 10, 348-358.	2.5	37

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91	Cloning of a cDNA Encoding Chitotriosidase, a Human Chitinase Produced by Macrophages. Journal of Biological Chemistry, 1995, 270, 26252-26256.	3.4	351