Alessandro Costa

List of Publications by Year
in descending order

47 papers	2,939 citations	186265 28 h-index	233421 45 g-index
50 all docs	50 docs citations	50 times ranked	2730 citing authors

#	Article	IF	Citations
1	The structural basis for MCM2â€“7 helicase activation by GINS and Cdc45. Nature Structural and Molecular Biology, 2011, 18, 471-477.	8.2	290
2	The mechanism of eukaryotic CMG helicase activation. Nature, 2018, 555, 265-268.	27.8	196
3	A Ctf4 trimer couples the CMG helicase to DNA polymerase Î± in the eukaryotic replisome. Nature, 2014, 510, 293-297.	27.8	186
4	Mechanisms for Initiating Cellular DNA Replication. Annual Review of Biochemistry, 2013, 82, 25-54.	11.1	161
5	Structural basis for retroviral integration into nucleosomes. Nature, 2015, 523, 366-369.	27.8	133
6	Ctf4 Links DNA Replication with Sister Chromatid Cohesion Establishment by Recruiting the Chl1 Helicase to the Replisome. Molecular Cell, 2016, 63, 371-384.	9.7	113
7	A Structure-Based Mechanism for DNA Entry into the Cohesin Ring. Molecular Cell, 2020, 79, 917-933.e9.	9.7	112
8	Cryo-EM structures of the eukaryotic replicative helicase bound to a translocation substrate. Nature Communications, 2016, 7, 10708.	12.8	109
9	Mechanism of head-to-head MCM double-hexamer formation revealed by cryo-EM. Nature, 2019, 575, 704-710.	27.8	105
10	DNA binding polarity, dimerization, and ATPase ring remodeling in the CMG helicase of the eukaryotic replisome. ELife, 2014, 3, e03273.	6.0	103
11	Microtubule Nucleation Properties of Single Human Î³TuRCs Explained by Their Cryo-EM Structure. Developmental Cell, 2020, 53, 603-617.e8.	7.0	99
12	A supramolecular assembly mediates lentiviral DNA integration. Science, 2017, 355, 93-95.	12.6	96
13	Structure of DNA-CMG-Pol epsilon elucidates the roles of the non-catalytic polymerase modules in the eukaryotic replisome. Nature Communications, 2018, 9, 5061.	12.8	96
14	CMGâ€“Pol epsilon dynamics suggests a mechanism for the establishment of leading-strand synthesis in the eukaryotic replisome. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 4141-4146.	7.1	88
15	Cdc45 (cell division cycle protein 45) guards the gate of the Eukaryote Replisome helicase stabilizing leading strand engagement. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E249-58.	7.1	78
16	Cryo-EM structure of a licensed DNA replication origin. Nature Communications, 2017, 8, 2241.	12.8	75
17	Molecular Basis for ATP-Hydrolysis-Driven DNA Translocation by the CMG Helicase of the Eukaryotic Replisome. Cell Reports, 2019, 28, 2673-2688.e8.	6.4	74
18	Cdt1 stabilizes an open MCM ring for helicase loading. Nature Communications, 2017, 8, 15720.	12.8	69

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19	The Initiation of Eukaryotic DNA Replication. Annual Review of Biochemistry, 2022, 91, 107-131.	11.1	68
20	ATP-dependent conformational dynamics underlie the functional asymmetry of the replicative helicase from a minimalist eukaryote. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 11999-12004.	7.1	65
21	Structural Studies Reveal the Functional Modularity of the Scc2-Scc4 Cohesin Loader. Cell Reports, 2015, 12, 719-725.	6.4	60
22	The FA Core Complex Contains a Homo-dimeric Catalytic Module for the Symmetric Mono-ubiquitination of FANCI-FANCD2. Cell Reports, 2017, 18, 611-623.	6.4	55
23	Structural biology of MCM helicases. Critical Reviews in Biochemistry and Molecular Biology, 2009, 44, 326-342.	5.2	54
24	Insights into the Architecture of the Replicative Helicase from the Structure of an Archaeal MCM Homolog. Structure, 2009, 17, 211-222.	3.3	51
25	Human RECQ1 helicase-driven DNA unwinding, annealing, and branch migration: Insights from DNA complex structures. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 4286-4291.	7.1	47
26	New Insights into the Mechanism of DNA Duplication by the Eukaryotic Replisome. Trends in Biochemical Sciences, 2016, 41, 859-871.	7.5	47
27	Intersubunit allosteric communication mediated by a conserved loop in the MCM helicase. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 1051-1056.	7.1	43
28	Retroviral integration into nucleosomes through DNA looping and sliding along the histone octamer. Nature Communications, 2019, 10, 4189.	12.8	43
29	Mechanism of replication origin melting nucleated by CMG helicase assembly. Nature, 2022, 606, 1007-1014.	27.8	34
30	The MCM Helicase Motor of the Eukaryotic Replisome. Journal of Molecular Biology, 2016, 428, 1822-1832.	4.2	32
31	Architecture and DNA Recognition Elements of the Fanconi Anemia FANCM-FAAP24 Complex. Structure, 2013, 21, 1648-1658.	3.3	26
32	Structural mechanism for the selective phosphorylation of DNA-loaded MCM double hexamers by the Dbf4-dependent kinase. Nature Structural and Molecular Biology, 2022, 29, 10-20.	8.2	21
33	The architecture and function of the chromatin replication machinery. Current Opinion in Structural Biology, 2017, 47, 9-16.	5.7	20
34	Cryo-electron microscopy of chromatin biology. Acta Crystallographica Section D: Structural Biology, 2017, 73, 541-548.	2.3	20
35	Caught in the act: structural dynamics of replication origin activation and fork progression. Biochemical Society Transactions, 2020, 48, 1057-1066.	3.4	14
36	A combined structural and biochemical approach reveals translocation and stalling of UvrB on the DNA lesion as a mechanism of damage verification in bacterial nucleotide excision repair. DNA Repair, 2020, 85, 102746.	2.8	13

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37	Mechanism of Bloom syndrome complex assembly required for double Holliday junction dissolution and genome stability. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	12
38	A structural framework for DNA replication and transcription through chromatin. Current Opinion in Structural Biology, 2021, 71, 51-58.	5.7	6
39	Escorting Client Proteins to the Hsp90 Molecular Chaperone. Structure, 2017, 25, 964-965.	3.3	4
40	DNA replication and inter-strand crosslink repair: Symmetric activation of dimeric nanomachines?. Biophysical Chemistry, 2017, 225, 15-19.	2.8	2
41	In silico reconstitution of DNA replication. Lessons from single-molecule imaging and cryo-tomography applied to single-particle cryo-EM. Current Opinion in Structural Biology, 2022, 72, 279-286.	5.7	2
42	Preparing Frozen-Hydrated Proteinâ€"Nucleic Acid Assemblies for High-Resolution Cryo-EM Imaging. Methods in Molecular Biology, 2018, 1814, 287-296.	0.9	1
43	A Different Twist on Centromeric Chromatin. Structure, 2020, 28, 3-5.	3.3	1
44	Towards a Structural Mechanism for Sister Chromatid Cohesion Establishment at the Eukaryotic Replication Fork. Biology, 2021, 10, 466.	2.8	1
45	Preparing to unwind. ELife, 2014, 3, e02618.	6.0	1
46	Multiple roles of Pol epsilon in eukaryotic chromosome replication. Biochemical Society Transactions, 2022, , .	3.4	1
47	ReconSil: An electron microscopy toolbox to study helicase function at an origin of replication. Methods in Enzymology, 2022, , 203-231.	1.0	0