Anthony J Koleske

List of Publications by Year
in descending order

109 papers	9,125 citations	46918 47 h-index	40881 93 g-index
114 all docs	114 docs citations	114 times ranked	10262 citing authors

#	Article	IF	Citations
1	An RNA polymerase II holoenzyme responsive to activators. Nature, 1994, 368, 466-469.	13.7	594
2	Metabotropic Glutamate Receptor 5 Is a Coreceptor for Alzheimer AÎ² Oligomer Bound to Cellular Prion Protein. Neuron, 2013, 79, 887-902.	3.8	485
3	A multisubunit complex associated with the RNA polymerase II CTD and TATA-binding protein in yeast. Cell, 1993, 73, 1361-1375.	13.5	457
4	A kinaseâ€“cyclin pair in the RNA polymerase II holoenzyme. Nature, 1995, 374, 193-196.	13.7	411
5	Essential Roles for the Abl and Arg Tyrosine Kinases in Neurulation. Neuron, 1998, 21, 1259-1272.	3.8	382
6	Cortactin regulates cofilin and N-WASp activities to control the stages of invadopodium assembly and maturation. Journal of Cell Biology, 2009, 186, 571-587.	2.3	316
7	Molecular mechanisms of dendrite stability. Nature Reviews Neuroscience, 2013, 14, 536-550.	4.9	314
8	The RNA polymerase II holoenzyme and its implications for gene regulation. Trends in Biochemical Sciences, 1995, 20, 113-116.	3.7	305
9	Phosphorylation by the c-Abl protein tyrosine kinase inhibits parkin's ubiquitination and protective function. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 16691-16696.	3.3	241
10	An EGFRâ€“Srcâ€“Argâ€“Cortactin Pathway Mediates Functional Maturation of Invadopodia and Breast Cancer Cell Invasion. Cancer Research, 2011, 71, 1730-1741.	0.4	236
11	Mechanisms of Synapse and Dendrite Maintenance and Their Disruption in Psychiatric and Neurodegenerative Disorders. Annual Review of Neuroscience, 2010, 33, 349-378.	5.0	217
12	Cortactin phosphorylation regulates cell invasion through a pH-dependent pathway. Journal of Cell Biology, 2011, 195, 903-920.	2.3	181
13	A novel transcription factor reveals a functional link between the RNA polymerase II CTD and TFIID. Cell, 1992, 69, 883-894.	13.5	177
14	Cortactin in cell migration and cancer at a glance. Journal of Cell Science, 2012, 125, 1621-1626.	1.2	160
15	Regulation of cell migration and morphogenesis by Abl-family kinases: emerging mechanisms and physiological contexts. Journal of Cell Science, 2009, 122, 3441-3454.	1.2	157
16	How do Abl family kinases regulate cell shape and movement?. Trends in Cell Biology, 2004, 14, 36-44.	3.6	154
17	Specific tyrosine phosphorylation sites on cortactin regulate Nck1-dependent actin polymerization in invadopodia. Journal of Cell Science, 2010, 123, 3662-3673.	1.2	145
18	Corticosteroid-Induced Neural Remodeling Predicts Behavioral Vulnerability and Resilience. Journal of Neuroscience, 2013, 33, 3107-3112.	1.7	139

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19	Shigella IpgB1 promotes bacterial entry through the ELMOâ€“Dock180 machinery. Nature Cell Biology, 2007, 9, 121-128.	4.6	136
20	Caveolae, transmembrane signalling and cellular transformation. Molecular Membrane Biology, 1995, 12, 121-124.	2.0	135
21	Integrin-Mediated Dendrite Branch Maintenance Requires Abelson (Abl) Family Kinases. Journal of Neuroscience, 2005, 25, 6105-6118.	1.7	134
22	Two Distinct Phosphorylation Pathways Have Additive Effects on Abl Family Kinase Activation. Molecular and Cellular Biology, 2003, 23, 3884-3896.	1.1	129
23	A phase Ib multiple ascending dose study of the safety, tolerability, and central nervous system availability of AZD0530 (saracatinib) in Alzheimerâ€™s disease. Alzheimer's Research and Therapy, 2015, 7, 35.	3.0	129
24	Abl-dependent tyrosine phosphorylation of Sos-1 mediates growth-factor-induced Rac activation. Nature Cell Biology, 2004, 6, 268-274.	4.6	119
25	A Critical Role for Cortactin Phosphorylation by Abl-Family Kinases in PDGF-Induced Dorsal-Wave Formation. Current Biology, 2007, 17, 445-451.	1.8	118
26	Inhibition of Rho via Arg and p190RhoGAP in the Postnatal Mouse Hippocampus Regulates Dendritic Spine Maturation, Synapse and Dendrite Stability, and Behavior. Journal of Neuroscience, 2007, 27, 10982-10992.	1.7	114
27	Integrin Signaling through Arg Activates p190RhoGAP by Promoting Its Binding to p120RasGAP and Recruitment to the Membrane. Molecular Biology of the Cell, 2006, 17, 4827-4836.	0.9	113
28	Adhesion-Dependent Regulation of p190RhoGAP in the Developing Brain by the Abl-Related Gene Tyrosine Kinase. Current Biology, 2004, 14, 691-696.	1.8	109
29	The Abl-related gene (Arg) requires its F-actinâ€“microtubule cross-linking activity to regulate lamellipodial dynamics during fibroblast adhesion. Journal of Cell Biology, 2004, 165, 407-420.	2.3	105
30	The vacuolar-ATPase modulates matrix metalloproteinase isoforms in human pancreatic cancer. Laboratory Investigation, 2011, 91, 732-743.	1.7	105
31	Action control is mediated by prefrontal BDNF and glucocorticoid receptor binding. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 20714-20719.	3.3	105
32	Arg interacts with cortactin to promote adhesion-dependent cell edge protrusion. Journal of Cell Biology, 2009, 185, 503-519.	2.3	97
33	Integrin Î²1 Signals through Arg to Regulate Postnatal Dendritic Arborization, Synapse Density, and Behavior. Journal of Neuroscience, 2012, 32, 2824-2834.	1.7	97
34	Regulation of neuronal morphogenesis and synaptic function by Abl family kinases. Current Opinion in Neurobiology, 2003, 13, 535-544.	2.0	89
35	Arg Kinase Regulates Prefrontal Dendritic Spine Refinement and Cocaine-Induced Plasticity. Journal of Neuroscience, 2012, 32, 2314-2323.	1.7	83
36	The Abl-related Gene Tyrosine Kinase Acts through p190RhoGAP to Inhibit Actomyosin Contractility and Regulate Focal Adhesion Dynamics upon Adhesion to Fibronectin. Molecular Biology of the Cell, 2007, 18, 3860-3872.	0.9	81

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37	Extracellular matrix control of dendritic spine and synapse structure and plasticity in adulthood. Frontiers in Neuroanatomy, 2014, 8, 116.	0.9	79
38	ECM receptors in neuronal structure, synaptic plasticity, and behavior. Progress in Brain Research, 2014, 214, 101-131.	0.9	72
39	Bidirectional Signaling Links the Abelson Kinases to the Platelet-Derived Growth Factor Receptor. Molecular and Cellular Biology, 2004, 24, 2573-2583.	1.1	69
40	Phospholipids Can Switch the GTPase Substrate Preference of a GTPase-activating Protein. Journal of Biological Chemistry, 2004, 279, 5055-5058.	1.6	66
41	Abl2/Arg Controls Dendritic Spine and Dendrite Arbor Stability via Distinct Cytoskeletal Control Pathways. Journal of Neuroscience, 2013, 33, 1846-1857.	1.7	62
42	Reciprocal stabilization of ABL and TAZ regulates osteoblastogenesis through transcription factor RUNX2. Journal of Clinical Investigation, 2016, 126, 4482-4496.	3.9	60
43	The ARG Tyrosine Kinase Interacts with Siva-1 in the Apoptotic Response to Oxidative Stress. Journal of Biological Chemistry, 2001, 276, 11465-11468.	1.6	59
44	Abl Family Nonreceptor Tyrosine Kinases Modulate Short-Term Synaptic Plasticity. Journal of Neurophysiology, 2003, 89, 1678-1687.	0.9	58
45	Differential expression of cytoskeletal regulatory factors in the adolescent prefrontal cortex: Implications for cortical development. Journal of Neuroscience Research, 2017, 95, 1123-1143.	1.3	56
46	Transient inhibition of p53 homologs protects ovarian function from two distinct apoptotic pathways triggered by anticancer therapies. Cell Death and Differentiation, 2019, 26, 502-515.	5.0	53
47	N-Myristoylated c-Abl Tyrosine Kinase Localizes to the Endoplasmic Reticulum upon Binding to an Allosteric Inhibitor. Journal of Biological Chemistry, 2009, 284, 29005-29014.	1.6	52
48	Synaptic Clustering of PSD-95 Is Regulated by c-Abl through Tyrosine Phosphorylation. Journal of Neuroscience, 2010, 30, 3728-3738.	1.7	50
49	Integrin Î±3 Is Required for Late Postnatal Stability of Dendrite Arbors, Dendritic Spines and Synapses, and Mouse Behavior. Journal of Neuroscience, 2013, 33, 6742-6752.	1.7	50
50	Loss of dendrite stabilization by the Abl-related gene (Arg) kinase regulates behavioral flexibility and sensitivity to cocaine. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 16859-16864.	3.3	46
51	Neurodevelopmental disease-associated de novo mutations and rare sequence variants affect TRIO GDP/GTP exchange factor activity. Human Molecular Genetics, 2017, 26, 4728-4740.	1.4	46
52	Defective T Cell Development and Function in the Absence of Abelson Kinases. Journal of Immunology, 2007, 179, 7334-7343.	0.4	45
53	CNS Neurons Deposit Laminin Î±5 to Stabilize Synapses. Cell Reports, 2017, 21, 1281-1292.	2.9	45
54	Longâ€Term Liveâ€Cell STED Nanoscopy of Primary and Cultured Cells with the Plasma Membrane HIDE Probe Dilâ€SiR. Angewandte Chemie - International Edition, 2017, 56, 10408-10412.	7.2	44

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55	Increased Dendrite Branching in AÎ²PP/PS1 Mice and Elongation of Dendrite Arbors by Fasudil Administration. Journal of Alzheimer's Disease, 2010, 20, 1003-1008.	1.2	43
56	Adolescent cocaine exposure simplifies orbitofrontal cortical dendritic arbors. Frontiers in Pharmacology, 2014, 5, 228.	1.6	42
57	Abelson phosphorylation of CLASP2 modulates its association with microtubules and actin. Cytoskeleton, 2014, 71, 195-209.	1.0	41
58	Direct Interactions with the Integrin Î²1 Cytoplasmic Tail Activate the Abl2/Arg Kinase. Journal of Biological Chemistry, 2015, 290, 8360-8372.	1.6	40
59	Trio Haploinsufficiency Causes Neurodevelopmental Disease-Associated Deficits. Cell Reports, 2019, 26, 2805-2817.e9.	2.9	39
60	The Abl and Arg Kinases Mediate Distinct Modes of Phagocytosis and Are Required for Maximal Leishmania Infection. Molecular and Cellular Biology, 2012, 32, 3176-3186.	1.1	38
61	Phosphorylated cortactin recruits Vav2 guanine nucleotide exchange factor to activate Rac3 and promote invadopodial function in invasive breast cancer cells. Molecular Biology of the Cell, 2017, 28, 1347-1360.	0.9	38
62	Integrin Î±5Î²1 regulates PP2A complex assembly through PDE4D in atherosclerosis. Journal of Clinical Investigation, 2019, 129, 4863-4874.	3.9	37
63	Abl2/Abl-related Gene Stabilizes Actin Filaments, Stimulates Actin Branching by Actin-related Protein 2/3 Complex, and Promotes Actin Filament Severing by Cofilin. Journal of Biological Chemistry, 2015, 290, 4038-4046.	1.6	36
64	Caveolae and human disease: functional roles in transcytosis, potocytosis, signalling and cell polarity. Seminars in Developmental Biology, 1995, 6, 47-58.	1.3	33
65	Arg/Abl2 Modulates the Affinity and Stoichiometry of Binding of Cortactin to F-Actin. Biochemistry, 2012, 51, 6644-6653.	1.2	32
66	Enhancement of ABL Kinase Catalytic Efficiency by a Direct Binding Regulator Is Independent of Other Regulatory Mechanisms. Journal of Biological Chemistry, 2008, 283, 31401-31407.	1.6	30
67	Regulation of Actin Polymerization and Adhesion-Dependent Cell Edge Protrusion by the Abl-Related Gene (Arg) Tyrosine Kinase and N-WASp. Biochemistry, 2010, 49, 2227-2234.	1.2	28
68	Noonan Syndrome-Associated SHP2 Dephosphorylates GluN2B to Regulate NMDA Receptor Function. Cell Reports, 2018, 24, 1523-1535.	2.9	26
69	Two-color nanoscopy of organelles for extended times with HIDE probes. Nature Communications, 2020, 11, 4271.	5.8	26
70	The Arg Non-receptor Tyrosine Kinase Modifies F-actin Structure. Journal of Molecular Biology, 2005, 346, 565-575.	2.0	25
71	Ablation of ErbB4 from excitatory neurons leads to reduced dendritic spine density in mouse prefrontal cortex. Journal of Comparative Neurology, 2014, 522, 3351-3362.	0.9	25
72	T cell survival and function requires the c-Abl tyrosine kinase. Cell Cycle, 2008, 7, 3847-3857.	1.3	24

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73	Do Filopodia Enable the Growth Cone to Find Its Way?. Science Signaling, 2003, 2003, pe20-pe20.	1.6	23
74	Disruption of Coordinated Presynaptic and Postsynaptic Maturation Underlies the Defects in Hippocampal Synapse Stability and Plasticity in Abl2/Arg-Deficient Mice. Journal of Neuroscience, 2016, 36, 6778-6791.	1.7	22
75	ABL1, Overexpressed in Hepatocellular Carcinomas, Regulates Expression of NOTCH1 and Promotes Development of Liver Tumors in Mice. Gastroenterology, 2020, 159, 289-305.e16.	0.6	22
76	Control of Synapse Structure and Function by Actin and Its Regulators. Cells, 2022, 11, 603.	1.8	22
77	Functional interactions of ion channels with the actin cytoskeleton: does coupling to dynamic actin regulate NMDA receptors?. Journal of Physiology, 2021, 599, 431-441.	1.3	21
78	Dissecting kinase signaling pathways. Drug Discovery Today, 2007, 12, 717-724.	3.2	18
79	The Src kinases Hck, Fgr, and Lyn activate Abl2/Arg to facilitate IgG-mediated phagocytosis andLeishmaniainfection. Journal of Cell Science, 2016, 129, 3130-43.	1.2	18
80	Met acts through Abl to regulate p53 transcriptional outcomes and cell survival in the developing liver. Journal of Hepatology, 2012, 57, 1292-1298.	1.8	17
81	Corticosteroid-induced dendrite loss and behavioral deficiencies can be blocked by activation of Abl2/Arg kinase. Molecular and Cellular Neurosciences, 2017, 85, 226-234.	1.0	17
82	Neural Stem Cells Direct Axon Guidance via Their Radial Fiber Scaffold. Neuron, 2020, 107, 1197-1211.e9.	3.8	17
83	Trio family proteins as regulators of cell migration and morphogenesis in development and disease â€“ mechanisms and cellular contexts. Journal of Cell Science, 2021, 134, .	1.2	17
84	The Abl and Arg nonâ€receptor tyrosine kinases regulate different zones of stress fiber, focal adhesion, and contractile network localization in spreading fibroblasts. Cytoskeleton, 2010, 67, 666-675.	1.0	16
85	Arg kinase signaling in dendrite and synapse stabilization pathways: Memory, cocaine sensitivity, and stress. International Journal of Biochemistry and Cell Biology, 2013, 45, 2496-2500.	1.2	15
86	Brain Region and Isoform-Specific Phosphorylation Alters Kalirin SH2 Domain Interaction Sites and Calpain Sensitivity. ACS Chemical Neuroscience, 2017, 8, 1554-1569.	1.7	15
87	[16] Purification of yeast RNA polymerase II holoenzymes. Methods in Enzymology, 1996, 273, 176-184.	0.4	14
88	WAVE2 Regulates Epithelial Morphology and Cadherin Isoform Switching through Regulation of Twist and Abl. PLoS ONE, 2013, 8, e64533.	1.1	14
89	SNARE Complex Dysfunction: A Unifying Hypothesis for Schizophrenia. Biological Psychiatry, 2015, 78, 356-358.	0.7	14
90	Cortactin stabilization of actin requires actin-binding repeats and linker, is disrupted by specific substitutions, and is independent of nucleotide state. Journal of Biological Chemistry, 2018, 293, 13022-13032.	1.6	13

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91	Two Amino Acid Residues Confer Different Binding Affinities of Abelson Family Kinase Src Homology 2 Domains for Phosphorylated Cortactin. Journal of Biological Chemistry, 2014, 289, 19704-19713.	1.6	12
92	Lysozyme contamination facilitates crystallization of a heterotrimeric cortactinâ€“Argâ€“lysozyme complex. Acta Crystallographica Section F: Structural Biology Communications, 2012, 68, 154-158.	0.7	11
93	Regulation of MT dynamics via direct binding of an Abl family kinase. Journal of Cell Biology, 2019, 218, 3986-3997.	2.3	11
94	Regulation of the NMDA receptor by its cytoplasmic domains: (How) is the tail wagging the dog?. Neuropharmacology, 2021, 195, 108634.	2.0	10
95	The repeat region of cortactin is intrinsically disordered in solution. Scientific Reports, 2017, 7, 16696.	1.6	9
96	Cell adhesion signaling pathways. Communicative and Integrative Biology, 2011, 4, 30-33.	0.6	8
97	Abl2 is recruited to ventral actin waves through cytoskeletal interactions to promote lamellipodium extension. Molecular Biology of the Cell, 2018, 29, 2863-2873.	0.9	8
98	Abl2:Cortactin Interactions Regulate Dendritic Spine Stability via Control of a Stable Filamentous Actin Pool. Journal of Neuroscience, 2021, 41, 3068-3081.	1.7	8
99	Cell adhesion signaling pathways: First responders to cocaine exposure?. Communicative and Integrative Biology, 2011, 4, 30-3.	0.6	8
100	Structure of the ABL2/ARG kinase in complex with dasatinib. Acta Crystallographica Section F, Structural Biology Communications, 2015, 71, 443-448.	0.4	7
101	Crystal structure of a guanine nucleotide exchange factor encoded by the scrub typhus pathogen Orientia tsutsugamushi. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 30380-30390.	3.3	7
102	A Role for the Non-Receptor Tyrosine Kinase Abl2/Arg in Experimental Neuroinflammation. Journal of NeuroImmune Pharmacology, 2018, 13, 265-276.	2.1	6
103	In vitro fluorescence assay to measure GDP/GTP exchange of guanine nucleotide exchange factors of Rho family GTPases. Biology Methods and Protocols, 2022, 7, bpab024.	1.0	6
104	Invadopodia: RhoC Runs Rings around Cofilin. Current Biology, 2011, 21, R280-R282.	1.8	4
105	Analysis of Cellular Tyrosine Phosphorylation via Chemical Rescue of Conditionally Active Abl Kinase. Biochemistry, 2018, 57, 1390-1398.	1.2	4
106	Platelet-derived growth factor receptor beta activates Abl2 via direct binding and phosphorylation. Journal of Biological Chemistry, 2021, 297, 100883.	1.6	4
107	Arg Deficiency Does not Influence the Course of Myelin Oligodendrocyte Glycoprotein (MOG35-55)-induced Experimental Autoimmune Encephalomyelitis. Journal of Clinical & Cellular Immunology, 2016, 7, .	1.5	1
108	What is the role of synaptic protein TRIO's spectrin repeats?. FASEB Journal, 2021, 35, .	0.2	0

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109	Measuring Cell-Edge Protrusion Dynamics during Spreading using Live-Cell Microscopy. Journal of Visualized Experiments, 2021, , .	0.2	0