Simon Foster

List of Publications by Year
in descending order

137 papers	15,020 citations	18465 62 h-index	19726 117 g-index
143 all docs	143 docs citations	143 times ranked	14988 citing authors

#	Article	IF	Citations
1	An Interplay of Multiple Positive and Negative Factors Governs Methicillin Resistance in Staphylococcus aureus. Microbiology and Molecular Biology Reviews, 2022, 86, e0015921.	2.9	12
2	The W-Acidic Motif of Histidine Kinase WalK Is Required for Signaling and Transcriptional Regulation in Streptococcus mutans. Frontiers in Microbiology, 2022, 13, 820089.	1.5	1
3	Penicillin-Binding Protein 1 (PBP1) of Staphylococcus aureus Has Multiple Essential Functions in Cell Division. MBio, 2022, 13, .	1.8	11
4	Neutrophils use selective autophagy receptor Sqstm1/p62 to target <i>Staphylococcus aureus</i> for degradation <i>in vivo</i> in zebrafish. Autophagy, 2021, 17, 1448-1457.	4.3	21
5	Staphylococcus aureus cell wall structure and dynamics during host-pathogen interaction. PLoS Pathogens, 2021, 17, e1009468.	2.1	36
6	Human-specific staphylococcal virulence factors enhance pathogenicity in a humanised zebrafish C5a receptor model. Journal of Cell Science, 2021, 134, .	1.2	2
7	Correlative Super-Resolution Optical and Atomic Force Microscopy Reveals Relationships Between Bacterial Cell Wall Architecture and Synthesis in <i>Bacillus subtilis</i>. ACS Nano, 2021, 15, 16011-16018.	7.3	7
8	Commensal bacteria augment Staphylococcus aureus infection by inactivation of phagocyte-derived reactive oxygen species. PLoS Pathogens, 2021, 17, e1009880.	2.1	8
9	Demonstration of the role of cell wall homeostasis in <i>Staphylococcus aureus</i> growth and the action of bactericidal antibiotics. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	30
10	Ruthenium based antimicrobial theranostics â€" using nanoscopy to identify therapeutic targets and resistance mechanisms in<i>Staphylococcus aureus</i>. Chemical Science, 2020, 11, 70-79.	3.7	37
11	Identification of a Quorum Sensing-Dependent Communication Pathway Mediating Bacteria-Gut-Brain Cross Talk. IScience, 2020, 23, 101695.	1.9	18
12	Evolving MRSA: High-level Î²-lactam resistance in Staphylococcus aureusÂis associated with RNA Polymerase alterations and fine tuning of gene expression. PLoS Pathogens, 2020, 16, e1008672.	2.1	43
13	Mononuclear ruthenium(<scp>ii</scp>) theranostic complexes that function as broad-spectrum antimicrobials in therapeutically resistant pathogens through interaction with DNA. Chemical Science, 2020, 11, 8828-8838.	3.7	26
14	Scratching the Surface: Bacterial Cell Envelopes at the Nanoscale. MBio, 2020, 11, .	1.8	25
15	The architecture of the Gram-positive bacterial cell wall. Nature, 2020, 582, 294-297.	13.7	223
16	The Role of Macrophages in Staphylococcus aureus Infection. Frontiers in Immunology, 2020, 11, 620339.	2.2	129
17	Title is missing!. , 2020, 16, e1008672.		0
18	Title is missing!. , 2020, 16, e1008672.		0

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19	Title is missing!. , 2020, 16, e1008672.		0
20	Title is missing!. , 2020, 16, e1008672.		0
21	Title is missing!. , 2020, 16, e1008672.		0
22	Title is missing!. , 2020, 16, e1008672.		0
23	SosA inhibits cell division in <i>Staphylococcus aureus</i> in response to DNA damage. Molecular Microbiology, 2019, 112, 1116-1130.	1.2	26
24	The Impact of Hypoxia on the Host-Pathogen Interaction between Neutrophils and Staphylococcus aureus. International Journal of Molecular Sciences, 2019, 20, 5561.	1.8	18
25	A transgenic zebrafish line for in vivo visualisation of neutrophil myeloperoxidase. PLoS ONE, 2019, 14, e0215592.	1.1	42
26	A Genome-Wide Screen Identifies Factors Involved in S. aureus-Induced Human Neutrophil Cell Death and Pathogenesis. Frontiers in Immunology, 2019, 10, 45.	2.2	16
27	Staphylococcus aureus: setting its sights on the human innate immune system. Microbiology (United) Tj ETQq1 1 0.784314 rgBT /Overl	0.7	25
28	Heterogeneous localisation of membrane proteins in Staphylococcus aureus. Scientific Reports, 2018, 8, 3657.	1.6	18
29	Use of Larval Zebrafish Model to Study Within-Host Infection Dynamics. Methods in Molecular Biology, 2018, 1736, 147-156.	0.4	0
30	Construction and Use of Staphylococcus aureus Strains to Study Within-Host Infection Dynamics. Methods in Molecular Biology, 2018, 1736, 17-27.	0.4	2
31	Molecular imaging of glycan chains couples cell-wall polysaccharide architecture to bacterial cell morphology. Nature Communications, 2018, 9, 1263.	5.8	78
32	Molecular coordination of Staphylococcus aureus cell division. ELife, 2018, 7, .	2.8	69
33	Human skin commensals augment Staphylococcus aureus pathogenesis. Nature Microbiology, 2018, 3, 881-890.	5.9	80
34	Staphylococcus aureus infection dynamics. PLoS Pathogens, 2018, 14, e1007112.	2.1	137
35	Hypoxia determines survival outcomes of bacterial infection through HIF-1Î±â€"dependent reprogramming of leukocyte metabolism. Science Immunology, 2017, 2, .	5.6	61
36	Identification of Staphylococcus aureus Factors Required for Pathogenicity and Growth in Human Blood. Infection and Immunity, 2017, 85, .	1.0	53

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37	Molecular Bases Determining Daptomycin Resistance-Mediated Resensitization to Î²-Lactams (Seesaw) Tj ETQq1 1 0.784314 rgBT /Over 61, .	1.4	54
38	Coordination of Chromosome Segregation and Cell Division in Staphylococcus aureus. Frontiers in Microbiology, 2017, 8, 1575.	1.5	29
39	The Plasmin-Sensitive Protein Pls in Methicillin-Resistant Staphylococcus aureus (MRSA) Is a Glycoprotein. PLoS Pathogens, 2017, 13, e1006110.	2.1	33
40	An automated image analysis framework for segmentation and division plane detection of single live<i>Staphylococcus aureus</i>cells which can operate at millisecond sampling time scales using bespoke Slimfield microscopy. Physical Biology, 2016, 13, 055002.	0.8	19
41	The major autolysin is redundant for<i>Staphylococcus aureus</i>USA300 LAC JE2 virulence in a murine device-related infection model. FEMS Microbiology Letters, 2016, 363, fnw087.	0.7	15
42	Intracellular <i>Staphylococcus aureus</i> eludes selective autophagy by activating a host cell kinase. Autophagy, 2016, 12, 2069-2084.	4.3	97
43	Atomic Force Microscopy Analysis of Bacterial Cell Wall Peptidoglycan Architecture. Methods in Molecular Biology, 2016, 1440, 3-9.	0.4	17
44	Alternatives to antibioticsâ€"a pipeline portfolio review. Lancet Infectious Diseases, The, 2016, 16, 239-251.	4.6	720
45	Supramolecular structure in the membrane ofStaphylococcus aureus. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15725-15730.	3.3	26
46	Impact of the Î²-Lactam Resistance Modifier (â^')-Epicatechin Gallate on the Non-Random Distribution of Phospholipids across the Cytoplasmic Membrane of Staphylococcus aureus. International Journal of Molecular Sciences, 2015, 16, 16710-16727.	1.8	19
47	Bacterial Cell Enlargement Requires Control of Cell Wall Stiffness Mediated by Peptidoglycan Hydrolases. MBio, 2015, 6, e00660.	1.8	83
48	A single natural nucleotide mutation alters bacterial pathogen host tropism. Nature Genetics, 2015, 47, 361-366.	9.4	106
49	Staphylococcus aureus-induced clotting of plasma is an immune evasion mechanism for persistence within the fibrin network. Microbiology (United Kingdom), 2015, 161, 621-627.	0.7	30
50	The effect of skin fatty acids on Staphylococcus aureus. Archives of Microbiology, 2015, 197, 245-267.	1.0	28
51	Existence of a ColonizingStaphylococcus aureusStrain Isolated in Diabetic Foot Ulcers. Diabetes, 2015, 64, 2991-2995.	0.3	28
52	Molecular basis for bacterial peptidoglycan recognition by LysM domains. Nature Communications, 2014, 5, 4269.	5.8	167
53	Clonal Expansion during Staphylococcus aureus Infection Dynamics Reveals the Effect of Antibiotic Intervention. PLoS Pathogens, 2014, 10, e1003959.	2.1	73
54	Different walls for rods and balls: the diversity of peptidoglycan. Molecular Microbiology, 2014, 91, 862-874.	1.2	150

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55	The Interplay between Cell Wall Mechanical Properties and the Cell Cycle in Staphylococcus aureus. Biophysical Journal, 2014, 107, 2538-2545.	0.2	52
56	Surfactant-free purification of membrane protein complexes from bacteria: application to the staphylococcal penicillin-binding protein complex PBP2/PBP2a. Nanotechnology, 2014, 25, 285101.	1.3	53
57	Staphylococcus aureusâ€…DivIBis a peptidoglycanâ€binding protein that is required for a morphological checkpoint in cell division. Molecular Microbiology, 2014, 94, 1041-1064.	1.2	29
58	Bactericidal Activity of the Human Skin Fatty Acid <i>cis</i> -6-Hexadecanoic Acid on Staphylococcus aureus. Antimicrobial Agents and Chemotherapy, 2014, 58, 3599-3609.	1.4	58
59	A Spaetzle-like role for nerve growth factor Î² in vertebrate immunity to <i>Staphylococcus aureus</i>. Science, 2014, 346, 641-646.	6.0	68
60	Cell wall elongation mode in Gram-negative bacteria is determined by peptidoglycan architecture. Nature Communications, 2013, 4, 1496.	5.8	125
61	Zebrafish as a Novel Vertebrate Model To Dissect Enterococcal Pathogenesis. Infection and Immunity, 2013, 81, 4271-4279.	1.0	40
62	Identification of conserved antigens from staphylococcal and streptococcal pathogens. Journal of Medical Microbiology, 2012, 61, 766-779.	0.7	12
63	The iron-regulated surface proteins IsdA,IsdB, and IsdH are not required for heme iron utilization in Staphylococcus aureus. FEMS Microbiology Letters, 2012, 329, 93-100.	0.7	20
64	A privileged intraphagocyte niche is responsible for disseminated infection of <i> <scp>S</scp> taphylococcus aureus </i> in a zebrafish model. Cellular Microbiology, 2012, 14, 1600-1619.	1.1	107
65	Multiple essential roles for EzrA in cell division of <i>Staphylococcus aureus</i>. Molecular Microbiology, 2011, 80, 542-555.	1.2	81
66	Superâ€resolution microscopy reveals cell wall dynamics and peptidoglycan architecture in ovococcal bacteria. Molecular Microbiology, 2011, 82, 1096-1109.	1.2	111
67	Desiccation tolerance in Staphylococcus aureus. Archives of Microbiology, 2011, 193, 125-135.	1.0	121
68	A simple plasmid-based system that allows rapid generation of tightly controlled gene expression in Staphylococcus aureus. Microbiology (United Kingdom), 2011, 157, 666-676.	0.7	40
69	Peptidoglycan architecture can specify division planes in Staphylococcus aureus. Nature Communications, 2010, 1, 26.	5.8	114
70	Iron-Regulated Surface Determinant Protein A Mediates Adhesion of<i>Staphylococcus aureus</i>to Human Corneocyte Envelope Proteins. Infection and Immunity, 2009, 77, 2408-2416.	1.0	78
71	Comprehensive identification of essential Staphylococcus aureus genes using Transposon-Mediated Differential Hybridisation (TMDH). BMC Genomics, 2009, 10, 291.	1.2	253
72	YsxC, an essential protein in Staphylococcus aureus crucial for ribosome assembly/stability. BMC Microbiology, 2009, 9, 266.	1.3	27

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73	A ruthenium(II) polypyridyl complex for direct imaging of DNA structure in living cells. Nature Chemistry, 2009, 1, 662-667.	6.6	436
74	Immobilizing live bacteria for AFM imaging of cellular processes. Ultramicroscopy, 2009, 109, 775-780.	0.8	74
75	Anti-Staphylococcus aureus immunotherapy: current status and prospects. Current Opinion in Pharmacology, 2009, 9, 552-557.	1.7	19
76	Bacterial peptidoglycan (murein) hydrolases. FEMS Microbiology Reviews, 2008, 32, 259-286.	3.9	725
77	A novel vertebrate model of<i>Staphylococcus aureus</i>infection reveals phagocyte-dependent resistance of zebrafish to non-host specialized pathogens. Cellular Microbiology, 2008, 10, 2312-2325.	1.1	185
78	Cell wall peptidoglycan architecture in <i>Bacillus subtilis</i>. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 14603-14608.	3.3	207
79	IsdA Protects<i>Staphylococcus aureus</i>against the Bactericidal Protease Activity of Apolactoferrin. Infection and Immunity, 2008, 76, 1518-1526.	1.0	60
80	Catalase (KatA) and Alkyl Hydroperoxide Reductase (AhpC) Have Compensatory Roles in Peroxide Stress Resistance and Are Required for Survival, Persistence, and Nasal Colonization in Staphylococcus aureus. Journal of Bacteriology, 2007, 189, 1025-1035.	1.0	268
81	Characterization of IsaA and SceD, Two Putative Lytic Transglycosylases of <i>Staphylococcus aureus</i>. Journal of Bacteriology, 2007, 189, 7316-7325.	1.0	162
82	The Staphylococcus aureus Surface Protein IsdA Mediates Resistance to Innate Defenses of Human Skin. Cell Host and Microbe, 2007, 1, 199-212.	5.1	180
83	Surface Adhesins of Staphylococcus aureus. Advances in Microbial Physiology, 2006, 51, 187-224.	1.0	237
84	Identification of In Vivoâ€"Expressed Antigens ofStaphylococcus aureusand Their Use in Vaccinations for Protection against Nasal Carriage. Journal of Infectious Diseases, 2006, 193, 1098-1108.	1.9	183
85	Investigations into Ïƒ B -Modulated Regulatory Pathways Governing Extracellular Virulence Determinant Production in Staphylococcus aureus. Journal of Bacteriology, 2006, 188, 6070-6080.	1.0	44
86	Staphylococcus aureus: the search for novel targets. Drug Discovery Today, 2005, 10, 643-651.	3.2	42
87	Sigma Factor B and RsbU Are Required for Virulence in Staphylococcus aureus -Induced Arthritis and Sepsis. Infection and Immunity, 2004, 72, 6106-6111.	1.0	72
88	PheP, a Putative Amino Acid Permease of Staphylococcus aureus , Contributes to Survival In Vivo and during Starvation. Infection and Immunity, 2004, 72, 3073-3076.	1.0	17
89	Role of the hprTâ€"ftsH locus in Staphylococcus aureus. Microbiology (United Kingdom), 2004, 150, 373-381.	0.7	51
90	Drosophila melanogaster as a model host for Staphylococcus aureus infection. Microbiology (United) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.7	93

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91	IsdA of Staphylococcus aureus is a broad spectrum, iron-regulated adhesin. Molecular Microbiology, 2004, 51, 1509-1519.	1.2	122
92	The role and regulation of the extracellular proteases of Staphylococcus aureus. Microbiology (United Kingdom), 2004, 150, 217-228.	0.7	215
93	N-Acetylmuramoyl-l-alanine amidase. , 2004, , 866-868.		1
94	An essential role for NOD1 in host recognition of bacterial peptidoglycan containing diaminopimelic acid. Nature Immunology, 2003, 4, 702-707.	7.0	1,139
95	Essential Bacillus subtilis genes. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 4678-4683.	3.3	1,261
96	Characterization of AcmB, an N-acetylglucosaminidase autolysin from Lactococcus lactis. Microbiology (United Kingdom), 2003, 149, 695-705.	0.7	72
97	Role and regulation of the superoxide dismutases of Staphylococcus aureus. Microbiology (United) Tj ETQq1 1 0.784314 rgBT /Overlo	0.7	168
98	A Polysaccharide Deacetylase Gene (pdaA) Is Required for Germination and for Production of Muramic Î´-Lactam Residues in the Spore Cortex of Bacillus subtilis. Journal of Bacteriology, 2002, 184, 6007-6015.	1.0	79
99	Analysis of Ebh, a 1.1-Megadalton Cell Wall-Associated Fibronectin-Binding Protein of Staphylococcus aureus. Infection and Immunity, 2002, 70, 6680-6687.	1.0	127
100	Bacterial endospores the ultimate survivors. International Dairy Journal, 2002, 12, 217-223.	1.5	57
101	Ïƒ B Modulates Virulence Determinant Expression and Stress Resistance: Characterization of a Functional rsbU Strain Derived from Staphylococcus aureus 8325-4. Journal of Bacteriology, 2002, 184, 5457-5467.	1.0	625
102	MntR modulates expression of the PerR regulon and superoxide resistance in Staphylococcus aureus through control of manganese uptake. Molecular Microbiology, 2002, 44, 1269-1286.	1.2	220
103	Analysis of spore cortex lytic enzymes and related proteins in Bacillus subtilis endospore germination. Microbiology (United Kingdom), 2002, 148, 2383-2392.	0.7	125
104	PerR Controls Oxidative Stress Resistance and Iron Storage Proteins and Is Required for Virulence in Staphylococcus aureus. Infection and Immunity, 2001, 69, 3744-3754.	1.0	299
105	Analysis of the role of bacterial endospore cortex structure in resistance properties and demonstration of its conservation amongst species. Journal of Applied Microbiology, 2001, 91, 364-372.	1.4	66
106	Negative and positive ion matrix-assisted laser desorption/ionization time-of-flight mass spectrometry and positive ion nano-electrospray ionization quadrupole ion trap mass spectrometry of peptidoglycan fragments isolated from variousBacillusspecies. Journal of Mass Spectrometry, 2001, 36, 124-139.	0.7	24
107	Identification and Analysis of Staphylococcus aureus Components Expressed by a Model System of Growth in Serum. Infection and Immunity, 2001, 69, 5198-5202.	1.0	43
108	In Staphylococcus aureus , Fur Is an Interactive Regulator with PerR, Contributes to Virulence, and Is Necessary for Oxidative Stress Resistance through Positive Regulation of Catalase and Iron Homeostasis. Journal of Bacteriology, 2001, 183, 468-475.	1.0	252

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109	In vivo roles of the germination-specific lytic enzymes of Bacillus subtilis 168. Microbiology (United) Tj ETQq1 1 0.784314 rgBT /Overl	0.7	41
110	zur: a Zn2+-responsive regulatory element of Staphylococcus aureus The GenBank accession number for the sequence reported in this paper is AF101263.. Microbiology (United Kingdom), 2001, 147, 1259-1266.	0.7	79
111	Starvation survival in Listeria monocytogenes: characterization of the response and the role of known and novel components. Microbiology (United Kingdom), 2001, 147, 2275-2284.	0.7	52
112	Autolysins of Bacillus subtilis: multiple enzymes with multiple functions. Microbiology (United) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 622	0.7	355
113	Complete spore-cortex hydrolysis during germination of Bacillus subtilis 168 requires SleB and YpeB. Microbiology (United Kingdom), 2000, 146, 57-64.	0.7	76
114	The role of peptidoglycan structure and structural dynamics during endospore dormancy and germination. Antonie Van Leeuwenhoek, 1999, 75, 299-307.	0.7	70
115	Interactive regulatory pathways control virulence determinant production and stability in response to environmental conditions in Staphylococcus aureus. Molecular Genetics and Genomics, 1999, 262, 323-331.	2.4	68
116	Structural analysis of Bacillus megaterium KM spore peptidoglycan and its dynamics during germination. Microbiology (United Kingdom), 1999, 145, 1033-1041.	0.7	34
117	Analysis of Peptidoglycan Structure from Vegetative Cells of <i>Bacillus subtilis</i> 168 and Role of PBP 5 in Peptidoglycan Maturation. Journal of Bacteriology, 1999, 181, 3956-3966.	1.0	208
118	Molecular characterization of an autolytic amidase of Listeria monocytogenes EGD. Microbiology (United Kingdom), 1998, 144, 1359-1367.	0.7	46
119	Isolation and characterization of Staphylococcus aureus starvat ion4 nduced, stationary-phase mutants defective in survival or recovery. Microbiology (United Kingdom), 1998, 144, 3159-3169.	0.7	52
120	The role of environmental factors in the regulation of virulence-determinant expression in Staphylococcus aureus 8325-4. Microbiology (United Kingdom), 1998, 144, 2469-2479.	0.7	121
121	The role of autolysins during vegetative growth of Bacillus subtilis 168. Microbiology (United) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T	0.7	146
122	Characterization of the Starvation-Survival Response of <i>Staphylococcus aureus</i>. Journal of Bacteriology, 1998, 180, 1750-1758.	1.0	178
123	The Staphylococcus aureus Alternative Sigma Factor Ï,B Controls the Environmental Stress Response but Not Starvation Survival or Pathogenicity in a Mouse Abscess Model. Journal of Bacteriology, 1998, 180, 6082-6089.	1.0	6
124	The <i>Staphylococcus aureus</i> Alternative Sigma Factor Ï, ^B Controls the Environmental Stress Response but Not Starvation Survival or Pathogenicity in a Mouse Abscess Model. Journal of Bacteriology, 1998, 180, 6082-6089.	1.0	186
125	Structural analysis of Bacillus subtilis 168 endospore peptidoglycan and its role during differentiation. Journal of Bacteriology, 1996, 178, 6173-6183.	1.0	141
126	Characterization of the involvement of two compensatory autolysins in mother cell lysis during sporulation of Bacillus subtilis 168. Journal of Bacteriology, 1995, 177, 3855-3862.	1.0	84

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127	Molecular characterization and functional analysis of the major autolysin of Staphylococcus aureus 8325/4. Journal of Bacteriology, 1995, 177, 5723-5725.	1.0	144
128	The role and regulation of cell wall structural dynamics during differentiation of endosporeâ€forming bacteria. Journal of Applied Bacteriology, 1994, 76, 25S-39S.	1.1	38
129	Molecular analysis of three major wall-associated proteins of Bacillus subtilis 168: evidence for processing of the product of a gene encoding a 258 kDa precursor two-domain ligand-binding protein. Molecular Microbiology, 1993, 8, 299-310.	1.2	80
130	Purification and characterization of an Ã¢Â€Â˜actomyosinÃ¢Â€Â™ complex fromEscherichia coliW3110. FEMS Microbiology Letters, 1993, 110, 295-298.	0.7	4
131	Analysis of Bacillus subtilis 168 prophage-associated lytic enzymes; identification and characterization of CWLA-related prophage proteins. Journal of General Microbiology, 1993, 139, 3177-3184.	2.3	24
132	Analysis of the autolysins of Bacillus subtilis 168 during vegetative growth and differentiation by using renaturing polyacrylamide gel electrophoresis. Journal of Bacteriology, 1992, 174, 464-470.	1.0	169
133	Cloning, expression, sequence analysis and biochemical characterization of an autolytic amidase of Bacillus subtilis 168 trpC2. Journal of General Microbiology, 1991, 137, 1987-1998.	2.3	95
134	Pulling the trigger: the mechanism of bacterial spore germination. Molecular Microbiology, 1990, 4, 137-141.	1.2	116
135	Germination-specific cortex-lytic enzyme is activated during triggering of Bacillus megaterium KM spore germination. Molecular Microbiology, 1988, 2, 727-733.	1.2	36
136	Purification and properties of a germination-specific cortex-lytic enzyme from spores of <i>Bacillus megaterium</i> KM. Biochemical Journal, 1987, 242, 573-579.	1.7	67
137	Inhibiting Glycogen Synthase Kinase 3Î² in Sepsis. Novartis Foundation Symposium, 0, , 128-146.	1.2	13