# Guhan Jayaraman

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7221184/publications.pdf

Version: 2024-02-01

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|---|---|---|---|
| 41 papers | 1,077 citations | 331670 21 h-index | 414414 32 g-index |
| 47 all docs | 47 docs citations | 47 times ranked | 786 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Characterization of non-linear adsorption properties of dextran-based polyelectrolyte displacers in ion-exchange systems. Journal of Chromatography A, 1993, 630, 37-52. | 3.7 | 97 |
| 2 | Ion-exchange displacement chromatography of proteins. Journal of Chromatography A, 1993, 630, 53-68. | 3.7 | 87 |
| 3 | Ion-exchange displacement chromatography of proteins Dendritic polymers as novel displacers. Journal of Chromatography A, 1995, 702, 143-155. | 3.7 | 83 |
| 4 | Hyaluronic acid production is enhanced by the additional co-expression of UDP-glucose pyrophosphorylase in Lactococcus lactis. Applied Microbiology and Biotechnology, 2010, 86, 273-283. | 3.6 | 74 |
| 5 | Protected amino acids as novel low-molecular-weight displacers in cation-exchange displacement chromatography. Biotechnology and Bioengineering, 1995, 48, 452-460. | 3.3 | 54 |
| 6 | Ratio of intracellular precursors concentration and their flux influences hyaluronic acid molecular weight in Streptococcus zooepidemicus and recombinant Lactococcus lactis. Bioresource Technology, 2014, 163, 222-227. | 9.6 | 46 |
| 7 | Engineering Escherichia coli with acrylate pathway genes for propionic acid synthesis and its impact on mixed-acid fermentation. Applied Microbiology and Biotechnology, 2013, 97, 1191-1200. | 3.6 | 45 |
| 8 | Effects of post-induction feed strategies on secretory production of recombinant streptokinase in Escherichia coli. Biochemical Engineering Journal, 2007, 33, 34-41. | 3.6 | 41 |
| 9 | Hyaluronan production and molecular weight is enhanced in pathway-engineered strains of lactate dehydrogenase-deficient Lactococcus lactis. Metabolic Engineering Communications, 2016, 3, 15-23. | 3.6 | 41 |
| 10 | Glycerol conversion to 1, 3-Propanediol is enhanced by the expression of a heterologous alcohol dehydrogenase gene in Lactobacillus reuteri. AMB Express, 2011, 1, 37. | 3.0 | 38 |
| 11 | Chromosomal integration of hyaluronic acid synthesis (has) genes enhances the molecular weight of hyaluronan produced in Lactococcus lactis. Biotechnology Journal, 2014, 9, 1554-1564. | 3.5 | 35 |
| 12 | Transcription analysis of hyaluronan biosynthesis genes in Streptococcus zooepidemicus and metabolically engineered Lactococcus lactis. Applied Microbiology and Biotechnology, 2012, 94, 1593-1607. | 3.6 | 29 |
| 13 | Recombinant protein purification using gradient assisted simulated moving bed hydrophobic interaction chromatography. Part II: Process design and experimental validation. Journal of Chromatography A, 2011, 1218, 6402-6411. | 3.7 | 24 |
| 14 | The P170 expression system enhances hyaluronan molecular weight and production in metabolically-engineered Lactococcus lactis. Biochemical Engineering Journal, 2014, 90, 73-78. | 3.6 | 24 |
| 15 | Production of controlled molecular weight hyaluronic acid by glucostat strategy using recombinant Lactococcus lactis cultures. Applied Microbiology and Biotechnology, 2019, 103, 4363-4375. | 3.6 | 24 |
| 16 | Displacement chromatography of biomolecules with large particle diameter systems. Journal of Chromatography A, 1989, 484, 225-236. | 3.7 | 23 |
| 17 | Biosynthesis of Hyaluronic acid polymer: Dissecting the role of sub structural elements of hyaluronan synthase. Scientific Reports, 2019, 9, 12510. | 3.3 | 23 |
| 18 | Co-culture of Lactobacillus delbrueckii and engineered Lactococcus lactis enhances stoichiometric yield of d-lactic acid from whey permeate. Applied Microbiology and Biotechnology, 2019, 103, 5653-5662. | 3.6 | 23 |

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|---|---|---|---|
| 19 | Preparative chromatography in biotechnology. Current Opinion in Biotechnology, 1993, 4, 217-225. | 6.6 | 22 |
| 20 | On-line monitoring of recombinant bacterial cultures using multi-wavelength fluorescence spectroscopy. Biochemical Engineering Journal, 2011, 58-59, 133-139. | 3.6 | 22 |
| 21 | Enhancement of recombinant streptokinase production in Lactococcus lactis by suppression of acid tolerance response. Applied Microbiology and Biotechnology, 2006, 72, 1202-1209. | 3.6 | 21 |
| 22 | Design of aqueous twoâ€phase systems for purification of hyaluronic acid produced by metabolically engineered Lactococcus lactis. Journal of Separation Science, 2016, 39, 655-662. | 2.5 | 20 |
| 23 | HtrA Is Essential for Efficient Secretion of Recombinant Proteins by Lactococcus lactis. Applied and Environmental Microbiology, 2008, 74, 7442-7446. | 3.1 | 19 |
| 24 | Improving the accuracy of hyaluronic acid molecular weight estimation by conventional size exclusion chromatography. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2017, 1060, 255-261. | 2.3 | 18 |
| 25 | Inactivation behavior and intracellular changes in Escherichia coli during electro-oxidation process using Ti/Sbâ€“SnO2/PbO2 anode: Elucidation of the disinfection mechanism. Environmental Research, 2022, 210, 112749. | 7.5 | 17 |
| 26 | Eggshell derived hydroxyapatite microspheres for chromatographic applications by a novel dissolution - precipitation method. Ceramics International, 2021, 47, 18575-18583. | 4.8 | 16 |
| 27 | Recombinant protein purification using gradient-assisted simulated moving bed hydrophobic interaction chromatography. Part I: Selection of chromatographic system and estimation of adsorption isotherms. Journal of Chromatography A, 2011, 1218, 6396-6401. | 3.7 | 14 |
| 28 | Uncovering Novel Pathways for Enhancing Hyaluronan Synthesis in Recombinant Lactococcus lactis: Genome-Scale Metabolic Modeling and Experimental Validation. Processes, 2019, 7, 343. | 2.8 | 13 |
| 29 | Enhancement of stability of recombinant streptokinase by intracellular expression and single step purification by hydrophobic interaction chromatography. Biochemical Engineering Journal, 2008, 39, 84-90. | 3.6 | 12 |
| 30 | Evolutionary engineering of Lactobacillus bulgaricus reduces enzyme usage and enhances conversion of lignocellulosics to D-lactic acid by simultaneous saccharification and fermentation. Biotechnology for Biofuels, 2020, 13, 171. | 6.2 | 12 |
| 31 | Exploiting the diversity of streptococcal hyaluronan synthases for the production of molecular weightâ€“tailored hyaluronan. Applied Microbiology and Biotechnology, 2019, 103, 7567-7581. | 3.6 | 11 |
| 32 | Enhancement of acetyl-CoA by acetate co-utilization in recombinant Lactococcus lactis cultures enables the production of high molecular weight hyaluronic acid. Applied Microbiology and Biotechnology, 2019, 103, 6989-7001. | 3.6 | 10 |
| 33 | Cellular response to accumulation of recombinant proteins in the E. coli inner membrane: Implications for proteolysis and productivity of the secretory expression system. Biochemical Engineering Journal, 2008, 39, 74-83. | 3.6 | 9 |
| 34 | Process strategies for enhancing recombinant streptokinase production in Lactococcus lactis cultures using P170 expression system. Biochemical Engineering Journal, 2015, 93, 94-101. | 3.6 | 7 |
| 35 | Continuous refolding of L-asparaginase inclusion bodies using periodic counter-current chromatography. Journal of Chromatography A, 2022, 1662, 462746. | 3.7 | 6 |
| 36 | Theoretical and experimental investigation of chaperone effects on soluble recombinant proteins in Escherichia coli: effect of free DnaK level on temperature-induced recombinant streptokinase production. Systems and Synthetic Biology, 2008, 2, 27-48. | 1.0 | 5 |

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|---|---|---|---|
| 37 | Real-time monitoring of hyaluronic acid fermentation by in situ transflectance spectroscopy. Applied Microbiology and Biotechnology, 2018, 102, 2659-2669. | 3.6 | 5 |
| 38 | Process optimization for the rapid conversion of calcite into hydroxyapatite microspheres for chromatographic applications. Scientific Reports, 2022, 12, . | 3.3 | 5 |
| 39 | Hyaluronic acid production is enhanced by harnessing the heme-induced respiration in recombinant Lactococcus lactis cultures. Biochemical Engineering Journal, 2022, 182, 108428. | 3.6 | 2 |
| 40 | Extraction of pure component spectrum from mixture spectra containing a known diluent. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 649-653. | 0.4 | 0 |
| 41 | Design and Construction of a Synthetic Riboregulator-Based Platform for Metabolic Shunting of Pathways in Lactococcus lactis. Proceedings of the Singapore National Academy of Science, 2019, 13, 17-26. | 0.1 | 0 |