Kirsten Jung

List of Publications by Year
in descending order

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	Translation Elongation Factor EF-P Alleviates Ribosome Stalling at Polyproline Stretches. Science, 2013, 339, 82-85.	12.6	393
2	Histidine kinases and response regulators in networks. Current Opinion in Microbiology, 2012, 15, 118-124.	5.1	204
3	Distinct XPPX sequence motifs induce ribosome stalling, which is rescued by the translation elongation factor EF-P. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 15265-15270.	7.1	167
4	The bacterial translation stress response. FEMS Microbiology Reviews, 2014, 38, 1172-1201.	8.6	165
5	Heterogeneity in quorum sensingâ€regulated bioluminescence of <i>Vibrio harveyi</i>. Molecular Microbiology, 2009, 73, 267-277.	2.5	141
6	Arginine-rhamnosylation as new strategy to activate translation elongation factor P. Nature Chemical Biology, 2015, 11, 266-270.	8.0	116
7	The membraneâ€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
8	Stimulation of the potassium sensor KdpD kinase activity by interaction with the phosphotransferase protein IIA^{Ntr} in <i>Escherichia coli</i>. Molecular Microbiology, 2009, 72, 978-994.	2.5	98
9	Binding of Cyclic Di-AMP to the Staphylococcus aureus Sensor Kinase KdpD Occurs via the Universal Stress Protein Domain and Downregulates the Expression of the Kdp Potassium Transporter. Journal of Bacteriology, 2016, 198, 98-110.	2.2	97
10	Purification, Reconstitution, and Characterization of KdpD, the Turgor Sensor of Escherichia coli. Journal of Biological Chemistry, 1997, 272, 10847-10852.	3.4	90
11	Translational stalling at polyproline stretches is modulated by the sequence context upstream of the stall site. Nucleic Acids Research, 2014, 42, 10711-10719.	14.5	88
12	Phage-mediated Dispersal of Biofilm and Distribution of Bacterial Virulence Genes Is Induced by Quorum Sensing. PLoS Pathogens, 2015, 11, e1004653.	4.7	77
13	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
14	A Sensory Complex Consisting of an ATP-binding Cassette Transporter and a Two-component Regulatory System Controls Bacitracin Resistance in Bacillus subtilis. Journal of Biological Chemistry, 2014, 289, 27899-27910.	3.4	73
15	Outer Membrane Vesicles Facilitate Trafficking of the Hydrophobic Signaling Molecule CAI-1 between Vibrio harveyi Cells. Journal of Bacteriology, 2018, 200, .	2.2	73
16	The complexity of the â€˜simpleâ€™ two-component system KdpD/KdpE in<i>Escherichia coli</i>. FEMS Microbiology Letters, 2010, 304, 97-106.	1.8	71
17	Stall no more at polyproline stretches with the translation elongation factors EFâ€P and IFâ€5A. Molecular Microbiology, 2016, 99, 219-235.	2.5	70
18	The Universal Stress Protein UspC Scaffolds the KdpD/KdpE Signaling Cascade of Escherichia coli under Salt Stress. Journal of Molecular Biology, 2009, 386, 134-148.	4.2	69

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19	The regulatory interplay between membraneâ€integrated sensors and transport proteins in bacteria. Molecular Microbiology, 2009, 73, 982-991.	2.5	67
20	In vitro interaction network of a synthetic gut bacterial community. ISME Journal, 2022, 16, 1095-1109.	9.8	66
21	Simple generation of site-directed point mutations in the Escherichia coli chromosome using RedÂ®/ETÂ® Recombination. Microbial Cell Factories, 2008, 7, 14.	4.0	63
22	Induction Kinetics of a Conditional pH Stress Response System in Escherichia coli. Journal of Molecular Biology, 2009, 393, 272-286.	4.2	62
23	K+ and Ionic Strength Directly Influence the Autophosphorylation Activity of the Putative Turgor Sensor KdpD ofEscherichia coli. Journal of Biological Chemistry, 2000, 275, 40142-40147.	3.4	61
24	Autoinducers Act as Biological Timers in Vibrio harveyi. PLoS ONE, 2012, 7, e48310.	2.5	57
25	New Insights into the Signaling Mechanism of the pH-responsive, Membrane-integrated Transcriptional Activator CadC of Escherichia coli. Journal of Biological Chemistry, 2011, 286, 10681-10689.	3.4	56
26	Photorhabdus luminescens genes induced upon insect infection. BMC Genomics, 2008, 9, 229.	2.8	48
27	Single Cell Kinetics of Phenotypic Switching in the Arabinose Utilization System of E. coli. PLoS ONE, 2014, 9, e89532.	2.5	48
28	The Phosphorylation Flow of the Vibrio harveyi Quorum-Sensing Cascade Determines Levels of Phenotypic Heterogeneity in the Population. Journal of Bacteriology, 2015, 197, 1747-1756.	2.2	46
29	Structure-function analysis of the DNA-binding domain of a transmembrane transcriptional activator. Scientific Reports, 2017, 7, 1051.	3.3	46
30	Truncation of Amino Acids 12â€“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
31	Bacterial transmembrane signalling systems and their engineering for biosensing. Open Biology, 2018, 8, 180023.	3.6	43
32	First Insights into the Unexplored Two-Component System YehU/YehT in Escherichia coli. Journal of Bacteriology, 2012, 194, 4272-4284.	2.2	41
33	A Conserved Proline Triplet in Val-tRNA Synthetase and the Origin of Elongation Factor P. Cell Reports, 2014, 9, 476-483.	6.4	41
34	Identification of a Target Gene and Activating Stimulus for the YpdA/YpdB Histidine Kinase/Response Regulator System in Escherichia coli. Journal of Bacteriology, 2013, 195, 807-815.	2.2	40
35	Production of Siderophores Increases Resistance to Fusaric Acid in Pseudomonas protegens Pf-5. PLoS ONE, 2015, 10, e0117040.	2.5	40
36	Cs + Induces the kdp Operon of Escherichia coli by Lowering the Intracellular K + Concentration. Journal of Bacteriology, 2001, 183, 3800-3803.	2.2	39

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37	Importance of Pyruvate Sensing and Transport for the Resuscitation of Viable but Nonculturable <i>Escherichia coli</i> K-12. Journal of Bacteriology, 2019, 201, .	2.2	39
38	Identification of a Novel Nutrient-Sensing Histidine Kinase/Response Regulator Network in Escherichia coli. Journal of Bacteriology, 2014, 196, 2023-2029.	2.2	38
39	Deactivation of the E. coli pH Stress Sensor CadC by Cadaverine. Journal of Molecular Biology, 2012, 424, 15-27.	4.2	37
40	K+ Stimulates Specifically the Autokinase Activity of Purified and Reconstituted EnvZ of Escherichia coli. Journal of Biological Chemistry, 2001, 276, 40896-40902.	3.4	36
41	Identification of a High-Affinity Pyruvate Receptor in Escherichia coli. Scientific Reports, 2017, 7, 1388.	3.3	36
42	BtsT, a Novel and Specific Pyruvate/H ⁺ Symporter in Escherichia coli. Journal of Bacteriology, 2018, 200, .	2.2	36
43	Structural and Functional Analysis of the Signal-Transducing Linker in the pH-Responsive One-Component System CadC of Escherichia coli. Journal of Molecular Biology, 2015, 427, 2548-2561.	4.2	35
44	Novel volatiles of skin-borne bacteria inhibit the growth of Gram-positive bacteria and affect quorum-sensing controlled phenotypes of Gram-negative bacteria. Systematic and Applied Microbiology, 2016, 39, 503-515.	2.8	35
45	New Insights into the Interplay Between the Lysine Transporter LysP and the pH Sensor CadC in Escherichia Coli. Journal of Molecular Biology, 2014, 426, 215-229.	4.2	34
46	The N-terminal Input Domain of the Sensor Kinase KdpD of Escherichia coli 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
47	A Dual-Sensing Receptor Confers Robust Cellular Homeostasis. Cell Reports, 2016, 16, 213-221.	6.4	32
48	The Hydrophilic N-terminal Domain Complements the Membrane-anchored C-terminal Domain of the Sensor Kinase KdpD ofEscherichia coli. Journal of Biological Chemistry, 2000, 275, 17080-17085.	3.4	31
49	A comprehensive toolbox for the rapid construction of lacZ fusion reporters. Journal of Microbiological Methods, 2012, 91, 537-543.	1.6	31
50	Evolutionary analysis of polyproline motifs in Escherichia coli reveals their regulatory role in translation. PLoS Computational Biology, 2018, 14, e1005987.	3.2	31
51	Resolving the Î±-glycosidic linkage of arginine-rhamnosylated translation elongation factor P triggers generation of the first Arg^{Rha} specific antibody. Chemical Science, 2016, 7, 6995-7001.	7.4	30
52	The turgor sensor KdpD of Escherichia coli is a homodimer. Biochimica Et Biophysica Acta - Biomembranes, 1998, 1415, 114-124.	2.6	29
53	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
54	Quantification of Interaction Strengths between Chaperones and Tetratricopeptide Repeat Domain-containing Membrane Proteins. Journal of Biological Chemistry, 2013, 288, 30614-30625.	3.4	28

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55	CipA and CipB as Scaffolds To Organize Proteins into Crystalline Inclusions. ACS Synthetic Biology, 2017, 6, 826-836.	3.8	28
56	Crystal structure of the sensory domain of <i>Escherichia coli</i> CadC, a member of the ToxRâ€like protein family. Protein Science, 2011, 20, 656-669.	7.6	26
57	Identification and Initial Characterization of Prophages in Vibrio campbellii. PLoS ONE, 2016, 11, e0156010.	2.5	26
58	Nonâ€canonical activation of histidine kinase KdpD by phosphotransferase protein PtsN through interaction with the transmitter domain. Molecular Microbiology, 2017, 106, 54-73.	2.5	26
59	A Single-Cell View of the BtsSR/YpdAB Pyruvate Sensing Network in Escherichia coli and Its Biological Relevance. Journal of Bacteriology, 2018, 200, .	2.2	25
60	Revisiting regulation of potassium homeostasis in <i>Escherichia coli</i>: the connection to phosphate limitation. MicrobiologyOpen, 2017, 6, e00438.	3.0	24
61	Structural Basis for EarP-Mediated Arginine Glycosylation of Translation Elongation Factor EF-P. MBio, 2017, 8, .	4.1	24
62	A Modular View of the Diversity of Cell-Density-Encoding Schemes in Bacterial Quorum-Sensing Systems. Biophysical Journal, 2014, 107, 266-277.	0.5	22
63	A Versatile Toolbox for the Control of Protein Levels Using <i>N</i>^{Îµ}-Acetyl-<scp>l</scp>-lysine Dependent Amber Suppression. ACS Synthetic Biology, 2017, 6, 1892-1902.	3.8	21
64	Coming in and Finding Out: Blending Receptorâ€Targeted Delivery and Efficient Endosomal Escape in a Novel Bioâ€Responsive siRNA Delivery System for Gene Knockdown in Pulmonary T Cells. Advanced Therapeutics, 2019, 2, 1900047.	3.2	21
65	DNA-binding directs the localization of a membrane-integrated receptor of the ToxR family. Communications Biology, 2019, 2, 4.	4.4	21
66	Activity, Abundance, and Localization of Quorum Sensing Receptors in Vibrio harveyi. Frontiers in Microbiology, 2017, 8, 634.	3.5	19
67	Comparative analysis of LytS/LytTR-type histidine kinase/response regulator systems in Î³-proteobacteria. PLoS ONE, 2017, 12, e0182993.	2.5	18
68	Phenotypic heterogeneity of microbial populations under nutrient limitation. Current Opinion in Biotechnology, 2020, 62, 160-167.	6.6	18
69	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
70	Fimbrolide Natural Products Disrupt Bioluminescence of <i>Vibrio</i> By Targeting Autoinducer Biosynthesis and Luciferase Activity. Angewandte Chemie - International Edition, 2016, 55, 1187-1191.	13.8	16
71	Switching the Post-translational Modification of Translation Elongation Factor EF-P. Frontiers in Microbiology, 2019, 10, 1148.	3.5	16
72	Function and Regulation of the Pyruvate Transporter CstA in Escherichia coli. International Journal of Molecular Sciences, 2020, 21, 9068.	4.1	16

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73	Deciphering the role of the type II glyoxalase isoenzyme YcbL (GlxII-2) in Escherichia coli. FEMS Microbiology Letters, 2015, 362, 1-7.	1.8	15
74	Interaction Analysis of a Two-Component System Using Nanodiscs. PLoS ONE, 2016, 11, e0149187.	2.5	15
75	Phosphorylation of the outer membrane mitochondrial protein OM64 influences protein import into mitochondria. Mitochondrion, 2019, 44, 93-102.	3.4	15
76	Domain swapping reveals that the N-terminal domain of the sensor kinase KdpD in Escherichia coli is important for signaling. BMC Microbiology, 2009, 9, 133.	3.3	14
77	Insights into the DNA-binding mechanism of a LytTR-type transcription regulator. Bioscience Reports, 2016, 36, .	2.4	14
78	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
79	Division of labor and collective functionality in Escherichia coli under acid stress. Communications Biology, 2022, 5, 327.	4.4	14
80	Evidence of Cross-Regulation in Two Closely Related Pyruvate-Sensing Systems in Uropathogenic Escherichia coli. Journal of Membrane Biology, 2018, 251, 65-74.	2.1	13
81	Optimization of sample preparation and green color imaging using the mNeonGreen fluorescent protein in bacterial cells for photoactivated localization microscopy. Scientific Reports, 2018, 8, 10137.	3.3	13
82	Proline codon pair selection determines ribosome pausing strength and translation efficiency in bacteria. Communications Biology, 2021, 4, 589.	4.4	13
83	Dynamics of an Interactive Network Composed of a Bacterial Two-Component System, a Transporter and K+ as Mediator. PLoS ONE, 2014, 9, e89671.	2.5	12
84	LACTATEing Salmonella: A Host-Derived Fermentation Product Fuels Pathogen Growth. Cell Host and Microbe, 2018, 23, 3-4.	11.0	11
85	Structure and Function of an Elongation Factor P Subfamily in Actinobacteria. Cell Reports, 2020, 30, 4332-4342.e5.	6.4	11
86	Transcriptional regulation of the <i>N</i>_{Îµ}â€fructoselysine metabolism in <i>Escherichia coli</i> by global and substrateâ€specific cues. Molecular Microbiology, 2021, 115, 175-190.	2.5	10
87	The role of polyproline motifs in the histidine kinase EnvZ. PLoS ONE, 2018, 13, e0199782.	2.5	9
88	Phenotypic Heterogeneity Generated by Histidine Kinase-Based Signaling Networks. Journal of Molecular Biology, 2019, 431, 4547-4558.	4.2	8
89	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
90	Direct binding of benzoate derivatives to two chemoreceptors with Cache sensor domains in Halomonas titanicae KHS3. Molecular Microbiology, 2021, 115, 672-683.	2.5	7

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91	Dynamics of chromosomal target search by a membrane-integrated one-component receptor. PLoS Computational Biology, 2021, 17, e1008680.	3.2	7
92	A New Mechanism of Phosphoregulation in Signal Transduction Pathways. Science Signaling, 2009, 2, pe71.	3.6	6
93	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
94	Synthetic postâ€translational modifications of elongation factor P using the ligase EpmA. FEBS Journal, 2021, 288, 663-677.	4.7	5
95	Tuning communication fidelity. Nature Chemical Biology, 2011, 7, 502-503.	8.0	4
96	Elongation factor P is required for EII Glc translation in Corynebacterium glutamicum due to an essential polyproline motif. Molecular Microbiology, 2021, 115, 320-331.	2.5	4
97	Insights into a Pyruvate Sensing and Uptake System in Vibrio campbellii and Its Importance for Virulence. Journal of Bacteriology, 2021, 203, e0029621.	2.2	4
98	Mechanistic analysis of aliphatic Î²-lactones in Vibrio harveyi reveals a quorum sensing independent mode of action. Chemical Communications, 2016, 52, 11971-11974.	4.1	2