Harvey W Blanch

List of Publications by Year in descending order

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23567 27406 11,715 140 58 106 citations h-index g-index papers 142 142 142 10529 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Engineering Cel7A carbohydrate binding module and linker for reduced lignin inhibition. Biotechnology and Bioengineering, 2016, 113, 1369-1374.	3.3	42
2	Coâ€production of acetone and ethanol with molar ratio control enables production of improved gasoline or jet fuel blends. Biotechnology and Bioengineering, 2016, 113, 2079-2087.	3.3	11
3	Engineering ionic liquid-tolerant cellulases for biofuels production. Protein Engineering, Design and Selection, 2016, 29, 117-122.	2.1	29
4	Evaluating endoglucanase Cel7Bâ€lignin interaction mechanisms and kinetics using quartz crystal microgravimetry. Biotechnology and Bioengineering, 2015, 112, 2256-2266.	3.3	23
5	Renewable fuels from biomass: Technical hurdles and economic assessment of biological routes. AICHE Journal, 2015, 61, 2689-2701.	3.6	63
6	Production of an acetone-butanol-ethanol mixture from Clostridium acetobutylicum and its conversion to high-value biofuels. Nature Protocols, 2015, 10, 528-537.	12.0	77
7	Mutagenesis of Trichoderma reesei endoglucanase I: impact of expression host on activity and stability at elevated temperatures. BMC Biotechnology, 2015, 15, 11.	3.3	56
8	Structural Insights into the Affinity of Cel7A Carbohydrate-binding Module for Lignin. Journal of Biological Chemistry, 2015, 290, 22818-22826.	3.4	62
9	Development of a Native Escherichia coli Induction System for Ionic Liquid Tolerance. PLoS ONE, 2014, 9, e101115.	2.5	31
10	Chemocatalytic Upgrading of Tailored Fermentation Products Toward Biodiesel. ChemSusChem, 2014, 7, 2445-2448.	6.8	54
11	Engineering Clostridium acetobutylicum for production of kerosene and diesel blendstock precursors. Metabolic Engineering, 2014, 25, 124-130.	7.0	31
12	Understanding cost drivers and economic potential of two variants of ionic liquid pretreatment for cellulosic biofuel production. Biotechnology for Biofuels, 2014, 7, 86.	6.2	120
13	Lignocellulosic ethanol production without enzymes – Technoeconomic analysis of ionic liquid pretreatment followed by acidolysis. Bioresource Technology, 2014, 158, 294-299.	9.6	33
14	Survival of the fittest: An economic perspective on the production of novel biofuels. AICHE Journal, 2013, 59, 4454-4460.	3.6	13
15	Integration of chemical catalysis with extractive fermentation to produce fuels. Nature, 2012, 491, 235-239.	27.8	327
16	Initial- and Processive-Cut Products Reveal Cellobiohydrolase Rate Limitations and the Role of Companion Enzymes. Biochemistry, 2012, 51, 442-452.	2.5	93
17	A model for optimizing the enzymatic hydrolysis of ionic liquid-pretreated lignocellulose. Bioresource Technology, 2012, 126, 290-297.	9.6	21
18	Bioprocessing for biofuels. Current Opinion in Biotechnology, 2012, 23, 390-395.	6.6	71

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19	Escherichia coli for biofuel production: bridging the gap from promise to practice. Trends in Biotechnology, 2012, 30, 538-545.	9.3	86
20	Delignification of Miscanthus by Extraction. Separation Science and Technology, 2012, 47, 370-376.	2.5	9
21	An evaluation of cellulose saccharification and fermentation with an engineered <i>Saccharomyces cerevisiae</i> capable of cellobiose and xylose utilization. Biotechnology Journal, 2012, 7, 361-373.	3.5	10
22	Co-production of ethanol, biogas, protein fodder and natural fertilizer in organic farming – Evaluation of a concept for a farm-scale biorefinery. Bioresource Technology, 2012, 104, 440-446.	9.6	44
23	Extraction of lignins from aqueous–ionic liquid mixtures by organic solvents. Biotechnology and Bioengineering, 2012, 109, 346-352.	3.3	33
24	The challenge of enzyme cost in the production of lignocellulosic biofuels. Biotechnology and Bioengineering, 2012, 109, 1083-1087.	3.3	792
25	Green fluorescent protein as a screen for enzymatic activity in ionic liquid–aqueous systems for in situhydrolysis of lignocellulose. Green Chemistry, 2011, 13, 3107-3110.	9.0	28
26	Redesigning Escherichia coli Metabolism for Anaerobic Production of Isobutanol. Applied and Environmental Microbiology, 2011, 77, 4894-4904.	3.1	96
27	Identification and characterization of a multidomain hyperthermophilic cellulase from an archaeal enrichment. Nature Communications, 2011, 2, 375.	12.8	163
28	Multiple Approaches To Enhance the Cultivability of Bacteria Associated with the Marine Sponge <i>Haliclona</i> (<i>gellius</i>) sp. Applied and Environmental Microbiology, 2011, 77, 2130-2140.	3.1	105
29	Biomass deconstruction to sugars. Biotechnology Journal, 2011, 6, 1086-1102.	3.5	140
30	Titelbild: High-Throughput Inâ€Vitro Glycoside Hydrolase (HIGH) Screening for Enzyme Discovery (Angew. Chem. 47/2011). Angewandte Chemie, 2011, 123, 11205-11205.	2.0	0
31	Cover Picture: High‶hroughput Inâ€Vitro Glycoside Hydrolase (HIGH) Screening for Enzyme Discovery (Angew. Chem. Int. Ed. 47/2011). Angewandte Chemie - International Edition, 2011, 50, 11013-11013.	13.8	0
32	Ionic liquid pretreatment of cellulosic biomass: Enzymatic hydrolysis and ionic liquid recycle. Biotechnology and Bioengineering, 2011, 108, 511-520.	3.3	282
33	A mechanistic model for rational design of optimal cellulase mixtures. Biotechnology and Bioengineering, 2011, 108, 2561-2570.	3.3	37
34	Technoâ€economic analysis of a lignocellulosic ethanol biorefinery with ionic liquid preâ€treatment. Biofuels, Bioproducts and Biorefining, 2011, 5, 562-569.	3.7	303
35	Role of Alcohols in Growth, Lipid Composition, and Membrane Fluidity of Yeasts, Bacteria, and Archaea. Applied and Environmental Microbiology, 2011, 77, 6400-6408.	3.1	174
36	Spatial distribution of bacteria associated with the marine sponge Tethya californiana. Marine Biology, 2010, 157, 627-638.	1.5	30

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37	Recovery of Sugars from Ionic Liquid Biomass Liquor by Solvent Extraction. Bioenergy Research, 2010, 3, 123-133.	3.9	112
38	Elucidating mechanisms of solvent toxicity in ethanologenic <i>Escherichia coli</i> . Biotechnology and Bioengineering, 2010, 106, 721-730.	3.3	16
39	A mechanistic model of the enzymatic hydrolysis of cellulose. Biotechnology and Bioengineering, 2010, 107, 37-51.	3.3	129
40	Technoeconomic analysis of biofuels: A wiki-based platform for lignocellulosic biorefineries. Biomass and Bioenergy, 2010, 34, 1914-1921.	5.7	153
41	Ionic liquid tolerant hyperthermophilic cellulases for biomass pretreatment and hydrolysis. Green Chemistry, 2010, 12, 338.	9.0	211
42	Biological Characterisation of Haliclona (?gellius) sp.: Sponge and Associated Microorganisms. Microbial Ecology, 2009, 58, 903-920.	2.8	52
43	Metabolic and Morphological Differences between Rapidly Proliferating Cancerous and Normal Breast Epithelial Cells. Biotechnology Progress, 2008, 24, 334-341.	2.6	52
44	Next-generation biomass feedstocks for biofuel production. Genome Biology, 2008, 9, 242.	9.6	144
45	Addressing the Need for Alternative Transportation Fuels: The Joint BioEnergy Institute. ACS Chemical Biology, 2008, 3, 17-20.	3.4	44
46	Kinetics of Adsorption and Proteolytic Cleavage of a Multilayer Ovalbumin Film by Subtilisin Carlsberg. Langmuir, 2008, 24, 7388-7393.	3.5	15
47	Optimal design of metabolic flux analysis experiments for anchorageâ€dependent mammalian cells using a cellular automaton model. Biotechnology and Bioengineering, 2007, 98, 221-229.	3.3	1
48	Estradiol stimulates the biosynthetic pathways of breast cancer cells: Detection by metabolic flux analysis. Metabolic Engineering, 2006, 8, 639-652.	7.0	88
49	Interactions of lysozyme in guanidinium chloride solutions from static and dynamic light-scattering measurements. Biotechnology and Bioengineering, 2005, 90, 482-490.	3.3	78
50	Temperature-Dependent Solvent Disruption of Guanidinium-1,5-Naphthalenedisulfonate Networks Yields a One-Dimensional Pore Structure. Crystal Growth and Design, 2005, 5, 1135-1144.	3.0	17
51	Chromatographic measurement of interactions between unlike proteins. Fluid Phase Equilibria, 2004, 219, 139-148.	2.5	23
52	Effect of alcohols on aqueous lysozyme–lysozyme interactions from static light-scattering measurements. Biophysical Chemistry, 2004, 107, 289-298.	2.8	76
53	Measurement of Lysozymeâ^'Lysozyme Interactions with Quantitative Affinity Chromatography. Journal of Physical Chemistry B, 2004, 108, 7437-7444.	2.6	27
54	The Hydrodynamics of DNA Electrophoretic Stretch and Relaxation in a Polymer Solution. Biophysical Journal, 2004, 87, 468-475.	0.5	16

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55	Amyloid Fibril Formation by Peptide LYS (11-36) in Aqueous Trifluoroethanol. Biomacromolecules, 2004, 5, 1818-1823.	5.4	42
56	Dilatational Rheology of BSA Conformers at the Air/Water Interface. Langmuir, 2003, 19, 2349-2356.	3.5	199
57	Surface Forces and Drainage Kinetics of Protein-Stabilized Aqueous Films. Langmuir, 2003, 19, 7503-7513.	3.5	53
58	Direct Imaging of Lysozyme Adsorption onto Mica by Atomic Force Microscopy. Langmuir, 2002, 18, 5841-5850.	3.5	158
59	Molecular thermodynamics for fluid-phase equilibria in aqueous two-protein systems. AICHE Journal, 2002, 48, 1292-1300.	3.6	15
60	A kinetic model for enzyme interfacial activity and stability: pa-hydroxynitrile lyase at the diisopropyl ether/water interface. Biotechnology and Bioengineering, 2002, 78, 595-605.	3.3	23
61	Identification of potential fermentation inhibitors in conversion of hybrid poplar hydrolyzate to ethanol. Biomass and Bioenergy, 2002, 22, 125-138.	5.7	177
62	Role of organic solvents on Pa-hydroxynitrile lyase interfacial activity and stability. Biotechnology and Bioengineering, 2001, 74, 18-28.	3.3	30
63	Using isotopomer path tracing to quantify metabolic fluxes in pathway models containing reversible reactions. Biotechnology and Bioengineering, 2001, 74, 196-211.	3.3	34
64	Physiology and xanthophyll cycle activity of Nannochloropsis gaditana. Biotechnology and Bioengineering, 2001, 75, 1-12.	3.3	41
65	Capillary electrophoresis of DNA in uncrosslinked polymer solutions: Evidence for a new mechanism of DNA separation., 2000, 52, 259-270.		22
66	Biodesulfurization of dibenzothiophene in Escherichia coli is enhanced by expression of a Vibrio harveyi oxidoreductase gene. Biotechnology and Bioengineering, 2000, 67, 72-79.	3.3	64
67	Biodesulfurization of dibenzothiophene in Escherichia coli is enhanced by expression of a Vibrio harveyi oxidoreductase gene. Biotechnology and Bioengineering, 2000, 67, 72.	3.3	1
68	Analysis of Metabolic Fluxes in Mammalian Cells. , 2000, , 556-594.		3
69	Hydroxynitrile lyase at the diisopropyl ether/water interface: Evidence for interfacial enzyme activity. Biotechnology and Bioengineering, 1999, 65, 425-436.	3.3	33
70	Lysozyme Net Charge and Ion Binding in Concentrated Aqueous Electrolyte Solutions. Journal of Physical Chemistry B, 1999, 103, 1368-1374.	2.6	241
71	A theory for the electrophoretic separation of DNA in polymer solutions. Electrophoresis, 1998, 19, 3128-3136.	2.4	27
72	High-frequency alternating-crossed-field gel electrophoresis with neutral or slightly charged interpenetrating networks to improve DNA separation. Electrophoresis, 1998, 19, 3137-3148.	2.4	4

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73	Effect of extracellular glutamine concentration on primary and secondary metabolism of a murine hybridoma: An in vivo13C nuclear magnetic resonance study. Biotechnology and Bioengineering, 1998, 57, 172-186.	3.3	28
74	Total Internal Reflection Fluorescence Spectrometer To Study Dynamic Adsorption Phenomena at Liquid/Liquid Interfaces. Industrial & Engineering Chemistry Research, 1998, 37, 3159-3168.	3.7	24
75	Capillary electrophoresis of DNA restriction fragments: Effect of polymer properties. Electrophoresis, 1997, 18, 1994-1997.	2.4	17
76	Polymeric separation media for capillary electrophoresis of nucleic acids. Electrophoresis, 1997, 18, 2243-2254.	2.4	69
77	Capillary Electrophoretic Separation of DNA Restriction Fragments in Mixtures of Low- and High-Molecular-Weight Hydroxyethylcellulose. Industrial & Engineering Chemistry Research, 1996, 35, 2900-2908.	3.7	30
78	Partitioning of hexavalent chromium in temperature-sensitive, polyelectrolyte hydrogels. Polymer Gels and Networks, 1996, 4, 269-300.	0.6	6
79	Partitioning of proteins and small biomolecules in temperature- and pH-sensitive hydrogels. Polymer, 1996, 37, 2151-2164.	3.8	64
80	The effects of polymer properties on DNA separations by capillary electrophoresis in uncross-linked polymer solutions. Electrophoresis, 1996, 17, 744-757.	2.4	125
81	Phase equilibria for aqueous protein/polyelectrolyte gel systems. AICHE Journal, 1996, 42, 2335-2353.	3.6	15
82	Characterization of size-exclusion effects in highly swollen hydrogels: Correlation and prediction. Journal of Applied Polymer Science, 1996, 59, 1337-1346.	2.6	23
83	Sorption of lysozyme by HEMA copolymer hydrogels. Journal of Applied Polymer Science, 1996, 60, 225-234.	2.6	12
84	Salt-induced protein precipitation: Phase equilibria from an equation of state. Fluid Phase Equilibria, 1996, 116, 140-147.	2.5	54
85	Synthesis and characterization of polyamides containing unnatural amino acids. Biopolymers, 1995, 35, 503-512.	2.4	19
86	The use of coated and uncoated capillaries for the electrophoretic separation of DNA in dilute polymer solutions. Electrophoresis, 1995, 16, 64-74.	2.4	80
87	Pore-size distributions of cationic 2-hydroxyethyl methacrylate (HEMA) hydrogels. Polymer Gels and Networks, 1995, 3, 29-45.	0.6	12
88	Popcorn-polymer formation during hydrogel synthesis. Polymer Gels and Networks, 1995, 3, 47-58.	0.6	1
89	Swelling properties of acrylamide-based ampholytic hydrogels: comparison of experiment with theory. Polymer, 1995, 36, 1061-1069.	3.8	140
90	DNA Separations by Slab Gel, and Capillary Electrophoresis: Theory and Practice. Separation and Purification Reviews, 1995, 24, 1-118.	0.8	50

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91	Enzymatic Oligomerization of the Tetrapeptide Ester Allylglycine-Phenylalanine-Phenylalanine-Allylglycine Ethyl Ester. Biocatalysis and Biotransformation, 1995, 13, 131-139.	2.0	2
92	Pore-size distributions of cationic polyacrylamide hydrogels of different compositions maintained at the same swelling capacity. Journal of Macromolecular Science - Physics, 1994, 33, 267-286.	1.0	6
93	A transient entanglement coupling mechanism for DNA separation by capillary electrophoresis in ultradilute polymer solutions. Electrophoresis, 1994, 15, 597-615.	2.4	212
94	Equilibrium swelling properties of weakly lonizable 2-hydroxyethyl methacrylate (HEMA)-based hydrogels. Journal of Applied Polymer Science, 1994, 52, 783-788.	2.6	29
95	Quantitative in vivo nuclear magnetic resonance studies of hybridoma metabolism. Biotechnology and Bioengineering, 1994, 43, 1059-1074.	3.3	86
96	Examination of primary metabolic pathways in a murine hybridoma with carbon-13 nuclear magnetic resonance spectroscopy. Biotechnology and Bioengineering, 1994, 44, 563-585.	3.3	98
97	Capillary electrophoresis of DNA in uncross-linked polymer solutions. Journal of Chromatography A, 1993, 652, 3-16.	3.7	220
98	Monte Carlo simulations of hydrophobic weak polyelectrolytes: Titration properties and pHâ€induced structural transitions for polymers containing weak electrolytes. Journal of Chemical Physics, 1992, 97, 8767-8774.	3.0	44
99	Swelling equilibria for acrylamide-based polyampholyte hydrogels. Macromolecules, 1992, 25, 1955-1958.	4.8	130
100	Functional differentiation and primary metabolism of mouse mammary epithelial cells in extended-batch and hollow-fiber culture. Biotechnology and Bioengineering, 1992, 40, 672-680.	3.3	0
101	Some characteristics of protein precipitation by salts. Biotechnology and Bioengineering, 1992, 40, 1155-1164.	3.3	135
102	Buffer effects on aqueous swelling kinetics of polyelectrolyte gels. Journal of Applied Polymer Science, 1992, 45, 1411-1423.	2.6	36
103	Swelling equilibria for weakly ionizable, temperature-sensitive hydrogels. Macromolecules, 1991, 24, 549-551.	4.8	193
104	Enzyme-catalyzed interesterification of triglycerides in supercritical carbon dioxide. Industrial & Engineering Chemistry Research, 1991, 30, 939-946.	3.7	84
105	Regulation of Animal Cell Metabolism in Bioreactors. , 1991, 17, 119-161.		20
106	Kinetics of lipase-catalysed interesterification of triglycerides in cyclohexane. Enzyme and Microbial Technology, 1991, 13, 98-103.	3.2	86
107	Inhibition of dextransucrase by α-D-Glucose derivatives. Applied Biochemistry and Biotechnology, 1991, 31, 237-246.	2.9	8
108	Papain kinetics in the presence of a water-miscible organic solvent. Biotechnology and Bioengineering, 1991, 37, 967-972.	3.3	35

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109	A Nuclear Magnetic Resonance Technique for Determining Hybridoma Cell Concentration in Hollow Fiber Bioreactors. Nature Biotechnology, 1990, 8, 1282-1285.	17.5	36
110	Swelling equilibria for positively ionized polyacrylamide hydrogels. Macromolecules, 1990, 23, 1096-1104.	4.8	227
111	Transition electrolyte concentrations for bubble coalescence. AICHE Journal, 1990, 36, 1425-1429.	3.6	124
112	Bubble coalescence and break-up in air-sparged bubble columns. AICHE Journal, 1990, 36, 1485-1499.	3.6	1,005
113	Swelling equilibria for ionized temperatureâ€sensitive gels in water and in aqueous salt solutions. Journal of Chemical Physics, 1990, 92, 2061-2066.	3.0	98
114	Kinetics of Encapsulated Yeast Alcohol Dehydrogenase Dispersed in an Organic Solvent. Biocatalysis, 1990, 4, 113-139.	0.9	3
115	Nuclear Magnetic Resonance Methods for Observing the Intracellular Environment of Mammalian Cells. Annals of the New York Academy of Sciences, 1990, 589, 458-475.	3.8	28
116	Monte Carlo simulations of hydrophobic polyelectrolytes. Evidence for a structural transition in response to increasing chain ionization. Journal of Chemical Physics, 1990, 93, 2715-2723.	3.0	32
117	Mass Transfer and Cholesterol Oxidase Kinetics in a Liquid-Liquid Two-Phase System. Biocatalysis, 1989, 2, 97-120.	0.9	9
118	A Novel Optical Method for the Measurement of Biomolecular Diffusion in Polymer Matrices. Biotechnology Progress, 1989, 5, 126-131.	2.6	2
119	Transient responses of hybridoma cells to nutrient additions in continuous culture: I. Glucose pulse and step changes. Biotechnology and Bioengineering, 1989, 33, 477-486.	3.3	116
120	The transient responses of hybridoma cells to nutrient additions in continuous culture: II. Glutamine pulse and step changes. Biotechnology and Bioengineering, 1989, 33, 487-499.	3.3	97
121	A bio-mimetic cadmium adsorbent: Design, synthesis, and characterization. Biotechnology and Bioengineering, 1989, 34, 180-188.	3.3	30
122	Molecular thermodynamics of aqueous two-phase systems for bioseparations. AICHE Journal, 1988, 34, 1585-1594.	3.6	205
123	Design and mathematical description of differential contactors used in extractive fermentations. Biotechnology and Bioengineering, 1988, 32, 192-204.	3.3	9
124	Effects of dissolved oxygen concentration on hybridoma growth and metabolism in continuous culture. Journal of Cellular Physiology, 1987, 132, 524-530.	4.1	184
125	BUBBLE COALESCENCE IN STAGNANT LIQUIDS. Chemical Engineering Communications, 1986, 43, 237-261.	2.6	168
126	Regulation of Sugar Metabolism in <i>Saccharomyces</i> -Type Yeast: Experimental and Conceptual Considerations. Critical Reviews in Biotechnology, 1986, 4, 299-325.	9.0	33

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127	Bubble coalescence in air-sparged bioreactors. Biotechnology and Bioengineering, 1986, 28, 578-584.	3.3	36
128	Polymer biocompatibility?effect on hybridoma growth and metabolism. Biotechnology Letters, 1986, 8, 463-468.	2.2	9
129	Continuous production of lactic acid in a cell recycle reactor. Applied Biochemistry and Biotechnology, 1985, 11, 317-332.	2.9	72
130	Continuous production of lactic acid from glucose and lactose in a cell-recycle reactor. Applied Biochemistry and Biotechnology, 1985, 11, 457-463.	2.9	45
131	Kinetics of the enzymatic hydrolysis of cellulose. Biotechnology and Bioengineering, 1984, 26, 221-230.	3.3	131
132	Enhanced cellulase production in fed-batch culture of Trichoderma reesei C30. Enzyme and Microbial Technology, 1984, 6, 73-77.	3.2	99
133	Lactase production in continuous culture by Trichoderma reesei Rut-C30. Biotechnology Letters, 1984, 6, 593-596.	2.2	14
134	Immobilized Microbial Cells. Plant, Cell and Environment, 1984, 7, 81-105.	5.7	16
135	By-product inhibition effects on ethanolic fermentation bySaccharomyces cerevisiae. Biotechnology and Bioengineering, 1983, 25, 103-121.	3.3	338
136	The half-saturation coefficient for dissolved oxygen: A dynamic method for its determination and its effect on dual species competition. Biotechnology and Bioengineering, 1983, 25, 403-416.	3.3	43
137	LIQUID CIRCULATION PATTERNS AND THEIR EFFECT ON GAS HOLD-UP AND AXIAL MIXING IN BUBBLE COLUMNS. Chemical Engineering Communications, 1983, 19, 243-262.	2.6	59
138	Lactic acid production by Lactobacillus delbreuckii in a hollow fiber fermenter. Biotechnology Letters, 1982, 4, 483-488.	2.2	100
139	INVITED REVIEW MICROBIAL GROWTH KINETICS. Chemical Engineering Communications, 1981, 8, 181-211.	2.6	27
140	Enhanced production of cellulase, hemicellulase, and ?-glucosidase byTrichoderma reesei (Rut C-30). Biotechnology and Bioengineering, 1981, 23, 1837-1849.	3.3	210