

Molecular architecture of chemoreceptor arrays revealed
Escherichia coli minicells

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Noise in Bacterial Chemotaxis: Sources, Analysis, and Control. <i>BioScience</i> , 2012, 62, 1030-1038.	2.2	9
2	Computational and Experimental Analyses Reveal the Essential Roles of Interdomain Linkers in the Biological Function of Chemotaxis Histidine Kinase CheA. <i>Journal of the American Chemical Society</i> , 2012, 134, 16107-16110.	6.6	36
3	Ligand Affinity and Kinase Activity Are Independent of Bacterial Chemotaxis Receptor Concentration: Insight into Signaling Mechanisms. <i>Biochemistry</i> , 2012, 51, 6920-6931.	1.2	12
4	Isolated Bacterial Chemosensory Array Possesses Quasi- and Ultrastable Components: Functional Links between Array Stability, Cooperativity, and Order. <i>Biochemistry</i> , 2012, 51, 10218-10228.	1.2	14
5	Analysis of an Ordered, Comprehensive STM Mutant Library in Infectious <i>Borrelia burgdorferi</i> : Insights into the Genes Required for Mouse Infectivity. <i>PLoS ONE</i> , 2012, 7, e47532.	1.1	127
6	Two CheW coupling proteins are essential in a chemosensory pathway of <i>Borrelia burgdorferi</i> . <i>Molecular Microbiology</i> , 2012, 85, 782-794.	1.2	27
7	Prolonged stimuli alter the bacterial chemosensory clusters. <i>Molecular Microbiology</i> , 2013, 88, 634-644.	1.2	24
8	Cryo-electron tomography of the magnetotactic vibrio <i>Magnetovibrio blakemorei</i> : Insights into the biomineralization of prismatic magnetosomes. <i>Journal of Structural Biology</i> , 2013, 181, 162-168.	1.3	22
9	The bacterial Min system. <i>Current Biology</i> , 2013, 23, R553-R556.	1.8	89
10	Structure, Function, and On/Off Switching of a Core Unit Contact between CheA Kinase and CheW Adaptor Protein in the Bacterial Chemosensory Array: A Disulfide Mapping and Mutagenesis Study. <i>Biochemistry</i> , 2013, 52, 7753-7765.	1.2	36
11	A phenylalanine rotameric switch for signal-state control in bacterial chemoreceptors. <i>Nature Communications</i> , 2013, 4, 2881.	5.8	37
12	The mobility of two kinase domains in the <i>Escherichia coli</i> chemoreceptor array varies with signalling state. <i>Molecular Microbiology</i> , 2013, 89, 831-841.	1.2	59
13	Structural biology in situ—the potential of subtomogram averaging. <i>Current Opinion in Structural Biology</i> , 2013, 23, 261-267.	2.6	218
14	The Bacteriophage T7 Virion Undergoes Extensive Structural Remodeling During Infection. <i>Science</i> , 2013, 339, 576-579.	6.0	187
15	Conformational States of Macromolecular Assemblies Explored by Integrative Structure Calculation. <i>Structure</i> , 2013, 21, 1500-1508.	1.6	29
16	Cryo-electron microscopy—a primer for the non-microscopist. <i>FEBS Journal</i> , 2013, 280, 28-45.	2.2	194
17	The 3.2 Å... Resolution Structure of a Receptor:CheA:CheW Signaling Complex Defines Overlapping Binding Sites and Key Residue Interactions within Bacterial Chemosensory Arrays. <i>Biochemistry</i> , 2013, 52, 3852-3865.	1.2	80
18	Defining a Key Receptor-CheA Kinase Contact and Elucidating Its Function in the Membrane-Bound Bacterial Chemosensory Array: A Disulfide Mapping and TAM-IDS Study. <i>Biochemistry</i> , 2013, 52, 3866-3880.	1.2	35

#	ARTICLE	IF	CITATIONS
19	Conformational Coupling between Receptor and Kinase Binding Sites through a Conserved Salt Bridge in a Signaling Complex Scaffold Protein. <i>PLoS Computational Biology</i> , 2013, 9, e1003337.	1.5	13
20	Adaptation Dynamics in Densely Clustered Chemoreceptors. <i>PLoS Computational Biology</i> , 2013, 9, e1003230.	1.5	23
21	Excitation and Adaptation in Bacteria—a Model Signal Transduction System that Controls Taxis and Spatial Pattern Formation. <i>International Journal of Molecular Sciences</i> , 2013, 14, 9205-9248.	1.8	21
22	Directional sensing by cooperative chemoreceptor arrays modeled as Monod-Wyman-Changeux clusters. <i>Physical Review E</i> , 2013, 87, .	0.8	1
23	Cryo-electron tomography: The challenge of doing structural biology in situ. <i>Journal of Cell Biology</i> , 2013, 202, 407-419.	2.3	337
24	Comparative proteomic analysis reveals mechanistic insights into <i>Pseudomonas putida</i> F1 growth on benzoate and citrate. <i>AMB Express</i> , 2013, 3, 64.	1.4	15
25	Homology Modeling of the CheW Coupling Protein of the Chemotaxis Signaling Complex. <i>PLoS ONE</i> , 2013, 8, e70705.	1.1	5
26	ParP prevents dissociation of CheA from chemotactic signaling arrays and tethers them to a polar anchor. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, E255-64.	3.3	44
27	The Role of Membrane-Mediated Interactions in the Assembly and Architecture of Chemoreceptor Lattices. <i>PLoS Computational Biology</i> , 2014, 10, e1003932.	1.5	32
28	The dynamics in the bacterial chemosensory arrays. , 2014, , .		1
29	Signallingâ€dependent interactions between the kinaseâ€coupling protein <sc>CheW</sc> and chemoreceptors in living cells. <i>Molecular Microbiology</i> , 2014, 93, 1144-1155.	1.2	18
30	The long-chain alkane metabolism network of <i>Alcanivorax dieselolei</i> . <i>Nature Communications</i> , 2014, 5, 5755.	5.8	112
31	Controlled Bacterial Lysis for Electron Tomography of Native Cell Membranes. <i>Structure</i> , 2014, 22, 1875-1882.	1.6	34
32	Polar localization of <sc>E</sc> <sc>Escherichia coli</sc> chemoreceptors requires an intact <sc>Tol</sc>â€<sc>Pal</sc> complex. <i>Molecular Microbiology</i> , 2014, 92, 985-1004.	1.2	61
33	New Insights into Bacterial Chemoreceptor Array Structure and Assembly from Electron Cryotomography. <i>Biochemistry</i> , 2014, 53, 1575-1585.	1.2	91
34	Icosahedral bacteriophage Î X174 forms a tail for DNA transport during infection. <i>Nature</i> , 2014, 505, 432-435.	13.7	99
35	Selective allosteric coupling in core chemotaxis signaling complexes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 15940-15945.	3.3	60
36	Architecture and signal transduction mechanism of the bacterial chemosensory array: Progress, controversies, and challenges. <i>Current Opinion in Structural Biology</i> , 2014, 29, 85-94.	2.6	44

#	ARTICLE	IF	CITATIONS
37	Cys-Scanning Disulfide Crosslinking and Bayesian Modeling Probe the Transmembrane Signaling Mechanism of the Histidine Kinase, PhoQ. <i>Structure</i> , 2014, 22, 1239-1251.	1.6	103
38	Molecular Architecture of the Bacterial Flagellar Motor in Cells. <i>Biochemistry</i> , 2014, 53, 4323-4333.	1.2	124
39	The Linker between the Dimerization and Catalytic Domains of the CheA Histidine Kinase Propagates Changes in Structure and Dynamics That Are Important for Enzymatic Activity. <i>Biochemistry</i> , 2014, 53, 855-861.	1.2	36
40	Increasing and Decreasing the Ultrastability of Bacterial Chemotaxis Core Signaling Complexes by Modifying Protein-Protein Contacts. <i>Biochemistry</i> , 2014, 53, 5592-5600.	1.2	14
41	Piston versus Scissors: Chemotaxis Receptors versus Sensor His-Kinase Receptors in Two-Component Signaling Pathways. <i>Structure</i> , 2014, 22, 1219-1220.	1.6	14
42	Concentration Threshold and Amplification Exhibited by a Helicene Oligomer during Helix-Dimer Formation: A Proposal on How a Cell Senses Concentration Changes of a Chemical. <i>Chemistry - A European Journal</i> , 2015, 21, 13788-13792.	1.7	16
43	The role of FlhF and HubP as polar landmark proteins in <i>S. hewanella putrefaciens</i> ... CN. <i>Molecular Microbiology</i> , 2015, 98, 727-742.	1.2	43
44	Differential backbone dynamics of companion helices in the extended helical coiled-coil domain of a bacterial chemoreceptor. <i>Protein Science</i> , 2015, 24, 1764-1776.	3.1	18
45	The Min system and other nucleoid-independent regulators of Z ring positioning. <i>Frontiers in Microbiology</i> , 2015, 6, 478.	1.5	110
46	Protein Connectivity in Chemotaxis Receptor Complexes. <i>PLoS Computational Biology</i> , 2015, 11, e1004650.	1.5	6
47	CryoEM and computer simulations reveal a novel kinase conformational switch in bacterial chemotaxis signaling. <i>ELife</i> , 2015, 4, .	2.8	106
48	Bacterial chemoreceptor dynamics correlate with activity state and are coupled over long distances. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 2455-2460.	3.3	37
49	Preformed Soluble Chemoreceptor Trimers That Mimic Cellular Assembly States and Activate CheA Autophosphorylation. <i>Biochemistry</i> , 2015, 54, 3454-3468.	1.2	14
50	Signaling and sensory adaptation in <i>Escherichia coli</i> chemoreceptors: 2015 update. <i>Trends in Microbiology</i> , 2015, 23, 257-266.	3.5	317
51	Conformational Transitions that Enable Histidine Kinase Autophosphorylation and Receptor Array Integration. <i>Journal of Molecular Biology</i> , 2015, 427, 3890-3907.	2.0	25
52	Lessons in Fundamental Mechanisms and Diverse Adaptations from the 2015 Bacterial Locomotion and Signal Transduction Meeting. <i>Journal of Bacteriology</i> , 2015, 197, 3028-3040.	1.0	3
53	The bacterial divisome: ready for its close-up. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2015, 370, 20150028.	1.8	41
54	Transmembrane protein sorting driven by membrane curvature. <i>Nature Communications</i> , 2015, 6, 8728.	5.8	56

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55	Bacterial chemoreceptors and chemoeffectors. <i>Cellular and Molecular Life Sciences</i> , 2015, 72, 691-708.	2.4	63
56	Macroscopic equations for bacterial chemotaxis: integration of detailed biochemistry of cell signaling. <i>Journal of Mathematical Biology</i> , 2015, 70, 1-44.	0.8	74
57	Multidimensional Solid-State Nuclear Magnetic Resonance of a Functional Multiprotein Chemoreceptor Array. <i>Biochemistry</i> , 2016, 55, 3616-3624.	1.2	8
58	Electron cryotomography. <i>Methods in Microbiology</i> , 2016, 43, 115-139.	0.4	19
59	Networked Chemoreceptors Benefit Bacterial Chemotaxis Performance. <i>MBio</i> , 2016, 7, .	1.8	46
60	Untangling the Effect of Fatty Acid Addition at Species Level Revealed Different Transcriptional Responses of the Biogas Microbial Community Members. <i>Environmental Science & Technology</i> , 2016, 50, 6079-6090.	4.6	79
61	Computational Methodologies for Real-Space Structural Refinement of Large Macromolecular Complexes. <i>Annual Review of Biophysics</i> , 2016, 45, 253-278.	4.5	67
62	Chemotaxis cluster 1 proteins form cytoplasmic arrays in <i>Vibrio cholerae</i> and are stabilized by a double signaling domain receptor DosM. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 10412-10417.	3.3	55
64	Using Tomoauto: A Protocol for High-throughput Automated Cryo-electron Tomography. <i>Journal of Visualized Experiments</i> , 2016, , e53608.	0.2	31
65	Bacterial Chemoreceptor Dynamics: Helical Stability in the Cytoplasmic Domain Varies with Functional Segment and Adaptational Modification. <i>Journal of Molecular Biology</i> , 2016, 428, 3789-3804.	2.0	22
66	Minicells, Back in Fashion. <i>Journal of Bacteriology</i> , 2016, 198, 1186-1195.	1.0	82
67	A new view into prokaryotic cell biology from electron cryotomography. <i>Nature Reviews Microbiology</i> , 2016, 14, 205-220.	13.6	86
68	Molecular switching involving metastable states: molecular thermal hysteresis and sensing of environmental changes by chiral helicene oligomeric foldamers. <i>Chemical Communications</i> , 2016, 52, 4955-4970.	2.2	52
69	The source of high signal cooperativity in bacterial chemosensory arrays. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 3335-3340.	3.3	93
70	Hypothetical Protein BB0569 Is Essential for Chemotaxis of the Lyme Disease Spirochete <i>Borrelia burgdorferi</i> . <i>Journal of Bacteriology</i> , 2016, 198, 664-672.	1.0	13
71	MAP1S Protein Regulates the Phagocytosis of Bacteria and Toll-like Receptor (TLR) Signaling. <i>Journal of Biological Chemistry</i> , 2016, 291, 1243-1250.	1.6	16
72	Signaling Consequences of Structural Lesions that Alter the Stability of Chemoreceptor Trimers of Dimers. <i>Journal of Molecular Biology</i> , 2017, 429, 823-835.	2.0	14
73	Cooperation of two distinct coupling proteins creates chemosensory network connections. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 2970-2975.	3.3	23

#	ARTICLE	IF	CITATIONS
74	Quantification of Chemotaxis-Related Alkane Accumulation in <i>Acinetobacter baylyi</i> Using Raman Microspectroscopy. <i>Analytical Chemistry</i> , 2017, 89, 3909-3918.	3.2	25
75	Methyl-accepting chemotaxis proteins: a core sensing element in prokaryotes and archaea. <i>Cellular and Molecular Life Sciences</i> , 2017, 74, 3293-3303.	2.4	135
76	Progress and Potential of Electron Cryotomography as Illustrated by Its Application to Bacterial Chemoreceptor Arrays. <i>Annual Review of Biophysics</i> , 2017, 46, 1-21.	4.5	23
77	Sensory Rhodopsin I and Sensory Rhodopsin <i>II</i> Form Trimers of Dimers in Complex with their Cognate Transducers. <i>Photochemistry and Photobiology</i> , 2017, 93, 796-804.	1.3	20
78	Signaling complexes control the chemotaxis kinase by altering its apparent rate constant of autophosphorylation. <i>Protein Science</i> , 2017, 26, 1535-1546.	3.1	17
79	Molecular architecture of the sheathed polar flagellum in <i>Vibrio alginolyticus</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 10966-10971.	3.3	87
80	Paradoxical enhancement of chemoreceptor detection sensitivity by a sensory adaptation enzyme. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E7583-E7591.	3.3	3
81	His-Tag-Mediated Dimerization of Chemoreceptors Leads to Assembly of Functional Nanoarrays. <i>Biochemistry</i> , 2017, 56, 5874-5885.	1.2	19
82	Signaling-Related Mobility Changes in Bacterial Chemotaxis Receptors Revealed by Solid-State NMR. <i>Journal of Physical Chemistry B</i> , 2017, 121, 8693-8705.	1.2	20
83	Imaging the Motility and Chemotaxis Machineries in <i>Helicobacter pylori</i> by Cryo-Electron Tomography. <i>Journal of Bacteriology</i> , 2017, 199, e00695-16.	1.0	62
84	FRET Analysis of the Chemotaxis Pathway Response. <i>Methods in Molecular Biology</i> , 2018, 1729, 107-126.	0.4	3
85	Regulatory Role of an Interdomain Linker in the Bacterial Chemotaxis Histidine Kinase CheA. <i>Journal of Bacteriology</i> , 2018, 200, .	1.0	12
86	Behavioral Variability and Phenotypic Diversity in Bacterial Chemotaxis. <i>Annual Review of Biophysics</i> , 2018, 47, 595-616.	4.5	54
87	Transmembrane Signal Transduction in Bacterial Chemosensing. <i>Methods in Molecular Biology</i> , 2018, 1729, 7-19.	0.4	0
88	Visualizing Chemoreceptor Arrays in Bacterial Minicells by Cryo-Electron Tomography and Subtomogram Analysis. <i>Methods in Molecular Biology</i> , 2018, 1729, 187-199.	0.4	2
89	Noncritical Signaling Role of a Kinase- <i>Receptor</i> Interaction Surface in the <i>Escherichia coli</i> Chemosensory Core Complex. <i>Journal of Molecular Biology</i> , 2018, 430, 1051-1064.	2.0	27
90	Analyzing Chemoreceptor Interactions In Vivo with the Trifunctional Cross-Linker TMEA. <i>Methods in Molecular Biology</i> , 2018, 1729, 159-170.	0.4	0
91	Use of Cryo-EM to Study the Structure of Chemoreceptor Arrays In Vivo. <i>Methods in Molecular Biology</i> , 2018, 1729, 173-185.	0.4	3

#	ARTICLE	IF	CITATIONS
92	Transmembrane region of bacterial chemoreceptor is capable of promoting protein clustering. <i>Journal of Biological Chemistry</i> , 2018, 293, 2149-2158.	1.6	11
93	Chemotaxis Arrays in <i>Vibrio</i> Species and Their Intracellular Positioning by the ParC/ParP System. <i>Journal of Bacteriology</i> , 2018, 200, e00793-17.	1.0	19
94	Flexible Hinges in Bacterial Chemoreceptors. <i>Journal of Bacteriology</i> , 2018, 200, .	1.0	19
95	Long-term positioning and polar preference of chemoreceptor clusters in <i>E. coli</i> . <i>Nature Communications</i> , 2018, 9, 4444.	5.8	25
96	Taxis in archaea. <i>Emerging Topics in Life Sciences</i> , 2018, 2, 535-546.	1.1	19
97	Baseplate variability of <i>Vibrio cholerae</i> chemoreceptor arrays. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 13365-13370.	3.3	40
98	Locating macromolecules and determining structures inside bacterial cells using electron cryotomography. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2018, 1866, 973-981.	1.1	15
99	Cellular Targeting and Segregation of Bacterial Chemosensory Systems. <i>FEMS Microbiology Reviews</i> , 2018, 42, 462-476.	3.9	18
100	Identification of two different chemosensory pathways in representatives of the genus <i>Halomonas</i> . <i>BMC Genomics</i> , 2018, 19, 266.	1.2	14
101	New Twists and Turns in Bacterial Locomotion and Signal Transduction. <i>Journal of Bacteriology</i> , 2019, 201, .	1.0	7
102	Spatial Restrictions in Chemotaxis Signaling Arrays: A Role for Chemoreceptor Flexible Hinges across Bacterial Diversity. <i>International Journal of Molecular Sciences</i> , 2019, 20, 2989.	1.8	6
103	Advances in cryo-electron tomography and subtomogram averaging and classification. <i>Current Opinion in Structural Biology</i> , 2019, 58, 249-258.	2.6	74
104	Conformational shifts in a chemoreceptor helical hairpin control kinase signaling in <i>Escherichia coli</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 15651-15660.	3.3	4
105	<i>In Situ</i> Conformational Changes of the <i>Escherichia coli</i> Serine Chemoreceptor in Different Signaling States. <i>MBio</i> , 2019, 10, .	1.8	29
106	TCT-51 IVUS Predictors of Stent Expansion in Severely Calcified Lesions. <i>Journal of the American College of Cardiology</i> , 2019, 74, B51.	1.2	2
107	Identification of a Kinase-Active CheA Conformation in <i>Escherichia coli</i> Chemoreceptor Signaling Complexes. <i>Journal of Bacteriology</i> , 2019, 201, .	1.0	12
108	Hydrogen exchange of chemoreceptors in functional complexes suggests protein stabilization mediates long-range allosteric coupling. <i>Journal of Biological Chemistry</i> , 2019, 294, 16062-16079.	1.6	15
109	The ligand-binding domain of a chemoreceptor from <i>Comamonas testosteroni</i> has a previously unknown homotrimeric structure. <i>Molecular Microbiology</i> , 2019, 112, 906-917.	1.2	13

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110	Positioning of the Motility Machinery in Halophilic Archaea. MBio, 2019, 10, .	1.8	42
111	Distinct Chemotaxis Protein Paralogs Assemble into Chemoreceptor Signaling Arrays To Coordinate Signaling Output. MBio, 2019, 10, .	1.8	10
112	A divergent CheW confers plasticity to nucleoid-associated chemosensory arrays. PLoS Genetics, 2019, 15, e1008533.	1.5	3
113	Bacterial chemotaxis coupling protein: Structure, function and diversity. Microbiological Research, 2019, 219, 40-48.	2.5	52
114	Regulation of the chemotaxis histidine kinase CheA: A structural perspective. Biochimica Et Biophysica Acta - Biomembranes, 2020, 1862, 183030.	1.4	45
115	Diversity of Bacterial Chemosensory Arrays. Trends in Microbiology, 2020, 28, 68-80.	3.5	32
116	Truncated, Non-networking Versions of the Coupling Protein CheW Retain Chemoreceptor Control of Kinase CheA. Journal of Molecular Biology, 2020, 432, 576-584.	2.0	2
117	Methyltransferase CheR binds to its chemoreceptor substrates independent of their signaling conformation yet modifies them differentially. Protein Science, 2020, 29, 443-454.	3.1	9
118	Structure and dynamics of the E. coli chemotaxis core signaling complex by cryo-electron tomography and molecular simulations. Communications Biology, 2020, 3, 24.	2.0	35
119	Engineered chemotaxis core signaling units indicate a constrained kinase-off state. Science Signaling, 2020, 13, .	1.6	10
120	Horizontal <i>che</i> gene drives <i>che</i> TM harness indigenous bacteria for bioremediation. Scientific Reports, 2020, 10, 15091.	1.6	41
121	The chemosensory systems of <i>Vibrio cholerae</i> . Molecular Microbiology, 2020, 114, 367-376.	1.2	20
122	Repurposing a chemosensory macromolecular machine. Nature Communications, 2020, 11, 2041.	5.8	38
123	ATP Binding as a Key Target for Control of the Chemotaxis Kinase. Journal of Bacteriology, 2020, 202, .	1.0	8
124	Symmetry of membrane protein polyhedra with heterogeneous protein size. Physical Review E, 2020, 101, 022417.	0.8	2
125	Complete structure of the chemosensory array core signalling unit in an E. coli minicell strain. Nature Communications, 2020, 11, 743.	5.8	47
126	Strategies for identifying dynamic regions in protein complexes: Flexibility changes accompany methylation in chemotaxis receptor signaling states. Biochimica Et Biophysica Acta - Biomembranes, 2020, 1862, 183312.	1.4	4
127	The Interaction of RecA With Both CheA and CheW Is Required for Chemotaxis. Frontiers in Microbiology, 2020, 11, 583.	1.5	6

#	ARTICLE	IF	CITATIONS
129	Effect of receptor clustering on chemotactic performance of <i>E. coli</i> : Sensing versus adaptation. <i>Physical Review E</i> , 2021, 103, L030401.	0.8	4
130	Alternative Architecture of the <i>E. coli</i> Chemosensory Array. <i>Biomolecules</i> , 2021, 11, 495.	1.8	6
131	Production and Characterization of Motile and Chemotactic Bacterial Minicells. <i>ACS Synthetic Biology</i> , 2021, 10, 1284-1291.	1.9	5
133	Studying bacterial chemosensory array with CryoEM. <i>Biochemical Society Transactions</i> , 2021, 49, 2081-2089.	1.6	5
134	How an unusual chemosensory system forms arrays on the bacterial nucleoid. <i>Biochemical Society Transactions</i> , 2020, 48, 347-356.	1.6	3
136	Insights into the evolution of bacterial flagellar motors from high-throughput <i>in situ</i> electron cryotomography and subtomogram averaging. <i>Acta Crystallographica Section D: Structural Biology</i> , 2018, 74, 585-594.	1.1	30
137	The nucleoid as a scaffold for the assembly of bacterial signaling complexes. <i>PLoS Genetics</i> , 2017, 13, e1007103.	1.5	8
138	Structure of bacterial cytoplasmic chemoreceptor arrays and implications for chemotactic signaling. <i>ELife</i> , 2014, 3, e02151.	2.8	112
139	Coincidence detection and bi-directional transmembrane signaling control a bacterial second messenger receptor. <i>ELife</i> , 2016, 5, .	2.8	23
140	Structure and <i>in situ</i> organisation of the <i>Pyrococcus furiosus</i> archaeellum machinery. <i>ELife</i> , 2017, 6, .	2.8	83
141	Coupling chemosensory array formation and localization. <i>ELife</i> , 2017, 6, .	2.8	27
142	Concerted Differential Changes of Helical Dynamics and Packing upon Ligand Occupancy in a Bacterial Chemoreceptor. <i>ACS Chemical Biology</i> , 2021, 16, 2472-2480.	1.6	3
149	Template-Based and Template-Free Approaches in Cellular Cryo-Electron Tomography Structural Pattern Mining. , 0, , 175-186.		4
152	Hexameric rings of the scaffolding protein CheW enhance response sensitivity and cooperativity in <i>Escherichia coli</i> chemoreceptor arrays. <i>Science Signaling</i> , 2022, 15, eabj1737.	1.6	12
153	Protein rings are critical to the remarkable signaling properties of bacterial chemotaxis nanoarrays. <i>Science Signaling</i> , 2022, 15, eabn2056.	1.6	0
154	Effect of switching time scale of receptor activity on chemotactic performance of <i>Escherichia coli</i> . <i>Indian Journal of Physics</i> , 2022, 96, 2619-2627.	0.9	2
155	Effect of receptor cooperativity on methylation dynamics in bacterial chemotaxis with weak and strong gradient. <i>Physical Review E</i> , 2022, 105, 014411.	0.8	1
156	How advances in cryo-electron tomography have contributed to our current view of bacterial cell biology. <i>Journal of Structural Biology: X</i> , 2022, 6, 100065.	0.7	3

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157	Collective responses of bacteria to a local source of conflicting effectors. <i>Scientific Reports</i> , 2022, 12, 4928.	1.6	2
170	Structural insights into the mechanism of archaellar rotational switching. <i>Nature Communications</i> , 2022, 13, .	5.8	1
171	The evolutionary path of chemosensory and flagellar macromolecular machines in Campylobacterota. <i>PLoS Genetics</i> , 2022, 18, e1010316.	1.5	8
172	Using Atomistic Simulations to Explore the Role of Methylation and ATP in Chemotaxis Signal Transduction. <i>ACS Omega</i> , 2022, 7, 27886-27895.	1.6	0
174	Chemosensory pathways of <i>Halomonas titanicae</i> KHS3 control chemotaxis behaviour and biofilm formation. <i>Microbiology (United Kingdom)</i> , 2022, 168, .	0.7	1
175	Polar localization of CheO under hypoxia promotes <i>Campylobacter jejuni</i> chemotactic behavior within host. <i>PLoS Pathogens</i> , 2022, 18, e1010953.	2.1	0
176	Interdomain Linkers Regulate Histidine Kinase Activity by Controlling Subunit Interactions. <i>Biochemistry</i> , 2022, 61, 2672-2686.	1.2	2
177	Mechanisms of <i>E. coli</i> chemotaxis signaling pathways visualized using cryoET and computational approaches. <i>Biochemical Society Transactions</i> , 2022, 50, 1595-1605.	1.6	6
179	Short time extremal response to step stimulus for a single cell <i>E. coli</i> . <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2022, 2022, 123503.	0.9	0
180	The Chemoreceptor Sensory Adaptation System Produces Coordinated Reversals of the Flagellar Motors on an <i>Escherichia coli</i> Cell. <i>Journal of Bacteriology</i> , 2022, 204, .	1.0	0