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	Pseudomonas aeruginosa Displays Multiple Phenotypes during Development as a Biofilm. Journal of Bacteriology, 2002, 184, 1140-1154.	1.0	1,413
2	Biofilm dispersion. Nature Reviews Microbiology, 2020, 18, 571-586.	13.6	437
3	Characterization of Nutrient-Induced Dispersion in Pseudomonas aeruginosa PAO1 Biofilm. Journal of Bacteriology, 2004, 186, 7312-7326.	1.0	414
4	Characterization of Phenotypic Changes in Pseudomonas putida in Response to Surface-Associated Growth. Journal of Bacteriology, 2001, 183, 6579-6589.	1.0	322
5	Sticky Situations: Key Components That Control Bacterial Surface Attachment. Journal of Bacteriology, 2012, 194, 2413-2425.	1.0	302
6	The genomics and proteomics of biofilm formation. Genome Biology, 2003, 4, 219.	13.9	237
7	BdlA, a Chemotaxis Regulator Essential for Biofilm Dispersion in Pseudomonas aeruginosa. Journal of Bacteriology, 2006, 188, 7335-7343.	1.0	215
8	Characterization of Temporal Protein Production in Pseudomonas aeruginosa Biofilms. Journal of Bacteriology, 2005, 187, 8114-8126.	1.0	192
9	Escaping the biofilm in more than one way: desorption, detachment or dispersion. Current Opinion in Microbiology, 2016, 30, 67-78.	2.3	192
10	A Novel Signaling Network Essential for Regulating Pseudomonas aeruginosa Biofilm Development. PLoS Pathogens, 2009, 5, e1000668.	2.1	182
11	The Phosphodiesterase DipA (PA5017) Is Essential for Pseudomonas aeruginosa Biofilm Dispersion. Journal of Bacteriology, 2012, 194, 2904-2915.	1.0	164
12	Characterization of Colony Morphology Variants Isolated from Streptococcus pneumoniae Biofilms. Journal of Bacteriology, 2007, 189, 2030-2038.	1.0	158
13	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
14	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
15	Phenotypic Characterization of Streptococcus pneumoniae Biofilm Development. Journal of Bacteriology, 2006, 188, 2325-2335.	1.0	140
16	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
17	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
18	Small RNAs and their role in biofilm formation. Trends in Microbiology, 2013, 21, 39-49.	3.5	109

#	ARTICLE	IF	CITATIONS
19	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
20	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
21	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
22	<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
23	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
24	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
25	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
26	The MerR-Like Transcriptional Regulator BrlR Contributes to Pseudomonas aeruginosa Biofilm Tolerance. Journal of Bacteriology, 2012, 194, 4823-4836.	1.0	81
27	Control of Biofilms with the Fatty Acid Signaling Molecule cis-2-Decenoic Acid. Pharmaceuticals, 2015, 8, 816-835.	1.7	81
28	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
29	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
30	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
31	<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
32	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
33	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
34	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
35	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
36	BdlA, DipA and Induced Dispersion Contribute to Acute Virulence and Chronic Persistence of Pseudomonas aeruginosa. PLoS Pathogens, 2014, 10, e1004168.	2.1	60

#	Article	IF	Citations
37	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
38	The Diguanylate Cyclase GcbA Facilitates Pseudomonas aeruginosa Biofilm Dispersion by Activating BdlA. Journal of Bacteriology, 2015, 197, 174-187.	1.0	59
39	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
40	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
41	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
42	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
43	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
44	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
45	Methyl-coenzymeâ€ƒM formation in methanogenic archaea. FEBS Journal, 2000, 267, 2498-2504.	0.2	49
46	ILâ€4â€mediated fine tuning of ILâ€12p70 production by human DC. European Journal of Immunology, 2008, 38, 3138-3149.	1.6	44
47	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
48	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
49	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
50	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
51	Extraction and Quantification of Cyclic Di-GMP from Pseudomonas aeruginosa. Bio-protocol, 2013, 3, .	0.2	39
52	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
53	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
54	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

#	Article	IF	Citations
55	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
56	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
57	Tetramethylammonium:coenzyme M methyltransferase system from Methanococcoides sp.. Archives of Microbiology, 1998, 170, 220-226.	1.0	27
58	Neutral super-oxidised solutions are effective in killing<i>P. aeruginosa</i>biofilms. Biofouling, 2009, 25, 45-54.	0.8	26
59	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
60	Self-defensive antimicrobial biomaterial surfaces. Colloids and Surfaces B: Biointerfaces, 2020, 192, 110989.	2.5	20
61	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
62	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
63	Hydrothermally-grown nanostructured anatase TiO2 coatings tailored for photocatalytic and antibacterial properties. Ceramics International, 2019, 45, 23216-23224.	2.3	13
64	Controlling chronicPseudomonas aeruginosainfections by strategically interfering with the sensory function of SagS. Molecular Microbiology, 2019, 111, 1211-1228.	1.2	11
65	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
66	Persister control by leveraging dormancy associated reduction of antibiotic efflux. PLoS Pathogens, 2021, 17, e1010144.	2.1	10
67	SagS and its unorthodox contributions to Pseudomonas aeruginosa biofilm development. Biofilm, 2021, 3, 100059.	1.5	9
68	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
69	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
70	Signal Sensing and Transduction Are Conserved between the Periplasmic Sensory Domains of BifA and SagS. MSphere, 2019, 4, .	1.3	3
71	Cyclic di-GMP and the Regulation of Biofilm Dispersion. , 2020, , 545-560.		2
72	The War on Slime. Scientific American, 2017, 317, 64-69.	1.0	1

#	Article	IF	Citations
73	Detection of c-di-GMP-Responsive DNA Binding. Methods in Molecular Biology, 2017, 1657, 293-302.	0.4	0