Helene Faustrup Kildegaard

List of Publications by Year
in descending order

41 papers	1,810 citations	257101 24 h-index	276539 41 g-index
53 all docs	53 docs citations	53 times ranked	1595 citing authors

#	Article	IF	Citations
1	A Chinese hamster transcription start site atlas that enables targeted editing of CHO cells. NAR Genomics and Bioinformatics, 2021, 3, lqab061.	1.5	7
2	A metabolic CRISPR-Cas9 screen in Chinese hamster ovary cells identifies glutamine-sensitive genes. Metabolic Engineering, 2021, 66, 114-122.	3.6	17
3	An optimized genome-wide, virus-free CRISPR screen for mammalian cells. Cell Reports Methods, 2021, 1, 100062.	1.4	14
4	A pooled CRISPR/AsCpf1 screen using paired gRNAs to induce genomic deletions in Chinese hamster ovary cells. Biotechnology Reports (Amsterdam, Netherlands), 2021, 31, e00649.	2.1	5
5	Awakening dormant glycosyltransferases in CHO cells with CRISPRa. Biotechnology and Bioengineering, 2020, 117, 593-598.	1.7	27
6	Genome-scale reconstructions of the mammalian secretory pathway predict metabolic costs and limitations of protein secretion. Nature Communications, 2020, 11, 68.	5.8	74
7	Knockout of sialidase and pro-apoptotic genes in Chinese hamster ovary cells enables the production of recombinant human erythropoietin in fed-batch cultures. Metabolic Engineering, 2020, 57, 182-192.	3.6	16
8	Multiplex secretome engineering enhances recombinant protein production and purity. Nature Communications, 2020, 11, 1908.	5.8	63
9	Reprogramming AA catabolism in CHO cells with CRISPR/Cas9 genome editing improves cell growth and reduces byproduct secretion. Metabolic Engineering, 2019, 56, 120-129.	3.6	22
10	BCAT1 and BCAT2 disruption in CHO cells has cell line-dependent effects. Journal of Biotechnology, 2019, 306, 24-31.	1.9	5
11	Genetic engineering approaches to improve posttranslational modification of biopharmaceuticals in different production platforms. Biotechnology and Bioengineering, 2019, 116, 2778-2796.	1.7	34
12	Reduced apoptosis in Chinese hamster ovary cells via optimized CRISPR interference. Biotechnology and Bioengineering, 2019, 116, 1813-1819.	1.7	39
13	Mitigating Clonal Variation in Recombinant Mammalian Cell Lines. Trends in Biotechnology, 2019, 37, 931-942.	4.9	41
14	CRISPR/Cas9 as a Genome Editing Tool for Targeted Gene Integration in CHO Cells. Methods in Molecular Biology, 2019, 1961, 213-232.	0.4	12
15	Systematic Evaluation of Site-Specific Recombinant Gene Expression for Programmable Mammalian Cell Engineering. ACS Synthetic Biology, 2019, 8, 758-774.	1.9	32
16	Glyco-engineered CHO cell lines producing alpha-1-antitrypsin and C1 esterase inhibitor with fully humanized N-glycosylation profiles. Metabolic Engineering, 2019, 52, 143-152.	3.6	42
17	Using Titer and Titer Normalized to Confluence Are Complementary Strategies for Obtaining Chinese Hamster Ovary Cell Lines with High Volumetric Productivity of Etanercept. Biotechnology Journal, 2018, 13, e1700216.	1.8	16
18	Enhanced Genome Editing Tools For Multiâ€Gene Deletion Knockâ€Out Approaches Using Paired CRISPR sgRNAs in CHO Cells. Biotechnology Journal, 2018, 13, e1700211.	1.8	34

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19	Baicalein Reduces Oxidative Stress in CHO Cell Cultures and Improves Recombinant Antibody Productivity. Biotechnology Journal, 2018, 13, e1700425.	1.8	27
20	Revealing Key Determinants of Clonal Variation in Transgene Expression in Recombinant CHO Cells Using Targeted Genome Editing. ACS Synthetic Biology, 2018, 7, 2867-2878.	1.9	39
21	Minimizing Clonal Variation during Mammalian Cell Line Engineering for Improved Systems Biology Data Generation. ACS Synthetic Biology, 2018, 7, 2148-2159.	1.9	51
22	CRISPR/Cas9â€Multiplexed Editing of Chinese Hamster Ovary B4Galâ€T1, 2, 3, and 4 Tailors Nâ€Glycan Profiles of Therapeutics and Secreted Host Cell Proteins. Biotechnology Journal, 2018, 13, e1800111.	1.8	27
23	Ribosome profiling-guided depletion of an mRNA increases cell growth rate and protein secretion. Scientific Reports, 2017, 7, 40388.	1.6	48
24	Engineer Medium and Feed for Modulating N-Glycosylation of Recombinant Protein Production in CHO Cell Culture. Methods in Molecular Biology, 2017, 1603, 209-226.	0.4	3
25	Application of CRISPR/Cas9 Genome Editing to Improve Recombinant Protein Production in CHO Cells. Methods in Molecular Biology, 2017, 1603, 101-118.	0.4	20
26	Cell Factory Engineering. Cell Systems, 2017, 4, 262-275.	2.9	96
27	Improving the secretory capacity of Chinese hamster ovary cells by ectopic expression of effector genes: Lessons learned and future directions. Biotechnology Advances, 2017, 35, 64-76.	6.0	58
28	Network reconstruction of the mouse secretory pathway applied on CHO cell transcriptome data. BMC Systems Biology, 2017, 11, 37.	3.0	14
29	Glycoprofiling effects of media additives on IgG produced by CHO cells in fedâ€batch bioreactors. Biotechnology and Bioengineering, 2016, 113, 359-366.	1.7	38
30	Case study on human Î±1â€antitrypsin: Recombinant protein titers obtained by commercial ELISA kits are inaccurate. Biotechnology Journal, 2016, 11, 1648-1656.	1.8	6
31	Endoplasmic reticulumâ€directed recombinant mRNA displays subcellular localization equal to endogenous mRNA during transient expression in CHO cells. Biotechnology Journal, 2016, 11, 1362-1367.	1.8	6
32	Accelerated homologyâ€directed targeted integration of transgenes in Chinese hamster ovary cells via CRISPR/Cas9 and fluorescent enrichment. Biotechnology and Bioengineering, 2016, 113, 2518-2523.	1.7	58
33	Multiâ€omic profiling Âof EPOâ€producing Chinese hamster ovary cell panel reveals metabolic adaptation to heterologous protein production. Biotechnology and Bioengineering, 2015, 112, 2373-2387.	1.7	20
34	CRISPR/Cas9â€mediated genome engineering of CHO cell factories: Application and perspectives. Biotechnology Journal, 2015, 10, 979-994.	1.8	104
35	Versatile microscale screening platform for improving recombinant protein productivity in Chinese hamster ovary cells. Scientific Reports, 2015, 5, 18016.	1.6	23
36	Site-specific integration in CHO cells mediated by CRISPR/Cas9 and homology-directed DNA repair pathway. Scientific Reports, 2015, 5, 8572.	1.6	168

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37	Oneâ€step generation of triple knockout CHO cell lines using CRISPR/Cas9 and fluorescent enrichment. Biotechnology Journal, 2015, 10, 1446-1456.	1.8	108
38	Toward genome-scale models of the Chinese hamster ovary cells: incentives, status and perspectives. Pharmaceutical Bioprocessing, 2014, 2, 437-448.	0.8	13
39	Accelerating genome editing in CHO cells using CRISPR Cas9 and CRISPy, a webâ€based target finding tool. Biotechnology and Bioengineering, 2014, 111, 1604-1616.	1.7	167
40	A Versatile System for USER Cloning-Based Assembly of Expression Vectors for Mammalian Cell Engineering. PLoS ONE, 2014, 9, e96693.	1.1	26
41	The emerging CHO systems biology era: harnessing the â€˜omics revolution for biotechnology. Current Opinion in Biotechnology, 2013, 24, 1102-1107.	3.3	159