Isabelle S Lucet

List of Publications by Year
in descending order

58 papers	5,070 citations	172457 29 h-index	144013 57 g-index
64 all docs	64 docs citations	64 times ranked	7382 citing authors

#	Article	IF	Citations
1	The Pseudokinase MLKL Mediates Necroptosis via a Molecular Switch Mechanism. Immunity, 2013, 39, 443-453.	14.3	958
2	Activation of the pseudokinase MLKL unleashes the four-helix bundle domain to induce membrane localization and necroptotic cell death. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 15072-15077.	7.1	484
3	The molecular regulation of Janus kinase (JAK) activation. Biochemical Journal, 2014, 462, 1-13.	3.7	251
4	Open Source Drug Discovery with the Malaria Box Compound Collection for Neglected Diseases and Beyond. PLoS Pathogens, 2016, 12, e1005763.	4.7	244
5	The structural basis of Janus kinase 2 inhibition by a potent and specific pan-Janus kinase inhibitor. Blood, 2006, 107, 176-183.	1.4	243
6	A robust methodology to subclassify pseudokinases based on their nucleotide-binding properties. Biochemical Journal, 2014, 457, 323-334.	3.7	241
7	Suppression of Cytokine Signaling by SOCS3: Characterization of the Mode of Inhibition and the Basis of Its Specificity. Immunity, 2012, 36, 239-250.	14.3	240
8	SOCS3 binds specific receptorâ€“JAK complexes to control cytokine signaling by direct kinase inhibition. Nature Structural and Molecular Biology, 2013, 20, 469-476.	8.2	229
9	Dissecting Specificity in the Janus Kinases: The Structures of JAK-Specific Inhibitors Complexed to the JAK1 and JAK2 Protein Tyrosine Kinase Domains. Journal of Molecular Biology, 2009, 387, 219-232.	4.2	225
10	Differential Recognition of CD1d-Î±-Galactosyl Ceramide by the VÎ²8.2 and VÎ²7 Semi-invariant NKT T Cell Receptors. Immunity, 2009, 31, 47-59.	14.3	198
11	Conformational switching of the pseudokinase domain promotes human MLKL tetramerization and cell death by necroptosis. Nature Communications, 2018, 9, 2422.	12.8	154
12	Cytological and biochemical characterization of the FtsA cell division protein of <i>Bacillus subtilis</i>. Molecular Microbiology, 2001, 40, 115-125.	2.5	128
13	Molecular Mechanism of CCAAT-Enhancer Binding Protein Recruitment by the TRIB1 Pseudokinase. Structure, 2015, 23, 2111-2121.	3.3	93
14	Insights into the evolution of divergent nucleotide-binding mechanisms among pseudokinases revealed by crystal structures of human and mouse MLKL. Biochemical Journal, 2014, 457, 369-377.	3.7	92
15	Eph receptor signalling: from catalytic to non-catalytic functions. Oncogene, 2019, 38, 6567-6584.	5.9	88
16	<i>Plasmodium</i> kinases as targets for new-generation antimalarials. Future Medicinal Chemistry, 2012, 4, 2295-2310.	2.3	85
17	Genome-wide binding and mechanistic analyses of Smchd1-mediated epigenetic regulation. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E3535-44.	7.1	83
18	Viral MLKL Homologs Subvert Necroptotic Cell Death by Sequestering Cellular RIPK3. Cell Reports, 2019, 28, 3309-3319.e5.	6.4	83

#	Article	IF	Citations
19	The 2.7ÂÃ... Crystal Structure of the Autoinhibited Human c-Fms Kinase Domain. Journal of Molecular Biology, 2007, 367, 839-847.	4.2	63
20	Regulation of Janus kinases by SOCS proteins. Biochemical Society Transactions, 2013, 41, 1042-1047.	3.4	62
21	Crystal Structures of the Lyn Protein Tyrosine Kinase Domain in Its Apo- and Inhibitor-bound State. Journal of Biological Chemistry, 2009, 284, 284-291.	3.4	60
22	Biochemical and Structural Insights into Doublecortin-like Kinase Domain 1. Structure, 2016, 24, 1550-1561.	3.3	56
23	Distinct pseudokinase domain conformations underlie divergent activation mechanisms among vertebrate MLKL orthologues. Nature Communications, 2020, 11, 3060.	12.8	47
24	An exported kinase (FIKK4.2) that mediates virulence-associated changes in Plasmodium falciparum-infected red blood cells. International Journal for Parasitology, 2014, 44, 319-328.	3.1	45
25	Ubiquitylation of MLKL at lysine 219 positively regulates necroptosis-induced tissue injury and pathogen clearance. Nature Communications, 2021, 12, 3364.	12.8	43
26	Plasmodium falciparum Adhesins Play an Essential Role in Signalling and Activation of Invasion into Human Erythrocytes. PLoS Pathogens, 2015, 11, e1005343.	4.7	41
27	Structure of SgK223 pseudokinase reveals novel mechanisms of homotypic and heterotypic association. Nature Communications, 2017, 8, 1157.	12.8	40
28	The large resolvase TnpX is the only transposon-encoded protein required for transposition of the Tn4451/3 family of integrative mobilizable elements. Molecular Microbiology, 2004, 51, 1787-1800.	2.5	38
29	Mechanistic insights into activation and SOCS3-mediated inhibition of myeloproliferative neoplasm-associated JAK2 mutants from biochemical and structural analyses. Biochemical Journal, 2014, 458, 395-405.	3.7	33
30	FSHD2- and BAMS-associated mutations confer opposing effects on SMCHD1 function. Journal of Biological Chemistry, 2018, 293, 9841-9853.	3.4	33
31	Homo- and Heterotypic Association Regulates Signaling by the SgK269/PEAK1 and SgK223 Pseudokinases. Journal of Biological Chemistry, 2016, 291, 21571-21583.	3.4	30
32	DNA binding properties of TnpX indicate that different synapses are formed in the excision and integration of the Tn4451 family. Molecular Microbiology, 2004, 53, 1195-1207.	2.5	25
33	The epigenetic regulator Smchd1 contains a functional GHKL-type ATPase domain. Biochemical Journal, 2016, 473, 1733-1744.	3.7	25
34	The FxRxHrS Motif: A Conserved Region Essential for DNA Binding of the VirR Response Regulator from Clostridium perfringens. Journal of Molecular Biology, 2002, 322, 997-1011.	4.2	24
35	Purification, Kinetic Properties, and Intracellular Concentration of SpoIIE, an Integral Membrane Protein That Regulates Sporulation in Bacillus subtilis. Journal of Bacteriology, 1999, 181, 3242-3245.	2.2	24
36	Hijacking of a Substrate-binding Protein Scaffold for use in Mycobacterial Cell Wall Biosynthesis. Journal of Molecular Biology, 2006, 359, 983-997.	4.2	23

#	Article	IF	Citations
37	Potent Inhibition of Necroptosis by Simultaneously Targeting Multiple Effectors of the Pathway. ACS Chemical Biology, 2020, 15, 2702-2713.	3.4	22
38	An Extensive Antigenic Footprint Underpins Immunodominant TCR Adaptability against a Hypervariable Viral Determinant. Journal of Immunology, 2014, 193, 5402-5413.	0.8	21
39	Identification of the Structural and Functional Domains of the Large Serine Recombinase TnpX from Clostridium perfringens. Journal of Biological Chemistry, 2005, 280, 2503-2511.	3.4	20
40	The PEAK family of pseudokinases, their role in cell signalling and cancer. FEBS Journal, 2020, 287, 4183-4197.	4.7	20
41	Fate of the SpoIIAB*-ADP Liberated after SpoIIAB Phosphorylates SpoIIAA of Bacillus subtilis. Journal of Bacteriology, 2000, 182, 6250-6253.	2.2	18
42	Structural basis for small molecule targeting of Doublecortin Like Kinase 1 with DCLK1-IN-1. Communications Biology, 2021, 4, 1105.	4.4	17
43	Techniques to examine nucleotide binding by pseudokinases. Biochemical Society Transactions, 2013, 41, 975-980.	3.4	15
44	TheBacillus subtilisregulator protein SpoIIE shares functional and structural similarities with eukaryotic protein phosphatases 2C. FEMS Microbiology Letters, 1999, 174, 117-123.	1.8	14
45	Characterization of Ligand Binding to Pseudokinases Using a Thermal Shift Assay. Methods in Molecular Biology, 2017, 1636, 91-104.	0.9	14
46	Two distinct regions of the large serine recombinase TnpX are required for DNA binding and biological function. Molecular Microbiology, 2006, 60, 591-601.	2.5	12
47	Mapping and functional analysis of heterochromatin protein 1 phosphorylation in the malaria parasite Plasmodium falciparum. Scientific Reports, 2019, 9, 16720.	3.3	12
48	A regulatory region on <scp>RIPK</scp> 2 is required for <scp>XIAP</scp> binding and <scp>NOD</scp> signaling activity. EMBO Reports, 2020, 21, e50400.	4.5	9
49	Distinct PEAK3 interactors and outputs expand the signaling potential of the PEAK pseudokinase family. Science Signaling, 2022, 15, eabj3554.	3.6	8
50	Granulovirus PK-1 kinase activity relies on a side-to-side dimerization mode centered on the regulatory Î±C helix. Nature Communications, 2021, 12, 1002.	12.8	7
51	The intracellular domains of the EphB6 and EphA10 receptor tyrosine pseudokinases function as dynamic signalling hubs. Biochemical Journal, 2021, 478, 3351-3371.	3.7	6
52	Genotype, Phenotype, and Protein Structure in a Regulator of Sporulation: Effects of Mutations in the spoIIAA Gene of Bacillus subtilis. Journal of Bacteriology, 1999, 181, 3860-3863.	2.2	4
53	Production and purification of the PEAK pseudokinases for structural and functional studies. Methods in Enzymology, 2022, 667, 1-35.	1.0	4
54	Production and Crystallization of Recombinant JAK Proteins. Methods in Molecular Biology, 2013, 967, 275-300.	0.9	3

#	Article	IF	Citations
55	Flicking the molecular switch underlying MLKL-mediated necroptosis. Molecular and Cellular Oncology, 2015, 2, e985550.	0.7	3
56	CHAPTER 13. A Structural Perspective of the Pseudokinome: Defining the Targetable Space. RSC Drug Discovery Series, 2018, , 359-380.	0.3	3
57	Development and application of a high-throughput screening assay for identification of small molecule inhibitors of the P. falciparum reticulocyte binding-like homologue 5 protein. International Journal for Parasitology: Drugs and Drug Resistance, 2020, 14, 188-200.	3.4	2
58	Kinases and pseudokinases online symposium. Biochemist, 2021, 43, 48-48.	0.5	0