Jae-seong Jae Seong Lee

List of Publications by Year
in descending order

40 papers	1,434 citations	394390 19 h-index	345203 36 g-index
45 all docs	45 docs citations	45 times ranked	1341 citing authors

#	Article	IF	Citations
1	A Consensus Genome-scale Reconstruction of Chinese Hamster Ovary Cell Metabolism. Cell Systems, 2016, 3, 434-443.e8.	6.2	205
2	Site-specific integration in CHO cells mediated by CRISPR/Cas9 and homology-directed DNA repair pathway. Scientific Reports, 2015, 5, 8572.	3.3	168
3	Oneâ€step generation of triple knockout CHO cell lines using CRISPR/Cas9 and fluorescent enrichment. Biotechnology Journal, 2015, 10, 1446-1456.	3.5	108
4	CRISPR/Cas9â€mediated genome engineering of CHO cell factories: Application and perspectives. Biotechnology Journal, 2015, 10, 979-994.	3.5	104
5	Influence of co-down-regulation of caspase-3 and caspase-7 by siRNAs on sodium butyrate-induced apoptotic cell death of Chinese hamster ovary cells producing thrombopoietin. Metabolic Engineering, 2007, 9, 452-464.	7.0	68
6	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.	3.3	58
7	Minimizing Clonal Variation during Mammalian Cell Line Engineering for Improved Systems Biology Data Generation. ACS Synthetic Biology, 2018, 7, 2148-2159.	3.8	51
8	Monitoring of autophagy in Chinese hamster ovary cells using flow cytometry. Methods, 2012, 56, 375-382.	3.8	45
9	Antiâ€cell death engineering of CHO cells: Coâ€overexpression of Bclâ€2 for apoptosis inhibition, Beclinâ€1 for autophagy induction. Biotechnology and Bioengineering, 2013, 110, 2195-2207.	3.3	43
10	Mitigating Clonal Variation in Recombinant Mammalian Cell Lines. Trends in Biotechnology, 2019, 37, 931-942.	9.3	41
11	Revealing Key Determinants of Clonal Variation in Transgene Expression in Recombinant CHO Cells Using Targeted Genome Editing. ACS Synthetic Biology, 2018, 7, 2867-2878.	3.8	39
12	Reduced apoptosis in Chinese hamster ovary cells via optimized CRISPR interference. Biotechnology and Bioengineering, 2019, 116, 1813-1819.	3.3	39
13	Rapamycin treatment inhibits CHO cell death in a serumâ€free suspension culture by autophagy induction. Biotechnology and Bioengineering, 2012, 109, 3093-3102.	3.3	35
14	Effect of sodium butyrate on autophagy and apoptosis in Chinese hamster ovary cells. Biotechnology Progress, 2012, 28, 349-357.	2.6	34
15	Autophagy and its implication in Chinese hamster ovary cell culture. Biotechnology Letters, 2013, 35, 1753-1763.	2.2	34
16	Autophagy and apoptosis of recombinant Chinese hamster ovary cells during fedâ€batch culture: Effect of nutrient supplementation. Biotechnology and Bioengineering, 2011, 108, 2182-2192.	3.3	33
17	Awakening dormant glycosyltransferases in CHO cells with CRISPRa. Biotechnology and Bioengineering, 2020, 117, 593-598.	3.3	27
18	Current state and perspectives on erythropoietin production. Applied Microbiology and Biotechnology, 2012, 95, 1405-1416.	3.6	23

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19	Comprehensive Analysis of Genomic Safe Harbors as Target Sites for Stable Expression of the Heterologous Gene in HEK293 Cells. ACS Synthetic Biology, 2020, 9, 1263-1269.	3.8	23
20	Application of CRISPR/Cas9 Genome Editing to Improve Recombinant Protein Production in CHO Cells. Methods in Molecular Biology, 2017, 1603, 101-118.	0.9	20
21	Differential induction of autophagy in caspase-3/7 down-regulating and Bcl-2 overexpressing recombinant CHO cells subjected to sodium butyrate treatment. Journal of Biotechnology, 2012, 161, 34-41.	3.8	19
22	CHO Cell Line Development and Engineering via Site-specific Integration: Challenges and Opportunities. Biotechnology and Bioprocess Engineering, 2020, 25, 633-645.	2.6	18
23	Protein reference mapping of dihydrofolate reductaseâ€deficient CHO DG44 cell lines using 2â€dimensional electrophoresis. Proteomics, 2010, 10, 2292-2302.	2.2	17
24	A metabolic CRISPR-Cas9 screen in Chinese hamster ovary cells identifies glutamine-sensitive genes. Metabolic Engineering, 2021, 66, 114-122.	7.0	17
25	Modular 5â€²-UTR hexamers for context-independent tuning of protein expression in eukaryotes. Nucleic Acids Research, 2018, 46, e127.	14.5	15
26	Overexpression of PACEsol improves BMP-7 processing in recombinant CHO cells. Journal of Biotechnology, 2013, 164, 336-339.	3.8	14
27	Chemical inhibition of autophagy: Examining its potential to increase the specific productivity of recombinant CHO cell lines. Biotechnology and Bioengineering, 2016, 113, 1953-1961.	3.3	14
28	Optimized CRISPR/Cas9 strategy for homologyâ€directed multiple targeted integration of transgenes in CHO cells. Biotechnology and Bioengineering, 2020, 117, 1895-1903.	3.3	14
29	An optimized genome-wide, virus-free CRISPR screen for mammalian cells. Cell Reports Methods, 2021, 1, 100062.	2.9	14
30	CRISPR/Cas9 as a Genome Editing Tool for Targeted Gene Integration in CHO Cells. Methods in Molecular Biology, 2019, 1961, 213-232.	0.9	12
31	Estimation of autophagy pathway genes for autophagy induction: Overexpression of Atg9A does not induce autophagy in recombinant Chinese hamster ovary cells. Biochemical Engineering Journal, 2012, 68, 221-226.	3.6	11
32	Streamlined Human Cell-Based Recombinase-Mediated Cassette Exchange Platform Enables Multigene Expression for the Production of Therapeutic Proteins. ACS Synthetic Biology, 2021, 10, 1715-1727.	3.8	10
33	Endogenous BiP reporter system for simultaneous identification of ER stress and antibody production in Chinese hamster ovary cells. Metabolic Engineering, 2022, 72, 35-45.	7.0	9
34	Untangling the mechanism of 3â€methyladenine in enhancing the specific productivity: Transcriptome analysis of recombinant Chinese hamster ovary cells treated with 3â€methyladenine. Biotechnology and Bioengineering, 2018, 115, 2243-2254.	3.3	8
35	Controlling Ratios of Plasmid-Based Double Cut Donor and CRISPR/Cas9 Components to Enhance Targeted Integration of Transgenes in Chinese Hamster Ovary Cells. International Journal of Molecular Sciences, 2021, 22, 2407.	4.1	8
36	Improving the secretory capacity of CHO producer cells: The effect of controlled Blimp1 expression, a master transcription factor for plasma cells. Metabolic Engineering, 2022, 69, 73-86.	7.0	8

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37	Recombinase-mediated cassette exchange-based screening of a CRISPR/Cas9 library for enhanced recombinant protein production in human embryonic kidney cells: Improving resistance to hyperosmotic stress. Metabolic Engineering, 2022, 72, 247-258.	7.0	5
38	Endogenous p21-Dependent Transgene Control for CHO Cell Engineering. ACS Synthetic Biology, 2020, 9, 1572-1580.	3.8	4
39	Enhancement of Transgene Expression by Mild Hypothermia Is Promoter Dependent in HEK293 Cells. Life, 2021, 11, 901.	2.4	4
40	Hydroxyurea selection for enhancement of homology-directed targeted integration of transgenes in CHO cells. New Biotechnology, 2021, 62, 26-31.	4.4	2