# Susan T Sharfstein

List of Publications by Year
in descending order



| 71 | 2,289 | 236612 | 223531 |
|---|---|---|---|
| papers | citations | 25 h-index | 46 g-index |

| 75 | 75 | 75 | 2612 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Repetitive, non-invasive imaging of the dopamine D2 receptor as a reporter gene in living animals. Gene Therapy, 1999, 6, 785-791. | 2.3 | 356 |
| 2 | Heparin: Past, Present, and Future. Pharmaceuticals, 2016, 9, 38. | 1.7 | 181 |
| 3 | An 'omics approach towards CHO cell engineering. Biotechnology and Bioengineering, 2013, 110, 1255-1271. | 1.7 | 106 |
| 4 | Examination of primary metabolic pathways in a murine hybridoma with carbon-13 nuclear magnetic resonance spectroscopy. Biotechnology and Bioengineering, 1994, 44, 563-585. | 1.7 | 98 |
| 5 | Sodium butyrate stimulates monoclonal antibody overâ€expression in CHO cells by improving gene accessibility. Biotechnology and Bioengineering, 2008, 100, 189-194. | 1.7 | 95 |
| 6 | Regulation of Recombinant Monoclonal Antibody Production in Chinese Hamster Ovary Cells: A Comparative Study of Gene Copy Number, mRNA Level, and Protein Expression. Biotechnology Progress, 2006, 22, 313-318. | 1.3 | 91 |
| 7 | Quantitative in vivo nuclear magnetic resonance studies of hybridoma metabolism. Biotechnology and Bioengineering, 1994, 43, 1059-1074. | 1.7 | 86 |
| 8 | Gene Delivery in Three-Dimensional Cell Cultures by Superparamagnetic Nanoparticles. ACS Nano, 2010, 4, 4733-4743. | 7.3 | 80 |
| 9 | Metabolic engineering of Chinese hamster ovary cells: Towards a bioengineered heparin. Metabolic Engineering, 2012, 14, 81-90. | 3.6 | 67 |
| 10 | Ultra-performance ion-pairing liquid chromatography with on-line electrospray ion trap mass spectrometry for heparin disaccharide analysis. Analytical Biochemistry, 2011, 415, 59-66. | 1.1 | 66 |
| 11 | The effects of culture conditions on the glycosylation of secreted human placental alkaline phosphatase produced in Chinese hamster ovary cells. Biotechnology and Bioengineering, 2008, 100, 1178-1192. | 1.7 | 62 |
| 12 | Parallel Synthesis and Screening of Polymers for Nonviral Gene Delivery. Molecular Pharmaceutics, 2009, 6, 86-97. | 2.3 | 55 |
| 13 | Recreating a human trabecular meshwork outflow system on microfabricated porous structures. Biotechnology and Bioengineering, 2013, 110, 3205-3218. | 1.7 | 51 |
| 14 | Glycoengineering in CHO Cells: Advances in Systems Biology. Biotechnology Journal, 2018, 13, e1700234. | 1.8 | 51 |
| 15 | Transcriptomic responses to sodium chlorideâ€induced osmotic stress: A study of industrial fedâ€batch CHO cell cultures. Biotechnology Progress, 2010, 26, 1104-1115. | 1.3 | 50 |
| 16 | Observations of cell size dynamics under osmotic stress. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2011, 79A, 560-569. | 1.1 | 46 |
| 17 | TGFÎ²2-induced outflow alterations in a bioengineered trabecular meshwork are offset by a rho-associated kinase inhibitor. Scientific Reports, 2016, 6, 38319. | 1.6 | 44 |
| 18 | Bioengineered glaucomatous 3D human trabecular meshwork as an in vitro disease model. Biotechnology and Bioengineering, 2016, 113, 1357-1368. | 1.7 | 42 |

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|---|---|---|---|
| 19 | Identifying bottlenecks in transient and stable production of recombinant monoclonalâ€antibody sequence variants in chinese hamster ovary cells. Biotechnology Progress, 2012, 28, 846-855. | 1.3 | 38 |
| 20 | Genome-wide analysis of the transcriptional response of murine hybridomas to osmotic shock. Biotechnology and Bioengineering, 2006, 93, 132-145. | 1.7 | 36 |
| 21 | Walking through trabecular meshwork biology: Toward engineering design of outflow physiology. Biotechnology Advances, 2014, 32, 971-983. | 6.0 | 36 |
| 22 | Hyperosmotic Stress in Murine Hybridoma Cells: Effects on Antibody Transcription, Translation, Posttranslational Processing, and the Cell Cycle. Biotechnology Progress, 2008, 20, 576-589. | 1.3 | 34 |
| 23 | Cell Attachment to Microcarriers Affects Growth, Metabolic Activity, and Culture Productivity in Bioreactor Culture. Biotechnology Progress, 2008, 23, 652-660. | 1.3 | 29 |
| 24 | 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. | 1.7 | 28 |
| 25 | Bioengineered Chinese Hamster Ovary Cells with Golgi-targeted 3-O-Sulfotransferase-1 Biosynthesize Heparan Sulfate with an Antithrombin-binding Site. Journal of Biological Chemistry, 2013, 288, 37308-37318. | 1.6 | 27 |
| 26 | A Closer Look at Schlemmâ€™s Canal Cell Physiology: Implications for Biomimetics. Journal of Functional Biomaterials, 2015, 6, 963-985. | 1.8 | 27 |
| 27 | Optimization of bioprocess conditions improves production of a CHO cellâ€derived, bioengineered heparin. Biotechnology Journal, 2015, 10, 1067-1081. | 1.8 | 26 |
| 28 | Polyphosphate Metabolism in Escherichia coli. Annals of the New York Academy of Sciences, 1994, 745, 77-91. | 1.8 | 24 |
| 29 | A biomimetic Schlemm's canal inner wall: A model to study outflow physiology, glaucoma pathology and high-throughput drug screening. Biomaterials, 2015, 65, 86-92. | 5.7 | 22 |
| 30 | Reproducibility of the high-performance liquid chromatographic fingerprints obtained from two soybean cultivars and a selected progeny. Journal of Chromatography A, 2001, 915, 61-74. | 1.8 | 18 |
| 31 | Computational investigation of stoichiometric effects, binding site heterogeneities, and selectivities of molecularly imprinted polymers. Journal of Molecular Modeling, 2016, 22, 139. | 0.8 | 18 |
| 32 | Non-protein biologic therapeutics. Current Opinion in Biotechnology, 2018, 53, 65-75. | 3.3 | 18 |
| 33 | Effects of clonal variation on growth, metabolism, and productivity in response to trophic factor stimulation: a study of Chinese hamster ovary cells producing a recombinant monoclonal antibody. Cytotechnology, 2012, 64, 27-41. | 0.7 | 17 |
| 34 | Reduced Culture Temperature Differentially Affects Expression and Biophysical Properties of Monoclonal Antibody Variants. Antibodies, 2014, 3, 253-271. | 1.2 | 17 |
| 35 | Optimized Removal of Soluble Host Cell Proteins for the Recovery of met-Human Growth Hormone Inclusion Bodies from Escherichia coli Cell Lysate Using Crossflow Microfiltration. Biotechnology Progress, 2008, 23, 667-672. | 1.3 | 15 |
| 36 | Proteogenomic Annotation of Chinese Hamsters Reveals Extensive Novel Translation Events and Endogenous Retroviral Elements. Journal of Proteome Research, 2019, 18, 2433-2445. | 1.8 | 15 |

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|---|---|---|---|
| 37 | On the dynamic modeling of mammalian cell metabolism and mAb production. Computers and Chemical Engineering, 2010, 34, 210-222. | 2.0 | 14 |
| 38 | Bioengineering murine mastocytoma cells to produce anticoagulant heparin. Glycobiology, 2014, 24, 272-280. | 1.3 | 14 |
| 39 | The effects of microcarrier culture on recombinant CHO cells under biphasic hypothermic culture conditions. Cytotechnology, 2009, 59, 81-91. | 0.7 | 13 |
| 40 | Highâ€Throughput Transfection of Interfering RNA into a 3D Cellâ€Culture Chip. Small, 2012, 8, 2091-2098. | 5.2 | 13 |
| 41 | Increased mAb production in amplified CHO cell lines is associated with increased interaction of CREB1 with transgene promoter. Current Research in Biotechnology, 2019, 1, 49-57. | 1.9 | 12 |
| 42 | Toward a bioengineered heparin. Bioengineered, 2012, 3, 227-231. | 1.4 | 11 |
| 43 | Role of epigenetics in expression of recombinant proteins from mammalian cells. Pharmaceutical Bioprocessing, 2014, 2, 403-419. | 0.8 | 11 |
| 44 | Modulation of the phosphate-starvation response in Escherichia coli by genetic manipulation of the polyphosphate pathways. , 2000, 51, 434-438. | | 10 |
| 45 | The â€˜Omics Revolution in CHO Biology: Roadmap to Improved CHO Productivity. Methods in Molecular Biology, 2017, 1603, 153-168. | 0.4 | 10 |
| 46 | In silico characterization of enantioselective molecularly imprinted binding sites. Journal of Molecular Recognition, 2018, 31, e2612. | 1.1 | 10 |
| 47 | Highâ€throughput and automation advances for accelerating singleâ€cell cloning, monoclonality and early phase clone screening steps in mammalian cell line development for biologics production. Biotechnology Progress, 2021, 37, e3208. | 1.3 | 8 |
| 48 | Advances in Cell Culture Process Development: Tools and Techniques for Improving Cell Line Development and Process Optimization. Biotechnology Progress, 2008, 24, 727-734. | 1.3 | 7 |
| 49 | Microarray platform affords improved product analysis in mammalian cell growth studies. Biotechnology Journal, 2014, 9, 386-395. | 1.8 | 7 |
| 50 | Alginate Hydrogel Microtubes for Salivary Gland Cell Organization and Cavitation. Bioengineering, 2022, 9, 38. | 1.6 | 7 |
| 51 | Characterization of gene localization and accessibility in DHFRâ€amplified CHO cells. Biotechnology Progress, 2009, 25, 296-300. | 1.3 | 6 |
| 52 | A flexible state-space approach for the modeling of metabolic networks I: Development of mathematical methods. Metabolic Engineering, 2011, 13, 125-137. | 3.6 | 6 |
| 53 | Biosimilars: Imitation Games. ACS Medicinal Chemistry Letters, 2017, 8, 690-693. | 1.3 | 6 |
| 54 | Industrial Production of Glycosaminoglycans. , 2017, , . | | 6 |

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|---|---|---|---|
| 55 | Modulation of the phosphate-starvation response in Escherichia coli by genetic manipulation of the polyphosphate pathways. , 1996, 51, 434. | | 6 |
| 56 | Techniques for Dual Staining of DNA and Intracellular Immunoglobulins in Murine Hybridoma Cells: Applications to Cell-Cycle Analysis of Hyperosmotic Cultures. Cytotechnology, 2005, 48, 15-26. | 0.7 | 5 |
| 57 | Multiplex genome editing of mammalian cells for producing recombinant heparin. Metabolic Engineering, 2022, 70, 155-165. | 3.6 | 5 |
| 58 | Molecular Response to Osmotic Shock. Cell Engineering, 2007, , 213-236. | 0.4 | 4 |
| 59 | Modulation of heparan sulfate biosynthesis by sodium butyrate in recombinant CHO cells. Cytotechnology, 2015, 67, 223-235. | 0.7 | 4 |
| 60 | Metabolic engineering of mammalian cells to produce heparan sulfates. Emerging Topics in Life Sciences, 2018, 2, 443-452. | 1.1 | 4 |
| 61 | Engineering cryoelectrospun elastin-alginate scaffolds to serve as stromal extracellular matrices. Biofabrication, 2022, 14, 035010. | 3.7 | 4 |
| 62 | PTSelectâ„¢: A post-transcriptional technology that enables rapid establishment of stable CHO cell lines and surveillance of clonal variation. Journal of Biotechnology, 2021, 325, 360-371. | 1.9 | 3 |
| 63 | Omics insights into productionâ€scale bioreactors. Biotechnology Journal, 2016, 11, 1124-1125. | 1.8 | 2 |
| 64 | Insulin production from hiPSCâ€derived pancreatic cells in a novel wicking matrix bioreactor. Biotechnology and Bioengineering, 2020, 117, 2247-2261. | 1.7 | 2 |
| 65 | Evaluation of site-specific methylation of the CMV promoter and its role in CHO cell productivity of a recombinant monoclonal antibody. Antibody Therapeutics, 2022, 5, 121-129. | 1.2 | 2 |
| 66 | A flexible state-space approach for the modeling of metabolic networks II: Advanced interrogation of hybridoma metabolism. Metabolic Engineering, 2011, 13, 138-149. | 3.6 | 1 |
| 67 | Reactivity of deposited byproducts generated from ZrO2 atomic layer deposition. Journal of Loss Prevention in the Process Industries, 2017, 45, 78-87. | 1.7 | 1 |
| 68 | A novel technique for determining magnet cleanliness - NMR spectroscopy. IEEE Transactions on Magnetics, 1987, 23, 3602-3604. | 1.2 | 0 |
| 69 | Functional differentiation and primary metabolism of mouse mammary epithelial cells in extended-batch and hollow-fiber culture. Biotechnology and Bioengineering, 1992, 40, 672-680. | 1.7 | 0 |
| 70 | Applications of Nanotechnology to Bioprocessing. , 2012, , 323-366. | | 0 |
| 71 | Applications of Nanotechnology to Bioprocessing. , 2019, , 712-730. | | 0 |