Jose Luis Iborra

List of Publications by Year
in descending order

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135 papers	5,200 citations	87888 38 h-index	98798 67 g-index
137 all docs	137 docs citations	137 times ranked	3979 citing authors

#	Article	IF	Citations
1	Ectoines in cell stress protection: Uses and biotechnological production. Biotechnology Advances, 2010, 28, 782-801.	11.7	296
2	Stabilization of ?-chymotrypsin by ionic liquids in transesterification reactions. Biotechnology and Bioengineering, 2001, 75, 563-569.	3.3	233
3	Over-stabilization of Candida antarctica lipase B by ionic liquids in ester synthesis. Biotechnology Letters, 2001, 23, 1529-1533.	2.2	223
4	Continuous green biocatalytic processes using ionic liquids and supercritical carbon dioxide. Chemical Communications, 2002, , 692-693.	4.1	212
5	Fluorescence and CD spectroscopic analysis of the ?-chymotrypsin stabilization by the ionic liquid, 1-ethyl-3-methylimidazolium bis[(trifluoromethyl)sulfonyl]amide. Biotechnology and Bioengineering, 2004, 88, 916-924.	3.3	190
6	Lipase Catalysis in Ionic Liquids and Supercritical Carbon Dioxide at 150 Â°C. Biotechnology Progress, 2003, 19, 380-382.	2.6	136
7	Criteria to Design Green Enzymatic Processes in Ionic Liquid/Supercritical Carbon Dioxide Systems. Biotechnology Progress, 2004, 20, 661-669.	2.6	134
8	Bioreactors Based on Monolith-Supported Ionic Liquid Phase for Enzyme Catalysis in Supercritical Carbon Dioxide. Advanced Synthesis and Catalysis, 2007, 349, 1077-1084.	4.3	128
9	A quantitative high-performance liquid chromatographic method to analyse commercial saffron (Crocus sativus L.) products.. Journal of Chromatography A, 1999, 830, 477-483.	3.7	120
10	An insight into the role of phosphotransacetylase (pta) and the acetate/acetyl-CoA node in Escherichia coli. Microbial Cell Factories, 2009, 8, 54.	4.0	118
11	Enzymatic ester synthesis in ionic liquids. Journal of Molecular Catalysis B: Enzymatic, 2003, 21, 9-13.	1.8	114
12	Short-chain flavour ester synthesis by immobilized lipase in organic media. Biotechnology Letters, 1991, 13, 339-344.	2.2	105
13	A non-destructive method to determine the safranal content of saffron (Crocus sativus L.) by supercritical carbon dioxide extraction combined with high-performance liquid chromatography and gas chromatography. Journal of Proteomics, 2000, 43, 367-378.	2.4	105
14	A method for assaying the rhamnosidase activity of naringinase. Analytical Biochemistry, 1985, 149, 566-571.	2.4	104
15	On the nature of ionic liquids and their effects on lipases that catalyze ester synthesis. Journal of Biotechnology, 2009, 140, 234-241.	3.8	104
16	Kinetic study of the pathway of melanizationn between l-dopa and dopachrome. Biochimica Et Biophysica Acta - General Subjects, 1982, 717, 124-131.	2.4	96
17	Chemical intermediates in dopamine oxidation by tyrosinase, and kinetic studies of the process. Archives of Biochemistry and Biophysics, 1984, 235, 438-448.	3.0	94
18	Effect of polyols on Î±-chymotrypsin thermostability: a mechanistic analysis of the enzyme stabilization. Journal of Biotechnology, 1994, 35, 9-18.	3.8	88

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19	Membrane reactor with immobilized Candida antarctica lipase B for ester synthesis in supercritical carbon dioxide. Journal of Supercritical Fluids, 2004, 29, 121-128.	3.2	85
20	cAMPâ€CRP coâ€ordinates the expression of the protein acetylation pathway with central metabolism in Escherichia coli. Molecular Microbiology, 2011, 82, 1110-1128.	2.5	82
21	An efficient activity ionic liquid-enzyme system for biodiesel production. Green Chemistry, 2011, 13, 444.	9.0	78
22	Ionic liquids improve citronellyl ester synthesis catalyzed by immobilized Candida antarctica lipase B in solvent-free media. Green Chemistry, 2007, 9, 780.	9.0	73
23	On the importance of the supporting material for activity of immobilized Candida antarctica lipase B in ionic liquid/hexane and ionic liquid/supercritical carbon dioxide biphasic media. Journal of Supercritical Fluids, 2007, 40, 93-100.	3.2	72
24	TLC Preparative Purification of Picrocrocin, HTCC and Crocin from Saffron. Journal of Food Science, 1992, 57, 714-716.	3.1	71
25	Acetate scavenging activity in Escherichia coli: interplay of acetylâ€“CoA synthetase and the PEPâ€“glyoxylate cycle in chemostat cultures. Applied Microbiology and Biotechnology, 2012, 93, 2109-2124.	3.6	71
26	Dynamic structureâ€“function relationships in enzyme stabilization by ionic liquids. Biocatalysis and Biotransformation, 2005, 23, 169-176.	2.0	70
27	Active membranes coated with immobilized Candida antarctica lipase B: preparation and application for continuous butyl butyrate synthesis in organic media. Journal of Membrane Science, 2002, 201, 55-64.	8.2	69
28	Chemoenzymatic dynamic kinetic resolution of rac-1-phenylethanol in ionic liquids and ionic liquids/supercritical carbon dioxide systems. Biotechnology Letters, 2006, 28, 1559-1565.	2.2	68
29	A recyclable enzymatic biodiesel production process in ionic liquids. Bioresource Technology, 2011, 102, 6336-6339.	9.6	68
30	Synthesis of glycidyl esters catalyzed by lipases in ionic liquids and supercritical carbon dioxide. Journal of Molecular Catalysis A, 2004, 214, 113-119.	4.8	61
31	Long term continuous chemoenzymatic dynamic kinetic resolution of rac-1-phenylethanol using ionic liquids and supercritical carbon dioxide. Green Chemistry, 2009, 11, 538.	9.0	59
32	Tyrosine hydroxylase activity of immobilized tyrosinase on enzacryl-AA and CPG-AA supports: Stabilization and properties. Biotechnology and Bioengineering, 1984, 26, 1306-1312.	3.3	58
33	Dynamic Structure/Function Relationships in the alpha-Chymotrypsin Deactivation Process by Heat and pH. FEBS Journal, 1997, 248, 80-85.	0.2	55
34	Kinetic resolution of rac-2-pentanol catalyzed by Candida antarctica lipase B in the ionic liquid, 1-butyl-3-methylimidazolium bis[(trifluoromethyl)sulfonyl]amide. Biotechnology Letters, 2004, 26, 301-306.	2.2	54
35	Role of Central Metabolism in the Osmoadaptation of the Halophilic Bacterium Chromohalobacter salexigens. Journal of Biological Chemistry, 2013, 288, 17769-17781.	3.4	53
36	Preparative high-performance liquid chromatographic purification of saffron secondary metabolites. Journal of Chromatography A, 1993, 648, 187-190.	3.7	45

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37	Permeabilization of Escherichia coli cells in the biotransformation of trimethylammonium compounds into l-carnitine. Enzyme and Microbial Technology, 2005, 37, 300-308.	3.2	43
38	Immobilization of naringinase on glycophase-coated porous glass. Biotechnology Letters, 1985, 7, 477-482.	2.2	38
39	Comparative thermostability of glucose dehydrogenase from Haloferax mediterranei. Effects of salts and polyols. Enzyme and Microbial Technology, 1996, 19, 352-360.	3.2	38
40	Stability of immobilized ?-chymotrypsin in supercritical carbon dioxide. Biotechnology Letters, 1996, 18, 1345-1350.	2.2	37
41	Salt stress effects on the central and carnitine metabolisms ofEscherichia coli. Biotechnology and Bioengineering, 2007, 96, 722-737.	3.3	36
42	Preparation of hybrid membranes for enzymatic reaction. Separation and Purification Technology, 2001, 25, 229-233.	7.9	33
43	A model that links growth and secondary metabolite production in plant cell suspension cultures. Biotechnology and Bioengineering, 1995, 46, 291-297.	3.3	32
44	A cross-flow reactor with immobilized pectolytic enzymes for juice clarification. Biotechnology Letters, 1987, 9, 875-880.	2.2	31
45	Biotransformation of D(+)-carnitine into L(â^')-carnitine by resting cells ofEscherichia coliO44 K74. Journal of Applied Microbiology, 1998, 85, 883-890.	3.1	31
46	2,3,5-triphenyltetrazolium chloride as a viability assay for immobilized plant cells. Biotechnology Letters, 1992, 6, 319-322.	0.5	30
47	Production of L-carnitine by secondary metabolism of bacteria. Microbial Cell Factories, 2007, 6, 31.	4.0	30
48	Evaluation of the effectiveness factor along immobilized enzyme fixed-bed reactors: Design of a reactor with naringinase covalently immobilized into glycophase-coated porous glass. Biotechnology and Bioengineering, 1987, 30, 491-497.	3.3	28
49	Kinetic and operational study of a cross-flow reactor with immobilized pectolytic enzymes. Enzyme and Microbial Technology, 1990, 12, 499-505.	3.2	27
50	Modeling, optimization and experimental assessment of continuous L-(â^')-carnitine production byEscherichia colicultures. Biotechnology and Bioengineering, 2002, 80, 794-805.	3.3	27
51	Effect of water-miscible aprotic solvents on kyotorphin synthesis catalyzed by immobilized ?-chymotrypsin. Biotechnology Letters, 1995, 17, 603-608.	2.2	26
52	Kinetic study and intermediates identification of noradrenaline oxidation by tyrosinase. Biochemical Pharmacology, 1984, 33, 3689-3697.	4.4	25
53	Modeling of the biotransformation of crotonobetaine intoL-(â^')-carnitine byEscherichia colistrains. Biotechnology and Bioengineering, 2002, 77, 764-775.	3.3	25
54	Quantitative determination of tryptophanyl and tyrosyl residues of proteins by second-derivative fluorescence spectroscopy. Analytical Biochemistry, 1982, 125, 277-285.	2.4	24

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55	Analysis of diffusion effects on immobilized enzymes on porous supports with reversible Michaelis-Menten kinetics. Enzyme and Microbial Technology, 1986, 8, 433-438.	3.2	24
56	Picrocrocin hydrolysis by immobilized ?-glucosidase. Biotechnology Letters, 1992, 14, 475-480.	2.2	24
57	Degradation of limonin by entrappedRhodococcus fascians cells. Biotechnology Letters, 1989, 11, 653-658.	2.2	23
58	Influence of Water-Miscible Aprotic Solvents on Î±-Chymotrypsin Stability. Biotechnology Progress, 1996, 12, 488-493.	2.6	23
59	Kinetic study on the slow inhibition of epidermis tyrosinase by m-coumaric acid. BBA - Proteins and Proteomics, 1984, 790, 101-107.	2.1	20
60	Properties of pectinesterase immobilized on glycophase-coated controlled-pore glass. Applied Biochemistry and Biotechnology, 1989, 22, 129-140.	2.9	20
61	Link between primary and secondary metabolism in the biotransformation of trimethylammonium compounds byescherichia coli. Biotechnology and Bioengineering, 2003, 84, 686-699.	3.3	20
62	Retention and regeneration of native NAD(H) in noncharged ultrafiltration membrane reactors: Application to l-lactate and gluconate production. , 1998, 57, 510-517.		19
63	Analysis of Escherichia coli cell state by flow cytometry during whole cell catalyzed biotransformation for l-carnitine production. Process Biochemistry, 2007, 42, 25-33.	3.7	19
64	Metabolic adaptation of Escherichia coli to long-term exposure to salt stress. Process Biochemistry, 2010, 45, 1459-1467.	3.7	19
65	Continuous retention of native NADP(H) in an enzyme membrane reactor for gluconate and glutamate production. Journal of Biotechnology, 1996, 50, 27-36.	3.8	18
66	Optimization of the pectinesterase/endo-d-polygalacturonase coimmobilization process. Enzyme and Microbial Technology, 1989, 11, 837-843.	3.2	17
67	Influence of polyhydroxylic cosolvents on papain thermostability. Enzyme and Microbial Technology, 1993, 15, 868-873.	3.2	17
68	l(â^')-Carnitine production with immobilized Escherichia coli cells in continuous reactors. Enzyme and Microbial Technology, 1997, 21, 531-536.	3.2	17
69	Designing enzymatic kyotorphin synthesis in organic media with low water content. Enzyme and Microbial Technology, 2000, 26, 608-613.	3.2	17
70	The existence of apotyrosinase in the cytosol of Harding-Passey mouse melanoma melanocytes and characteristics of enzyme reconstitution by Cu(II). Biochimica Et Biophysica Acta - General Subjects, 1987, 923, 413-420.	2.4	16
71	Biotransformation from geraniol to nerol by immobilized grapevine cells (V. vinifera). Applied Biochemistry and Biotechnology, 1996, 56, 169-180.	2.9	16
72	Stabilization of Glucose Dehydrogenase with Polyethyleneimine in an Electrochemical Reactor with NAD(P)+ Regeneration. Biotechnology Progress, 1997, 13, 557-561.	2.6	16

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73	Design of Metabolic Engineering Strategies for Maximizing l-(-)-Carnitine Production by Escherichia coli. Integration of the Metabolic and Bioreactor Levels. Biotechnology Progress, 2008, 21, 329-337.	2.6	16
74	Kinetic study of the interaction between frog epidermis tyrosinase and chloride. BBA - Proteins and Proteomics, 1984, 788, 327-332.	2.1	15
75	Comparative study of tyrosinases from different sources: Relationship between halide inhibition and the enzyme active site. Comparative Biochemistry and Physiology Part B: Comparative Biochemistry, 1986, 83, 633-636.	0.2	15
76	Study of Î±-methyldopa oxidation by tyrosinase. International Journal of Biochemistry & Cell Biology, 1986, 18, 39-47.	0.5	15
77	Analysis of a packed-bed reactor for hydrolysis of picrocrocin by immobilized Î²-glucosidase. Enzyme and Microbial Technology, 1993, 15, 780-784.	3.2	15
78	Glycosylated Î±-chymotrypsin as a catalyst for kyotorphin synthesis in water-organic media. Biotechnology Letters, 1999, 21, 595-599.	2.2	15
79	Title is missing!. Biotechnology Letters, 2000, 22, 771-775.	2.2	15
80	L(-)-carnitine production using a recombinant Escherichia coli strain. Enzyme and Microbial Technology, 2001, 28, 785-791.	3.2	15
81	Effect of salt stress on crotonobetaine and D(+)-carnitine biotransformation into L(â¯)-carnitine by resting cells of Escherichia coli. Journal of Basic Microbiology, 2003, 43, 259-268.	3.3	15
82	Ester synthesis from trimethylammonium alcohols in dry organic media catalyzed by immobilizedCandida antarctica lipase B. Biotechnology and Bioengineering, 2003, 82, 352-358.	3.3	15
83	Characteristics of the immobilized pectin lyase activity from a commercial pectolytic enzyme preparation. Acta Biotechnologica, 1990, 10, 531-539.	0.9	14
84	Limonin consumption at acidic pH values and absence of aeration by Rhodococcus fascians cells in batch and immobilized continuous systems. Enzyme and Microbial Technology, 1998, 22, 111-116.	3.2	14
85	Determination of -Carnitine by Flow Injection Analysis with NADH Fluorescence Detection. Analytical Biochemistry, 2000, 281, 176-181.	2.4	13
86	Î²-Galactosidase immobilization for milk lactose hydrolysis: a simple experimental and modelling study of batch and continuous reactors. Biochemical Education, 2000, 28, 164-168.	0.1	13
87	Role of energetic coenzyme pools in the production of l-carnitine by Escherichia coli. Metabolic Engineering, 2006, 8, 603-618.	7.0	13
88	Metabolic engineering for high yielding L(-)-carnitine production in Escherichia coli. Microbial Cell Factories, 2013, 12, 56.	4.0	13
89	Irreversible inhibition of trypsin by tlck. A continuous method for kinetic study of irreversible enzymatic inhibitors in the presence of substrate. International Journal of Biochemistry & Cell Biology, 1986, 18, 285-288.	0.5	12
90	Enhanced accumulation of anthocyanins in Vitis vinifera cells immobilized in polyurethane foam. Enzyme and Microbial Technology, 1994, 16, 416-419.	3.2	12

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91	Enzymatic Cycling Assay for d-Carnitine Determination. Analytical Biochemistry, 1999, 274, 34-39.	2.4	12
92	Membrane cell retention systems for continuous production of -carnitine using Proteus sp.. Journal of Membrane Science, 2003, 214, 101-111.	8.2	12
93	Activity of soluble and immobilized hesperidinase on insoluble hesperidin. Biotechnology Letters, 1987, 9, 871-874.	2.2	11
94	A practical experiment on enzyme immobilization and characterization of the immobilized derivatives. Biochemical Education, 1995, 23, 213-216.	0.1	11
95	Redirecting metabolic fluxes through cofactor engineering: Role of CoA-esters pool during l(â^')-carnitine production by Escherichia coli. Journal of Biotechnology, 2007, 132, 110-117.	3.8	11
96	Acid proteinase activity in fish II. Purification and characterization of cathepsins B and D from Mujil auratus muscle. Comparative Biochemistry and Physiology Part B: Comparative Biochemistry, 1984, 78, 207-213.	0.2	10
97	One-step synthesis of Gly-Gly-PheNH2 from N-unprotected amino acid derivatives by papain in one-phase liquid media. Biotechnology Letters, 1992, 14, 933-936.	2.2	10
98	Model of central and trimethylammonium metabolism for optimizing l-carnitine production by E. coli. Metabolic Engineering, 2005, 7, 401-425.	7.0	10
99	Role of betaine:CoA ligase (CaiC) in the activation of betaines and the transfer of coenzyme A inEscherichia coli. Journal of Applied Microbiology, 2008, 105, 42-50.	3.1	10
100	Title is missing!. Biotechnology Letters, 1997, 19, 1005-1009.	2.2	9
101	Conformational studies of soluble and immobilized frog epidermis tyrosinase by fluorescence. Applied Biochemistry and Biotechnology, 1984, 9, 173-185.	2.9	7
102	Acid proteinase activity in fishâ€"I. Comparative study of extraction of cathepsins B and D from Mujil auratus. Comparative Biochemistry and Physiology Part B: Comparative Biochemistry, 1984, 78, 203-206.	0.2	7
103	Regulation of the cytosolic and melanosome-bound tyrosinase activities in harding-passey mouse melanoma. International Journal of Biochemistry & Cell Biology, 1985, 17, 995-1002.	0.5	7
104	Kinetics and stoichiometry of cysteinyldopa formation in the first steps of melanogenesis. International Journal of Biochemistry & Cell Biology, 1986, 18, 161-166.	0.5	7
105	Degradation of isovalerate and 2-methylbutyrate in an anaerobic trickling filter. Biological Wastes, 1990, 34, 241-250.	0.2	7
106	Properties of pectinesterase and endo-d-polygalacturonase coimmobilized in a porous glass support. Applied Biochemistry and Biotechnology, 1992, 37, 19-31.	2.9	7
107	Synthesis of L-tyrosine glyceryl ester catalyzed by Î±-chymotrypsin in water-miscible organic solvents: A possible sun-tan accelerator product. Biotechnology Letters, 1993, 15, 1223-1228.	2.2	7
108	pH influence on the consumption of limonin species by Rhodococcus fascians cells. Biotechnology Letters, 1996, 18, 423-428.	2.2	7

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109	Effect of temperature and long-term operation on passively immobilizedZymomonas mobilis for continuous ethanol production. Biotechnology Letters, 1987, 9, 573-576.	2.2	6
110	pH influence on ethanol production and retained biomass in a passively immobilizedZymomonas mobilis system. Biotechnology Letters, 1988, 10, 437-442.	2.2	6
111	Synergistic effect of endo-D-polygalacturonase on coimmobilized pectinesterase. Biotechnology Letters, 1988, 10, 97-100.	2.2	6
112	Plasmid maintenance and physiology of a genetically engineered Escherichia coli strain during continuous l-carnitine production. Biotechnology Letters, 2007, 29, 1549-1556.	2.2	6
113	Racemisation of d(+)-carnitine into l(â^')-carnitine by Escherichia coli strains. Process Biochemistry, 2003, 39, 287-293.	3.7	5
114	Chemical intermediates in Î±-methylnoradrenaline oxidation by tyrosinaseâ€"I. Spectral properties and stoichiometry. International Journal of Biochemistry & Cell Biology, 1985, 17, 885-890.	0.5	4
115	Chemical intermediates in Î±-methylnoradrenaline oxidation by tyrosinaseâ€"II. Kinetic study of process. International Journal of Biochemistry & Cell Biology, 1985, 17, 891-894.	0.5	4
116	Effect of ethanol addition on propionic acid consumption in an anaerobic bioreactor. Biotechnology Letters, 1987, 9, 807-810.	2.2	4
117	Methanogenic biofilm growth studies in an anaerobic fixed-film reactor. Enzyme and Microbial Technology, 1990, 12, 387-394.	3.2	4
118	Food Protein Nutrient Improvement by Protease at Reduced Water Activity. Journal of Food Science, 1994, 59, 876-880.	3.1	4
119	Analysis of Commercial Neohesperidin Dihydrochalcone by High Performance Liquid Chromatography. Journal of Liquid Chromatography and Related Technologies, 1997, 20, 2063-2073.	1.0	4
120	Culture collections and biochemistry. International Microbiology, 2003, 6, 105-112.	2.4	4
121	Whole cell biocatalysts stabilization forl-carnitine production. Biocatalysis and Biotransformation, 2005, 23, 149-158.	2.0	4
122	Impairing and Monitoring Glucose Catabolite Repression in L-Carnitine Biosynthesis. Biotechnology Progress, 2007, 23, 1286-1296.	2.6	4
123	Microcomputer-based question bank for training and assessment in biochemistry. Biochemical Education, 1984, 12, 108-111.	0.1	3
124	Incorporation of bovine thyroid peroxidase in liposomes. Chemistry and Physics of Lipids, 1984, 34, 237-244.	3.2	3
125	A visual-practical method for following the immobilization of biomolecules. Biochemical Education, 1987, 15, 85-86.	0.1	2
126	Stability against stop of flow of an immobilizedZymomonas mobilis bioreactor. Biotechnology Letters, 1989, 11, 665-668.	2.2	2

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127	Comparative study of reactor performance for the resolution of d,l-amino acids. Process Biochemistry, 1992, 27, 339-346.	3.7	2
128	Thermostability of immobilized plant microsomes. Biotechnology Letters, 1993, 15, 1129-1132.	2.2	2
129	Peptide Synthesis by Papain in Alkali Halide Media. Biocatalysis and Biotransformation, 1996, 13, 255-269.	2.0	2
130	Selective synthesis of panthenyl esters by a kinetically controlled enzymatic process. Biocatalysis and Biotransformation, 2013, 31, 175-180.	2.0	2
131	Steady-state kinetics of thyroid peroxidase. evidence for a high degree rate equation using the f statistic. International Journal of Biochemistry & Cell Biology, 1983, 15, 1195-1200.	0.5	1
132	Optimization of the start-up of a passively immobilized Zymomonas mobilis system for continuous ethanol production. Process Biochemistry, 1994, 29, 569-574.	3.7	1
133	Non-proteolytic solubilization of bovine thyroid peroxidase: Thermodynamic parameters of the thermoinactivation. International Journal of Biochemistry & Cell Biology, 1983, 15, 95-103.	0.5	0
134	Anaerobic digestion: A case study. Biochemical Education, 1988, 16, 82-84.	0.1	0
135	Effect of zeolite addition on ethanol production from glucose by Saccharomyces bayanus. Journal of Chemical Technology and Biotechnology, 1998, 73, 377-384.	3.2	0