Benfang Lei

List of Publications by Year
in descending order

76 papers	3,652 citations	109137 35 h-index	133063 59 g-index
76 all docs	76 docs citations	76 times ranked	2928 citing authors

#	Article	IF	Citations
1	Genome sequence of a serotype M3 strain of group A Streptococcus: Phage-encoded toxins, the high-virulence phenotype, and clone emergence. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 10078-10083.	3.3	452
2	Action Mechanism of Antitubercular Isoniazid. Journal of Biological Chemistry, 2000, 275, 2520-2526.	1.6	175
3	Evasion of human innate and acquired immunity by a bacterial homolog of CD11b that inhibits opsonophagocytosis. Nature Medicine, 2001, 7, 1298-1305.	15.2	156
4	Genome-wide protective response used by group A Streptococcus to evade destruction by human polymorphonuclear leukocytes. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 1996-2001.	3.3	148
5	Identification and Immunogenicity of Group A Streptococcus Culture Supernatant Proteins. Infection and Immunity, 2000, 68, 6807-6818.	1.0	142
6	Prophage Induction and Expression of Prophage-EncodedVirulence Factors in Group A Streptococcus Serotype M3 StrainMGAS315. Infection and Immunity, 2003, 71, 7079-7086.	1.0	104
7	Direct Hemin Transfer from IsdA to IsdC in the Iron-regulated Surface Determinant (Isd) Heme Acquisition System of Staphylococcus aureus. Journal of Biological Chemistry, 2008, 283, 6668-6676.	1.6	104
8	Pathway for Heme Uptake from Human Methemoglobin by the Iron-regulated Surface Determinants System of Staphylococcus aureus. Journal of Biological Chemistry, 2008, 283, 18450-18460.	1.6	104
9	Identification and Characterization of a Novel Heme-Associated Cell Surface Protein Made by Streptococcus pyogenes. Infection and Immunity, 2002, 70, 4494-4500.	1.0	99
10	Decreased necrotizing fasciitis capacity caused by a single nucleotide mutation that alters a multiple gene virulence axis. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 888-893.	3.3	99
11	Flavin Reductase P:â€‰ Structure of a Dimeric Enzyme That Reduces Flavin,. Biochemistry, 1996, 35, 13531-13539.	1.2	98
12	The Mechanism of Direct Heme Transfer from the Streptococcal Cell Surface Protein Shp to HtsA of the HtsABC Transporter. Journal of Biological Chemistry, 2006, 281, 20761-20771.	1.6	81
13	Defects in ex vivo and in vivo growth and sensitivity to osmotic stress of group A Streptococcus caused by interruption of response regulator gene vicR. Microbiology (United Kingdom), 2006, 152, 967-978.	0.7	79
14	A periplasmic arseniteâ€binding protein involved in regulating arsenite oxidation. Environmental Microbiology, 2012, 14, 1624-1634.	1.8	79
15	Isoniazid Activation Defects in Recombinant Mycobacterium tuberculosis Catalase-Peroxidase (KatG) Mutants Evident in InhA Inhibitor Production. Antimicrobial Agents and Chemotherapy, 2003, 47, 670-675.	1.4	77
16	Identification and Characterization of HtsA, a Second Heme-Binding Protein Made by Streptococcus pyogenes. Infection and Immunity, 2003, 71, 5962-5969.	1.0	77
17	Identification of New Candidate Vaccine Antigens Made byStreptococcus pyogenes:Purification and Characterization of 16 Putative Extracellular Lipoproteins. Journal of Infectious Diseases, 2004, 189, 79-89.	1.9	75
18	Mechanism of Reduced Flavin Transfer fromVibrioharveyiNADPHâ˘'FMN Oxidoreductase to Luciferaseâ€. Biochemistry, 1998, 37, 14623-14629.	1.2	74

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19	The surface protein Shr of Streptococcus pyogenes binds heme and transfers it to the streptococcal heme-binding protein Shp. BMC Microbiology, 2008, 8, 15.	1.3	69
20	Heme Transfer from Streptococcal Cell Surface Protein Shp to HtsA of Transporter HtsABC. Infection and Immunity, 2005, 73, 5086-5092.	1.0	64
21	Transient Weak Proteinâ€œProtein Complexes Transfer Heme Across the Cell Wall of Staphylococcus aureus. Journal of the American Chemical Society, 2011, 133, 14176-14179.	6.6	62
22	Insight of Host Immune Evasion Mediated by Two Variants of Group A Streptococcus Mac Protein. Journal of Biological Chemistry, 2004, 279, 52789-52796.	1.6	61
23	Opsonophagocytosis-Inhibiting Mac Protein of Group A Streptococcus : Identification and Characteristics of Two Genetic Complexes. Infection and Immunity, 2002, 70, 6880-6890.	1.0	56
24	The Secreted Esterase of Group A <i>Streptococcus</i> Is Important for Invasive Skin Infection and Dissemination in Mice. Infection and Immunity, 2009, 77, 5225-5232.	1.0	53
25	Neutrophil Isolation From Nonhuman Species. Methods in Molecular Biology, 2007, 412, 21-34.	0.4	53
26	ABC transporter FtsABCD of Streptococcus pyogenes mediates uptake of ferric ferrichrome. BMC Microbiology, 2005, 5, 62.	1.3	50
27	Bis-methionyl Coordination in the Crystal Structure of the Heme-binding Domain of the Streptococcal Cell Surface Protein Shp. Journal of Molecular Biology, 2007, 374, 374-383.	2.0	49
28	Staphylococcus aureus Uses a Novel Multidomain Receptor to Break Apart Human Hemoglobin and Steal Its Heme. Journal of Biological Chemistry, 2013, 288, 1065-1078.	1.6	49
29	Differential Regulation of Iron- and Manganese-Specific MtsABC and Heme-Specific HtsABC Transporters by the Metalloregulator MtsR of Group A Streptococcus. Infection and Immunity, 2006, 74, 5132-5139.	1.0	48
30	Characterization of an Extracellular Virulence FactorMade by Group A Streptococcus with Homology to the Listeria monocytogenes Internalin Family ofProteins. Infection and Immunity, 2003, 71, 7043-7052.	1.0	47
31	Neutrophils Select Hypervirulent CovRS Mutants of M1T1 Group A Streptococcus during Subcutaneous Infection of Mice. Infection and Immunity, 2014, 82, 1579-1590.	1.0	44
32	Active and Passive Immunizations with the Streptococcal Esterase Sse Protect Mice against Subcutaneous Infection with Group A Streptococci. Infection and Immunity, 2007, 75, 3651-3657.	1.0	43
33	Solution Structure and Molecular Determinants of Hemoglobin Binding of the First NEAT Domain of IsdB in <i>Staphylococcus aureus</i>. Biochemistry, 2014, 53, 3922-3933.	1.2	40
34	Group A Streptococcus Secreted Esterase Hydrolyzes Platelet-Activating Factor to Impede Neutrophil Recruitment and Facilitate Innate Immune Evasion. PLoS Pathogens, 2012, 8, e1002624.	2.1	39
35	Bis-methionine Ligation to Heme Iron in the Streptococcal Cell Surface Protein Shp Facilitates Rapid Hemin Transfer to HtsA of the HtsABC Transporter. Journal of Biological Chemistry, 2007, 282, 31380-31388.	1.6	38
36	Identity of the Emitter in the Bacterial Luciferase Luminescence Reaction:Â Binding and Fluorescence Quantum Yield Studies of 5-Decyl-4a-hydroxy-4a,5-dihydroriboflavin-5â€˜-phosphate as a Modelâ€. Biochemistry, 2004, 43, 15975-15982.	1.2	36

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37	Stability and peptide binding specificity of Btk SH2 domain: Molecular basis for Xâ€linked agammaglobulinemia. Protein Science, 2000, 9, 2377-2385.	3.1	35
38	Analysis of a Novel Prophage-encoded Group A Streptococcus Extracellular Phospholipase A2. Journal of Biological Chemistry, 2004, 279, 45909-45918.	1.6	35
39	Spectroscopic Identification of Heme Axial Ligands in HtsA That Are Involved in Heme Acquisition by <i>Streptococcus pyogenes</i>. Biochemistry, 2010, 49, 2834-2842.	1.2	34
40	Vibrio harveyiNADPH:FMN Oxidoreductase: Preparation and Characterization of the Apoenzyme and Monomerâ€"Dimer Equilibrium. Archives of Biochemistry and Biophysics, 1997, 337, 89-95.	1.4	31
41	Non-Heme-Binding Domains and Segments of the Staphylococcus aureus IsdB Protein Critically Contribute to the Kinetics and Equilibrium of Heme Acquisition from Methemoglobin. PLoS ONE, 2014, 9, e100744.	1.1	31
42	Regulation of Inhibition of Neutrophil Infiltration by the Two-Component Regulatory System CovRS in Subcutaneous Murine Infection with Group A Streptococcus. Infection and Immunity, 2013, 81, 974-983.	1.0	26
43	Identification and characterization of the heme-binding proteins SeShp and SeHtsA of Streptococcus equi subspecies equi. BMC Microbiology, 2006, 6, 82.	1.3	24
44	Vibrio harveyiNADPHâˆ'FMN Oxidoreductase Arg203 as a Critical Residue for NADPH Recognition and Bindingâ€. Biochemistry, 2000, 39, 7813-7819.	1.2	21
45	Relationship between the Conserved Î± Subunit Arginine 107 and Effects of Phosphate on the Activity and Stability of Vibrio harveyi Luciferase. Archives of Biochemistry and Biophysics, 1999, 370, 45-50.	1.4	20
46	Serotype M3 and M28 Group A Streptococci Have Distinct Capacities to Evade Neutrophil and TNF-Î± Responses and to Invade Soft Tissues. PLoS ONE, 2015, 10, e0129417.	1.1	20
47	Toward a genome-scale understanding of group A Streptococcus pathogenesis. Current Opinion in Microbiology, 2001, 4, 65-70.	2.3	19
48	Direct Heme Transfer Reactions in the Group A Streptococcus Heme Acquisition Pathway. PLoS ONE, 2012, 7, e37556.	1.1	17
49	The Mga Regulon but Not Deoxyribonuclease Sda1 of Invasive M1T1 Group A Streptococcus Contributes to <i>In Vivo</i> Selection of CovRS Mutations and Resistance to Innate Immune Killing Mechanisms. Infection and Immunity, 2015, 83, 4293-4303.	1.0	16
50	Null Mutations of Group A Streptococcus Orphan Kinase RocA: Selection in Mouse Infection and Comparison with CovS Mutations in Alteration of <i>In Vitro</i> and <i>In Vivo</i> Protease SpeB Expression and Virulence. Infection and Immunity, 2017, 85, .	1.0	16
51	Lipid Oxidation in Trout Muscle Is Strongly Inhibited by a Protein That Specifically Binds Hemin Released from Hemoglobin. Journal of Agricultural and Food Chemistry, 2013, 61, 4180-4187.	2.4	15
52	Histidine and Aspartic Acid Residues Important for Immunoglobulin G Endopeptidase Activity of the Group A Streptococcus Opsonophagocytosis-Inhibiting Mac Protein. Infection and Immunity, 2003, 71, 2881-2884.	1.0	14
53	Esterase SeE of<i>Streptococcus equi</i>ssp.<i>equi</i>is a novel nonspecific carboxylic ester hydrolase. FEMS Microbiology Letters, 2008, 289, 181-186.	0.7	13
54	Axial Ligand Replacement Mechanism in Heme Transfer from Streptococcal Heme-Binding Protein Shp to HtsA of the HtsABC Transporter. Biochemistry, 2013, 52, 6537-6547.	1.2	11

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55	Characterization of Streptococcal Platelet-Activating Factor Acetylhydrolase Variants That Are Involved in Innate Immune Evasion. Infection and Immunity, 2013, 81, 3128-3138.	1.0	11
56	Requirement and Synergistic Contribution of Platelet-Activating Factor Acetylhydrolase Sse and Streptolysin S to Inhibition of Neutrophil Recruitment and Systemic Infection by Hypervirulent<i>emm3</i>Group A Streptococcus in Subcutaneous Infection of Mice. Infection and Immunity, 2017, 85, .	1.0	11
57	Contemporary Pharyngeal and Invasive emm1 and Invasive emm12 Group A Streptococcus Isolates Exhibit Similar In Vivo Selection for CovRS Mutants in Mice. PLoS ONE, 2016, 11, e0162742.	1.1	11
58	The<i><i>sagA</i></i>/<i><i>pel</i></i>locus does not regulate the expression of the M protein of the M1T1 lineage of group A<i><i>Streptococcus</i></i>. Virulence, 2013, 4, 698-706.	1.8	10
59	Probing the Mechanisms of the Biological Intermolecular Transfer of Reduced Flavin. Journal of Nutrition, 2000, 130, 331S-332S.	1.3	9
60	Characterization of the Binding of Photobacterium phosphoreum P-flavin by Vibrio harveyi Luciferase. Archives of Biochemistry and Biophysics, 2001, 396, 199-206.	1.4	9
61	Reply to â€œStreptococcus pyogenes and phagocytic killingâ€• Nature Medicine, 2002, 8, 1045-1046.	15.2	8
62	The Two-Component Regulatory System VicRK is Important to Virulence of Streptococcus equi Subspecies equi. Open Microbiology Journal, 2008, 2, 89-93.	0.2	8
63	Benfang Leiâ€™s research on heme acquisition in Gram-positive pathogens and bacterial pathogenesis. World Journal of Biological Chemistry, 2010, 1, 286.	1.7	8
64	Crystallization and Preliminary Crystallographic Analysis of NADPH:FMN Oxidoreductase from Vibrio harveyi. Journal of Molecular Biology, 1994, 241, 283-287.	2.0	6
65	Redox Potential and Equilibria in the Reductive Half-Reaction ofVibrio harveyiNADPHâˆ’FMN Oxidoreductaseâ€. Biochemistry, 2005, 44, 261-267.	1.2	6
66	A Neutralizing Monoclonal IgG1 Antibody of Platelet-Activating Factor Acetylhydrolase SsE Protects Mice against Lethal Subcutaneous Group A Streptococcus Infection. Infection and Immunity, 2015, 83, 2796-2805.	1.0	6
67	Hypervirulent Group A Streptococcus of Genotype<i>emm</i>3 Invades the Vascular System in Pulmonary Infection of Mice. Infection and Immunity, 2018, 86, .	1.0	6
68	1H, 13C, 15N backbone and side chain NMR resonance assignments of the N-terminal NEAr iron transporter domain 1 (NEAT 1) of the hemoglobin receptor IsdB of Staphylococcus aureus. Biomolecular NMR Assignments, 2014, 8, 201-205.	0.4	5
69	Pathogenesis of Hypervirulent Group A Streptococcus. Japan Journal of Medicine, 2018, 1, 269-275.	0.0	5
70	Tissue Tropism in Streptococcal Infection: Wild-Type M1T1 Group A<i>Streptococcus</i>Is Efficiently Cleared by Neutrophils Using an NADPH Oxidase-Dependent Mechanism in the Lung but Not in the Skin. Infection and Immunity, 2019, 87, .	1.0	4
71	Isolation of Neutrophils from Nonhuman Species. Methods in Molecular Biology, 2020, 2087, 43-59.	0.4	3
72	IgG Endopeptidase SeMac does not Inhibit Opsonophagocytosis of Streptococcus equi Subspecies equi by Horse Polymorphonuclear Leukocytes. Open Microbiology Journal, 2010, 4, 20-25.	0.2	2

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73	Complete Genome Sequence of Hypervirulent Streptococcus pyogenes emm 3 Strain 1838. Microbiology Resource Announcements, 2019, 8, .	0.3	1
74	A Naturally Occurring Single Nucleotide Mutation Significantly Impairs Necrotizing Fasciitis (â€œFlesh) Tj ETQq0 0 0 rgBT /Overlock 10 T	0.2	1
75	Iron Metabolismâ˜†. , 2015, , 748-748.		0
76	Host-to-Host Group A Streptococcus Transmission Causes Infection of the Lamina Propria but not Epithelium of the Upper Respiratory Tract in MyD88-Deficient Mice. Infection and Immunity, 2021, , IAI0042321.	1.0	0