

# Jian-Ye Xia

## List of Publications by Year in descending order

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42  
papers

1,003  
citations

430874

18  
h-index

454955

30  
g-index

45  
all docs

45  
docs citations

45  
times ranked

918  
citing authors

#	ARTICLE	IF	CITATIONS
1	$\hat{\gamma}$ -PGA Fermentation by <i>Bacillus subtilis</i> PG-001 with Glucose Feedback Control pH-stat Strategy. <i>Applied Biochemistry and Biotechnology</i> , 2022, 194, 1871-1880.	2.9	6
2	Genome-scale Metabolic Model's multi-objective solving algorithm based on the inflexion point of Pareto front including maximum energy utilization and its application in <i>Aspergillus niger</i> DS03043. <i>Biotechnology and Bioengineering</i> , 2022, 119, 1539-1555.	3.3	1
3	Proteome allocations change linearly with the specific growth rate of <i>Saccharomyces cerevisiae</i> under glucose limitation. <i>Nature Communications</i> , 2022, 13, .	12.8	28
4	Multi-omics analyses of the transition to the Crabtree effect in <i>S. cerevisiae</i> reveals a key role for the citric acid shuttle. <i>FEMS Yeast Research</i> , 2022, 22, .	2.3	2
5	Understanding the scale-up of fermentation processes from the viewpoint of the flow field in bioreactors and the physiological response of strains. <i>Chinese Journal of Chemical Engineering</i> , 2021, 30, 178-184.	3.5	11
6	Dynamic response of <i>Aspergillus niger</i> to periodical glucose pulse stimuli in chemostat cultures. <i>Biotechnology and Bioengineering</i> , 2021, 118, 2265-2282.	3.3	7
7	Integration of enzyme constraints in a genome-scale metabolic model of <i>Aspergillus niger</i> improves phenotype predictions. <i>Microbial Cell Factories</i> , 2021, 20, 125.	4.0	17
8	A new strategy for dynamic metabolic flux estimation by integrating transient metabolome data into genome-scale metabolic models. <i>Bioprocess and Biosystems Engineering</i> , 2021, 44, 2553-2565.	3.4	1
9	Impact of Altered Trehalose Metabolism on Physiological Response of <i>Penicillium chrysogenum</i> Chemostat Cultures during Industrially Relevant Rapid Feast/Famine Conditions. <i>Processes</i> , 2021, 9, 118.	2.8	5
10	Novel scale-up strategy based on three-dimensional shear space for animal cell culture. <i>Chemical Engineering Science</i> , 2020, 212, 115329.	3.8	17
11	Enzymatic Preparation of the Chiral ( <i>S</i> )-Sulfoxide Drug Esomeprazole at Pilot-Scale Levels. <i>Organic Process Research and Development</i> , 2020, 24, 1124-1130.	2.7	33
12	Dynamic response of <i>Aspergillus niger</i> to single pulses of glucose with high and low concentrations. <i>Bioresources and Bioprocessing</i> , 2019, 6, .	4.2	12
13	Numerical and experimental assessment of a miniature bioreactor equipped with a mechanical agitator and non-invasive biosensors. <i>Journal of Chemical Technology and Biotechnology</i> , 2019, 94, 2671-2683.	3.2	4
14	Comparative performance of different scale-down simulators of substrate gradients in <i>Penicillium chrysogenum</i> cultures: the need of a biological systems response analysis. <i>Microbial Biotechnology</i> , 2018, 11, 486-497.	4.2	27
15	Power input effects on degeneration in prolonged penicillin chemostat cultures: A systems analysis at flux, residual glucose, metabolite, and transcript levels. <i>Biotechnology and Bioengineering</i> , 2018, 115, 114-125.	3.3	17
16	Gas-liquid mass transfer studies: The influence of single- and double-impeller configurations in stirred tanks. <i>Korean Journal of Chemical Engineering</i> , 2018, 35, 61-72.	2.7	6
17	Multi-omics integrative analysis with genome-scale metabolic model simulation reveals global cellular adaptation of <i>Aspergillus niger</i> under industrial enzyme production condition. <i>Scientific Reports</i> , 2018, 8, 14404.	3.3	36
18	Dynamic metabolic response of <i>Aspergillus niger</i> to glucose perturbation: evidence of regulatory mechanism for reduced glucoamylase production. <i>Journal of Biotechnology</i> , 2018, 287, 28-40.	3.8	8

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19	Hydrodynamic investigation of a novel shear-generating device for the measurement of anchorage-dependent cell adhesion intensity. <i>Bioprocess and Biosystems Engineering</i> , 2018, 41, 1371-1382.	3.4	11
20	A 9â€pool metabolic structured kinetic model describing days to seconds dynamics of growth and product formation by <i>Penicillium chrysogenum</i> . <i>Biotechnology and Bioengineering</i> , 2017, 114, 1733-1743.	3.3	41
21	The Impact of Systems Biology on Bioprocessing. <i>Trends in Biotechnology</i> , 2017, 35, 1156-1168.	9.3	67
22	Comprehensive reconstruction and in silico analysis of <i>Aspergillus niger</i> genomeâ€scale metabolic network model that accounts for 1210 ORFs. <i>Biotechnology and Bioengineering</i> , 2017, 114, 685-695.	3.3	33
23	CFD Simulation of Average and Local Gasâ€Liquid Flow Properties in Stirred Tank Reactors with Multiple Rushton Impellers. <i>Journal of Chemical Engineering of Japan</i> , 2017, 50, 878-891.	0.6	8
24	Quantitative evaluation of the shear threshold on <i>Carthamus tinctorius</i> L. cell growth with computational fluid dynamics in shaken flask bioreactors. <i>Biochemical Engineering Journal</i> , 2016, 113, 66-76.	3.6	19
25	Application of Eulerâ€Lagrange CFD for quantitative evaluating the effect of shear force on <i>Carthamus tinctorius</i> L. cell in a stirred tank bioreactor. <i>Biochemical Engineering Journal</i> , 2016, 114, 209-217.	3.6	43
26	Integrated isotope-assisted metabolomics and <sup>13</sup> C metabolic flux analysis reveals metabolic flux redistribution for high glucoamylase production by <i>Aspergillus niger</i> . <i>Microbial Cell Factories</i> , 2015, 14, 147.	4.0	34
27	Integration of microbial kinetics and fluid dynamics toward modelâ€driven scaleâ€up of industrial bioprocesses. <i>Engineering in Life Sciences</i> , 2015, 15, 20-29.	3.6	71
28	Dependence of fungal characteristics on seed morphology and shear stress in bioreactors. <i>Bioprocess and Biosystems Engineering</i> , 2015, 38, 917-928.	3.4	17
29	Advances and Practices of Bioprocess Scale-up. <i>Advances in Biochemical Engineering/Biotechnology</i> , 2015, 152, 137-151.	1.1	17
30	Improvement of glucoamylase production using axial impellers with low power consumption and homogeneous mass transfer. <i>Biochemical Engineering Journal</i> , 2015, 99, 167-176.	3.6	19
31	Power consumption, local and average volumetric mass transfer coefficient in multiple-impeller stirred bioreactors for xanthan gum solutions. <i>Chemical Engineering Science</i> , 2014, 106, 144-156.	3.8	43
32	Prelude to rational scale-up of penicillin production: a scale-down study. <i>Applied Microbiology and Biotechnology</i> , 2014, 98, 2359-2369.	3.6	29
33	Flow Pattern, Mixing, Gas Hold-Up and Mass Transfer Coefficient of Triple-Impeller Configurations in Stirred Tank Bioreactors. <i>Industrial &amp; Engineering Chemistry Research</i> , 2014, 53, 5941-5953.	3.7	54
34	Effects of flow field on the metabolic characteristics of <i>Streptomyces lincolnensis</i> in the industrial fermentation of lincomycin. <i>Journal of Bioscience and Bioengineering</i> , 2013, 115, 27-31.	2.2	8
35	CFD analysis of the turbulent flow in baffled shake flasks. <i>Biochemical Engineering Journal</i> , 2013, 70, 140-150.	3.6	54
36	A novel impeller configuration to improve fungal physiology performance and energy conservation for cephalosporin C production. <i>Journal of Biotechnology</i> , 2012, 161, 250-256.	3.8	31

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37	Comparison of Power Number for Paddle-Type Impellers by Three Methods. Journal of Chemical Engineering of Japan, 2011, 44, 840-844.	0.6	12
38	Computational fluid dynamics modeling of an inverted frustoconical shaking bioreactor for mammalian cell suspension culture. Biotechnology and Bioprocess Engineering, 2011, 16, 567-575.	2.6	12
39	Industrial bioprocess control and optimization in the context of systems biotechnology. Biotechnology Advances, 2009, 27, 989-995.	11.7	43
40	Fluid dynamics investigation of variant impeller combinations by simulation and fermentation experiment. Biochemical Engineering Journal, 2009, 43, 252-260.	3.6	66
41	Computational investigation of fluid dynamics in a recently developed centrifugal impeller bioreactor. Biochemical Engineering Journal, 2008, 38, 406-413.	3.6	31
42	Review of construction methods for whole-cell computational models. Systems Microbiology and Biomanufacturing, 0, , 1.	2.9	1