Delphi Chatterjee

List of Publications by Year in Descending Order

98 papers	5,180 citations	42 h-index	70 g-index
99 ext. papers	5,598 ext. citations	6.4 avg, IF	5.05 L-index

#	Paper	IF	Citations
98	Simple manipulation of enzyme-linked immunosorbent assay (ELISA) using an automated microfluidic interface.. *Analytical Methods*, **2022**, 14, 1774-1781	3.2	1
97	Host and pathogen response to bacteriophage engineered against Mycobacterium abscessus lung infection.. *Cell*, **2022**,	56.2	7
96	Monoclonal antibodies from humans with Mycobacterium tuberculosis exposure or latent infection recognize distinct arabinomannan epitopes. *Communications Biology*, **2021**, 4, 1181	6.7	1
95	Culturing Mycobacteria. *Methods in Molecular Biology*, **2021**, 2314, 1-58	1.4	2
94	Urine lipoarabinomannan in HIV uninfected, smear negative, symptomatic TB patients: effective sample pretreatment for a sensitive immunoassay and mass spectrometry. *Scientific Reports*, **2021**, 11, 2922	4.9	4
93	Structural implications of lipoarabinomannan glycans from global clinical isolates in diagnosis of Mycobacterium tuberculosis infection. *Journal of Biological Chemistry*, **2021**, 297, 101265	5.4	1
92	Immobilization of Proteinase K for urine pretreatment to improve diagnostic accuracy of active tuberculosis. *PLoS ONE*, **2021**, 16, e0257615	3.7	2
91	Urine lipoarabinomannan as a marker for low-risk of NTM infection in the CF airway. *Journal of Cystic Fibrosis*, **2020**, 19, 801-807	4.1	6
90	Comparative Structural Study of Terminal Ends of Lipoarabinomannan from Mice Infected Lung Tissues and Urine of a Tuberculosis Positive Patient. *ACS Infectious Diseases*, **2020**, 6, 291-301	5.5	11
89	Altered composition and functional profile of high-density lipoprotein in leprosy patients. *PLoS Neglected Tropical Diseases*, **2020**, 14, e0008138	4.8	7
88	Altered composition and functional profile of high-density lipoprotein in leprosy patients **2020**, 14, e0008138		
87	Altered composition and functional profile of high-density lipoprotein in leprosy patients **2020**, 14, e0008138		
86	Altered composition and functional profile of high-density lipoprotein in leprosy patients **2020**, 14, e0008138		
85	Altered composition and functional profile of high-density lipoprotein in leprosy patients **2020**, 14, e0008138		
84	Detection of the tuberculosis biomarker mannose-capped lipoarabinomannan in human serum: Impact of sample pretreatment with perchloric acid. *Analytica Chimica Acta*, **2019**, 1046, 140-147	6.6	7
83	Handheld Raman Spectrometer Instrumentation for Quantitative Tuberculosis Biomarker Detection: A Performance Assessment for Point-of-Need Infectious Disease Diagnostics. *Applied Spectroscopy*, **2018**, 72, 1104-1115	3.1	13
82	Characterization of the Antigenic Heterogeneity of Lipoarabinomannan, the Major Surface Glycolipid of , and Complexity of Antibody Specificities toward This Antigen. *Journal of Immunology*, **2018**, 200, 3053-3066	5.3	39

81	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. *Tuberculosis*, **2018**, 111, 178-187	2.6	27
80	Structural determinants in a glucose-containing lipopolysaccharide from critical for inducing a subset of protective T cells. *Journal of Biological Chemistry*, **2018**, 293, 9706-9717	5.4	7
79	Detection of the tuberculosis antigenic marker mannose-capped lipoarabinomannan in pretreated serum by surface-enhanced Raman scattering. *Analyst, The*, **2016**, 142, 186-196	5	31
78	Importance of specimen pretreatment for the low-level detection of mycobacterial lipoarabinomannan in human serum. *Analyst, The*, **2016**, 142, 177-185	5	13
77	A Subset of Protective □□ T Cells Is Activated by Novel Mycobacterial Glycolipid Components. *Infection and Immunity*, **2016**, 84, 2449-62	3.7	21
76	Estimation of D-Arabinose by Gas Chromatography/Mass Spectrometry as Surrogate for Mycobacterial Lipoarabinomannan in Human Urine. *PLoS ONE*, **2015**, 10, e0144088	3.7	15
75	Tuberculosis in the African continent: A comprehensive review. *Pathophysiology*, **2015**, 22, 73-83	1.8	13
74	Isolation and purification of Mycobacterium tuberculosis from H37Rv infected guinea pig lungs. *Tuberculosis*, **2014**, 94, 525-30	2.6	2
73	Lipids and Carbohydrates of Mycobacterium tuberculosis **2014**, 285-306		59
72	A single arabinan chain is attached to the phosphatidylinositol mannosyl core of the major immunomodulatory mycobacterial cell envelope glycoconjugate, lipoarabinomannan. *Journal of Biological Chemistry*, **2014**, 289, 30249-30256	5.4	15
71	Evolution of high-level ethambutol-resistant tuberculosis through interacting mutations in decaprenylphosphoryl-□D-arabinose biosynthetic and utilization pathway genes. *Nature Genetics*, **2013**, 45, 1190-7	36.3	150
70	Metabolomic signatures in guinea pigs infected with epidemic-associated W-Beijing strains of Mycobacterium tuberculosis. *Journal of Proteome Research*, **2012**, 11, 4873-84	5.6	43
69	The mycobacterial acyltransferase PapA5 is required for biosynthesis of cell wall-associated phenolic glycolipids. *Microbiology (United Kingdom)*, **2012**, 158, 1379-1387	2.9	13
68	A bioanalytical method to determine the cell wall composition of Mycobacterium tuberculosis grown in vivo. *Analytical Biochemistry*, **2012**, 421, 240-9	3.1	28
67	Isolation of a distinct Mycobacterium tuberculosis mannose-capped lipoarabinomannan isoform responsible for recognition by CD1b-restricted T cells. *Glycobiology*, **2012**, 22, 1118-27	5.8	40
66	Reconstitution of functional mycobacterial arabinosyltransferase AftC proteoliposome and assessment of decaprenylphosphorylarabinose analogues as arabinofuranosyl donors. *ACS Chemical Biology*, **2011**, 6, 819-28	4.9	20
65	Metabolic profiling of lung granuloma in Mycobacterium tuberculosis infected guinea pigs: ex vivo 1H magic angle spinning NMR studies. *Journal of Proteome Research*, **2011**, 10, 4186-95	5.6	95
64	Analysis of antibody responses to Mycobacterium leprae phenolic glycolipid I, lipoarabinomannan, and recombinant proteins to define disease subtype-specific antigenic profiles in leprosy. *Vaccine Journal*, **2011**, 18, 260-7		51

63	Glycosylated components of the mycobacterial cell wall: Structure and function **2010**, 147-167		4
62	Development of a plate-based scintillation proximity assay for the mycobacterial AftB enzyme involved in cell wall arabinan biosynthesis. *Bioorganic and Medicinal Chemistry*, **2010**, 18, 7121-31	3.4	10
61	A modified synthesis and serological evaluation of neoglycoproteins containing the natural disaccharide of PGL-I from Mycobacterium leprae. *Bioorganic and Medicinal Chemistry Letters*, **2010**, 20, 3250-3	2.9	14
60	New insights into the early steps of phosphatidylinositol mannoside biosynthesis in mycobacteria: PimBUs an essential enzyme of Mycobacterium smegmatis. *Journal of Biological Chemistry*, **2009**, 284, 25687-96	5.4	56
59	AftD, a novel essential arabinofuranosyltransferase from mycobacteria. *Glycobiology*, **2009**, 19, 1235-47	5.8	53
58	The two-domain LysX protein of Mycobacterium tuberculosis is required for production of lysinylated phosphatidylglycerol and resistance to cationic antimicrobial peptides. *PLoS Pathogens*, **2009**, 5, e1000534	7.6	79
57	Menaquinone synthesis is critical for maintaining mycobacterial viability during exponential growth and recovery from non-replicating persistence. *Molecular Microbiology*, **2009**, 72, 85-97	4.1	106
56	Lipoglycans of Mycobacterium tuberculosis: isolation, purification, and characterization. *Methods in Molecular Biology*, **2009**, 465, 23-45	1.4	8
55	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 Mycobacterium tuberculosis mycolyl arabinogalactan. *Journal of Biological Chemistry*, **2008**, 283, 12992-3000	5.4	74
54	The critical role of embC in Mycobacterium tuberculosis. *Journal of Bacteriology*, **2008**, 190, 4335-41	3.5	41
53	Lipoarabinomannan of Mycobacterium: mannose capping by a multifunctional terminal mannosyltransferase. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 17973-7	11.5	61
52	Structural analysis and biosynthesis gene cluster of an antigenic glycopeptidolipid from Mycobacterium intracellulare. *Journal of Bacteriology*, **2008**, 190, 3613-21	3.5	17
51	Transfer of the first arabinofuranose residue to galactan is essential for Mycobacterium smegmatis viability. *Journal of Bacteriology*, **2008**, 190, 5248-55	3.5	18
50	Identification of Mycobacterium tuberculosis clinical isolates with altered phagocytosis by human macrophages due to a truncated lipoarabinomannan. *Journal of Biological Chemistry*, **2008**, 283, 31417-28	5.4	53
49	EmbA is an essential arabinosyltransferase in Mycobacterium tuberculosis. *Microbiology (United Kingdom)*, **2008**, 154, 240-248	2.9	39
48	Characterization of a distinct arabinofuranosyltransferase in Mycobacterium smegmatis. *Journal of the American Chemical Society*, **2007**, 129, 9650-62	16.4	32
47	Targeting fatty acid biosynthesis for the development of novel chemotherapeutics against Mycobacterium tuberculosis: evaluation of A-ring-modified diphenyl ethers as high-affinity InhA inhibitors. *Antimicrobial Agents and Chemotherapy*, **2007**, 51, 3562-7	5.9	48
46	New insights into the biosynthesis of mycobacterial lipomannan arising from deletion of a conserved gene. *Journal of Biological Chemistry*, **2007**, 282, 27133-27140	5.4	53

45	A major cell wall lipopeptide of Mycobacterium avium subspecies paratuberculosis. *Journal of Biological Chemistry*, **2006**, 281, 5209-15	5.4	30
44	The carboxy terminus of EmbC from Mycobacterium smegmatis mediates chain length extension of the arabinan in lipoarabinomannan. *Journal of Biological Chemistry*, **2006**, 281, 19512-26	5.4	64
43	Genetic basis for the synthesis of the immunomodulatory mannose caps of lipoarabinomannan in Mycobacterium tuberculosis. *Journal of Biological Chemistry*, **2006**, 281, 20027-35	5.4	64
42	Biosynthesis of mycobacterial lipoarabinomannan: role of a branching mannosyltransferase. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 13664-9	11.5	82
41	Characterization of a specific arabinosyltransferase activity involved in mycobacterial arabinan biosynthesis. *Chemistry and Biology*, **2006**, 13, 787-95		30
40	Characterization of D-arabinosyltransferase activity involved in mycobacterial arabinan biosynthesis using specific synthetic acceptors. *FASEB Journal*, **2006**, 20, LB56	0.9	
39	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. *Glycobiology*, **2005**, 15, 139-51	5.8	50
38	Mycobacterium avium 104 deleted of the methyltransferase D gene by allelic replacement lacks serotype-specific glycopeptidolipids and shows attenuated virulence in mice. *Molecular Microbiology*, **2005**, 56, 1262-73	4.1	27
37	Roles of conserved proline and glycosyltransferase motifs of EmbC in biosynthesis of lipoarabinomannan. *Journal of Biological Chemistry*, **2005**, 280, 5651-63	5.4	65
36	Truncated structural variants of lipoarabinomannan in Mycobacterium leprae and an ethambutol-resistant strain of Mycobacterium tuberculosis. *Journal of Biological Chemistry*, **2004**, 279, 41227-39	5.4	59
35	Identification of the 5-methylthiopentosyl substituent in Mycobacterium tuberculosis lipoarabinomannan. *Angewandte Chemie - International Edition*, **2004**, 43, 3918-22	16.4	61
34	The Emb proteins of mycobacteria direct arabinosylation of lipoarabinomannan and arabinogalactan via an N-terminal recognition region and a C-terminal synthetic region. *Molecular Microbiology*, **2003**, 50, 69-76	4.1	113
33	Mycobacterium avium infection and modulation of human macrophage gene expression. *Journal of Immunology*, **2002**, 169, 6286-97	5.3	36
32	Mycobacterium avium complex promotes recruitment of monocyte hosts for HIV-1 and bacteria. *Journal of Immunology*, **2002**, 169, 3854-62	5.3	18
31	5-Methylthiopentose: a new substituent on lipoarabinomannan in Mycobacterium tuberculosis. *Journal of Molecular Biology*, **2002**, 316, 89-100	6.5	63
30	Synthetic mannosides act as acceptors for mycobacterial alpha1-6 mannosyltransferase. *Bioorganic and Medicinal Chemistry*, **2001**, 9, 815-24	3.4	32
29	Variation in mannose-capped terminal arabinan motifs of lipoarabinomannans from clinical isolates of Mycobacterium tuberculosis and Mycobacterium avium complex. *Journal of Biological Chemistry*, **2001**, 276, 3863-71	5.4	73
28	The role of the embA and embB gene products in the biosynthesis of the terminal hexaarabinofuranosyl motif of Mycobacterium smegmatis arabinogalactan. *Journal of Biological Chemistry*, **2001**, 276, 48854-62	5.4	132

27	Mycobacterial lysocardiolipin is exported from phagosomes upon cleavage of cardiolipin by a macrophage-derived lysosomal phospholipase A2. *Journal of Immunology*, **2001**, 167, 2187-92	5.3	53
26	Trafficking and release of mycobacterial lipids from infected macrophages. *Traffic*, **2000**, 1, 235-47	5.7	278
25	Altered expression profile of the surface glycopeptidolipids in drug-resistant clinical isolates of Mycobacterium avium complex. *Journal of Biological Chemistry*, **1999**, 274, 9778-85	5.4	42
24	The pimB gene of Mycobacterium tuberculosis encodes a mannosyltransferase involved in lipoarabinomannan biosynthesis. *Journal of Biological Chemistry*, **1999**, 274, 31625-31	5.4	95
23	Mycolactone: a polyketide toxin from Mycobacterium ulcerans required for virulence. *Science*, **1999** , 283, 854-7	33.3	520
22	Characterization of Novel Macrolide Toxins, Mycolactones A and B, from a Human Pathogen,Mycobacterium ulcerans. *Journal of the American Chemical Society*, **1999**, 121, 6092-6093	16.4	70
21	Molecular interaction of CD1b with lipoglycan antigens. *Immunity*, **1998**, 8, 331-40	32.3	165
20	Mycobacterial lipoarabinomannan: an extraordinary lipoheteroglycan with profound physiological effects. *Glycobiology*, **1998**, 8, 113-20	5.8	307
19	Identification and recombinant expression of a Mycobacterium avium rhamnosyltransferase gene (rtfA) involved in glycopeptidolipid biosynthesis. *Journal of Bacteriology*, **1998**, 180, 5567-73	3.5	44
18	Structural mapping of the glycans from the egg glycoproteins of Schistosoma mansoni and Schistosoma japonicum: identification of novel core structures and terminal sequences. *Glycobiology*, **1997**, 7, 663-77	5.8	131
17	Structural characterization of glycophingolipids from the eggs of Schistosoma mansoni and Schistosoma japonicum. *Glycobiology*, **1997**, 7, 653-61	5.8	67
16	The mycobacterial cell wall: structure, biosynthesis and sites of drug action. *Current Opinion in Chemical Biology*, **1997**, 1, 579-88	9.7	153
15	Truncated structural variants of lipoarabinomannan in ethambutol drug-resistant strains of Mycobacterium smegmatis. Inhibition of arabinan biosynthesis by ethambutol. *Journal of Biological Chemistry*, **1996**, 271, 28682-90	5.4	90
14	Novel O-methylated terminal glucuronic acid characterizes the polar glycopeptidolipids of Mycobacterium habana strain TMC 5135. *Journal of Biological Chemistry*, **1996**, 271, 12333-42	5.4	23
13	Inositol phosphate capping of the nonreducing termini of lipoarabinomannan from rapidly growing strains of Mycobacterium. *Journal of Biological Chemistry*, **1995**, 270, 12380-9	5.4	166
12	Structural definition of acylated phosphatidylinositol mannosides from Mycobacterium tuberculosis: definition of a common anchor for lipomannan and lipoarabinomannan. *Glycobiology*, **1995**, 5, 117-27	5.8	119
11	The variable surface glycolipids of mycobacteria: structures, synthesis of epitopes, and biological properties. *Advances in Carbohydrate Chemistry and Biochemistry*, **1995**, 51, 169-242	3.7	67
10	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		15

9	Leprosy-specific neoglycoconjugates: synthesis and application to serodiagnosis of leprosy. *Methods in Enzymology*, **1994**, 242, 27-37	1.7	2
8	Structural definition of the non-reducing termini of mannose-capped LAM from Mycobacterium tuberculosis through selective enzymatic degradation and fast atom bombardment-mass spectrometry. *Glycobiology*, **1993**, 3, 497-506	5.8	76
7	Structures of the glycopeptidolipid antigens of serovars 25 and 26 of the Mycobacterium avium serocomplex, synthesis of allyl glycosides of the outer disaccharide units and serology of the derived neoglycoproteins. *Carbohydrate Research*, **1992**, 237, 57-77	2.9	18
6	Mycobacterial glycolipids: isolation, structures, antigenicity, and synthesis of neoantigens. *Methods in Enzymology*, **1989**, 179, 215-42	1.7	65
5	Synthesis and immunoreactivity of neoglycoproteins containing the trisaccharide unit of phenolic glycolipid I of Mycobacterium leprae. *Carbohydrate Research*, **1988**, 183, 241-60	2.9	27
4	Synthesis of tetrasaccharides related to the antigenic determinants from the glycopeptidolipid antigens of serovars 9 and 25 in the Mycobacterium avium-M. intracellulare-M. scrofulaceum serocomplex. *Carbohydrate Research*, **1986**, 150, 133-50	2.9	17
3	Chemical synthesis and seroreactivity of O-(3,6-di-O-methyl-beta-D-glucopyranosyl)-(1----4)-O-(2,3-di-O-methyl-alpha-L-rhamnopyranosyl)-(1----9)-oxynonanoyl-bovine serum albumin--the leprosy-specific, natural disaccharide-octyl-neoglycoprotein. *Carbohydrate Research*, **1986**, 156, 39-56	2.9	39
2	A simplified serological test for leprosy based on a 3,6-di-O-methylglucose-containing synthetic antigen. *American Journal of Tropical Medicine and Hygiene*, **1986**, 35, 167-72	3.2	8
1	The hex-5-enose degradation: zinc dust cleavage of 6-deoxy-6-iodo-D-galactopyranosidic linkages in methylated di- and trisaccharides. *Canadian Journal of Chemistry*, **1984**, 62, 2728-2735	0.9	14