

David E Block

List of Publications by Year in descending order

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66
papers

2,955
citations

201658

27
h-index

168376

53
g-index

67
all docs

67
docs citations

67
times ranked

3395
citing authors

#	ARTICLE	IF	CITATIONS
1	ACCESO A LA REPRESENTACIÓN ESCRITA DE LOS NÚMEROS NATURALES: UNA SECUENCIA DIDÁCTICA PARA ADULTOS DE BAJA O NULA ESCOLARIDAD 1. Revista Latinoamericana De Investigacion En Matematica Educativa, 2023, 17, 165-189.	0.1	1
2	Multi-Information source Bayesian optimization of culture media for cellular agriculture. Biotechnology and Bioengineering, 2022, 119, 2447-2458.	3.3	16
3	Development and Analysis of an Intensified Batch-Fed Wine Fermentation Process. Fermentation, 2022, 8, 268.	3.0	0
4	Considerations for the development of cost-effective cell culture media for cultivated meat production. Comprehensive Reviews in Food Science and Food Safety, 2021, 20, 686-709.	11.7	66
5	A generalizable hybrid search framework for optimizing expensive design problems using surrogate models. Engineering Optimization, 2021, 53, 1772-1785.	2.6	5
6	Nitrogenous Compound Utilization and Production of Volatile Organic Compounds among Commercial Wine Yeasts Highlight Strain-Specific Metabolic Diversity. Microbiology Spectrum, 2021, 9, e0048521.	3.0	11
7	Optimization of muscle cell culture media using nonlinear design of experiments. Biotechnology Journal, 2021, 16, e2100228.	3.5	15
8	Metabolic flux sampling predicts strain-dependent differences related to aroma production among commercial wine yeasts. Microbial Cell Factories, 2021, 20, 204.	4.0	14
9	A review of wine fermentation process modeling. Journal of Food Engineering, 2020, 273, 109783.	5.2	25
10	A combined phenolic extraction and fermentation reactor engineering model for multiphase red wine fermentation. Biotechnology and Bioengineering, 2020, 117, 109-116.	3.3	5
11	A Multi-Parameter, Predictive Model of Starch Hydrolysis in Barley Beer Mash. Beverages, 2020, 6, 60.	2.8	7
12	The Effects of Temperature and Ethanol on Proanthocyanidin Adsorption to Grape Cell Wall Material in the Presence of Anthocyanins. Molecules, 2020, 25, 4139.	3.8	4
13	Curation and Analysis of a <i>Saccharomyces cerevisiae</i> Genome-Scale Metabolic Model for Predicting Production of Sensory Impact Molecules under Enological Conditions. Processes, 2020, 8, 1195.	2.8	13
14	Predicting the Impact of Fermentor Geometry and Cap Management on Phenolic Profile Using a Reactor Engineering Model. American Journal of Enology and Viticulture, 2020, 71, 44-51.	1.7	1
15	Scaling up the Bioconversion of Cheese Whey Permeate into Fungal Oil by <i>Mucor circinelloides</i> . JAOCS, Journal of the American Oil Chemists' Society, 2020, 97, 703-716.	1.9	12
16	Impact of cold soak duration on Cabernet Sauvignon fermentation and phenolic composition. Journal of the Science of Food and Agriculture, 2019, 99, 805-815.	3.5	2
17	Heat-Dependent Desorption of Proanthocyanidins from Grape-Derived Cell Wall Material under Variable Ethanol Concentrations in Model Wine Systems. Molecules, 2019, 24, 3561.	3.8	10
18	Predicting fermentation dynamics of concrete egg fermenters. Australian Journal of Grape and Wine Research, 2019, 25, 338-344.	2.1	3

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19	A Mechanistic Model for the Extraction of Phenolics from Grapes During Red Wine Fermentation. <i>Molecules</i> , 2019, 24, 1275.	3.8	17
20	Impact of Temperature, Ethanol and Cell Wall Material Composition on Cell Wall-Anthocyanin Interactions. <i>Molecules</i> , 2019, 24, 3350.	3.8	26
21	Creation and validation of a reactor engineering model for multiphase red wine fermentations. <i>Biotechnology and Bioengineering</i> , 2019, 116, 781-792.	3.3	10
22	Predicting the Impact of Red Winemaking Practices Using a Reactor Engineering Model. <i>American Journal of Enology and Viticulture</i> , 2019, 70, 162-168.	1.7	8
23	Extracellular fungal polyol lipids: A new class of potential high value lipids. <i>Biotechnology Advances</i> , 2018, 36, 397-414.	11.7	42
24	Effect of Pump-over Conditions on the Extraction of Phenolic Compounds during Cabernet Sauvignon Fermentation. <i>American Journal of Enology and Viticulture</i> , 2018, 69, 295-301.	1.7	11
25	Chemical Gradients in Pilot-Scale Cabernet Sauvignon Fermentations and Their Effect on Phenolic Extraction. <i>American Journal of Enology and Viticulture</i> , 2017, 68, 401-411.	1.7	19
26	Simultaneous production of intracellular triacylglycerols and extracellular polyol esters of fatty acids by <i>Rhodotorula babjevae</i> and <i>Rhodotorula</i> aff. <i>paludigena</i> . <i>Journal of Industrial Microbiology and Biotechnology</i> , 2017, 44, 1397-1413.	3.0	17
27	Oligosaccharides Released from Milk Glycoproteins Are Selective Growth Substrates for Infant-Associated Bifidobacteria. <i>Applied and Environmental Microbiology</i> , 2016, 82, 3622-3630.	3.1	124
28	Characterizing the release of bioactive N-glycans from dairy products by a novel endo- β -N-acetylglucosaminidase. <i>Biotechnology Progress</i> , 2015, 31, 1331-1339.	2.6	28
29	A novel endo- β -N-acetylglucosaminidase releases specific N-glycans depending on different reaction conditions. <i>Biotechnology Progress</i> , 2015, 31, 1323-1330.	2.6	20
30	Investigating the Effect of Cold Soak Duration on Phenolic Extraction during Cabernet Sauvignon Fermentation. <i>Molecules</i> , 2015, 20, 7974-7989.	3.8	23
31	Kinetic characterization of a novel endo- β -N-acetylglucosaminidase on concentrated bovine colostrum whey to release bioactive glycans. <i>Enzyme and Microbial Technology</i> , 2015, 77, 46-53.	3.2	20
32	Effects of Cap and Overall Fermentation Temperature on Phenolic Extraction in Cabernet Sauvignon Fermentations. <i>American Journal of Enology and Viticulture</i> , 2015, 66, 444-453.	1.7	43
33	Examining the Role of Membrane Lipid Composition in Determining the Ethanol Tolerance of <i>Saccharomyces cerevisiae</i> . <i>Applied and Environmental Microbiology</i> , 2014, 80, 2966-2972.	3.1	119
34	Oleaginous yeasts for biodiesel: Current and future trends in biology and production. <i>Biotechnology Advances</i> , 2014, 32, 1336-1360.	11.7	361
35	Ethanol Production and Maximum Cell Growth Are Highly Correlated with Membrane Lipid Composition during Fermentation as Determined by Lipidomic Analysis of 22 <i>Saccharomyces cerevisiae</i> Strains. <i>Applied and Environmental Microbiology</i> , 2013, 79, 91-104.	3.1	60
36	Selective Hydrodeoxygenation of Guaiacol Catalyzed by Platinum Supported on Magnesium Oxide. <i>Catalysis Letters</i> , 2012, 142, 1190-1196.	2.6	108

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37	Catalytic conversion of compounds representative of lignin-derived bio-oils: a reaction network for guaiacol, anisole, 4-methylanisole, and cyclohexanone conversion catalysed by Pt/ γ -Al ₂ O ₃ . Catalysis Science and Technology, 2012, 2, 113-118.	4.1	158
38	Catalytic Conversion of Furan to Gasoline-Range Aliphatic Hydrocarbons via Ring Opening and Decarbonylation Reactions Catalyzed by Pt/ γ -Al ₂ O ₃ . Catalysis Letters, 2012, 142, 664-666.	2.6	15
39	Conversion of 4-Methylanisole Catalyzed by Pt/ γ -Al ₂ O ₃ and by Pt/SiO ₂ -Al ₂ O ₃ : Reaction Networks and Evidence of Oxygen Removal. Catalysis Letters, 2012, 142, 7-15.	2.6	40
40	Upgrading of Lignin-Derived Compounds: Reactions of Eugenol Catalyzed by HY Zeolite and by Pt/ γ -Al ₂ O ₃ . Catalysis Letters, 2012, 142, 151-160.	2.6	62
41	Analysis of Major Phospholipid Species and Ergosterol in Fermenting Industrial Yeast Strains Using Atmospheric Pressure Ionization Ion-Trap Mass Spectrometry. Journal of Agricultural and Food Chemistry, 2011, 59, 12761-12770.	5.2	25
42	Catalytic Conversion of Guaiacol Catalyzed by Platinum Supported on Alumina: Reaction Network Including Hydrodeoxygenation Reactions. Energy & Fuels, 2011, 25, 3417-3427.	5.1	222
43	Conversion of Anisole Catalyzed by Platinum Supported on Alumina: The Reaction Network. Energy & Fuels, 2011, 25, 4776-4785.	5.1	68
44	Catalytic Conversion of Anisole: Evidence of Oxygen Removal in Reactions with Hydrogen. Catalysis Letters, 2011, 141, 817-820.	2.6	62
45	Catalytic Reactions of Guaiacol: Reaction Network and Evidence of Oxygen Removal in Reactions with Hydrogen. Catalysis Letters, 2011, 141, 779-783.	2.6	122
46	Cyclohexanone Conversion Catalyzed by Pt/ γ -Al ₂ O ₃ : Evidence of Oxygen Removal and Coupling Reactions. Catalysis Letters, 2011, 141, 1072-1078.	2.6	46
47	Incorporation of nisI-mediated nisin immunity improves vector-based nisin-controlled gene expression in lactic acid bacteria. Plasmid, 2009, 61, 151-158.	1.4	17
48	Dual inducible expression of recombinant GFP and targeted antisense RNA in Lactococcus lactis. Plasmid, 2009, 62, 108-118.	1.4	7
49	Integration of data mining into a nonlinear experimental design approach for improved performance. AIChE Journal, 2009, 55, 3017-3021.	3.6	4
50	Using highly efficient nonlinear experimental design methods for optimization of <i>Lactococcus lactis</i> fermentation in chemically defined media. Biotechnology Progress, 2009, 25, 1587-1597.	2.6	19
51	A dynamic, genome-scale flux model of Lactococcus lactis to increase specific recombinant protein expression. Metabolic Engineering, 2009, 11, 367-381.	7.0	45
52	Development of Chemically Defined Media Supporting High-Cell-Density Growth of Lactococci, Enterococci, and Streptococci. Applied and Environmental Microbiology, 2009, 75, 1080-1087.	3.1	104
53	Formation of temperature gradients in large- and small-scale red wine fermentations during cap management. Australian Journal of Grape and Wine Research, 2009, 15, 249-255.	2.1	33
54	Temperature-Dependent Kinetic Model for Nitrogen-Limited Wine Fermentations. Applied and Environmental Microbiology, 2007, 73, 5875-5884.	3.1	72

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55	Optimization of fed-batch production of the model recombinant protein GFP in <i>Lactococcus lactis</i> . <i>Biotechnology and Bioengineering</i> , 2007, 96, 1127-1138.	3.3	26
56	Nonlinear experimental design using Bayesian regularized neural networks. <i>AIChE Journal</i> , 2007, 53, 1496-1509.	3.6	12
57	New experimental design method for highly nonlinear and dimensional processes. <i>AIChE Journal</i> , 2007, 53, 2013-2025.	3.6	9
58	Retrospective optimization of time-dependent fermentation control strategies using time-independent historical data. <i>Biotechnology and Bioengineering</i> , 2006, 95, 412-423.	3.3	13
59	Kinetics of <i>Lactococcus lactis</i> growth and metabolite formation under aerobic and anaerobic conditions in the presence or absence of hemin. <i>Biotechnology and Bioengineering</i> , 2006, 95, 1070-1080.	3.3	32
60	Bayesian parameter estimation with informative priors for nonlinear systems. <i>AIChE Journal</i> , 2006, 52, 651-667.	3.6	34
61	Elasticity and Phase Behavior of DPPC Membrane Modulated by Cholesterol, Ergosterol, and Ethanol. <i>Biophysical Journal</i> , 2005, 89, 2481-2493.	0.5	137
62	An integrated approach to optimization of <i>Escherichia coli</i> fermentations using historical data. <i>Biotechnology and Bioengineering</i> , 2003, 84, 274-285.	3.3	28
63	Interfacial Tension Effect of Ethanol on Lipid Bilayer Rigidity, Stability, and Area/Molecule: A Micropipet Aspiration Approach. <i>Langmuir</i> , 2002, 18, 8988-8995.	3.5	82
64	Kinetic model for nitrogen-limited wine fermentations. <i>Biotechnology and Bioengineering</i> , 2002, 77, 49-60.	3.3	112
65	Identification of Critical Batch Operating Parameters in Fed-Batch Recombinant <i>E. coli</i> Fermentations Using Decision Tree Analysis. <i>Biotechnology Progress</i> , 2002, 18, 1366-1376.	2.6	17
66	Using historical data for bioprocess optimization: Modeling wine characteristics using artificial neural networks and archived process information. <i>Biotechnology and Bioengineering</i> , 2001, 73, 55-68.	3.3	66