FrÃ©dÃ©ric Barras

List of Publications by Year
in descending order

48 papers	4,252 citations	172457 29 h-index	197818 49 g-index
56 all docs	56 docs citations	56 times ranked	4625 citing authors

#	Article	IF	Citations
1	Cellular assays identify barriers impeding iron-sulfur enzyme activity in a non-native prokaryotic host. ELife, 2022, 11, .	6.0	9
2	The Feâ€“S proteome ofEscherichia coli: prediction, function, and fate. Metallomics, 2022, 14, .	2.4	6
3	Redox controls RecA protein activity via reversible oxidation of its methionine residues. ELife, 2021, 10, .	6.0	18
4	Ironâ€“sulfur biology invades tRNA modification: the case of U34 sulfuration. Nucleic Acids Research, 2021, 49, 3997-4007.	14.5	16
5	The Biosynthetic Pathway of Ubiquinone Contributes to Pathogenicity of Francisella novicida. Journal of Bacteriology, 2021, 203, e0040021.	2.2	8
6	Bacterial Approaches for Assembling Iron-Sulfur Proteins. MBio, 2021, 12, e0242521.	4.1	31
7	Making iron-sulfur cluster: structure, regulation and evolution of the bacterial ISC system. Advances in Microbial Physiology, 2020, 76, 1-39.	2.4	32
8	The O2-independent pathway of ubiquinone biosynthesis is essential for denitrification in Pseudomonas aeruginosa. Journal of Biological Chemistry, 2020, 295, 9021-9032.	3.4	25
9	Oxidative stress antagonizes fluoroquinolone drug sensitivity via the SoxR-SUF Fe-S cluster homeostatic axis. PLoS Genetics, 2020, 16, e1009198.	3.5	10
10	Art and microbiology: encounters of the third type. Environmental Microbiology Reports, 2019, 11, 29-34.	2.4	3
11	The SUF system: an ABC ATPase-dependent protein complex with a role in Feâ€“S cluster biogenesis. Research in Microbiology, 2019, 170, 426-434.	2.1	49
12	Ubiquinone Biosynthesis over the Entire O ₂ Range: Characterization of a Conserved O ₂ -Independent Pathway. MBio, 2019, 10, .	4.1	34
13	A Soluble Metabolon Synthesizes the Isoprenoid Lipid Ubiquinone. Cell Chemical Biology, 2019, 26, 482-492.e7.	5.2	46
14	A small RNA controls bacterial sensitivity to gentamicin during iron starvation. PLoS Genetics, 2019, 15, e1008078.	3.5	22
15	The MFS efflux pump EmrKY contributes to the survival of Shigella within macrophages. Scientific Reports, 2019, 9, 2906.	3.3	31
16	The ErpA/NfuA complex builds an oxidation-resistant Fe-S cluster delivery pathway. Journal of Biological Chemistry, 2018, 293, 7689-7702.	3.4	28
17	Species-specific activity of antibacterial drug combinations. Nature, 2018, 559, 259-263.	27.8	276
18	Silver and Antibiotic, New Facts to an Old Story. Antibiotics, 2018, 7, 79.	3.7	65

#	Article	IF	Citations
19	Oxidative stress, protein damage and repair in bacteria. Nature Reviews Microbiology, 2017, 15, 385-396.	28.6	634
20	The UbiK protein is an accessory factor necessary for bacterial ubiquinone (UQ) biosynthesis and forms a complex with the UQ biogenesis factor UbiJ. Journal of Biological Chemistry, 2017, 292, 11937-11950.	3.4	35
21	Silver potentiates aminoglycoside toxicity by enhancing their uptake. Molecular Microbiology, 2017, 105, 115-126.	2.5	27
22	The iron-sulfur cluster sensor IscR is a negative regulator of Spi1 type III secretion system in Salmonella enterica. Cellular Microbiology, 2017, 19, e12680.	2.1	21
23	Evolution of Ubiquinone Biosynthesis: Multiple Proteobacterial Enzymes with Various Regioselectivities To Catalyze Three Contiguous Aromatic Hydroxylation Reactions. MSystems, 2016, 1, .	3.8	44
24	A Regulatory Circuit Composed of a Transcription Factor, IscR, and a Regulatory RNA, RyhB, Controls Fe-S Cluster Delivery. MBio, 2016, 7, .	4.1	41
25	The â€˜liaisons dangereusesâ€™ between iron and antibiotics. FEMS Microbiology Reviews, 2016, 40, 418-435.	8.6	60
26	Repairing oxidized proteins in the bacterial envelope using respiratory chain electrons. Nature, 2015, 528, 409-412.	27.8	139
27	Turning Escherichia coli into a Frataxin-Dependent Organism. PLoS Genetics, 2015, 11, e1005134.	3.5	19
28	The ironâ€binding <scp>CyaY</scp> and <scp>IscX</scp> proteins assist the <scp>ISC</scp>â€catalyzed <scp>F</scp>eâ€<scp>S</scp> biogenesis in <scp>E</scp>scherichia coli. Molecular Microbiology, 2015, 95, 605-623.	2.5	36
29	Commercial Lysogeny Broth culture media and oxidative stress: A cautious tale. Free Radical Biology and Medicine, 2014, 74, 245-251.	2.9	28
30	ubiJ, a New Gene Required for Aerobic Growth and Proliferation in Macrophage, Is Involved in Coenzyme Q Biosynthesis in Escherichia coli and Salmonella enterica Serovar Typhimurium. Journal of Bacteriology, 2014, 196, 70-79.	2.2	38
31	Biosynthesis and physiology of coenzyme Q in bacteria. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 1004-1011.	1.0	123
32	Reprint of: Iron/sulfur proteins biogenesis in prokaryotes: Formation, regulation and diversity. Biochimica Et Biophysica Acta - Bioenergetics, 2013, 1827, 923-937.	1.0	58
33	In vivo [<scp>F</scp>eâ€<scp>S</scp>] cluster acquisition by <scp>IscR</scp> and <scp>NsrR</scp>, two stress regulators in <scp>E</scp>scherichia coli. Molecular Microbiology, 2013, 87, 493-508.	2.5	43
34	Iron/sulfur proteins biogenesis in prokaryotes: Formation, regulation and diversity. Biochimica Et Biophysica Acta - Bioenergetics, 2013, 1827, 455-469.	1.0	281
35	Fe-S Cluster Biosynthesis Controls Uptake of Aminoglycosides in a ROS-Less Death Pathway. Science, 2013, 340, 1583-1587.	12.6	201
36	Ferredoxin Competes with Bacterial Frataxin in Binding to the Desulfurase IscS*. Journal of Biological Chemistry, 2013, 288, 24777-24787.	3.4	68

#	Article	IF	Citations
37	ubiI, a New Gene in Escherichia coli Coenzyme Q Biosynthesis, Is Involved in Aerobic C5-hydroxylation. Journal of Biological Chemistry, 2013, 288, 20085-20092.	3.4	45
38	Molecular organization, biochemical function, cellular role and evolution of NfuA, an atypical Feâ€S carrier. Molecular Microbiology, 2012, 86, 155-171.	2.5	80
39	Building Feâ€“S proteins: bacterial strategies. Nature Reviews Microbiology, 2010, 8, 436-446.	28.6	334
40	The CsdA cysteine desulphurase promotes Fe/S biogenesis by recruiting Suf components and participates to a new sulphur transfer pathway by recruiting CsdL (exâ€YgdL), a ubiquitinâ€modifyingâ€like protein. Molecular Microbiology, 2009, 74, 1527-1542.	2.5	52
41	Iron-Sulfur (Fe/S) Protein Biogenesis: Phylogenomic and Genetic Studies of A-Type Carriers. PLoS Genetics, 2009, 5, e1000497.	3.5	166
42	Biogenesis of Fe/S proteins and pathogenicity: IscR plays a key role in allowing Erwinia chrysanthemi to adapt to hostile conditions. Molecular Microbiology, 2008, 67, 1257-1273.	2.5	51
43	NfuA, a New Factor Required for Maturing Fe/S Proteins in Escherichia coli under Oxidative Stress and Iron Starvation Conditions. Journal of Biological Chemistry, 2008, 283, 14084-14091.	3.4	132
44	ErpA, an ironâ€“sulfur (Feâ€“S) protein of the A-type essential for respiratory metabolism in Escherichia coli. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 13626-13631.	7.1	134
45	Calorimetry and mass spectrometry study of oxidized calmodulin interaction with target and differential repair by methionine sulfoxide reductases. Biochimie, 2005, 87, 473-480.	2.6	20
46	Methionine sulfoxide reductases protect Ffh from oxidative damages in Escherichia coli. EMBO Journal, 2004, 23, 1868-1877.	7.8	62
47	SufC: an unorthodox cytoplasmic ABC/ATPase required for [Fe-S] biogenesis under oxidative stress. EMBO Journal, 2003, 22, 427-437.	7.8	245
48	Repair of Oxidized Proteins. Journal of Biological Chemistry, 2001, 276, 48915-48920.	3.4	320