

# Kirsten Jung

## List of Publications by Year in descending order

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98  
papers

4,357  
citations

109321

35  
h-index

133252

59  
g-index

141  
all docs

141  
docs citations

141  
times ranked

4470  
citing authors

#	ARTICLE	IF	CITATIONS
1	In vitro interaction network of a synthetic gut bacterial community. ISME Journal, 2022, 16, 1095-1109.	9.8	66
2	Eukaryotic catecholamine hormones influence the chemotactic control of <i>Vibrio campbellii</i> by binding to the coupling protein CheW. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2118227119.	7.1	6
3	Division of labor and collective functionality in <i>Escherichia coli</i> under acid stress. Communications Biology, 2022, 5, 327.	4.4	14
4	Synthetic post-translational modifications of elongation factor P using the ligase EpmA. FEBS Journal, 2021, 288, 663-677.	4.7	5
5	Transcriptional regulation of the $\mu$ -fructoselysine metabolism in <i>Escherichia coli</i> by global and substrate-specific cues. Molecular Microbiology, 2021, 115, 175-190.	2.5	10
6	Elongation factor P is required for EII <sub>Glc</sub> translation in <i>Corynebacterium glutamicum</i> due to an essential polyproline motif. Molecular Microbiology, 2021, 115, 320-331.	2.5	4
7	Direct binding of benzoate derivatives to two chemoreceptors with Cache sensor domains in <i>Halomonas titanicae</i> KHS3. Molecular Microbiology, 2021, 115, 672-683.	2.5	7
8	Dynamics of chromosomal target search by a membrane-integrated one-component receptor. PLoS Computational Biology, 2021, 17, e1008680.	3.2	7
9	Proline codon pair selection determines ribosome pausing strength and translation efficiency in bacteria. Communications Biology, 2021, 4, 589.	4.4	13
10	Insights into a Pyruvate Sensing and Uptake System in <i>Vibrio campbellii</i> and Its Importance for Virulence. Journal of Bacteriology, 2021, 203, e0029621.	2.2	4
11	Phenotypic heterogeneity of microbial populations under nutrient limitation. Current Opinion in Biotechnology, 2020, 62, 160-167.	6.6	18
12	Function and Regulation of the Pyruvate Transporter CstA in <i>Escherichia coli</i> . International Journal of Molecular Sciences, 2020, 21, 9068.	4.1	16
13	MS-Based <i>In Situ</i> Proteomics Reveals AMPylation of Host Proteins during Bacterial Infection. ACS Infectious Diseases, 2020, 6, 3277-3289.	3.8	7
14	Molecular Design of a Signaling System Influences Noise in Protein Abundance under Acid Stress in Different Gammaproteobacteria. Journal of Bacteriology, 2020, 202, .	2.2	14
15	Structure and Function of an Elongation Factor P Subfamily in Actinobacteria. Cell Reports, 2020, 30, 4332-4342.e5.	6.4	11
16	Switching the Post-translational Modification of Translation Elongation Factor EF-P. Frontiers in Microbiology, 2019, 10, 1148.	3.5	16
17	Coming in and Finding Out: Blending Receptor-Targeted Delivery and Efficient Endosomal Escape in a Novel Bio-Responsive siRNA Delivery System for Gene Knockdown in Pulmonary T Cells. Advanced Therapeutics, 2019, 2, 1900047.	3.2	21
18	Phenotypic Heterogeneity Generated by Histidine Kinase-Based Signaling Networks. Journal of Molecular Biology, 2019, 431, 4547-4558.	4.2	8

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19	Importance of Pyruvate Sensing and Transport for the Resuscitation of Viable but Nonculturable <i>Escherichia coli</i> K-12. <i>Journal of Bacteriology</i> , 2019, 201, .	2.2	39
20	DNA-binding directs the localization of a membrane-integrated receptor of the ToxR family. <i>Communications Biology</i> , 2019, 2, 4.	4.4	21
21	Phosphorylation of the outer membrane mitochondrial protein OM64 influences protein import into mitochondria. <i>Mitochondrion</i> , 2019, 44, 93-102.	3.4	15
22	Evidence of Cross-Regulation in Two Closely Related Pyruvate-Sensing Systems in Uropathogenic <i>Escherichia coli</i> . <i>Journal of Membrane Biology</i> , 2018, 251, 65-74.	2.1	13
23	LACTATEing Salmonella: A Host-Derived Fermentation Product Fuels Pathogen Growth. <i>Cell Host and Microbe</i> , 2018, 23, 3-4.	11.0	11
24	Bacterial transmembrane signalling systems and their engineering for biosensing. <i>Open Biology</i> , 2018, 8, 180023.	3.6	43
25	Outer Membrane Vesicles Facilitate Trafficking of the Hydrophobic Signaling Molecule CAI-1 between <i>Vibrio harveyi</i> Cells. <i>Journal of Bacteriology</i> , 2018, 200, .	2.2	73
26	A Single-Cell View of the BtsSR/YpdAB Pyruvate Sensing Network in <i>Escherichia coli</i> and Its Biological Relevance. <i>Journal of Bacteriology</i> , 2018, 200, .	2.2	25
27	BtsT, a Novel and Specific Pyruvate/H <sup>+</sup> Symporter in <i>Escherichia coli</i> . <i>Journal of Bacteriology</i> , 2018, 200, .	2.2	36
28	Optimization of sample preparation and green color imaging using the mNeonGreen fluorescent protein in bacterial cells for photoactivated localization microscopy. <i>Scientific Reports</i> , 2018, 8, 10137.	3.3	13
29	The role of polyproline motifs in the histidine kinase EnvZ. <i>PLoS ONE</i> , 2018, 13, e0199782.	2.5	9
30	Evolutionary analysis of polyproline motifs in <i>Escherichia coli</i> reveals their regulatory role in translation. <i>PLoS Computational Biology</i> , 2018, 14, e1005987.	3.2	31
31	Revisiting regulation of potassium homeostasis in <i>Escherichia coli</i> : the connection to phosphate limitation. <i>MicrobiologyOpen</i> , 2017, 6, e00438.	3.0	24
32	CipA and CipB as Scaffolds To Organize Proteins into Crystalline Inclusions. <i>ACS Synthetic Biology</i> , 2017, 6, 826-836.	3.8	28
33	Structure-function analysis of the DNA-binding domain of a transmembrane transcriptional activator. <i>Scientific Reports</i> , 2017, 7, 1051.	3.3	46
34	A Versatile Toolbox for the Control of Protein Levels Using $\mu$ -Acetyl-lysine Dependent Amber Suppression. <i>ACS Synthetic Biology</i> , 2017, 6, 1892-1902.	3.8	21
35	Identification of a High-Affinity Pyruvate Receptor in <i>Escherichia coli</i> . <i>Scientific Reports</i> , 2017, 7, 1388.	3.3	36
36	Structural Basis for EarP-Mediated Arginine Glycosylation of Translation Elongation Factor EF-P. <i>MBio</i> , 2017, 8, .	4.1	24

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37	Non-canonical activation of histidine kinase KdpD by phosphotransferase protein PtsN through interaction with the transmitter domain. <i>Molecular Microbiology</i> , 2017, 106, 54-73.	2.5	26
38	Activity, Abundance, and Localization of Quorum Sensing Receptors in <i>Vibrio harveyi</i> . <i>Frontiers in Microbiology</i> , 2017, 8, 634.	3.5	19
39	Comparative analysis of LytS/LytTR-type histidine kinase/response regulator systems in $\hat{1}^3$ -proteobacteria. <i>PLoS ONE</i> , 2017, 12, e0182993.	2.5	18
40	Interaction Analysis of a Two-Component System Using Nanodiscs. <i>PLoS ONE</i> , 2016, 11, e0149187.	2.5	15
41	Identification and Initial Characterization of Prophages in <i>Vibrio campbellii</i> . <i>PLoS ONE</i> , 2016, 11, e0156010.	2.5	26
42	Fimbricide Natural Products Disrupt Bioluminescence of <i>Vibrio</i> By Targeting Autoinducer Biosynthesis and Luciferase Activity. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 1187-1191.	13.8	16
43	Insights into the DNA-binding mechanism of a LytTR-type transcription regulator. <i>Bioscience Reports</i> , 2016, 36, .	2.4	14
44	A Dual-Sensing Receptor Confers Robust Cellular Homeostasis. <i>Cell Reports</i> , 2016, 16, 213-221.	6.4	32
45	Novel volatiles of skin-borne bacteria inhibit the growth of Gram-positive bacteria and affect quorum-sensing controlled phenotypes of Gram-negative bacteria. <i>Systematic and Applied Microbiology</i> , 2016, 39, 503-515.	2.8	35
46	Mechanistic analysis of aliphatic $\hat{1}^2$ -lactones in <i>Vibrio harveyi</i> reveals a quorum sensing independent mode of action. <i>Chemical Communications</i> , 2016, 52, 11971-11974.	4.1	2
47	Resolving the $\hat{1}^{\pm}$ -glycosidic linkage of arginine-rhamnosylated translation elongation factor P triggers generation of the first Arg<sup>Rha</sup> specific antibody. <i>Chemical Science</i> , 2016, 7, 6995-7001.	7.4	30
48	Stall no more at polyproline stretches with the translation elongation factors EF $\hat{1}$ P and IF $\hat{5}$ A. <i>Molecular Microbiology</i> , 2016, 99, 219-235.	2.5	70
49	Binding of Cyclic Di-AMP to the <i>Staphylococcus aureus</i> Sensor Kinase KdpD Occurs via the Universal Stress Protein Domain and Downregulates the Expression of the Kdp Potassium Transporter. <i>Journal of Bacteriology</i> , 2016, 198, 98-110.	2.2	97
50	Phage-mediated Dispersal of Biofilm and Distribution of Bacterial Virulence Genes Is Induced by Quorum Sensing. <i>PLoS Pathogens</i> , 2015, 11, e1004653.	4.7	77
51	Structural and Functional Analysis of the Signal-Transducing Linker in the pH-Responsive One-Component System CadC of <i>Escherichia coli</i> . <i>Journal of Molecular Biology</i> , 2015, 427, 2548-2561.	4.2	35
52	Arginine-rhamnosylation as new strategy to activate translation elongation factor P. <i>Nature Chemical Biology</i> , 2015, 11, 266-270.	8.0	116
53	Deciphering the role of the type II glyoxalase isoenzyme YcbL (GlxII-2) in <i>Escherichia coli</i> . <i>FEMS Microbiology Letters</i> , 2015, 362, 1-7.	1.8	15
54	The Phosphorylation Flow of the <i>Vibrio harveyi</i> Quorum-Sensing Cascade Determines Levels of Phenotypic Heterogeneity in the Population. <i>Journal of Bacteriology</i> , 2015, 197, 1747-1756.	2.2	46

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55	Production of Siderophores Increases Resistance to Fusaric Acid in <i>Pseudomonas protegens</i> Pf-5. <i>PLoS ONE</i> , 2015, 10, e0117040.	2.5	40
56	A Conserved Proline Triplet in Val-tRNA Synthetase and the Origin of Elongation Factor P. <i>Cell Reports</i> , 2014, 9, 476-483.	6.4	41
57	Translational stalling at polyproline stretches is modulated by the sequence context upstream of the stall site. <i>Nucleic Acids Research</i> , 2014, 42, 10711-10719.	14.5	88
58	New Insights into the Interplay Between the Lysine Transporter LysP and the pH Sensor CadC in <i>Escherichia Coli</i> . <i>Journal of Molecular Biology</i> , 2014, 426, 215-229.	4.2	34
59	Identification of a Novel Nutrient-Sensing Histidine Kinase/Response Regulator Network in <i>Escherichia coli</i> . <i>Journal of Bacteriology</i> , 2014, 196, 2023-2029.	2.2	38
60	A Modular View of the Diversity of Cell-Density-Encoding Schemes in Bacterial Quorum-Sensing Systems. <i>Biophysical Journal</i> , 2014, 107, 266-277.	0.5	22
61	The bacterial translation stress response. <i>FEMS Microbiology Reviews</i> , 2014, 38, 1172-1201.	8.6	165
62	A Sensory Complex Consisting of an ATP-binding Cassette Transporter and a Two-component Regulatory System Controls Bacitracin Resistance in <i>Bacillus subtilis</i> . <i>Journal of Biological Chemistry</i> , 2014, 289, 27899-27910.	3.4	73
63	Single Cell Kinetics of Phenotypic Switching in the Arabinose Utilization System of <i>E. coli</i> . <i>PLoS ONE</i> , 2014, 9, e89532.	2.5	48
64	Dynamics of an Interactive Network Composed of a Bacterial Two-Component System, a Transporter and K <sup>+</sup> as Mediator. <i>PLoS ONE</i> , 2014, 9, e89671.	2.5	12
65	Translation Elongation Factor EF-P Alleviates Ribosome Stalling at Polyproline Stretches. <i>Science</i> , 2013, 339, 82-85.	12.6	393
66	Distinct XPPX sequence motifs induce ribosome stalling, which is rescued by the translation elongation factor EF-P. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 15265-15270.	7.1	167
67	Identification of a Target Gene and Activating Stimulus for the YpdA/YpdB Histidine Kinase/Response Regulator System in <i>Escherichia coli</i> . <i>Journal of Bacteriology</i> , 2013, 195, 807-815.	2.2	40
68	Quantification of Interaction Strengths between Chaperones and Tetratricopeptide Repeat Domain-containing Membrane Proteins. <i>Journal of Biological Chemistry</i> , 2013, 288, 30614-30625.	3.4	28
69	First Insights into the Unexplored Two-Component System YehU/YehT in <i>Escherichia coli</i> . <i>Journal of Bacteriology</i> , 2012, 194, 4272-4284.	2.2	41
70	Histidine kinases and response regulators in networks. <i>Current Opinion in Microbiology</i> , 2012, 15, 118-124.	5.1	204
71	Deactivation of the <i>E. coli</i> pH Stress Sensor CadC by Cadaverine. <i>Journal of Molecular Biology</i> , 2012, 424, 15-27.	4.2	37
72	A comprehensive toolbox for the rapid construction of lacZ fusion reporters. <i>Journal of Microbiological Methods</i> , 2012, 91, 537-543.	1.6	31

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73	Autoinducers Act as Biological Timers in <i>Vibrio harveyi</i> . PLoS ONE, 2012, 7, e48310.	2.5	57
74	Tuning communication fidelity. Nature Chemical Biology, 2011, 7, 502-503.	8.0	4
75	Crystal structure of the sensory domain of <i>Escherichia coli</i> CadC, a member of the ToxR-like protein family. Protein Science, 2011, 20, 656-669.	7.6	26
76	New Insights into the Signaling Mechanism of the pH-responsive, Membrane-integrated Transcriptional Activator CadC of <i>Escherichia coli</i> . Journal of Biological Chemistry, 2011, 286, 10681-10689.	3.4	56
77	The complexity of the $\sigma^{70}$ two-component system KdpD/KdpE in <i>Escherichia coli</i> . FEMS Microbiology Letters, 2010, 304, 97-106.	1.8	71
78	A New Mechanism of Phosphoregulation in Signal Transduction Pathways. Science Signaling, 2009, 2, pe71.	3.6	6
79	Domain swapping reveals that the N-terminal domain of the sensor kinase KdpD in <i>Escherichia coli</i> is important for signaling. BMC Microbiology, 2009, 9, 133.	3.3	14
80	Stimulation of the potassium sensor KdpD kinase activity by interaction with the phosphotransferase protein IIA <sup>Ntr</sup> in <i>Escherichia coli</i> . Molecular Microbiology, 2009, 72, 978-994.	2.5	98
81	Heterogeneity in quorum sensing-regulated bioluminescence of <i>Vibrio harveyi</i> . Molecular Microbiology, 2009, 73, 267-277.	2.5	141
82	The regulatory interplay between membrane-integrated sensors and transport proteins in bacteria. Molecular Microbiology, 2009, 73, 982-991.	2.5	67
83	The Universal Stress Protein UspC Scaffolds the KdpD/KdpE Signaling Cascade of <i>Escherichia coli</i> under Salt Stress. Journal of Molecular Biology, 2009, 386, 134-148.	4.2	69
84	Induction Kinetics of a Conditional pH Stress Response System in <i>Escherichia coli</i> . Journal of Molecular Biology, 2009, 393, 272-286.	4.2	62
85	The membrane-integrated transcriptional activator CadC of <i>Escherichia coli</i> senses lysine indirectly via the interaction with the lysine permease LysP. Molecular Microbiology, 2008, 67, 570-583.	2.5	105
86	<i>Photobacterium luminescens</i> genes induced upon insect infection. BMC Genomics, 2008, 9, 229.	2.8	48
87	Simple generation of site-directed point mutations in the <i>Escherichia coli</i> chromosome using Red $\alpha$ /ET $\alpha$ Recombination. Microbial Cell Factories, 2008, 7, 14.	4.0	63
88	The Extension of the Fourth Transmembrane Helix of the Sensor Kinase KdpD of <i>Escherichia coli</i> Is Involved in Sensing. Journal of Bacteriology, 2007, 189, 7326-7334.	2.2	17
89	CadC-Mediated Activation of the <i>cadBA</i> Promoter in <i>Escherichia coli</i> . Journal of Molecular Microbiology and Biotechnology, 2005, 10, 26-39.	1.0	76
90	The N-terminal Input Domain of the Sensor Kinase KdpD of <i>Escherichia coli</i> Stabilizes the Interaction between the Cognate Response Regulator KdpE and the Corresponding DNA-binding Site. Journal of Biological Chemistry, 2003, 278, 51277-51284.	3.4	33

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91	Cs <sup>+</sup> Induces the kdp Operon of Escherichia coli by Lowering the Intracellular K <sup>+</sup> Concentration. Journal of Bacteriology, 2001, 183, 3800-3803.	2.2	39
92	K <sup>+</sup> Stimulates Specifically the Autokinase Activity of Purified and Reconstituted EnvZ of Escherichia coli. Journal of Biological Chemistry, 2001, 276, 40896-40902.	3.4	36
93	K <sup>+</sup> and Ionic Strength Directly Influence the Autophosphorylation Activity of the Putative Turgor Sensor KdpD of Escherichia coli. Journal of Biological Chemistry, 2000, 275, 40142-40147.	3.4	61
94	The Hydrophilic N-terminal Domain Complements the Membrane-anchored C-terminal Domain of the Sensor Kinase KdpD of Escherichia coli. Journal of Biological Chemistry, 2000, 275, 17080-17085.	3.4	31
95	The turgor sensor KdpD of Escherichia coli is a homodimer. Biochimica Et Biophysica Acta - Biomembranes, 1998, 1415, 114-124.	2.6	29
96	Truncation of Amino Acids 126-128 Causes Deregulation of the Phosphatase Activity of the Sensor Kinase KdpD of Escherichia coli. Journal of Biological Chemistry, 1998, 273, 17406-17410.	3.4	43
97	Individual Substitutions of Clustered Arginine Residues of the Sensor Kinase KdpD of Escherichia coli Modulate the Ratio of Kinase to Phosphatase Activity. Journal of Biological Chemistry, 1998, 273, 26415-26420.	3.4	29
98	Purification, Reconstitution, and Characterization of KdpD, the Turgor Sensor of Escherichia coli. Journal of Biological Chemistry, 1997, 272, 10847-10852.	3.4	90