Isabelle Vernos

List of Publications by Year in Descending Order

90 papers	6,823 citations	41 h-index	82 g-index
98 ext. papers	7,478 ext. citations	11.3 avg, IF	5.65 L-index

#	Paper	IF	Citations
90	The human sperm basal body is a complex centrosome important for embryo preimplantation development. *Molecular Human Reproduction*, **2021**, 27,	4.4	4
89	The chaperonin CCT controls T cell receptor-driven 3D configuration of centrioles. *Science Advances* , **2020**, 6,	14.3	9
88	DnaJB6 is a RanGTP-regulated protein required for microtubule organization during mitosis. *Journal of Cell Science*, **2019**, 132,	5.3	3
87	Microtubule nucleation during central spindle assembly requires NEDD1 phosphorylation on serine 405 by Aurora A. *Journal of Cell Science*, **2019**, 132,	5.3	4
86	Insights of the tubulin code in gametes and embryos: from basic research to potential clinical applications in humans *Biology of Reproduction*, **2019**, 100, 575-589	3.9	9
85	Nek9 Phosphorylation Defines a New Role for TPX2 in Eg5-Dependent Centrosome Separation before Nuclear Envelope Breakdown. *Current Biology*, **2018**, 28, 121-129.e4	6.3	28
84	Functional Analysis of Human Pathological Semen Samples in an Oocyte Cytoplasmic Ex Vivo System. *Scientific Reports*, **2018**, 8, 15348	4.9	2
83	Proteomic Profiling of Microtubule Self-organization in M-phase. *Molecular and Cellular Proteomics*, **2018**, 17, 1991-2004	7.6	2
82	Role of Kif15 and its novel mitotic partner KBP in K-fiber dynamics and chromosome alignment. *PLoS ONE*, **2017**, 12, e0174819	3.7	12
81	Allosteric inhibition of Aurora-A kinase by a synthetic vNAR domain. *Open Biology*, **2016**, 6,	7	25
80	The C-terminal domain of TPX2 is made of alpha-helical tandem repeats. *BMC Structural Biology*, **2016**, 16, 17	2.7	4
79	Aurora-A regulates MCRS1 function during mitosis. *Cell Cycle*, **2016**, 15, 1779-86	4.7	2
78	Acentrosomal Microtubule Assembly in Mitosis: The Where, When, and How. *Trends in Cell Biology*, **2016**, 26, 80-87	18.3	50
77	From meiosis to mitosis the sperm centrosome defines the kinetics of spindle assembly after fertilization in Xenopus. *Development (Cambridge)*, **2016**, 143, e1.1-e1.1	6.6	
76	Non-centrosomal TPX2-Dependent Regulation of the Aurora A Kinase: Functional Implications for Healthy and Pathological Cell Division. *Frontiers in Oncology*, **2016**, 6, 88	5.3	22
75	Microtubule Organization in Mitotic Cells **2016**, 1-26		
74	From meiosis to mitosis - the sperm centrosome defines the kinetics of spindle assembly after fertilization in Xenopus. *Journal of Cell Science*, **2016**, 129, 2538-47	5.3	7

73	The sequential activation of the mitotic microtubule assembly pathways favors bipolar spindle formation. *Molecular Biology of the Cell*, **2016**, 27, 2935-45	3.5	7
72	An epigenetic regulator emerges as microtubule minus-end binding and stabilizing factor in mitosis. *Nature Communications*, **2015**, 6, 7889	17.4	36
71	Microtubule nucleation in mitosis by a RanGTP-dependent protein complex. *Current Biology*, **2015**, 25, 131-140	6.3	65
70	Aurora-A-Dependent Control of TACC3 Influences the Rate of Mitotic Spindle Assembly. *PLoS Genetics*, **2015**, 11, e1005345	6	29
69	The RanGTP Pathway: From Nucleo-Cytoplasmic Transport to Spindle Assembly and Beyond. *Frontiers in Cell and Developmental Biology*, **2015**, 3, 82	5.7	66
68	XTACC3-XMAP215 association reveals an asymmetric interaction promoting microtubule elongation. *Nature Communications*, **2014**, 5, 5072	17.4	15
67	The role of NEDD1 phosphorylation by Aurora A in chromosomal microtubule nucleation and spindle function. *Current Biology*, **2013**, 23, 143-9	6.3	41
66	Research management: Quotas are questionable. *Nature*, **2013**, 495, 39	50.4	19
65	Aurora A kinase and its substrate TACC3 are required for central spindle assembly. *EMBO Reports*, **2013**, 14, 829-36	6.5	50
64	Structure and non-structure of centrosomal proteins. *PLoS ONE*, **2013**, 8, e62633	3.7	16
63	Microtubule assembly during mitosis - from distinct origins to distinct functions?. *Journal of Cell Science*, **2012**, 125, 2805-14	5.3	80
62	Nek9 phosphorylation of NEDD1/GCP-WD contributes to Plk1 control of γ-tubulin recruitment to the mitotic centrosome. *Current Biology*, **2012**, 22, 1516-23	6.3	60
61	Chromokinesins: localization-dependent functions and regulation during cell division. *Biochemical Society Transactions*, **2011**, 39, 1154-60	5.1	27
60	K-fibre minus ends are stabilized by a RanGTP-dependent mechanism essential for functional spindle assembly. *Nature Cell Biology*, **2011**, 13, 1406-14	23.4	72
59	Uncovering new substrates for Aurora A kinase. *EMBO Reports*, **2010**, 11, 977-84	6.5	49
58	Plant TPX2 and related proteins. *Plant Signaling and Behavior*, **2009**, 4, 69-72	2.5	17
57	The role of Hklp2 in the stabilization and maintenance of spindle bipolarity. *Current Biology*, **2009**, 19, 1712-7	6.3	122
56	Development and biological evaluation of a novel aurora A kinase inhibitor. *ChemBioChem*, **2009**, 10, 464-78	3.8	32

55	Dissecting the role of Aurora A during spindle assembly. *EMBO Journal*, **2008**, 27, 2567-79	13	70
54	Dissecting the role of Aurora A during spindle assembly. *EMBO Journal*, **2008**, 27, 2942-2942	13	2
53	Spindle-localized CPE-mediated translation controls meiotic chromosome segregation. *Nature Cell Biology*, **2008**, 10, 858-65	23.4	67
52	The TACC proteins: TACC-ling microtubule dynamics and centrosome function. *Trends in Cell Biology*, **2008**, 18, 379-88	18.3	119
51	The plant TPX2 protein regulates prospindle assembly before nuclear envelope breakdown. *Plant Cell*, **2008**, 20, 2783-97	11.6	84
50	The kinesin superfamily motor protein KIF4 is associated with immune cell activation in idiopathic inflammatory myopathies. *Journal of Neuropathology and Experimental Neurology*, **2008**, 67, 624-32	3.1	16
49	A role for kinesin-2 in COPI-dependent recycling between the ER and the Golgi complex. *Current Biology*, **2006**, 16, 2245-51	6.3	55
48	Chromokinesin Xklp1 contributes to the regulation of microtubule density and organization during spindle assembly. *Molecular Biology of the Cell*, **2006**, 17, 1451-60	3.5	25
47	Motor protein KIFC5A interacts with Nubp1 and Nubp2, and is implicated in the regulation of centrosome duplication. *Journal of Cell Science*, **2006**, 119, 2035-47	5.3	31
46	Detection and quantification of protein-microtubules interactions using green fluorescent protein photoconversion. *Traffic*, **2006**, 7, 1283-9	5.7	3
45	Kinesin-2 is a motor for late endosomes and lysosomes. *Traffic*, **2005**, 6, 1114-24	5.7	110
44	Development and biological evaluation of potent and specific inhibitors of mitotic Kinesin Eg5. *ChemBioChem*, **2005**, 6, 1173-7	3.8	113
43	Regulation of microtubule-dependent recycling at the trans-Golgi network by Rab6A and Rab6AT *Molecular Biology of the Cell*, **2005**, 16, 162-77	3.5	94
42	Function and regulation of Maskin, a TACC family protein, in microtubule growth during mitosis. *Journal of Cell Biology*, **2005**, 170, 1057-66	7.3	110
41	Determinants for Aurora-A Activation and Aurora-B Discrimination by TPX2. *Cell Cycle*, **2004**, 3, 402-405	4.7	43
40	The mechanism of spindle assembly: functions of Ran and its target TPX2. *Journal of Cell Biology*, **2004**, 166, 949-55	7.3	177
39	Characterization of the TPX2 domains involved in microtubule nucleation and spindle assembly in Xenopus egg extracts. *Molecular Biology of the Cell*, **2004**, 15, 5318-28	3.5	85
38	Protein 4.1R regulates interphase microtubule organization at the centrosome. *Journal of Cell Science*, **2004**, 117, 6197-206	5.3	21

37	A kinesin-like motor inhibits microtubule dynamic instability. *Science*, **2004**, 303, 1519-22	33.3	128
36	Kinesin II mediates Vg1 mRNA transport in Xenopus oocytes. *Current Biology*, **2004**, 14, 219-24	6.3	80
35	The chromosomal passenger complex takes center stage during mitosis. *Developmental Cell*, **2004**, 7, 145-6	10.2	8
34	Determinants for Aurora-A activation and Aurora-B discrimination by TPX2. *Cell Cycle*, **2004**, 3, 404-7	4.7	24
33	Structural basis of Aurora-A activation by TPX2 at the mitotic spindle. *Molecular Cell*, **2003**, 12, 851-62	17.6	449
32	Dynactin is required for bidirectional organelle transport. *Journal of Cell Biology*, **2003**, 160, 297-301	7.3	262
31	Xkid chromokinesin is required for the meiosis I to meiosis II transition in Xenopus laevis oocytes. *Nature Cell Biology*, **2002**, 4, 737-42	23.4	27
30	Chromosome-induced microtubule assembly mediated by TPX2 is required for spindle formation in HeLa cells. *Nature Cell Biology*, **2002**, 4, 871-9	23.4	261
29	A dominant negative approach for functional studies of the kinesin II complex. *Methods in Molecular Biology*, **2001**, 164, 191-204	1.4	10
28	The use of dominant negative mutants to study the function of mitotic motors in the in vitro spindle assembly assay in Xenopus egg extracts. *Methods in Molecular Biology*, **2001**, 164, 173-89	1.4	3
27	Chromosome motors on the move. *EMBO Reports*, **2001**, 2, 669-673	6.5	29
26	Analysis of heterodimer formation by Xklp3A/B, a newly cloned kinesin-II from Xenopus laevis. *EMBO Journal*, **2001**, 20, 3370-9	13	28
25	The mitotic spindle: a self-made machine. *Science*, **2001**, 294, 543-7	33.3	379
24	Ran induces spindle assembly by reversing the inhibitory effect of importin alpha on TPX2 activity. *Cell*, **2001**, 104, 83-93	56.2	496
23	Chromosome motors on the move. From motion to spindle checkpoint activity. *EMBO Reports*, **2001**, 2, 669-73	6.5	11
22	TPX2, A novel xenopus MAP involved in spindle pole organization. *Journal of Cell Biology*, **2000**, 149, 1405-18	7.3	315
21	Xkid, a chromokinesin required for chromosome alignment on the metaphase plate. *Cell*, **2000**, 102, 425-35	56.2	203
20	Kinesin subfamily UNC104 contains a FHA domain: boundaries and physicochemical characterization. *FEBS Letters*, **2000**, 486, 285-90	3.8	20

19	A model for the proposed roles of different microtubule-based motor proteins in establishing spindle bipolarity. *Current Biology*, **1998**, 8, 903-13	6.3	350
18	Role of xklp3, a subunit of the Xenopus kinesin II heterotrimeric complex, in membrane transport between the endoplasmic reticulum and the Golgi apparatus. *Journal of Cell Biology*, **1998**, 143, 1559-73	7.3	88
17	Localization of the kinesin-like protein Xklp2 to spindle poles requires a leucine zipper, a microtubule-associated protein, and dynein. *Journal of Cell Biology*, **1998**, 143, 673-85	7.3	161
16	Heterotrimeric kinesin II is the microtubule motor protein responsible for pigment dispersion in Xenopus melanophores. *Journal of Cell Biology*, **1998**, 143, 1547-58	7.3	167
15	The role of microtubule dependent motors in centrosome movements and spindle pole organization during mitosis. *Seminars in Cell and Developmental Biology*, **1996**, 7, 367-378	7.5	24
14	Xklp2, a novel Xenopus centrosomal kinesin-like protein required for centrosome separation during mitosis. *Cell*, **1996**, 84, 49-59	56.2	140
13	Motors involved in spindle assembly and chromosome segregation. *Current Opinion in Cell Biology*, **1996**, 8, 4-9	9	74
12	Xklp1, a chromosomal Xenopus kinesin-like protein essential for spindle organization and chromosome positioning. *Cell*, **1995**, 81, 117-27	56.2	230
11	Chromosomes take the lead in spindle assembly. *Trends in Cell Biology*, **1995**, 5, 297-301	18.3	72
10	S1 nuclease-sensitive sites in the bithoraxoid region of the Drosophila Ultrabithorax gene. *Biochemical and Biophysical Research Communications*, **1993**, 194, 647-53	3.4	
9	Multiple kinesin-like transcripts in Xenopus oocytes. *Developmental Biology*, **1993**, 157, 232-9	3.1	42
8	Different forms of Ultrabithorax proteins generated by alternative splicing are functionally equivalent.. *EMBO Journal*, **1990**, 9, 3551-3555	13	20
7	Different forms of Ultrabithorax proteins generated by alternative splicing are functionally equivalent. *EMBO Journal*, **1990**, 9, 3551-5	13	7
6	Insects as test systems for assessing the potential role of microgravity in biological development and evolution. *Advances in Space Research*, **1989**, 9, 137-46	2.4	4
5	Quantitative analysis of ventral denticular patterns of Drosophila melanogaster larvae and the regulation of the bithorax complex. *BioSystems*, **1989**, 23, 139-58; discussion 159	1.9	1
4	Analysis of the Involvement of the Terrestrial Space Radiation in the Microgravity Effects on Drosophila Melanogaster Development and Aging **1988**, 509-516		1
3	Embryogenesis and aging of Drosophila melanogaster flown in the space shuttle. Preliminary analysis of experiment fly 15E. *Die Naturwissenschaften*, **1986**, 73, 431-2	2	26
2	Genetic organization of Drosophila bithorax complex. *Nature*, **1985**, 313, 108-13	50.4	463

List of Publications

1 The human sperm basal body is a complex centrosome important for embryo pre-implantation development 2