# Markus Affolter

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4871260/publications.pdf

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|---|---|---|---|
| 63 papers | 5,789 citations | 87723 38 h-index | 114278 63 g-index |
| 79 all docs | 79 docs citations | 79 times ranked | 6678 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Fluorescent fusion protein knockout mediated by anti-GFP nanobody. Nature Structural and Molecular Biology, 2012, 19, 117-121. | 3.6 | 427 |
| 2 | The Decapentaplegic morphogen gradient: from pattern formation to growth regulation. Nature Reviews Genetics, 2007, 8, 663-674. | 7.7 | 351 |
| 3 | Receptor serine/threonine kinases implicated in the control of Drosophila body pattern by decapentaplegic. Cell, 1994, 78, 225-237. | 13.5 | 279 |
| 4 | Complex cell rearrangements during intersegmental vessel sprouting and vessel fusion in the zebrafish embryo. Developmental Biology, 2008, 316, 312-322. | 0.9 | 276 |
| 5 | Flow-Dependent Endothelial YAP Regulation Contributes to Vessel Maintenance. Developmental Cell, 2017, 40, 523-536.e6. | 3.1 | 233 |
| 6 | Regulation of cardiovascular development and integrity by the heart of glassâ€“cerebral cavernous malformation protein pathway. Nature Medicine, 2009, 15, 169-176. | 15.2 | 217 |
| 7 | Distinct Cellular Mechanisms of Blood Vessel Fusion in the Zebrafish Embryo. Current Biology, 2011, 21, 1942-1948. | 1.8 | 205 |
| 8 | Cell behaviors and dynamics during angiogenesis. Development (Cambridge), 2016, 143, 2249-2260. | 1.2 | 174 |
| 9 | Tissue remodelling through branching morphogenesis. Nature Reviews Molecular Cell Biology, 2009, 10, 831-842. | 16.1 | 172 |
| 10 | Vascular morphogenesis in the zebrafish embryo. Developmental Biology, 2010, 341, 56-65. | 0.9 | 172 |
| 11 | Epithelial tube morphogenesis during Drosophila tracheal development requires Piopio, a luminal ZP protein. Nature Cell Biology, 2003, 5, 895-901. | 4.6 | 155 |
| 12 | Semaphorin-PlexinD1 Signaling Limits Angiogenic Potential via the VEGF Decoy Receptor sFlt1. Developmental Cell, 2011, 21, 301-314. | 3.1 | 145 |
| 13 | InÂVivo Analysis Reveals a Highly Stereotypic Morphogenetic Pathway of Vascular Anastomosis. Developmental Cell, 2013, 25, 492-506. | 3.1 | 138 |
| 14 | Genetic Control of Cell Intercalation during Tracheal Morphogenesis in Drosophila. Current Biology, 2004, 14, 2197-2207. | 1.8 | 136 |
| 15 | Cdh5/VE-cadherin Promotes Endothelial Cell Interface Elongation via Cortical Actin Polymerization during Angiogenic Sprouting. Cell Reports, 2014, 9, 504-513. | 2.9 | 135 |
| 16 | Tracheal branching morphogenesis inDrosophila: new insights into cell behaviour and organ architecture. Development (Cambridge), 2008, 135, 2055-2064. | 1.2 | 133 |
| 17 | Tip-Cell Migration Controls Stalk-Cell Intercalation during Drosophila Tracheal Tube Elongation. Current Biology, 2008, 18, 1727-1734. | 1.8 | 130 |
| 18 | Control of Dpp morphogen signalling by a secreted feedback regulator. Nature Cell Biology, 2010, 12, 611-617. | 4.6 | 121 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | The zebrafish common cardinal veins develop by a novel mechanism: lumen ensheathment. Development (Cambridge), 2013, 140, 2776-2786. | 1.2 | 120 |
| 20 | Dpp/BMP signaling in flies: From molecules to biology. Seminars in Cell and Developmental Biology, 2014, 32, 128-136. | 2.3 | 119 |
| 21 | Endothelial Cell Self-fusion during Vascular Pruning. PLoS Biology, 2015, 13, e1002126. | 2.6 | 119 |
| 22 | Dpp spreading is required for medial but not for lateral wing disc growth. Nature, 2015, 527, 317-322. | 13.7 | 116 |
| 23 | Dpp Signaling Activity Requires Pentagone to Scale with Tissue Size in the Growing Drosophila Wing Imaginal Disc. PLoS Biology, 2011, 9, e1001182. | 2.6 | 107 |
| 24 | Blood Flow Changes Coincide with Cellular Rearrangements during Blood Vessel Pruning in Zebrafish Embryos. PLoS ONE, 2013, 8, e75060. | 1.1 | 106 |
| 25 | Branching Morphogenesis: From Cells to Organs and Back. Cold Spring Harbor Perspectives in Biology, 2012, 4, a008243-a008243. | 2.3 | 99 |
| 26 | A nanobody-based toolset to investigate the role of protein localization and dispersal in Drosophila. ELife, 2017, 6, . | 2.8 | 91 |
| 27 | Formin-Mediated Actin Polymerization at Endothelial Junctions Is Required for Vessel Lumen Formation and Stabilization. Developmental Cell, 2015, 32, 123-132. | 3.1 | 87 |
| 28 | The tip cell concept 10 years after: New players tune in for a common theme. Experimental Cell Research, 2013, 319, 1255-1263. | 1.2 | 76 |
| 29 | Formation of the Long Range Dpp Morphogen Gradient. PLoS Biology, 2011, 9, e1001111. | 2.6 | 75 |
| 30 | Amnioserosa cell constriction but not epidermal actin cable tension autonomously drives dorsal closure. Nature Cell Biology, 2016, 18, 1161-1172. | 4.6 | 74 |
| 31 | Protein interference applications in cellular and developmental biology using DARPins that recognize GFP and mCherry. Biology Open, 2014, 3, 1252-1261. | 0.6 | 73 |
| 32 | Live imaging molecular changes in junctional tension upon VE-cadherin in zebrafish. Nature Communications, 2017, 8, 1402. | 5.8 | 73 |
| 33 | Spatio-temporally separated cortical flows and spindle geometry establish physical asymmetry in fly neural stem cells. Nature Communications, 2017, 8, 1383. | 5.8 | 70 |
| 34 | Wnt/Î²-catenin signaling regulates VE-cadherin-mediated anastomosis of brain capillaries by counteracting S1pr1 signaling. Nature Communications, 2018, 9, 4860. | 5.8 | 66 |
| 35 | Protein binders and their applications in developmental biology. Development (Cambridge), 2018, 145, . | 1.2 | 54 |
| 36 | Endothelial cell rearrangements during vascular patterning require PI3-kinase-mediated inhibition of actomyosin contractility. Nature Communications, 2018, 9, 4826. | 5.8 | 53 |

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|---|---|---|---|
| 37 | Raeppli: a whole-tissue labeling tool for live imaging of Drosophila development. Development (Cambridge), 2014, 141, 472-480. | 1.2 | 52 |
| 38 | Junction-based lamellipodia drive endothelial cell rearrangements in vivo via a VE-cadherin-F-actin based oscillatory cell-cell interaction. Nature Communications, 2018, 9, 3545. | 5.8 | 48 |
| 39 | Biochemical and Biophysical Characterization of RefoldedDrosophila DPP, a Homolog of Bone Morphogenetic Proteins 2 and 4. Journal of Biological Chemistry, 1998, 273, 29052-29065. | 1.6 | 47 |
| 40 | Chapter 6 Cellular and Molecular Mechanisms Underlying the Formation of Biological Tubes. Current Topics in Developmental Biology, 2009, 89, 137-162. | 1.0 | 40 |
| 41 | deGradFP: A System to Knockdown GFP-Tagged Proteins. Methods in Molecular Biology, 2016, 1478, 177-187. | 0.4 | 37 |
| 42 | BMP morphogen gradients in flies. Cytokine and Growth Factor Reviews, 2016, 27, 119-127. | 3.2 | 36 |
| 43 | Dpp from the anterior stripe of cells is crucial for the growth of the Drosophila wing disc. ELife, 2017, 6, . | 2.8 | 31 |
| 44 | Distinct and redundant functions of Esam and VE-cadherin during vascular morphogenesis. Development (Cambridge), 2017, 144, 1554-1565. | 1.2 | 30 |
| 45 | Regulation of BMP4/Dpp retrotranslocation and signaling by deglycosylation. ELife, 2020, 9, . | 2.8 | 30 |
| 46 | Remodelling epithelial tubes through cell rearrangements: from cells to molecules. EMBO Reports, 2006, 7, 36-40. | 2.0 | 29 |
| 47 | Myosin II is not required forDrosophilatracheal branch elongation and cell intercalation. Development (Cambridge), 2017, 144, 2961-2968. | 1.2 | 26 |
| 48 | Using Nanobodies to Study Protein Function in Developing Organisms. Antibodies, 2019, 8, 16. | 1.2 | 25 |
| 49 | Protein Knockouts in Living Eukaryotes Using deGradFP and Green Fluorescent Protein Fusion Targets. Current Protocols in Protein Science, 2013, 73, 30.2.1-30.2.13. | 2.8 | 23 |
| 50 | Asymmetric requirement of Dpp/BMP morphogen dispersal in the Drosophila wing disc. Nature Communications, 2021, 12, 6435. | 5.8 | 22 |
| 51 | Vinculin controls endothelial cell junction dynamics during vascular lumen formation. Cell Reports, 2022, 39, 110658. | 2.9 | 20 |
| 52 | Sprouting and anastomosis in the Drosophila trachea and the vertebrate vasculature: Similarities and differences in cell behaviour. Vascular Pharmacology, 2019, 112, 8-16. | 1.0 | 19 |
| 53 | Reflections on the use of protein binders to study protein function in developmental biology. Wiley Interdisciplinary Reviews: Developmental Biology, 2019, 8, e356. | 5.9 | 17 |
| 54 | Protein manipulation using single copies of short peptide tags in cultured cells and in Drosophila melanogaster. Development (Cambridge), 2021, 148, . | 1.2 | 17 |

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|---|---|---|---|
| 55 | Endothelial cell division in angiogenic sprouts of differing cellular architecture. Biology Open, 2015, 4, 1259-1269. | 0.6 | 13 |
| 56 | Tracheal development in Drosophila melanogaster as a model system for studying the development of a branched organ. Gene, 2002, 287, 55-66. | 1.0 | 12 |
| 57 | DARPins recognizing mTFP1 as novel reagents for in vitro and in vivo protein manipulations. Biology Open, 2018, 7, . | 0.6 | 7 |
| 58 | Building the complex architectures of vascular networks: Where to branch, where to connect and where to remodel?. Current Topics in Developmental Biology, 2021, 143, 281-297. | 1.0 | 5 |
| 59 | Probing the Effects of the FGFR-Inhibitor Derazantinib on Vascular Development in Zebrafish Embryos. Pharmaceuticals, 2021, 14, 25. | 1.7 | 4 |
| 60 | Myosin II is not required for Drosophila tracheal branch elongation and cell intercalation. Journal of Cell Science, 2017, 130, e1.1-e1.1. | 1.2 | 2 |
| 61 | Nanobody-Based GFP Traps to Study Protein Localization and Function in Developmental Biology. Methods in Molecular Biology, 2022, 2446, 581-593. | 0.4 | 2 |
| 62 | Control of dynamic cell behaviors during angiogenesis and anastomosis by Rasip1. Development (Cambridge), 2021, 148, . | 1.2 | 1 |
| 63 | Drosophila research: From the genome to the proteome. Comptes Rendus - Biologies, 2019, 342, 248-249. | 0.1 | 0 |