Cornelis Jan Weijer

List of Publications by Year
in descending order

86	5,059	71102	95266
papers	citations	41 h-index	68 g-index

94	94	94	4190
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Cell Movement Patterns during Gastrulation in the Chick Are Controlled by Positive and Negative Chemotaxis Mediated by FGF4 and FGF8. Developmental Cell, 2002, 3, 425-437.	7.0	305
2	Collective cell migration in development. Journal of Cell Science, 2009, 122, 3215-3223.	2.0	273
3	Three-dimensional scroll waves organize Dictyostelium slugs.. Proceedings of the National Academy of Sciences of the United States of America, 1992, 89, 6433-6437.	7.1	194
4	Active Vertex Model for cell-resolution description of epithelial tissue mechanics. PLoS Computational Biology, 2017, 13, e1005569.	3.2	180
5	PtdIns(3,4,5)P3-Dependent and -Independent Roles for PTEN in the Control of Cell Migration. Current Biology, 2007, 17, 115-125.	3.9	178
6	Myosin-II-mediated cell shape changes and cell intercalation contribute to primitive streak formation. Nature Cell Biology, 2015, 17, 397-408.	10.3	176
7	Digital image processing of optical density wave propagation in Dictyostelium discoideum and analysis of the effects of caffeine and ammonia. Journal of Cell Science, 1989, 93, 325-335.	2.0	152
8	Signaling to Cytoskeletal Dynamics during Chemotaxis. Developmental Cell, 2005, 9, 19-34.	7.0	138
9	Spiral and concentric waves organize multicellular Dictyostelium mounds. Current Biology, 1995, 5, 937-943.	3.9	136
10	In vivo analysis of 3-phosphoinositide dynamics during Dictyostelium phagocytosis and chemotaxis. Journal of Cell Science, 2004, 117, 6497-6509.	2.0	121
11	Dictyostelium morphogenesis. Current Opinion in Genetics and Development, 2004, 14, 392-398.	3.3	120
12	Suppression of cellular proliferation and invasion by the concerted lipid and protein phosphatase activities of PTEN. Oncogene, 2010, 29, 687-697.	5.9	117
13	Cell movement during chick primitive streak formation. Developmental Biology, 2006, 296, 137-149.	2.0	108
14	Analysis of optical density wave propagation and cell movement in the cellular slime mould Dictyostelium discoideum. Physica D: Nonlinear Phenomena, 1991, 49, 224-232.	2.8	103
15	Visualizing Signals Moving in Cells. Science, 2003, 300, 96-100.	12.6	100
16	PDGF signalling controls the migration of mesoderm cells during chick gastrulation by regulating N-cadherin expression. Development (Cambridge), 2008, 135, 3521-3530.	2.5	97
17	The Cyclase-associated Protein CAP as Regulator of Cell Polarity and cAMP Signaling in Dictyostelium. Molecular Biology of the Cell, 2004, 15, 934-945.	2.1	96
18	Imaging of cell migration. EMBO Journal, 2006, 25, 3480-3493.	7.8	93

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19	Propagating chemoattractant waves coordinate periodic cell movement inDictyosteliumslugs. Development (Cambridge), 2001, 128, 4535-4543.	2.5	92
20	Visualizing PI3 Kinase-Mediated Cell-Cell Signaling during Dictyostelium Development. Current Biology, 2002, 12, 1178-1188.	3.9	86
21	Simultaneous quantification of cell motility and protein-membrane-association using active contours. Cytoskeleton, 2002, 52, 221-230.	4.4	86
22	Patterns of cell movement within the Dictyostelium slug revealed by cell type-specific, surface labeling of living cells. Cell, 1994, 77, 687-699.	28.9	83
23	Spatial Pattern Formation During Aggregation of the Slime MouldDictyostelium discoideum. Journal of Theoretical Biology, 1996, 181, 203-213.	1.7	80
24	Analysis of tissue flow patterns during primitive streak formation in the chick embryo. Developmental Biology, 2005, 284, 37-47.	2.0	79
25	Wnt3a-mediated chemorepulsion controls movement patterns of cardiac progenitors and requires RhoA function. Development (Cambridge), 2008, 135, 1029-1037.	2.5	74
26	Analysis of Optical Density Wave Propagation and Cell Movement during Mound Formation in Dictyostelium discoideum. Developmental Biology, 1996, 177, 427-438.	2.0	73
27	Dual mode of paraxial mesoderm formation during chick gastrulation. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 2744-2749.	7.1	70
28	Chemotactic cell movement during Dictyostelium development and gastrulation. Current Opinion in Genetics and Development, 2006, 16, 367-373.	3.3	64
29	The migration of paraxial and lateral plate mesoderm cells emerging from the late primitive streak is controlled by different Wnt signals. BMC Developmental Biology, 2008, 8, 63.	2.1	64
30	Modeling Gastrulation in the Chick Embryo: Formation of the Primitive Streak. PLoS ONE, 2010, 5, e10571.	2.5	63
31	The multicellularity genes of dictyostelid social amoebas. Nature Communications, 2016, 7, 12085.	12.8	63
32	Chemotactic cell movement during development. Current Opinion in Genetics and Development, 2003, 13, 358-364.	3.3	62
33	Analysis of Cell Cycle Progression during the Development of Dictyostelium and Its Relationship to Differentiation. Developmental Biology, 1993, 160, 178-185.	2.0	60
34	Paxillin is required for cell-substrate adhesion, cell sorting and slug migration during Dictyostelium development. Journal of Cell Science, 2005, 118, 4295-4310.	2.0	60
35	cAMP receptor affinity controls wave dynamics, geometry and morphogenesis inDictyostelium. Journal of Cell Science, 2001, 114, 2513-2523.	2.0	59
36	Multiarmed Spirals in Excitable Media. Physical Review Letters, 1997, 78, 2489-2492.	7.8	58

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37	The control of chemotactic cell movement duringDictyosteliummorphogenesis. Philosophical Transactions of the Royal Society B: Biological Sciences, 2000, 355, 983-991.	4.0	57
38	Null Mutations of theDictyosteliumCyclic Nucleotide Phosphodiesterase Gene Block Chemotactic Cell Movement in Developing Aggregates. Developmental Biology, 1997, 192, 181-192.	2.0	53
39	Collective Epithelial and Mesenchymal Cell Migration During Gastrulation. Current Genomics, 2012, 13, 267-277.	1.6	53
40	Modeling Chemotactic Cell Sorting during Dictyostelium discoideum Mound Formation. Biophysical Journal, 1999, 76, 595-605.	0.5	52
41	The Mechanisms Underlying Primitive Streak Formation in the Chick Embryo. Current Topics in Developmental Biology, 2008, 81, 135-156.	2.2	45
42	The Dictyostelium cell cycle and its relationship to differentiation. FEMS Microbiology Letters, 1994, 124, 123-130.	1.8	43
43	Propagating waves control Dictyostelium discoideum morphogenesis. Biophysical Chemistry, 1998, 72, 21-35.	2.8	43
44	Modelling of Dictyostelium discoideum slug migration. Journal of Theoretical Biology, 2003, 223, 347-359.	1.7	42
45	Morphogenetic cell movement in Dictyostelium. Seminars in Cell and Developmental Biology, 1999, 10, 609-619.	5.0	41
46	The regulation of cell migration by PTEN. Biochemical Society Transactions, 2005, 33, 1507.	3.4	41
47	Progress and perspectives in signal transduction, actin dynamics, and movement at the cell and tissue level: lessons fromDictyostelium. Interface Focus, 2016, 6, 20160047.	3.0	41
48	Dictyostelium discoideum: Cell-type proportioning, cell-differentiation preference, cell fate, and the behavior of anterior-like cells in Hs1/Hs2 and G+/Gâ" mixtures. Differentiation, 1986, 32, 1-9.	1.9	38
49	A Model forDictyosteliumSlug Movement. Journal of Theoretical Biology, 1999, 199, 125-136.	1.7	35
50	Oscillatory cAMP cell-cell signalling persists during multicellular Dictyostelium development. Communications Biology, 2019, 2, 139.	4.4	35
51	Regulation of cell migration during chick gastrulation. Current Opinion in Genetics and Development, 2009, 19, 343-349.	3.3	34
52	A Model for Cell Movement DuringDictyosteliumMound Formation. Journal of Theoretical Biology, 1997, 189, 41-51.	1.7	33
53	Separation of Dictyostelium discoideum cells into density classes throughout their development and their relationship to the later cell types. Differentiation, 1984, 28, 13-23.	1.9	29
54	Becoming Multicellular by Aggregation; The Morphogenesis of the Social Amoebae Dicyostelium discoideum. Journal of Biological Physics, 2002, 28, 765-780.	1.5	29

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55	Correlating Cell Behavior with Tissue Topology in Embryonic Epithelia. PLoS ONE, 2011, 6, e18081.	2.5	28
56	Cellular processes driving gastrulation in the avian embryo. Mechanisms of Development, 2020, 163, 103624.	1.7	28
57	A temperature-sensitive adenylyl cyclase mutant of Dictyostelium. EMBO Journal, 2000, 19, 2247-2256.	7.8	26
58	Induction of Optical Density Waves and Chemotactic Cell Movement inDictyostelium discoideumby Microinjection of cAMP Pulses. Developmental Biology, 1998, 204, 525-536.	2.0	24
59	A frequency difference in optical-density oscillations of early Dictyostelium discoideum density classes and its implications for development. Differentiation, 1984, 28, 9-12.	1.9	23
60	Who moves whom during primitive streak formation in the chick embryo. HFSP Journal, 2009, 3, 71-76.	2.5	20
61	Tumourigenic fragments of APC cause dominant defects in directional cell migration in multiple model systems. DMM Disease Models and Mechanisms, 2012, 5, 940-7.	2.4	20
62	Analysis of Cell Movement and Signalling during Ring Formation in an Activated GÎ±1 Mutant ofDictyostelium discoideumThat Is Defective in Prestalk Zone Formation. Developmental Biology, 1997, 181, 79-90.	2.0	18
63	SILAC-based proteomic quantification of chemoattractant-induced cytoskeleton dynamics on a second to minute timescale. Nature Communications, 2014, 5, 3319.	12.8	18
64	Dynamic morphoskeletons in development. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 11444-11449.	7.1	18
65	A flow fluorimetric analysis of the cell cycle during growth and differentiation inDictyostelium discoideum. Wilhelm Roux's Archives of Developmental Biology, 1984, 194, 18-24.	1.4	14
66	The Dictyostelium cell cycle and its relationship to differentiation. FEMS Microbiology Letters, 1994, 124, 123-130.	1.8	14
67	Modelling cell movement, cell differentiation, cell sorting and proportion regulation in Dictyostelium discoideum aggregations. Journal of Theoretical Biology, 2015, 370, 135-150.	1.7	13
68	Analysis of barotactic and chemotactic guidance cues on directional decision-making of Dictyostelium discoideum cells in confined environments. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 25553-25559.	7.1	12
69	A Dictyostelium nuclear phosphatidylinositol phosphate kinase required for developmental gene expression. EMBO Journal, 2001, 20, 6017-6027.	7.8	11
70	Chapter 24 Vital Staining Methods Used in the Analysis of Cell Sorting in Dictyostelium discoideum. Methods in Cell Biology, 1987, 28, 449-459.	1.1	10
71	Measurement of junctional tension in epithelial cells at the onset of primitive streak formation in the chick embryo via non-destructive optical manipulation. Development (Cambridge), 2020, 147, .	2.5	10
72	Imaging cell signalling and movement in development. Seminars in Cell and Developmental Biology, 2009, 20, 947-955.	5.0	8

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73	Visualizing Signaling and Cell Movement During the Multicellular Stages of Dictyostelium Development. , 2006, 346, 297-310.		7
74	Effects of spatial confinement on migratory properties of Dictyostelium discoideum cells. Communicative and Integrative Biology, 2021, 14, 5-14.	1.4	5
75	Chemotactic stimulation of aggregation-stage Dictyostelium cells induces rapid changes in energy metabolism, as measured by succinic thiokinase phosphorylation. Biochimica Et Biophysica Acta - Molecular Cell Research, 1993, 1176, 175-182.	4.1	3
76	Investigating the motility of Dictyostelium discodeum using high frequency ultrasound as a method of manipulation. , 2012, , .		2
77	Moving the Research Forward: The Best of British Biology Using the Tractable Model System Dictyostelium discoideum. Cells, 2021, 10, 3036.	4.1	2
78	Modelling Dictyostelium discoideum Morphogenesis. The IMA Volumes in Mathematics and Its Applications, 2001, , 193-209.	0.5	1
79	The Cellular Basis of Dictyostelium Morphogenesis. , 2009, , 209-220.		1
80	The morphogenesis of dictyostelium discoideum â€" Pattern formation in a biological excitable system. , 1998, , 163-178.		0
81	From unicellular to multicellular organisation in the social amoeba Dictyostelium discoideum. , 0, , 7-24.		0
82	Spiral Waves of the Chemo-Attractant cAMP Organise Multicellular Development in the Social Dictyostelium discoideum. The Frontiers Collection, 2019, , 193-207.	0.2	0
83	Chemotaxis: Active Degradation of Attractant Enables Optimal Maze Navigation. Current Biology, 2020, 30, R1436-R1438.	3.9	0
84	Chemotactic cell movement a key mechanism of tissue dynamics and morphogenesis. FASEB Journal, 2011, 25, 301.1.	0.5	0
85	Signalling During Dictyostelium Development. , 2013, , 49-70.		0
86	Gaussian vs. Bessel light-sheets: performance analysis in live large sample imaging. , 2017, , .		0