Sun-gu Lee

List of Publications by Year
in descending order

72 papers	1,220 citations	471061 17 h-index	395343 33 g-index
75 all docs	75 docs citations	75 times ranked	1938 citing authors

#	Article	IF	Citations
1	In silico Study on Binding Specificities of Cellular Retinol Binding Protein and Its Q108R Mutant. Biotechnology and Bioprocess Engineering, 2022, 27, 126-134.	1.4	3
2	Effect of molecular properties of the protein-ligand complex on the prediction accuracy of AutoDock. Journal of Molecular Graphics and Modelling, 2021, 106, 107921.	1.3	7
3	Structural Study on the Impact of S239D/I332E Mutations in the Binding of Fc and FcÎ³RIIIa. Biotechnology and Bioprocess Engineering, 2021, 26, 985-992.	1.4	3
4	Effect of ligand torsion number on the AutoDock mediated prediction of protein-ligand binding affinity. Journal of Industrial and Engineering Chemistry, 2020, 83, 359-365.	2.9	19
5	Assessment of Computational Modeling of Fc-Fc Receptor Binding Through Protein-protein Docking Tool. Biotechnology and Bioprocess Engineering, 2020, 25, 734-741.	1.4	11
6	Combinatorial Effect of Ligand and Ligand-Binding Site Hydrophobicities on Binding Affinity. Journal of Chemical Information and Modeling, 2020, 60, 1678-1684.	2.5	4
7	In Silico Characterization of the Binding Modes of Surfactants with Bovine Serum Albumin. Scientific Reports, 2019, 9, 10643.	1.6	32
8	Identification of common and distinct features of ligand-binding sites in kernel and outlier lipocalins. Journal of Industrial and Engineering Chemistry, 2019, 78, 344-351.	2.9	1
9	In vivo Protein Evolution, Next Generation Protein Engineering Strategy: from Random Approach to Target-specific Approach. Biotechnology and Bioprocess Engineering, 2019, 24, 85-94.	1.4	12
10	Overexpression of câ€type cytochrome, CymA in <i>Shewanella oneidensis</i> MRâ€1 for enhanced bioelectricity generation and cell growth in a microbial fuel cell. Journal of Chemical Technology and Biotechnology, 2019, 94, 2115-2122.	1.6	44
11	RiSLnet: Rapid identification of smart mutant libraries using protein structure network. Application to thermal stability enhancement. Biotechnology and Bioengineering, 2019, 116, 250-259.	1.7	6
12	Exploring the differences and similarities between urea and thermally driven denaturation of bovine serum albumin: intermolecular forces and solvation preferences. Journal of Molecular Modeling, 2018, 24, 75.	0.8	27
13	Computational screening of potential non-immunoglobulin scaffolds using overlapped conserved residues (OCR)-based fingerprints. Korean Journal of Chemical Engineering, 2018, 35, 717-724.	1.2	2
14	Comparative Analysis of TM and Cytoplasmic Î²-barrel Conformations Using Joint Descriptor. Scientific Reports, 2018, 8, 14185.	1.6	2
15	In Silico Study on Retinoid-binding Modes in Human RBP and ApoD Lipocalins. Biotechnology and Bioprocess Engineering, 2018, 23, 158-167.	1.4	2
16	Sequence and Structural Features of Subsite Residues in GH10 and GH11 Xylanases. Biotechnology and Bioprocess Engineering, 2018, 23, 311-318.	1.4	5
17	Validation on the molecular docking efficiency of lipocalin family of proteins. Journal of Industrial and Engineering Chemistry, 2018, 67, 293-300.	2.9	5
18	Joint-based description of protein structure: its application to the geometric characterization of membrane proteins. Scientific Reports, 2017, 7, 1056.	1.6	3

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19	Characterization on the aggregation of self-aggregating green fluorescent protein variant. Journal of Industrial and Engineering Chemistry, 2017, 46, 337-341.	2.9	0
20	Simultaneously Enhancing the Stability and Catalytic Activity of Multimeric Lysine Decarboxylase CadA by Engineering Interface Regions for Enzymatic Production of Cadaverine at High Concentration of Lysine. Biotechnology Journal, 2017, 12, 1700278.	1.8	30
21	Measuring the Conformational Distance of GPCR-related Proteins Using a Joint-based Descriptor. Scientific Reports, 2017, 7, 15205.	1.6	1
22	Engineering an aldehyde dehydrogenase toward its substrates, 3-hydroxypropanal and NAD+, for enhancing the production of 3-hydroxypropionic acid. Scientific Reports, 2017, 7, 17155.	1.6	19
23	Separation efficiency of freeâ€solution conjugated electrophoresis with dragâ€tags incorporating a synthetic amino acid. Electrophoresis, 2016, 37, 818-825.	1.3	0
24	Generation of efficient fingerprint for GFP-like fold and computational identification of potential GFP-like homologs. Biotechnology and Bioprocess Engineering, 2016, 21, 712-719.	1.4	2
25	Engineering a beta-turn in green fluorescent protein to a foreign loop. Journal of Industrial and Engineering Chemistry, 2016, 33, 330-335.	2.9	1
26	Identification of an Ideal-like Fingerprint for a Protein Fold using Overlapped Conserved Residues based Approach. Scientific Reports, 2015, 4, 5643.	1.6	6
27	Stable isotopic labelingâ€based quantitative targeted glycomics (iâ€<scp>QT</scp>a<scp>G</scp>). Biotechnology Progress, 2015, 31, 840-848.	1.3	12
28	Identification of novel cytochrome P450 homologs using overlapped conserved residues based approach. Biotechnology and Bioprocess Engineering, 2015, 20, 431-438.	1.4	4
29	Identification of Novel Cupredoxin Homologs Using Overlapped Conserved Residues Based Approach. Journal of Microbiology and Biotechnology, 2015, 25, 127-136.	0.9	5
30	NADH-dependent lactate dehydrogenase from Alcaligenes eutrophus H16 reduces 2-oxoadipate to 2-hydroxyadipate. Biotechnology and Bioprocess Engineering, 2014, 19, 1048-1057.	1.4	6
31	A variant of green fluorescent protein exclusively deposited to active intracellular inclusion bodies. Microbial Cell Factories, 2014, 13, 68.	1.9	12
32	Structural and sequence features of two residue turns in beta-hairpins. Proteins: Structure, Function and Bioinformatics, 2014, 82, 1721-1733.	1.5	14
33	Redesigning the type II' <i>Î²</i> -turn in green fluorescent protein to type I': Implications for folding kinetics and stability. Proteins: Structure, Function and Bioinformatics, 2014, 82, 2812-2822.	1.5	3
34	Modulation of intracellular protein activity at level of protein folding by beta-turn engineering. Biotechnology and Bioprocess Engineering, 2014, 19, 433-441.	1.4	1
35	Siteâ€specific reversible immobilization and purification of Hisâ€tagged protein on poly(2â€acetamidoacrylic) Tj ETQq1 1 0.784314 rgB	1.6	7
36	A comparative study on the stability and structure of two different green fluorescent proteins in organic co-solvent systems. Biotechnology and Bioprocess Engineering, 2013, 18, 342-349.	1.4	10

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37	In silico study on the effect of surface lysines and arginines on the electrostatic interactions and protein stability. Biotechnology and Bioprocess Engineering, 2013, 18, 18-26.	1.4	17
38	Multivalent (Nitrilotriacetic Acid)â€Endâ€Functionalized Polystyrenes by ATRP and Their Selfâ€Assembly. Macromolecular Chemistry and Physics, 2013, 214, 2027-2035.	1.1	2
39	Deciphering the factors responsible for the stability of a GFP variant resistant to alkaline pH using molecular dynamics simulations. Biotechnology and Bioprocess Engineering, 2013, 18, 858-867.	1.4	3
40	Modulation of protein stability and aggregation properties by surface charge engineering. Molecular BioSystems, 2013, 9, 2379.	2.9	32
41	In situ formation of polymerâ€“protein hybrid spherical aggregates from (nitrilotriacetic) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 5	1.9	16
42	One-step immobilization and purification of his-tagged enzyme using poly(2-acetamidoacrylic acid) hydrogel. Macromolecular Research, 2013, 21, 5-9.	1.0	12
43	Generation of anti-c-met single domain antibody fragment based on human stable frameworks. Biotechnology and Bioprocess Engineering, 2012, 17, 1120-1127.	1.4	0
44	A Study on the Effect of Surface Lysine to Arginine Mutagenesis on Protein Stability and Structure Using Green Fluorescent Protein. PLoS ONE, 2012, 7, e40410.	1.1	198
45	(Nitrilotriacetic Acid)-End-Functionalized Polystyrenes Synthesized by ATRP. ACS Symposium Series, 2012, , 303-314.	0.5	0
46	Soft Immobilization of Proteins onto Singleâ€Walled Carbon Nanotubes through Nickel Complexed Nitrilotriacetic Acidâ€End Functionalized Polystyrenes. Israel Journal of Chemistry, 2012, 52, 359-363.	1.0	5
47	Encapsulation of Nanoparticles Using Nitrilotriacetic Acid Endâ€Functionalized Polystyrenes and Their Application for the Separation of Proteins. Advanced Functional Materials, 2012, 22, 4032-4037.	7.8	17
48	Conjugation of Proteins by Installing BIO-Orthogonally Reactive Groups at Their N-Termini. PLoS ONE, 2012, 7, e46741.	1.1	18
49	Deletional Protein Engineering Based on Stable Fold. PLoS ONE, 2012, 7, e51510.	1.1	8
50	Enhancing the thermal stability of a single-chain Fv fragment by in vivo global fluorination of the proline residues. Molecular BioSystems, 2011, 7, 258-265.	2.9	26
51	Synthesis of Well-Defined (Nitrilotriacetic Acid)-End-Functionalized Polystyrenes and Their Bioconjugation with Histidine-Tagged Green Fluorescent Proteins. Macromolecules, 2011, 44, 4672-4680.	2.2	30
52	Biosynthetic substitution of tyrosine in green fluorescent protein with its surrogate fluorotyrosine in Escherichia coli. Biotechnology Letters, 2011, 33, 2201-2207.	1.1	17
53	Development of a Selective, Sensitive, and Reversible Biosensor by the Genetic Incorporation of a Metalâ€Binding Site into Green Fluorescent Protein. Angewandte Chemie - International Edition, 2011, 50, 6534-6537.	7.2	55
54	In vivo Production of Functional Singleâ€Chain Fv Fragment with an Nâ€Terminalâ€Specific Bioâ€orthogonal Reactive Group. ChemBioChem, 2010, 11, 498-501.	1.3	5

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55	Engineering Protein Sequence Composition for Folding Robustness Renders Efficient Noncanonical Amino acid Incorporations. ChemBioChem, 2010, 11, 2521-2524.	1.3	33
56	Redesigning of antiâ€câ€Met single chain Fv antibody for the cytoplasmic folding and its structural analysis. Biotechnology and Bioengineering, 2010, 106, 367-375.	1.7	18
57	Importance of expression system in the production of unnatural recombinant proteins in Escherichia coli. Biotechnology and Bioprocess Engineering, 2009, 14, 257-265.	1.4	20
58	Biological synthesis of alkyne-terminated telechelic recombinant protein. Macromolecular Research, 2009, 17, 424-429.	1.0	1
59	Colorimetric monitoring of the activity of recombinant Escherichia coli expressing styrene monooxygenase. Journal of Industrial and Engineering Chemistry, 2009, 15, 520-523.	2.9	2
60	Comparison of P aprE , P amyE , and P P43 promoter strength for Î²-galactosidase and staphylokinase expression in Bacillus subtilis. Biotechnology and Bioprocess Engineering, 2008, 13, 313-318.	1.4	16
61	Construction and characterization of a recombinant whole-cell biocatalyst of Escherichia coli expressing styrene monooxygenase under the control of arabinose promoter. Biotechnology and Bioprocess Engineering, 2008, 13, 69-76.	1.4	11
62	The effect of the cspA 5â€²-untranslated region on recombinant protein production at low temperature. Biotechnology and Bioprocess Engineering, 2008, 13, 366-371.	1.4	4
63	Improving the growth rate ofEscherichia coli DH5Î± at low temperature through engineering of GroEL/S chaperone system. Biotechnology and Bioengineering, 2008, 99, 515-520.	1.7	6
64	Control of acetate production rate in Escherichia coli by regulating expression of single-copy pta using lacI(Q) in multicopy plasmid. Journal of Microbiology and Biotechnology, 2008, 18, 334-7.	0.9	2
65	Improving the productivity of single-chain Fv antibody against c-Met by rearranging the order of its variable domains. Journal of Microbiology and Biotechnology, 2008, 18, 1186-90.	0.9	22
66	Functional expression of single-chain variable fragment antibody against c-Met in the cytoplasm of Escherichia coli. Protein Expression and Purification, 2006, 47, 203-209.	0.6	48
67	Production of (S)-styrene oxide using styrene oxide isomerase negative mutant of Pseudomonas putida SN1. Enzyme and Microbial Technology, 2006, 39, 1264-1269.	1.6	17
68	Development of recombinantPseudomonas putida containing homologous styrene monooxygenase genes for the production of (S)-styrene oxide. Biotechnology and Bioprocess Engineering, 2006, 11, 530-537.	1.4	13
69	Design of artificial cell-cell communication using gene and metabolic networks. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 2299-2304.	3.3	151
70	Production of cytidine 5?-monophosphateN-acetylneuraminic acid using recombinantEscherichia coli as a biocatalyst. Biotechnology and Bioengineering, 2002, 80, 516-524.	1.7	50
71	Title is missing!. Biotechnology Letters, 2000, 22, 819-823.	1.1	8
72	Production of sialyltrisaccharides using Î²-galactosidase andtrans-sialidase in one pot. Biotechnology and Bioprocess Engineering, 2000, 5, 215-218.	1.4	3