Leonard R Stephens

List of Publications by Year
in descending order

118 papers	15,280 citations	29994 54 h-index	21474 114 g-index
118 all docs	118 docs citations	118 times ranked	16099 citing authors

#	Article	IF	Citations
1	Kinase-independent synthesis of 3-phosphorylated phosphoinositides by a phosphotransferase. Nature Cell Biology, 2022, 24, 708-722.	4.6	18
2	Acyl chain selection couples the consumption and synthesis of phosphoinositides. EMBO Journal, 2022, 41, .	3.5	13
3	GÎ²Î³ is a direct regulator of endogenous p101/p110Î³ and p84/p110Î³ PI3KÎ³ complexes in mouse neutrophils. Science Signaling, 2020, 13, .	1.6	19
4	Frontline Science: TNF-Î± and GM-CSF1 priming augments the role of SOS1/2 in driving activation of Ras, PI3K-Î³, and neutrophil proinflammatory responses. Journal of Leukocyte Biology, 2019, 106, 815-822.	1.5	17
5	How is the acyl chain composition of phosphoinositides created and does it matter?. Biochemical Society Transactions, 2019, 47, 1291-1305.	1.6	42
6	Quantitation of class IA PI3Ks in mice reveals p110-free-p85s and isoform-selective subunit associations and recruitment to receptors. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 12176-12181.	3.3	40
7	Genome organization and chromatin analysis identify transcriptional downregulation of insulin-like growth factor signaling as a hallmark of aging in developing B cells. Genome Biology, 2018, 19, 126.	3.8	29
8	Profiling of phosphoinositide molecular species in human and mouse platelets identifies new species increasing following stimulation. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2018, 1863, 1121-1131.	1.2	26
9	Compensation between CSF1R+ macrophages and Foxp3+ Treg cells drives resistance to tumor immunotherapy. JCI Insight, 2018, 3, .	2.3	90
10	cAMP Signaling of Adenylate Cyclase Toxin Blocks the Oxidative Burst of Neutrophils through Epac-Mediated Inhibition of Phospholipase C Activity. Journal of Immunology, 2017, 198, 1285-1296.	0.4	46
11	PTEN Regulates PI(3,4)P2 Signaling Downstream of Class I PI3K. Molecular Cell, 2017, 68, 566-580.e10.	4.5	149
12	In-depth PtdIns(3,4,5)P3 signalosome analysis identifies DAPP1 as a negative regulator of GPVI-driven platelet function. Blood Advances, 2017, 1, 918-932.	2.5	34
13	Class (I) Phosphoinositide 3-Kinases in the Tumor Microenvironment. Cancers, 2017, 9, 24.	1.7	31
14	Investigating the effect of arachidonate supplementation on the phosphoinositide content of MCF10a breast epithelial cells. Advances in Biological Regulation, 2016, 62, 18-24.	1.4	20
15	Emerging evidence of signalling roles for PI(3,4)<i>P</i>2 in Class I and II PI3K-regulated pathways. Biochemical Society Transactions, 2016, 44, 307-314.	1.6	96
16	Phosphoproteomic Analyses of Interleukin 2 Signaling Reveal Integrated JAK Kinase-Dependent and -Independent Networks in CD8 + T Cells. Immunity, 2016, 45, 685-700.	6.6	68
17	In B cells, phosphatidylinositol 5-phosphate 4-kinaseâ€"Î± synthesizes PI(4,5)P2 to impact mTORC2 and Akt signaling. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 10571-10576.	3.3	21
18	Coincident signals from GPCRs and receptor tyrosine kinases are uniquely transduced by PI3KÎ² in myeloid cells. Science Signaling, 2016, 9, ra82.	1.6	53

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19	The Inositol-3-Phosphate Synthase Biosynthetic Enzyme Has Distinct Catalytic and Metabolic Roles. Molecular and Cellular Biology, 2016, 36, 1464-1479.	1.1	22
20	Localizing the lipid products of PI3KÎ³ in neutrophils. Advances in Biological Regulation, 2016, 60, 36-45.	1.4	11
21	The cytotoxic T cell proteome and its shaping by the kinase mTOR. Nature Immunology, 2016, 17, 104-112.	7.0	192
22	Inactivation of the Class II PI3K-C2Î² Potentiates Insulin Signaling and Sensitivity. Cell Reports, 2015, 13, 1881-1894.	2.9	66
23	Perturbations of PIP3 signalling trigger a global remodelling of mRNA landscape and reveal a transcriptional feedback loop. Nucleic Acids Research, 2015, 43, gkv1015.	6.5	20
24	The regulatory subunits of PI3KÎ³ control distinct neutrophil responses. Science Signaling, 2015, 8, ra8.	1.6	42
25	PI3K signalling in inflammation. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2015, 1851, 882-897.	1.2	380
26	Regulation of PTEN inhibition by the pleckstrin homology domain of P-REX2 during insulin signaling and glucose homeostasis. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 155-160.	3.3	61
27	The Phosphoinositide 3â€Kinase Isoform PI3KÎ² Regulates Osteoclastâ€Mediated Bone Resorption in Humans and Mice. Arthritis and Rheumatology, 2014, 66, 2210-2221.	2.9	29
28	<i>Dictyostelium</i> uses etherâ€linked inositol phospholipids for intracellular signalling. EMBO Journal, 2014, 33, 2188-2200.	3.5	53
29	The hexosamine biosynthesis pathway and Oâ€Glc<scp>NA</scp>cylation maintain insulinâ€stimulated <scp>PI</scp>3Kâ€<scp>PKB</scp> phosphorylation and tumour cell growth after shortâ€term glucose deprivation. FEBS Journal, 2014, 281, 3591-3608.	2.2	26
30	A new approach to measuring phosphoinositides in cells by mass spectrometry. Advances in Biological Regulation, 2014, 54, 131-141.	1.4	70
31	BMX Acts Downstream of PI3K to Promote Colorectal Cancer Cell Survival and Pathway Inhibition Sensitizes to the BH3 Mimetic ABT-737. Neoplasia, 2014, 16, 147-W16.	2.3	22
32	P-Rex1 directly activates RhoG to regulate GPCR-driven Rac signalling and actin polarity in neutrophils. Journal of Cell Science, 2014, 127, 2589-600.	1.2	50
33	Phosphoinositide 3-Kinase Î´ Gene Mutation Predisposes to Respiratory Infection and Airway Damage. Science, 2013, 342, 866-871.	6.0	541
34	Two distinct functions for PI3-kinases in macropinocytosis. Journal of Cell Science, 2013, 126, 4296-307.	1.2	83
35	3D time series analysis of cell shape using Laplacian approaches. BMC Bioinformatics, 2013, 14, 296.	1.2	19
36	More Paths to PI3KÎ³. PLoS Biology, 2013, 11, e1001594.	2.6	4

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37	Lysophosphatidylinositol-Acyltransferase-1 (LPIAT1) Is Required to Maintain Physiological Levels of PtdIns and PtdInsP2 in the Mouse. PLoS ONE, 2013, 8, e58425.	1.1	65
38	Phosphoinositide 3-OH Kinase Regulates Integrin-Dependent Processes in Neutrophils by Signaling through Its Effector ARAP3. Journal of Immunology, 2013, 190, 381-391.	0.4	19
39	Signaling via Class IA Phosphoinositide 3-Kinases (PI3K) in Human, Breast-Derived Cell Lines. PLoS ONE, 2013, 8, e75045.	1.1	12
40	Fast random walker for neutrophil cell segmentation in 3D. , 2012, , .		3
41	GPCR activation of Ras and PI3KÎ³ in neutrophils depends on PLCÎ²2/Î²3 and the RasGEF RasGRP4. EMBO Journal, 2012, 31, 3118-3129.	3.5	58
42	PI3K signalling: the path to discovery and understanding. Nature Reviews Molecular Cell Biology, 2012, 13, 195-203.	16.1	799
43	Activation of the neutrophil NADPH oxidase by <i>Aspergillus fumigatus</i>. Annals of the New York Academy of Sciences, 2012, 1273, 68-73.	1.8	18
44	Functional Redundancy of Class I Phosphoinositide 3-Kinase (PI3K) Isoforms in Signaling Growth Factor-Mediated Human Neutrophil Survival. PLoS ONE, 2012, 7, e45933.	1.1	45
45	Local Shape Representation in 3D: from Weighted Spherical Harmonics to Spherical Wavelet. , 2012, , .		3
46	Signalling via class IA PI3Ks. Advances in Enzyme Regulation, 2011, 51, 27-36.	2.9	12
47	Structure of Lipid Kinase p110Î²/p85Î² Elucidates an Unusual SH2-Domain-Mediated Inhibitory Mechanism. Molecular Cell, 2011, 41, 567-578.	4.5	161
48	PI3KÎ² Plays a Critical Role in Neutrophil Activation by Immune Complexes. Science Signaling, 2011, 4, ra23.	1.6	130
49	SCFAs Induce Mouse Neutrophil Chemotaxis through the GPR43 Receptor. PLoS ONE, 2011, 6, e21205.	1.1	226
50	The GTPase-activating protein ARAP3 regulates chemotaxis and adhesion-dependent processes in neutrophils. Blood, 2011, 118, 1087-1098.	0.6	54
51	Quantification of PtdInsP3 molecular species in cells and tissues by mass spectrometry. Nature Methods, 2011, 8, 267-272.	9.0	246
52	Class IA Phosphoinositide 3-Kinase Î² and Î´ Regulate Neutrophil Oxidase Activation in Response to<i>Aspergillus fumigatus</i>Hyphae. Journal of Immunology, 2011, 186, 2978-2989.	0.4	64
53	Phosphorylation of threonine 154 in p40phox is an important physiological signal for activation of the neutrophil NADPH oxidase. Blood, 2010, 116, 6027-6036.	0.6	40
54	PtdIns3P and Rac direct the assembly of the NADPH oxidase on a novel, pre-phagosomal compartment during FcR-mediated phagocytosis in primary mouse neutrophils. Blood, 2010, 116, 4978-4989.	0.6	55

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55	Synthesis and biological evaluation of phosphatidylinositol phosphate affinity probes. Organic and Biomolecular Chemistry, 2010, 8, 66-76.	1.5	56
56	PI3K Signaling in Neutrophils. Current Topics in Microbiology and Immunology, 2010, 346, 183-202.	0.7	84
57	Modulation of Monomeric G Proteins by Phosphoinositides. , 2010, , 1131-1139.		1
58	CD18-dependent activation of the neutrophil NADPH oxidase during phagocytosis of Escherichia coli or Staphylococcus aureus is regulated by class III but not class I or II PI3Ks. Blood, 2008, 112, 5202-5211.	0.6	81
59	Moving towards a Better Understanding of Chemotaxis. Current Biology, 2008, 18, R485-R494.	1.8	154
60	PI3K Class IB Pathway in Neutrophils. Science's STKE: Signal Transduction Knowledge Environment, 2007, 2007, cm3.	4.1	49
61	Quantitative Measurement of Phosphatidylinositol 3,4,5-trisphosphate. Methods in Enzymology, 2007, 434, 117-130.	0.4	33
62	Use of the GRP1 PH domain as a tool to measure the relative levels of PtdIns(3,4,5)P3 through a protein-lipid overlay approach. Journal of Lipid Research, 2007, 48, 726-732.	2.0	27
63	PI3KÎ³ Is a Key Regulator of Inflammatory Responses and Cardiovascular Homeostasis. Science, 2007, 318, 64-66.	6.0	68
64	PI3K Class IB Pathway. Science's STKE: Signal Transduction Knowledge Environment, 2007, 2007, cm2.	4.1	36
65	PI(3)KÎ³ has an important context-dependent role in neutrophil chemokinesis. Nature Cell Biology, 2007, 9, 86-91.	4.6	233
66	Structural determinants of LL5Î² subcellular localisation and association with filamin C. Cellular Signalling, 2007, 19, 817-824.	1.7	12
67	The role of PI3Ks in the regulation of the neutrophil NADPH oxidase. Biochemical Society Symposia, 2007, 74, 59.	2.7	30
68	The role of PI3Ks in the regulation of the neutrophil NADPH oxidase. Biochemical Society Symposia, 2007, 74, 59-67.	2.7	25
69	Receptor association and tyrosine phosphorylation of S6 kinases. FEBS Journal, 2006, 273, 2023-2036.	2.2	25
70	GÎ²Î³s and the Ras binding domain of p110Î³ are both important regulators of PI3KÎ³ signalling in neutrophils. Nature Cell Biology, 2006, 8, 1303-1309.	4.6	167
71	PtdIns3P binding to the PX domain of p40phox is a physiological signal in NADPH oxidase activation. EMBO Journal, 2006, 25, 4468-4478.	3.5	116
72	Neutrophils from p40phoxâ^'/â^' mice exhibit severe defects in NADPH oxidase regulation and oxidant-dependent bacterial killing. Journal of Experimental Medicine, 2006, 203, 1927-1937.	4.2	162

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73	Purification of ARAP3 and Characterization of GAP Activities. Methods in Enzymology, 2006, 406, 91-103.	0.4	8
74	ARAP3 is essential for formation of lamellipodia after growth factor stimulation. Journal of Cell Science, 2006, 119, 425-432.	1.2	55
75	RhoG Regulates the Neutrophil NADPH Oxidase. Journal of Immunology, 2006, 176, 5314-5320.	0.4	37
76	Sequential activation of class IB and class IA PI3K is important for the primed respiratory burst of human but not murine neutrophils. Blood, 2005, 106, 1432-1440.	0.6	274
77	p84, a New GÎ²Î³-Activated Regulatory Subunit of the Type IB Phosphoinositide 3-Kinase p110Î³. Current Biology, 2005, 15, 566-570.	1.8	157
78	P-Rex1 Regulates Neutrophil Function. Current Biology, 2005, 15, 1867-1873.	1.8	161
79	Regulation of P-Rex1 by Phosphatidylinositol (3,4,5)-Trisphosphate and GÎ²Î³ Subunits. Journal of Biological Chemistry, 2005, 280, 4166-4173.	1.6	102
80	Phosphoinositide 3-kinases as drug targets in cancer. Current Opinion in Pharmacology, 2005, 5, 357-365.	1.7	100
81	ARAP3 Is a PI3K- and Rap-Regulated GAP for RhoA. Current Biology, 2004, 14, 1380-1384.	1.8	119
82	The role of phosphoinositides and phosphorylation in regulation of NADPH oxidase. Advances in Enzyme Regulation, 2004, 44, 279-298.	2.9	47
83	P-Rex2, a new guanine-nucleotide exchange factor for Rac. FEBS Letters, 2004, 572, 172-176.	1.3	94
84	Phosphoinositide 3-kinase-dependent activation of Rac. FEBS Letters, 2003, 546, 93-97.	1.3	279
85	LL5Î² Is a Phosphatidylinositol (3,4,5)-Trisphosphate Sensor That Can Bind the Cytoskeletal Adaptor, Î³-Filamin. Journal of Biological Chemistry, 2003, 278, 1328-1335.	1.6	43
86	Modulation of Monomeric G Proteins by Phosphoinositides. , 2003, , 203-207.		0
87	Regulation of Phosphatidylinositol 3-Kinase Activity and Phosphatidylinositol 3,4,5-Trisphosphate Accumulation by Neutrophil Priming Agents. Journal of Immunology, 2002, 169, 3336-3344.	0.4	59
88	Mechanism of the regulation of type IB phosphoinositide 3OH-kinase byG-protein Î²Î³ subunits. Biochemical Journal, 2002, 362, 725.	1.7	19
89	Mechanism of the regulation of type IB phosphoinositide 3OH-kinase byG-protein Î²Î³ subunits. Biochemical Journal, 2002, 362, 725-731.	1.7	29
90	P-Rex1, a PtdIns(3,4,5)P3- and GÎ²Î³-Regulated Guanine-Nucleotide Exchange Factor for Rac. Cell, 2002, 108, 809-821.	13.5	487

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91	Activation of Phosphoinositide 3-Kinase Î³ by Ras. Current Biology, 2002, 12, 1068-1075.	1.8	110
92	Roles of PI3Ks in leukocyte chemotaxis and phagocytosis. Current Opinion in Cell Biology, 2002, 14, 203-213.	2.6	239
93	The PX domain: a new phosphoinositide-binding module. Journal of Cell Science, 2002, 115, 1099-1105.	1.2	152
94	The PX domain: a new phosphoinositide-binding module. Journal of Cell Science, 2002, 115, 1099-105.	1.2	136
95	The Crystal Structure of the PX Domain from p40phox Bound to Phosphatidylinositol 3-Phosphate. Molecular Cell, 2001, 8, 829-839.	4.5	263
96	Synthesis and biological evaluation of a PtdIns(3,4,5)P3 affinity matrix. Chemical Communications, 2001, , 645-646.	2.2	20
97	PtdIns(3)P regulates the neutrophil oxidase complex by binding to the PX domain of p40phox. Nature Cell Biology, 2001, 3, 679-682.	4.6	389
98	Src Family Kinases Mediate Receptor-stimulated, Phosphoinositide 3-Kinase-dependent, Tyrosine Phosphorylation of Dual Adaptor for Phosphotyrosine and 3-Phosphoinositides-1 in Endothelial and B Cell Lines. Journal of Biological Chemistry, 2001, 276, 42767-42773.	1.6	32
99	Colorectal carcinomas in mice lacking the catalytic subunit of PI(3)KÎ³. Nature, 2000, 406, 897-902.	13.7	102
100	Structural Determinants of Phosphoinositide 3-Kinase Inhibition by Wortmannin, LY294002, Quercetin, Myricetin, and Staurosporine. Molecular Cell, 2000, 6, 909-919.	4.5	1,102
101	Crystal Structure and Functional Analysis of Ras Binding to Its Effector Phosphoinositide 3-Kinase Î³. Cell, 2000, 103, 931-944.	13.5	574
102	Structural insights into phosphoinositide 3-kinase catalysis and signalling. Nature, 1999, 402, 313-320.	13.7	453
103	General synthesis of 3-phosphorylated myo-inositol phospholipids and derivatives. Journal of the Chemical Society Perkin Transactions 1, 1999, , 923-936.	0.9	43
104	Synergistic activation of JNK/SAPK by interleukin-1 and platelet-derived growth factor is independent of Rac and Cdc42. Biochemical Journal, 1999, 338, 387-392.	1.7	35
105	Synergistic activation of JNK/SAPK by interleukin-1 and platelet-derived growth factor is independent of Rac and Cdc42. Biochemical Journal, 1999, 338, 387.	1.7	12
106	Priming of human neutrophil superoxide generation by tumour necrosis factor-Î± is signalled by enhanced phosphatidylinositol 3,4,5-trisphosphate but not inositol 1,4,5-trisphosphate accumulation. FEBS Letters, 1998, 439, 147-151.	1.3	41
107	Translocation of PDK-1 to the plasma membrane is important in allowing PDK-1 to activate protein kinase B. Current Biology, 1998, 8, 684-691.	1.8	334
108	Protein Kinase B Kinases That Mediate Phosphatidylinositol 3,4,5-Trisphosphate-Dependent Activation of Protein Kinase B. Science, 1998, 279, 710-714.	6.0	992

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109	Protein Kinase B and Rac Are Activated in Parallel within a Phosphatidylinositide 3OH-kinase-controlled Signaling Pathway. Journal of Biological Chemistry, 1998, 273, 11248-11256.	1.6	83
110	168 Structural analysis of a novel isoform of phosphoinositide 30H-kinase. Biochemical Society Transactions, 1997, 25, S604-S604.	1.6	3
111	Synthesis of dipalmitoyl phosphatidylinositol 3,4-bis(phosphate) and 3,4,5-tris(phosphate) and their enantiomers. Chemical Communications, 1997, , 1635-1636.	2.2	10
112	Dual Role of Phosphatidylinositol-3,4,5-trisphosphate in the Activation of Protein Kinase B. Science, 1997, 277, 567-570.	6.0	1,131
113	Insulin and ATP stimulate actin polymerization in U937 cells by a wortmannin-sensitive mechanism. FEBS Letters, 1996, 392, 66-70.	1.3	10
114	PDGF stimulates an increase in GTPâ€"Rac via activation of phosphoinositide 3-kinase. Current Biology, 1995, 5, 393-403.	1.8	531
115	Activation of phosphoinositide 3-kinase is required for PDGF-stimulated membrane ruffling. Current Biology, 1994, 4, 385-393.	1.8	447
116	An inositol 1,4,5-trisphosphate-6-kinase activity in pea roots. Planta, 1992, 187, 542-5.	1.6	20
117	Phosphoinositol diphosphates: non-enzymic formation in vitro and occurrence in vivo in the cellular slime mold Dictyostelium. Carbohydrate Research, 1992, 234, 247-262.	1.1	46
118	The metabolism and functions of inositol pentakisphosphate and inositol hexakisphosphate. Biochemical Society Transactions, 1989, 17, 3-5.	1.6	28