

Ioannis K Kookos

List of Publications by Year in descending order

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72
papers

3,123
citations

172386

29
h-index

155592

55
g-index

75
all docs

75
docs citations

75
times ranked

3291
citing authors

#	ARTICLE	IF	CITATIONS
1	Valorization of industrial waste and by-product streams via fermentation for the production of chemicals and biopolymers. <i>Chemical Society Reviews</i> , 2014, 43, 2587.	18.7	437
2	Design and techno-economic evaluation of microbial oil production as a renewable resource for biodiesel and oleochemical production. <i>Fuel</i> , 2014, 116, 566-577.	3.4	301
3	Techno-economic analysis of a biodiesel production process from vegetable oils. <i>Fuel Processing Technology</i> , 2009, 90, 1023-1031.	3.7	253
4	An Algorithm for Simultaneous Process Design and Control. <i>Industrial & Engineering Chemistry Research</i> , 2001, 40, 4079-4088.	1.8	117
5	Sustainable production of bio-based chemicals and polymers via integrated biomass refining and bioprocessing in a circular bioeconomy context. <i>Bioresource Technology</i> , 2020, 307, 123093.	4.8	104
6	Techno-economic evaluation of a complete bioprocess for 2,3-butanediol production from renewable resources. <i>Bioresource Technology</i> , 2016, 204, 55-64.	4.8	96
7	Formulation of fermentation media from flour-rich waste streams for microbial lipid production by <i>Lipomyces starkeyi</i> . <i>Journal of Biotechnology</i> , 2014, 189, 36-45.	1.9	91
8	Conversion of biodiesel-derived glycerol into biotechnological products of industrial significance by yeast and fungal strains. <i>Engineering in Life Sciences</i> , 2017, 17, 262-281.	2.0	84
9	Wine lees valorization: Biorefinery development including production of a generic fermentation feedstock employed for poly(3-hydroxybutyrate) synthesis. <i>Food Research International</i> , 2015, 73, 81-87.	2.9	83
10	Production of added-value metabolites by <i>Yarrowia lipolytica</i> growing in olive mill wastewater-based media under aseptic and non-aseptic conditions. <i>Engineering in Life Sciences</i> , 2017, 17, 695-709.	2.0	75
11	Utilisation of By-Products from Sunflower-Based Biodiesel Production Processes for the Production of Fermentation Feedstock. <i>Waste and Biomass Valorization</i> , 2013, 4, 529-537.	1.8	66
12	Process control structure selection based on economics. <i>AIChE Journal</i> , 2000, 46, 1998-2016.	1.8	65
13	Sunflower-based biorefinery: Poly(3-hydroxybutyrate) and poly(3-hydroxybutyrate-co) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 2 <i>Technology</i> , 2014, 172, 121-130.	4.8	60
14	Life cycle assessment of bioprocessing schemes for poly(3-hydroxybutyrate) production using soybean oil and sucrose as carbon sources. <i>Resources, Conservation and Recycling</i> , 2019, 141, 317-328.	5.3	57
15	Optimal Design of Membrane/Distillation Column Hybrid Processes. <i>Industrial & Engineering Chemistry Research</i> , 2003, 42, 1731-1738.	1.8	56
16	Technoeconomic and environmental assessment of a process for biodiesel production from spent coffee grounds (SCGs). <i>Resources, Conservation and Recycling</i> , 2018, 134, 156-164.	5.3	55
17	Process Design and Optimization of Novel Wheat-Based Continuous Bioethanol Production System. <i>Biotechnology Progress</i> , 2007, 23, 1394-1403.	1.3	49
18	An algorithmic method for the selection of multivariable process control structures. <i>Journal of Process Control</i> , 2002, 12, 85-99.	1.7	47

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19	Techno-economic evaluation of wine lees refining for the production of value-added products. <i>Biochemical Engineering Journal</i> , 2016, 116, 157-165.	1.8	46
20	Integrated sunflower-based biorefinery for the production of antioxidants, protein isolate and poly(3-hydroxybutyrate). <i>Industrial Crops and Products</i> , 2015, 71, 106-113.	2.5	45
21	Hybridised sustainability metrics for use in life cycle assessment of bio-based products: resource efficiency and circularity. <i>Green Chemistry</i> , 2020, 22, 803-813.	4.6	45
22	Downstream separation of poly(hydroxyalkanoates) using crude enzyme consortia produced via solid state fermentation integrated in a biorefinery concept. <i>Food and Bioproducts Processing</i> , 2016, 100, 323-334.	1.8	40
23	Downstream separation and purification of succinic acid from fermentation broths using spent sulphite liquor as feedstock. <i>Separation and Purification Technology</i> , 2019, 209, 666-675.	3.9	40
24	Pretreatment of spent sulphite liquor via ultrafiltration and nanofiltration for bio-based succinic acid production. <i>Journal of Biotechnology</i> , 2016, 233, 95-105.	1.9	34
25	Valorisation of side streams from wheat milling and confectionery industries for consolidated production and extraction of microbial lipids. <i>Food Chemistry</i> , 2016, 198, 85-92.	4.2	34
26	Improvement on bioprocess economics for 2,3-butanediol production from very high polarity cane sugar via optimisation of bioreactor operation. <i>Bioresource Technology</i> , 2019, 274, 343-352.	4.8	32
27	Techno-economic analysis and life cycle assessment of heterotrophic yeast-derived single cell oil production process. <i>Fuel</i> , 2020, 264, 116839.	3.4	32
28	Optimisation of 2,3-butanediol production by <i>Enterobacter ludwigii</i> using sugarcane molasses. <i>Biochemical Engineering Journal</i> , 2019, 152, 107370.	1.8	31
29	A targeting approach to the synthesis of membrane networks for gas separations. <i>Journal of Membrane Science</i> , 2002, 208, 193-202.	4.1	29
30	Control structure selection based on economics: Generalization of the back-off methodology. <i>AIChE Journal</i> , 2016, 62, 3056-3064.	1.8	29
31	Techno-economic evaluation and life-cycle assessment of poly(3-hydroxybutyrate) production within a biorefinery concept using sunflower-based biodiesel industry by-products. <i>Bioresource Technology</i> , 2021, 326, 124711.	4.8	29
32	Techno-economic risk assessment, life cycle analysis and life cycle costing for poly(butylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 227 T Environment, 2022, 806, 150594.	3.9	29
33	PID controller tuning using mathematical programming. <i>Chemical Engineering and Processing: Process Intensification</i> , 2005, 44, 41-49.	1.8	28
34	Modelling of low temperature wine-making, using immobilized cells. <i>Food Chemistry</i> , 2012, 133, 1341-1348.	4.2	28
35	Heuristic-Based Mathematical Programming Framework for Control Structure Selection. <i>Industrial & Engineering Chemistry Research</i> , 2001, 40, 2079-2088.	1.8	27
36	Optimization of batch and fed-batch bioreactors using simulated annealing. <i>Biotechnology Progress</i> , 2004, 20, 1285-1288.	1.3	27

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37	Techno-economic evaluation and life cycle assessment of a biorefinery using winery waste streams for the production of succinic acid and value-added co-products. <i>Bioresource Technology</i> , 2022, 348, 126295.	4.8	27
38	Magnetically modified bacterial cellulose: A promising carrier for immobilization of affinity ligands, enzymes, and cells. <i>Materials Science and Engineering C</i> , 2017, 71, 214-221.	3.8	25
39	Optimization and Cost Estimation of Novel Wheat Biorefining for Continuous Production of Fermentation Feedstock. <i>Biotechnology Progress</i> , 2007, 23, 872-880.	1.3	24
40	Plant-wide control structure selection methodology based on economics. <i>Computers and Chemical Engineering</i> , 2013, 52, 240-248.	2.0	23
41	Risk assessment modeling of bio-based chemicals economics based on Monte-Carlo simulations. <i>Chemical Engineering Research and Design</i> , 2020, 163, 273-280.	2.7	23
42	Classical and alternative fuel mix optimization in cement production using mathematical programming. <i>Fuel</i> , 2011, 90, 1277-1284.	3.4	22
43	Valorization of spent sulphite liquor for succinic acid production via continuous fermentation system. <i>Biochemical Engineering Journal</i> , 2018, 137, 262-272.	1.8	22
44	Estimation of volumetric mass transfer coefficient (kLa)—Review of classical approaches and contribution of a novel methodology. <i>Biochemical Engineering Journal</i> , 2020, 155, 107458.	1.8	22
45	A Systematic Method for Optimum Sensor Selection in Inferential Control Systems. <i>Industrial & Engineering Chemistry Research</i> , 1999, 38, 4299-4308.	1.8	21
46	Optimal design of upstream processes in biotransformation technologies. <i>Bioresource Technology</i> , 2017, 224, 509-514.	4.8	21
47	Bioprocess development for (2R,3R)-butanediol and acetoin production using very high polarity cane sugar and sugarcane molasses by a <i>Bacillus amyloliquefaciens</i> strain. <i>Journal of Chemical Technology and Biotechnology</i> , 2019, 94, 2167-2177.	1.6	20
48	TREATMENT OF WASTEWATER WITH HIGH FAT CONTENT EMPLOYING AN ENZYME POOL AND BIOSURFACTANT: TECHNICAL AND ECONOMIC FEASIBILITY. <i>Brazilian Journal of Chemical Engineering</i> , 2018, 35, 531-542.	0.7	17
49	On the diffusion in porous electrodes of SOFCs. <i>Chemical Engineering Science</i> , 2012, 69, 571-577.	1.9	15
50	A newly isolated <i>Enterobacter</i> sp. strain produces 2,3-butanediol during its cultivation on low-cost carbohydrate-based substrates. <i>FEMS Microbiology Letters</i> , 2019, 366, .	0.7	13
51	Real-Time Regulatory Control Structure Selection Based on Economics. <i>Industrial & Engineering Chemistry Research</i> , 2005, 44, 3993-4000.	1.8	12
52	Control Structure Selection of an Ideal Reactive Distillation Column. <i>Industrial & Engineering Chemistry Research</i> , 2011, 50, 11193-11200.	1.8	11
53	A simple and efficient model for calculating fixed capital investment and utilities consumption of large-scale biotransformation processes. <i>Biochemical Engineering Journal</i> , 2020, 154, 107462.	1.8	11
54	A mathematical programming formulation for biorefineries technology selection. <i>Biochemical Engineering Journal</i> , 2016, 116, 135-145.	1.8	10

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55	Regulatory control structure selection of linear systems. Computers and Chemical Engineering, 2002, 26, 875-887.	2.0	9
56	Optimal Operation of Batch Processes under Uncertainty: A Monte Carlo Simulation-Deterministic Optimization Approach. Industrial & Engineering Chemistry Research, 2003, 42, 6815-6822.	1.8	8
57	Plantwide control structure selection methodology for the benchmark vinyl acetate monomer plant. Computers and Chemical Engineering, 2014, 62, 108-116.	2.0	8
58	Bioprocess Development for 2,3-Butanediol Production from Crude Glycerol and Conceptual Process Design for Aqueous Conversion into Methyl Ethyl Ketone. ACS Sustainable Chemistry and Engineering, 2021, 9, 8692-8705.	3.2	8
59	On the efficient computation of disturbance rejection measures. Computers and Chemical Engineering, 2003, 27, 95-99.	2.0	7
60	Life cycle assessment of biobased chemicals from different agricultural feedstocks. Journal of Cleaner Production, 2021, 323, 129201.	4.6	7
61	Increasing the volumetric productivity of fermentative ethanol production using a fed-batch vacuform process. Biomass Conversion and Biorefinery, 2021, 11, 673-680.	2.9	6
62	A quadratic approximation of the back-off methodology for the control structure selection problem. Computers and Chemical Engineering, 2020, 143, 107114.	2.0	5
63	A novel approach to the simultaneous design & control problem. Chemical Engineering Science, 2021, 240, 116637.	1.9	5
64	Optimization and Cost Estimation of Novel Wheat Biorefining for Continuous Production of Fermentation Feedstock. Biotechnology Progress, 2007, 23, 872-880.	1.3	5
65	CALCULATING DYNAMIC DISTURBANCE REJECTION MEASURES. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 573-578.	0.4	4
66	An Algorithmic Method for Temperature Sensor Location Selection in Distillation Columns. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 527-532.	0.4	2
67	Strategic planning for chemicals and fuels bioconversion processes. Journal of Chemical Technology and Biotechnology, 2020, 95, 3079-3084.	1.6	2
68	Algorithmic Approach to the Simultaneous Design and Control Problem. Industrial & Engineering Chemistry Research, 2021, 60, 14271-14281.	1.8	2
69	Techno-Economic Evaluation of Refining of Food Supply Chain Wastes for the Production of Chemicals and Biopolymers. , 2017, , 147-164.		2
70	Validation of a solid oxide fuel cell model. , 2012, , .		0
71	Plantwide Control Structure Selection Methodology based on Economics: a Quadratic Approximation. Computer Aided Chemical Engineering, 2020, 48, 1105-1110.	0.3	0
72	An Improved Formulation for the Process Control Structure Selection based on Economics Problem. Computer Aided Chemical Engineering, 2011, , 638-642.	0.3	0