Alfredo Martinez

List of Publications by Year
in descending order

115 papers	5,048 citations	109137 35 h-index	118652 62 g-index
116 all docs	116 docs citations	116 times ranked	4747 citing authors

#	Article	IF	Citations
1	Effect of selected aldehydes on the growth and fermentation of ethanologenicEscherichia coli. , 1999, 65, 24-33.		383
2	Detoxification of Dilute Acid Hydrolysates of Lignocellulose with Lime. Biotechnology Progress, 2001, 17, 287-293.	1.3	296
3	Effects of Ca(OH)2 treatments (â€œoverlimingâ€) on the composition and toxicity of bagasse hemicellulose hydrolysates. Biotechnology and Bioengineering, 2000, 69, 526-536.	1.7	259
4	Enteric Bacterial Catalysts for Fuel Ethanol Production. Biotechnology Progress, 1999, 15, 855-866.	1.3	231
5	Effect of alcohol compounds found in hemicellulose hydrolysate on the growth and fermentation of ethanologenicEscherichia coli. , 2000, 68, 524-530.		175
6	Expression ofgalPandglkin aEscherichia coliPTS mutant restores glucose transport and increases glycolytic flux to fermentation products. Biotechnology and Bioengineering, 2003, 83, 687-694.	1.7	159
7	Low salt medium for lactate and ethanol production by recombinant Escherichia coli B. Biotechnology Letters, 2007, 29, 397-404.	1.1	142
8	Use of UV Absorbance To Monitor Furans in Dilute Acid Hydrolysates of Biomass. Biotechnology Progress, 2000, 16, 637-641.	1.3	139
9	Enzymatic hydrolysis at high-solids loadings for the conversion of agave bagasse to fuel ethanol. Applied Energy, 2014, 113, 277-286.	5.1	133
10	Heterotrophic growth of Neochloris oleoabundans using glucose as a carbon source. Biotechnology for Biofuels, 2013, 6, 100.	6.2	129
11	Heterotrophic growth of microalgae: metabolic aspects. World Journal of Microbiology and Biotechnology, 2015, 31, 1-9.	1.7	119
12	Heterotrophic cultivation of microalgae: production of metabolites of commercial interest. Journal of Chemical Technology and Biotechnology, 2017, 92, 925-936.	1.6	112
13	Engineering a Homo-Ethanol Pathway in Escherichia coli : Increased Glycolytic Flux and Levels of Expression of Glycolytic Genes during Xylose Fermentation. Journal of Bacteriology, 2001, 183, 2979-2988.	1.0	106
14	Cloning of the two pyruvate kinase isoenzyme structural genes from Escherichia coli: the relative roles of these enzymes in pyruvate biosynthesis. Journal of Bacteriology, 1995, 177, 5719-5722.	1.0	104
15	Response to different environmental stress conditions of industrial and laboratory Saccharomyces cerevisiae strains. Applied Microbiology and Biotechnology, 2004, 63, 734-741.	1.7	99
16	Metabolic Engineering of Bacillus subtilis for Ethanol Production: Lactate Dehydrogenase Plays a Key Role in Fermentative Metabolism. Applied and Environmental Microbiology, 2007, 73, 5190-5198.	1.4	99
17	Chromosomal Integration of Heterologous DNA in <i>Escherichia coli</i> with Precise Removal of Markers and Replicons Used during Construction. Journal of Bacteriology, 1999, 181, 7143-7148.	1.0	81
18	Metabolic engineering for improving anthranilate synthesis from glucose in Escherichia coli. Microbial Cell Factories, 2009, 8, 19.	1.9	79

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19	Characterization of bacterial diversity inPulque, a traditional Mexican alcoholic fermented beverage, as determined by 16S rDNA analysis. FEMS Microbiology Letters, 2004, 235, 273-279.	0.7	74
20	Engineering of a microbial coculture of Escherichia coli strains for the biosynthesis of resveratrol. Microbial Cell Factories, 2016, 15, 163.	1.9	69
21	Engineering and adaptive evolution of Escherichia coli for d-lactate fermentation reveals GatC as a xylose transporter. Metabolic Engineering, 2012, 14, 469-476.	3.6	65
22	Laboratory metabolic evolution improves acetate tolerance and growth on acetate of ethanologenic Escherichia coli under non-aerated conditions in glucose-mineral medium. Applied Microbiology and Biotechnology, 2012, 96, 1291-1300.	1.7	62
23	Optimum melanin production using recombinant Escherichia coli. Journal of Applied Microbiology, 2006, 101, 1002-1008.	1.4	60
24	Metabolic Engineering of <i>Escherichia coli</i> for <scp>l</scp> -Tyrosine Production by Expression of Genes Coding for the Chorismate Mutase Domain of the Native Chorismate Mutase-Prephenate Dehydratase and a Cyclohexadienyl Dehydrogenase from <i>Zymomonas mobilis</i>. Applied and Environmental Microbiology, 2008, 74, 3284-3290.	1.4	60
25	Production of cinnamic and p-hydroxycinnamic acid from sugar mixtures with engineered Escherichia coli. Microbial Cell Factories, 2015, 14, 6.	1.9	55
26	Expression of the melA gene from Rhizobium etli CFN42 in Escherichia coli and characterization of the encoded tyrosinase. Enzyme and Microbial Technology, 2006, 38, 772-779.	1.6	52
27	Metabolic engineering of Escherichia coli for improving l-3,4-dihydroxyphenylalanine (l-DOPA) synthesis from glucose. Journal of Industrial Microbiology and Biotechnology, 2011, 38, 1845-1852.	1.4	52
28	Production of Melanins With Recombinant Microorganisms. Frontiers in Bioengineering and Biotechnology, 2019, 7, 285.	2.0	51
29	Biosynthetic Burden and Plasmid Burden Limit Expression of Chromosomally Integrated Heterologous Genes (pdc, adhB) in Escherichia coli. Biotechnology Progress, 1999, 15, 891-897.	1.3	50
30	Metabolic engineering of Escherichia coli to optimize melanin synthesis from glucose. Microbial Cell Factories, 2013, 12, 108.	1.9	45
31	Improving poly-3-hydroxybutyrate production in Escherichia coli by combining the increase in the NADPH pool and acetyl-CoA availability. Antonie Van Leeuwenhoek, 2014, 105, 687-696.	0.7	45
32	Homolactic fermentation from glucose and cellobiose using Bacillus subtilis. Microbial Cell Factories, 2009, 8, 23.	1.9	44
33	Sequential enzymatic saccharification and fermentation of ionic liquid and organosolv pretreated agave bagasse for ethanol production. Bioresource Technology, 2017, 225, 191-198.	4.8	44
34	Stimulation of glucose catabolism through the pentose pathway by the absence of the two pyruvate kinase isoenzymes inEscherichia coli. , 1998, 58, 292-295.		41
35	Tyrosinase from <i>Rhizobium etli</i> Is Involved in Nodulation Efficiency and Symbiosis-Associated Stress Resistance. Journal of Molecular Microbiology and Biotechnology, 2007, 13, 35-44.	1.0	41
36	Cell surface display of a Î^2-glucosidase employing the type V secretion system on ethanologenic Escherichia coli for the fermentation of cellobiose to ethanol. Journal of Industrial Microbiology and Biotechnology, 2012, 39, 1141-1152.	1.4	40

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37	Growth Recovery on Glucose under Aerobic Conditions of an <i>Escherichia coli</i> Strain Carrying a Phosphoenolpyruvate:Carbohydrate Phosphotransferase System Deletion by Inactivating <i>arcA</i> and Overexpressing the Genes Coding for Glucokinase and Galactose Permease. Journal of Molecular Microbiology and Biotechnology, 2007, 13, 105-116.	1.0	37
38	ATP limitation in a pyruvate formate lyase mutant of Escherichia coli MG1655 increases glycolytic flux to d-lactate. Journal of Industrial Microbiology and Biotechnology, 2009, 36, 1057-1062.	1.4	36
39	Biotechnological production of l-tyrosine and derived compounds. Process Biochemistry, 2012, 47, 1017-1026.	1.8	35
40	Culturing Neochloris oleoabundans microalga in a nitrogen-limited, heterotrophic fed-batch system to enhance lipid and carbohydrate accumulation. Algal Research, 2014, 5, 61-69.	2.4	35
41	Autohydrolysis pretreatment assessment in ethanol production from agave bagasse. Bioresource Technology, 2017, 242, 184-190.	4.8	35
42	Modification of glucose import capacity in Escherichia coli: physiologic consequences and utility for improving DNA vaccine production. Microbial Cell Factories, 2013, 12, 42.	1.9	34
43	Engineering highâ€gravity fermentations for ethanol production at elevated temperature with <i>Saccharomyces cerevisiae</i>. Biotechnology and Bioengineering, 2019, 116, 2587-2597.	1.7	33
44	A Review on the Synthesis, Characterization, and Modeling of Polymer Grafting. Processes, 2021, 9, 375.	1.3	33
45	Characterization of bacterial diversity in pulque, a traditional Mexican alcoholic fermented beverage, as determined by 16S rDNA analysis. FEMS Microbiology Letters, 2004, 235, 273-9.	0.7	32
46	Bioenergy Potential, Energy Crops, and Biofuel Production in Mexico. Bioenergy Research, 2016, 9, 981-984.	2.2	31
47	Non-severe thermochemical hydrolysis of stover from white corn and sequential enzymatic saccharification and fermentation to ethanol. Bioresource Technology, 2015, 198, 611-618.	4.8	30
48	Adaptive Evolution of Escherichia coli Inactivated in the Phosphotransferase System Operon Improves Co-utilization of Xylose and Glucose Under Anaerobic Conditions. Applied Biochemistry and Biotechnology, 2011, 163, 485-496.	1.4	27
49	Acinetobacter baylyi ADP1 growth performance and lipid accumulation on different carbon sources. Applied Microbiology and Biotechnology, 2019, 103, 6217-6229.	1.7	26
50	Metabolic regulation analysis of an ethanologenic Escherichia coli strain based on RT-PCR and enzymatic activities. Biotechnology for Biofuels, 2008, 1, 8.	6.2	25
51	Specific Ethanol Production Rate in Ethanologenic <i>Escherichia coli</i> Strain KO11 Is Limited by Pyruvate Decarboxylase. Journal of Molecular Microbiology and Biotechnology, 2008, 15, 55-64.	1.0	25
52	Role of Pyruvate Oxidase in <i>Escherichia coli</i> Strains Lacking the Phosphoenolpyruvate:Carbohydrate Phosphotransferase System. Journal of Molecular Microbiology and Biotechnology, 2004, 8, 209-221.	1.0	24
53	Catechol biosynthesis from glucose in Escherichia coli anthranilate-overproducer strains by heterologous expression of anthranilate 1,2-dioxygenase from Pseudomonas aeruginosa PAO1. Microbial Cell Factories, 2014, 13, 136.	1.9	24
54	Production of d-lactate from sugarcane bagasse and corn stover hydrolysates using metabolic engineered Escherichia coli strains. Bioresource Technology, 2016, 220, 208-214.	4.8	24

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55	Metabolic engineering strategies for caffeic acid production in Escherichia coli. Electronic Journal of Biotechnology, 2019, 38, 19-26.	1.2	24
56	Sequential Thermochemical Hydrolysis of Corncobs and Enzymatic Saccharification of the Whole Slurry Followed by Fermentation of Solubilized Sugars to Ethanol with the Ethanologenic Strain Escherichia coli MS04. Bioenergy Research, 2016, 9, 1046-1052.	2.2	23
57	Toward an understanding of lipid and starch accumulation in microalgae: A proteomic study of Neochloris oleoabundans cultivated under N-limited heterotrophic conditions. Algal Research, 2016, 20, 22-34.	2.4	23
58	Lactic acid production from glucose and xylose using the lactogenic Escherichia coli strain JU15: Experiments and techno-economic results. Bioresource Technology, 2019, 273, 86-92.	4.8	23
59	Improvement of culture conditions to overproduce Î²-galactosidase from Escherichia coli in Bacillus subtilis. Applied Microbiology and Biotechnology, 1997, 47, 40-45.	1.7	22
60	Effect of Growth Rate on the Production of Î²-Galactosidase from Escherichia Coli in Bacillus Subtilis Using Glucose-Limited Exponentially Fedbatch Cultures. Enzyme and Microbial Technology, 1998, 22, 520-526.	1.6	22
61	Biosynthesis of catechol melanin from glycerol employing metabolically engineered Escherichia coli. Microbial Cell Factories, 2016, 15, 161.	1.9	22
62	Evolutionary and reverse engineering to increase Saccharomyces cerevisiae tolerance to acetic acid, acidic pH, and high temperature. Applied Microbiology and Biotechnology, 2022, 106, 383-399.	1.7	22
63	Inactivation of Pyruvate Kinase or the Phosphoenolpyruvate: Sugar Phosphotransferase System Increases Shikimic and Dehydroshikimic Acid Yields from Glucose in <i>Bacillus subtilis</i>. Journal of Molecular Microbiology and Biotechnology, 2014, 24, 37-45.	1.0	21
64	Xyloseâ€“glucose co-fermentation to ethanol by Escherichia coli strain MS04 using single- and two-stage continuous cultures under micro-aerated conditions. Microbial Cell Factories, 2019, 18, 145.	1.9	21
65	Power consumption of three impeller combinations in mixing Xanthan fermentation broths. Process Biochemistry, 1992, 27, 351-365.	1.8	20
66	Ag43-mediated display of a thermostable Î²-glucosidase in Escherichia coli and its use for simultaneous saccharification and fermentation at high temperatures. Microbial Cell Factories, 2014, 13, 106.	1.9	19
67	A new pneumatic bearing dynamometer for power input measurement in stirred tanks. Chemical Engineering and Technology, 1991, 14, 105-108.	0.9	18
68	Nitrogen Limitation in Neochloris oleoabundans: A Reassessment of Its Effect on Cell Growth and Biochemical Composition. Applied Biochemistry and Biotechnology, 2013, 171, 1775-1791.	1.4	18
69	Production of cellulases and xylanases under catabolic repression conditions from mutant PR-22 of Cellulomonas flavigena. Journal of Industrial Microbiology and Biotechnology, 2011, 38, 257-264.	1.4	16
70	Metabolic and transcriptional response of Escherichia coli with a NADP+-dependent glyceraldehyde 3-phosphate dehydrogenase from Streptococcus mutans. Antonie Van Leeuwenhoek, 2013, 104, 913-924.	0.7	16
71	Cellulase and Xylanase Production by the Mexican Strain Talaromyces stollii LV186 and Its Application in the Saccharification of Pretreated Corn and Sorghum Stover. Bioenergy Research, 2016, 9, 1034-1045.	2.2	16
72	Title is missing!. World Journal of Microbiology and Biotechnology, 1999, 15, 587-592.	1.7	14

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73	Engineering the Escherichia coli Fermentative Metabolism. , 2010, 121, 71-107.		14
74	Membrane Proteomic Insights into the Physiology and Taxonomy of an Oleaginous Green Microalga. Plant Physiology, 2017, 173, 390-416.	2.3	14
75	Bioethanol from hydrolyzed Spirulina (Arthrospira platensis) biomass using ethanologenic bacteria. Bioresources and Bioprocessing, 2020, 7, .	2.0	14
76	One-pot bioethanol production from brewery spent grain using the ethanologenic Escherichia coli MS04. Renewable Energy, 2022, 189, 717-725.	4.3	14
77	Polysaccharide hydrolysis with engineered Escherichia coli for the production of biocommodities. Journal of Industrial Microbiology and Biotechnology, 2013, 40, 401-410.	1.4	13
78	Volumetric oxygen transfer coefficient as a means of improving volumetric ethanol productivity and a criterion for scaling up ethanol production with<i>Escherichia coli</i>. Journal of Chemical Technology and Biotechnology, 2017, 92, 981-989.	1.6	13
79	Growth-dependent recombinant product formation kinetics can be reproduced through engineering of glucose transport and is prone to phenotypic heterogeneity. Microbial Cell Factories, 2019, 18, 26.	1.9	13
80	Metabolic profiles and aprE expression in anaerobic cultures of Bacillus subtilis using nitrate as terminal electron acceptor. Applied Microbiology and Biotechnology, 2001, 57, 379-384.	1.7	12
81	A novel plasmid vector designed for chromosomal gene integration and expression: Use for developing a genetically stable Escherichia coli melanin production strain. Plasmid, 2013, 69, 16-23.	0.4	12
82	EndoG: A novel multifunctional halotolerant glucanase and xylanase isolated from cow rumen. Journal of Molecular Catalysis B: Enzymatic, 2016, 126, 1-9.	1.8	12
83	Expression of a codon-optimized Î²-glucosidase from Cellulomonas flavigena PR-22 in Saccharomyces cerevisiae for bioethanol production from cellobiose. Archives of Microbiology, 2017, 199, 605-611.	1.0	12
84	Technical and economic potential evaluation of the strain Escherichia coli MS04 in the ethanol production from glucose and xylose. Biochemical Engineering Journal, 2018, 140, 123-129.	1.8	12
85	A comparison of cavern development in mixing a yield stress fluid by rushton and intermig impellers. Chemical Engineering and Technology, 1996, 19, 315-323.	0.9	11
86	Physiologic Consequences of Glucose Transport and Phosphoenolpyruvate Node Modifications in <i>Bacillus subtilis</i> 168. Journal of Molecular Microbiology and Biotechnology, 2012, 22, 177-197.	1.0	11
87	Determination of the Composition of Lignocellulosic Biomasses from Combined Analyses of Thermal, Spectroscopic, and Wet Chemical Methods. Industrial & Engineering Chemistry Research, 2021, 60, 3502-3515.	1.8	11
88	D-Lactic acid production from Cistus ladanifer residues: Co-fermentation of pentoses and hexoses by Escherichia coli JU15. Industrial Crops and Products, 2022, 177, 114519.	2.5	11
89	Characterization of cellulolytic activities of Bjerkandera adusta and Pycnoporus sanguineus on solid wheat straw medium. Electronic Journal of Biotechnology, 2009, 12, .	1.2	10
90	Metabolic engineering and adaptive evolution of<i>Escherichia coli</i>KO11 for ethanol production through the Entner-Doudoroff and the pentose phosphate pathways. Journal of Chemical Technology and Biotechnology, 2017, 92, 990-996.	1.6	10

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91	Increasing pinosylvin production in Escherichia coli by reducing the expression level of the gene fabI -encoded enoyl-acyl carrier protein reductase. Electronic Journal of Biotechnology, 2018, 33, 11-16.	1.2	9
92	Growth and phycocyanin production with Galdieria sulphuraria UTEX 2919 using xylose, glucose, and corn stover hydrolysates under heterotrophy and mixotrophy. Algal Research, 2022, 65, 102752.	2.4	9
93	Improved ethanol production from biomass by a rumen metagenomic DNA fragment expressed in Escherichia coli MS04 during fermentation. Applied Microbiology and Biotechnology, 2015, 99, 9049-9060.	1.7	8
94	Use of water hyacinth as a substrate for the production of filamentous fungal hydrolytic enzymes in solid-state fermentation. 3 Biotech, 2019, 9, 21.	1.1	8
95	Genomic and physiological characterization of a laboratory-isolated Acinetobacter schindleri ACE strain that quickly and efficiently catabolizes acetate. Microbiology (United Kingdom), 2017, 163, 1052-1064.	0.7	8
96	Single-cell protein production potential with the extremophilic red microalgae Galdieria sulphuraria: growth and biochemical characterization. Journal of Applied Phycology, 2022, 34, 1341-1352.	1.5	8
97	Efficiency of insecticidal crystal protein production in a Bacillus thuringiensis mutant with derepressed expression of the terminal oxidase aa 3 during sporulation. Applied Microbiology and Biotechnology, 1993, 39, 558-562.	1.7	7
98	Physiological and transcriptional comparison of acetate catabolism between <i>Acinetobacter schindleri</i> ACE and <i>Escherichia coli</i> JM101. FEMS Microbiology Letters, 2019, 366, .	0.7	7
99	Limited oxygen conditions as an approach to scale-up and improve d and l-lactic acid production in mineral media and avocado seed hydrolysates with metabolically engineered Escherichia coli. Bioprocess and Biosystems Engineering, 2021, 44, 379-389.	1.7	7
100	Ethanol production by <i>Escherichia coli</i> from detoxified lignocellulosic teak wood hydrolysates with high concentration of phenolic compounds. Journal of Industrial Microbiology and Biotechnology, 2022, 49, .	1.4	7
101	Integral use of plants and their residues: the case of cocoyam (Xanthosoma sagittifolium) conversion through biorefineries at small scale. Environmental Science and Pollution Research, 2018, 25, 35949-35959.	2.7	6
102	Phenotypic and genomic analysis of Zymomonas mobilis ZM4 mutants with enhanced ethanol tolerance. Biotechnology Reports (Amsterdam, Netherlands), 2019, 23, e00328.	2.1	6
103	Recombinant protein production in cultures of an Escherichia coli trp âˆ’ strain. Applied Microbiology and Biotechnology, 1993, 39, 541-546.	1.7	5
104	The Phosphotransferase System-Dependent Sucrose Utilization Regulon in Enteropathogenic <i>Escherichia coli</i> Strains Is Located in a Variable Chromosomal Region Containing <i>iap</i> Sequences. Journal of Molecular Microbiology and Biotechnology, 2007, 13, 117-125.	1.0	5
105	Comparison of Growth and Lipid Accumulation at Three Different Growth Regimes with Desmodesmus sp.. Waste and Biomass Valorization, 2018, 9, 421-427.	1.8	4
106	D-lactic acid production from hydrothermally pretreated, alkali delignified and enzymatically saccharified rockrose with the metabolic engineered Escherichia coli strain JU15. Biomass Conversion and Biorefinery, 0, , 1.	2.9	4
107	Sparger position effect over kLa in bench and pilot stirred-tank fermentors. Journal of Bioscience and Bioengineering, 1989, 68, 71-73.	0.9	3
108	In Focus: Biotechnology and chemical technology for biorefineries and biofuel production. Journal of Chemical Technology and Biotechnology, 2017, 92, 897-898.	1.6	3

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109	d-lactate production from Spirulina (Arthrospira platensis) biomass using lactogenic Escherichia coli. Bioresource Technology Reports, 2020, 12, 100598.	1.5	3
110	Effect of selected aldehydes on the growth and fermentation of ethanologenic Escherichia coli. , 1999, 65, 24.		3
111	Metabolic Engineering of Escherichia coli for Lactic Acid Production from Renewable Resources. , 2017, , 125-145.		3
112	Effects of Ca(OH)2 treatments (â€œoverlimingâ€) on the composition and toxicity of bagasse hemicellulose hydrolysates. , 2000, 69, 526.		2
113	Growth rate of a non-fermentative Escherichia coli strain is influenced by NAD+ regeneration. Biotechnology Letters, 2007, 29, 1857-1863.	1.1	1
114	Enzymatic saccharification of sugar cane bagasse by continuous xylanase and cellulase production from <i>cellulomonas flavigena</i> PRâ€22. Biotechnology Progress, 2016, 32, 321-326.	1.3	1
115	The yeastGemMap: A process diagram to assist yeast systemsâ€metabolic studies. Biotechnology and Bioengineering, 2021, 118, 4800-4814.	1.7	1