Olivier Pourquie

List of Publications by Year
in descending order

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150
papers

14,335
citations

20797
60
h-index

22147
113
g-index

188
all docs

188
docs citations

188
times ranked

9941
citing authors

#	ARTICLE	IF	CITATIONS
1	Bioinks and Bioprinting Strategies for Skeletal Muscle Tissue Engineering. Advanced Materials, 2022, 34, e2105883.	11.1	53
2	Paraxial mesoderm organoids model development of human somites. ELife, 2022, 11, .	2.8	27
3	Rectified random cell motility as a mechanism for embryo elongation. Development (Cambridge), 2022, 149, .	1.2	14
4	A brief history of the segmentation clock. Developmental Biology, 2022, 485, 24-36.	0.9	14
5	In vitro systems: A new window to the segmentation clock. Development Growth and Differentiation, 2021, 63, 140-153.	0.6	15
6	Human muscle production in vitro from pluripotent stem cells: Basic and clinical applications. Seminars in Cell and Developmental Biology, 2021, 119, 39-48.	2.3	9
7	Prednisolone rescues Duchenne muscular dystrophy phenotypes in human pluripotent stem cellâ€“derived skeletal muscle in vitro. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	32
8	Dynamics of primitive streak regression controls the fate of neuromesodermal progenitors in the chicken embryo. ELife, 2021, 10, .	2.8	31
9	Metabolic decisions in development and diseaseâ€”a Keystone Symposia report. Annals of the New York Academy of Sciences, 2021, 1506, 55-73.	1.8	6
10	Optogenetic modeling of human neuromuscular circuits in Duchenne muscular dystrophy with CRISPR and pharmacological corrections. Science Advances, 2021, 7, eabi8787.	4.7	14
11	Patterning with clocks and genetic cascades: Segmentation and regionalization of vertebrate versus insect body plans. PLoS Genetics, 2021, 17, e1009812.	1.5	27
12	In vitro characterization of the human segmentation clock. Nature, 2020, 580, 113-118.	13.7	152
13	<i>In Situ</i> Printing of Adhesive Hydrogel Scaffolds for the Treatment of Skeletal Muscle Injuries. ACS Applied Bio Materials, 2020, 3, 1568-1579.	2.3	86
14	Exploring the Influence of Cell Metabolism on Cell Fate through Protein Post-translational Modifications. Developmental Cell, 2020, 54, 282-292.	3.1	42
15	Mechanical Coupling Coordinates the Co-elongation of Axial and Paraxial Tissues in Avian Embryos. Developmental Cell, 2020, 55, 354-366.e5.	3.1	65
16	Differentiation of the human PAX7-positive myogenic precursors/satellite cell lineage <i>in vitro</i>. Development (Cambridge), 2020, 147, .	1.2	37
17	Intracellular pH controls WNT downstream of glycolysis in amniote embryos. Nature, 2020, 584, 98-101.	13.7	95
18	Bioelectrical domain walls in homogeneous tissues. Nature Physics, 2020, 16, 357-364.	6.5	35

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19	Mechanics of Anteroposterior Axis Formation in Vertebrates. Annual Review of Cell and Developmental Biology, 2019, 35, 259-283.	4.0	43
20	The Lin28/let-7 Pathway Regulates the Mammalian Caudal Body Axis Elongation Program. Developmental Cell, 2019, 48, 396-405.e3.	3.1	60
21	SarcTrack. Circulation Research, 2019, 124, 1172-1183.	2.0	94
22	Timed Collinear Activation of Hox Genes during Gastrulation Controls the Avian Forelimb Position. Current Biology, 2019, 29, 35-50.e4.	1.8	50
23	Introducing preLights: preprint highlights, selected by the biological community. Development (Cambridge), 2018, 145, .	1.2	2
24	And one last thing. Development (Cambridge), 2018, 145, .	1.2	1
25	Recapitulating early development of mouse musculoskeletal precursors of the paraxial mesoderm <i>in vitro</i>. Development (Cambridge), 2018, 145, .	1.2	53
26	Ce n'est qu'un au revoir. Development (Cambridge), 2018, 145, .	1.2	3
27	Human development: recent progress and future prospects. Development (Cambridge), 2018, 145, .	1.2	0
28	Advocating developmental biology. Development (Cambridge), 2018, 145, .	1.2	2
29	The Long Road to Making Muscle In Vitro. Current Topics in Developmental Biology, 2018, 129, 123-142.	1.0	24
30	Somite formation in the chicken embryo. International Journal of Developmental Biology, 2018, 62, 57-62.	0.3	20
31	<i>PAPC</i> couples the segmentation clock to somite morphogenesis by regulating N-cadherin dependent adhesion. Development (Cambridge), 2017, 144, 664-676.	1.2	27
32	A Gradient of Glycolytic Activity Coordinates FGF and Wnt Signaling during Elongation of the Body Axis in Amniote Embryos. Developmental Cell, 2017, 40, 342-353.e10.	3.1	156
33	Making muscle: skeletal myogenesis<i>in vivo</i>and<i>in vitro</i>. Development (Cambridge), 2017, 144, 2104-2122.	1.2	577
34	Going format-free. Development (Cambridge), 2017, 144, 1919-1919.	1.2	0
35	The WHHERE coactivator complex is required for retinoic acid-dependent regulation of embryonic symmetry. Nature Communications, 2017, 8, 728.	5.8	27
36	Excitable Dynamics and Yap-Dependent Mechanical Cues Drive the Segmentation Clock. Cell, 2017, 171, 668-682.e11.	13.5	117

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37	Multiscale quantification of tissue behavior during amniote embryo axis elongation. Development (Cambridge), 2017, 144, 4462-4472.	1.2	60
38	The times they are a-changinâ€™. Development (Cambridge), 2017, 144, 1-2.	1.2	7
39	Editorial changes. Development (Cambridge), 2017, , .	1.2	0
40	Introducing cross-referee commenting in peer review. Development (Cambridge), 2016, 143, 3035-3036.	1.2	3
41	Generation of human muscle fibers and satellite-like cells from human pluripotent stem cells in vitro. Nature Protocols, 2016, 11, 1833-1850.	5.5	215
42	Future developments: your thoughts and our plans. Development (Cambridge), 2016, 143, 1-2.	1.2	8
43	Standing Up for Sticklebacks. Cell, 2016, 164, 9-10.	13.5	0
44	Human development: a Special Issue. Development (Cambridge), 2015, 142, 3071-3072.	1.2	2
45	Developing peer review. Development (Cambridge), 2015, 142, 1389-1389.	1.2	3
46	Developing a new look. Development (Cambridge), 2015, 142, 3803-3804.	1.2	1
47	Differentiation of pluripotent stem cells to muscle fiber to model Duchenne muscular dystrophy. Nature Biotechnology, 2015, 33, 962-969.	9.4	339
48	Independent regulation of vertebral number and vertebral identity by microRNA-196 paralogs. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E4884-93.	3.3	60
49	Looking inwards: opening a window onto human development. Development (Cambridge), 2015, 142, 1-2.	1.2	13
50	Hox genes control vertebrate body elongation by collinear Wnt repression. ELife, 2015, 4, .	2.8	106
51	Integrative Data Mining Highlights Candidate Genes for Monogenic Myopathies. PLoS ONE, 2014, 9, e110888.	1.1	16
52	Ethical development. Development (Cambridge), 2014, 141, 3439-3440.	1.2	1
53	Developing with the community. Development (Cambridge), 2014, 141, 3-4.	1.2	0
54	A relative shift in cloacal location repositions external genitalia in amniote evolution. Nature, 2014, 516, 391-394.	13.7	70

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55	Signalling dynamics in vertebrate segmentation. Nature Reviews Molecular Cell Biology, 2014, 15, 709-721.	16.1	317
56	Managing patterns and proportions over time. Science, 2014, 345, 1565-1566.	6.0	0
57	Manteia, a predictive data mining system for vertebrate genes and its applications to human genetic diseases. Nucleic Acids Research, 2014, 42, D882-D891.	6.5	25
58	Formation and Segmentation of the Vertebrate Body Axis. Annual Review of Cell and Developmental Biology, 2013, 29, 1-26.	4.0	133
59	Making the Clock Tick: Right Time, Right Pace. Developmental Cell, 2013, 24, 115-116.	3.1	5
60	Reprogramming development. Development (Cambridge), 2013, 140, 1-2.	1.2	3
61	The San Francisco Declaration on Research Assessment. Development (Cambridge), 2013, 140, 2643-2644.	1.2	2
62	Stem cells and regeneration: a special issue. Development (Cambridge), 2013, 140, 2445-2445.	1.2	3
63	<i>Development</i>: looking to the future. Development (Cambridge), 2012, 139, 1893-1894.	1.2	2
64	Evolutionary plasticity of segmentation clock networks. Development (Cambridge), 2011, 138, 2783-2792.	1.2	166
65	Vertebrate Segmentation: From Cyclic Gene Networks to Scoliosis. Cell, 2011, 145, 650-663.	13.5	306
66	Steering a changing course. Development (Cambridge), 2011, 138, 1-2.	1.2	2
67	The Node: a place to discuss, debate and deliberate developmental biology. Development (Cambridge), 2010, 137, 2251-2251.	1.2	2
68	Sex-dimorphic gene expression and ineffective dosage compensation of Z-linked genes in gastrulating chicken embryos. BMC Genomics, 2010, 11, 13.	1.2	61
69	Rere controls retinoic acid signalling and somite bilateral symmetry. Nature, 2010, 463, 953-957.	13.7	103
70	Changes in Hox genesâ€™ structure and function during the evolution of the squamate body plan. Nature, 2010, 464, 99-103.	13.7	160
71	A random cell motility gradient downstream of FGF controls elongation of an amniote embryo. Nature, 2010, 466, 248-252.	13.7	289
72	Spatiotemporal compartmentalization of key physiological processes during muscle precursor differentiation. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 4224-4229.	3.3	37

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73	Lighting up developmental mechanisms: how fluorescence imaging heralded a new era. Development (Cambridge), 2010, 137, 373-387.	1.2	47
74	Signaling Gradients during Paraxial Mesoderm Development. Cold Spring Harbor Perspectives in Biology, 2010, 2, a000869-a000869.	2.3	205
75	Incomplete penetrance and phenotypic variability characterize Gdf6-attributable oculo-skeletal phenotypes. Human Molecular Genetics, 2009, 18, 1110-1121.	1.4	92
76	Cyclic <i>Nrarp</i> mRNA expression is regulated by the somitic oscillator but Nrarp protein levels do not oscillate. Developmental Dynamics, 2009, 238, 3043-3055.	0.8	16
77	Developmental control of segment numbers in vertebrates. Journal of Experimental Zoology Part B: Molecular and Developmental Evolution, 2009, 312B, 533-544.	0.6	80
78	Progress in the Understanding of the Genetic Etiology of Vertebral Segmentation Disorders in Humans. Annals of the New York Academy of Sciences, 2009, 1151, 38-67.	1.8	70
79	More Than Patterningâ€"Hox Genes and the Control of Posterior Axial Elongation. Developmental Cell, 2009, 17, 439-440.	3.1	4
80	Chapter 7 Establishment of Hox Vertebral Identities in the Embryonic Spine Precursors. Current Topics in Developmental Biology, 2009, 88, 201-234.	1.0	80
81	Modeling the segmentation clock as a network of coupled oscillations in the Notch, Wnt and FGF signaling pathways. Journal of Theoretical Biology, 2008, 252, 574-585.	0.8	162
82	Mutations in the MESP2 Gene Cause Spondylothoracic Dysostosis/Jarcho-Levin Syndrome. American Journal of Human Genetics, 2008, 82, 1334-1341.	2.6	79
83	Control of segment number in vertebrate embryos. Nature, 2008, 454, 335-339.	13.7	398
84	A Î²-catenin gradient links the clock and wavefront systems in mouse embryo segmentation. Nature Cell Biology, 2008, 10, 186-193.	4.6	286
85	Segmental patterning of the vertebrate embryonic axis. Nature Reviews Genetics, 2008, 9, 370-382.	7.7	331
86	Oscillating signaling pathways during embryonic development. Current Opinion in Cell Biology, 2008, 20, 632-637.	2.6	106
87	Developmental Biology: Cell Intercalation One Step beyond. Current Biology, 2008, 18, R119-R121.	1.8	1
88	Retinoic acid. Current Biology, 2008, 18, R191-R192.	1.8	20
89	Pattern formation and developmental mechanisms. Current Opinion in Genetics and Development, 2008, 18, 285-286.	1.5	0
90	The vertebrate segmentation clock: the tip of the iceberg. Current Opinion in Genetics and Development, 2008, 18, 317-323.	1.5	59

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91	Chapter 13 Manipulation and Electroporation of the Avian Segmental Plate and Somites In Vitro. Methods in Cell Biology, 2008, 87, 257-270.	0.5	25
92	Comparison of Pattern Detection Methods in Microarray Time Series of the Segmentation Clock. PLoS ONE, 2008, 3, e2856.	1.1	38
93	FGF signaling acts upstream of the NOTCH and WNT signaling pathways to control segmentation clock oscillations in mouse somitogenesis. Development (Cambridge), 2007, 134, 4033-4041.	1.2	161
94	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.	3.3	70
95	Abnormal vertebral segmentation and the notch signaling pathway in man. Developmental Dynamics, 2007, 236, 1456-1474.	0.8	143
96	Sharp developmental thresholds defined through bistability by antagonistic gradients of retinoic acid and FGF signaling. Developmental Dynamics, 2007, 236, 1495-1508.	0.8	126
97	Editorial on Segmentation Focus. Developmental Dynamics, 2007, 236, 1377-1378.	0.8	0
98	<i>Hox</i>genes in time and space during vertebrate body formation. Development Growth and Differentiation, 2007, 49, 265-275.	0.6	115
99	A Complex Oscillating Network of Signaling Genes Underlies the Mouse Segmentation Clock. Science, 2006, 314, 1595-1598.	6.0	418
100	Oscillations of the Snail Genes in the Presomitic Mesoderm Coordinate Segmental Patterning and Morphogenesis in Vertebrate Somitogenesis. Developmental Cell, 2006, 10, 355-366.	3.1	138
101	Collinear activation of Hoxb genes during gastrulation is linked to mesoderm cell ingression. Nature, 2006, 442, 568-571.	13.7	196
102	On periodicity and directionality of somitogenesis. Anatomy and Embryology, 2006, 211, 3-8.	1.5	30
103	Retinoic acid coordinates somitogenesis and leftâ€"right patterning in vertebrate embryos. Nature, 2005, 435, 215-220.	13.7	239
104	A new canon. Nature, 2005, 433, 208-209.	13.7	20
105	Chicken genome: New tools and concepts. Developmental Dynamics, 2005, 232, 883-886.	0.8	14
106	Synchronised cycling gene oscillations in presomitic mesoderm cells require cell-cell contact. International Journal of Developmental Biology, 2005, 49, 309-315.	0.3	86
107	Control of the segmentation process by graded MAPK/ERK activation in the chick embryo. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 11343-11348.	3.3	165
108	In vivo analysis of mRNA stability using the Tet-Off system in the chicken embryo. Developmental Biology, 2005, 284, 292-300.	0.9	35

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109	Coupling segmentation to axis formation. Development (Cambridge), 2004, 131, 5783-5793.	1.2	183
110	fgf8 mRNA decay establishes a gradient that couples axial elongation to patterning in the vertebrate embryo. Nature, 2004, 427, 419-422.	13.7	380
111	The chick embryo: a leading model in somitogenesis studies. Mechanisms of Development, 2004, 121, 1069-1079.	1.7	89
112	Axon fasciculation defects and retinal dysplasias in mice lacking the immunoglobulin superfamily adhesion molecule BEN/ALCAM/SC1. Molecular and Cellular Neurosciences, 2004, 27, 59-69.	1.0	100
113	Segmentation clock: insights from computational models. Current Biology, 2003, 13, R632-R634.	1.8	26
114	BEN/DM-GRASP/SC1 expression during mouse facial development: differential expression and regulation in molars and incisors. Gene Expression Patterns, 2003, 3, 255-259.	0.3	3
115	Synthesis of new 3-alkoxy-7-amino-4-chloro-isocoumarin derivatives as new Î²-amyloid peptide production inhibitors and their activities on various classes of protease. Bioorganic and Medicinal Chemistry, 2003, 11, 3141-3152.	1.4	44
116	Welcome to Syndetome. Developmental Cell, 2003, 4, 611-612.	3.1	13
117	The Segmentation Clock: Converting Embryonic Time into Spatial Pattern. Science, 2003, 301, 328-330.	6.0	487
118	GENETICS: Chicken Genome--Science Nuggets to Come Soon. Science, 2003, 300, 1669-1669.	6.0	61
119	Vertebrate somitogenesis: a novel paradigm for animal segmentation?. International Journal of Developmental Biology, 2003, 47, 597-603.	0.3	53
120	From head to tail: links between the segmentation clock and antero-posterior patterning of the embryo. Current Opinion in Genetics and Development, 2002, 12, 519-523.	1.5	56
121	Vertebrate Segmentation: Lunatic Transcriptional Regulation. Current Biology, 2002, 12, R699-R701.	1.8	4
122	Vertebrate Somitogenesis. Annual Review of Cell and Developmental Biology, 2001, 17, 311-350.	4.0	234
123	A Nomenclature for Prospective Somites and Phases of Cyclic Gene Expression in the Presomitic Mesoderm. Developmental Cell, 2001, 1, 619-620.	3.1	101
124	FGF Signaling Controls Somite Boundary Position and Regulates Segmentation Clock Control of Spatiotemporal Hox Gene Activation. Cell, 2001, 106, 219-232.	13.5	628
125	A molecular clock involved in Somite segmentation. Current Topics in Developmental Biology, 2001, 51, 221-248.	1.0	66
126	The vertebrate segmentation clock. Journal of Anatomy, 2001, 199, 169-175.	0.9	51

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127	A macho way to make muscles. Nature, 2001, 409, 679-680.	13.7	17
128	New protease inhibitors prevent Î³-secretase-mediated production of AÎ²40/42 without affecting Notch cleavage. Nature Cell Biology, 2001, 3, 507-511.	4.6	181
129	A clock-work somite. BioEssays, 2000, 22, 72-83.	1.2	92
130	Vertebrate segmentation: is cycling the rule?. Current Opinion in Cell Biology, 2000, 12, 747-751.	2.6	15
131	Skin development: Delta laid bare. Current Biology, 2000, 10, R425-R428.	1.8	27
132	Somite formation and patterning. International Review of Cytology, 2000, 198, 1-65.	6.2	61
133	Oscillating Expression of c-Hey2 in the Presomitic Mesoderm Suggests That the Segmentation Clock May Use Combinatorial Signaling through Multiple Interacting bHLH Factors. Developmental Biology, 2000, 227, 91-103.	0.9	139
134	Expression of DM-GRASP/BEN in the developing mouse spinal cord and various epithelia. Mechanisms of Development, 2000, 95, 221-224.	1.7	13
135	3 Segmentation of the Paraxial Mesoderm and Vertebrate Somitogenesis. Current Topics in Developmental Biology, 1999, 47, 81-105.	1.0	48
136	Notch around the clock. Current Opinion in Genetics and Development, 1999, 9, 559-565.	1.5	66
137	The lunatic Fringe gene is a target of the molecular clock linked to somite segmentation in avian embryos. Current Biology, 1998, 8, 979-982.	1.8	247
138	Uncoupling segmentation and somitogenesis in the chick presomitic mesoderm. , 1998, 23, 77-85.		87
139	Somitogenesis: segmenting a vertebrate. Current Opinion in Genetics and Development, 1998, 8, 487-493.	1.5	68
140	Clocks regulating developmental processes. Current Opinion in Neurobiology, 1998, 8, 665-670.	2.0	28
141	Expression of Genes (CAPN3, SGCA, SGCB, and TTN) Involved in Progressive Muscular Dystrophies during Early Human Development. Genomics, 1998, 48, 145-156.	1.3	59
142	Avian hairy Gene Expression Identifies a Molecular Clock Linked to Vertebrate Segmentation and Somitogenesis. Cell, 1997, 91, 639-648.	13.5	880
143	Maintenance of neuroepithelial progenitor cells by Deltaâ€“Notch signalling in the embryonic chick retina. Current Biology, 1997, 7, 661-670.	1.8	394
144	Induction of oligodendrocyte progenitors in the trunk neural tube by ventralizing signals: effects of notochord and floor plate grafts, and of sonic hedgehog. Mechanisms of Development, 1996, 60, 13-32.	1.7	136

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145	Lateral and Axial Signals Involved in Avian Somite Patterning: A Role for BMP4. Cell, 1996, 84, 461-471.	13.5	390
146	BEN As a Presumptive Target Recognition Molecule during the Development of the Olivocerebellar System. Journal of Neuroscience, 1996, 16, 3296-3310.	1.7	86
147	Chapter 1 Cell migrations and establishment of neuronal connections in the developing brain: a study using the quail-chick chimera system. Progress in Brain Research, 1994, 100, 3-18.	0.9	6
148	Identification in the Chicken of GRL1 and GRL2: Two Granule Proteins Expressed on the Surface of Activated Leukocytes. Experimental Cell Research, 1993, 204, 156-166.	1.2	11
149	BEN, a novel surface molecule of the immunoglobulin superfamily on avian hemopoietic progenitor cells shared with neural cells. Experimental Cell Research, 1992, 203, 91-99.	1.2	29
150	An antigen expressed by avian neuronal cells is also expressed by activated T lymphocytes. Cellular Immunology, 1992, 141, 99-110.	1.4	25