Karin Sauer

List of Publications by Year
in descending order

73 papers	7,550 citations	61857 43 h-index	85405 71 g-index
73 all docs	73 docs citations	73 times ranked	7183 citing authors

#	Article	IF	Citations
1	A previously uncharacterized gene, PA2146, contributes to biofilm formation and drug tolerance across the Ê£-Proteobacteria. Npj Biofilms and Microbiomes, 2022, 8, .	2.9	6
2	Glucose-6-Phosphate Acts as an Extracellular Signal of SagS To Modulate Pseudomonas aeruginosa c-di-GMP Levels, Attachment, and Biofilm Formation. MSphere, 2021, 6, .	1.3	10
3	SagS and its unorthodox contributions to Pseudomonas aeruginosa biofilm development. Biofilm, 2021, 3, 100059.	1.5	9
4	Persister control by leveraging dormancy associated reduction of antibiotic efflux. PLoS Pathogens, 2021, 17, e1010144.	2.1	10
5	Untethering and Degradation of the Polysaccharide Matrix Are Essential Steps in the Dispersion Response of <i>Pseudomonas aeruginosa</i> Biofilms. Journal of Bacteriology, 2020, 202, .	1.0	33
6	Biofilm dispersion. Nature Reviews Microbiology, 2020, 18, 571-586.	13.6	437
7	Self-defensive antimicrobial biomaterial surfaces. Colloids and Surfaces B: Biointerfaces, 2020, 192, 110989.	2.5	20
8	Cyclic di-GMP and the Regulation of Biofilm Dispersion. , 2020, , 545-560.		2
9	Hydrothermally-grown nanostructured anatase TiO2 coatings tailored for photocatalytic and antibacterial properties. Ceramics International, 2019, 45, 23216-23224.	2.3	13
10	Enzyme-encapsulating polymeric nanoparticles: A potential adjunctive therapy in Pseudomonas aeruginosa biofilm-associated infection treatment. Colloids and Surfaces B: Biointerfaces, 2019, 184, 110512.	2.5	19
11	Controlling chronicPseudomonas aeruginosainfections by strategically interfering with the sensory function of SagS. Molecular Microbiology, 2019, 111, 1211-1228.	1.2	11
12	Pseudomonas aeruginosa Requires the DNA-Specific Endonuclease EndA To Degrade Extracellular Genomic DNA To Disperse from the Biofilm. Journal of Bacteriology, 2019, 201, .	1.0	36
13	Pyruvate-depleting conditions induce biofilm dispersion and enhance the efficacy of antibiotics in killing biofilms in vitro and in vivo. Scientific Reports, 2019, 9, 3763.	1.6	56
14	Signal Sensing and Transduction Are Conserved between the Periplasmic Sensory Domains of BifA and SagS. MSphere, 2019, 4, .	1.3	3
15	The ABC of Biofilm Drug Tolerance: the MerR-Like Regulator BrlR Is an Activator of ABC Transport Systems, with PA1874-77 Contributing to the Tolerance of Pseudomonas aeruginosa Biofilms to Tobramycin. Antimicrobial Agents and Chemotherapy, 2018, 62, .	1.4	43
16	The Yin and Yang of SagS: Distinct Residues in the HmsP Domain of SagS Independently Regulate Biofilm Formation and Biofilm Drug Tolerance. MSphere, 2018, 3, .	1.3	21
17	Cyclic-di-GMP and oprF Are Involved in the Response of Pseudomonas aeruginosa to Substrate Material Stiffness during Attachment on Polydimethylsiloxane (PDMS). Frontiers in Microbiology, 2018, 9, 110.	1.5	52
18	The PA3177 Gene Encodes an Active Diguanylate Cyclase That Contributes to Biofilm Antimicrobial Tolerance but Not Biofilm Formation by Pseudomonas aeruginosa. Antimicrobial Agents and Chemotherapy, 2018, 62, .	1.4	34

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19	Comparative evaluation of rRNA depletion procedures for the improved analysis of bacterial biofilm and mixed pathogen culture transcriptomes. Scientific Reports, 2017, 7, 41114.	1.6	55
20	Divide and conquer: the <scp><i>P</i></scp><i>seudomonas aeruginosa</i> twoâ€component hybrid <scp>S</scp>ag<scp>S</scp> enables biofilm formation and recalcitrance of biofilm cells to antimicrobial agents via distinct regulatory circuits. Environmental Microbiology, 2017, 19, 2005-2024.	1.8	29
21	How Bacteria Respond to Material Stiffness during Attachment: A Role of <i>Escherichia coli</i> Flagellar Motility. ACS Applied Materials & Interfaces, 2017, 9, 22176-22184.	4.0	66
22	The War on Slime. Scientific American, 2017, 317, 64-69.	1.0	1
23	Susceptibility of Pseudomonas aeruginosa Dispersed Cells to Antimicrobial Agents Is Dependent on the Dispersion Cue and Class of the Antimicrobial Agent Used. Antimicrobial Agents and Chemotherapy, 2017, 61, .	1.4	43
24	Detection of Cyclic di-GMP Binding Proteins Utilizing a Biotinylated Cyclic di-GMP Pull-Down Assay. Methods in Molecular Biology, 2017, 1657, 317-329.	0.4	7
25	Detection of c-di-GMP-Responsive DNA Binding. Methods in Molecular Biology, 2017, 1657, 293-302.	0.4	0
26	Escaping the biofilm in more than one way: desorption, detachment or dispersion. Current Opinion in Microbiology, 2016, 30, 67-78.	2.3	192
27	Control of Biofilms with the Fatty Acid Signaling Molecule cis-2-Decenoic Acid. Pharmaceuticals, 2015, 8, 816-835.	1.7	81
28	The Diguanylate Cyclase GcbA Facilitates Pseudomonas aeruginosa Biofilm Dispersion by Activating BdlA. Journal of Bacteriology, 2015, 197, 174-187.	1.0	59
29	The Pseudomonas aeruginosa Diguanylate Cyclase GcbA, a Homolog of P. fluorescens GcbA, Promotes Initial Attachment to Surfaces, but Not Biofilm Formation, via Regulation of Motility. Journal of Bacteriology, 2014, 196, 2827-2841.	1.0	59
30	BdlA, DipA and Induced Dispersion Contribute to Acute Virulence and Chronic Persistence of Pseudomonas aeruginosa. PLoS Pathogens, 2014, 10, e1004168.	2.1	60
31	Diguanylate cyclase <scp>NicD</scp>â€based signalling mechanism of nutrientâ€induced dispersion by <scp><i>P</i></scp><i>seudomonas aeruginosa</i>. Molecular Microbiology, 2014, 94, 771-793.	1.2	91
32	Elevated levels of the second messenger câ€diâ€<scp>GMP</scp> contribute to antimicrobial resistance of <scp><i>P</i></scp><i>seudomonas aeruginosa</i>. Molecular Microbiology, 2014, 92, 488-506.	1.2	66
33	Bacteria Present in Carotid Arterial Plaques Are Found as Biofilm Deposits Which May Contribute to Enhanced Risk of Plaque Rupture. MBio, 2014, 5, e01206-14.	1.8	105
34	<scp>BrlR</scp> from <scp><i>P</i></scp><i>seudomonas aeruginosa</i> is a câ€diâ€<scp>GMP</scp>â€responsive transcription factor. Molecular Microbiology, 2014, 92, 471-487.	1.2	72
35	The MerR-Like Regulator BrlR Confers Biofilm Tolerance by Activating Multidrug Efflux Pumps in Pseudomonas aeruginosa Biofilms. Journal of Bacteriology, 2013, 195, 3352-3363.	1.0	114
36	Small RNAs and their role in biofilm formation. Trends in Microbiology, 2013, 21, 39-49.	3.5	109

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37	Antimicrobial Tolerance of Pseudomonas aeruginosa Biofilms Is Activated during an Early Developmental Stage and Requires the Two-Component Hybrid SagS. Journal of Bacteriology, 2013, 195, 4975-4987.	1.0	66
38	NO-Induced Biofilm Dispersion in Pseudomonas aeruginosa Is Mediated by an MHYT Domain-Coupled Phosphodiesterase. Journal of Bacteriology, 2013, 195, 3531-3542.	1.0	142
39	The MerR-Like Regulator BrlR Impairs Pseudomonas aeruginosa Biofilm Tolerance to Colistin by Repressing PhoPQ. Journal of Bacteriology, 2013, 195, 4678-4688.	1.0	50
40	Extraction and Quantification of Cyclic Di-GMP from Pseudomonas aeruginosa. Bio-protocol, 2013, 3, .	0.2	39
41	Microcolony formation by the opportunistic pathogen <i><scp>P</scp>seudomonas aeruginosa</i> requires pyruvate and pyruvate fermentation. Molecular Microbiology, 2012, 86, 819-835.	1.2	72
42	PAS Domain Residues and Prosthetic Group Involved in BdlA-Dependent Dispersion Response by Pseudomonas aeruginosa Biofilms. Journal of Bacteriology, 2012, 194, 5817-5828.	1.0	55
43	Dispersion by <i>Pseudomonas aeruginosa</i> requires an unusual posttranslational modification of BdlA. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 16690-16695.	3.3	89
44	The MerR-Like Transcriptional Regulator BrlR Contributes to Pseudomonas aeruginosa Biofilm Tolerance. Journal of Bacteriology, 2012, 194, 4823-4836.	1.0	81
45	The Phosphodiesterase DipA (PA5017) Is Essential for Pseudomonas aeruginosa Biofilm Dispersion. Journal of Bacteriology, 2012, 194, 2904-2915.	1.0	164
46	Sticky Situations: Key Components That Control Bacterial Surface Attachment. Journal of Bacteriology, 2012, 194, 2413-2425.	1.0	302
47	The novel <i>Pseudomonas aeruginosa</i> twoâ€component regulator BfmR controls bacteriophageâ€mediated lysis and DNA release during biofilm development through PhdA. Molecular Microbiology, 2011, 81, 767-783.	1.2	75
48	SagS Contributes to the Motile-Sessile Switch and Acts in Concert with BfiSR To Enable Pseudomonas aeruginosa Biofilm Formation. Journal of Bacteriology, 2011, 193, 6614-6628.	1.0	87
49	The Novel Two-Component Regulatory System BfiSR Regulates Biofilm Development by Controlling the Small RNA<i>rsmZ</i>through CafA. Journal of Bacteriology, 2010, 192, 5275-5288.	1.0	114
50	The Pneumococcal Serine-Rich Repeat Protein Is an Intra-Species Bacterial Adhesin That Promotes Bacterial Aggregation In Vivo and in Biofilms. PLoS Pathogens, 2010, 6, e1001044.	2.1	157
51	Early biofilm formation on microtiter plates is not correlated with the invasive disease potential of Streptococcus pneumoniae. Microbial Pathogenesis, 2010, 48, 124-130.	1.3	53
52	Neutral super-oxidised solutions are effective in killing<i>P. aeruginosa</i>biofilms. Biofouling, 2009, 25, 45-54.	0.8	26
53	A Novel Signaling Network Essential for Regulating Pseudomonas aeruginosa Biofilm Development. PLoS Pathogens, 2009, 5, e1000668.	2.1	182
54	Effect of a solution containing citrate/Methylene Blue/parabens on Staphylococcus aureus bacteria and biofilm, and comparison with various heparin solutions. Journal of Antimicrobial Chemotherapy, 2009, 63, 937-945.	1.3	44

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55	ILâ€4â€mediated fine tuning of ILâ€12p70 production by human DC. European Journal of Immunology, 2008, 38, 3138-3149.	1.6	44
56	Formation of<i>Streptococcus pneumoniae</i>Non-Phase-Variable Colony Variants Is Due to Increased Mutation Frequency Present under Biofilm Growth Conditions. Journal of Bacteriology, 2008, 190, 6330-6339.	1.0	67
57	Proteomic, Microarray, and Signature-Tagged Mutagenesis Analyses of Anaerobic<i>Pseudomonas aeruginosa</i>at pH 6.5, Likely Representing Chronic, Late-Stage Cystic Fibrosis Airway Conditions. Journal of Bacteriology, 2008, 190, 2739-2758.	1.0	86
58	Characterization of Colony Morphology Variants Isolated from Streptococcus pneumoniae Biofilms. Journal of Bacteriology, 2007, 189, 2030-2038.	1.0	158
59	<i>Pseudomonas aeruginosa</i>AlgR Represses the Rhl Quorum-Sensing System in a Biofilm-Specific Manner. Journal of Bacteriology, 2007, 189, 7752-7764.	1.0	90
60	BdlA, a Chemotaxis Regulator Essential for Biofilm Dispersion in Pseudomonas aeruginosa. Journal of Bacteriology, 2006, 188, 7335-7343.	1.0	215
61	Phenotypic Characterization of Streptococcus pneumoniae Biofilm Development. Journal of Bacteriology, 2006, 188, 2325-2335.	1.0	140
62	Characterization of Temporal Protein Production in Pseudomonas aeruginosa Biofilms. Journal of Bacteriology, 2005, 187, 8114-8126.	1.0	192
63	Characterization of Nutrient-Induced Dispersion in Pseudomonas aeruginosa PAO1 Biofilm. Journal of Bacteriology, 2004, 186, 7312-7326.	1.0	414
64	The genomics and proteomics of biofilm formation. Genome Biology, 2003, 4, 219.	13.9	237
65	Pseudomonas aeruginosa Displays Multiple Phenotypes during Development as a Biofilm. Journal of Bacteriology, 2002, 184, 1140-1154.	1.0	1,413
66	Characterization of Phenotypic Changes in Pseudomonas putida in Response to Surface-Associated Growth. Journal of Bacteriology, 2001, 183, 6579-6589.	1.0	322
67	Methyl-coenzymeâ€ƒM formation in methanogenic archaea. FEBS Journal, 2000, 267, 2498-2504.	0.2	49
68	Methanol:coenzyme M methyltransferase fromMethanosarcina barkeriâ€ƒ--â€ƒsubstitution of the corrinoid harbouring subunit MtaC by free cob(I)alamin. FEBS Journal, 1999, 261, 674-681.	0.2	43
69	Methanol : coenzyme M methyltransferase from Methanosarcina barkeri . Identification of the active-site histidine in the corrinoid-harboring subunit MtaC by site-directed mutagenesis. FEBS Journal, 1998, 253, 698-705.	0.2	36
70	Tetramethylammonium:coenzyme M methyltransferase system from Methanococcoides sp.. Archives of Microbiology, 1998, 170, 220-226.	1.0	27
71	His84rather than His35is the active site histidine in the corrinoid protein MtrA of the energy conserving methyltransferase complex fromMethanobacterium thermoautotrophicum. FEBS Letters, 1998, 436, 401-402.	1.3	14
72	Methanol: Coenzyme M Methyltransferase from Methanosarcina Barkeri. Zinc Dependence and Thermodynamics of the Methanol:Cob(I)alamin Methyltransferase Reaction. FEBS Journal, 1997, 249, 280-285.	0.2	79

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73	Methanol: Coenzyme M Methyltransferase from Methanosarcina Barkeri. Purification, Properties and Encoding Genes of the Corrinoid Protein MT1. FEBS Journal, 1997, 243, 670-677.	0.2	102