Carolyn Elizabeth Lubner

List of Publications by Year
in descending order

31 papers	1,360 citations	393982 19 h-index	433756 31 g-index
33 all docs	33 docs citations	33 times ranked	1390 citing authors

#	Article	IF	Citations
1	A site-differentiated [4Feâ€“4S] cluster controls electron transfer reactivity of <i>Clostridium acetobutylicum</i> [FeFe]-hydrogenase I. Chemical Science, 2022, 13, 4581-4588.	3.7	8
2	An uncharacteristically low-potential flavin governs the energy landscape of electron bifurcation. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2117882119.	3.3	5
3	The influence of electron utilization pathways on photosystem I photochemistry in <i>Synechocystis</i> sp. PCC 6803. RSC Advances, 2022, 12, 14655-14664.	1.7	2
4	Introduction to (photo)electrocatalysis for renewable energy. Chemical Communications, 2021, 57, 1540-1542.	2.2	3
5	The role of thermodynamic features on the functional activity of electron bifurcating enzymes. Biochimica Et Biophysica Acta - Bioenergetics, 2021, 1862, 148377.	0.5	7
6	Universal free-energy landscape produces efficient and reversible electron bifurcation. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 21045-21051.	3.3	26
7	The structure and reactivity of the HoxEFU complex from the cyanobacterium Synechocystis sp. PCC 6803. Journal of Biological Chemistry, 2020, 295, 9445-9454.	1.6	15
8	Electron bifurcation: progress and grand challenges. Chemical Communications, 2019, 55, 11823-11832.	2.2	25
9	The catalytic mechanism of electron-bifurcating electron transfer flavoproteins (ETFs) involves an intermediary complex with NAD+. Journal of Biological Chemistry, 2019, 294, 3271-3283.	1.6	30
10	Bacteria â€œReadâ€•Light To Gain a Competitive Advantage. Journal of Bacteriology, 2019, 201, .	1.0	2
11	The oxygen reduction reaction catalyzed by <i>Synechocystis</i> sp. PCC 6803 flavodiiron proteins. Sustainable Energy and Fuels, 2019, 3, 3191-3200.	2.5	22
12	Distinct properties underlie flavin-based electron bifurcation in a novel electron transfer flavoprotein FixAB from Rhodopseudomonas palustris. Journal of Biological Chemistry, 2018, 293, 4688-4701.	1.6	22
13	A new era for electron bifurcation. Current Opinion in Chemical Biology, 2018, 47, 32-38.	2.8	54
14	Mechanistic insights into energy conservation by flavin-based electron bifurcation. Nature Chemical Biology, 2017, 13, 655-659.	3.9	121
15	Reduction Potentials of [FeFe]-Hydrogenase Accessory Ironâ€“Sulfur Clusters Provide Insights into the Energetics of Proton Reduction Catalysis. Journal of the American Chemical Society, 2017, 139, 9544-9550.	6.6	42
16	Electron Bifurcation Makes the Puzzle Pieces Fall Energetically into Place in Methanogenic Energy Conservation. ChemBioChem, 2017, 18, 2295-2297.	1.3	12
17	Equilibrium and ultrafast kinetic studies manipulating electron transfer: A short-lived flavin semiquinone is not sufficient for electron bifurcation. Journal of Biological Chemistry, 2017, 292, 14039-14049.	1.6	23
18	Activation Thermodynamics and H/D Kinetic Isotope Effect of the H_{ox} to H_{red}H⁺ Transition in [FeFe] Hydrogenase. Journal of the American Chemical Society, 2017, 139, 12879-12882.	6.6	23

#	Article	IF	Citations
19	Electron Bifurcation: Thermodynamics and Kinetics of Two-Electron Brokering in Biological Redox Chemistry. Accounts of Chemical Research, 2017, 50, 2410-2417.	7.6	44
20	The Electron Bifurcating FixABCX Protein Complex from <i>Azotobacter vinelandii</i>: Generation of Low-Potential Reducing Equivalents for Nitrogenase Catalysis. Biochemistry, 2017, 56, 4177-4190.	1.2	140
21	Quantum yield measurements of light-induced H2 generation in a photosystem Iâ€“[FeFe]-H2ase nanoconstruct. Photosynthesis Research, 2016, 127, 5-11.	1.6	7
22	Twoâ€Dimensional Protein Crystals for Solar Energy Conversion. Advanced Materials, 2014, 26, 7064-7069.	11.1	32
23	Wiring photosystem I for electron transfer to a tethered redox dye. Energy and Environmental Science, 2011, 4, 2428.	15.6	5
24	A Novel Photosynthetic Strategy for Adaptation to Low-Iron Aquatic Environments. Biochemistry, 2011, 50, 686-692.	1.2	56
25	Solar hydrogen-producing bionanodevice outperforms natural photosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 20988-20991.	3.3	156
26	Wiring an [FeFe]-Hydrogenase with Photosystem I for Light-Induced Hydrogen Production. Biochemistry, 2010, 49, 10264-10266.	1.2	120
27	Wiring Photosystem I for Direct Solar Hydrogen Production. Biochemistry, 2010, 49, 404-414.	1.2	143
28	Maximizing H2 production in Photosystem I/dithiol molecular wire/platinum nanoparticle bioconjugates. Dalton Transactions, 2009, , 10106.	1.6	40
29	Photosystem I/Molecular Wire/Metal Nanoparticle Bioconjugates for the Photocatalytic Production of H₂. Journal of the American Chemical Society, 2008, 130, 6308-6309.	6.6	135
30	Chemical rescue of a site-modified ligand to a [4Feâ€“4S] cluster in PsaC, a bacterial-like dicluster ferredoxin bound to Photosystem I. Biochimica Et Biophysica Acta - Bioenergetics, 2007, 1767, 712-724.	0.5	39
31	11 Re-routing redox chains for directed photocatalysis. , 0, , .		0