Boon Chuan Low

List of Publications by Year
in descending order

90 papers	4,043 citations	101384 36 h-index	128067 60 g-index
95 all docs	95 docs citations	95 times ranked	6296 citing authors

#	Article	IF	Citations
1	Lung Cancer Induces NK Cell Contractility and Cytotoxicity Through Transcription Factor Nuclear Localization. Frontiers in Cell and Developmental Biology, 2022, 10, .	1.8	2
2	Distinct mRNAs in Cancer Extracellular Vesicles Activate Angiogenesis and Alter Transcriptome of Vascular Endothelial Cells. Cancers, 2021, 13, 2009.	1.7	5
3	Structural basis for p50RhoGAP BCH domainâ€“mediated regulation of Rho inactivation. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, e2014242118.	3.3	7
4	Enhanced tumor cell killing by ultrasound after microtubule depolymerization. Bioengineering and Translational Medicine, 2021, 6, e10233.	3.9	16
5	A computational model of mutual antagonism in the mechano-signaling network of RhoA and nitric oxide. BMC Molecular and Cell Biology, 2021, 22, 47.	1.0	3
6	Spatial arrangement of LD motif-interacting residues on focal adhesion targeting domain of Focal Adhesion Kinase determine domain-motif interaction affinity and specificity. Biochimica Et Biophysica Acta - General Subjects, 2020, 1864, 129450.	1.1	4
7	Bile canaliculi contract autonomously by releasing calcium into hepatocytes via mechanosensitive calcium channel. Biomaterials, 2020, 259, 120283.	5.7	8
8	BNIP-2 retards breast cancer cell migration by coupling microtubule-mediated GEF-H1 and RhoA activation. Science Advances, 2020, 6, eaaz1534.	4.7	18
9	Common and Unique Transcription Signatures of YAP and TAZ in Gastric Cancer Cells. Cancers, 2020, 12, 3667.	1.7	11
10	Rab5a activates IRS1 to coordinate IGF-AKT-mTOR signaling and myoblast differentiation during muscle regeneration. Cell Death and Differentiation, 2020, 27, 2344-2362.	5.0	30
11	Scaffold Proteins and their Roles in Human Diseases. Proceedings of the Singapore National Academy of Science, 2020, 14, 15-29.	0.1	0
12	Hsp90Î² interacts with MDM2 to suppress p53â€dependent senescence during skeletal muscle regeneration. Aging Cell, 2019, 18, e13003.	3.0	28
13	Large-scale curvature sensing by directional actin flow drives cellular migration mode switching. Nature Physics, 2019, 15, 393-402.	6.5	78
14	Activation of AKT-mTOR Signaling Directs Tenogenesis of Mesenchymal Stem Cells. Stem Cells, 2018, 36, 527-539.	1.4	36
15	Hsp70 Interacts with Mitogen-Activated Protein Kinase (MAPK)-Activated Protein Kinase 2 To Regulate p38MAPK Stability and Myoblast Differentiation during Skeletal Muscle Regeneration. Molecular and Cellular Biology, 2018, 38, .	1.1	31
16	Mutations in six nephrosis genes delineate a pathogenic pathway amenable to treatment. Nature Communications, 2018, 9, 1960.	5.8	90
17	Mechanobiology of Tumor Growth. Chemical Reviews, 2018, 118, 6499-6515.	23.0	118
18	BPGAP1 spatially integrates JNK/ERK signaling crosstalk in oncogenesis. Oncogene, 2017, 36, 3178-3192.	2.6	16

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19	Actomyosin contractility drives bile regurgitation as an early response during obstructive cholestasis. Journal of Hepatology, 2017, 66, 1231-1240.	1.8	15
20	YAP Regulates Actin Dynamics through ARHGAP29 and Promotes Metastasis. Cell Reports, 2017, 19, 1495-1502.	2.9	188
21	Differential Depth Sensing Reduces Cancer Cell Proliferation <i>via</i> Rho-Rac-Regulated Invadopodia. ACS Nano, 2017, 11, 7336-7348.	7.3	11
22	The Mechanobiology Institute â€" Defining a New Field of Science. , 2017, , 435-451.		0
23	Topography induces differential sensitivity on cancer cell proliferation via Rho-ROCK-Myosin contractility. Scientific Reports, 2016, 6, 19672.	1.6	47
24	NuSAP governs chromosome oscillation by facilitating the Kid-generated polar ejection force. Nature Communications, 2016, 7, 10597.	5.8	22
25	Structural basis for exploring the allosteric inhibition of human kidney type glutaminase. Oncotarget, 2016, 7, 57943-57954.	0.8	39
26	Structural Basis for a Unique ATP Synthase Core Complex from Nanoarcheaum equitans. Journal of Biological Chemistry, 2015, 290, 27280-27296.	1.6	14
27	Annexin-A1 controls an ERK-RhoAâ€"NFÎºB activation loop in breast cancer cells. Biochemical and Biophysical Research Communications, 2015, 461, 47-53.	1.0	30
28	Epidermal Growth Factor Activates the Rho GTPase-activating Protein (GAP) Deleted in Liver Cancer 1 via Focal Adhesion Kinase and Protein Phosphatase 2A. Journal of Biological Chemistry, 2015, 290, 4149-4162.	1.6	22
29	KIF5B transports BNIP-2 to regulate p38 mitogen-activated protein kinase activation and myoblast differentiation. Molecular Biology of the Cell, 2015, 26, 29-42.	0.9	17
30	BNIP-H Recruits the Cholinergic Machinery to Neurite Terminals to Promote Acetylcholine Signaling and Neuritogenesis. Developmental Cell, 2015, 34, 555-568.	3.1	22
31	The bi-lobe-associated LRRP1 regulates Ran activity in Trypanosoma brucei. Journal of Cell Science, 2014, 127, 4846-56.	1.2	7
32	Crosstalk of Ras and Rho: activation of RhoA abates Kras-induced liver tumorigenesis in transgenic zebrafish models. Oncogene, 2014, 33, 2717-2727.	2.6	81
33	YAP/TAZ as mechanosensors and mechanotransducers in regulating organ size and tumor growth. FEBS Letters, 2014, 588, 2663-2670.	1.3	354
34	A cooperative jack model of random coilâ€toâ€elongation transition of the FH1 domain by profilin binding explains formin motor behavior in actin polymerization. FEBS Letters, 2014, 588, 2288-2293.	1.3	8
35	Concerted modulation of paxillin dynamics at focal adhesions by deleted in liver cancerâ€1 and focal adhesion kinase during early cell spreading. Cytoskeleton, 2014, 71, 677-694.	1.0	19
36	Structural Basis for the Active Site Inhibition Mechanism of Human Kidney-Type Glutaminase (KGA). Scientific Reports, 2014, 4, 3827.	1.6	80

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37	SmgGDS antagonizes BPGAP1-induced Ras/ERK activation and neuritogenesis in PC12 cell differentiation. Molecular Biology of the Cell, 2013, 24, 145-156.	0.9	14
38	Role of DLC1 in Regulating Cellular and Focal Adhesion Dynamics. FASEB Journal, 2013, 27, 1046.1.	0.2	0
39	Structural basis for the allosteric inhibitory mechanism of human kidney-type glutaminase (KGA) and its regulation by Raf-Mek-Erk signaling in cancer cell metabolism. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 7705-7710.	3.3	178
40	Modularity and functional plasticity of scaffold proteins as p(l)acemakers in cell signaling. Cellular Signalling, 2012, 24, 2143-2165.	1.7	77
41	Functional plasticity of the BNIPâ€2 and Cdc42GAP Homology (BCH) domain in cell signaling and cell dynamics. FEBS Letters, 2012, 586, 2674-2691.	1.3	23
42	Using Zebrafish for Studying Rho GTPases Signaling In Vivo. Methods in Molecular Biology, 2012, 827, 321-337.	0.4	2
43	Cross-Species Analyses Identify the BNIP-2 and Cdc42GAP Homology (BCH) Domain as a Distinct Functional Subclass of the CRAL_TRIO/Sec14 Superfamily. PLoS ONE, 2012, 7, e33863.	1.1	16
44	Molecular Mechanistic Insights into the Endothelial Receptor Mediated Cytoadherence of Plasmodium falciparum-Infected Erythrocytes. PLoS ONE, 2011, 6, e16929.	1.1	28
45	An Integrated Mathematical Model of Thrombin-, Histamine-and VEGF-Mediated Signalling in Endothelial Permeability. BMC Systems Biology, 2011, 5, 112.	3.0	15
46	Simulating EGFR-ERK Signaling Control by Scaffold Proteins KSR and MP1 Reveals Differential Ligand-Sensitivity Co-Regulated by Cbl-CIN85 and Endophilin. PLoS ONE, 2011, 6, e22933.	1.1	9
47	Identification of the BCL2/adenovirus E1B-19K protein-interacting protein 2 (BNIP-2) as a granzyme B target during human natural killer cell-mediated killing. Biochemical Journal, 2010, 431, 423-431.	1.7	12
48	In-Silico Approaches to Multi-target Drug Discovery. Pharmaceutical Research, 2010, 27, 739-749.	1.7	135
49	The BNIP-2 and Cdc42GAP Homology (BCH) Domain of p50RhoGAP/Cdc42GAP Sequesters RhoA from Inactivation by the Adjacent GTPase-activating Protein Domain. Molecular Biology of the Cell, 2010, 21, 3232-3246.	0.9	23
50	Active Mek2 as a regulatory scaffold that promotes Pin1 binding to BPGAP1 to suppress BPGAP1-induced acute Erk activation and cell migration. Journal of Cell Science, 2010, 123, 903-916.	1.2	24
51	Virtual Screening of Selective Multitarget Kinase Inhibitors by Combinatorial Support Vector Machines. Molecular Pharmaceutics, 2010, 7, 1545-1560.	2.3	55
52	The SAM domain of the RhoGAP DLC1 binds EF1A1 to regulate cell migration. Journal of Cell Science, 2009, 122, 414-424.	1.2	45
53	Simulation of crosstalk between small GTPase RhoA and EGFR-ERK signaling pathway via MEKK1. Bioinformatics, 2009, 25, 358-364.	1.8	29
54	Pathway sensitivity analysis for detecting proâ€proliferation activities of oncogenes and tumor suppressors of epidermal growth factor receptorâ€extracellular signalâ€regulated protein kinase pathway at altered protein levels. Cancer, 2009, 115, 4246-4263.	2.0	7

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55	A genetic pathway composed of Sox14 and Mical governs severing of dendrites during pruning. Nature Neuroscience, 2009, 12, 1497-1505.	7.1	121
56	Virtual Screening of Abl Inhibitors from Large Compound Libraries by Support Vector Machines. Journal of Chemical Information and Modeling, 2009, 49, 2101-2110.	2.5	45
57	RhoA prevents apoptosis during zebrafish embryogenesis through activation of Mek/Erk pathway. Oncogene, 2008, 27, 1580-1589.	2.6	43
58	Simulation of the regulation of EGFR endocytosis and EGFRâ€ERK signaling by endophilinâ€mediated RhoAâ€EGFR crosstalk. FEBS Letters, 2008, 582, 2283-2290.	1.3	31
59	Evaluation of Virtual Screening Performance of Support Vector Machines Trained by Sparsely Distributed Active Compounds. Journal of Chemical Information and Modeling, 2008, 48, 1227-1237.	2.5	41
60	A Cdoâ€"Bnip-2â€"Cdc42 signaling pathway regulates p38Î±/Î² MAPK activity and myogenic differentiation. Journal of Cell Biology, 2008, 182, 497-507.	2.3	98
61	Protein Encoded by the Axin Allele Effectively Down-regulates Wnt Signaling but Exerts a Dominant Negative Effect on c-Jun N-terminal Kinase Signaling. Journal of Biological Chemistry, 2008, 283, 13132-13139.	1.6	10
62	BNIP2 extra long inhibits RhoA and cellular transformation by Lbc RhoGEF via its BCH domain. Journal of Cell Science, 2008, 121, 1739-1749.	1.2	37
63	Nerve Growth Factor Stimulates Interaction of Cayman Ataxia Protein BNIP-H/Caytaxin with Peptidyl-Prolyl Isomerase Pin1 in Differentiating Neurons. PLoS ONE, 2008, 3, e2686.	1.1	22
64	K-ras/PI3K-Akt Signaling Is Essential for Zebrafish Hematopoiesis and Angiogenesis. PLoS ONE, 2008, 3, e2850.	1.1	48
65	Derivation of Stable Microarray Cancer-Differentiating Signatures Using Consensus Scoring of Multiple Random Sampling and Gene-Ranking Consistency Evaluation. Cancer Research, 2007, 67, 9996-10003.	0.4	25
66	BNIP-SÎ± induces cell rounding and apoptosis by displacing p50RhoGAP and facilitating RhoA activation via its unique motifs in the BNIP-2 and Cdc42GAP homology domain. Oncogene, 2006, 25, 2393-2408.	2.6	41
67	RhoA acts downstream of Wnt5 and Wnt11 to regulate convergence and extension movements by involving effectors Rho Kinase and Diaphanous: Use of zebrafish as an in vivo model for GTPase signaling. Cellular Signalling, 2006, 18, 359-372.	1.7	106
68	Brain-specific BNIP-2-homology protein Caytaxin relocalises glutaminase to neurite terminals and reduces glutamate levels. Journal of Cell Science, 2006, 119, 3337-3350.	1.2	51
69	Juxtanodin: An oligodendroglial protein that promotes cellular arborization and 2',3'-cyclic nucleotide-3'-phosphodiesterase trafficking. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 11527-11532.	3.3	35
70	Activation of EGF receptor endocytosis and ERK1/2 signaling by BPGAP1 requires direct interaction with EEN/endophilin II and a functional RhoGAP domain. Journal of Cell Science, 2005, 118, 2707-2721.	1.2	41
71	BNIP-2 induces cell elongation and membrane protrusions by interacting with Cdc42 via a unique Cdc42-binding motif within its BNIP-2 and Cdc42GAP homology domain. Experimental Cell Research, 2005, 303, 263-274.	1.2	31
72	Cortactin phosphorylation as a switch for actin cytoskeletal network and cell dynamics control. FEBS Letters, 2005, 579, 577-585.	1.3	113

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73	BPGAP1 Interacts with Cortactin and Facilitates Its Translocation to Cell Periphery for Enhanced Cell Migration. Molecular Biology of the Cell, 2004, 15, 2873-2883.	0.9	41
74	Filling the GAPs in cell dynamics control: BPGAP1 promotes cortactin translocation to the cell periphery for enhanced cell migration. Biochemical Society Transactions, 2004, 32, 1110-1112.	1.6	6
75	Concerted Regulation of Cell Dynamics by BNIP-2 and Cdc42GAP Homology/Sec14p-like, Proline-rich, and GTPase-activating Protein Domains of a Novel Rho GTPase-activating Protein, BPGAP1. Journal of Biological Chemistry, 2003, 278, 45903-45914.	1.6	41
76	The BNIP-2 and Cdc42GAP Homology/Sec14p-like Domain of BNIP-SÎ± Is a Novel Apoptosis-inducing Sequence. Journal of Biological Chemistry, 2002, 277, 7483-7492.	1.6	38
77	Sprouty2 attenuates epidermal growth factor receptor ubiquitylation and endocytosis, and consequently enhances Ras/ERK signalling. EMBO Journal, 2002, 21, 4796-4808.	3.5	209
78	Evidence for Direct Interaction between Sprouty and Cbl. Journal of Biological Chemistry, 2001, 276, 5866-5875.	1.6	114
79	Sprouty Proteins Are Targeted to Membrane Ruffles upon Growth Factor Receptor Tyrosine Kinase Activation. Journal of Biological Chemistry, 2000, 275, 32837-32845.	1.6	90
80	Evidence for a Novel Cdc42GAP Domain at the Carboxyl Terminus of BNIP-2. Journal of Biological Chemistry, 2000, 275, 14415-14422.	1.6	32
81	The BNIP-2 and Cdc42GAP Homology Domain of BNIP-2 Mediates Its Homophilic Association and Heterophilic Interaction with Cdc42GAP. Journal of Biological Chemistry, 2000, 275, 37742-37751.	1.6	41
82	Tyrosine Phosphorylation of the Bcl-2-associated Protein BNIP-2 by Fibroblast Growth Factor Receptor-1 Prevents Its Binding to Cdc42GAP and Cdc42. Journal of Biological Chemistry, 1999, 274, 33123-33130.	1.6	42
83	Association of Atypical Protein Kinase C Isotypes with the Docker Protein FRS2 in Fibroblast Growth Factor Signaling. Journal of Biological Chemistry, 1999, 274, 19025-19034.	1.6	31
84	Growth Factors Stimulate Tyrosine Dephosphorylation of p75 and Its Dissociation from the SH2 Domain of Grb2. Journal of Biological Chemistry, 1997, 272, 29892-29898.	1.6	7
85	SHP2 Associates Directly with Tyrosine Phosphorylated p90 (SNT) Protein in FGF-Stimulated Cells. Biochemical and Biophysical Research Communications, 1997, 238, 261-266.	1.0	49
86	Interaction of interferonâ€Î³ and epidermal growth factor in the regulation of nitric oxide production and cellular proliferation in a cultured murine mammary cell line, COMMAâ€Đ. IUBMB Life, 1997, 41, 1237-1245.	1.5	0
87	SUC1-Associated Neurotrophic Factor Target (SNT) Protein Is a Major FGF-Stimulated Tyrosine Phosphorylated 90-kDa Protein Which Binds to the SH2 Domain of GRB2. Biochemical and Biophysical Research Communications, 1996, 225, 1021-1026.	1.0	44
88	Interleukin-1Î²and Tumor Necrosis Factor-Î± Stimulate the cat-2 Gene of the L-Arginine Transporter in Cultured Vascular Smooth Muscle Cells. Journal of Biological Chemistry, 1996, 271, 11280-11283.	1.6	69
89	Angiotensin II Stimulates System y+ and Cationic Amino Acid Transporter Gene Expression in Cultured Vascular Smooth Muscle Cells. Journal of Biological Chemistry, 1995, 270, 27577-27583.	1.6	51
90	Characterization of system L and system y+ amino acid transport activity in cultured vascular smooth muscle cells. Journal of Cellular Physiology, 1993, 156, 626-634.	2.0	27