Robert G Kranz

List of Publications by Year
in descending order

62 papers	2,755 citations	159585 30 h-index	182427 51 g-index
63 all docs	63 docs citations	63 times ranked	1913 citing authors

#	Article	IF	Citations
1	Mmicular mechanisms of cytochromecbiogenesis: three distinct systems. Molecular Microbiology, 1998, 29, 383-396.	2.5	266
2	CPC, a Single-Repeat R3 MYB, Is a Negative Regulator of Anthocyanin Biosynthesis in Arabidopsis. Molecular Plant, 2009, 2, 790-802.	8.3	229
3	CytochromecBiogenesis: Mechanisms for Covalent Modifications and Trafficking of Heme and for Heme-Iron Redox Control. Microbiology and Molecular Biology Reviews, 2009, 73, 510-528.	6.6	224
4	Mitochondrial cytochrome c biogenesis: no longer an enigma. Trends in Biochemical Sciences, 2015, 40, 446-455.	7.5	97
5	Characterization of nif regulatory genes in Rhodopseudomonas capsulata using lac gene fusions. Gene, 1985, 40, 203-215.	2.2	87
6	Chemiluminescent-based methods to detect subpicomole levels of c-type cytochromes. Analytical Biochemistry, 2003, 315, 90-94.	2.4	80
7	Recombinant cytochromes c biogenesis systems I and II and analysis of haem delivery pathways in Escherichia coli. Molecular Microbiology, 2006, 60, 563-577.	2.5	80
8	Four genes are required for the system II cytochromecÂbiogenesis pathway inBordetella pertussis, a unique bacterial model. Molecular Microbiology, 2000, 38, 465-481.	2.5	79
9	A thioreduction pathway tethered to the membrane for periplasmic cytochromes c biogenesis; in vitro and in vivo studies. Journal of Molecular Biology, 1997, 271, 679-692.	4.2	77
10	Molecular and immunological analysis of an ABC transporter complex required for cytochrome c biogenesis. Journal of Molecular Biology, 1997, 268, 724-738.	4.2	76
11	ABC transporter-mediated release of a haem chaperone allows cytochromecbiogenesis. Molecular Microbiology, 2006, 61, 219-231.	2.5	76
12	Analysis of the promoters and upstream sequences of nifA1 aud nifA2 in Rhodobacter capsulatus; activation requires ntrC but not rpoN. Molecular Microbiology, 1992, 6, 1049-1060.	2.5	67
13	CcsBA is a cytochrome c synthetase that also functions in heme transport. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 10201-10206.	7.1	67
14	Isolation and organization of genes for nitrogen fixation in Rhodopseudomonas capsulata. Molecular Genetics and Genomics, 1985, 201, 363-369.	2.4	63
15	A conserved haem redox and trafficking pathway for cofactor attachment. EMBO Journal, 2009, 28, 2349-2359.	7.8	58
16	Reciprocal Leaf and Root Expression of AtAmt1.1 and Root Architectural Changes in Response to Nitrogen Starvation. Plant Physiology, 2007, 143, 236-250.	4.8	52
17	Structure and expression of the alternative sigma factor, RpoN, in Rhodobacter capsulatus; physiological relevance of an autoactivated nifU2-rpoN superoperon. Molecular Microbiology, 1994, 11, 51-65.	2.5	51
18	The CcmC:Heme:CcmE Complex in Heme Trafficking and Cytochrome c Biosynthesis. Journal of Molecular Biology, 2010, 401, 350-362.	4.2	48

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19	Sequence, genetic, and lacZ fusion analyses of a nifR3?ntrB?ntrC operon in Rhodobacter capsulatus. Molecular Microbiology, 1993, 8, 903-914.	2.5	46
20	Human mitochondrial holocytochrome c synthaseâ€™s heme binding, maturation determinants, and complex formation with cytochrome c. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E788-97.	7.1	42
21	ABC transporters associated with cytochrome c biogenesis. Research in Microbiology, 2001, 152, 323-329.	2.1	41
22	Heme Concentration Dependence and Metalloporphyrin Inhibition of the System I and II Cytochrome c Assembly Pathways. Journal of Bacteriology, 2007, 189, 455-463.	2.2	41
23	Photoferrotrophs Produce a PioAB Electron Conduit for Extracellular Electron Uptake. MBio, 2019, 10, .	4.1	40
24	Evolution and horizontal transfer of an entire biosynthetic pathway for cytochromecbiogenesis:Helicobacter,Deinococcus, Archae and more. Molecular Microbiology, 1998, 27, 871-873.	2.5	39
25	The Cytochrome c Maturation Components CcmF, CcmH, and CcmI Form a Membrane-integral Multisubunit Heme Ligation Complex. Journal of Biological Chemistry, 2008, 283, 29715-29722.	3.4	39
26	Substrate specificity of three cytochromechaem lyase isoenzymes fromWolinella succinogenes: unconventional haemcbinding motifs are not sufficient for haemcattachment by NrfI and CcsA1. Molecular Microbiology, 2010, 75, 122-137.	2.5	39
27	Oxidationâ^'Reduction Properties of Disulfide-Containing Proteins of the Rhodobacter capsulatus Cytochrome c Biogenesis System. Biochemistry, 2000, 39, 10172-10176.	2.5	38
28	Genomic analyses of bacterial respiratory and cytochrome c assembly systems: Bordetella as a model for the SystemÂII cytochrome c biogenesis pathway. Research in Microbiology, 2002, 153, 1-6.	2.1	37
29	Overproduction of CcmG and CcmFH Rc Fully Suppresses the c -Type Cytochrome Biogenesis Defect of Rhodobacter capsulatus CcmI-Null Mutants. Journal of Bacteriology, 2005, 187, 4245-4256.	2.2	32
30	Mutations in Cytochrome Assembly and Periplasmic Redox Pathways in Bordetella pertussis. Journal of Bacteriology, 2005, 187, 3941-3949.	2.2	31
31	Characterization of the Rhodobacter capsulatus Housekeeping RNA Polymerase. Journal of Biological Chemistry, 1997, 272, 27266-27273.	3.4	29
32	In vitro activation and repression of photosynthesis gene transcription in Rhodobacter capsulatus. Molecular Microbiology, 1999, 33, 429-437.	2.5	29
33	In Vitro Reconstitution and Characterization of the Rhodobacter capsulatus NtrB and NtrC Two-component System. Journal of Biological Chemistry, 1996, 271, 6530-6536.	3.4	28
34	Urea Utilization in the Phototrophic Bacterium Rhodobacter capsulatus Is Regulated by the Transcriptional Activator NtrC. Journal of Bacteriology, 2001, 183, 637-643.	2.2	27
35	Topology and Function of CcmD in Cytochrome c Maturation. Journal of Bacteriology, 2008, 190, 3489-3493.	2.2	27
36	A quantitative radioimmunological screening method for specific gene products. Analytical Biochemistry, 1982, 127, 247-257.	2.4	25

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37	A Nitrogen-Regulated Glutamine Amidotransferase (GAT1_2.1) Represses Shoot Branching in Arabidopsis Â. Plant Physiology, 2012, 160, 1770-1780.	4.8	23
38	The <scp>CcmFH</scp> complex is the system <scp>I</scp> holocytochrome c synthetase: engineering cytochrome c maturation independent of <scp>CcmABCDE</scp>. Molecular Microbiology, 2014, 91, 996-1008.	2.5	23
39	Mechanisms of Mitochondrial Holocytochrome c Synthase and the Key Roles Played by Cysteines and Histidine of the Heme Attachment Site, Cys-XX-Cys-His. Journal of Biological Chemistry, 2014, 289, 28795-28807.	3.4	22
40	Ammonia-constitutive nitrogen fixation mutants of rhodobacter capsulatus. Gene, 1988, 71, 65-74.	2.2	21
41	Translational activation by an NtrC enhancer-binding protein 1 1Edited by K. Yamamoto. Journal of Molecular Biology, 1998, 278, 903-914.	4.2	21
42	Interaction of HoloCcmE with CcmF in Heme Trafficking and Cytochrome c Biosynthesis. Journal of Molecular Biology, 2014, 426, 570-585.	4.2	19
43	A bacterial homolog to the mitochondrial enoyl-CoA hydratase. Gene, 1991, 107, 171-172.	2.2	17
44	Overexpression of ccl1â˜2 can bypass the need for the putative apocytochrome chaperone CycH during the biogenesis of c-type cytochromes. Molecular Microbiology, 2002, 46, 1069-1080.	2.5	17
45	Structurally Mapping Endogenous Heme in the CcmCDE Membrane Complex for Cytochrome c Biogenesis. Journal of Molecular Biology, 2018, 430, 1065-1080.	4.2	16
46	Essential histidine pairs indicate conserved haem binding in epsilonproteobacterial cytochrome c haem lyases. Microbiology (United Kingdom), 2010, 156, 3773-3781.	1.8	16
47	RNA Polymerase Subunit Requirements for Activation by the Enhancer-binding Protein Rhodobacter capsulatus NtrC. Journal of Biological Chemistry, 2003, 278, 31701-31708.	3.4	15
48	Conserved Residues of the Human Mitochondrial Holocytochrome c Synthase Mediate Interactions with Heme. Biochemistry, 2014, 53, 5261-5271.	2.5	15
49	Structure-Function Analysis of the Bifunctional CcsBA Heme Exporter and Cytochrome c Synthetase. MBio, 2018, 9, .	4.1	15
50	Thiol redox requirements and substrate specificities of recombinant cytochrome c assembly systems II and III. Biochimica Et Biophysica Acta - Bioenergetics, 2012, 1817, 911-919.	1.0	14
51	Engineered holocytochrome c synthases that biosynthesize new cytochromes c. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 2235-2240.	7.1	14
52	Cryo-EM of CcsBA reveals the basis for cytochrome c biogenesis and heme transport. Nature Chemical Biology, 2022, 18, 101-108.	8.0	14
53	Heme Trafficking and Modifications during System I Cytochrome c Biogenesis: Insights from Heme Redox Potentials of Ccm Proteins. Biochemistry, 2016, 55, 3150-3156.	2.5	13
54	Oxidized or Reduced Cytochrome c and Axial Ligand Variants All Form the Apoptosome in Vitro. Biochemistry, 2017, 56, 2766-2769.	2.5	9

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55	Molecular Basis Behind Inability of Mitochondrial Holocytochrome c Synthase to Mature Bacterial Cytochromes. Journal of Biological Chemistry, 2016, 291, 17523-17534.	3.4	8
56	DNA gyrase activities fromRhodobacter capsulatus: analysis of target(s) of coumarins and cloning of thegyrBlocus. FEMS Microbiology Letters, 1992, 93, 25-32.	1.8	7
57	Rhodobacter capsulatus nifA1 Promoter: High-GC â^'10 Regions in High-GC Bacteria and the Basis for Their Transcription. Journal of Bacteriology, 2004, 186, 740-749.	2.2	7
58	In vitro reconstitution reveals major differences between human and bacterial cytochrome c synthases. ELife, 2021, 10, .	6.0	6
59	Immunochemical analysis of the membrane-bound succinate dehydrogenase ofEscherichia coli. FEBS Letters, 1982, 142, 81-87.	2.8	5
60	Biosynthesis of Single Thioether c-Type Cytochromes Provides Insight into Mechanisms Intrinsic to Holocytochrome c Synthase (HCCS). Biochemistry, 2017, 56, 3337-3346.	2.5	5
61	DNA gyrase activities from Rhodobacter capsulatus: analysis of target(s) of coumarins and cloning of the gyrB locus. FEMS Microbiology Letters, 1992, 93, 25-32.	1.8	5
62	Characterization of monoclonal antibodies directed against pyruvate oxidase from Escherichia coli: Modulation of antibody-induced inhibition by enzyme conformation. Biochemical and Biophysical Research Communications, 1986, 137, 884-891.	2.1	0