Guillaume Lessene

List of Publications by Year
in descending order

68	9,466	117453 34	98622 67
papers	citations	h-index	g-index

72	72	72	13353
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Control of apoptosis by the BCL-2 protein family: implications for physiology and therapy. Nature Reviews Molecular Cell Biology, 2014, 15, 49-63.	16.1	2,444
2	The MCL1 inhibitor S63845 is tolerable and effective in diverse cancer models. Nature, 2016, 538, 477-482.	13.7	830
3	Apoptotic Caspases Suppress mtDNA-Induced STING-Mediated Type I IFN Production. Cell, 2014, 159, 1549-1562.	13.5	698
4	BAK/BAX macropores facilitate mitochondrial herniation and mtDNA efflux during apoptosis. Science, 2018, 359, .	6.0	581
5	BCL-2 family antagonists for cancer therapy. Nature Reviews Drug Discovery, 2008, 7, 989-1000.	21.5	549
6	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.	3.3	484
7	Mechanism and inhibition of the papainâ€like protease, PLpro, of SARSâ€CoVâ€2. EMBO Journal, 2020, 39, e106275.	3.5	330
8	Structure-guided design of a selective BCL-XL inhibitor. Nature Chemical Biology, 2013, 9, 390-397.	3.9	324
9	BH3-Mimetic Drugs: Blazing the Trail for New Cancer Medicines. Cancer Cell, 2018, 34, 879-891.	7.7	250
10	Discovery of a Potent and Selective BCL-X_L Inhibitor with in Vivo Activity. ACS Medicinal Chemistry Letters, 2014, 5, 1088-1093.	1.3	242
11	MLKL trafficking and accumulation at the plasma membrane control the kinetics and threshold for necroptosis. Nature Communications, 2020, 11, 3151.	5.8	194
12	The Mitochondrial Apoptotic Effectors BAX/BAK Activate Caspase-3 and -7 to Trigger NLRP3 Inflammasome and Caspase-8 Driven IL-1Î² Activation. Cell Reports, 2018, 25, 2339-2353.e4.	2.9	164
13	Conformational switching of the pseudokinase domain promotes human MLKL tetramerization and cell death by necroptosis. Nature Communications, 2018, 9, 2422.	5.8	154
14	Synergistic action of the MCL-1 inhibitor S63845 with current therapies in preclinical models of triple-negative and HER2-amplified breast cancer. Science Translational Medicine, 2017, 9, .	5.8	148
15	The manipulation of apoptosis for cancer therapy using BH3-mimetic drugs. Nature Reviews Cancer, 2022, 22, 45-64.	12.8	144
16	Structures of BCL-2 in complex with venetoclax reveal the molecular basis of resistance mutations. Nature Communications, 2019, 10, 2385.	5.8	139
17	Hierarchy for targeting prosurvival BCL2 family proteins in multiple myeloma: pivotal role of MCL1. Blood, 2016, 128, 1834-1844.	0.6	127
18	Combining BH3-mimetics to target both BCL-2 and MCL1 has potent activity in pre-clinical models of acute myeloid leukemia. Leukemia, 2019, 33, 905-917.	3.3	126

#	Article	IF	Citations
19	A RIPK2 inhibitor delays NOD signalling events yet prevents inflammatory cytokine production. Nature Communications, 2015, 6, 6442.	5.8	112
20	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.	1.7	92
21	Viral MLKL Homologs Subvert Necroptotic Cell Death by Sequestering Cellular RIPK3. Cell Reports, 2019, 28, 3309-3319.e5.	2.9	83
22	Conformational Changes in Bcl-2 Pro-survival Proteins Determine Their Capacity to Bind Ligands. Journal of Biological Chemistry, 2009, 284, 30508-30517.	1.6	79
23	Eliminating Legionella by inhibiting BCL-XL to induce macrophage apoptosis. Nature Microbiology, 2016, 1, 15034.	5.9	75
24	Dual inhibition of BCL-XL and MCL-1 is required to induce tumour regression in lung squamous cell carcinomas sensitive to FGFR inhibition. Oncogene, 2018, 37, 4475-4488.	2.6	75
25	Humanized Mcl-1 mice enable accurate preclinical evaluation of MCL-1 inhibitors destined for clinical use. Blood, 2018, 132, 1573-1583.	0.6	67
26	Computationally designed high specificity inhibitors delineate the roles of BCL2 family proteins in cancer. ELife, 2016, 5, .	2.8	65
27	Quinazoline Sulfonamides as Dual Binders of the Proteins B-Cell Lymphoma 2 and B-Cell Lymphoma Extra Long with Potent Proapoptotic Cell-Based Activity. Journal of Medicinal Chemistry, 2011, 54, 1914-1926.	2.9	62
28	Discovery of Potent and Selective Benzothiazole Hydrazone Inhibitors of Bcl-X_L. Journal of Medicinal Chemistry, 2013, 56, 5514-5540.	2.9	60
29	Inhibition of Hematopoietic Cell Kinase Activity Suppresses Myeloid Cell-Mediated Colon Cancer Progression. Cancer Cell, 2017, 31, 563-575.e5.	7.7	57
30	Conversion of Bim-BH3 from Activator to Inhibitor of Bak through Structure-Based Design. Molecular Cell, 2017, 68, 659-672.e9.	4.5	57
31	A Concise Total Synthesis of Naamidine A. Organic Letters, 2006, 8, 419-421.	2.4	49
32	Human RIPK3 maintains MLKL in an inactive conformation prior to cell death by necroptosis. Nature Communications, 2021, 12, 6783.	5.8	47
33	ATF3 Repression of BCL-XL Determines Apoptotic Sensitivity to HDAC Inhibitors across Tumor Types. Clinical Cancer Research, 2017, 23, 5573-5584.	3.2	46
34	Inhibitors of SARS-CoV-2 PLpro. Frontiers in Chemistry, 2022, 10, 876212.	1.8	38
35	Structure-Guided Rescaffolding of Selective Antagonists of BCL-X_L. ACS Medicinal Chemistry Letters, 2014, 5, 662-667.	1.3	37
36	De-Novo Designed Library of Benzoylureas as Inhibitors of BCL-X_L: Synthesis, Structural and Biochemical Characterization. Journal of Medicinal Chemistry, 2014, 57, 1323-1343.	2.9	33

#	Article	IF	Citations
37	Bcl-2 Family Proteins as Therapeutic Targets. Current Pharmaceutical Design, 2010, 16, 3132-3148.	0.9	32
38	A small molecule interacts with VDAC2 to block mouse BAK-driven apoptosis. Nature Chemical Biology, 2019, 15, 1057-1066.	3.9	30
39	Spiroleucettadine: synthetic studies and investigations towards structural revision. Tetrahedron Letters, 2007, 48, 2199-2203.	0.7	28
40	Cotargeting BCL-2 and MCL-1 in high-risk B-ALL. Blood Advances, 2020, 4, 2762-2767.	2.5	28
41	Characterization of the Two Fundamental Conformations of Benzoylureas and Elucidation of the Factors That Facilitate Their Conformational Interchange. Journal of Organic Chemistry, 2009, 74, 6511-6525.	1.7	25
42	Hepatocyte growth factor renders BRAF mutant human melanoma cell lines resistant to PLX4032 by downregulating the pro-apoptotic BH3-only proteins PUMA and BIM. Cell Death and Differentiation, 2016, 23, 2054-2062.	5.0	24
43	Potent Inhibition of Necroptosis by Simultaneously Targeting Multiple Effectors of the Pathway. ACS Chemical Biology, 2020, 15, 2702-2713.	1.6	22
44	The BH3-only proteins BIM and PUMA are not critical for the reticulocyte apoptosis caused by loss of the pro-survival protein BCL-XL. Cell Death and Disease, 2017, 8, e2914-e2914.	2.7	18
45	Synthesis of conformationally constrained benzoylureas as BH3-mimetics. Organic and Biomolecular Chemistry, 2012, 10, 5230.	1.5	16
46	BAX-BAK1-independent LC3B lipidation by BH3 mimetics is unrelated to BH3 mimetic activity and has only minimal effects on autophagic flux. Autophagy, 2016, 12, 1083-1093.	4.3	16
47	Small molecules targeting Mcl-1: the search for a silver bullet in cancer therapy. MedChemComm, 2016, 7, 778-787.	3.5	16
48	BH3 mimetic drugs cooperate with Temozolomide, JQ1 and inducers of ferroptosis in killing glioblastoma multiforme cells. Cell Death and Differentiation, 2022, 29, 1335-1348.	5.0	15
49	Acquired Mutations in BAX Confer Resistance to BH3 Mimetics in Acute Myeloid Leukemia. Blood, 2020, 136, 7-8.	0.6	13
50	Total Synthesis of (â˜)â€Spiroleucettadine. Angewandte Chemie - International Edition, 2017, 56, 14663-14666.	7.2	12
51	Development of NanoLuc-targeting protein degraders and a universal reporter system to benchmark tag-targeted degradation platforms. Nature Communications, 2022, 13, 2073.	5.8	11
52	Insights Into Drug Repurposing, as Well as Specificity and Compound Properties of Piperidine-Based SARS-CoV-2 PLpro Inhibitors. Frontiers in Chemistry, 2022, 10, 861209.	1.8	11
53	Defining the susceptibility of colorectal cancers to BH3-mimetic compounds. Cell Death and Disease, 2020, 11, 735.	2.7	10
54	The Lck inhibitor, AMG-47a, blocks necroptosis and implicates RIPK1 in signalling downstream of MLKL. Cell Death and Disease, 2022, 13, 291.	2.7	10

#	Article	IF	Citations
55	BCL-XL antagonism selectively reduces neutrophil life span within inflamed tissues without causing neutropenia. Blood Advances, 2021, 5, 2550-2562.	2.5	9
56	Exploiting the Biginelli reaction: nitrogen-rich pyrimidine-based tercyclic Î±-helix mimetics. Tetrahedron, 2016, 72, 1151-1160.	1.0	8
57	BCLâ€XL exerts a protective role against anemia caused by radiationâ€induced kidney damage. EMBO Journal, 2020, 39, e105561.	3.5	7
58	Strategies, Setbacks, and Successes in the Synthesis of (â^')-Spiroleucettadine. Journal of Organic Chemistry, 2018, 83, 10120-10133.	1.7	6
59	Structure-Guided Development of Potent Benzoylurea Inhibitors of BCL-X_L and BCL-2. Journal of Medicinal Chemistry, 2021, 64, 5447-5469.	2.9	5
60	Crystallization and preliminary X-ray characterization of Epsteinâ€“Barr virus BHRF1 in complex with a benzoylurea peptidomimetic. Acta Crystallographica Section F: Structural Biology Communications, 2012, 68, 1521-1524.	0.7	4
61	The Synthesis of (â€“)-Spiroleucettadine. Synlett, 2018, 29, 1125-1130.	1.0	4
62	BCL-XL inhibition by BH3-mimetic drugs induces apoptosis in models of Epstein-Barr virus-associated T/NK-cell lymphoma. Blood Advances, 2020, 4, 4775-4787.	2.5	4
63	Dual drug targeting to kill colon cancers. Cancer Medicine, 2022, , .	1.3	4
64	Targeting cell death pathways with small molecules: playing with life and death at the cellular level to treat diseases. Future Medicinal Chemistry, 2015, 7, 2099-2102.	1.1	2
65	Preclinical small molecule WEHI-7326 overcomes drug resistance and elicits response in patient-derived xenograft models of human treatment-refractory tumors. Cell Death and Disease, 2021, 12, 268.	2.7	2
66	Total Synthesis of (â^')â€Spiroleucettadine. Angewandte Chemie, 2017, 129, 14855-14858.	1.6	1
67	Synthesis and Biological Evaluation of (â^') and (+)â€Spiroleucettadine and Analogues. ChemMedChem, 2021, 16, 1308-1315.	1.6	1
68	Removal of BFL-1 sensitises some melanoma cells to killing by BH3 mimetic drugs. Cell Death and Disease, 2022, 13, 301.	2.7	1