Roy D Welch

List of Publications by Year
in descending order

36 papers	1,487 citations	567281 15 h-index	454955 30 g-index
39 all docs	39 docs citations	39 times ranked	1738 citing authors

#	Article	IF	Citations
1	Complete genome sequence of the myxobacterium Sorangium cellulosum. Nature Biotechnology, 2007, 25, 1281-1289.	17.5	354
2	Genome Sequences of ThreeAgrobacteriumBiovars Help Elucidate the Evolution of Multichromosome Genomes in Bacteria. Journal of Bacteriology, 2009, 191, 2501-2511.	2.2	220
3	The Entomopathogenic Bacterial Endosymbionts Xenorhabdus and Photorhabdus: Convergent Lifestyles from Divergent Genomes. PLoS ONE, 2011, 6, e27909.	2.5	161
4	Waves and aggregation patterns in myxobacteria. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 4256-4261.	7.1	97
5	Global Mutational Analysis of NtrC-Like Activators in Myxococcus xanthus : Identifying Activator Mutants Defective for Motility and Fruiting Body Development. Journal of Bacteriology, 2003, 185, 6083-6094.	2.2	86
6	Dynamics of Fruiting Body Morphogenesis. Journal of Bacteriology, 2004, 186, 919-927.	2.2	68
7	Self-Driven Phase Transitions DriveMyxococcus xanthusFruiting Body Formation. Physical Review Letters, 2019, 122, 248102.	7.8	63
8	Ïƒ54 Enhancer Binding Proteins and Myxococcus xanthus Fruiting Body Development. Journal of Bacteriology, 2004, 186, 4361-4368.	2.2	61
9	Rootbeer: Seamlessly Using GPUs from Java. , 2012, , .		52
10	Spatial Organization of Myxococcus xanthus during Fruiting Body Formation. Journal of Bacteriology, 2007, 189, 9126-9130.	2.2	50
11	Reconciliation of Sequence Data and Updated Annotation of the Genome of Agrobacterium tumefaciens C58, and Distribution of a Linear Chromosome in the Genus Agrobacterium. Applied and Environmental Microbiology, 2013, 79, 1414-1417.	3.1	35
12	Functional genome annotation through phylogenomic mapping. Nature Biotechnology, 2005, 23, 691-698.	17.5	26
13	Predicting Prokaryotic Ecological Niches Using Genome Sequence Analysis. PLoS ONE, 2007, 2, e743.	2.5	26
14	Stable isotope dilution analysis of n-hexanoylglycine, 3-phenylpropionylglycine and suberylglycine in human urine using chemical ionization gas chromatography/mass spectrometry selected ion monitoring. Biomedical & Environmental Mass Spectrometry, 1989, 18, 471-477.	1.6	25
15	The Emerging World of Wikis. Science, 2008, 320, 1289-1290.	12.6	23
16	Quantifying Aggregation Dynamics during Myxococcus xanthus Development. Journal of Bacteriology, 2011, 193, 5164-5170.	2.2	21
17	Chemotaxis as an Emergent Property of a Swarm. Journal of Bacteriology, 2008, 190, 6811-6816.	2.2	20
18	Describing Myxococcus xanthus Aggregation Using Ostwald Ripening Equations for Thin Liquid Films. Scientific Reports, 2014, 4, 6376.	3.3	17

#	Article	IF	Citations
19	Xanthusbase: adapting wikipedia principles to a model organism database. Nucleic Acids Research, 2007, 35, D422-D426.	14.5	13
20	Spreading rates of bacterial colonies depend on substrate stiffness and permeability. , 2022, 1, .		12
21	Inter-laboratory evolution of a model organism and its epistatic effects on mutagenesis screens. Scientific Reports, 2016, 6, 38001.	3.3	11
22	Phenotypic profiling of ABC transporter coding genes in Myxococcus xanthus. Frontiers in Microbiology, 2014, 5, 352.	3.5	8
23	A Markovian analysis of bacterial genome sequence constraints. PeerJ, 2013, 1, e127.	2.0	8
24	Identification of 2-(2â€²-octenyl) succinic acid in urine. Rapid Communications in Mass Spectrometry, 1990, 4, 170-172.	1.5	5
25	Practical Applications of Bacterial Functional Genomics. Biotechnology and Genetic Engineering Reviews, 2007, 24, 213-242.	6.2	5
26	Recording Multicellular Behavior in Myxococcus xanthus Biofilms using Time-lapse Microcinematography. Journal of Visualized Experiments, 2010, , .	0.3	5
27	If you build it, they might come. Nature Reviews Microbiology, 2009, 7, 90-90.	28.6	4
28	Bacterial Postgenomics: the Promise and Peril of Systems Biology â–¿. Journal of Bacteriology, 2006, 188, 7999-8004.	2.2	3
29	A Clp/Hsp100 Chaperone Functions in Myxococcus xanthus Sporulation and Self-Organization. Journal of Bacteriology, 2012, 194, 1689-1696.	2.2	3
30	The Ïƒ54 system directly regulates bacterial natural product genes. Scientific Reports, 2021, 11, 4771.	3.3	3
31	Simultaneous Measurement of Multiple mRNAs with a Single Control by Quantitative Competitive Reverse Transcriptaseâ€“Polymerase Chain Reaction: Glucose Transporters Glut1 and Glut4. Analytical Biochemistry, 1999, 268, 102-109.	2.4	1
32	Xanthusbase after five years expands to become Openmods. Nucleic Acids Research, 2012, 40, D1288-D1294.	14.5	1
33	Soot class loading in the rootbeer GPU compiler. , 2013, , .		0
34	Quantification of Myxococcus xanthus Aggregation and Rippling Behaviors: Deep-Learning Transformation of Phase-Contrast into Fluorescence Microscopy Images. Microorganisms, 2021, 9, 1954.	3.6	0
35	Profiling Myxococcus xanthus Swarming Phenotypes through Mutation and Environmental Variation. Journal of Bacteriology, 2021, 203, e0030621.	2.2	0
36	A Postgenomic Overview of the Myxobacteria. , 0, , 299-311.		0