Lucas Pelkmans

List of Publications by Year
in descending order

44 papers	7,353 citations	172457 29 h-index	233421 45 g-index
61 all docs	61 docs citations	61 times ranked	9628 citing authors

#	Article	IF	Citations
1	Caveolar endocytosis of simian virus 40 reveals a new two-step vesicular-transport pathway to the ER. Nature Cell Biology, 2001, 3, 473-483.	10.3	1,158
2	Local Actin Polymerization and Dynamin Recruitment in SV40-Induced Internalization of Caveolae. Science, 2002, 296, 535-539.	12.6	648
3	Genome-wide analysis of human kinases in clathrin- and caveolae/raft-mediated endocytosis. Nature, 2005, 436, 78-86.	27.8	580
4	Caveolin-Stabilized Membrane Domains as Multifunctional Transport and Sorting Devices in Endocytic Membrane Traffic. Cell, 2004, 118, 767-780.	28.9	470
5	Population context determines cell-to-cell variability in endocytosis and virus infection. Nature, 2009, 461, 520-523.	27.8	371
6	Multiplexed protein maps link subcellular organization to cellular states. Science, 2018, 361, .	12.6	350
7	Coronavirus Cell Entry Occurs through the Endo-/Lysosomal Pathway in a Proteolysis-Dependent Manner. PLoS Pathogens, 2014, 10, e1004502.	4.7	338
8	Control of Transcript Variability in Single Mammalian Cells. Cell, 2015, 163, 1596-1610.	28.9	332
9	Insider information: what viruses tell us about endocytosis. Current Opinion in Cell Biology, 2003, 15, 414-422.	5.4	312
10	Kinase-regulated quantal assemblies and kiss-and-run recycling of caveolae. Nature, 2005, 436, 128-133.	27.8	312
11	Kinase-controlled phase transition of membraneless organelles in mitosis. Nature, 2018, 559, 211-216.	27.8	296
12	Image-based transcriptomics in thousands of single human cells at single-molecule resolution. Nature Methods, 2013, 10, 1127-1133.	19.0	253
13	Secrets of caveolae- and lipid raft-mediated endocytosis revealed by mammalian viruses. Biochimica Et Biophysica Acta - Molecular Cell Research, 2005, 1746, 295-304.	4.1	154
14	Singleâ€cell analysis of population context advances RNAi screening at multiple levels. Molecular Systems Biology, 2012, 8, 579.	7.2	153
15	Using Cell-to-Cell Variabilityâ€"A New Era in Molecular Biology. Science, 2012, 336, 425-426.	12.6	153
16	Large Scale RNAi Reveals the Requirement of Nuclear Envelope Breakdown for Nuclear Import of Human Papillomaviruses. PLoS Pathogens, 2014, 10, e1004162.	4.7	135
17	Passive Noise Filtering by Cellular Compartmentalization. Cell, 2016, 164, 1151-1161.	28.9	100
18	Trajectories of cell-cycle progression from fixed cell populations. Nature Methods, 2015, 12, 951-954.	19.0	97

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19	A Hierarchical Map of Regulatory Genetic Interactions in Membrane Trafficking. Cell, 2014, 157, 1473-1487.	28.9	93
20	A Systems-Level Study Reveals Regulators of Membrane-less Organelles in Human Cells. Molecular Cell, 2018, 72, 1035-1049.e5.	9.7	93
21	Cell-intrinsic adaptation of lipid composition to local crowding drives social behaviour. Nature, 2015, 523, 88-91.	27.8	88
22	CellClassifier: supervised learning of cellular phenotypes. Bioinformatics, 2009, 25, 3028-3030.	4.1	81
23	Single-cell and multivariate approaches in genetic perturbation screens. Nature Reviews Genetics, 2015, 16, 18-32.	16.3	80
24	The Tumor Profiler Study: integrated, multi-omic, functional tumor profiling for clinical decision support. Cancer Cell, 2021, 39, 288-293.	16.8	71
25	Largeâ€scale imageâ€based profiling of singleâ€cell phenotypes in arrayed CRISPRâ€Cas9 gene perturbation screens. Molecular Systems Biology, 2018, 14, e8064.	7.2	56
26	Hypertonic Stress Causes Cytoplasmic Translocation of Neuronal, but Not Astrocytic, FUS due to Impaired Transportin Function. Cell Reports, 2018, 24, 987-1000.e7.	6.4	49
27	Wnt directs the endosomal flux of <scp>LDL</scp> â€derived cholesterol and lipid droplet homeostasis. EMBO Reports, 2015, 16, 741-752.	4.5	43
28	Non-specific adhesive forces between filaments and membraneless organelles. Nature Physics, 2022, 18, 571-578.	16.7	41
29	Protein Kinases: Starting a Molecular Systems View of Endocytosis. Annual Review of Cell and Developmental Biology, 2008, 24, 501-523.	9.4	38
30	Viruses as probes for systems analysis of cellular signalling, cytoskeleton reorganization and endocytosis. Current Opinion in Microbiology, 2005, 8, 331-337.	5.1	37
31	SCIM: universal single-cell matching with unpaired feature sets. Bioinformatics, 2020, 36, i919-i927.	4.1	37
32	Multimodal perception links cellular state to decision-making in single cells. Science, 2022, 377, 642-648.	12.6	35
33	Computer vision for image-based transcriptomics. Methods, 2015, 85, 44-53.	3.8	33
34	Lessons from genetics: interpreting complex phenotypes in RNAi screens. Current Opinion in Cell Biology, 2008, 20, 483-489.	5.4	29
35	A Systems Survey of Progressive Host-Cell Reorganization during Rotavirus Infection. Cell Host and Microbe, 2016, 20, 107-120.	11.0	29
36	Mechanisms of cellular mRNA transcript homeostasis. Trends in Cell Biology, 2022, 32, 655-668.	7.9	27

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37	Feedback from nuclear RNA on transcription promotes robust RNA concentration homeostasis in human cells. Cell Systems, 2022, 13, 454-470.e15.	6.2	25
38	Multivariate Control of Transcript to Protein Variability in Single Mammalian Cells. Cell Systems, 2018, 7, 398-411.e6.	6.2	24
39	Modifiers of prion protein biogenesis and recycling identified by a highly parallel endocytosis kinetics assay. Journal of Biological Chemistry, 2017, 292, 8356-8368.	3.4	19
40	Post-transcriptional control of executioner caspases by RNA-binding proteins. Genes and Development, 2016, 30, 2213-2225.	5.9	15
41	Characterization of the neurogenic niche in the aging dentate gyrus using iterative immunofluorescence imaging. ELife, 2022, 11, .	6.0	14
42	<scp>KCML</scp> : a machineâ€learning framework for inference of multiâ€scale gene functions from genetic perturbation screens. Molecular Systems Biology, 2020, 16, e9083.	7.2	11
43	High content genome-wide siRNA screen to investigate the coordination of cell size and RNA production. Scientific Data, 2021, 8, 162.	5.3	9
44	Liquid droplets in the skin. Science, 2020, 367, 1193-1194.	12.6	5