Rolf G Boot

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5760824/publications.pdf

Version: 2024-02-01

91	8,257	57758	45317
papers	citations	44 h-index	90 g-index

93	93	93	6663
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Elevated globotriaosylsphingosine is a hallmark of Fabry disease. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 2812-2817.	7.1	597
2	Identification of a Novel Acidic Mammalian Chitinase Distinct from Chitotriosidase. Journal of Biological Chemistry, 2001, 276, 6770-6778.	3.4	442
3	The Human Chitotriosidase Gene. Journal of Biological Chemistry, 1998, 273, 25680-25685.	3.4	360
4	Cloning of a cDNA Encoding Chitotriosidase, a Human Chitinase Produced by Macrophages. Journal of Biological Chemistry, 1995, 270, 26252-26256.	3.4	351
5	Chitotriosidase, a chitinase, and the 39â€kDa human cartilage glycoprotein, a chitinâ€binding lectin, are homologues of family 18 glycosyl hydrolases secreted by human macrophages. FEBS Journal, 1998, 251, 504-509.	0.2	336
6	Myelin-laden macrophages are anti-inflammatory, consistent with foam cells in multiple sclerosis. Brain, 2006, 129, 517-526.	7.6	330
7	Strong Induction of Members of the Chitinase Family of Proteins in Atherosclerosis. Arteriosclerosis, Thrombosis, and Vascular Biology, 1999, 19, 687-694.	2.4	301
8	Marked elevation of the chemokine CCL18/PARC in Gaucher disease: a novel surrogate marker for assessing therapeutic intervention. Blood, 2004, 103, 33-39.	1.4	297
9	Characterization of human phagocyte-derived chitotriosidase, a component of innate immunity. International Immunology, 2005, 17, 1505-1512.	4.0	272
10	Evolution of Mammalian Chitinase(-Like) Members of Family 18 Glycosyl Hydrolases. Genetics, 2007, 177, 959-970.	2.9	248
11	Glycosphingolipidsâ€”Nature, Function, and Pharmacological Modulation. Angewandte Chemie - International Edition, 2009, 48, 8848-8869.	13.8	245
12	Gaucher Cells Demonstrate a Distinct Macrophage Phenotype and Resemble Alternatively Activated Macrophages. American Journal of Clinical Pathology, 2004, 122, 359-369.	0.7	239
13	Elevated plasma glucosylsphingosine in Gaucher disease: relation to phenotype, storage cell markers, and therapeutic response. Blood, 2011, 118, e118-e127.	1.4	224
14	Ultrasensitive in situ visualization of active glucocerebrosidase molecules. Nature Chemical Biology, 2010, 6, 907-913.	8.0	196
15	Structure of Human Chitotriosidase. Journal of Biological Chemistry, 2002, 277, 25537-25544.	3.4	185
16	Identification of the Non-lysosomal Glucosylceramidase as Î²-Glucosidase 2. Journal of Biological Chemistry, 2007, 282, 1305-1312.	3.4	156
17	Synthesis, Sorting, and Processing into Distinct Isoforms of Human Macrophage Chitotriosidase. FEBS Journal, 1997, 244, 279-285.	0.2	149
18	Transglycosidase Activity of Chitotriosidase. Journal of Biological Chemistry, 2003, 278, 40911-40916.	3.4	138

#	Article	IF	Citations
19	Marked Differences in Tissue-specific Expression of Chitinases in Mouse and Man. Journal of Histochemistry and Cytochemistry, 2005, 53, 1283-1292.	2.5	127
20	Clinical evaluation of chemokine and enzymatic biomarkers of Gaucher disease. Blood Cells, Molecules, and Diseases, 2005, 35, 259-267.	1.4	111
21	Substrate reduction therapy of glycosphingolipid storage disorders. Journal of Inherited Metabolic Disease, 2006, 29, 449-456.	3.6	110
22	Specificity and Affinity of Natural Product Cyclopentapeptide Inhibitors against A. fumigatus, Human, and Bacterial Chitinases. Chemistry and Biology, 2005, 12, 65-76.	6.0	109
23	Increased YKL-40 and Chitotriosidase in Asthma and Chronic Obstructive Pulmonary Disease. American Journal of Respiratory and Critical Care Medicine, 2016, 193, 131-142.	5.6	107
24	Lysosomal glycosphingolipid catabolism by acid ceramidase: formation of glycosphingoid bases during deficiency of glycosidases. FEBS Letters, 2016, 590, 716-725.	2.8	106
25	Novel Activityâ€Based Probes for Broadâ€Spectrum Profiling of Retaining Î²â€Exoglucosidases Inâ€…Situ and Inâ€…Vivo. Angewandte Chemie - International Edition, 2012, 51, 12529-12533.	13.8	104
26	Chitotriosidase is the primary active chitinase in the human lung and is modulated by genotype and smoking habit. Journal of Allergy and Clinical Immunology, 2008, 122, 944-950.e3.	2.9	99
27	Increased plasma macrophage inflammatory protein (MIP)-1Îą and MIP-1Î² levels in type 1 Gaucher disease. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2007, 1772, 788-796.	3.8	96
28	Biomarkers in the diagnosis of lysosomal storage disorders: proteins, lipids, and inhibodies. Journal of Inherited Metabolic Disease, 2011, 34, 605-619.	3.6	93
29	Gaucher disease and Fabry disease: New markers and insights in pathophysiology for two distinct glycosphingolipidoses. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2014, 1841, 811-825.	2.4	92
30	Dual-Action Lipophilic Iminosugar Improves Glycemic Control in Obese Rodents by Reduction of Visceral Glycosphingolipids and Buffering of Carbohydrate Assimilation. Journal of Medicinal Chemistry, 2010, 53, 689-698.	6.4	90
31	The Biology of the Gaucher Cell: The Cradle of Human Chitinases. International Review of Cytology, 2006, 252, 71-128.	6.2	84
32	Modulation of glycosphingolipid metabolism significantly improves hepatic insulin sensitivity and reverses hepatic steatosis in mice. Hepatology, 2009, 50, 1431-1441.	7.3	79
33	Crystal Structures of Allosamidin Derivatives in Complex with Human Macrophage Chitinase. Journal of Biological Chemistry, 2003, 278, 20110-20116.	3.4	71
34	Biochemistry of glycosphingolipid storage disorders: implications for therapeutic intervention. Philosophical Transactions of the Royal Society B: Biological Sciences, 2003, 358, 905-914.	4.0	67
35	Plasma chitotriosidase and CCL18 as surrogate markers for granulomatous macrophages in sarcoidosis. Clinica Chimica Acta, 2010, 411, 31-36.	1.1	65
36	Glucosylated cholesterol in mammalian cells and tissues: formation and degradation by multiple cellular Î²-glucosidases. Journal of Lipid Research, 2016, 57, 451-463.	4.2	61

#	Article	IF	Citations
37	Reducing GBA2 Activity Ameliorates Neuropathology in Niemann-Pick Type C Mice. PLoS ONE, 2015, 10, e0135889.	2.5	61
38	Biomarkers for lysosomal storage disorders: identification and application as exemplified by chitotriosidase in Gaucher disease. Acta Paediatrica, International Journal of Paediatrics, 2008, 97, 7-14.	1.5	60
39	Elevation of glycoprotein nonmetastatic melanoma protein B in type 1 Gaucher disease patients and mouse models. FEBS Open Bio, 2016, 6, 902-913.	2.3	59
40	Glycoprotein Non-Metastatic Protein B: An Emerging Biomarker for Lysosomal Dysfunction in Macrophages. International Journal of Molecular Sciences, 2019, 20, 66.	4.1	58
41	Differential Enzymatic Activity of Common Haplotypic Versions of the Human Acidic Mammalian Chitinase Protein. Journal of Biological Chemistry, 2009, 284, 19650-19658.	3.4	54
42	Mass spectrometric quantification of glucosylsphingosine in plasma and urine of type 1 Gaucher patients using an isotope standard. Blood Cells, Molecules, and Diseases, 2015, 54, 307-314.	1.4	54
43	A Fluorescence Polarization Activity-Based Protein Profiling Assay in the Discovery of Potent, Selective Inhibitors for Human Nonlysosomal Glucosylceramidase. Journal of the American Chemical Society, 2017, 139, 14192-14197.	13.7	50
44	Fabry Disease: Molecular Basis, Pathophysiology, Diagnostics and Potential Therapeutic Directions. Biomolecules, 2021, 11, 271.	4.0	50
45	Glycosphingolipids and Insulin Resistance. Advances in Experimental Medicine and Biology, 2011, 721, 99-119.	1.6	48
46	The cytosolic Î²-glucosidase GBA3 does not influence type 1 Gaucher disease manifestation. Blood Cells, Molecules, and Diseases, 2011, 46, 19-26.	1.4	45
47	Potent and Selective Activity-Based Probes for GH27 Human Retaining Î±-Galactosidases. Journal of the American Chemical Society, 2014, 136, 11622-11625.	13.7	45
48	Detection of Active Mammalian GH31 Î±-Glucosidases in Health and Disease Using In-Class, Broad-Spectrum Activity-Based Probes. ACS Central Science, 2016, 2, 351-358.	11.3	45
49	In vitro and in vivo comparative and competitive activity-based protein profiling of GH29 Î±-<scp>l</scp>-fucosidases. Chemical Science, 2015, 6, 2782-2789.	7.4	44
50	Phenotype diversity in type 1 Gaucher disease: discovering the genetic basis of Gaucher disease/hematologic malignancy phenotype by individual genome analysis. Blood, 2012, 119, 4731-4740.	1.4	39
51	Glucocerebrosidase genotype of Gaucher patients in The Netherlands: Limitations in prognostic value. Human Mutation, 1997, 10, 348-358.	2.5	37
52	Lyso-glycosphingolipids: presence and consequences. Essays in Biochemistry, 2020, 64, 565-578.	4.7	37
53	Synthesis of <scp>l</scp>-altro-1-Deoxynojirimycin, <scp>d</scp>-allo-1-Deoxynojirimycin, and <scp>d</scp>-galacto-1-Deoxynojirimycin from a Single Chiral Cyanohydrin. Organic Letters, 2010, 12, 3957-3959.	4.6	35
54	Cell surface associated glycohydrolases in normal and Gaucher disease fibroblasts. Journal of Inherited Metabolic Disease, 2012, 35, 1081-1091.	3.6	35

#	Article	IF	Citations
55	TLRâ€•and NOD2â€•dependent regulation of human phagocyteâ€•specific chitotriosidase. FEBS Letters, 2007, 581, 5389-5395.	2.8	34
56	Common G102S polymorphism in chitotriosidase differentially affects activity towards 4â€•methylumbelliferyl substrates. FEBS Journal, 2009, 276, 5678-5688.	4.7	33
57	Identification of Potent and Selective Glucosylceramide Synthase Inhibitors from a Library of N-Alkylated Iminosugars. ACS Medicinal Chemistry Letters, 2011, 2, 119-123.	2.8	32
58	Activityâ€Based Profiling of Retaining Î²â€Glucosidases: A Comparative Study. ChemBioChem, 2011, 12, 1263-1269.	2.6	32
59	Gaucher disease: a model disorder for biomarker discovery. Expert Review of Proteomics, 2009, 6, 411-419.	3.0	31
60	CCL18: A urinary marker of Gaucher cell burden in Gaucher patients. Journal of Inherited Metabolic Disease, 2006, 29, 564-571.	3.6	29
61	Role of Î¼-glucosidase 2 in aberrant glycosphingolipid metabolism: model of glucocerebrosidase deficiency in zebrafish. Journal of Lipid Research, 2019, 60, 1851-1867.	4.2	29
62	Visualization of Active Glucocerebrosidase in Rodent Brain with High Spatial Resolution following In Situ Labeling with Fluorescent Activity Based Probes. PLoS ONE, 2015, 10, e0138107.	2.5	28
63	Functionalized Cyclophellitols Are Selective Glucocerebrosidase Inhibitors and Induce a Bona Fide Neuropathic Gaucher Model in Zebrafish. Journal of the American Chemical Society, 2019, 141, 4214-4218.	13.7	28
64	Exploring functional cyclophellitol analogues as human retaining beta-glucosidase inhibitors. Organic and Biomolecular Chemistry, 2014, 12, 7786-7791.	2.8	24
65	Stabilization of Glucocerebrosidase by Active Site Occupancy. ACS Chemical Biology, 2017, 12, 1830-1841.	3.4	24
66	Manno-epi-cyclophellitols Enable Activity-Based Protein Profiling of Human Î±-Mannosidases and Discovery of New Golgi Mannosidase II Inhibitors. Journal of the American Chemical Society, 2020, 142, 13021-13029.	13.7	24
67	N-Azidoacetylmannosamine-mediated chemical tagging of gangliosides. Journal of Lipid Research, 2007, 48, 1417-1421.	4.2	23
68	Assessment of Partially Deoxygenated Deoxynojirimycin Derivatives as Glucosylceramide Synthase Inhibitors. ACS Medicinal Chemistry Letters, 2011, 2, 519-522.	2.8	23
69	Differential expression of the EGF-TM7 family members CD97 and EMR2 in lipid-laden macrophages in atherosclerosis, multiple sclerosis and Gaucher disease. Immunology Letters, 2010, 129, 64-71.	2.5	20
70	A Sensitive Gel-based Method Combining Distinct Cyclophellitol-based Probes for the Identification of Acid/Base Residues in Human Retaining Î²-Glucosidases. Journal of Biological Chemistry, 2014, 289, 35351-35362.	3.4	20
71	Development of an acid ceramidase activity-based probe. Chemical Communications, 2015, 51, 6161-6163.	4.1	20
72	Reduction of glycosphingolipid biosynthesis stimulates biliary lipid secretion in mice. Hepatology, 2009, 49, 637-645.	7.3	19

#	Article	IF	Citations
73	A single histidine residue modulates enzymatic activity in acidic mammalian chitinase. FEBS Letters, 2008, 582, 931-935.	2.8	18
74	A Specific Activityâ€Based Probe to Monitor Family GH59 Galactosylceramidase, the Enzyme Deficient in Krabbe Disease. ChemBioChem, 2017, 18, 402-412.	2.6	18
75	A Concise Synthesis of Globotriaosylsphingosine. European Journal of Organic Chemistry, 2011, 2011, 1652-1663.	2.4	17
76	The Glucosylceramide Synthase InhibitorN-(5-Adamantane-1-yl-methoxy-pentyl)-deoxynojirimycin Induces Sterol Regulatory Element-Binding Protein-Regulated Gene Expression and Cholesterol Synthesis in HepG2 Cells. Journal of Pharmacology and Experimental Therapeutics, 2008, 326, 849-855.	2.5	15
77	Curdlanâ€mediated regulation of human phagocyteâ€specific chitotriosidase. FEBS Letters, 2010, 584, 3165-3169.	2.8	14
78	Synthesis of Eight 1â€Deoxynojirimycin Isomers from a Single Chiral Cyanohydrin. European Journal of Organic Chemistry, 2012, 2012, 3437-3446.	2.4	13
79	Human Alpha Galactosidases Transiently Produced in Nicotiana benthamiana Leaves: New Insights in Substrate Specificities with Relevance for Fabry Disease. Frontiers in Plant Science, 2017, 8, 1026.	3.6	12
80	Chemical Proteomic Analysis of Serine Hydrolase Activity in Niemann-Pick Type C Mouse Brain. Frontiers in Neuroscience, 2018, 12, 440.	2.8	11
81	Investigations on therapeutic glucocerebrosidases through paired detection with fluorescent activity-based probes. PLoS ONE, 2017, 12, e0170268.	2.5	9
82	Consequences of excessive glucosylsphingosine in glucocerebrosidase-deficient zebrafish.. Journal of Lipid Research, 2022, , 100199.	4.2	9
83	Detection of chitinase activity by 2-aminobenzoic acid labeling of chito-oligosaccharides. Analytical Biochemistry, 2009, 384, 191-193.	2.4	8
84	Hydrophobic Interactions Contribute to Conformational Stabilization of Endoglycoceramidase II by Mechanism-Based Probes. Biochemistry, 2016, 55, 4823-4835.	2.5	6
85	A Preparative Synthesis of Human Chitinase Fluorogenic Substrate (4â€²â€Deoxychitobiosyl)â€4â€methylumbelliferone. European Journal of Organic Chemistry, 2010, 2010, 2565-2570.	2.4	5
86	Human glucocerebrosidase mediates formation of xylosyl-cholesterol by Î²-xylosidase and transxylosidase reactions. Journal of Lipid Research, 2021, 62, 100018.	4.2	5
87	Xyloseâ€Configured Cyclophellitols as Selective Inhibitors for Glucocerebrosidase. ChemBioChem, 2021, 22, 3090-3098.	2.6	4
88	Endoâ€Î²â€Glucosidase Tag Allows Dual Detection of Fusion Proteins by Fluorescent Mechanismâ€Based Probes and Activity Measurement. ChemBioChem, 2016, 17, 1698-1704.	2.6	2
89	HEPESâ€buffering of bicarbonateâ€containing culture medium perturbs lysosomal glucocerebrosidase activity. Journal of Cellular Biochemistry, 2022, 123, 893-905.	2.6	2
90	Design and synthesis of 4â€²-O-alkyl-chitobiosyl-4-methylumbelliferone as human chitinase fluorogenic substrates. Carbohydrate Research, 2014, 399, 26-37.	2.3	1

#	Article	IF	Citations
91	Beyond the Primary Biochemical Defect in Type 1 Gaucher Disease. Clinical Therapeutics, 2007, 29, S77-S78.	2.5	0