

# Octavio T RamÃ- rez

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1919043/publications.pdf>

Version: 2024-02-01

98  
papers

3,903  
citations

109321

35  
h-index

144013

57  
g-index

103  
all docs

103  
docs citations

103  
times ranked

3402  
citing authors

#	ARTICLE	IF	CITATIONS
1	Living With Heterogeneities in Bioreactors: Understanding the Effects of Environmental Gradients on Cells. <i>Molecular Biotechnology</i> , 2006, 34, 355-382.	2.4	317
2	New insights into <i>Escherichia coli</i> metabolism: carbon scavenging, acetate metabolism and carbon recycling responses during growth on glycerol. <i>Microbial Cell Factories</i> , 2012, 11, 46.	4.0	155
3	Cell cycle- and growth phase-dependent variations in size distribution, antibody productivity, and oxygen demand in hybridoma cultures. <i>Biotechnology and Bioengineering</i> , 1990, 36, 839-848.	3.3	152
4	Production of recombinant proteins in <i>E. coli</i> by the heat inducible expression system based on the phage lambda pL and/or pR promoters. <i>Microbial Cell Factories</i> , 2010, 9, 18.	4.0	130
5	Production of Recombinant Proteins: Challenges and Solutions. , 2004, 267, 015-052.		124
6	The role of the plasma membrane fluidity on the shear sensitivity of hybridomas grown under hydrodynamic stress. <i>Biotechnology and Bioengineering</i> , 1990, 36, 911-920.	3.3	115
7	Replacement of the glucose phosphotransferase transport system by galactose permease reduces acetate accumulation and improves process performance of <i>Escherichia coli</i> for recombinant protein production without impairment of growth rate. <i>Metabolic Engineering</i> , 2006, 8, 281-290.	7.0	115
8	Couitilization of glucose and glycerol enhances the production of aromatic compounds in an <i>Escherichia coli</i> strain lacking the phosphoenolpyruvate: carbohydrate phosphotransferase system. <i>Microbial Cell Factories</i> , 2008, 7, 1.	4.0	99
9	Understanding cellular interactions with nanomaterials: towards a rational design of medical nanodevices. <i>Nanotechnology</i> , 2020, 31, 132002.	2.6	90
10	Rotavirus-like particles primary recovery from insect cells in aqueous two-phase systems. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2006, 842, 48-57.	2.3	88
11	Metabolic engineering for the production of shikimic acid in an evolved <i>Escherichia coli</i> strain lacking the phosphoenolpyruvate: carbohydrate phosphotransferase system. <i>Microbial Cell Factories</i> , 2010, 9, 21.	4.0	87
12	Effect of pH in the synthesis of ampicillin by penicillin acylase. <i>Enzyme and Microbial Technology</i> , 1996, 19, 462-469.	3.2	86
13	Transcriptional and metabolic response of recombinant <i>Escherichia coli</i> to spatial dissolved oxygen tension gradients simulated in a scale-down system. <i>Biotechnology and Bioengineering</i> , 2006, 93, 372-385.	3.3	83
14	Titration of Non-Occluded Baculovirus Using a Cell Viability Assay. <i>BioTechniques</i> , 2003, 34, 260-264.	1.8	74
15	The effect of dissolved oxygen tension and the utility of oxygen uptake rate in insect cell culture. <i>Cytotechnology</i> , 1996, 22, 225-237.	1.6	70
16	Culture of <i>Escherichia coli</i> under dissolved oxygen gradients simulated in a two-compartment scale-down system: Metabolic response and production of recombinant protein. <i>Biotechnology and Bioengineering</i> , 2005, 89, 453-463.	3.3	65
17	Utility of an <i>Escherichia coli</i> strain engineered in the substrate uptake system for improved culture performance at high glucose and cell concentrations: An alternative to fed-batch cultures. <i>Biotechnology and Bioengineering</i> , 2008, 99, 893-901.	3.3	65
18	Fast dynamic response of the fermentative metabolism of <i>Escherichia coli</i> to aerobic and anaerobic glucose pulses. <i>Biotechnology and Bioengineering</i> , 2009, 104, 1153-1161.	3.3	65

#	ARTICLE	IF	CITATIONS
19	Evidence of Pluronic F-68 direct interaction with insect cells: impact on shear protection, recombinant protein, and baculovirus production. <i>Enzyme and Microbial Technology</i> , 2000, 26, 324-331.	3.2	62
20	Heterogeneous conditions in dissolved oxygen affect N-glycosylation but not productivity of a monoclonal antibody in hybridoma cultures. <i>Biotechnology and Bioengineering</i> , 2004, 88, 176-188.	3.3	62
21	Metabolic Engineering of <i>Escherichia coli</i> for $\alpha$ -Tyrosine Production by Expression of Genes Coding for the Chorismate Mutase Domain of the Native Chorismate Mutase-Prephenate Dehydratase and a Cyclohexadienyl Dehydrogenase from <i>Zymomonas mobilis</i> . <i>Applied and Environmental Microbiology</i> , 2008, 74, 3284-3290.	3.1	60
22	The effect of heating rate on <i>Escherichia coli</i> metabolism, physiological stress, transcriptional response, and production of temperature-induced recombinant protein: A scale-down study. <i>Biotechnology and Bioengineering</i> , 2009, 102, 468-482.	3.3	60
23	Challenges for the production of virus-like particles in insect cells: The case of rotavirus-like particles. <i>Biochemical Engineering Journal</i> , 2009, 45, 158-167.	3.6	59
24	Constitutive expression of selected genes from the pentose phosphate and aromatic pathways increases the shikimic acid yield in high-glucose batch cultures of an <i>Escherichia coli</i> strain lacking PTS and pykF. <i>Microbial Cell Factories</i> , 2013, 12, 86.	4.0	56
25	Effect of Oscillating Dissolved Oxygen Tension on the Production of Alginate by <i>Azotobacter vinelandii</i> . <i>Biotechnology Progress</i> , 2001, 17, 1042-1048.	2.6	53
26	Effect of Temperature Downshift on the Transcriptomic Responses of Chinese Hamster Ovary Cells Using Recombinant Human Tissue Plasminogen Activator Production Culture. <i>PLoS ONE</i> , 2016, 11, e0151529.	2.5	52
27	Molecular and process design for rotavirus-like particle production in <i>Saccharomyces cerevisiae</i> . <i>Microbial Cell Factories</i> , 2011, 10, 33.	4.0	47
28	Differences in the glycosylation profile of a monoclonal antibody produced by hybridomas cultured in serum-supplemented, serum-free or chemically defined media. <i>Biotechnology and Applied Biochemistry</i> , 2007, 47, 113.	3.1	44
29	Engineering <i>Escherichia coli</i> to improve culture performance and reduce formation of by-products during recombinant protein production under transient intermittent anaerobic conditions. <i>Biotechnology and Bioengineering</i> , 2006, 94, 1164-1175.	3.3	42
30	Kinetics of Hematopoiesis in Dexter&hyphen;Type Long&hyphen;Term Cultures Established from Human Umbilical Cord Blood Cells. <i>Stem Cells</i> , 1998, 16, 127-135.	3.2	41
31	Engineering <i>Escherichia coli</i> to increase plasmid DNA production in high cell-density cultivations in batch mode. <i>Microbial Cell Factories</i> , 2012, 11, 132.	4.0	41
32	An insight into insect cell metabolism through selective nutrient manipulation. <i>Journal of Biotechnology</i> , 1999, 72, 61-75.	3.8	40
33	Metabolic and transcriptional response of recombinant <i>Escherichia coli</i> to elevated dissolved carbon dioxide concentrations. <i>Biotechnology and Bioengineering</i> , 2009, 104, 102-110.	3.3	40
34	Effect of Production Method and Gene Amplification on the Glycosylation Pattern of a Secreted Reporter Protein in CHO Cells. <i>Biotechnology Progress</i> , 2008, 21, 40-49.	2.6	38
35	Strategies for manipulating the relative concentration of recombinant rotavirus structural proteins during simultaneous production by insect cells. <i>Biotechnology and Bioengineering</i> , 2002, 78, 635-644.	3.3	37
36	Growth Recovery on Glucose under Aerobic Conditions of an <i>Escherichia coli</i> Strain Carrying a Phosphoenolpyruvate:Carbohydrate Phosphotransferase System Deletion by Inactivating <i>arcA</i> and Overexpressing the Genes Coding for Glucokinase and Galactose Permease. <i>Journal of Molecular Microbiology and Biotechnology</i> , 2007, 13, 105-116.	1.0	37

#	ARTICLE	IF	CITATIONS
37	<i>Vitreoscilla</i> hemoglobin expression in engineered <i>Escherichia coli</i> : Improved performance in high cell density batch cultivations. <i>Biotechnology Journal</i> , 2011, 6, 993-1002.	3.5	37
38	Intracellular distribution of rotavirus structural proteins and virus-like particles expressed in the insect cell-baculovirus system. <i>Journal of Biotechnology</i> , 2006, 122, 443-452.	3.8	35
39	Effect of serum on the plasma membrane fluidity of hybridomas: an insight into its shear protective mechanism. <i>Biotechnology Progress</i> , 1992, 8, 40-50.	2.6	34
40	Design, characterization and application of a minibioreactor for the culture of human hematopoietic cells under controlled conditions. <i>Cytotechnology</i> , 1998, 28, 127-138.	1.6	34
41	Title is missing!. <i>Biotechnology Letters</i> , 2001, 23, 359-364.	2.2	34
42	Modification of glucose import capacity in <i>Escherichia coli</i> : physiologic consequences and utility for improving DNA vaccine production. <i>Microbial Cell Factories</i> , 2013, 12, 42.	4.0	34
43	Specific growth rate determines the molecular mass of the alginate produced by <i>Azotobacter vinelandii</i> . <i>Biochemical Engineering Journal</i> , 2005, 25, 187-193.	3.6	31
44	Population kinetics during simultaneous infection of insect cells with two different recombinant baculoviruses for the production of rotavirus-like particles. <i>BMC Biotechnology</i> , 2007, 7, 39.	3.3	31
45	Bovine colostrum or milk as a serum substitute for the cultivation of a mouse hybridoma. <i>Biotechnology and Bioengineering</i> , 1990, 35, 882-889.	3.3	30
46	Comparative characterization of cell death between Sf9 insect cells and hybridoma cultures. <i>Biotechnology and Bioengineering</i> , 2001, 72, 441-457.	3.3	30
47	Use of recombinant rotavirus VP6 nanotubes as a multifunctional template for the synthesis of nanobiomaterials functionalized with metals. <i>Biotechnology and Bioengineering</i> , 2009, 104, 871-881.	3.3	29
48	The assembly conformation of rotavirus VP6 determines its protective efficacy against rotavirus challenge in mice. <i>Vaccine</i> , 2014, 32, 2874-2877.	3.8	29
49	Plasmid DNA Production for Therapeutic Applications. <i>Methods in Molecular Biology</i> , 2012, 824, 271-303.	0.9	28
50	The use of culture redox potential and oxygen uptake rate for assessing glucose and glutamine depletion in hybridoma cultures. , 1997, 56, 555-563.		27
51	Parameters that determine virus adsorption kinetics: toward the design of better infection strategies for the insect cell - baculovirus expression system. <i>Enzyme and Microbial Technology</i> , 2001, 29, 52-61.	3.2	27
52	Quantification of rotavirus-like particles by gel permeation chromatography. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2005, 824, 267-276.	2.3	27
53	Simulation of dissolved CO <sub>2</sub> gradients in a scale-down system: A metabolic and transcriptional study of recombinant <i>Escherichia coli</i> . <i>Biotechnology Journal</i> , 2011, 6, 959-967.	3.5	27
54	Impact of physicochemical parameters on in vitro assembly and disassembly kinetics of recombinant triple-layered rotavirus-like particles. <i>Biotechnology and Bioengineering</i> , 2009, 104, 674-686.	3.3	25

#	ARTICLE	IF	CITATIONS
55	Role of Pyruvate Oxidase in <i>Escherichia coli</i> Strains Lacking the Phosphoenolpyruvate:Carbohydrate Phosphotransferase System. <i>Journal of Molecular Microbiology and Biotechnology</i> , 2004, 8, 209-221.	1.0	24
56	High cell-density cultivation in batch mode for plasmid DNA production by a metabolically engineered <i>E. coli</i> strain with minimized overflow metabolism. <i>Biochemical Engineering Journal</i> , 2011, 56, 165-171.	3.6	23
57	Molecular responses of <i>E. coli</i> caused by heat stress and recombinant protein production during temperature induction. <i>Bioengineered Bugs</i> , 2011, 2, 105-110.	1.7	23
58	Simultaneous expression of recombinant proteins in the insect cell-baculovirus system: Production of virus-like particles. <i>Methods</i> , 2012, 56, 389-395.	3.8	23
59	Strategies for the purification and characterization of protein scaffolds for the production of hybrid nanobiomaterials. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2011, 879, 1105-1111.	2.3	22
60	Effect of growth rate on plasmid DNA production and metabolic performance of <i>Engineered Escherichia coli</i> strains. <i>Journal of Bioscience and Bioengineering</i> , 2014, 117, 336-342.	2.2	22
61	Comparison of oxygen enriched air vs. pressure cultivations to increase oxygen transfer and to scale-up plasmid DNA production fermentations. <i>Engineering in Life Sciences</i> , 2011, 11, 382-386.	3.6	21
62	Physiological effects of pH gradients on <i>Escherichia coli</i> during plasmid DNA production. <i>Biotechnology and Bioengineering</i> , 2016, 113, 598-611.	3.3	21
63	Separation and quantification of double- and triple-layered rotavirus-like particles by CZE. <i>Electrophoresis</i> , 2010, 31, 1376-1381.	2.4	18
64	Understanding internalization of rotavirus VP6 nanotubes by cells: towards a recombinant vaccine. <i>Archives of Virology</i> , 2014, 159, 1005-1015.	2.1	17
65	Glycobiotechnology of the Insect Cell-Baculovirus Expression System Technology. <i>Advances in Biochemical Engineering/Biotechnology</i> , 2018, 175, 71-92.	1.1	17
66	Enhanced production of plasmid DNA by engineered <i>Escherichia coli</i> strains. <i>Journal of Biotechnology</i> , 2012, 158, 211-214.	3.8	16
67	Strategies for specifically directing metal functionalization of protein nanotubes: constructing protein coated silver nanowires. <i>Nanotechnology</i> , 2013, 24, 235602.	2.6	16
68	Effect of metal catalyzed oxidation in recombinant viral protein assemblies. <i>Microbial Cell Factories</i> , 2014, 13, 25.	4.0	16
69	Dynamic Modeling of CHO Cell Metabolism Using the Hybrid Cybernetic Approach With a Novel Elementary Mode Analysis Strategy. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 279.	4.1	15
70	Effect of heating rate on pDNA production by <i>E. coli</i> . <i>Biochemical Engineering Journal</i> , 2013, 79, 230-238.	3.6	14
71	Enhancing thermo-induced recombinant protein production in <i>Escherichia coli</i> by temperature oscillations and post-induction nutrient feeding strategies. <i>Journal of Biotechnology</i> , 2013, 167, 47-55.	3.8	13
72	A postfermentative stage improves penicillin acylase production by a recombinant <i>E. coli</i> . <i>Biotechnology Letters</i> , 1996, 18, 927-932.	2.2	12

#	ARTICLE	IF	CITATIONS
73	Modulating the Physicochemical and Structural Properties of Gold-Functionalized Protein Nanotubes through Thiol Surface Modification. <i>Langmuir</i> , 2014, 30, 14991-14998.	3.5	12
74	Overexpression of the mitochondrial pyruvate carrier reduces lactate production and increases recombinant protein productivity in CHO cells. <i>Biotechnology and Bioengineering</i> , 2020, 117, 2633-2647.	3.3	11
75	Insect Cell Culture: Recent Advances, Bioengineering Challenges and Implications in Protein Production. , 1998, , 25-52.		11
76	Genotypification of bovine group A rotavirus in México. <i>Vaccine</i> , 2009, 27, 6411-6414.	3.8	10
77	Toward efficient microaerobic processes using engineered <i>Escherichia coli</i> W3110 strains. <i>Engineering in Life Sciences</i> , 2016, 16, 588-597.	3.6	9
78	Metabolic modeling and response surface analysis of an <i>Escherichia coli</i> strain engineered for shikimic acid production. <i>BMC Systems Biology</i> , 2018, 12, 102.	3.0	9
79	Recombinant whole cell penicillin acylase biocatalyst: Production, characterization and use in the synthesis and hydrolysis of antibiotics. <i>Biotechnology Letters</i> , 1995, 17, 615-620.	2.2	8
80	Intracellular localization of adeno-associated viral proteins expressed in insect cells. <i>Biotechnology Progress</i> , 2011, 27, 483-493.	2.6	8
81	Immunogenicity and protective efficacy of yeast extracts containing rotavirus-like particles: A potential veterinary vaccine. <i>Vaccine</i> , 2014, 32, 2794-2798.	3.8	8
82	Mannosamine supplementation extends the N-acetylglucosamylation of recombinant human secreted alkaline phosphatase produced in <i>Trichoplusia ni</i> (cabbage looper) insect cell cultures. <i>Biotechnology and Applied Biochemistry</i> , 2005, 42, 25.	3.1	7
83	Molecular Docking and Aberration-Corrected STEM of Palladium Nanoparticles on Viral Templates. <i>Metals</i> , 2016, 6, 200.	2.3	7
84	Defining the multiplicity and time of infection for the production of Zaire Ebola virus-like particles in the insect cell-baculovirus expression system. <i>Vaccine</i> , 2019, 37, 6962-6969.	3.8	7
85	Structural Characterization of Rotavirus-Directed Synthesis and Assembly of Metallic Nanoparticle Arrays. <i>Journal of Nanoscience and Nanotechnology</i> , 2013, 13, 5572-5579.	0.9	5
86	Characterization of conductive nanobiomaterials derived from viral assemblies by low-voltage STEM imaging and Raman scattering. <i>Nanotechnology</i> , 2014, 25, 385706.	2.6	5
87	Poly(vinyl alcohol co-vinyl acetate) as a novel scaffold for mammalian cell culture and controlled drug release. <i>Journal of Materials Science</i> , 2019, 54, 7867-7882.	3.7	5
88	Design and characterization of a one-compartment scale-down system for simulating dissolved oxygen tension gradients. <i>Journal of Chemical Technology and Biotechnology</i> , 2010, 85, 950-956.	3.2	4
89	Control of redox potential in hybridoma cultures: effects on MAb production, metabolism, and apoptosis. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2012, 39, 1189-1198.	3.0	4
90	Flocculation of CHO cells for primary separation of recombinant glycoproteins: Effect on glycosylation profiles. <i>Biochemical Engineering Journal</i> , 2018, 132, 244-254.	3.6	4

#	ARTICLE	IF	CITATIONS
91	Effect of controlled redox potential and dissolved oxygen on the in vitro refolding of an E. coli alkaline phosphatase and chicken lysozyme. <i>Enzyme and Microbial Technology</i> , 2013, 52, 312-318.	3.2	3
92	Real-time imaging reveals unique heterogeneous population features in insect cell cultures. <i>Journal of Biotechnology</i> , 2017, 259, 56-62.	3.8	3
93	A novel method for the in vitro assembly of virus-like particles and multimeric proteins. <i>Biotechnology Letters</i> , 2021, 43, 1155-1161.	2.2	3
94	Design, characterization and application of a minibioreactor for the culture of human hematopoietic cells under controlled conditions. <i>Current Applications of Cell Culture Engineering</i> , 1998, , 127-138.	0.1	2
95	Pharmaceutical biotechnology emerges in Mexico. <i>Nature Biotechnology</i> , 1999, 17, 934-934.	17.5	1
96	Hydrodynamic Stress and Heterogeneities in Animal Cell Culture. , 2019, , 108-118.		1
97	In Vitro Disassembly and Reassembly of Triple-Layered Rotavirus-Like Particles. , 2010, , 313-318.		0
98	Metabolic and kinetic studies of hybridomas in exponentially fed-batch cultures using T-flasks. <i>Current Applications of Cell Culture Engineering</i> , 1994, , 73-86.	0.1	0