Emmanuelle Charpentier

List of Publications by Year
in descending order

46 papers	31,178 citations	159585 30 h-index	233421 45 g-index
57 all docs	57 docs citations	57 times ranked	27888 citing authors

#	Article	IF	Citations
1	A Programmable Dual-RNAâ€“Guided DNA Endonuclease in Adaptive Bacterial Immunity. Science, 2012, 337, 816-821.	12.6	12,811
2	The new frontier of genome engineering with CRISPR-Cas9. Science, 2014, 346, 1258096.	12.6	4,828
3	CRISPR RNA maturation by trans-encoded small RNA and host factor RNase III. Nature, 2011, 471, 602-607.	27.8	2,093
4	An updated evolutionary classification of CRISPRâ€“Cas systems. Nature Reviews Microbiology, 2015, 13, 722-736.	28.6	2,081
5	Evolution and classification of the CRISPRâ€“Cas systems. Nature Reviews Microbiology, 2011, 9, 467-477.	28.6	2,078
6	Evolutionary classification of CRISPRâ€“Cas systems: a burst of class 2 and derived variants. Nature Reviews Microbiology, 2020, 18, 67-83.	28.6	1,427
7	Structures of Cas9 Endonucleases Reveal RNA-Mediated Conformational Activation. Science, 2014, 343, 1247997.	12.6	938
8	The CRISPR-associated DNA-cleaving enzyme Cpf1 also processes precursor CRISPR RNA. Nature, 2016, 532, 517-521.	27.8	737
9	The Biology of CRISPR-Cas: Backward and Forward. Cell, 2018, 172, 1239-1259.	28.9	737
10	Classification and evolution of type II CRISPR-Cas systems. Nucleic Acids Research, 2014, 42, 6091-6105.	14.5	401
11	Phylogeny of Cas9 determines functional exchangeability of dual-RNA and Cas9 among orthologous type II CRISPR-Cas systems. Nucleic Acids Research, 2014, 42, 2577-2590.	14.5	315
12	The tracrRNA and Cas9 families of type II CRISPR-Cas immunity systems. RNA Biology, 2013, 10, 726-737.	3.1	311
13	CRISPR-Cas: biology, mechanisms and relevance. Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20150496.	4.0	308
14	Biogenesis pathways of RNA guides in archaeal and bacterial CRISPR-Cas adaptive immunity. FEMS Microbiology Reviews, 2015, 39, 428-441.	8.6	223
15	Adaptation in CRISPR-Cas Systems. Molecular Cell, 2016, 61, 797-808.	9.7	192
16	Memory of viral infections by CRISPR-Cas adaptive immune systems: Acquisition of new information. Virology, 2012, 434, 202-209.	2.4	188
17	Rewriting a genome. Nature, 2013, 495, 50-51.	27.8	168
18	Extracellular Vesicle RNA: A Universal Mediator of Microbial Communication?. Trends in Microbiology, 2018, 26, 401-410.	7.7	162

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19	A Two-Component Regulatory System Impacts Extracellular Membrane-Derived Vesicle Production in Group A Streptococcus. MBio, 2016, 7, .	4.1	132
20	CRISPR germline engineeringâ€"the community speaks. Nature Biotechnology, 2015, 33, 478-486.	17.5	110
21	DNA and RNA interference mechanisms by CRISPR-Cas surveillance complexes. FEMS Microbiology Reviews, 2015, 39, 442-463.	8.6	98
22	Engineering of temperature- and light-switchable Cas9 variants. Nucleic Acids Research, 2013, 44, 10003-10014.	14.5	95
23	CRISPR-Cas in <i>Streptococcus pyogenes</i>. RNA Biology, 2019, 16, 380-389.	3.1	86
24	Distinct Polysaccharide Utilization Determines Interspecies Competition between Intestinal Prevotella spp.. Cell Host and Microbe, 2020, 28, 838-852.e6.	11.0	86
25	Harnessing CRISPR-Cas9 immunity for genetic engineering. Current Opinion in Microbiology, 2014, 19, 114-119.	5.1	67
26	Bacterial flagella grow through an injection-diffusion mechanism. ELife, 2017, 6, .	6.0	66
27	Catalytically Active Cas9 Mediates Transcriptional Interference to Facilitate Bacterial Virulence. Molecular Cell, 2019, 75, 498-510.e5.	9.7	60
28	A flagellum-specific chaperone facilitates assembly of the core type III export apparatus of the bacterial flagellum. PLoS Biology, 2017, 15, e2002267.	5.6	54
29	Bridge helix arginines play a critical role in Cas9 sensitivity to mismatches. Nature Chemical Biology, 2020, 16, 587-595.	8.0	51
30	Switchable Cas9. Current Opinion in Biotechnology, 2017, 48, 119-126.	6.6	38
31	<scp>CRISPR</scp> â€Cas9: how research on a bacterial <scp>RNA</scp> â€guided mechanism opened new perspectives in biotechnology and biomedicine. EMBO Molecular Medicine, 2015, 7, 363-365.	6.9	33
32	Improved bi-allelic modification of a transcriptionally silent locus in patient-derived iPSC by Cas9 nickase. Scientific Reports, 2016, 6, 38198.	3.3	29
33	RNA sequencing uncovers antisense RNAs and novel small RNAs inStreptococcus pyogenes. RNA Biology, 2016, 13, 177-195.	3.1	28
34	An RNA-seq based comparative approach reveals the transcriptome-wide interplay between 3â€²-to-5â€² exoRNases and RNase Y. Nature Communications, 2020, 11, 1587.	12.8	27
35	In vivo 3â€²-to-5â€² exoribonuclease targetomes of Streptococcus pyogenes. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 11814-11819.	7.1	21
36	Identification of endoribonuclease specific cleavage positions reveals novel targets of RNase III in<i>Streptococcus pyogenes</i>. Nucleic Acids Research, 2017, 45, gkw1316.	14.5	18

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37	Alpharetroviral self-inactivating vectors produced by a superinfection-resistant stable packaging cell line allow genetic modification of primary human T lymphocytes. Biomaterials, 2016, 97, 97-109.	11.4	13
38	Control of membrane barrier during bacterial type-III protein secretion. Nature Communications, 2021, 12, 3999.	12.8	12
39	Toward Whole-Transcriptome Editing with CRISPR-Cas9. Molecular Cell, 2015, 58, 560-562.	9.7	11
40	Hypothesis: RNA and DNA Viral Sequence Integration into the Mammalian Host Genome Supports Long-Term B Cell and T Cell Adaptive Immunity. Viral Immunology, 2017, 30, 628-632.	1.3	11
41	Survival Strategies of Streptococcus pyogenes in Response to Phage Infection. Viruses, 2021, 13, 612.	3.3	11
42	RNase Y-mediated regulation of the streptococcal pyrogenic exotoxin B. RNA Biology, 2018, 15, 1336-1347.	3.1	9
43	Characterization of a transcriptional TPP riboswitch in the human pathogen <i>Neisseria meningitidis</i>. RNA Biology, 2020, 17, 718-730.	3.1	6
44	CRISPR-Cas: more than ten years and still full of mysteries. RNA Biology, 2019, 16, 377-379.	3.1	4
45	Gene Editing and Genome Engineering with CRISPR-Cas9. Molecular Frontiers Journal, 2017, 01, 99-107.	1.1	2
46	Editorial overview: Novel technologies in microbiology: Recent advances in techniques in microbiology. Current Opinion in Microbiology, 2014, 19, viii-x.	5.1	0