Carrie A Eckert

List of Publications by Year
in descending order

34 papers	901 citations	471509 17 h-index	501196 28 g-index
38 all docs	38 docs citations	38 times ranked	1371 citing authors

#	Article	IF	Citations
1	Nanorg Microbial Factories: Light-Driven Renewable Biochemical Synthesis Using Quantum Dot-Bacteria Nanobiohybrids. Journal of the American Chemical Society, 2019, 141, 10272-10282.	13.7	99
2	The enhancement of pericentromeric cohesin association by conserved kinetochore components promotes high-fidelity chromosome segregation and is sensitive to microtubule-based tension. Genes and Development, 2007, 21, 278-291.	5.9	91
3	Ethylene-forming enzyme and bioethylene production. Biotechnology for Biofuels, 2014, 7, 33.	6.2	90
4	The role of the bidirectional hydrogenase in cyanobacteria. Bioresource Technology, 2011, 102, 8368-8377.	9.6	85
5	A Genetic Toolbox for Modulating the Expression of Heterologous Genes in the Cyanobacterium Synechocystis sp. PCC 6803. ACS Synthetic Biology, 2018, 7, 276-286.	3.8	78
6	Development of both type Iâ€“B and type II CRISPR/Cas genome editing systems in the cellulolytic bacterium Clostridium thermocellum. Metabolic Engineering Communications, 2020, 10, e00116.	3.6	60
7	Recombinant and in vitro expression systems for hydrogenases: new frontiers in basic and applied studies for biological and synthetic H2 production. Dalton Transactions, 2009, , 9970.	3.3	48
8	Genetic Analysis of the Hox Hydrogenase in the Cyanobacterium Synechocystis sp. PCC 6803 Reveals Subunit Roles in Association, Assembly, Maturation, and Function. Journal of Biological Chemistry, 2012, 287, 43502-43515.	3.4	40
9	CRISPRâ€Enabled Tools for Engineering Microbial Genomes and Phenotypes. Biotechnology Journal, 2018, 13, e1700586.	3.5	30
10	Multiplex navigation of global regulatory networks (MINR) in yeast for improved ethanol tolerance and production. Metabolic Engineering, 2019, 51, 50-58.	7.0	30
11	Overcoming substrate limitations for improved production of ethylene in E. coli. Biotechnology for Biofuels, 2016, 9, 3.	6.2	27
12	Synthetic chimeric nucleases function for efficient genome editing. Nature Communications, 2019, 10, 5524.	12.8	24
13	Building a genome engineering toolbox in nonmodel prokaryotic microbes. Biotechnology and Bioengineering, 2018, 115, 2120-2138.	3.3	23
14	Genome Annotation Provides Insight into Carbon Monoxide and Hydrogen Metabolism in Rubrivivax gelatinosus. PLoS ONE, 2014, 9, e114551.	2.5	21
15	Engineering regulatory networks for complex phenotypes in E. coli. Nature Communications, 2020, 11, 4050.	12.8	21
16	Synthetic Biology and Metabolic Engineering Employing Escherichia coli for C2â€“C6 Bioalcohol Production. Frontiers in Bioengineering and Biotechnology, 2020, 8, 710.	4.1	19
17	Photobiological Hydrogen Production â€“ Prospects and Challenges. Microbe Magazine, 2009, 4, 275-280.	0.4	18
18	The Model System Saccharomyces cerevisiae Versus Emerging Non-Model Yeasts for the Production of Biofuels. Life, 2020, 10, 299.	2.4	16

#	Article	IF	Citations
19	Hydrogen Production by Water Biophotolysis. Advances in Photosynthesis and Respiration, 2014, , 101-135.	1.0	13
20	Solar powered biohydrogen production requires specific localization of the hydrogenase. Energy and Environmental Science, 2014, 7, 3791-3800.	30.8	12
21	Genomic Deoxyxylulose Phosphate Reductoisomerase (DXR) Mutations Conferring Resistance to the Antimalarial Drug Fosmidomycin in E.Âcoli. ACS Synthetic Biology, 2018, 7, 2824-2832.	3.8	11
22	Predicting Drug Resistance Using Deep Mutational Scanning. Molecules, 2020, 25, 2265.	3.8	8
23	Engineering improved ethylene production: Leveraging systems biology and adaptive laboratory evolution. Metabolic Engineering, 2021, 67, 308-320.	7.0	8
24	Multiplex Evolution of Antibody Fragments Utilizing a Yeast Surface Display Platform. ACS Synthetic Biology, 2020, 9, 2197-2202.	3.8	7
25	High-Throughput Functional Genomics for Energy Production. Current Opinion in Biotechnology, 2021, 67, 7-14.	6.6	7
26	Transcriptional Regulatory Networks Involved in C3â€“C4 Alcohol Stress Response and Tolerance in Yeast. ACS Synthetic Biology, 2021, 10, 19-28.	3.8	7
27	Inactivation of the uptake hydrogenase in the purple non-sulfur photosynthetic bacterium Rubrivivax gelatinosus CBS enables a biological waterâ€“gas shift platform for H2 production. Journal of Industrial Microbiology and Biotechnology, 2019, 46, 993-1002.	3.0	2
28	Gene Editing Technologies for Biofuel Production in Thermophilic Microbes. Methods in Molecular Biology, 2020, 2096, 149-163.	0.9	2
29	Advances in protein engineering and its application in synthetic biology. , 2022, , 147-158.		1
30	Highly Efficient Libraries Design for Saturation Mutagenesis. Synthetic Biology, 0, , .	2.2	1
31	CRISPR-based tools for microbial cell factories. , 2021, , 95-113.		0
32	CRISPR-Cas Genome Editing in the Cellulolytic Bacterium Clostridium thermocellum (C.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 222 Td (th	0.3	0
33	Advances and application of CRISPR-Cas systems. , 2022, , 331-348.		0
34	Editorial: Microorganisms for Consolidated 2nd Generation Biorefining. Frontiers in Microbiology, 0, 13, .	3.5	0