Oliver Mueller-Cajar

List of Publications by Year
in descending order

30	1,432	279701 23	454834 30
papers	citations	h-index	g-index

33	33	33	1340
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The CbbQO-type rubisco activases encoded in carboxysome gene clusters can activate carboxysomal form IA rubiscos. Journal of Biological Chemistry, 2022, 298, 101476.	1.6	5
2	Insights into the mechanism and regulation of the CbbQO-type Rubisco activase, a MoxR AAA+ ATPase. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 381-387.	3.3	33
3	Biomolecular condensates in photosynthesis and metabolism. Current Opinion in Plant Biology, 2020, 58, 1-7.	3.5	20
4	Rubisco activase requires residues in the large subunit N terminus to remodel inhibited plant Rubisco. Journal of Biological Chemistry, 2020, 295, 16427-16435.	1.6	13
5	The structural basis of Rubisco phase separation in the pyrenoid. Nature Plants, 2020, 6, 1480-1490.	4.7	68
6	Highly active rubiscos discovered by systematic interrogation of natural sequence diversity. EMBO Journal, 2020, 39, e104081.	3.5	72
7	The pyrenoidal linker protein EPYC1 phase separates with hybrid Arabidopsisâ€“Chlamydomonas Rubisco through interactions with the algal Rubisco small subunit. Journal of Experimental Botany, 2019, 70, 5271-5285.	2.4	36
8	CO₂â€fixing liquid droplets: Towards a dissection of the microalgal pyrenoid. Traffic, 2019, 20, 380-389.	1.3	30
9	Probing the rice Rubiscoâ€“Rubisco activase interaction via subunit heterooligomerization. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 24041-24048.	3.3	19
10	Reconstitution of the Liquid Liquid Phase Separation Underlying the Microalgal Rubisco Supercharger. Biophysical Journal, 2018, 114, 61a.	0.2	1
11	The phase separation underlying the pyrenoid-based microalgal Rubisco supercharger. Nature Communications, 2018, 9, 5076.	5.8	89
12	Overexpressing the most abundant enzyme. Nature Plants, 2018, 4, 746-747.	4.7	1
13	In Vitro Characterization of Thermostable CAM Rubisco Activase Reveals a Rubisco Interacting Surface Loop. Plant Physiology, 2017, 174, 1505-1516.	2.3	52
14	Surveying the expanding prokaryotic Rubisco multiverse. FEMS Microbiology Letters, 2017, 364, .	0.7	30
15	Mechanism of Enzyme Repair by the AAA+ Chaperone Rubisco Activase. Molecular Cell, 2017, 67, 744-756.e6.	4.5	47
16	The Diverse AAA+ Machines that Repair Inhibited Rubisco Active Sites. Frontiers in Molecular Biosciences, 2017, 4, 31.	1.6	56
17	Rubisco Activase: The Molecular Chiropractor of the Worldâ€™s Most Abundant Protein. , 2017, , 159-187.		4
18	Structural insights into the LCIB protein family reveals a new group of Î²-carbonic anhydrases. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 14716-14721.	3.3	61

#	Article	IF	Citations
19	Characterization of the heterooligomeric red-type rubisco activase from red algae. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 14019-14024.	3.3	36
20	Opposing effects of folding and assembly chaperones on evolvability of Rubisco. Nature Chemical Biology, 2015, 11, 148-155.	3.9	86
21	Role of Small Subunit in Mediating Assembly of Red-type Form I Rubisco. Journal of Biological Chemistry, 2015, 290, 1066-1074.	1.6	32
22	Identification and characterization of multiple rubisco activases in chemoautotrophic bacteria. Nature Communications, 2015, 6, 8883.	5.8	81
23	Maintaining photosynthetic CO2 fixation via protein remodelling: the Rubisco activases. Photosynthesis Research, 2014, 119, 191-201.	1.6	40
24	Chaperonin Cofactors, Cpn10 and Cpn20, of Green Algae and Plants Function as Hetero-oligomeric Ring Complexes. Journal of Biological Chemistry, 2012, 287, 20471-20481.	1.6	48
25	Structure of green-type Rubisco activase from tobacco. Nature Structural and Molecular Biology, 2011, 18, 1366-1370.	3.6	97
26	Structure and function of the AAA+ protein CbbX, a red-type Rubisco activase. Nature, 2011, 479, 194-199.	13.7	141
27	Directing the evolution of Rubisco and Rubisco activase: first impressions of a new tool for photosynthesis research. Photosynthesis Research, 2008, 98, 667-675.	1.6	73
28	Evolving improved Synechococcus Rubisco functional expression in Escherichia coli. Biochemical Journal, 2008, 414, 205-214.	1.7	71
29	Directed Evolution of Rubisco in Escherichia coli Reveals a Specificity-Determining Hydrogen Bond in the Form II Enzyme. Biochemistry, 2007, 46, 14067-14074.	1.2	53
30	New roads lead to Rubisco in archaebacteria. BioEssays, 2007, 29, 722-724.	1.2	24