Steven James Norris

List of Publications by Year
in descending order

129 papers	9,376 citations	36203 51 h-index	53109 85 g-index
141 all docs	141 docs citations	141 times ranked	4387 citing authors

#	Article	IF	Citations
1	Complete Genome Sequence of Treponema pallidum, the Syphilis Spirochete. , 1998, 281, 375-388.		969
2	Antigenic Variation in Lyme Disease Borreliae by Promiscuous Recombination of VMP-like Sequence Cassettes. Cell, 1997, 89, 275-285.	13.5	613
3	Correlation between plasmid content and infectivity in Borrelia burgdorferi. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 13865-13870.	3.3	435
4	Comparison of the genome of the oral pathogen Treponema denticola with other spirochete genomes. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 5646-5651.	3.3	251
5	Low-passage-associated proteins of Borrelia burgdorferi B31: characterization and molecular cloning of OspD, a surface-exposed, plasmid-encoded lipoprotein. Infection and Immunity, 1992, 60, 4662-4672.	1.0	239
6	A plasmid-encoded nicotinamidase (PncA) is essential for infectivity of Borrelia burgdorferi in a mammalian host. Molecular Microbiology, 2003, 48, 753-764.	1.2	237
7	Genetic Variation of the <i>Borrelia burgdorferi</i> Gene <i>vlsE</i> Involves Cassette-Specific, Segmental Gene Conversion. Infection and Immunity, 1998, 66, 3698-3704.	1.0	224
8	Adherence of Borrelia burgdorferi to the proteoglycan decorin. Infection and Immunity, 1995, 63, 3467-3472.	1.0	210
9	Disruption of the Genes Encoding Antigen 85A and Antigen 85B of Mycobacterium tuberculosis H37Rv: Effect on Growth in Culture and in Macrophages. Infection and Immunity, 2000, 68, 767-778.	1.0	189
10	Kinetics and In Vivo Induction of Genetic Variation of <i>vlsE</i> in <i>Borrelia burgdorferi</i>. Infection and Immunity, 1998, 66, 3689-3697.	1.0	168
11	Long-Term <i>In Vitro</i> Culture of the Syphilis Spirochete <i>Treponema pallidum</i> subsp. <i>pallidum</i>. MBio, 2018, 9, .	1.8	154
12	Intact Flagellar Motor of <i>Borrelia burgdorferi</i> Revealed by Cryo-Electron Tomography: Evidence for Stator Ring Curvature and Rotor/C-Ring Assembly Flexion. Journal of Bacteriology, 2009, 191, 5026-5036.	1.0	147
13	BBE02 Disruption Mutants of Borrelia burgdorferi B31 Have a Highly Transformable, Infectious Phenotype. Infection and Immunity, 2004, 72, 7147-7154.	1.0	141
14	Origin of modern syphilis and emergence of a pandemic Treponema pallidum cluster. Nature Microbiology, 2017, 2, 16245.	5.9	138
15	Human Antibody Responses to VlsE Antigenic Variation Protein of<i>Borrelia burgdorferi</i>. Journal of Clinical Microbiology, 1999, 37, 3997-4004.	1.8	133
16	Purification of Treponema pallidum, Nichols Strain, by Percoll Density Gradient Centrifugation. Sexually Transmitted Diseases, 1984, 11, 275-286.	0.8	127
17	Analysis of an Ordered, Comprehensive STM Mutant Library in Infectious Borrelia burgdorferi: Insights into the Genes Required for Mouse Infectivity. PLoS ONE, 2012, 7, e47532.	1.1	127
18	Molecular Architecture of the Bacterial Flagellar Motor in Cells. Biochemistry, 2014, 53, 4323-4333.	1.2	124

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19	High- and low-infectivity phenotypes of clonal populations of in vitro-cultured Borrelia burgdorferi. Infection and Immunity, 1995, 63, 2206-2212.	1.0	121
20	Characterization of a manganese-dependent regulatory protein, TroR, from Treponema pallidum. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 10887-10892.	3.3	119
21	Crystal Structure of Lyme Disease Variable Surface Antigen VlsE of Borrelia burgdorferi. Journal of Biological Chemistry, 2002, 277, 21691-21696.	1.6	119
22	Cellular Architecture of Treponema pallidum: Novel Flagellum, Periplasmic Cone, and Cell Envelope as Revealed by Cryo Electron Tomography. Journal of Molecular Biology, 2010, 403, 546-561.	2.0	114
23	A Novel<i>Treponema pallidum</i>Antigen, TP0136, Is an Outer Membrane Protein That Binds Human Fibronectin. Infection and Immunity, 2008, 76, 1848-1857.	1.0	108
24	Whole Genome Sequences of Three Treponema pallidum ssp. pertenue Strains: Yaws and Syphilis Treponemes Differ in Less than 0.2% of the Genome Sequence. PLoS Neglected Tropical Diseases, 2012, 6, e1471.	1.3	106
25	A family of surface-exposed proteins of 20 kilodaltons in the genus Borrelia. Infection and Immunity, 1994, 62, 2792-2799.	1.0	103
26	Toxin Synthesis by Clostridium difficile Is Regulated through Quorum Signaling. MBio, 2015, 6, e02569.	1.8	102
27	Antigenic variation with a twist - the Borrelia story. Molecular Microbiology, 2006, 60, 1319-1322.	1.2	99
28	Cryoelectron tomography reveals the sequential assembly of bacterial flagella in <i>Borrelia burgdorferi</i>. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 14390-14395.	3.3	99
29	Detailed Analysis of Sequence Changes Occurring during vlsE Antigenic Variation in the Mouse Model of Borrelia burgdorferi Infection. PLoS Pathogens, 2009, 5, e1000293.	2.1	96
30	<i>vls</i>Antigenic Variation Systems of Lyme Disease<i>Borrelia</i>: Eluding Host Immunity through both Random, Segmental Gene Conversion and Framework Heterogeneity. Microbiology Spectrum, 2014, 2, .	1.2	96
31	Antigenic relatedness and N-terminal sequence homology define two classes of periplasmic flagellar proteins of Treponema pallidum subsp. pallidum and Treponema phagedenis. Journal of Bacteriology, 1988, 170, 4072-4082.	1.0	94
32	Genetic diversity in Treponema pallidum: Implications for pathogenesis, evolution and molecular diagnostics of syphilis and yaws. Infection, Genetics and Evolution, 2012, 12, 191-202.	1.0	90
33	Decreased Electroporation Efficiency in Borrelia burgdorferi Containing Linear Plasmids lp25 and lp56: Impact on Transformation of Infectious B. burgdorferi. Infection and Immunity, 2002, 70, 4798-4804.	1.0	88
34	Molecular mechanism for rotational switching of the bacterial flagellar motor. Nature Structural and Molecular Biology, 2020, 27, 1041-1047.	3.6	83
35	Identification and transcriptional analysis of a Treponema pallidum operon encoding a putative ABC transport system, an iron-activated repressor protein homolog, and a glycolytic pathway enzyme homolog. Gene, 1997, 197, 47-64.	1.0	78
36	Role of Acetyl-Phosphate in Activation of the Rrp2-RpoN-RpoS Pathway in Borrelia burgdorferi. PLoS Pathogens, 2010, 6, e1001104.	2.1	78

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37	Analysis of Borrelia burgdorferi vlsE Gene Expression and Recombination in the Tick Vector. Infection and Immunity, 2001, 69, 7083-7090.	1.0	76
38	Identity ofTreponema pallidum subsp.pallidum polypeptides: Correlation of sodium dodecyl sulfate-polyacrylamide gel electrophoresis results from different laboratories. Electrophoresis, 1987, 8, 77-92.	1.3	74
39	Relationship of Treponema denticola periplasmic flagella to irregular cell morphology. Journal of Bacteriology, 1997, 179, 1628-1635.	1.0	74
40	Modulation of immunity toBorrelia burgdorferi by ultraviolet irradiation: Differential effect on Th1 and Th2 immune responses. European Journal of Immunology, 1995, 25, 3017-3022.	1.6	72
41	Conversion of a linear to a circular plasmid in the relapsing fever agent Borrelia hermsii. Journal of Bacteriology, 1996, 178, 793-800.	1.0	72
42	Linear and Circular Plasmid Content in Borrelia burgdorferi Clinical Isolates. Infection and Immunity, 2003, 71, 3699-3706.	1.0	71
43	Transcriptome of Treponema pallidum : Gene Expression Profile during Experimental Rabbit Infection. Journal of Bacteriology, 2005, 187, 1866-1874.	1.0	70
44	Central Role of the Holliday Junction Helicase RuvAB in vlsE Recombination and Infectivity of Borrelia burgdorferi. PLoS Pathogens, 2009, 5, e1000679.	2.1	68
45	Complete genome sequence of Treponema pallidum ssp. pallidumstrain SS14 determined with oligonucleotide arrays. BMC Microbiology, 2008, 8, 76.	1.3	66
46	Complete Genome Sequence of Treponema paraluiscuniculi, Strain Cuniculi A: The Loss of Infectivity to Humans Is Associated with Genome Decay. PLoS ONE, 2011, 6, e20415.	1.1	66
47	Effects of vlsE Complementation on the Infectivity of Borrelia burgdorferi Lacking the Linear Plasmid lp28-1. Infection and Immunity, 2004, 72, 6577-6585.	1.0	65
48	Reactivity of Antibodies from Syphilis Patients to a Protein Array Representing the Treponema pallidum Proteome. Journal of Clinical Microbiology, 2006, 44, 888-891.	1.8	65
49	The genome ofTreponema pallidum: new light on the agent of syphilis. FEMS Microbiology Reviews, 1998, 22, 323-332.	3.9	63
50	In vitro cultivation of Treponema pallidum: independent confirmation. Infection and Immunity, 1982, 36, 437-439.	1.0	62
51	Genome Scale Identification of Treponema pallidum Antigens. Infection and Immunity, 2005, 73, 4445-4450.	1.0	61
52	Genome Analysis of Treponema pallidum subsp. pallidum and subsp. pertenue Strains: Most of the Genetic Differences Are Localized in Six Regions. PLoS ONE, 2010, 5, e15713.	1.1	59
53	Understanding Barriers to Borrelia burgdorferi Dissemination during Infection Using Massively Parallel Sequencing. Infection and Immunity, 2013, 81, 2347-2357.	1.0	58
54	Effect of Complement Component C3 Deficiency on Experimental Lyme Borreliosis in Mice. Infection and Immunity, 2003, 71, 4432-4440.	1.0	56

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55	Characterization and Serologic Analysis of the<i>Treponema pallidum</i>Proteome. Infection and Immunity, 2010, 78, 2631-2643.	1.0	55
56	A Mutant of Mycobacterium tuberculosis H37Rv That Lacks Expression of Antigen 85A Is Attenuated in Mice but Retains Vaccinogenic Potential. Infection and Immunity, 2004, 72, 7084-7095.	1.0	50
57	Biology of Treponema pallidum: correlation of functional activities with genome sequence data. Journal of Molecular Microbiology and Biotechnology, 2001, 3, 37-62.	1.0	50
58	Lyme Disease Pathogenesis. Current Issues in Molecular Biology, 2022, 42, 473-518.	1.0	49
59	Comparative reactivity of human sera to recombinant VlsE and other Borrelia burgdorferi antigens in class-specific enzyme-linked immunosorbent assays for Lyme borreliosis. Journal of Medical Microbiology, 2002, 51, 649-655.	0.7	49
60	Transcriptional Regulation of the Borrelia burgdorferi Antigenically Variable VlsE Surface Protein. Journal of Bacteriology, 2006, 188, 4879-4889.	1.0	47
61	Transposon mutagenesis as an approach to improved understanding of Borrelia pathogenesis and biology. Frontiers in Cellular and Infection Microbiology, 2014, 4, 63.	1.8	47
62	Global Tnâ€seq analysis of carbohydrate utilization and vertebrate infectivity of <i>Borrelia burgdorferi</i>. Molecular Microbiology, 2016, 101, 1003-1023.	1.2	47
63	Mycobacterial Protein HbhA Binds Human Complement Component C3. Infection and Immunity, 2001, 69, 7501-7511.	1.0	45
64	Identification of Potential Virulence Determinants by Himar1 Transposition of Infectious Borrelia burgdorferi B31. Infection and Immunity, 2006, 74, 6690-6699.	1.0	44
65	Systematic Cloning of Treponema pallidum Open Reading Frames for Protein Expression and Antigen Discovery. Genome Research, 2003, 13, 1665-1674.	2.4	43
66	Genome Differences between <i>Treponema pallidum</i> subsp. <i>pallidum</i> Strain Nichols and <i>T. paraluiscuniculi</i> Strain Cuniculi A. Infection and Immunity, 2007, 75, 5859-5866.	1.0	42
67	Extensive interplasmidic duplications change the virulence phenotype of the relapsing fever agent Borrelia turicatae. Molecular Microbiology, 1999, 34, 1120-1132.	1.2	40
68	Structural insights into flagellar statorâ€"rotor interactions. ELife, 2019, 8, .	2.8	40
69	A high-throughput genetic screen identifies previously uncharacterized Borrelia burgdorferi genes important for resistance against reactive oxygen and nitrogen species. PLoS Pathogens, 2017, 13, e1006225.	2.1	36
70	In vitro culture system to determine MICs and MBCs of antimicrobial agents against Treponema pallidum subsp. pallidum (Nichols strain). Antimicrobial Agents and Chemotherapy, 1988, 32, 68-74.	1.4	35
71	Physical map of the genome of Treponema pallidum subsp. pallidum (Nichols). Journal of Bacteriology, 1995, 177, 1797-1804.	1.0	35
72	From microbial genome sequence to applications. Research in Microbiology, 2000, 151, 151-158.	1.0	35

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73	Characterization of the vls antigenic variation loci of the Lyme disease spirochaetes Borrelia garinii Ip90 and Borrelia afzelii ACAI. Molecular Microbiology, 2003, 47, 1407-1417.	1.2	35
74	Influence of oxygen tension, sulfhydryl compounds, and serum on the motility and virulence of Treponema pallidum (Nichols strain) in a cell-free system. Infection and Immunity, 1978, 22, 689-697.	1.0	35
75	Conservation and Heterogeneity of vlsE among Human and Tick Isolates of Borrelia burgdorferi. Infection and Immunity, 2000, 68, 1714-1718.	1.0	34
76	In Vitro Cultivation of the Syphilis Spirochete <i>Treponema pallidum</i>. Current Protocols, 2021, 1, e44.	1.3	34
77	A selective antibiotic for Lyme disease. Cell, 2021, 184, 5405-5418.e16.	13.5	33
78	Mutations in the Borrelia burgdorferi Flagellar Type III Secretion System Genes <i>fliH</i> and <i>fliI</i> Profoundly Affect Spirochete Flagellar Assembly, Morphology, Motility, Structure, and Cell Division. MBio, 2015, 6, e00579-15.	1.8	32
79	Molecular Studies in Treponema pallidum Evolution: Toward Clarity?. PLoS Neglected Tropical Diseases, 2008, 2, e184.	1.3	31
80	Phosphoenolpyruvate Phosphotransferase System Components Modulate Gene Transcription and Virulence of Borrelia burgdorferi. Infection and Immunity, 2016, 84, 754-764.	1.0	31
81	Genome structure of spirochetes. Research in Microbiology, 1992, 143, 615-621.	1.0	30
82	High-Throughput Plasmid Content Analysis of <i>Borrelia burgdorferi</i> B31 by Using Luminex Multiplex Technology. Applied and Environmental Microbiology, 2011, 77, 1483-1492.	1.4	29
83	Decreased Infectivity despite Unaltered C3 Binding by a Î” hbhA Mutant of Mycobacterium tuberculosis. Infection and Immunity, 2002, 70, 6751-6760.	1.0	28
84	Peaceful coexistence amongst Borrelia plasmids: Getting by with a little help from their friends?. Plasmid, 2013, 70, 161-167.	0.4	28
85	Characterization of the cytoplasmic filament protein gene (cfpA) of Treponema pallidum subsp. pallidum. Journal of Bacteriology, 1996, 178, 3177-3187.	1.0	27
86	Isolation and characterization of a Treponema pallidum major 60-kilodalton protein resembling the groEL protein of Escherichia coli. Journal of Bacteriology, 1990, 172, 2862-2870.	1.0	26
87	BAC Library of T. pallidum DNA in E. coli. Genome Research, 2002, 12, 515-522.	2.4	26
88	The Nucleotide Excision Repair Pathway Protects Borrelia burgdorferi from Nitrosative Stress in Ixodes scapularis Ticks. Frontiers in Microbiology, 2016, 7, 1397.	1.5	26
89	Function of the Borrelia burgdorferi FtsH Homolog Is Essential for Viability both <i>In Vitro</i> and <i>In Vivo</i> and Independent of HflK/C. MBio, 2016, 7, e00404-16.	1.8	26
90	Genome-wide screen identifies novel genes required for Borrelia burgdorferi survival in its Ixodes tick vector. PLoS Pathogens, 2019, 15, e1007644.	2.1	25

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91	Antigenicity and recombination of VlsE, the antigenic variation protein ofBorrelia burgdorferi, in rabbits, a host putatively resistant to long-term infection with this spirochete. FEMS Immunology and Medical Microbiology, 2007, 50, 421-429.	2.7	21
92	Cryo-electron tomography of periplasmic flagella in Borrelia burgdorferi reveals a distinct cytoplasmic ATPase complex. PLoS Biology, 2018, 16, e3000050.	2.6	21
93	Interaction of spirochetes with the host. Research in Microbiology, 1992, 143, 629-639.	1.0	20
94	Infectivity of the Highly Transformable BBE02â^' lp56â^' Mutant of Borrelia burgdorferi, the Lyme Disease Spirochete, via Ticks. Infection and Immunity, 2006, 74, 3678-3681.	1.0	20
95	The Borrelia burgdorferi Glycosaminoglycan Binding Protein Bgp in the B31 Strain Is Not Essential for Infectivity despite Facilitating Adherence and Tissue Colonization. Infection and Immunity, 2018, 86, .	1.0	20
96	A Retrospective Study on Genetic Heterogeneity within Treponema Strains: Subpopulations Are Genetically Distinct in a Limited Number of Positions. PLoS Neglected Tropical Diseases, 2015, 9, e0004110.	1.3	19
97	The Microaerophilic Nature of Treponema pallidurn. Sexually Transmitted Diseases, 1982, 9, 1-8.	0.8	18
98	Serum Requirement for the Multiplication of Treponema pallidum in a Tissue-culture System. Sexually Transmitted Diseases, 1986, 13, 207-213.	0.8	18
99	SERUM ANTIBODIES TO BORRELIA BURGDORFERI, ANAPLASMA PHAGOCYTOPHILUM, AND BABESIA MICROTI IN RECAPTURED WHITE-FOOTED MICE. Journal of Wildlife Diseases, 2013, 49, 294-302.	0.3	16
100	Parameters Affecting Continuous <i>In Vitro</i> Culture of Treponema pallidum Strains. MBio, 2021, 12, .	1.8	16
101	Specific Th1 cell lines that confer protective immunity against experimental <i>Borrelia burgdorferi</i> infection in mice. Journal of Leukocyte Biology, 1998, 63, 542-549.	1.5	15
102	Long-term incorporation of tritiated adenine into deoxyribonucleic acid and ribonucleic acid by Treponema pallidum (Nichols strain). Infection and Immunity, 1980, 29, 1040-1049.	1.0	15
103	The genome sequence of Treponema pallidum, the syphilis spirochete: will clinicians benefit?. Current Opinion in Infectious Diseases, 2000, 13, 29-36.	1.3	14
104	The dynamic proteome of Lyme disease Borrelia. Genome Biology, 2006, 7, 209.	13.9	14
105	Enhanced Protective Immunogenicity of Homodimeric Borrelia burgdorferi Outer Surface Protein C. Vaccine Journal, 2017, 24, .	3.2	14
106	The intergenic small non-coding RNA ittA is required for optimal infectivity and tissue tropism in Borrelia burgdorferi. PLoS Pathogens, 2020, 16, e1008423.	2.1	13
107	Analysis of the intergenic sequences provided by Feria-Arroyo et al. does not support the claim of high Borrelia burgdorferi tick infection rates in Texas and northeastern Mexico. Parasites and Vectors, 2014, 7, 467.	1.0	12
108	Comparison of transcriptional profiles of Treponema pallidum during experimental infection of rabbits and in vitro culture: Highly similar, yet different. PLoS Pathogens, 2021, 17, e1009949.	2.1	12

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109	The Genus Treponema. , 1992, , 3537-3559.		12
110	<i>In Vitro</i> Susceptibility of Treponema pallidum subsp. <i>pallidum</i> to Doxycycline. Antimicrobial Agents and Chemotherapy, 2020, 64, .	1.4	11
111	The Thermophilic, Homohexameric Aminopeptidase of Borrelia burgdorferi Is a Member of the M29 Family of Metallopeptidases. Infection and Immunity, 2005, 73, 2253-2261.	1.0	10
112	Hiding in Plain Sight: Colonic Spirochetosis in Humans. Journal of Bacteriology, 2019, 201, .	1.0	9
113	YebC regulates variable surface antigen VlsE expression and is required for host immune evasion in Borrelia burgdorferi. PLoS Pathogens, 2020, 16, e1008953.	2.1	8
114	The Genus Treponema. , 2006, , 211-234.		8
115	Isolated Pontine Progressive Multifocal Leukoencephalopathy: Unusual Magnetic Resonance Imaging Features. Journal of Neuroimaging, 2002, 12, 63-66.	1.0	7
116	Response to Esteve-Gassent et al.: flaB sequences obtained from Texas PCR products are identical to the positive control strain Borrelia burgdorferi B31. Parasites and Vectors, 2015, 8, 310.	1.0	7
117	How do Lyme Borrelia Organisms Cause Disease? The Quest for Virulence Determinants. The Open Neurology Journal, 2012, 6, 119-123.	0.4	7
118	Illuminating the agent of syphilis: TheTreponema pallidum genome project (minireview). Electrophoresis, 1998, 19, 551-553.	1.3	6
119	OptiSol Corneal Storage Medium and Transmission of Treponema Pallidum. Cornea, 1995, 14, 595???600.	0.9	5
120	Out of the Woods: the Remarkable Genomes of the Genus Borrelia. Journal of Bacteriology, 2011, 193, 6812-6814.	1.0	5
121	vlsAntigenic Variation Systems of Lyme DiseaseBorrelia: Eluding Host Immunity through both Random, Segmental Gene Conversion and Framework Heterogeneity. , 2015, , 471-489.		4
122	Demonstration of Treponema pallidum in a cutaneous gumma by indirect immunofluorescence. Archives of Dermatology, 1983, 119, 677-680.	1.7	4
123	SERUM ANTIBODIES TO WHOLE-CELL AND RECOMBINANT ANTIGENS OF BORRELIA BURGDORFERI IN COTTONTAIL RABBITS. Journal of Wildlife Diseases, 2012, 48, 12-20.	0.3	2
124	BBB07 contributes to, but is not essential for, Borrelia burgdorferi infection in mice. Microbiology (United Kingdom), 2020, 166, 988-994.	0.7	2
125	Construction of Small Genome BAC Library for Functional and Genomic Applications. , 2004, 255, 047-056.		1
126	Antigenic Variation in Lyme Disease Borreliae by Promiscuous Recombination of VMP-like Sequence Cassettes. Cell, 1999, 96, 447.	13.5	0

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127	Intact Flagellar Motor Architecture Revealed by Cryo-Electron Tomography. Biophysical Journal, 2009, 96, 412a.	0.2	0
128	Catching up with Lyme Disease Antigenic Variation Computationally. Trends in Microbiology, 2018, 26, 644-645.	3.5	0
129	Comparative Pathogenomics of Spirochetes. , 0, , 141-159.		0