

Delphi Chatterjee

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4892560/publications.pdf>

Version: 2024-02-01

99
papers

6,159
citations

53794

45
h-index

74163

75
g-index

100
all docs

100
docs citations

100
times ranked

4467
citing authors

#	ARTICLE	IF	CITATIONS
1	Mycolactone: A Polyketide Toxin from <i>Mycobacterium ulcerans</i> Required for Virulence. <i>Science</i> , 1999, 283, 854-857.	12.6	602
2	Mycobacterial lipoarabinomannan: An extraordinary lipoheteroglycan with profound physiological effects. <i>Glycobiology</i> , 1998, 8, 113-120.	2.5	333
3	Trafficking and Release of Mycobacterial Lipids from Infected Macrophages. <i>Traffic</i> , 2000, 1, 235-247.	2.7	316
4	Evolution of high-level ethambutol-resistant tuberculosis through interacting mutations in decaprenylphosphoryl- β -D-arabinose biosynthetic and utilization pathway genes. <i>Nature Genetics</i> , 2013, 45, 1190-1197.	21.4	191
5	Inositol Phosphate Capping of the Nonreducing Termini of Lipoarabinomannan from Rapidly Growing Strains of <i>Mycobacterium</i> . <i>Journal of Biological Chemistry</i> , 1995, 270, 12380-12389.	3.4	190
6	Molecular Interaction of CD1b with Lipoglycan Antigens. <i>Immunity</i> , 1998, 8, 331-340.	14.3	177
7	The mycobacterial cell wall: structure, biosynthesis and sites of drug action. <i>Current Opinion in Chemical Biology</i> , 1997, 1, 579-588.	6.1	166
8	The Role of the embA and embB Gene Products in the Biosynthesis of the Terminal Hexaarabinofuranosyl Motif of <i>Mycobacterium smegmatis</i> Arabinogalactan. <i>Journal of Biological Chemistry</i> , 2001, 276, 48854-48862.	3.4	155
9	Menaquinone synthesis is critical for maintaining mycobacterial viability during exponential growth and recovery from non-replicating persistence. <i>Molecular Microbiology</i> , 2009, 72, 85-97.	2.5	141
10	Structural mapping of the glycans from the egg glycoproteins of <i>Schistosoma mansoni</i> and <i>Schistosoma japonicum</i> : identification of novel core structures and terminal sequences. <i>Glycobiology</i> , 1997, 7, 663-677.	2.5	136
11	Structural definition of acylated phosphatidylinositol mannosides from <i>Mycobacterium tuberculosis</i> : definition of a common anchor for lipomannan and lipoarabinomannan. <i>Glycobiology</i> , 1995, 5, 117-127.	2.5	131
12	The Emb proteins of mycobacteria direct arabinosylation of lipoarabinomannan and arabinogalactan via an N-terminal recognition region and a C-terminal synthetic region. <i>Molecular Microbiology</i> , 2003, 50, 69-76.	2.5	126
13	Metabolic Profiling of Lung Granuloma in <i>Mycobacterium tuberculosis</i> Infected Guinea Pigs: Ex vivo ^1H Magic Angle Spinning NMR Studies. <i>Journal of Proteome Research</i> , 2011, 10, 4186-4195.	3.7	112
14	Truncated Structural Variants of Lipoarabinomannan in Ethambutol Drug-resistant Strains of <i>Mycobacterium smegmatis</i> . <i>Journal of Biological Chemistry</i> , 1996, 271, 28682-28690.	3.4	104
15	The pimB Gene of <i>Mycobacterium tuberculosis</i> Encodes a Mannosyltransferase Involved in Lipoarabinomannan Biosynthesis. <i>Journal of Biological Chemistry</i> , 1999, 274, 31625-31631.	3.4	104
16	The Two-Domain LysX Protein of <i>Mycobacterium tuberculosis</i> Is Required for Production of Lysinylated Phosphatidylglycerol and Resistance to Cationic Antimicrobial Peptides. <i>PLoS Pathogens</i> , 2009, 5, e1000534.	4.7	97
17	Host and pathogen response to bacteriophage engineered against <i>Mycobacterium abscessus</i> lung infection. <i>Cell</i> , 2022, 185, 1860-1874.e12.	28.9	93
18	Biosynthesis of mycobacterial lipoarabinomannan: Role of a branching mannosyltransferase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 13664-13669.	7.1	91

#	ARTICLE	IF	CITATIONS
19	Structural definition of the non-reducing termini of mannose-capped LAM from <i>Mycobacterium tuberculosis</i> through selective enzymatic degradation and fast atom bombardment-mass spectrometry. <i>Glycobiology</i> , 1993, 3, 497-506.	2.5	87
20	Variation in Mannose-capped Terminal Arabinan Motifs of Lipoarabinomannans from Clinical Isolates of <i>Mycobacterium tuberculosis</i> and <i>Mycobacterium avium</i> Complex. <i>Journal of Biological Chemistry</i> , 2001, 276, 3863-3871.	3.4	85
21	The Identification and Location of Succinyl Residues and the Characterization of the Interior Arabinan Region Allow for a Model of the Complete Primary Structure of <i>Mycobacterium tuberculosis</i> Mycolyl Arabinogalactan. <i>Journal of Biological Chemistry</i> , 2008, 283, 12992-13000.	3.4	82
22	The Variable Surface Glycolipids of Mycobacteria: Structures, Synthesis of Epitopes, And Biological Properties. <i>Advances in Carbohydrate Chemistry and Biochemistry</i> , 1995, 51, 169-242.	0.9	79
23	[15] Mycobacterial glycolipids: Isolation, structures, antigenicity, and synthesis of neoantigens. <i>Methods in Enzymology</i> , 1989, 179, 215-242.	1.0	78
24	Characterization of Novel Macrolide Toxins, Mycolactones A and B, from a Human Pathogen, <i>Mycobacterium ulcerans</i> . <i>Journal of the American Chemical Society</i> , 1999, 121, 6092-6093.	13.7	76
25	The Carboxy Terminus of EmbC from <i>Mycobacterium smegmatis</i> Mediates Chain Length Extension of the Arabinan in Lipoarabinomannan. <i>Journal of Biological Chemistry</i> , 2006, 281, 19512-19526.	3.4	75
26	Structural characterization of glycosphingolipids from the eggs of <i>Schistosoma mansoni</i> and <i>Schistosoma japonicum</i> . <i>Glycobiology</i> , 1997, 7, 653-661.	2.5	74
27	5-methylthiopentose: a new substituent on lipoarabinomannan in <i>Mycobacterium tuberculosis</i> . <i>Journal of Molecular Biology</i> , 2002, 316, 89-100.	4.2	74
28	Lipoarabinomannan of <i>Mycobacterium</i> : Mannose capping by a multifunctional terminal mannosyltransferase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 17973-17977.	7.1	73
29	New Insights into the Early Steps of Phosphatidylinositol Mannoside Biosynthesis in Mycobacteria. <i>Journal of Biological Chemistry</i> , 2009, 284, 25687-25696.	3.4	70
30	Roles of Conserved Proline and Glycosyltransferase Motifs of EmbC in Biosynthesis of Lipoarabinomannan. <i>Journal of Biological Chemistry</i> , 2005, 280, 5651-5663.	3.4	68
31	Genetic Basis for the Synthesis of the Immunomodulatory Mannose Caps of Lipoarabinomannan in <i>Mycobacterium tuberculosis</i> . <i>Journal of Biological Chemistry</i> , 2006, 281, 20027-20035.	3.4	68
32	Identification of the 5-Methylthiopentosyl Substituent in <i>Mycobacterium tuberculosis</i> Lipoarabinomannan. <i>Angewandte Chemie - International Edition</i> , 2004, 43, 3918-3922.	13.8	67
33	Analysis of Antibody Responses to <i>Mycobacterium leprae</i> Phenolic Glycolipid I, Lipoarabinomannan, and Recombinant Proteins To Define Disease Subtype-Specific Antigenic Profiles in Leprosy. <i>Vaccine Journal</i> , 2011, 18, 260-267.	3.1	65
34	Lipids and Carbohydrates of <i>Mycobacterium tuberculosis</i> . , 0, , 285-306.		65
35	Truncated Structural Variants of Lipoarabinomannan in <i>Mycobacterium leprae</i> and an Ethambutol-resistant Strain of <i>Mycobacterium tuberculosis</i> . <i>Journal of Biological Chemistry</i> , 2004, 279, 41227-41239.	3.4	64
36	AftD, a novel essential arabinofuranosyltransferase from mycobacteria. <i>Glycobiology</i> , 2009, 19, 1235-1247.	2.5	61

#	ARTICLE	IF	CITATIONS
37	New Insights into the Biosynthesis of Mycobacterial Lipomannan Arising from Deletion of a Conserved Gene. <i>Journal of Biological Chemistry</i> , 2007, 282, 27133-27140.	3.4	60
38	Identification of Mycobacterium tuberculosis Clinical Isolates with Altered Phagocytosis by Human Macrophages Due to a Truncated Lipoarabinomannan. <i>Journal of Biological Chemistry</i> , 2008, 283, 31417-31428.	3.4	60
39	Mycobacterial Lysocardiolipin Is Exported from Phagosomes upon Cleavage of Cardioliolipin by a Macrophage-Derived Lysosomal Phospholipase A2. <i>Journal of Immunology</i> , 2001, 167, 2187-2192.	0.8	58
40	Characterization of the Antigenic Heterogeneity of Lipoarabinomannan, the Major Surface Glycolipid of <i>Mycobacterium tuberculosis</i> , and Complexity of Antibody Specificities toward This Antigen. <i>Journal of Immunology</i> , 2018, 200, 3053-3066.	0.8	58
41	Rapid structural characterization of the arabinogalactan and lipoarabinomannan in live mycobacterial cells using 2D and 3D HR-MAS NMR: structural changes in the arabinan due to ethambutol treatment and gene mutation are observed. <i>Glycobiology</i> , 2004, 15, 139-151.	2.5	55
42	Targeting Fatty Acid Biosynthesis for the Development of Novel Chemotherapeutics against <i>Mycobacterium tuberculosis</i> : Evaluation of A-Ring-Modified Diphenyl Ethers as High-Affinity InhA Inhibitors. <i>Antimicrobial Agents and Chemotherapy</i> , 2007, 51, 3562-3567.	3.2	54
43	Identification and Recombinant Expression of a Mycobacterium avium Rhamnosyltransferase Gene (<i>embC</i>). <i>Journal of Biological Chemistry</i> , 2002, 277, 10784-10791.	0.78	43
44	Chemical synthesis and seroreactivity of O-(3,6-di-O-methyl- β -D-glucopyranosyl)-(1 \rightarrow 4)-O-(2,3-di-O-methyl- β -D-rhamnopyranosyl)-(1 \rightarrow 9)-oxynonanoyl-bovine serum albumin, the leprosy-specific, natural disaccharide-octyl-neoglycoprotein. <i>Carbohydrate Research</i> , 1986, 156, 39-56.	2.3	51
45	The Critical Role of <i>embC</i> in <i>Mycobacterium tuberculosis</i> . <i>Journal of Bacteriology</i> , 2008, 190, 4335-4341.	2.2	51
46	EmbA is an essential arabinosyltransferase in Mycobacterium tuberculosis. <i>Microbiology (United Kingdom)</i> , 2000, 154, 107-114.	1.8	51
47	<i>Mycobacterium avium</i> Infection and Modulation of Human Macrophage Gene Expression. <i>Journal of Immunology</i> , 2002, 169, 6286-6297.	0.8	50
48	Altered Expression Profile of the Surface Glycopeptidolipids in Drug-resistant Clinical Isolates of Mycobacterium avium Complex. <i>Journal of Biological Chemistry</i> , 1999, 274, 9778-9785.	3.4	48
49	Detection of lipoarabinomannan in urine and serum of HIV-positive and HIV-negative TB suspects using an improved capture-enzyme linked immuno absorbent assay and gas chromatography/mass spectrometry. <i>Tuberculosis</i> , 2018, 111, 178-187.	1.9	48
50	Metabolomic Signatures in Guinea Pigs Infected with Epidemic-Associated W-Beijing Strains of Mycobacterium tuberculosis. <i>Journal of Proteome Research</i> , 2012, 11, 4873-4884.	3.7	47
51	Isolation of a distinct Mycobacterium tuberculosis mannose-capped lipoarabinomannan isoform responsible for recognition by CD1b-restricted T cells. <i>Glycobiology</i> , 2012, 22, 1118-1127.	2.5	46
52	Detection of the tuberculosis antigenic marker mannose-capped lipoarabinomannan in pretreated serum by surface-enhanced Raman scattering. <i>Analyst</i> , 2017, 142, 186-196.	3.5	44
53	Synthetic mannosides act as acceptors for mycobacterial α 1-6 mannosyltransferase. <i>Bioorganic and Medicinal Chemistry</i> , 2001, 9, 815-824.	3.0	42
54	A bioanalytical method to determine the cell wall composition of Mycobacterium tuberculosis grown in vivo. <i>Analytical Biochemistry</i> , 2012, 421, 240-249.	2.4	35

#	ARTICLE	IF	CITATIONS
55	Synthesis and immunoreactivity of neoglycoproteins containing the trisaccharide unit of phenolic glycolipid I of <i>Mycobacterium leprae</i> . <i>Carbohydrate Research</i> , 1988, 183, 241-260.	2.3	34
56	A Major Cell Wall Lipopeptide of <i>Mycobacterium avium</i> subspecies <i>paratuberculosis</i> . <i>Journal of Biological Chemistry</i> , 2006, 281, 5209-5215.	3.4	33
57	Characterization of a Distinct Arabinofuranosyltransferase in <i>Mycobacterium smegmatis</i> . <i>Journal of the American Chemical Society</i> , 2007, 129, 9650-9662.	13.7	33
58	Characterization of a Specific Arabinosyltransferase Activity Involved in Mycobacterial Arabinan Biosynthesis. <i>Chemistry and Biology</i> , 2006, 13, 787-795.	6.0	32
59	<i>Mycobacterium avium</i> 104 deleted of the methyltransferase D gene by allelic replacement lacks serotype-specific glycopeptidolipids and shows attenuated virulence in mice. <i>Molecular Microbiology</i> , 2005, 56, 1262-1273.	2.5	29
60	A Subset of Protective $\gamma\delta$ T Cells Is Activated by Novel Mycobacterial Glycolipid Components. <i>Infection and Immunity</i> , 2016, 84, 2449-2462.	2.2	27
61	Novel O-Methylated Terminal Glucuronic Acid Characterizes the Polar Glycopeptidolipids of <i>Mycobacterium habana</i> Strain TMC 5135. <i>Journal of Biological Chemistry</i> , 1996, 271, 12333-12342.	3.4	26
62	Reconstitution of Functional Mycobacterial Arabinosyltransferase AftC Proteoliposome and Assessment of Decaprenylphosphorylarabinose Analogues as Arabinofuranosyl Donors. <i>ACS Chemical Biology</i> , 2011, 6, 819-828.	3.4	24
63	Estimation of D-Arabinose by Gas Chromatography/Mass Spectrometry as Surrogate for Mycobacterial Lipoarabinomannan in Human Urine. <i>PLoS ONE</i> , 2015, 10, e0144088.	2.5	23
64	Comparative Structural Study of Terminal Ends of Lipoarabinomannan from Mice Infected Lung Tissues and Urine of a Tuberculosis Positive Patient. <i>ACS Infectious Diseases</i> , 2020, 6, 291-301.	3.8	23
65	Synthesis of tetrasaccharides related to the antigenic determinants from the glycopeptidolipid antigens of serovars 9 and 25 in the <i>Mycobacterium avium</i> - <i>M. intracellulare</i> - <i>M. scrofulaceum</i> serocomplex. <i>Carbohydrate Research</i> , 1986, 150, 133-150.	2.3	21
66	<i>Mycobacterium avium</i> Complex Promotes Recruitment of Monocyte Hosts for HIV-1 and Bacteria. <i>Journal of Immunology</i> , 2002, 169, 3854-3862.	0.8	21
67	Importance of specimen pretreatment for the low-level detection of mycobacterial lipoarabinomannan in human serum. <i>Analyst</i> , 2017, 142, 177-185.	3.5	20
68	Structures of the glycopeptidolipid antigens of serovars 25 and 26 of the <i>Mycobacterium avium</i> serocomplex, synthesis of allyl glycosides of the outer disaccharide units and serology of the derived neoglycoproteins. <i>Carbohydrate Research</i> , 1992, 237, 57-77.	2.3	19
69	Lipoarabinomannan from <i>Mycobacterium tuberculosis</i> modulates the generation of reactive nitrogen intermediates by gamma interferon-activated macrophages. <i>FEMS Immunology and Medical Microbiology</i> , 1994, 8, 299-305.	2.7	19
70	Transfer of the First Arabinofuranose Residue to Galactan Is Essential for <i>Mycobacterium smegmatis</i> Viability. <i>Journal of Bacteriology</i> , 2008, 190, 5248-5255.	2.2	19
71	Structural Analysis and Biosynthesis Gene Cluster of an Antigenic Glycopeptidolipid from <i>Mycobacterium intracellulare</i> . <i>Journal of Bacteriology</i> , 2008, 190, 3613-3621.	2.2	17
72	The hex-5-enose degradation: zinc dust cleavage of 6-deoxy-6-iodo- β -D-galactopyranosidic linkages in methylated di- and trisaccharides. <i>Canadian Journal of Chemistry</i> , 1984, 62, 2728-2735.	1.1	16

#	ARTICLE	IF	CITATIONS
73	A Single Arabinan Chain Is Attached to the Phosphatidylinositol Mannosyl Core of the Major Immunomodulatory Mycobacterial Cell Envelope Glycoconjugate, Lipoarabinomannan. <i>Journal of Biological Chemistry</i> , 2014, 289, 30249-30256.	3.4	16
74	Handheld Raman Spectrometer Instrumentation for Quantitative Tuberculosis Biomarker Detection: A Performance Assessment for Point-of-Need Infectious Disease Diagnostics. <i>Applied Spectroscopy</i> , 2018, 72, 1104-1115.	2.2	16
75	The mycobacterial acyltransferase PapA5 is required for biosynthesis of cell wall-associated phenolic glycolipids. <i>Microbiology (United Kingdom)</i> , 2012, 158, 1379-1387.	1.8	15
76	Tuberculosis in the African continent: A comprehensive review. <i>Pathophysiology</i> , 2015, 22, 73-83.	2.2	15
77	Structural implications of lipoarabinomannan glycans from global clinical isolates in diagnosis of <i>Mycobacterium tuberculosis</i> infection. <i>Journal of Biological Chemistry</i> , 2021, 297, 101265.	3.4	15
78	A modified synthesis and serological evaluation of neoglycoproteins containing the natural disaccharide of PGL-I from <i>Mycobacterium leprae</i> . <i>Bioorganic and Medicinal Chemistry Letters</i> , 2010, 20, 3250-3253.	2.2	14
79	Urine lipoarabinomannan as a marker for low-risk of NTM infection in the CF airway. <i>Journal of Cystic Fibrosis</i> , 2020, 19, 801-807.	0.7	14
80	Urine lipoarabinomannan in HIV uninfected, smear negative, symptomatic TB patients: effective sample pretreatment for a sensitive immunoassay and mass spectrometry. <i>Scientific Reports</i> , 2021, 11, 2922.	3.3	14
81	Immobilization of Proteinase K for urine pretreatment to improve diagnostic accuracy of active tuberculosis. <i>PLoS ONE</i> , 2021, 16, e0257615.	2.5	13
82	Detection of the tuberculosis biomarker mannose-capped lipoarabinomannan in human serum: Impact of sample pretreatment with perchloric acid. <i>Analytica Chimica Acta</i> , 2019, 1046, 140-147.	5.4	12
83	A Simplified Serological Test for Leprosy Based on a 3,6-di-O-Methylglucose-Containing Synthetic Antigen. <i>American Journal of Tropical Medicine and Hygiene</i> , 1986, 35, 167-172.	1.4	12
84	Monoclonal antibodies from humans with <i>Mycobacterium tuberculosis</i> exposure or latent infection recognize distinct arabinomannan epitopes. <i>Communications Biology</i> , 2021, 4, 1181.	4.4	12
85	Development of a plate-based scintillation proximity assay for the mycobacterial AftB enzyme involved in cell wall arabinan biosynthesis. <i>Bioorganic and Medicinal Chemistry</i> , 2010, 18, 7121-7131.	3.0	10
86	Altered composition and functional profile of high-density lipoprotein in leprosy patients. <i>PLoS Neglected Tropical Diseases</i> , 2020, 14, e0008138.	3.0	10
87	Culturing Mycobacteria. <i>Methods in Molecular Biology</i> , 2021, 2314, 1-58.	0.9	10
88	Lipoglycans of <i>Mycobacterium tuberculosis</i> : Isolation, Purification, and Characterization. <i>Methods in Molecular Biology</i> , 2009, 465, 23-45.	0.9	10
89	Simple manipulation of enzyme-linked immunosorbent assay (ELISA) using an automated microfluidic interface. <i>Analytical Methods</i> , 2022, 14, 1774-1781.	2.7	9
90	Structural determinants in a glucose-containing lipopolysaccharide from <i>Mycobacterium tuberculosis</i> critical for inducing a subset of protective T cells. <i>Journal of Biological Chemistry</i> , 2018, 293, 9706-9717.	3.4	8

#	ARTICLE	IF	CITATIONS
91	Glycosylated components of the mycobacterial cell wall. , 2010, , 147-167.		4
92	[3] Leprosy-specific neoglycoconjugates: Synthesis and application to serodiagnosis of leprosy. Methods in Enzymology, 1994, 242, 27-37.	1.0	3
93	Isolation and purification of Mycobacterium tuberculosis from H37Rv infected guinea pig lungs. Tuberculosis, 2014, 94, 525-530.	1.9	3
94	Lipoarabinomannan from Mycobacterium tuberculosis modulates the generation of reactive nitrogen intermediates by gamma interferon-activated macrophages. FEMS Immunology and Medical Microbiology, 1994, 8, 299-305.	2.7	2
95	Characterization of Dâ€rabinosyltransferase activity involved in mycobacterial arabinan biosynthesis using specific synthetic acceptors. FASEB Journal, 2006, 20, LB56.	0.5	0
96	Altered composition and functional profile of high-density lipoprotein in leprosy patients. , 2020, 14, e0008138.		0
97	Altered composition and functional profile of high-density lipoprotein in leprosy patients. , 2020, 14, e0008138.		0
98	Altered composition and functional profile of high-density lipoprotein in leprosy patients. , 2020, 14, e0008138.		0
99	Altered composition and functional profile of high-density lipoprotein in leprosy patients. , 2020, 14, e0008138.		0