

Eranthie Weerapana

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2795003/publications.pdf>

Version: 2024-02-01

114
papers

9,315
citations

34105

52
h-index

40979

93
g-index

144
all docs

144
docs citations

144
times ranked

12476
citing authors

#	ARTICLE	IF	CITATIONS
1	Quantitative reactivity profiling predicts functional cysteines in proteomes. <i>Nature</i> , 2010, 468, 790-795.	27.8	1,359
2	Optimized Metal-Organic-Framework Nanospheres for Drug Delivery: Evaluation of Small-Molecule Encapsulation. <i>ACS Nano</i> , 2014, 8, 2812-2819.	14.6	716
3	Discovery and Characterization of a Highly Selective FAAH Inhibitor that Reduces Inflammatory Pain. <i>Chemistry and Biology</i> , 2009, 16, 411-420.	6.0	401
4	Strategies for discovering and derisking covalent, irreversible enzyme inhibitors. <i>Future Medicinal Chemistry</i> , 2010, 2, 949-964.	2.3	319
5	Asparagine-linked protein glycosylation: from eukaryotic to prokaryotic systems. <i>Glycobiology</i> , 2006, 16, 91R-101R.	2.5	300
6	A chemoproteomic platform to quantitatively map targets of lipid-derived electrophiles. <i>Nature Methods</i> , 2014, 11, 79-85.	19.0	241
7	Disparate proteome reactivity profiles of carbon electrophiles. <i>Nature Chemical Biology</i> , 2008, 4, 405-407.	8.0	230
8	Tandem orthogonal proteolysis-activity-based protein profiling (TOP-ABPP) – a general method for mapping sites of probe modification in proteomes. <i>Nature Protocols</i> , 2007, 2, 1414-1425.	12.0	229
9	Mechanistic and Pharmacological Characterization of PF-04457845: A Highly Potent and Selective Fatty Acid Amide Hydrolase Inhibitor That Reduces Inflammatory and Noninflammatory Pain. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2011, 338, 114-124.	2.5	203
10	MsrB1 and MICALs Regulate Actin Assembly and Macrophage Function via Reversible Stereoselective Methionine Oxidation. <i>Molecular Cell</i> , 2013, 51, 397-404.	9.7	196
11	Covalent protein modification: the current landscape of residue-specific electrophiles. <i>Current Opinion in Chemical Biology</i> , 2015, 24, 18-26.	6.1	186
12	Zinc-Binding Cysteines: Diverse Functions and Structural Motifs. <i>Biomolecules</i> , 2014, 4, 419-434.	4.0	168
13	Diverse Functional Roles of Reactive Cysteines. <i>ACS Chemical Biology</i> , 2013, 8, 283-296.	3.4	164
14	Diverse compounds from pleuromutilin lead to a thioredoxin inhibitor and inducer of ferroptosis. <i>Nature Chemistry</i> , 2019, 11, 521-532.	13.6	159
15	The Rheumatoid Arthritis-Associated Citrullinome. <i>Cell Chemical Biology</i> , 2018, 25, 691-704.e6.	5.2	158
16	Disruption of glycolytic flux is a signal for inflammasome signaling and pyroptotic cell death. <i>ELife</i> , 2016, 5, e13663.	6.0	154
17	In vitro assembly of the undecaprenylpyrophosphate-linked heptasaccharide for prokaryotic N-linked glycosylation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 14255-14259.	7.1	123
18	GSTP1 Is a Driver of Triple-Negative Breast Cancer Cell Metabolism and Pathogenicity. <i>Cell Chemical Biology</i> , 2016, 23, 567-578.	5.2	122

#	ARTICLE	IF	CITATIONS
19	KEAP1-modifying small molecule reveals muted NRF2 signaling responses in neural stem cells from Huntington's disease patients. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E4676-E4685.	7.1	119
20	From structure to redox: The diverse functional roles of disulfides and implications in disease. <i>Proteomics</i> , 2017, 17, 1600391.	2.2	117
21	Proteome-wide Quantification and Characterization of Oxidation-Sensitive Cysteines in Pathogenic Bacteria. <i>Cell Host and Microbe</i> , 2013, 13, 358-370.	11.0	111
22	A small molecule accelerates neuronal differentiation in the adult rat. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 16542-16547.	7.1	109
23	Investigating the Proteome Reactivity and Selectivity of Aryl Halides. <i>Journal of the American Chemical Society</i> , 2014, 136, 3330-3333.	13.7	101
24	Tailored Glycoproteomics and Glycan Site Mapping Using Saccharide-Selective Bioorthogonal Probes. <i>Journal of the American Chemical Society</i> , 2007, 129, 7266-7267.	13.7	100
25	Reactive-cysteine profiling for drug discovery. <i>Current Opinion in Chemical Biology</i> , 2019, 50, 29-36.	6.1	99
26	Chemoenzymatic Synthesis of Glycopeptides with PglB, a Bacterial Oligosaccharyl Transferase from <i>Campylobacter jejuni</i> . <i>Chemistry and Biology</i> , 2005, 12, 1311-1316.	6.0	89
27	Hydrogen sulfide perturbs mitochondrial bioenergetics and triggers metabolic reprogramming in colon cells. <i>Journal of Biological Chemistry</i> , 2019, 294, 12077-12090.	3.4	87
28	1,3,5-Triazine as a Modular Scaffold for Covalent Inhibitors with Streamlined Target Identification. <i>Journal of the American Chemical Society</i> , 2013, 135, 2497-2500.	13.7	86
29	Cysteine reactivity across the subcellular universe. <i>Current Opinion in Chemical Biology</i> , 2019, 48, 96-105.	6.1	84
30	A Caged Electrophilic Probe for Global Analysis of Cysteine Reactivity in Living Cells. <i>Journal of the American Chemical Society</i> , 2015, 137, 7087-7090.	13.7	83
31	Glycoproteomics enabled by tagging sialic acid- or galactose-terminated glycans. <i>Glycobiology</i> , 2013, 23, 211-221.	2.5	81
32	Citrullination of NF- κ B p65 promotes its nuclear localization and TLR-induced expression of IL-1 β and TNF α . <i>Science Immunology</i> , 2017, 2, .	11.9	80
33	In Situ trans Ligands of CD22 Identified by Glycan-Protein Photocross-linking-enabled Proteomics. <i>Molecular and Cellular Proteomics</i> , 2010, 9, 1339-1351.	3.8	79
34	Methionine Sulfoxide Reductases Preferentially Reduce Unfolded Oxidized Proteins and Protect Cells from Oxidative Protein Unfolding. <i>Journal of Biological Chemistry</i> , 2012, 287, 24448-24459.	3.4	79
35	Chemical Proteomics with Sulfonyl Fluoride Probes Reveals Selective Labeling of Functional Tyrosines in Glutathione Transferases. <i>Chemistry and Biology</i> , 2013, 20, 541-548.	6.0	78
36	Cysteine-mediated redox signalling in the mitochondria. <i>Molecular BioSystems</i> , 2015, 11, 678-697.	2.9	78

#	ARTICLE	IF	CITATIONS
37	Mutually Orthogonal Nonsense-Suppression Systems and Conjugation Chemistries for Precise Protein Labeling at up to Three Distinct Sites. <i>Journal of the American Chemical Society</i> , 2019, 141, 6204-6212.	13.7	77
38	A chemoproteomic portrait of the oncometabolite fumarate. <i>Nature Chemical Biology</i> , 2019, 15, 391-400.	8.0	77
39	Isotopically-Labeled Iodoacetamide-Alkyne Probes for Quantitative Cysteine-Reactivity Profiling. <i>Molecular Pharmaceutics</i> , 2018, 15, 743-749.	4.6	73
40	Plasma Peptidylarginine Deiminase IV Promotes VWF-Platelet String Formation and Accelerates Thrombosis After Vessel Injury. <i>Circulation Research</i> , 2019, 125, 507-519.	4.5	72
41	An Isotopically Tagged Azobenzene-Based Cleavable Linker for Quantitative Proteomics. <i>ChemBioChem</i> , 2013, 14, 1410-1414.	2.6	68
42	A Competitive Chemical-Proteomic Platform To Identify Zinc-Binding Cysteines. <i>ACS Chemical Biology</i> , 2014, 9, 258-265.	3.4	68
43	Applications of Copper-Catalyzed Click Chemistry in Activity-Based Protein Profiling. <i>Molecules</i> , 2014, 19, 1378-1393.	3.8	68
44	Sulfonyl Fluoride Analogues as Activity-Based Probes for Serine Proteases. <i>ChemBioChem</i> , 2012, 13, 2327-2330.	2.6	67
45	Identification of a <i>S. aureus</i> virulence factor by activity-based protein profiling (ABPP). <i>Nature Chemical Biology</i> , 2018, 14, 609-617.	8.0	67
46	Naturally Occurring Isothiocyanates Exert Anticancer Effects by Inhibiting Deubiquitinating Enzymes. <i>Cancer Research</i> , 2015, 75, 5130-5142.	0.9	65
47	Identifying Functional Cysteine Residues in the Mitochondria. <i>ACS Chemical Biology</i> , 2017, 12, 947-957.	3.4	65
48	Investigating Bacterial N-Linked Glycosylation: Synthesis and Glycosyl Acceptor Activity of the Undecaprenyl Pyrophosphate-Linked Bacillosamine. <i>Journal of the American Chemical Society</i> , 2005, 127, 13766-13767.	13.7	63
49	Discovery and Optimization of Sulfonyl Acrylonitriles as Selective, Covalent Inhibitors of Protein Phosphatase Methylesterase-1. <i>Journal of Medicinal Chemistry</i> , 2011, 54, 5229-5236.	6.4	61
50	Chemical Proteomic Platform To Identify Citrullinated Proteins. <i>ACS Chemical Biology</i> , 2015, 10, 2520-2528.	3.4	61
51	Chemical-proteomic strategies to investigate cysteine posttranslational modifications. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2014, 1844, 2315-2330.	2.3	60
52	Chemical genetic screen identifies <i>Toxoplasma</i> DJ-1 as a regulator of parasite secretion, attachment, and invasion. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 10568-10573.	7.1	56
53	Selenium-Encoded Isotopic Signature Targeted Profiling. <i>ACS Central Science</i> , 2018, 4, 960-970.	11.3	56
54	Small-molecule inhibition of a depalmitoylase enhances <i>Toxoplasma</i> host-cell invasion. <i>Nature Chemical Biology</i> , 2013, 9, 651-656.	8.0	55

#	ARTICLE	IF	CITATIONS
55	Genetically encoded protein sulfation in mammalian cells. <i>Nature Chemical Biology</i> , 2020, 16, 379-382.	8.0	54
56	Chemoproteomic profiling of host and pathogen enzymes active in cholera. <i>Nature Chemical Biology</i> , 2016, 12, 268-274.	8.0	53
57	The Antimalarial Natural Product Salinipostin A Identifies Essential $\hat{\pm}/\hat{1}^2$ Serine Hydrolases Involved in Lipid Metabolism in <i>P. falciparum</i> Parasites. <i>Cell Chemical Biology</i> , 2020, 27, 143-157.e5.	5.2	48
58	Detection and identification of protein citrullination in complex biological systems. <i>Current Opinion in Chemical Biology</i> , 2016, 30, 1-6.	6.1	43
59	A tyrosine-reactive irreversible inhibitor for glutathione S-transferase Pi (GSTP1). <i>Molecular BioSystems</i> , 2016, 12, 1768-1771.	2.9	42
60	Chemoproteomic Strategy to Quantitatively Monitor Transnitrosation Uncovers Functionally Relevant S-Nitrosation Sites on Cathepsin D and HADH2. <i>Cell Chemical Biology</i> , 2016, 23, 727-737.	5.2	41
61	A Quantitative Chemoproteomic Platform to Monitor Selenocysteine Reactivity within a Complex Proteome. <i>Cell Chemical Biology</i> , 2018, 25, 1157-1167.e4.	5.2	41
62	Characterization of an A-Site Selective Protein Disulfide Isomerase A1 Inhibitor. <i>Biochemistry</i> , 2018, 57, 2035-2043.	2.5	38
63	The apical annuli of <i>Toxoplasma gondii</i> are composed of coiled-coil and signalling proteins embedded in the inner membrane complex sutures. <i>Cellular Microbiology</i> , 2020, 22, e13112.	2.1	38
64	Chemoproteomic Discovery of Cysteine-Containing Human Short Open Reading Frames. <i>Journal of the American Chemical Society</i> , 2013, 135, 16750-16753.	13.7	34
65	Phospholipid-binding Sites of Phosphatase and Tensin Homolog (PTEN). <i>Journal of Biological Chemistry</i> , 2015, 290, 1592-1606.	3.4	34
66	Reciprocal regulation of Th2 and Th17 cells by PAD2-mediated citrullination. <i>JCI Insight</i> , 2019, 4, .	5.0	32
67	Global Cysteine-Reactivity Profiling during Impaired Insulin/IGF-1 Signaling in <i>C. elegans</i> Identifies Uncharacterized Mediators of Longevity. <i>Cell Chemical Biology</i> , 2016, 23, 955-966.	5.2	30
68	Chemical Biology Approaches to Interrogate the Selenoproteome. <i>Accounts of Chemical Research</i> , 2019, 52, 2832-2840.	15.6	30
69	A clickable glutathione approach for identification of protein glutathionylation in response to glucose metabolism. <i>Molecular BioSystems</i> , 2016, 12, 2471-2480.	2.9	29
70	Optimization of Caged Electrophiles for Improved Monitoring of Cysteine Reactivity in Living Cells. <i>ChemBioChem</i> , 2017, 18, 81-84.	2.6	29
71	Profiling Cysteine Reactivity and Oxidation in the Endoplasmic Reticulum. <i>ACS Chemical Biology</i> , 2020, 15, 543-553.	3.4	27
72	Paper to Plastics: An Interdisciplinary Summer Outreach Project in Sustainability. <i>Journal of Chemical Education</i> , 2014, 91, 1574-1579.	2.3	26

#	ARTICLE	IF	CITATIONS
73	The Development of Benzimidazole-Based Clickable Probes for the Efficient Labeling of Cellular Protein Arginine Deiminases (PADs). <i>ACS Chemical Biology</i> , 2018, 13, 712-722.	3.4	26
74	Calcium Regulates the Nuclear Localization of Protein Arginine Deiminase 2. <i>Biochemistry</i> , 2019, 58, 3042-3056.	2.5	25
75	Recent Developments in the Synthesis of Bioactive 2,4,6-Trisubstituted 1,3,5-Triazines. <i>Synlett</i> , 2013, 24, 1599-1605.	1.8	24
76	Chemical Probes for Redox Signaling and Oxidative Stress. <i>Antioxidants and Redox Signaling</i> , 2019, 30, 1369-1386.	5.4	23
77	An Inhibitor of Glutathione <i>S</i> -Transferase Omega-1 that Selectively Targets Apoptotic Cells. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 8365-8368.	13.8	22
78	Citrullination Inactivates Nicotinamide- <i>N</i> -methyltransferase. <i>ACS Chemical Biology</i> , 2018, 13, 2663-2672.	3.4	20
79	A cysteinyl-tRNA synthetase variant confers resistance against selenite toxicity and decreases selenocysteine misincorporation. <i>Journal of Biological Chemistry</i> , 2019, 294, 12855-12865.	3.4	18
80	Generation of Recombinant Mammalian Selenoproteins through Genetic Code Expansion with Photocaged Selenocysteine. <i>ACS Chemical Biology</i> , 2020, 15, 1535-1540.	3.4	18
81	Halogen Bonding Increases the Potency and Isozyme Selectivity of Protein Arginine Deiminase 1 Inhibitors. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 12476-12480.	13.8	16
82	Toxoplasma DJ-1 Regulates Organelle Secretion by a Direct Interaction with Calcium-Dependent Protein Kinase 1. <i>MBio</i> , 2017, 8, .	4.1	15
83	Characterization of Serine Hydrolases Across Clinical Isolates of Commensal Skin Bacteria <i>Staphylococcus epidermidis</i> Using Activity-Based Protein Profiling. <i>ACS Infectious Diseases</i> , 2020, 6, 930-938.	3.8	15
84	Identification of deubiquitinase targets of isothiocyanates using SILAC-assisted quantitative mass spectrometry. <i>Oncotarget</i> , 2017, 8, 51296-51316.	1.8	14
85	A Quantitative Mass-Spectrometry Platform to Monitor Changes in Cysteine Reactivity. <i>Methods in Molecular Biology</i> , 2017, 1491, 11-22.	0.9	13
86	Human cytomegalovirus-induced host protein citrullination is crucial for viral replication. <i>Nature Communications</i> , 2021, 12, 3910.	12.8	13
87	Development of a Suicide Inhibition-Based Protein Labeling Strategy for Nicotinamide <i>N</i> -Methyltransferase. <i>ACS Chemical Biology</i> , 2019, 14, 613-618.	3.4	11
88	Ferlins and TgDOC2 in Toxoplasma Microneme, Rhoptry and Dense Granule Secretion. <i>Life</i> , 2021, 11, 217.	2.4	11
89	Peptides to peptidomimetics: towards the design and synthesis of bioavailable inhibitors of oligosaccharyl transferase. <i>Organic and Biomolecular Chemistry</i> , 2003, 1, 93-99.	2.8	10
90	Identifying cysteine residues susceptible to oxidation by photoactivatable atomic oxygen precursors using a proteome-wide analysis. <i>RSC Chemical Biology</i> , 2021, 2, 577-591.	4.1	9

#	ARTICLE	IF	CITATIONS
91	Orphan PTMs: Rare, yet functionally important modifications of cysteine. <i>Biopolymers</i> , 2014, 101, 156-164.	2.4	8
92	An infection-induced oxidation site regulates legumain processing and tumor growth. <i>Nature Chemical Biology</i> , 2022, 18, 698-705.	8.0	8
93	Diarylcarbonates are a new class of deubiquitinating enzyme inhibitor. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2019, 29, 204-211.	2.2	7
94	Heterogeneous adaptation of cysteine reactivity to a covalent oncometabolite. <i>Journal of Biological Chemistry</i> , 2020, 295, 13410-13418.	3.4	7
95	A Streamlined Data Analysis Pipeline for the Identification of Sites of Citrullination. <i>Biochemistry</i> , 2021, 60, 2902-2914.	2.5	7
96	Cysteine-reactive chemical probes based on a modular 4-aminopiperidine scaffold. <i>MedChemComm</i> , 2014, 5, 358-362.	3.4	6
97	Triazine Probes Target Ascorbate Peroxidases in Plants. <i>Plant Physiology</i> , 2019, 180, 1848-1859.	4.8	5
98	Novel chloroacetamido compound CWR-J02 is an anti-inflammatory glutaredoxin-1 inhibitor. <i>PLoS ONE</i> , 2017, 12, e0187991.	2.5	5
99	Gibberellin JRA-003: A Selective Inhibitor of Nuclear Translocation of IKK β . <i>ACS Medicinal Chemistry Letters</i> , 2020, 11, 1913-1918.	2.8	4
100	Halogen Bonding Increases the Potency and Isozyme Selectivity of Protein Arginine Deiminase 1 Inhibitors. <i>Angewandte Chemie</i> , 2019, 131, 12606-12610.	2.0	2
101	Interrogation of Functional Mitochondrial Cysteine Residues by Quantitative Mass Spectrometry. <i>Methods in Molecular Biology</i> , 2019, 1967, 211-227.	0.9	2
102	Expression of selenoproteins via genetic code expansion in mammalian cells. <i>Methods in Enzymology</i> , 2022, 662, 143-158.	1.0	2
103	Editorial overview: Omics: The maturation of chemical biology. <i>Current Opinion in Chemical Biology</i> , 2016, 30, v-vi.	6.1	1
104	Monitoring GAPDH activity and inhibition with cysteine-reactive chemical probes. <i>RSC Chemical Biology</i> , 2022, 3, 972-982.	4.1	1
105	Protein labelling. <i>Molecular BioSystems</i> , 2016, 12, 1725-1727.	2.9	0
106	Taking AKTion on HNEs. <i>Nature Chemical Biology</i> , 2017, 13, 244-245.	8.0	0
107	Target Deconvolution Efforts on Wnt Pathway Screen Reveal Dual Modulation of Oxidative Phosphorylation and SERCA2. <i>ChemMedChem</i> , 2017, 12, 917-924.	3.2	0
108	Establishing an Interdisciplinary Outreach Program at the Interface of Biology, Chemistry, and Materials Science. <i>ACS Symposium Series</i> , 2017, , 51-68.	0.5	0

#	ARTICLE	IF	CITATIONS
109	Chemical Tools in Biological Discovery. Cell Chemical Biology, 2020, 27, 889-890.	5.2	0
110	Another Reason to Eat Your Broccoli: Naturally Occurring Isothiocyanates Inhibit Deubiquitinating Enzymes. FASEB Journal, 2015, 29, 897.8.	0.5	0
111	Development of A Caged Cysteineâ€Reactive Probe for Characterizing Physiological Reactivity of Cysteine. FASEB Journal, 2015, 29, 723.3.	0.5	0
112	Investigating cysteineâ€mediated protein activities in complex proteomes. FASEB Journal, 2015, 29, 567.7.	0.5	0
113	A Chemicalâ€Proteomic Platform to Investigate Cysteine Sâ€Nitrosation. FASEB Journal, 2015, 29, 370.1.	0.5	0
114	Chemoproteomic interrogation of selenocysteine by low-pH isoTOP-ABPP. Methods in Enzymology, 2022, 662, 187-225.	1.0	0