Daniel Amador-Noguez

List of Publications by Year
in descending order

68	4,767	147801 31	106344 65
papers	citations	h-index	g-index

76	76	76	7707
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Assessing the impact of substrate-level enzyme regulations limiting ethanol titer in Clostridium thermocellum using a core kinetic model. Metabolic Engineering, 2022, 69, 286-301.	7.0	7
2	Novel computational and experimental approaches for investigating the thermodynamics of metabolic networks. Current Opinion in Microbiology, 2022, 66, 21-31.	5.1	5
3	Toward low-cost biological and hybrid biological/catalytic conversion of cellulosic biomass to fuels. Energy and Environmental Science, 2022, 15, 938-990.	30.8	93
4	Comparative functional genomics identifies an iron-limited bottleneck in a Saccharomyces cerevisiae strain with a cytosolic-localized isobutanol pathway. Synthetic and Systems Biotechnology, 2022, 7, 738-749.	3.7	4
5	Autotrophic and mixotrophic metabolism of an anammox bacterium revealed by in vivo 13C and 2H metabolic network mapping. ISME Journal, 2021, 15, 673-687.	9.8	64
6	Transcriptomic, Protein-DNA Interaction, and Metabolomic Studies of VosA, VelB, and WetA in Aspergillus nidulans Asexual Spores. MBio, 2021, 12, .	4.1	29
7	Reformulation of an extant ATPase active site to mimic ancestral GTPase activity reveals a nucleotide base requirement for function. ELife, 2021, 10, .	6.0	12
8	Design of synthetic human gut microbiome assembly and butyrate production. Nature Communications, 2021, 12, 3254.	12.8	83
9	Investigating the Chemolithoautotrophic and Formate Metabolism of Nitrospira moscoviensis by Constraint-Based Metabolic Modeling and ¹³ C-Tracer Analysis. MSystems, 2021, 6, e0017321.	3.8	8
10	Dominant Bacterial Phyla from the Human Gut Show Widespread Ability To Transform and Conjugate Bile Acids. MSystems, 2021, 6, e0080521.	3.8	70
11	Hostile Takeover: How Viruses Reprogram Prokaryotic Metabolism. Annual Review of Microbiology, 2021, 75, 515-539.	7.3	19
12	Phagocytes produce prostaglandin E2 in response to cytosolic Listeria monocytogenes. PLoS Pathogens, 2021, 17, e1009493.	4.7	3
13	Stepwise genetic engineering of Pseudomonas putida enables robust heterologous production of prodigiosin and glidobactin A. Metabolic Engineering, 2021, 67, 112-124.	7.0	16
14	Negative interactions determine Clostridioides difficile growth in synthetic human gut communities. Molecular Systems Biology, 2021, 17, e10355.	7.2	27
15	Metabolic Remodeling during Nitrogen Fixation in Zymomonas mobilis. MSystems, 2021, 6, e0098721.	3.8	5
16	The pentose phosphate pathway of cellulolytic clostridia relies on 6-phosphofructokinase instead of transaldolase. Journal of Biological Chemistry, 2020, 295, 1867-1878.	3.4	14
17	Small Alarmone Synthetase SasA Expression Leads to Concomitant Accumulation of pGpp, ppApp, and AppppA in Bacillus subtilis. Frontiers in Microbiology, 2020, 11, 2083.	3.5	30
18	Metabolic Fluxes of Nitrogen and Pyrophosphate in Chemostat Cultures of Clostridium thermocellum and Thermoanaerobacterium saccharolyticum. Applied and Environmental Microbiology, 2020, 86, .	3.1	7

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19	The nucleotide pGpp acts as a third alarmone in Bacillus, with functions distinct from those of (p)ppGpp. Nature Communications, 2020, 11, 5388.	12.8	41
20	In VivoThermodynamic Analysis of Glycolysis in Clostridium thermocellum and Thermoanaerobacterium saccharolyticum Using¹³C and²H Tracers. MSystems, 2020, 5, .	3.8	31
21	Liquid Crystal Emulsions That Intercept and Report on Bacterial Quorum Sensing. ACS Applied Materials & Interfaces, 2020, 12, 29056-29065.	8.0	13
22	Developing a Cell-Free Extract Reaction (CFER) System in Clostridium thermocellum to Identify Metabolic Limitations to Ethanol Production. Frontiers in Energy Research, 2020, 8, .	2.3	5
23	Metabolic and evolutionary responses of Clostridium thermocellum to genetic interventions aimed at improving ethanol production. Biotechnology for Biofuels, 2020, 13, 40.	6.2	49
24	Regulated redirection of central carbon flux enhances anaerobic production of bioproducts in Zymomonas mobilis. Metabolic Engineering, 2020, 61, 261-274.	7.0	26
25	Metabolic flux analysis and fluxomics-driven determination of reaction free energy using multiple isotopes. Current Opinion in Biotechnology, 2020, 64, 151-160.	6.6	19
26	Dual metabolomic profiling uncovers Toxoplasma manipulation of the host metabolome and the discovery of a novel parasite metabolic capability. PLoS Pathogens, 2020, 16, e1008432.	4.7	34
27	Expression of Phosphofructokinase Is Not Sufficient to Enable Embden-Meyerhof-Parnas Glycolysis in Zymomonas mobilis ZM4. Frontiers in Microbiology, 2019, 10, 2270.	3.5	12
28	Genome Wide Phosphoproteome Analysis of Zymomonas mobilis Under Anaerobic, Aerobic, and N2-Fixing Conditions. Frontiers in Microbiology, 2019, 10, 1986.	3.5	13
29	Genetic determinants of gut microbiota composition and bile acid profiles in mice. PLoS Genetics, 2019, 15, e1008073.	3.5	75
30	Near-equilibrium glycolysis supports metabolic homeostasis and energy yield. Nature Chemical Biology, 2019, 15, 1001-1008.	8.0	60
31	Thermodynamic analysis of the pathway for ethanol production from cellobiose in Clostridium thermocellum. Metabolic Engineering, 2019, 55, 161-169.	7.0	44
32	Cytochrome P450 Monooxygenase-Mediated Metabolic Utilization of Benzo[a]Pyrene by Aspergillus Species. MBio, 2019, 10, .	4.1	22
33	Metabolic Remodeling during Biofilm Development of Bacillus subtilis. MBio, 2019, 10, .	4.1	93
34	The thermophilic biomass-degrading bacterium Caldicellulosiruptor bescii utilizes two enzymes to oxidize glyceraldehyde 3-phosphate during glycolysis. Journal of Biological Chemistry, 2019, 294, 9995-10005.	3.4	18
35	2H and 13C metabolic flux analysis elucidates in vivo thermodynamics of the ED pathway in Zymomonas mobilis. Metabolic Engineering, 2019, 54, 301-316.	7.0	51
36	Systems-Level Analysis of Oxygen Exposure in Zymomonas mobilis : Implications for Isoprenoid Production. MSystems, 2019, 4, .	3.8	27

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37	OptSSeq explores enzyme expression and function landscapes to maximize isobutanol production rate. Metabolic Engineering, 2019, 52, 324-340.	7.0	36
38	Cyclooxygenase-1 and -2 Play Contrasting Roles in Listeria-Stimulated Immunity. Journal of Immunology, 2018, 200, 3729-3738.	0.8	15
39	acI Actinobacteria Assemble a Functional Actinorhodopsin with Natively Synthesized Retinal. Applied and Environmental Microbiology, 2018, 84, .	3.1	15
40	Few Differences in Metabolic Network Use Found Between Salmonella enterica Colonization of Plants and Typhoidal Mice. Frontiers in Microbiology, 2018, 9, 695.	3.5	10
41	Fecal Aliquot Straw Technique (FAST) allows for easy and reproducible subsampling: assessing interpersonal variation in trimethylamine-N-oxide (TMAO) accumulation. Microbiome, 2018, 6, 91.	11.1	20
42	Glycolysis without pyruvate kinase in Clostridium thermocellum. Metabolic Engineering, 2017, 39, 169-180.	7.0	62
43	Deletion of Type I glutamine synthetase deregulates nitrogen metabolism and increases ethanol production in Clostridium thermocellum. Metabolic Engineering, 2017, 41, 182-191.	7.0	27
44	A metabolic pathway for catabolizing levulinic acid in bacteria. Nature Microbiology, 2017, 2, 1624-1634.	13.3	86
45	Metabolic, Epigenetic, and Transgenerational Effects of Gut Bacterial Choline Consumption. Cell Host and Microbe, 2017, 22, 279-290.e7.	11.0	144
46	Recent applications of metabolomics to advance microbial biofuel production. Current Opinion in Biotechnology, 2017, 43, 118-126.	6.6	46
47	Metabolome analysis reveals a role for glyceraldehyde 3-phosphate dehydrogenase in the inhibition of C. thermocellum by ethanol. Biotechnology for Biofuels, 2017, 10, 276.	6.2	27
48	Different Functions of Phylogenetically Distinct Bacterial Complex I Isozymes. Journal of Bacteriology, 2016, 198, 1268-1280.	2.2	16
49	Metabolite concentrations, fluxes and free energies imply efficient enzyme usage. Nature Chemical Biology, 2016, 12, 482-489.	8.0	332
50	TrpE feedback mutants reveal roadblocks and conduits toward increasing secondary metabolism in Aspergillus fumigatus. Fungal Genetics and Biology, 2016, 89, 102-113.	2.1	24
51	Identification of Unanticipated and Novel N-Acyl L-Homoserine Lactones (AHLs) Using a Sensitive Non-Targeted LC-MS/MS Method. PLoS ONE, 2016, 11, e0163469.	2.5	55
52	Intestinal Microbiota Composition Modulates Choline Bioavailability from Diet and Accumulation of the Proatherogenic Metabolite Trimethylamine- N -Oxide. MBio, 2015, 6, e02481.	4.1	535
53	Molecular Mechanism and Evolution of Guanylate Kinase Regulation by (p)ppGpp. Molecular Cell, 2015, 57, 735-749.	9.7	88
54	Post-translational modifications as key regulators of bacterial metabolic fluxes. Current Opinion in Microbiology, 2015, 24, 29-37.	5.1	56

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55	De Novo Amino Acid Biosynthesis Contributes to Salmonella enterica Growth in Alfalfa Seedling Exudates. Applied and Environmental Microbiology, 2015, 81, 861-873.	3.1	31
56	Phenolic Amides Are Potent Inhibitors of De Novo Nucleotide Biosynthesis. Applied and Environmental Microbiology, 2015, 81, 5761-5772.	3.1	31
57	The exometabolome of Clostridium thermocellum reveals overflow metabolism at high cellulose loading. Biotechnology for Biofuels, 2014, 7, 155.	6.2	96
58	Stoichiometry of Site-specific Lysine Acetylation in an Entire Proteome. Journal of Biological Chemistry, 2014, 289, 21326-21338.	3.4	157
59	Steady-State Metabolite Concentrations Reflect a Balance between Maximizing Enzyme Efficiency and Minimizing Total Metabolite Load. PLoS ONE, 2013, 8, e75370.	2.5	67
60	Ultrasensitive regulation of anapleurosis via allosteric activation of PEP carboxylase. Nature Chemical Biology, 2012, 8, 562-568.	8.0	72
61	Metabolome Remodeling during the Acidogenic-Solventogenic Transition in Clostridium acetobutylicum. Applied and Environmental Microbiology, 2011, 77, 7984-7997.	3.1	105
62	Metabolomic Analysis via Reversed-Phase Ion-Pairing Liquid Chromatography Coupled to a Stand Alone Orbitrap Mass Spectrometer. Analytical Chemistry, 2010, 82, 3212-3221.	6.5	453
63	Systems-Level Metabolic Flux Profiling Elucidates a Complete, Bifurcated Tricarboxylic Acid Cycle in Clostridium acetobutylicum. Journal of Bacteriology, 2010, 192, 4452-4461.	2.2	122
64	Evidence for an Alternative Glycolytic Pathway in Rapidly Proliferating Cells. Science, 2010, 329, 1492-1499.	12.6	586
65	Cardiac Function in Young and Old Little Mice. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2007, 62, 1319-1325.	3.6	27
66	Alterations in xenobiotic metabolism in the longâ€lived Little mice. Aging Cell, 2007, 6, 453-470.	6.7	119
67	Gender-specific alterations in gene expression and loss of liver sexual dimorphism in the long-lived Ames dwarf mice. Biochemical and Biophysical Research Communications, 2005, 332, 1086-1100.	2.1	41
68	Gene expression profile of long-lived Ames dwarf mice and Little mice. Aging Cell, 2004, 3, 423-441.	6.7	114