Esteban Marcellin

List of Publications by Year
in descending order

87 papers	2,543 citations	201674 27 h-index	233421 45 g-index
97 all docs	97 docs citations	97 times ranked	2663 citing authors

#	Article	IF	Citations
1	Microbial Propionic Acid Production. Fermentation, 2017, 3, 21.	3.0	185
2	Low carbon fuels and commodity chemicals from waste gases â€“ systematic approach to understand energy metabolism in a model acetogen. Green Chemistry, 2016, 18, 3020-3028.	9.0	143
3	Maintenance of ATP Homeostasis Triggers Metabolic Shifts in Gas-Fermenting Acetogens. Cell Systems, 2017, 4, 505-515.e5.	6.2	128
4	H2 drives metabolic rearrangements in gas-fermenting Clostridium autoethanogenum. Biotechnology for Biofuels, 2018, 11, 55.	6.2	103
5	Arginine deiminase pathway provides ATP and boosts growth of the gas-fermenting acetogen Clostridium autoethanogenum. Metabolic Engineering, 2017, 41, 202-211.	7.0	96
6	Hyaluronan Molecular Weight Is Controlled by UDP-N-acetylglucosamine Concentration in Streptococcus zooepidemicus. Journal of Biological Chemistry, 2009, 284, 18007-18014.	3.4	83
7	Synthetic microbe communities provide internal reference standards for metagenome sequencing and analysis. Nature Communications, 2018, 9, 3096.	12.8	81
8	Enhancing CO2-Valorization Using Clostridium autoethanogenum for Sustainable Fuel and Chemicals Production. Frontiers in Bioengineering and Biotechnology, 2020, 8, 204.	4.1	79
9	Engineering and adaptive evolution of Escherichia coli for d-lactate fermentation reveals GatC as a xylose transporter. Metabolic Engineering, 2012, 14, 469-476.	7.0	65
10	Revisiting the Evolution and Taxonomy of Clostridia, a Phylogenomic Update. Genome Biology and Evolution, 2019, 11, 2035-2044.	2.5	65
11	Adaptive laboratory evolution of native methanol assimilation in Saccharomyces cerevisiae. Nature Communications, 2020, 11, 5564.	12.8	64
12	Cyclicâ€•diâ€•<scp>AMP</scp> synthesis by the diadenylate cyclase <scp>CdaA</scp> is modulated by the peptidoglycan biosynthesis enzyme <scp>GlmM</scp> in <scp><i>L</i></scp><i>actococcus lactis</i>. Molecular Microbiology, 2016, 99, 1015-1027.	2.5	61
13	Overcoming the energetic limitations of syngas fermentation. Current Opinion in Chemical Biology, 2017, 41, 84-92.	6.1	61
14	Enhanced uptake of potassium or glycine betaine or export of cyclic-di-AMP restores osmoresistance in a high cyclic-di-AMP Lactococcus lactis mutant. PLoS Genetics, 2018, 14, e1007574.	3.5	61
15	High-Antibody-Producing Chinese Hamster Ovary Cells Up-Regulate Intracellular Protein Transport and Glutathione Synthesis. Journal of Proteome Research, 2015, 14, 609-618.	3.7	60
16	Systems-level engineering and characterisation of Clostridium autoethanogenum through heterologous production of poly-3-hydroxybutyrate (PHB). Metabolic Engineering, 2019, 53, 14-23.	7.0	57
17	Redox controls metabolic robustness in the gas-fermenting acetogen <i>Clostridium autoethanogenum</i>. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 13168-13175.	7.1	54
18	Insight into hyaluronic acid molecular weight control. Applied Microbiology and Biotechnology, 2014, 98, 6947-6956.	3.6	43

#	Article	IF	Citations
19	Strategies to improve viability of a circular carbon bioeconomy-A techno-economic review of microbial electrosynthesis and gas fermentation. Water Research, 2021, 201, 117306.	11.3	43
20	Advances in systems metabolic engineering of autotrophic carbon oxide-fixing biocatalysts towards a circular economy. Metabolic Engineering, 2022, 71, 117-141.	7.0	41
21	Roles and opportunities for microbial anaerobic oxidation of methane in natural and engineered systems. Energy and Environmental Science, 2021, 14, 4803-4830.	30.8	40
22	Talaropeptides A-D: Structure and Biosynthesis of Extensively N-methylated Linear Peptides From an Australian Marine Tunicate-Derived Talaromyces sp.. Frontiers in Chemistry, 2018, 6, 394.	3.6	36
23	Reconstruction of the Saccharopolyspora erythraea genome-scale model and its use for enhancing erythromycin production. Antonie Van Leeuwenhoek, 2012, 102, 493-502.	1.7	35
24	Inter-Kingdom beach warfare: Microbial chemical communication activates natural chemical defences. ISME Journal, 2019, 13, 147-158.	9.8	34
25	Saccharopolyspora erythraeaâ€™sgenome is organised in high-order transcriptional regions mediated by targeted degradation at the metabolic switch. BMC Genomics, 2013, 14, 15.	2.8	33
26	Vaccine Production to Protect Animals Against Pathogenic Clostridia. Toxins, 2019, 11, 525.	3.4	32
27	Replenishing the cyclic-di-AMP pool: regulation of diadenylate cyclase activity in bacteria. Current Genetics, 2016, 62, 731-738.	1.7	31
28	Attenuating apoptosis in Chinese hamster ovary cells for improved biopharmaceutical production. Biotechnology and Bioengineering, 2020, 117, 1187-1203.	3.3	31
29	Quantitative analysis of intracellular sugar phosphates and sugar nucleotides in encapsulated streptococci using HPAECâ€PAD. Biotechnology Journal, 2009, 4, 58-63.	3.5	29
30	Advances in analytical tools for high throughput strain engineering. Current Opinion in Biotechnology, 2018, 54, 33-40.	6.6	29
31	RNAâ€Seq Highlights High Clonal Variation in Monoclonal Antibody Producing CHO Cells. Biotechnology Journal, 2018, 13, e1700231.	3.5	28
32	Escherichia coli W shows fast, highly oxidative sucrose metabolism and low acetate formation. Applied Microbiology and Biotechnology, 2014, 98, 9033-9044.	3.6	27
33	The Role of Hyaluronic Acid Precursor Concentrations in Molecular Weight Control in Streptococcus zooepidemicus. Molecular Biotechnology, 2014, 56, 147-156.	2.4	26
34	Improved production of propionic acid using genome shuffling. Biotechnology Journal, 2017, 12, 1600120.	3.5	23
35	Temporal Dynamics of the Saccharopolyspora erythraea Phosphoproteome. Molecular and Cellular Proteomics, 2014, 13, 1219-1230.	3.8	22
36	Re-annotation of the Saccharopolyspora erythraea genome using a systems biology approach. BMC Genomics, 2013, 14, 699.	2.8	21

#	Article	IF	Citations
37	Overexpression of the regulatory subunit of glutamateâ€cysteine ligase enhances monoclonal antibody production in CHO cells. Biotechnology and Bioengineering, 2017, 114, 1825-1836.	3.3	21
38	Control of chitin and N-acetylglucosamine utilization in Saccharopolyspora erythraea. Microbiology (United Kingdom), 2014, 160, 1914-1928.	1.8	20
39	Engineering <i>Escherichia coli</i> for propionic acid production through the Woodâ€“Werkman cycle. Biotechnology and Bioengineering, 2020, 117, 167-183.	3.3	20
40	Understanding plasmid effect on hyaluronic acid molecular weight produced by Streptococcus equi subsp. zooepidemicus. Metabolic Engineering, 2010, 12, 62-69.	7.0	18
41	Global dynamics of Escherichia coli phosphoproteome in central carbon metabolism under changing culture conditions. Journal of Proteomics, 2015, 126, 24-33.	2.4	18
42	A Pan-Genome Guided Metabolic Network Reconstruction of Five Propionibacterium Species Reveals Extensive Metabolic Diversity. Genes, 2020, 11, 1115.	2.4	18
43	Nickel complexation as an innovative approach for nickel-cobalt selective recovery using sulfate-reducing bacteria. Journal of Hazardous Materials, 2021, 402, 123506.	12.4	16
44	Transcriptional control of <i>Clostridium autoethanogenum</i> using CRISPRi. Synthetic Biology, 2021, 6, ysab008.	2.2	16
45	Recycling carbon for sustainable protein production using gas fermentation. Current Opinion in Biotechnology, 2022, 76, 102723.	6.6	16
46	Awakening sleeping beauty: production of propionic acid in Escherichia coli through the sbm operon requires the activity of a methylmalonyl-CoA epimerase. Microbial Cell Factories, 2017, 16, 121.	4.0	15
47	Perfusion culture of Chinese Hamster Ovary cells for bioprocessing applications. Critical Reviews in Biotechnology, 2022, 42, 1099-1115.	9.0	15
48	High-performance targeted mass spectrometry with precision data-independent acquisition reveals site-specific glycosylation macroheterogeneity. Analytical Biochemistry, 2016, 510, 106-113.	2.4	14
49	Modeling apoptosis resistance in CHO cells with CRISPRâ€mediated knockouts of Bak1, Bax, and Bok. Biotechnology and Bioengineering, 2022, 119, 1380-1391.	3.3	14
50	Tetanus toxin production is triggered by the transition from amino acid consumption to peptides. Anaerobe, 2016, 41, 113-124.	2.1	13
51	High methanolâ€toâ€formate ratios induce butanol production in <i>Eubacterium limosum</i>. Microbial Biotechnology, 2022, 15, 1542-1549.	4.2	13
52	Allantoin catabolism influences the production of antibiotics in Streptomyces coelicolor. Applied Microbiology and Biotechnology, 2014, 98, 351-360.	3.6	12
53	Diverse Cone-Snail Species Harbor Closely Related Streptomyces Species with Conserved Chemical and Genetic Profiles, Including Polycyclic Tetramic Acid Macrolactams. Frontiers in Microbiology, 2017, 8, 2305.	3.5	12
54	A TetR-Family Protein (CAETHG_0459) Activates Transcription From a New Promoter Motif Associated With Essential Genes for Autotrophic Growth in Acetogens. Frontiers in Microbiology, 2019, 10, 2549.	3.5	12

#	Article	IF	Citations
55	Genome-scale model guided design of Propionibacterium for enhanced propionic acid production. Metabolic Engineering Communications, 2018, 6, 1-12.	3.6	11
56	Deleterious variants in <i>CRLS1</i> lead to cardiolipin deficiency and cause an autosomal recessive multi-system mitochondrial disease. Human Molecular Genetics, 2022, 31, 3597-3612.	2.9	11
57	Faster Growth Enhances Low Carbon Fuel and Chemical Production Through Gas Fermentation. Frontiers in Bioengineering and Biotechnology, 2022, 10, 879578.	4.1	11
58	Linking genotype and phenotype in an economically viable propionic acid biosynthesis process. Biotechnology for Biofuels, 2018, 11, 224.	6.2	10
59	A novel multidomain acyl-CoA carboxylase in Saccharopolyspora erythraea provides malonyl-CoA for de novo fatty acid biosynthesis. Scientific Reports, 2019, 9, 6725.	3.3	10
60	Cyclic di-AMP Oversight of Counter-Ion Osmolyte Pools Impacts Intrinsic Cefuroxime Resistance in Lactococcus lactis. MBio, 2021, 12, .	4.1	10
61	Absolute Proteome Quantification in the Gas-Fermenting Acetogen <i>Clostridium autoethanogenum</i>. MSystems, 2022, 7, e0002622.	3.8	10
62	Analytical tools for unravelling the metabolism of gas-fermenting Clostridia. Current Opinion in Biotechnology, 2022, 75, 102700.	6.6	9
63	multiTFA: a Python package for multi-variate thermodynamics-based flux analysis. Bioinformatics, 2021, 37, 3064-3066.	4.1	8
64	Proteome analysis of the hyaluronic acid-producing bacterium, Streptococcus zooepidemicus. Proteome Science, 2009, 7, 13.	1.7	7
65	Genome Sequence of Propionibacterium acidipropionici ATCC 55737. Genome Announcements, 2016, 4, .	0.8	7
66	A universal and independent synthetic DNA ladder for the quantitative measurement of genomic features. Nature Communications, 2020, 11, 3609.	12.8	7
67	Enhanced metal recovery by efficient agglomeration of precipitates in an up-flow fixed-bed bioreactor. Chemical Engineering Journal, 2021, 416, 127662.	12.7	7
68	Network Analyses Predict Small RNAs That Might Modulate Gene Expression in the Testis and Epididymis of Bos indicus Bulls. Frontiers in Genetics, 2021, 12, 610116.	2.3	7
69	Systems Biology Approaches to Understand Natural Products Biosynthesis. Frontiers in Bioengineering and Biotechnology, 2015, 3, 199.	4.1	6
70	Deletion of the hypothetical protein SCO2127 of Streptomyces coelicolor allowed identification of a new regulator of actinorhodin production. Applied Microbiology and Biotechnology, 2016, 100, 9229-9237.	3.6	6
71	Time-course transcriptomics reveals that amino acids catabolism plays a key role in toxinogenesis and morphology in <i>Clostridium tetani</i>. Journal of Industrial Microbiology and Biotechnology, 2020, 47, 1059-1073.	3.0	6
72	Heterologous Production of 6-Deoxyerythronolide B in Escherichia coli through the Wood Werkman Cycle. Metabolites, 2020, 10, 228.	2.9	6

#	Article	IF	Citations
73	Knockout of Sfâ€Caspaseâ€1 generates apoptosisâ€resistant Sf9 cell lines: Implications for baculovirus expression. Biotechnology Journal, 2022, 17, e2100532.	3.5	6
74	Quantitative analysis of tetrahydrofolate metabolites from clostridium autoethanogenum. Metabolomics, 2018, 14, 35.	3.0	5
75	â€˜Omics driven discoveries of gene targets for apoptosis attenuation in CHO cells. Biotechnology and Bioengineering, 2021, 118, 481-490.	3.3	5
76	Multi-omic characterisation of<i>Streptomyces hygroscopicus</i>NRRL 30439: detailed assessment of its secondary metabolic potential. Molecular Omics, 2022, 18, 226-236.	2.8	5
77	Response of the Anaerobic Methanotrophic Archaeon Candidatus â€œMethanoperedens nitroreducensâ€• to the Long-Term Ferrihydrite Amendment. Frontiers in Microbiology, 2022, 13, 799859.	3.5	5
78	Multi-omics approach for comparative studies of monoclonal antibody producing CHO cells. BMC Proceedings, 2015, 9, .	1.6	4
79	Towards Sustainable Bioinoculants: A Fermentation Strategy for High Cell Density Cultivation of Paraburkholderia sp. SOS3, a Plant Growth-Promoting Bacterium Isolated in Queensland, Australia. Fermentation, 2021, 7, 58.	3.0	4
80	Comparative Economic Analysis Between Endogenous and Recombinant Production of Hyaluronic Acid. Frontiers in Bioengineering and Biotechnology, 2021, 9, 680278.	4.1	4
81	A Genome-Scale Metabolic Model of Methanoperedens nitroreducens: Assessing Bioenergetics and Thermodynamic Feasibility. Metabolites, 2022, 12, 314.	2.9	4
82	Engineering death resistance in CHO cells for improved perfusion culture. MAbs, 2022, 14, .	5.2	4
83	AllR Controls the Expression of Streptomyces coelicolor Allantoin Pathway Genes. Applied and Environmental Microbiology, 2015, 81, 6649-6659.	3.1	3
84	Osmoregulation via Cyclic di-AMP Signaling. , 2020, , 177-189.		1
85	Metabolic Pathway Engineering for Hyaluronic Ac id Production. , 2011, , .		0
86	Recent advances in the production of recombinant factor IX: bioprocessing and cell engineering. Critical Reviews in Biotechnology, 2023, 43, 484-502.	9.0	0
87	Role of the substrate on Ni inhibition in biological sulfate reduction. Journal of Environmental Management, 2022, 316, 115216.	7.8	0