Richard B Vallee

List of Publications by Year
in descending order

97	11,172	31976 53	40979 93
papers	citations	h-index	g-index

98	98	98	8201
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Overexpression of the Dynamitin (p50) Subunit of the Dynactin Complex Disrupts Dynein-dependent Maintenance of Membrane Organelle Distribution. Journal of Cell Biology, 1997, 139, 469-484.	5.2	598
2	Retrograde transport by the microtubule-associated protein MAP 1C. Nature, 1987, 330, 181-183.	27.8	541
3	A role for the lissencephaly gene LIS1 in mitosis and cytoplasmic dynein function. Nature Cell Biology, 2000, 2, 784-791.	10.3	406
4	Dual subcellular roles for LIS1 and dynein in radial neuronal migration in live brain tissue. Nature Neuroscience, 2007, 10, 970-979.	14.8	385
5	Dynein: An ancient motor protein involved in multiple modes of transport. Journal of Neurobiology, 2004, 58, 189-200.	3.6	379
6	Molecular cloning of the microtubule-associated mechanochemical enzyme dynamin reveals homology with a new family of GTP-binding proteins. Nature, 1990, 347, 256-261.	27.8	368
7	LIS1 RNA interference blocks neural stem cell division, morphogenesis, and motility at multiple stages. Journal of Cell Biology, 2005, 170, 935-945.	5.2	354
8	LIS1 and NudE Induce a Persistent Dynein Force-Producing State. Cell, 2010, 141, 304-314.	28.9	333
9	Cdc42, dynein, and dynactin regulate MTOC reorientation independent of Rho-regulated microtubule stabilization. Current Biology, 2001, 11, 1536-1541.	3.9	302
10	An extended microtubule-binding structure within the dynein motor domain. Nature, 1997, 390, 636-639.	27.8	276
11	Microtubule-associated protein 1C from brain is a two-headed cytosolic dynein. Nature, 1988, 332, 561-563.	27.8	266
12	Kinesin and dynamin are required for post-Golgi transport of a plasma-membrane protein. Nature Cell Biology, 2000, 2, 125-127.	10.3	228
13	Role of dynein, dynactin, and CLIP-170 interactions in LIS1 kinetochore function. Journal of Cell Biology, 2002, 156, 959-968.	5.2	228
14	Dynamin is a GTPase stimulated to high levels of activity by microtubules. Nature, 1992, 355, 733-735.	27.8	216
15	Kinesin 3 and cytoplasmic dynein mediate interkinetic nuclear migration in neural stem cells. Nature Neuroscience, 2010, 13, 1463-1471.	14.8	214
16	Cytoplasmic Dynein and Dynactin Are Required for the Transport of Microtubules into the Axon. Journal of Cell Biology, 1998, 140, 391-401.	5.2	204
17	Dynein at the cortex. Current Opinion in Cell Biology, 2002, 14, 44-49.	5.4	193
18	Direct Interaction of Pericentrin with Cytoplasmic Dynein Light Intermediate Chain Contributes to Mitotic Spindle Organization. Journal of Cell Biology, 1999, 147, 481-492.	5.2	184

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19	Homology of a 150K cytoplasmic dynein-associated polypeptide with the Drosophila gene Glued. Nature, 1991, 351, 579-583.	27.8	179
20	Interaction of brain cytoplasmic dynein and MAP2 with a common sequence at the C terminus of tubulin. Nature, 1989, 342, 569-572.	27.8	176
21	A Nup133-dependent NPC-anchored network tethers centrosomes to the nuclear envelope in prophase. Journal of Cell Biology, 2011, 192, 855-871.	5.2	172
22	Cytoplasmic dynein nomenclature. Journal of Cell Biology, 2005, 171, 411-413.	5.2	171
23	A role for cytoplasmic dynein and LIS1 in directed cell movement. Journal of Cell Biology, 2003, 163, 1205-1211.	5.2	169
24	Par3 and Dynein Associate to Regulate Local Microtubule Dynamics and Centrosome Orientation during Migration. Current Biology, 2009, 19, 1065-1074.	3.9	168
25	Multiple modes of cytoplasmic dynein regulation. Nature Cell Biology, 2012, 14, 224-230.	10.3	158
26	The Herpes Simplex Virus 1 U _L 34 Protein Interacts with a Cytoplasmic Dynein Intermediate Chain and Targets Nuclear Membrane. Journal of Virology, 2000, 74, 1355-1363.	3.4	154
27	The dynein family at a glance. Journal of Cell Science, 2006, 119, 4369-4371.	2.0	154
28	A cytoplasmic dynein tail mutation impairs motor processivity. Nature Cell Biology, 2010, 12, 1228-1234.	10.3	154
29	A requirement for cytoplasmic dynein and dynactin in intermediate filament network assembly and organization. Journal of Cell Biology, 2002, 157, 795-806.	5.2	151
30	The cellular roles of the lissencephaly gene LIS1, and what they tell us aboutbrain development. Genes and Development, 2006, 20, 1384-1393.	5.9	149
31	Cytoplasmic Dynein and LIS1 Are Required for Microtubule Advance during Growth Cone Remodeling and Fast Axonal Outgrowth. Journal of Neuroscience, 2007, 27, 5823-5834.	3.6	148
32	Adenovirus Transport via Direct Interaction of Cytoplasmic Dynein with the Viral Capsid Hexon Subunit. Cell Host and Microbe, 2009, 6, 523-535.	11.0	139
33	Light Intermediate Chain 1 Defines a Functional Subfraction of Cytoplasmic Dynein Which Binds to Pericentrin. Journal of Biological Chemistry, 2000, 275, 32763-32768.	3.4	137
34	Fast transport and retrograde movement of huntingtin and HAP 1 in axons. NeuroReport, 1997, 8, 2247-2250.	1.2	132
35	Emerging roles for myosin II and cytoplasmic dynein in migrating neurons and growth cones. Trends in Cell Biology, 2009, 19, 347-355.	7.9	128
36	NudE and NudEL are required for mitotic progression and are involved in dynein recruitment to kinetochores. Journal of Cell Biology, 2007, 178, 583-594.	5.2	127

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37	Molecular cloning of the retrograde transport motor cytoplasmic dynein (MAP 1C). Neuron, 1993, 10, 787-796.	8.1	122
38	Isolated flagellar outer arm dynein translocates brain microtubules in vitro. Nature, 1987, 330, 672-674.	27.8	116
39	Structural and thermodynamic characterization of a cytoplasmic dynein light chain intermediate chain complex. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 10028-10033.	7.1	116
40	Modes and Mishaps of Neuronal Migration in the Mammalian Brain. Journal of Neuroscience, 2008, 28, 11746-11752.	3.6	114
41	Molecular structure of cytoplasmic dynein 2 and its distribution in neuronal and ciliated cells. Journal of Cell Science, 2002, 115, 4801-4808.	2.0	105
42	The Involvement of the Intermediate Chain of Cytoplasmic Dynein in Binding the Motor Complex to Membranous Organelles ofXenopusOocytes. Molecular Biology of the Cell, 1997, 8, 2077-2088.	2.1	104
43	Distinct but Overlapping Sites within the Cytoplasmic Dynein Heavy Chain for Dimerization and for Intermediate Chain and Light Intermediate Chain Binding. Journal of Biological Chemistry, 2000, 275, 32769-32774.	3.4	102
44	Mutually Exclusive Cytoplasmic Dynein Regulation by NudE-Lis1 and Dynactin. Journal of Biological Chemistry, 2011, 286, 39615-39622.	3.4	99
45	Direct role of dynein motor in stable kinetochore-microtubule attachment, orientation, and alignment. Journal of Cell Biology, 2008, 182, 1045-1054.	5.2	94
46	High-resolution imaging reveals indirect coordination of opposite motors and a role for LIS1 in high-load axonal transport. Journal of Cell Biology, 2011, 195, 193-201.	5.2	94
47	Recruitment of dynein to late endosomes and lysosomes through light intermediate chains. Molecular Biology of the Cell, 2011, 22, 467-477.	2.1	86
48	Cdk1 Activates Pre-mitotic Nuclear Envelope Dynein Recruitment and Apical Nuclear Migration in Neural Stem Cells. Developmental Cell, 2015, 33, 703-716.	7.0	86
49	Mutations in DYNC2LI1 disrupt cilia function and cause short rib polydactyly syndrome. Nature Communications, 2015, 6, 7092.	12.8	79
50	Novel DyneinDYNC1H1Neck and Motor Domain Mutations Link Distal Spinal Muscular Atrophy and Abnormal Cortical Development. Human Mutation, 2014, 35, 298-302.	2.5	77
51	Control of cytoplasmic dynein force production and processivity by its C-terminal domain. Nature Communications, 2015, 6, 6206.	12.8	75
52	PKA-dependent dynein switching from lysosomes to adenovirus: A novel form of hostâ€“virus competition. Journal of Cell Biology, 2014, 205, 163-177.	5.2	70
53	Load-induced enhancement of Dynein force production by LIS1â€“NudE in vivo and in vitro. Nature Communications, 2016, 7, 12259.	12.8	64
54	Autoregulatory mechanism for dynactin control of processive and diffusive dynein transport. Nature Cell Biology, 2014, 16, 1192-1201.	10.3	63

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55	Severe NDE1-mediated microcephaly results from neural progenitor cell cycle arrests at multiple specific stages. Nature Communications, 2016, 7, 12551.	12.8	59
56	Role of the kinetochore/cell cycle checkpoint protein ZW10 in interphase cytoplasmic dynein function. Journal of Cell Biology, 2006, 172, 655-662.	5.2	55
57	KIF1A inhibition immortalizes brain stem cells but blocks BDNF-mediated neuronal migration. Nature Neuroscience, 2016, 19, 253-262.	14.8	51
58	The Dynein Adaptor RILP Controls Neuronal Autophagosome Biogenesis, Transport, and Clearance. Developmental Cell, 2020, 53, 141-153.e4.	7.0	48
59	An axonemal dynein at the Hybrid Sterility 6 locus: implications for t haplotype-specific male sterility and the evolution of species barriers. Mammalian Genome, 2000, 11, 8-15.	2.2	47
60	Long Range Allosteric Control of Cytoplasmic Dynein ATPase Activity by the Stalk and C-terminal Domains. Journal of Biological Chemistry, 2005, 280, 33045-33054.	3.4	46
61	Replication of early and recent Zika virus isolates throughout mouse brain development. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 12273-12278.	7.1	44
62	How dynein helps the cell find its center: a servomechanical model. Trends in Cell Biology, 2005, 15, 288-294.	7.9	43
63	Expression patterns of LIS1, dynein and their interaction partners dynactin, NudE, NudEL and NudC in human gliomas suggest roles in invasion and proliferation. Acta Neuropathologica, 2007, 113, 591-599.	7.7	42
64	Synthesis and Biological Evaluation of Purealin and Analogues as Cytoplasmic Dynein Heavy Chain Inhibitors. Journal of Medicinal Chemistry, 2006, 49, 2063-2076.	6.4	41
65	Adenovirus Recruits Dynein by an Evolutionary Novel Mechanism Involving Direct Binding to pH-Primed Hexon. Viruses, 2011, 3, 1417-1431.	3.3	40
66	ZW10 Function in Mitotic Checkpoint Control, Dynein Targeting, and Membrane Trafficking: Is Dynein the Unifying Theme?. Cell Cycle, 2006, 5, 2447-2451.	2.6	38
67	Molecular characterization of high molecular weight microtubule-associated proteins: Some answers, many questions. Cytoskeleton, 1990, 15, 204-209.	4.4	37
68	Glycogen synthase kinase 3 induces multilineage maturation of human pluripotent stem cell-derived lung progenitors in 3D culture. Development (Cambridge), 2019, 146, .	2.5	35
69	Role of kinesins in directed adenovirus transport and cytoplasmic exploration. PLoS Pathogens, 2018, 14, e1007055.	4.7	35
70	Neuronal migration defects in the Loa dynein mutant mouse. Neural Development, 2011, 6, 26.	2.4	31
71	Nesprin-2 Recruitment of BicD2 to the Nuclear Envelope Controls Dynein/Kinesin-Mediated Neuronal Migration InÂVivo. Current Biology, 2020, 30, 3116-3129.e4.	3.9	30
72	Use of multiple monoclonal antibodies to characterize the major microtubule-associated protein in sea urchin eggs. Cell Motility, 1985, 5, 431-446.	1.8	26

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73	Disentangling the molecular determinants for Cenpâ€F localization to nuclear pores and kinetochores. EMBO Reports, 2018, 19, .	4.5	26
74	Cdk1 phosphorylation of the dynein adapter Nde1 controls cargo binding from G2 to anaphase. Journal of Cell Biology, 2018, 217, 3019-3029.	5.2	25
75	Development and application of in vivo molecular traps reveals that dynein light chain occupancy differentially affects dynein-mediated processes. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 3493-3498.	7.1	24
76	Conformational Changes in the Adenovirus Hexon Subunit Responsible for Regulating Cytoplasmic Dynein Recruitment. Journal of Virology, 2015, 89, 1013-1023.	3.4	23
77	Role of cytoplasmic dynein and kinesins in adenovirus transport. FEBS Letters, 2020, 594, 1838-1847.	2.8	23
78	Distinct roles for dynein light intermediate chains in neurogenesis, migration, and terminal somal translocation. Journal of Cell Biology, 2019, 218, 808-819.	5.2	22
79	Emerging roles for motor proteins in progenitor cell behavior and neuronal migration during brain development. Cytoskeleton, 2016, 73, 566-576.	2.0	21
80	Cellular and subcellular imaging of motor protein-based behavior in embryonic rat brain. Methods in Cell Biology, 2016, 131, 349-363.	1.1	19
81	Autoinhibitory and other autoregulatory elements within the dynein motor domain. Journal of Structural Biology, 2006, 156, 175-181.	2.8	18
82	Dynamin, a GTPase Involved in the Initial Stages of Endocytosis. Novartis Foundation Symposium, 1993, 176, 185-197.	1.1	17
83	Dynamin in synaptic dynamics. Nature, 1993, 365, 107-108.	27.8	16
84	Emerging functions of force-producing kinetochore motors. Cell Cycle, 2010, 9, 715-719.	2.6	16
85	Microtubule-associated protein 1A (MAP 1A) is a ganglion cell marker in adult rat retina. Visual Neuroscience, 1989, 2, 349-356.	1.0	14
86	A RILP-regulated pathway coordinating autophagosome biogenesis with transport. Autophagy, 2020, 16, 1537-1538.	9.1	12
87	Microcephaly as a cell cycle disease. Cell Cycle, 2017, 16, 247-248.	2.6	11
88	The Dynein Stalk Contains an Antiparallel Coiled Coil with Region-Specific Stability. Biochemistry, 2009, 48, 2710-2713.	2.5	10
89	Dynein dynamics. Nature Structural and Molecular Biology, 2012, 19, 467-469.	8.2	8
90	Imaging of motor-dependent transport in neuronal and nonneuronal cells at high spatial and temporal resolution. Methods in Cell Biology, 2016, 131, 453-465.	1.1	3

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91	Roles of the multivalent dynein adaptors BicD2 and RILP in neurons. Neuroscience Letters, 2021, 752, 135796.	2.1	3
92	Tubulin site interpretation. Nature, 1990, 344, 389-389.	27.8	2
93	Cytoplasmic dynein and its regulators in neocortical development and disease. , 2018, , 262-285.		2
94	The Role of Dynein in Disease. , 0, , 497-509.		1
95	Emerging roles for motor proteins in progenitor cell behavior and neuronal migration during brain development. Cytoskeleton, 2016, 73, Spc1-Spc1.	2.0	1
96	Studies of Lissencephaly and Neurodegenerative Disease Reveal Novel Aspects of Cytoplasmic Dynein Regulation. , 2012, , 440-453.		0
97	Emerging roles for motor proteins in progenitor cell behavior and neuronal migration during brain development. Cytoskeleton, 2016, 73, Spc1-Spc1.	2.0	0