

# Andrew J Daugulis

## List of Publications by Citations

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162  
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165  
ext. papers

4,810  
ext. citations

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L-index

#	Paper	IF	Citations
162	Solvent selection strategies for extractive biocatalysis. <i>Biotechnology Progress</i> , <b>1991</b> , 7, 116-24	2.8	215
161	Two-phase partitioning bioreactors: a new technology platform for destroying xenobiotics. <i>Trends in Biotechnology</i> , <b>2001</b> , 19, 457-62	15.1	193
160	Recent advances in two-phase partitioning bioreactors for the treatment of volatile organic compounds. <i>Biotechnology Advances</i> , <b>2012</b> , 30, 1707-20	17.8	112
159	A rational approach to improving productivity in recombinant <i>Pichia pastoris</i> fermentation. <i>Biotechnology and Bioengineering</i> , <b>2001</b> , 72, 1-11	4.9	111
158	Bioproduction of the aroma compound 2-phenylethanol in a solid-liquid two-phase partitioning bioreactor system by <i>Kluyveromyces marxianus</i> . <i>Biotechnology and Bioengineering</i> , <b>2009</b> , 104, 332-9	4.9	96
157	Enhanced biodegradation of phenol by a microbial consortium in a solid-liquid two phase partitioning bioreactor. <i>Biodegradation</i> , <b>2005</b> , 16, 329-39	4.1	90
156	Interfacial effects in a two-phase partitioning bioreactor: degradation of polycyclic aromatic hydrocarbons (PAHs) by a hydrophobic <i>Mycobacterium</i> . <i>Process Biochemistry</i> , <b>2005</b> , 40, 1799-1805	4.8	87
155	Biodegradation of phenol at high initial concentrations in two-phase partitioning batch and fed-batch bioreactors. <i>Biotechnology and Bioengineering</i> , <b>1997</b> , 55, 155-62	4.9	80
154	A novel method of simulating oxygen mass transfer in two-phase partitioning bioreactors. <i>Biotechnology and Bioengineering</i> , <b>2003</b> , 83, 735-42	4.9	74
153	Ex Situ Bioremediation of Contaminated Soils: An Overview of Conventional and Innovative Technologies. <i>Critical Reviews in Environmental Science and Technology</i> , <b>2013</b> , 43, 2107-2139	11.1	73
152	Degradation of xenobiotics in a partitioning bioreactor in which the partitioning phase is a polymer. <i>Biotechnology and Bioengineering</i> , <b>2003</b> , 84, 399-405	4.9	72
151	Development of a novel bioreactor system for treatment of gaseous benzene. <i>Biotechnology and Bioengineering</i> , <b>2001</b> , 72, 156-65	4.9	69
150	Salt effects in extraction of ethanol, 1-butanol and acetone from aqueous solutions. <i>AIChE Journal</i> , <b>1994</b> , 40, 1459-1465	3.6	69
149	Kinetics and interactions of BTEX compounds during degradation by a bacterial consortium. <i>Process Biochemistry</i> , <b>2008</b> , 43, 1068-1076	4.8	61
148	Remediation of PAH contaminated soils: application of a solid-liquid two-phase partitioning bioreactor. <i>Chemosphere</i> , <b>2008</b> , 73, 798-804	8.4	59
147	Screening and identification of extractive fermentation solvents using a database. <i>Canadian Journal of Chemical Engineering</i> , <b>1985</b> , 63, 919-927	2.3	59
146	In situ product removal in fermentation systems: improved process performance and rational extractant selection. <i>Biotechnology Letters</i> , <b>2014</b> , 36, 443-60	3	57

145	Transient performance of two-phase partitioning bioreactors treating a toluene contaminated gas stream. <i>Biotechnology and Bioengineering</i> , <b>2006</b> , 94, 448-57	4.9	55
144	A comparative study of solid and liquid non-aqueous phases for the biodegradation of hexane in two-phase partitioning bioreactors. <i>Biotechnology and Bioengineering</i> , <b>2010</b> , 106, 731-40	4.9	54
143	Partitioning bioreactors. <i>Current Opinion in Biotechnology</i> , <b>1997</b> , 8, 169-74	11.4	54
142	Microbial degradation of high and low molecular weight polyaromatic hydrocarbons in a two-phase partitioning bioreactor by two strains of <i>Sphingomonas</i> sp. <i>Biotechnology Letters</i> , <b>2003</b> , 25, 1441-4	3	54
141	Experimental investigation and modeling of oscillatory behavior in the continuous culture of <i>Zymomonas mobilis</i> . <i>Biotechnology and Bioengineering</i> , <b>1997</b> , 56, 99-105	4.9	51
140	Removal and destruction of high concentrations of gaseous toluene in a two-phase partitioning bioreactor by <i>Alcaligenes xylosoxidans</i> . <i>Biotechnology Letters</i> , <b>2003</b> , 25, 1421-4	3	51
139	Overcoming substrate inhibition during biological treatment of monoaromatics: recent advances in bioprocess design. <i>Applied Microbiology and Biotechnology</i> , <b>2011</b> , 90, 1589-608	5.7	50
138	Structure-function relationships in spruce budworm antifreeze protein revealed by isoform diversity. <i>FEBS Journal</i> , <b>2000</b> , 267, 6082-8		50
137	Ethanol production by extractive fermentation: solvent identification and prototype development. <i>Canadian Journal of Chemical Engineering</i> , <b>1986</b> , 64, 598-606	2.3	50
136	Integrated Reaction and Product Recovery in Bioreactor Systems. <i>Biotechnology Progress</i> , <b>1988</b> , 4, 113-122		50
135	Treatment of synthetic tannery wastewater in a continuous two-phase partitioning bioreactor: Biodegradation of the organic fraction and chromium separation. <i>Journal of Cleaner Production</i> , <b>2017</b> , 152, 321-329	10.3	48
134	Enhanced degradation of a mixture of polycyclic aromatic hydrocarbons by a defined microbial consortium in a two-phase partitioning bioreactor. <i>Biodegradation</i> , <b>2007</b> , 18, 211-21	4.1	48
133	Oxygen transfer in a gas-liquid system containing solids of varying oxygen affinity. <i>Chemical Engineering Journal</i> , <b>2007</b> , 129, 67-74	14.7	48
132	Polymer development for enhanced delivery of phenol in a solid-liquid two-phase partitioning bioreactor. <i>Biotechnology Progress</i> , <b>2004</b> , 20, 1725-32	2.8	47
131	Benzene degradation in a two-phase partitioning bioreactor by <i>Alcaligenes xylosoxidans</i> Y234. <i>Process Biochemistry</i> , <b>2001</b> , 36, 765-772	4.8	46
130	The incidence of oscillatory behavior in the continuous fermentation of <i>zymomonas mobilis</i> . <i>Biotechnology Progress</i> , <b>1999</b> , 15, 667-80	2.8	46
129	Improved reactor performance and operability in the biotransformation of carveol to carveone using a solid-liquid two-phase partitioning bioreactor. <i>Biotechnology and Bioengineering</i> , <b>2008</b> , 101, 946-56	4.9	44
128	The economics of ethanol production by extractive fermentation. <i>Canadian Journal of Chemical Engineering</i> , <b>1991</b> , 69, 488-497	2.3	44

127	Sorbitol as a non-repressing carbon source for fed-batch fermentation of recombinant <i>Pichia pastoris</i> . <i>Biotechnology Letters</i> , <b>1999</b> , 21, 669-672	3	42
126	A Mathematical model for ethanol production by extractive fermentation in a continuous stirred tank fermentor. <i>Biotechnology and Bioengineering</i> , <b>1985</b> , 27, 1335-46	4.9	41
125	Biodegradation of 4-nitrophenol in a two-phase sequencing batch reactor: concept demonstration, kinetics and modelling. <i>Applied Microbiology and Biotechnology</i> , <b>2008</b> , 80, 1105-12	5.7	39
124	Transient performance of a two-phase partitioning bioscrubber treating a benzene-contaminated gas stream. <i>Environmental Science &amp; Technology</i> , <b>2005</b> , 39, 8971-7	10.3	39
123	Mixed-feed exponential feeding for fed-batch culture of recombinant methylotrophic yeast. <i>Biotechnology Letters</i> , <b>2000</b> , 22, 341-346	3	39
122	Review of Liquid Mixing in Packed Bed Biological Reactors. <i>Biotechnology Progress</i> , <b>1988</b> , 4, 134-148	2.8	39
121	Polymer Selection for Biphenyl Degradation in a Solid-Liquid Two-Phase Partitioning Bioreactor. <i>Biotechnology Progress</i> , <b>2007</b> , 23, 814-819	2.8	37
120	A two-phase partitioning airlift bioreactor for the treatment of BTEX contaminated gases. <i>Biotechnology and Bioengineering</i> , <b>2009</b> , 103, 1077-86	4.9	36
119	Response of a solid-liquid two-phase partitioning bioreactor to transient BTEX loadings. <i>Chemosphere</i> , <b>2008</b> , 73, 1453-60	8.4	36
118	A novel solid-liquid two-phase partitioning bioreactor for the enhanced bioproduction of 3-methylcatechol. <i>Biotechnology and Bioengineering</i> , <b>2007</b> , 98, 1008-16	4.9	35
117	Biodegradation of a phenolic mixture in a solid-liquid two-phase partitioning bioreactor. <i>Applied Microbiology and Biotechnology</i> , <b>2006</b> , 72, 607-15	5.7	35
116	Addressing biofilter limitations: a two-phase partitioning bioreactor process for the treatment of benzene and toluene contaminated gas streams. <i>Biodegradation</i> , <b>2003</b> , 14, 415-21	4.1	35
115	Biodegradation of biphenyl in a solid-liquid two-phase partitioning bioreactor. <i>Biochemical Engineering Journal</i> , <b>2007</b> , 36, 195-201	4.2	34
114	Treatment of substituted phenol mixtures in single phase and two-phase solid-liquid partitioning bioreactors. <i>Journal of Hazardous Materials</i> , <b>2011</b> , 191, 190-5	12.8	33
113	Direct estimation of the oxygen requirements of <i>Achromobacter xylosoxidans</i> for aerobic degradation of monoaromatic hydrocarbons (BTEX) in a bioscrubber. <i>Biotechnology Letters</i> , <b>2006</b> , 28, 1293-8	3	31
112	Two-phase partitioning bioreactors operating with polymers applied to the removal of substituted phenols. <i>Environmental Science &amp; Technology</i> , <b>2010</b> , 44, 7254-9	10.3	30
111	The use of <i>Enterobacter cloacae</i> ATCC 43560 in the development of a two-phase partitioning bioreactor for the destruction of hexahydro-1,3,5-trinitro-1,3,5-s-triazine (RDX). <i>Journal of Biotechnology</i> , <b>2003</b> , 100, 65-75	3.7	30
110	Biodegradation of PCBs in two-phase partitioning bioreactors following solid extraction from soil. <i>Biotechnology and Bioengineering</i> , <b>2008</b> , 99, 1273-80	4.9	28

109	Enhanced bioproduction of carvone in a two-liquid-phase partitioning bioreactor with a highly hydrophobic biocatalyst. <i>Biotechnology and Bioengineering</i> , <b>2008</b> , 101, 768-75	4.9	28
108	Delivery of benzene to <i>Alcaligenes xylosoxidans</i> by solid polymers in a two-phase partitioning bioreactor. <i>Biotechnology Letters</i> , <b>2003</b> , 25, 1203-7	3	28
107	Dynamic modeling and optimal fed-batch feeding strategies for a two-phase partitioning bioreactor. <i>Biotechnology and Bioengineering</i> , <b>2000</b> , 67, 224-33	4.9	28
106	Transformation of ferulic acid to vanillin using a fed-batch solid-liquid two-phase partitioning bioreactor. <i>Biotechnology Progress</i> , <b>2014</b> , 30, 207-14	2.8	27
105	Biodegradation of 4-nitrophenol in a two-phase system operating with polymers as the partitioning phase. <i>Environmental Science &amp; Technology</i> , <b>2009</b> , 43, 7105-10	10.3	27
104	Model for a solid-liquid stirred tank two-phase partitioning bioscrubber for the treatment of BTEX. <i>Journal of Hazardous Materials</i> , <b>2010</b> , 175, 872-82	12.8	27
103	Use of a two phase partitioning bioreactor for the biodegradation of phenol. <i>Biotechnology Letters</i> , <b>1996</b> , 10, 643		27
102	Examination of substrate and product inhibition kinetics on the production of ethanol by suspended and immobilized cell reactors. <i>Biotechnology and Bioengineering</i> , <b>1987</b> , 29, 639-45	4.9	27
101	Sequential anaerobic-aerobic decolourization of a real textile wastewater in a two-phase partitioning bioreactor. <i>Science of the Total Environment</i> , <b>2016</b> , 573, 585-593	10.2	26
100	Ex situ remediation of polluted soils by absorptive polymers, and a comparison of slurry and two-phase partitioning bioreactors for ultimate contaminant degradation. <i>Journal of Hazardous Materials</i> , <b>2013</b> , 262, 31-7	12.8	26
99	Application of solid-liquid TPPBs to the production of L-phenylacetylcarbinol from benzaldehyde using <i>Candida utilis</i> . <i>Biotechnology and Bioengineering</i> , <b>2010</b> , 107, 633-41	4.9	26
98	Bioremediation of phenol-contaminated water and soil using magnetic polymer beads. <i>Process Biochemistry</i> , <b>2010</b> , 45, 1582-1586	4.8	26
97	Biphenyl degradation kinetics by <i>Burkholderia xenovorans</i> LB400 in two-phase partitioning bioreactors. <i>Chemosphere</i> , <b>2006</b> , 63, 972-9	8.4	26
96	Ex situ bioremediation of phenol contaminated soil using polymer beads. <i>Biotechnology Letters</i> , <b>2006</b> , 28, 2027-31	3	26
95	Simultaneous biodegradation of benzene, toluene, and p-xylene in a two-phase partitioning bioreactor: concept demonstration and practical application. <i>Biotechnology Progress</i> , <b>1999</b> , 15, 74-80	2.8	26
94	Characterization of absorbent polymers for the removal of volatile hydrophobic pollutants from air. <i>Journal of Chemical Technology and Biotechnology</i> , <b>2011</b> , 86, 47-53	3.5	25
93	Scale-up performance of a partitioning bioreactor for the degradation of polyaromatic hydrocarbons by <i>Sphingomonas aromaticivorans</i> . <i>Biotechnology Letters</i> , <b>2002</b> , 24, 591-594	3	25
92	Effect of bioconversion conditions on vanillin production by <i>Amycolatopsis</i> sp. ATCC 39116 through an analysis of competing by-product formation. <i>Bioprocess and Biosystems Engineering</i> , <b>2014</b> , 37, 891-9	3.7	24

91	Ultrasonically enhanced delivery and degradation of PAHs in a polymer-liquid partitioning system by a microbial consortium. <i>Biotechnology and Bioengineering</i> , <b>2009</b> , 104, 91-101	4.9	24
90	Solid state fermentation and fractionation of oat straw by Basidiomycetes. <i>European Journal of Applied Microbiology and Biotechnology</i> , <b>1983</b> , 18, 120-123		24
89	Filament formation and ethanol production by <i>Zymomonas mobilis</i> in adsorbed cell bioreactors. <i>Biotechnology and Bioengineering</i> , <b>1985</b> , 27, 626-31	4.9	24
88	On the applicability of a hybrid bioreactor operated with polymeric tubing for the biological treatment of saline wastewater. <i>Science of the Total Environment</i> , <b>2017</b> , 599-600, 1056-1063	10.2	23
87	Substrate mass transport in two-phase partitioning bioreactors employing liquid and solid non-aqueous phases. <i>Bioprocess and Biosystems Engineering</i> , <b>2012</b> , 35, 1367-74	3.7	23
86	Enhancement of PCB degradation by <i>Burkholderia xenovorans</i> LB400 in biphasic systems by manipulating culture conditions. <i>Biotechnology and Bioengineering</i> , <b>2008</b> , 99, 521-8	4.9	23
85	A first principles approach to identifying polymers for use in two-phase partitioning bioreactors. <i>Journal of Chemical Technology and Biotechnology</i> , <b>2012</b> , 87, 1059-1065	3.5	22
84	Polymer characterization and optimization of conditions for the enhanced bioproduction of benzaldehyde by <i>Pichia pastoris</i> in a two-phase partitioning bioreactor. <i>Biotechnology and Bioengineering</i> , <b>2013</b> , 110, 1098-105	4.9	22
83	On the use, and reuse, of polymers for the treatment of hydrocarbon contaminated water via a solid-liquid partitioning bioreactor. <i>Biotechnology Progress</i> , <b>2008</b> , 24, 839-44	2.8	22
82	A restructured framework for modeling oxygen transfer in two-phase partitioning bioreactors. <i>Biotechnology and Bioengineering</i> , <b>2005</b> , 91, 773-7	4.9	22
81	Biodegradation of VOC mixtures of different hydrophobicities in two-phase partitioning bioreactors containing tailored polymer mixtures. <i>Journal of Chemical Technology and Biotechnology</i> , <b>2011</b> , 86, 138-144	3.5	21
80	Dynamic simulation of benzene vapor treatment by a two-phase partitioning bioscrubber: Part I: Model development, parameter estimation, and parametric sensitivity. <i>Biochemical Engineering Journal</i> , <b>2007</b> , 36, 239-249	4.2	21
79	Solid-liquid two-phase partitioning bioreactors for the treatment of gas-phase volatile organic carbons (VOCs) by a microbial consortium. <i>Biotechnology Letters</i> , <b>2008</b> , 30, 1583-7	3	20
78	Towards a continuous two-phase partitioning bioreactor for xenobiotic removal. <i>Journal of Hazardous Materials</i> , <b>2016</b> , 317, 403-415	12.8	19
77	2,4-Dichlorophenol removal in a solid-liquid two phase partitioning bioreactor (TPPB): kinetics of absorption, desorption and biodegradation. <i>New Biotechnology</i> , <b>2012</b> , 30, 44-50	6.4	19
76	Simultaneous biodegradation of volatile and toxic contaminant mixtures by solid-liquid two-phase partitioning bioreactors. <i>Journal of Hazardous Materials</i> , <b>2013</b> , 254-255, 206-213	12.8	18
75	Bioproduction of benzaldehyde in a solid-liquid two-phase partitioning bioreactor using <i>Pichia pastoris</i> . <i>Biotechnology Letters</i> , <b>2010</b> , 32, 1649-54	3	18
74	Solvent selection for enhanced bioproduction of 3-methylcatechol in a two-phase partitioning bioreactor. <i>Biotechnology and Bioengineering</i> , <b>2007</b> , 97, 536-43	4.9	18

73	Dynamic simulation of benzene vapor treatment by a two-phase partitioning bioscrubber: Part II: Model calibration, validation, and predictions. <i>Biochemical Engineering Journal</i> , <b>2007</b> , 36, 250-261	4.2	18
72	Enhancement and regulation of extracellular protein production by <i>Bacillus brevis</i> 47 through manipulation of cell culture conditions. <i>Biotechnology and Bioengineering</i> , <b>1992</b> , 40, 46-52	4.9	18
71	Heavy metals species affect fungal-bacterial synergism during the bioremediation of fluoranthene. <i>Applied Microbiology and Biotechnology</i> , <b>2016</b> , 100, 7741-50	5.7	17
70	A framework to predict and experimentally evaluate polymer-solute thermodynamic affinity for two-phase partitioning bioreactor (TPPB) applications. <i>Journal of Chemical Technology and Biotechnology</i> , <b>2014</b> , 89, 948-956	3.5	17
69	Challenges in the expression of disulfide bonded, threonine-rich antifreeze proteins in bacteria and yeast. <i>Protein Expression and Purification</i> , <b>2006</b> , 47, 152-61	2	17
68	Quantifying maintenance requirements from the steady-state operation of a two-phase partitioning bioscrubber. <i>Biotechnology and Bioengineering</i> , <b>2005</b> , 90, 248-58	4.9	17
67	Treatment of high-concentration gaseous benzene streams using a novel bioreactor system. <i>Biotechnology Letters</i> , <b>2000</b> , 22, 1747-1751	3	17
66	Protective effects of polymer additives on animal cells exposed to rapidly falling liquid films. <i>Biotechnology Progress</i> , <b>1995</b> , 11, 127-32	2.8	17
65	Liquid-liquid and vapour-liquid behaviour of oleyl alcohol applied to extractive fermentation processing. <i>Canadian Journal of Chemical Engineering</i> , <b>1993</b> , 71, 431-436	2.3	17
64	The use of used automobile tyres in a partitioning bioreactor for the biodegradation of xenobiotic mixtures. <i>Environmental Technology (United Kingdom)</i> , <b>2014</b> , 35, 75-81	2.6	16
63	A comparison of three first principles methods for predicting solute-polymer affinity, and the simultaneous biodegradation of phenol and butyl acetate in a two-phase partitioning bioreactor. <i>Journal of Chemical Technology and Biotechnology</i> , <b>2014</b> , 89, 88-96	3.5	16
62	Polymer-solute interactions in solid-liquid two-phase partitioning bioreactors. <i>Journal of Chemical Technology and Biotechnology</i> , <b>2010</b> , 85, 302-306	3.5	16
61	Modelling of a continuous two-phase partitioning bioreactor for the degradation of xenobiotics. <i>Process Biochemistry</i> , <b>2000</b> , 35, 1027-1035	4.8	16
60	Integrated fermentation and recovery processes. <i>Current Opinion in Biotechnology</i> , <b>1994</b> , 5, 192-5	11.4	16
59	A novel continuous two-phase partitioning bioreactor operated with polymeric tubing: Performance validation for enhanced biological removal of toxic substrates. <i>Journal of Environmental Management</i> , <b>2017</b> , 187, 265-272	7.9	15
58	Imidazolium-based polyionic liquid absorbents for bioproduct recovery. <i>Green Chemistry</i> , <b>2017</b> , 19, 5203-5213	5.2	15
57	Rapid and effective decontamination of chlorophenol-contaminated soil by sorption into commercial polymers: concept demonstration and process modeling. <i>Journal of Environmental Management</i> , <b>2015</b> , 150, 81-91	7.9	15
56	Demonstration of in situ product recovery of butyric acid via CO <sub>2</sub> -facilitated pH swings and medium development in two-phase partitioning bioreactors. <i>Biotechnology and Bioengineering</i> , <b>2014</b> , 111, 537-44	4.9	15

55	Benzene vapor treatment using a two-phase partitioning bioscrubber: an improved steady-state protocol to enhance long-term operation. <i>Bioprocess and Biosystems Engineering</i> , <b>2006</b> , 29, 229-40	3.7	14
54	Importance of enzyme and solvent physical properties for the biocompatibility relationship of alpha-amino acid ester hydrolase. <i>Enzyme and Microbial Technology</i> , <b>1993</b> , 15, 114-9	3.8	14
53	Liquid residence time distributions in immobilized cell bioreactors. <i>Biotechnology and Bioengineering</i> , <b>1989</b> , 33, 604-12	4.9	14
52	Feasibility of operating a solid-liquid bioreactor with used automobile tires as the sequestering phase for the biodegradation of inhibitory compounds. <i>Journal of Environmental Management</i> , <b>2013</b> , 125, 7-11	7.9	13
51	Enhancement of biogenic sulfide production in a packed-bed bioreactor via critical inoculum design and carrier material selection. <i>Biotechnology and Bioengineering</i> , <b>2008</b> , 100, 855-63	4.9	13
50	The use of CO <sub>2</sub> for reversible pH shifting, and the removal of succinic acid in a polymer-based two-phase partitioning bioreactor. <i>Journal of Chemical Technology and Biotechnology</i> , <b>2012</b> , 87, 42-50	3.5	12
49	A strategic approach for the design and operation of two-phase partitioning bioscrubbers for the treatment of volatile organic compounds. <i>Biotechnology Progress</i> , <b>2010</b> , 26, 1777-86	2.8	12
48	Inhibition effects of ethanol concentration history and ethanol concentration change rate on <i>Zymomonas mobilis</i> . <i>Biotechnology Letters</i> , <b>1995</b> , 17, 321-326	3	12
47	Bioproduction of cis-(1S,2R)-indandiol, a chiral pharmaceutical intermediate, using a solid-liquid two-phase partitioning bioreactor for enhanced removal of inhibitors. <i>Journal of Chemical Technology and Biotechnology</i> , <b>2011</b> , 86, 1379-1385	3.5	11
46	Oxygen mass transfer and hydrodynamics in a multi-phase airlift bioscrubber system. <i>Chemical Engineering Science</i> , <b>2009</b> , 64, 4171-4177	4.4	11
45	Strategies for improved bioproduction of benzaldehyde by <i>Pichia pastoris</i> and the use of hytrel as tubing material for integrated product removal by in situ pervaporation. <i>Biochemical Engineering Journal</i> , <b>2014</b> , 82, 97-104	4.2	10
44	Selecting polymers for two-phase partitioning bioreactors (TPPBs): Consideration of thermodynamic affinity, crystallinity, and glass transition temperature. <i>Biotechnology Progress</i> , <b>2015</b> , 31, 1500-7	2.8	10
43	Analysis of the performance and criteria for rational design of a sequencing batch reactor for xenobiotic removal. <i>Chemical Engineering Journal</i> , <b>2014</b> , 235, 167-175	14.7	9
42	A two-phase partitioning bioreactor system for treating benzene-contaminated soil. <i>Biotechnology Letters</i> , <b>2001</b> , 23, 467-473	3	9
41	Integrated product formation and recovery. <i>Current Opinion in Biotechnology</i> , <b>1991</b> , 2, 408-12	11.4	9
40	Process development of a prototype extractive fermentation system. <i>Annals of the New York Academy of Sciences</i> , <b>1987</b> , 506, 478-91	6.5	9
39	Thermodynamic affinity-based considerations for the rational selection of biphasic systems for microbial flavor and fragrance production. <i>Journal of Chemical Technology and Biotechnology</i> , <b>2018</b> , 93, 656-666	3.5	9
38	Manipulating the composition of absorbent polymers affects product and by-product concentration profiles in the biphasic biotransformation of indene to cis-1,2-indandiol. <i>Biochemical Engineering Journal</i> , <b>2013</b> , 77, 7-14	4.2	8



37	Mass transfer considerations in solid-liquid two-phase partitioning bioreactors: a polymer selection guide. <i>Journal of Chemical Technology and Biotechnology</i> , <b>2015</b> , 90, 1391-1399	3.5	8
36	Biocompatibility of low molecular weight polymers for two-phase partitioning bioreactors. <i>Biotechnology and Bioengineering</i> , <b>2015</b> , 112, 2450-8	4.9	8
35	Solid-liquid two-phase partitioning bioreactors (TPPBs) operated with waste polymers. Case study: 2,4-dichlorophenol biodegradation with used automobile tires as the partitioning phase. <i>Biotechnology Letters</i> , <b>2012</b> , 34, 2037-42	3	8
34	The biological treatment of synthetic fracking fluid in an extractive membrane bioreactor: Selective transport and biodegradation of hydrophobic and hydrophilic contaminants. <i>Journal of Hazardous Materials</i> , <b>2019</b> , 371, 734-742	12.8	8
33	Effect of polymer molecular weight distribution on solute sequestration in two-phase partitioning bioreactors. <i>Chemical Engineering Journal</i> , <b>2016</b> , 299, 56-62	14.7	7
32	The use of high pressure CO <sub>2</sub> -facilitated pH swings to enhance in situ product recovery of butyric acid in a two-phase partitioning bioreactor. <i>Biotechnology and Bioengineering</i> , <b>2014</b> , 111, 2183-91	4.9	7
31	Passive/aggressive detoxification of continuous flow biotreatment systems using absorptive polymers: partitioning bioreactors treating transient phenol loadings. <i>Biotechnology Letters</i> , <b>2012</b> , 34, 1817-24	3	7
30	Bioavailability of PCBs in biphasic bioreactors. <i>Biochemical Engineering Journal</i> , <b>2008</b> , 38, 219-225	4.2	7
29	A new method for the determination of microbial activity and critical logP in the presence of organic solvents. <i>Biotechnology Letters</i> , <b>1999</b> , 13, 549-553		7
28	Dynamic modelling and performance optimization of an extractive fermentation. <i>Canadian Journal of Chemical Engineering</i> , <b>1996</b> , 74, 385-393	2.3	7
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