Louis Y P Luk

List of Publications by Year
in descending order

52 papers	1,372 citations	361045 20 h-index	360668 35 g-index
58 all docs	58 docs citations	58 times ranked	1699 citing authors

#	Article	IF	Citations
1	Cell-penetrating peptide sequence and modification dependent uptake and subcellular distribution of green florescent protein in different cell lines. Scientific Reports, 2019, 9, 6298.	1.6	173
2	Unraveling the role of protein dynamics in dihydrofolate reductase catalysis. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 16344-16349.	3.3	119
3	Mechanistic Studies on Norcoclaurine Synthase of Benzylisoquinoline Alkaloid Biosynthesis:â€‰ An Enzymatic Pictetâ^Spengler Reaction. Biochemistry, 2007, 46, 10153-10161.	1.2	111
4	Using genetically incorporated unnatural amino acids to control protein functions in mammalian cells. Essays in Biochemistry, 2019, 63, 237-266.	2.1	72
5	A Cope Rearrangement in the Reaction Catalyzed by Dimethylallyltryptophan Synthase?. Journal of the American Chemical Society, 2011, 133, 12342-12345.	6.6	70
6	Mechanism of Dimethylallyltryptophan Synthase: Evidence for a Dimethylallyl Cation Intermediate in an Aromatic Prenyltransferase Reaction. Journal of the American Chemical Society, 2009, 131, 13932-13933.	6.6	60
7	Increased Dynamic Effects in a Catalytically Compromised Variant of Escherichia coli Dihydrofolate Reductase. Journal of the American Chemical Society, 2013, 135, 18689-18696.	6.6	56
8	Condensation of 2-((Alkylthio)(aryl)methylene)malononitrile with 1,2-Aminothiol as a Novel Bioorthogonal Reaction for Site-Specific Protein Modification and Peptide Cyclization. Journal of the American Chemical Society, 2020, 142, 5097-5103.	6.6	48
9	Comparative biological evaluation and G-quadruplex interaction studies of two new families of organometallic gold(I) complexes featuring N-heterocyclic carbene and alkynyl ligands. Journal of Inorganic Biochemistry, 2020, 202, 110844.	1.5	42
10	Protein motions and dynamic effects in enzyme catalysis. Physical Chemistry Chemical Physics, 2015, 17, 30817-30827.	1.3	41
11	Use of an asparaginyl endopeptidase for chemo-enzymatic peptide and protein labeling. Chemical Science, 2020, 11, 5881-5888.	3.7	39
12	Reactivity and Selectivity of Iminium Organocatalysis Improved by a Protein Host. Angewandte Chemie - International Edition, 2018, 57, 12478-12482.	7.2	38
13	Chemical Ligation and Isotope Labeling to Locate Dynamic Effects during Catalysis by Dihydrofolate Reductase. Angewandte Chemie - International Edition, 2015, 54, 9016-9020.	7.2	35
14	Protein Isotope Effects in Dihydrofolate Reductase From Geobacillus stearothermophilus Show Entropicâ€“Enthalpic Compensatory Effects on the Rate Constant. Journal of the American Chemical Society, 2014, 136, 17317-17323.	6.6	34
15	Cyanine dye mediated mitochondrial targeting enhances the anti-cancer activity of small-molecule cargoes. Chemical Communications, 2020, 56, 4672-4675.	2.2	32
16	Approaches for peptide and protein cyclisation. Organic and Biomolecular Chemistry, 2021, 19, 3983-4001.	1.5	32
17	A Versatile Disulfide-Driven Recycling System for NADP⁺ with High Cofactor Turnover Number. ACS Catalysis, 2017, 7, 1025-1029.	5.5	27
18	Different Dynamical Effects in Mesophilic and Hyperthermophilic Dihydrofolate Reductases. Journal of the American Chemical Society, 2014, 136, 6862-6865.	6.6	26

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19	Minimization of dynamic effects in the evolution of dihydrofolate reductase. Chemical Science, 2016, 7, 3248-3255.	3.7	25
20	Exploring the Chemoselectivity towards Cysteine Arylation by Cyclometallated Au^{III} Compounds: New Mechanistic Insights. ChemBioChem, 2020, 21, 3071-3076.	1.3	25
21	Asparaginyl endopeptidases: enzymology, applications and limitations. Organic and Biomolecular Chemistry, 2021, 19, 5048-5062.	1.5	25
22	Reaction Mechanism of Organocatalytic Michael Addition of Nitromethane to Cinnamaldehyde: A Case Study on Catalyst Regeneration and Solvent Effects. Journal of Physical Chemistry A, 2018, 122, 451-459.	1.1	20
23	Site-specific His/Asp phosphoproteomic analysis of prokaryotes reveals putative targets for drug resistance. BMC Microbiology, 2017, 17, 123.	1.3	18
24	Thermal Adaptation of Dihydrofolate Reductase from the Moderate Thermophile Geobacillus stearothermophilus. Biochemistry, 2014, 53, 2855-2863.	1.2	17
25	Î²1-subunitâ€“induced structural rearrangements of the Ca ²⁺ - and voltage-activated K ⁺ (BK) channel. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E3231-9.	3.3	14
26	Reactivity and Selectivity of Iminium Organocatalysis Improved by a Protein Host. Angewandte Chemie, 2018, 130, 12658-12662.	1.6	14
27	Acetylome of Acinetobacter baumannii SK17 Reveals a Highly-Conserved Modification of Histone-Like Protein HU. Frontiers in Molecular Biosciences, 2017, 4, 77.	1.6	13
28	Role of the Occluded Conformation in Bacterial Dihydrofolate Reductases. Biochemistry, 2014, 53, 4761-4768.	1.2	12
29	Reduction of Folate by Dihydrofolate Reductase from Thermotoga maritima. Biochemistry, 2017, 56, 1879-1886.	1.2	12
30	Rearrangements in the mechanisms of the indole alkaloid prenyltransferases. Pure and Applied Chemistry, 2013, 85, 1935-1948.	0.9	11
31	Switchable genome editing via genetic code expansion. Scientific Reports, 2018, 8, 10051.	1.6	11
32	Isotope Substitution of Promiscuous Alcohol Dehydrogenase Reveals the Origin of Substrate Preference in the Transition State. Angewandte Chemie - International Edition, 2018, 57, 3128-3131.	7.2	10
33	Applying switchable Cas9 variants to in vivo gene editing for therapeutic applications. Cell Biology and Toxicology, 2020, 36, 17-29.	2.4	10
34	Transfer hydrogenations catalyzed by streptavidin-hosted secondary amine organocatalysts. Chemical Communications, 2021, 57, 1919-1922.	2.2	10
35	Effect of Dimerization on Dihydrofolate Reductase Catalysis. Biochemistry, 2013, 52, 3881-3887.	1.2	9
36	Streptavidin-Hosted Organocatalytic Aldol Addition. Molecules, 2020, 25, 2457.	1.7	9

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37	Reactions of biologically inspired hydride sources with B(C ₆ F ₅) ₃. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2017, 375, 20170009.	1.6	7
38	Combined Theoretical and Experimental Study to Unravel the Differences in Promiscuous Amidase Activity of Two Nonhomologous Enzymes. ACS Catalysis, 2021, 11, 8635-8644.	5.5	6
39	Computational design of an amidase by combining the best electrostatic features of two promiscuous hydrolases. Chemical Science, 2022, 13, 4779-4787.	3.7	6
40	Enabling protein-hosted organocatalytic transformations. RSC Advances, 2020, 10, 16147-16161.	1.7	5
41	Chemoenzymatic Assembly of Isotopically Labeled Folates. Journal of the American Chemical Society, 2017, 139, 13047-13054.	6.6	4
42	Carbapenems as water soluble organocatalysts. Wellcome Open Research, 2018, 3, 107.	0.9	3
43	Transferability of N-terminal mutations of pyrrolysyl-tRNA synthetase in one species to that in another species on unnatural amino acid incorporation efficiency. Amino Acids, 2021, 53, 89-96.	1.2	3
44	Spatioâ€temporal control of cell death by selective delivery of photoâ€activatable proteins. ChemBioChem, 2022, , .	1.3	3
45	Chemical Ligation and Isotope Labeling to Locate Dynamic Effects. Methods in Enzymology, 2017, 596, 23-41.	0.4	2
46	Isotope Substitution of Promiscuous Alcohol Dehydrogenase Reveals the Origin of Substrate Preference in the Transition State. Angewandte Chemie, 2018, 130, 3182-3185.	1.6	2
47	Electric Field Measurements Reveal the Pivotal Role of Cofactorâ€“Substrate Interaction in Dihydrofolate Reductase Catalysis. ACS Catalysis, 2020, 10, 7907-7914.	5.5	2
48	The role of streptavidin and its variants in catalysis by biotinylated secondary amines. Organic and Biomolecular Chemistry, 2021, 19, 10424-10431.	1.5	2
49	Loss of Hyperconjugative Effects Drives Hydride Transfer during Dihydrofolate Reductase Catalysis. ACS Catalysis, 2019, 9, 10343-10349.	5.5	1
50	Cryoâ€kinetics Reveal Dynamic Effects on the Chemistry of Human Dihydrofolate Reductase. ChemBioChem, 2021, 22, 2410-2414.	1.3	1
51	Protein Motions, Dynamic Effects and Thermal Stability in Dihydrofolate Reductase from the Hyperthermophile Thermotoga maritima. , 2015, , 99-113.		0
52	Effect of Trimethine Cyanine Dye- and Folate-Conjugation on the In Vitro Biological Activity of Proapoptotic Peptides. Biomolecules, 2022, 12, 725.	1.8	0