

Paul Messner

List of Publications by Year in descending order

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69
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109
all docs

109
docs citations

109
times ranked

4036
citing authors

#	ARTICLE	IF	CITATIONS
1	Prokaryotes: Sweet proteins do matter. , 2020, , 3-36.		0
2	Nonulosonic acids contribute to the pathogenicity of the oral bacterium <i>Tannerella forsythia</i> . Interface Focus, 2019, 9, 20180064.	3.0	16
3	Carb loading takes proteins on a ride. Journal of Biological Chemistry, 2018, 293, 5374-5375.	3.4	2
4	Lipoteichoic acid mediates binding of a Lactobacillus S-layer protein. Glycobiology, 2018, 28, 148-158.	2.5	16
5	Structural basis of cell wall anchoring by SLH domains in <i>Paenibacillus alvei</i> . Nature Communications, 2018, 9, 3120.	12.8	27
6	<i>Tannerella forsythia</i> strains display different cell-surface nonulosonic acids: biosynthetic pathway characterization and first insight into biological implications. Glycobiology, 2017, 27, 342-357.	2.5	21
7	A pseudaminic acid or a legionaminic acid derivative transferase is strain-specifically implicated in the general protein O-glycosylation system of the periodontal pathogen <i>Tannerella forsythia</i> . Glycobiology, 2017, 27, 555-567.	2.5	22
8	Emerging facets of prokaryotic glycosylation. FEMS Microbiology Reviews, 2017, 41, 49-91.	8.6	114
9	Protein O-glucosylation in <i>Lactobacillus buchneri</i> . Glycoconjugate Journal, 2014, 31, 117-131.	2.7	25
10	Biochemical characterization of the major N-acetylmuramidase from <i>Lactobacillus buchneri</i> . Microbiology (United Kingdom), 2014, 160, 1807-1819.	1.8	12
11	Bacterial cell-envelope glycoconjugates. Advances in Carbohydrate Chemistry and Biochemistry, 2013, 69, 209-272.	0.9	41
12	Multivalent glycoconjugates as anti-pathogenic agents. Chemical Society Reviews, 2013, 42, 4709-4727.	38.1	464
13	Structure and Immunogenicity of the Rough-Type Lipopolysaccharide from the Periodontal Pathogen <i>Tannerella forsythia</i> . Vaccine Journal, 2013, 20, 945-953.	3.1	28
14	Small-Angle X-Ray Scattering for Imaging of Surface Layers on Intact Bacteria in the Native Environment. Journal of Bacteriology, 2013, 195, 2408-2414.	2.2	9
15	Are the Surface Layer Homology Domains Essential for Cell Surface Display and Glycosylation of the S-Layer Protein from <i>Paenibacillus alvei</i> CCM 2051T?. Journal of Bacteriology, 2013, 195, 565-575.	2.2	28
16	Characterizing the S-layer structure and anti-S-layer antibody recognition on intact <i>Tannerella forsythia</i> cells by scanning probe microscopy and small angle X-ray scattering. Journal of Molecular Recognition, 2013, 26, 542-549.	2.1	16
17	The S-Layer Homology Domain-Containing Protein SlhA from <i>Paenibacillus alvei</i> CCM 2051T Is Important for Swarming and Biofilm Formation. PLoS ONE, 2013, 8, e76566.	2.5	21
18	Analysis of the cell surface layer ultrastructure of the oral pathogen <i>Tannerella forsythia</i> . Archives of Microbiology, 2012, 194, 525-539.	2.2	37

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19	The S-Layer Glycome "Adding to the Sugar Coat of Bacteria. International Journal of Microbiology, 2011, 2011, 1-16.	2.3	31
20	Characterization and Scope of S-layer Protein O-Glycosylation in <i>Tannerella forsythia</i> . Journal of Biological Chemistry, 2011, 286, 38714-38724.	3.4	82
21	Cell surface display of chimeric glycoproteins via the S-layer of <i>Paenibacillus alvei</i> . Carbohydrate Research, 2010, 345, 1422-1431.	2.3	21
22	Bacterial surface layer glycoproteins and "non-classical" secondary cell wall polymers. , 2010, , 109-128.		2
23	Protein tyrosine O-glycosylation—A rather unexplored prokaryotic glycosylation system. Glycobiology, 2010, 20, 787-798.	2.5	62
24	Prokaryotic Cell Wall Components: Structure and Biochemistry. , 2010, , 459-481.		14
25	Occurrence, Structure, Chemistry, Genetics, Morphogenesis, and Functions of S-Layers. , 2010, , 53-109.		28
26	Construction of a Gene Knockout System for Application in <i>Paenibacillus alvei</i> CCM 2051 ^T , Exemplified by the S-Layer Glycan Biosynthesis Initiation Enzyme WsfP. Applied and Environmental Microbiology, 2009, 75, 3077-3085.	3.1	46
27	Recombinant Glycans on an S-Layer Self-Assembly Protein: A New Dimension for Nanopatterned Biomaterials. Small, 2008, 4, 1728-1740.	10.0	24
28	S-layer nanoglycobiology of bacteria. Carbohydrate Research, 2008, 343, 1934-1951.	2.3	74
29	Lipid layers on polyelectrolyte multilayer supports. Soft Matter, 2008, 4, 2245.	2.7	65
30	Molecular Basis of S-layer Glycoprotein Glycan Biosynthesis in <i>Geobacillus stearothermophilus</i> . Journal of Biological Chemistry, 2008, 283, 21120-21133.	3.4	42
31	The dTDP-4-dehydro-6-deoxyglucose reductase encoding <i>fcd</i> gene is part of the surface layer glycoprotein glycosylation gene cluster of <i>Geobacillus tepidamans</i> GS5-97T. Glycobiology, 2007, 17, 433-443.	2.5	21
32	Functional Characterization of the Initiation Enzyme of S-Layer Glycoprotein Glycan Biosynthesis in <i>Geobacillus stearothermophilus</i> NRS 2004/3a. Journal of Bacteriology, 2007, 189, 2590-2598.	2.2	47
33	Sequencing of O-Glycopeptides Derived from an S-Layer Glycoprotein of <i>Geobacillus stearothermophilus</i> NRS 2004/3a Containing up to 51 Monosaccharide Residues at a Single Glycosylation Site by Fourier Transform Ion Cyclotron Resonance Infrared Multiphoton Dissociation Mass Spectrometry. Analytical Chemistry, 2007, 79, 3271-3279.	6.5	20
34	Novel Biocatalysts Based on S-Layer Self-Assembly of <i>Geobacillus Stearothermophilus</i> NRS 2004/3a: A Nanobiotechnological Approach. Small, 2007, 3, 1549-1559.	10.0	53
35	Virus-Engineered Colloidal Particles "A Surface Display System. Angewandte Chemie - International Edition, 2006, 45, 784-789.	13.8	46
36	New Insights into the Glycosylation of the Surface Layer Protein SgsE from <i>Geobacillus stearothermophilus</i> NRS 2004/3a. Journal of Bacteriology, 2006, 188, 7914-7921.	2.2	30

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37	The secondary cell wall polymer of <i>Geobacillus tepidamans</i> GS5-97T: structure of different glycoforms. <i>Carbohydrate Research</i> , 2005, 340, 2290-2296.	2.3	12
38	Gene cloning, functional expression and secretion of the S-layer protein SgsE from <i>Geobacillus stearothermophilus</i> NRS 2004/3a in <i>Lactococcus lactis</i> . <i>FEMS Microbiology Letters</i> , 2005, 242, 27-35.	1.8	21
39	N-Acetylmuramic Acid as Capping Element of α -D-Fucose-containing S-layer Glycoprotein Glycans from <i>Geobacillus tepidamans</i> GS5-97T. <i>Journal of Biological Chemistry</i> , 2005, 280, 20292-20299.	3.4	25
40	The structure of secondary cell wall polymers: how Gram-positive bacteria stick their cell walls together. <i>Microbiology (United Kingdom)</i> , 2005, 151, 643-651.	1.8	164
41	Prokaryotic Glycoproteins: Unexplored but Important. <i>Journal of Bacteriology</i> , 2004, 186, 2517-2519.	2.2	57
42	S-layer glycan-specific loci on the chromosome of <i>Geobacillus stearothermophilus</i> NRS 2004/3a and dTDP-l-rhamnose biosynthesis potential of <i>G. stearothermophilus</i> strains. <i>Microbiology (United Kingdom)</i> , 2004, 150, 1007-1014.	1.0	10
43	Classification of isolates from locations in Austria and Yellowstone National Park as <i>Geobacillus tepidamans</i> sp. nov.. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2004, 54, 2361-2368.	1.7	66
44	Surface-layer glycoproteins: an example for the diversity of bacterial glycosylation with promising impacts on nanobiotechnology. <i>Glycobiology</i> , 2004, 14, 31R-42R.	2.5	84
45	Genetic organization of chromosomal S-layer glycan biosynthesis loci of Bacillaceae. <i>Glycoconjugate Journal</i> , 2003, 20, 435-447.	2.7	29
46	Surface Layer Glycoproteins of Bacteria and Archaea. <i>Journal of Bacteriology</i> , 2002, 184, 93-125.		3
47	The Surface Layer (S-layer) Glycoprotein of <i>Geobacillus stearothermophilus</i> NRS 2004/3a. <i>Journal of Biological Chemistry</i> , 2002, 277, 6230-6239.	3.4	68
48	Isolation of Glucocardiolipins from <i>Geobacillus stearothermophilus</i> NRS 2004/3a. <i>Journal of Bacteriology</i> , 2002, 184, 6709-6713.	2.2	9
49	Homologs of the Rml Enzymes from <i>Salmonella enterica</i> Are Responsible for dTDP- β -l-Rhamnose Biosynthesis in the Gram-Positive Thermophile <i>Aneurinibacillus thermoaerophilus</i> DSM 10155. <i>Applied and Environmental Microbiology</i> , 2002, 68, 3708-3715.	3.1	45
50	Isolation of Three New Surface Layer Protein Genes (slp) from <i>Lactobacillus brevis</i> ATCC 14869 and Characterization of the Change in Their Expression under Aerated and Anaerobic Conditions. <i>Journal of Bacteriology</i> , 2002, 184, 6786-6795.	2.2	82
51	The first biantennary bacterial secondary cell wall polymer and its influence on S-layer glycoprotein assembly. <i>Biochemical Journal</i> , 2002, 368, 483-494.	3.7	23
52	Glycobiology of surface layer proteins. <i>Biochimie</i> , 2001, 83, 591-599.	2.6	88
53	Biosynthesis of Nucleotide-activated d-glycero-d-manno-Heptose. <i>Journal of Biological Chemistry</i> , 2001, 276, 20935-20944.	3.4	94
54	Purification and structure elucidation of the N-acetylglucosamine-containing polysaccharide from <i>Bacillus picheniformis</i> ATCC 9945. <i>FEBS Journal</i> , 2001, 268, 857-864.	0.2	14

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55	Identification of Two GDP-6-deoxy-d-lyxo-4-hexulose Reductases Synthesizing GDP-d-rhamnose in <i>Aneurinibacillus thermoaerophilus</i> L420-91T. <i>Journal of Biological Chemistry</i> , 2001, 276, 5577-5583.	3.4	71
56	A novel type of carbohydrate-protein linkage region in the tyrosine-bound S-layer glycan of <i>Thermoanaerobacterium thermosaccharolyticum</i> D120-70. <i>FEBS Journal</i> , 2000, 267, 5482-5492.	0.2	27
57	A pyrophosphate bridge links the pyruvate-containing secondary cell wall polymer of <i>Paenibacillus alvei</i> CCM 2051 to muramic acid. <i>Glycoconjugate Journal</i> , 2000, 17, 681-690.	2.7	34
58	Two-Dimensional Gel Electrophoresis Analyses of pH-Dependent Protein Expression in Facultatively Alkaliphilic <i>Bacillus pseudofirmus</i> OF4 Lead to Characterization of an S-Layer Protein with a Role in Alkaliphily. <i>Journal of Bacteriology</i> , 2000, 182, 5969-5981.	2.2	56
59	Characterization of dTDP-4-dehydrorhamnose 3,5-Epimerase and dTDP-4-dehydrorhamnose Reductase, Required for dTDP-l-rhamnose Biosynthesis in <i>Salmonella enterica</i> Serovar Typhimurium LT2. <i>Journal of Biological Chemistry</i> , 1999, 274, 25069-25077.	3.4	111
60	The diacetamidodideoxyuronic-acid-containing glycan chain of <i>Bacillus stearothermophilus</i> NRS 2004/3a represents the secondary cell-wall polymer of wild-type <i>B. stearothermophilus</i> strains. <i>Microbiology (United Kingdom)</i> , 1999, 145, 1575-1583.	1.8	58
61	Crystalline Bacterial Cell Surface Layers (S Layers): From Supramolecular Cell Structure to Biomimetics and Nanotechnology. <i>Angewandte Chemie - International Edition</i> , 1999, 38, 1034-1054.	13.8	400
62	III. Biochemistry of S-layers. <i>FEMS Microbiology Reviews</i> , 1997, 20, 25-46.	8.6	39
63	VI. Applications of S-layers. <i>FEMS Microbiology Reviews</i> , 1997, 20, 151-175.	8.6	40
64	Taxonomic Comparison of Different Thermophilic Sugar Beet Isolates with Glycosylated Surface Layer (S-Layer) Proteins and their Affiliation to <i>Bacillus smithii</i> . <i>Systematic and Applied Microbiology</i> , 1997, 20, 559-565.	2.8	9
65	Bacterial glycoproteins. <i>Glycoconjugate Journal</i> , 1997, 14, 3-11.	2.7	111
66	Toward selective elicitation of TH1-controlled vaccination responses: vaccine applications of bacterial surface layer proteins. <i>Journal of Biotechnology</i> , 1996, 44, 225-231.	3.8	35
67	Immunoreactivity of allergen (Bet v 1) conjugated to crystalline bacterial cell surface layers (S-layers). <i>Immunotechnology: an International Journal of Immunological Engineering</i> , 1996, 2, 103-113.	2.4	41
68	Isolation and characterization of an amino sugar-rich glycopeptide from the surface layer glycoprotein of <i>Thermoanaerobacterium thermosaccharolyticum</i> E207-71. <i>Carbohydrate Research</i> , 1996, 295, 245-253.	2.3	16
69	Are S-Layer Glycoproteins and Lipopolysaccharides Related?. <i>Microbial Drug Resistance</i> , 1996, 2, 17-23.	2.0	39
70	Occurrence, Location, Ultrastructure and Morphogenesis of S-Layers. , 1996, , 5-33.		18
71	Vaccine Development Based on S-Layer Technology. , 1996, , 161-173.		10
72	Characterization of the Glycan Structure of a Major Glycopeptide from the Surface Layer Glycoprotein of <i>Clostridium thermosaccharolyticum</i> E207-71. <i>FEBS Journal</i> , 1995, 229, 308-315.	0.2	11

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73	Glycan structure of the S-layer glycoprotein of <i>Bacillus</i> sp. L420-91. <i>Glycoconjugate Journal</i> , 1995, 12, 99-107.	2.7	27
74	Glycan structure of a heptose-containing S-layer glycoprotein of <i>Bacillus thermoaerophilus</i> . <i>Glycobiology</i> , 1995, 5, 791-796.	2.5	46
75	Characterization of the Glycan Structure of a Major Glycopeptide from the Surface Layer Glycoprotein of <i>Clostridium thermosaccharolyticum</i> E207-71. <i>FEBS Journal</i> , 1995, 229, 308-315.	0.2	37
76	Two-dimensional protein crystals (S-layers): Fundamentals and applications. <i>Journal of Cellular Biochemistry</i> , 1994, 56, 171-176.	2.6	29
77	<i>Clostridium viride</i> sp. nov., a strictly anaerobic bacterium using 5-aminovalerate as growth substrate, previously assigned to <i>Clostridium aminovalericum</i> . <i>Archives of Microbiology</i> , 1994, 162, 387-394.	2.2	21
78	Application Potential of 2D Protein Crystals (S-layers). <i>Annals of the New York Academy of Sciences</i> , 1994, 745, 261-269.	3.8	3
79	Crystalline bacterial cell surface layers. <i>Molecular Microbiology</i> , 1993, 10, 911-916.	2.5	180
80	Reversible cross-linking of crystalline bacterial surface layer glycoproteins through their glycan chains. <i>Applied Microbiology and Biotechnology</i> , 1993, 40, 7.	3.6	3
81	Induction of T-cell immunity to oligosaccharide antigens immobilized on crystalline bacterial surface layers (S-layers). <i>Vaccine</i> , 1993, 11, 919-924.	3.8	37
82	Glycoprotein Nature of Select Bacterial S-Layers. , 1993, , 95-107.		11
83	Surface Layers from <i>Bacillus alvei</i> as a Carrier for a <i>Streptococcus pneumoniae</i> Conjugate Vaccine. , 1993, , 219-233.		15
84	Characterization of the S-Layer Glycoproteins of Two <i>Lactobacilli</i> . , 1993, , 281-284.		24
85	Crystalline Bacterial Cell Surface Layers and their Application Potentials. , 1993, , 105-117.		4
86	Crystalline Bacterial Cell-Surface Layers. <i>Advances in Microbial Physiology</i> , 1992, 33, 213-275.	2.4	286
87	Structure of the glycan chain from the surface layer glycoprotein of <i>Clostridium thermophydrosulfuricum</i> L77-66. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 1992, 1117, 71-77.	2.4	20
88	Artificial antigens. Synthetic carbohydrate haptens immobilized on crystalline bacterial surface layer glycoproteins. <i>Carbohydrate Research</i> , 1992, 233, 175-184.	2.3	30
89	Structure of the glycan chain from the surface layer glycoprotein of <i>Bacillus alvei</i> CCM 2051. <i>Biochemistry and Cell Biology</i> , 1991, 69, 72-78.	2.0	40
90	Bacterial surface layer glycoproteins. <i>Glycobiology</i> , 1991, 1, 545-551.	2.5	119

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91	Chemical characterization of the regularly arranged surface layer glycoprotein of <i>Clostridium thermosaccharolyticum</i> D120-70. <i>FEBS Journal</i> , 1990, 188, 73-82.	0.2	32
92	<i>Methanogenium liminatans</i> spec. nov., a new coccoid, mesophilic methanogen able to oxidize secondary alcohols. <i>Archives of Microbiology</i> , 1990, 153, 287-293.	2.2	67
93	<i>Methanolacinia</i> gen. nov., incorporating <i>Methanomicrobium paynteri</i> as <i>Methanolacinia paynteri</i> comb. nov.. <i>Journal of General and Applied Microbiology</i> , 1989, 35, 185-202.	0.7	39
94	Isolation and Characterization of a Thermophilic, Sulfate Reducing Archaeobacterium, <i>Archaeoglobus fulgidus</i> Strain Z. <i>Systematic and Applied Microbiology</i> , 1989, 11, 151-160.	2.8	95
95	Structure of a glycan from the surface-layer glycoprotein of <i>Clostridium thermohydrosulfuricum</i> strain L111-69. <i>Carbohydrate Research</i> , 1988, 176, 160-163.	2.3	42
96	The fine structure of the fibers of <i>Pyrodictium occultum</i> . <i>FEMS Microbiology Letters</i> , 1988, 49, 207-212.	1.8	27
97	Asparaginyl-rhamnose: A novel type of protein-carbohydrate linkage in a eubacterial surface-layer glycoprotein. <i>FEBS Letters</i> , 1988, 228, 317-320.	2.8	53
98	The Surface Layer of <i>Peptostreptococcus asaccharolyticus</i> . <i>Systematic and Applied Microbiology</i> , 1988, 10, 226-227.	2.8	4
99	2 Analysis of Crystalline Bacterial Surface Layers by Freeze-etching, Metal Shadowing, Negative Staining and Ultrathin Sectioning. <i>Methods in Microbiology</i> , 1988, 20, 29-60.	0.8	52
100	Isolation and structure determination of a diacetamidodideoxyuronic acid-containing glycan chain from the S-layer glycoprotein of <i>Bacillus stearothermophilus</i> NRS 2004/3a. <i>Carbohydrate Research</i> , 1987, 168, 211-218.	2.3	31
101	Crystalline envelope layers in archaeobacteria. <i>Systematic and Applied Microbiology</i> , 1986, 7, 310-313.	2.8	45
102	Structure of a rhamnan from the surface-layer glyco-protein of <i>Bacillus stearothermophilus</i> strain NRS 2004/3a. <i>Carbohydrate Research</i> , 1986, 150, 265-272.	2.3	49
103	Structural and chemical characterization of S-layers of selected strains of <i>Bacillus stearothermophilus</i> and <i>Desulfotomaculum nigrificans</i> . <i>Archives of Microbiology</i> , 1986, 146, 19-24.	2.2	144
104	Characterization of the ultrastructure and the self-assembly of the surface layer of <i>Bacillus stearothermophilus</i> strain NRS 2004/3a. <i>Journal of Structural Biology</i> , 1986, 97, 73-88.	0.8	80
105	Evidence for the glycoprotein nature of the crystalline cell wall surface layer of <i>Bacillus stearothermophilus</i> strain NRS2004/3a. <i>FEBS Letters</i> , 1984, 173, 185-190.	2.8	50
106	Constitutional and configurational assignments by ^{13}C n.m.r. spectroscopy of <i>Escherichia coli</i> capsular polysaccharides containing ribose and 3-deoxy-D-manno-2-octulosonic acid (KDO). <i>Journal of the Chemical Society Chemical Communications</i> , 1982, .	2.0	29