Hannele Ruohola-Baker

List of Publications by Year
in descending order

102 papers	12,442 citations	36271 51 h-index	34964 98 g-index
117 all docs	117 docs citations	117 times ranked	16678 citing authors

#	Article	IF	Citations
1	Electrospinning of Polymeric and Ceramic Nanofibers as Uniaxially Aligned Arrays. Nano Letters, 2003, 3, 1167-1171.	4.5	1,381
2	A Solution-Phase, Precursor Route to Polycrystalline SnO2Nanowires That Can Be Used for Gas Sensing under Ambient Conditions. Journal of the American Chemical Society, 2003, 125, 16176-16177.	6.6	929
3	Stem cell division is regulated by the microRNA pathway. Nature, 2005, 435, 974-978.	13.7	646
4	Ethylene glycol-mediated synthesis of metal oxide nanowires. Journal of Materials Chemistry, 2004, 14, 695.	6.7	491
5	HIF1Î± induced switch from bivalent to exclusively glycolytic metabolism during ESC-to-EpiSC/hESC transition. EMBO Journal, 2012, 31, 2103-2116.	3.5	480
6	HIF Induces Human Embryonic Stem Cell Markers in Cancer Cells. Cancer Research, 2011, 71, 4640-4652.	0.4	473
7	Bottom-Up and Top-Down Approaches to the Synthesis of Monodispersed Spherical Colloids of Low Melting-Point Metals. Nano Letters, 2004, 4, 2047-2050.	4.5	425
8	Derivation of naÃ¯ve human embryonic stem cells. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 4484-4489.	3.3	415
9	The metabolome regulates the epigenetic landscape during naive-to-primed human embryonic stem cellÂtransition. Nature Cell Biology, 2015, 17, 1523-1535.	4.6	360
10	Tri-iodo-l-thyronine promotes the maturation of human cardiomyocytes-derived from induced pluripotent stem cells. Journal of Molecular and Cellular Cardiology, 2014, 72, 296-304.	0.9	357
11	Transient posterior localization of a kinesin fusion protein reflects anteroposterior polarity of the Drosophila oocyte. Current Biology, 1994, 4, 289-300.	1.8	290
12	MicroRNA Discovery and Profiling in Human Embryonic Stem Cells by Deep Sequencing of Small RNA Libraries. Stem Cells, 2008, 26, 2496-2505.	1.4	273
13	Let-7 family of microRNA is required for maturation and adult-like metabolism in stem cell-derived cardiomyocytes. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E2785-94.	3.3	223
14	Maelstrom, aDrosophila spindle-class gene, encodes a protein that colocalizes with Vasa and RDE1/AGO1 homolog, Aubergine, in nuage. Development (Cambridge), 2003, 130, 859-871.	1.2	221
15	Single-Cell Transcriptomic Analysis of Cardiac Differentiation from Human PSCs Reveals HOPX-Dependent Cardiomyocyte Maturation. Cell Stem Cell, 2018, 23, 586-598.e8.	5.2	215
16	Notch-Delta signaling induces a transition from mitotic cell cycle to endocycle inDrosophilafollicle cells. Development (Cambridge), 2001, 128, 4737-4746.	1.2	201
17	Hypoxia-Inducible Factors Have Distinct and Stage-Specific Roles during Reprogramming of Human Cells to Pluripotency. Cell Stem Cell, 2014, 14, 592-605.	5.2	193
18	Fatty Acids Enhance the Maturation of Cardiomyocytes Derived from Human Pluripotent Stem Cells. Stem Cell Reports, 2019, 13, 657-668.	2.3	187

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19	Design of protein-binding proteins from the target structure alone. Nature, 2022, 605, 551-560.	13.7	164
20	Dystroglycan is required for polarizing the epithelial cells and the oocyte inDrosophila. Development (Cambridge), 2003, 130, 173-184.	1.2	156
21	Characterization of microRNAs Involved in Embryonic Stem Cell States. Stem Cells and Development, 2010, 19, 935-950.	1.1	156
22	microRNAs regulate human embryonic stem cell division. Cell Cycle, 2009, 8, 3729-3741.	1.3	154
23	Spatially localized rhomboid is required for establishment of the dorsal-ventral axis in Drosophila oogenesis. Cell, 1993, 73, 953-965.	13.5	145
24	microRNA and stem cell function. Cell and Tissue Research, 2008, 331, 57-66.	1.5	145
25	Metabolic remodeling during the loss and acquisition of pluripotency. Development (Cambridge), 2017, 144, 541-551.	1.2	141
26	The mitotic-to-endocycle switch inDrosophilafollicle cells is executed by Notch-dependent regulation of G1/S, G2/M and M/G1 cell-cycle transitions. Development (Cambridge), 2004, 131, 3169-3181.	1.2	131
27	Stem Cells Signal to the Niche through the Notch Pathway in the Drosophila Ovary. Current Biology, 2006, 16, 2352-2358.	1.8	131
28	Dissecting muscle and neuronal disorders in a Drosophila model of muscular dystrophy. EMBO Journal, 2007, 26, 481-493.	3.5	123
29	Dystrophin-deficient cardiomyocytes derived from human urine: New biologic reagents for drug discovery. Stem Cell Research, 2014, 12, 467-480.	0.3	116
30	Regulation of Stem Cell Populations by microRNAs. Advances in Experimental Medicine and Biology, 2013, 786, 329-351.	0.8	111
31	Characterization of differentially expressed genes in purified Drosophila follicle cells: Toward a general strategy for cell type-specific developmental analysis. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 5559-5564.	3.3	109
32	Small RNAs: Keeping Stem Cells in Line. Cell, 2008, 132, 563-566.	13.5	105
33	Designed proteins assemble antibodies into modular nanocages. Science, 2021, 372, .	6.0	104
34	Hypoxia induces re-entry of committed cells into pluripotency. Stem Cells, 2013, 31, 1737-1748.	1.4	101
35	Gene-Edited Human Kidney Organoids Reveal Mechanisms of Disease in Podocyte Development. Stem Cells, 2017, 35, 2366-2378.	1.4	101
36	Notch-Dependent Fizzy-Related/Hec1/Cdh1 Expression Is Required for the Mitotic-to-Endocycle Transition in Drosophila Follicle Cells. Current Biology, 2004, 14, 630-636.	1.8	99

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37	Wnt/Î²-catenin signaling promotes self-renewal and inhibits the primed state transition in naÃ¯ve human embryonic stem cells. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E6382-E6390.	3.3	98
38	Mosaic Analysis in the Drosophila Ovary Reveals a Common Hedgehog-Inducible Precursor Stage for Stalk and Polar Cells. Genetics, 1999, 151, 739-748.	1.2	90
39	Pointed, an ETS domain transcription factor, negatively regulates the EGF receptor pathway in Drosophila oogenesis. Development (Cambridge), 1996, 122, 3745-3754.	1.2	86
40	Design of biologically active binary protein 2D materials. Nature, 2021, 589, 468-473.	13.7	85
41	The homeobox gene mirror links EGF signalling to embryonic dorso-ventral axis formation through Notch activation. Nature Genetics, 2000, 24, 429-433.	9.4	81
42	Metabolic Control over mTOR-Dependent Diapause-like State. Developmental Cell, 2020, 52, 236-250.e7.	3.1	79
43	TFPa/HADHA is required for fatty acid beta-oxidation and cardiolipin re-modeling in human cardiomyocytes. Nature Communications, 2019, 10, 4671.	5.8	77
44	maelstrom is required for an early step in the establishment of Drosophila oocyte polarity: posterior localization of grk mRNA. Development (Cambridge), 1997, 124, 4661-4671.	1.2	76
45	The MicroRNA Pathway Plays a Regulatory Role in Stem Cell Division. Cell Cycle, 2006, 5, 172-175.	1.3	73
46	Expression of constitutively active Notch arrests follicle cells at a precursor stage during Drosophila oogenesis and disrupts the anterior-posterior axis of the oocyte. Development (Cambridge), 1996, 122, 3639-3650.	1.2	72
47	Multivalent designed proteins neutralize SARS-CoV-2 variants of concern and confer protection against infection in mice. Science Translational Medicine, 2022, 14, eabn1252.	5.8	68
48	Stage-Specific Differences in the Requirements for Germline Stem Cell Maintenance in the Drosophila Ovary. Cell Stem Cell, 2007, 1, 698-709.	5.2	63
49	Metabolic remodeling in early development and cardiomyocyte maturation. Seminars in Cell and Developmental Biology, 2016, 52, 84-92.	2.3	62
50	Dicer-1-dependent Dacapo suppression acts downstream of Insulin receptor in regulating cell division ofDrosophilagermline stem cells. Development (Cambridge), 2009, 136, 1497-1507.	1.2	59
51	Genetic Modifier Screens Reveal New Components that Interact with the Drosophila Dystroglycan-Dystrophin Complex. PLoS ONE, 2008, 3, e2418.	1.1	58
52	Single Crystalline Nanowires of Lead Can Be Synthesized through Thermal Decomposition of Lead Acetate in Ethylene Glycol. Nano Letters, 2003, 3, 1163-1166.	4.5	55
53	Increased sphingosine-1-phosphate improves muscle regeneration in acutely injured mdx mice. Skeletal Muscle, 2013, 3, 20.	1.9	52
54	Molecular mechanism of sphingosine-1-phosphate action in Duchenne muscular dystrophy. DMM Disease Models and Mechanisms, 2014, 7, 41-54.	1.2	52

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55	Tie-mediated signal from apoptotic cells protects stem cells in Drosophila melanogaster. Nature Communications, 2015, 6, 7058.	5.8	52
56	Role of Notch pathway in terminal follicle cell differentiation during Drosophila oogenesis. Development Genes and Evolution, 1999, 209, 301-311.	0.4	49
57	WNT/Î²-catenin signaling regulates mitochondrial activity to alter the oncogenic potential of melanoma in a PTEN-dependent manner. Oncogene, 2017, 36, 3119-3136.	2.6	48
58	Folliculin regulates mTORC1/2 and WNT pathways in early human pluripotency. Nature Communications, 2019, 10, 632.	5.8	47
59	Laminin A is required for follicle cellâ€“oocyte signaling that leads to establishment of the anteriorâ€“posterior axis in Drosophila. Current Biology, 2000, 10, 683-686.	1.8	46
60	Border of Notch activity establishes a boundary between the two dorsal appendage tube cell types. Developmental Biology, 2006, 297, 461-470.	0.9	43
61	Notch signaling through tramtrack bypasses the mitosis promoting activity of the JNK pathway in the mitotic-to-endocycle transition of Drosophila follicle cells. BMC Developmental Biology, 2006, 6, 16.	2.1	43
62	MicroRNA Regulation and Role in Stem Cell Maintenance, Cardiac Differentiation and Hypertrophy. Current Molecular Medicine, 2013, 13, 757-764.	0.6	41
63	First critical repressive H3K27me3 marks in embryonic stem cells identified using designed protein inhibitor. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 10125-10130.	3.3	39
64	The role of gene cassettes in axis formation during Drosophila oogenesis. Trends in Genetics, 1994, 10, 89-94.	2.9	38
65	Assessment of Hypoxia Inducible Factor Levels in Cancer Cell Lines upon Hypoxic Induction Using a Novel Reporter Construct. PLoS ONE, 2011, 6, e27460.	1.1	36
66	Genetic elevation of Sphingosine 1-phosphate suppresses dystrophic muscle phenotypes in Drosophila. Development (Cambridge), 2013, 140, 136-146.	1.2	34
67	Drosophila melanogaster as a Model of Muscle Degeneration Disorders. Current Topics in Developmental Biology, 2017, 121, 83-109.	1.0	33
68	Enhancer Chromatin and 3D Genome Architecture Changes from Naive to Primed Human Embryonic Stem Cell States. Stem Cell Reports, 2019, 12, 1129-1144.	2.3	33
69	Genome wide analysis of transcript levels after perturbation of the EGFR pathway in theDrosophilaovary. Developmental Dynamics, 2005, 232, 709-724.	0.8	28
70	Integrated epigenomic profiling reveals endogenous retrovirus reactivation in renal cell carcinoma. EBioMedicine, 2019, 41, 427-442.	2.7	26
71	Metabolism as an early predictor of DPSCs aging. Scientific Reports, 2019, 9, 2195.	1.6	26
72	Expression of constitutively active Notch arrests follicle cells at a precursor stage during Drosophila oogenesis and disrupts the anterior-posterior axis of the oocyte. Development (Cambridge), 1996, 122, 3639-50.	1.2	25

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73	miRNA sensitivity to Drosha levels correlates with pre-miRNA secondary structure. Rna, 2014, 20, 621-631.	1.6	24
74	maelstrom is required to position the MTOC in stage 2â€“6 Drosophila oocytes. Development Genes and Evolution, 2001, 211, 44-48.	0.4	23
75	Dystroglycan and Mitochondrial Ribosomal Protein L34 Regulate Differentiation in the Drosophila Eye. PLoS ONE, 2010, 5, e10488.	1.1	22
76	A Putative Src Homology 3 Domain Binding Motif but Not the C-terminal Dystrophin WW Domain Binding Motif Is Required for Dystroglycan Function in Cellular Polarity in Drosophila. Journal of Biological Chemistry, 2007, 282, 15159-15169.	1.6	21
77	Cross-validation of SARS-CoV-2 responses in kidney organoids and clinical populations. JCI Insight, 2021, 6, .	2.3	21
78	Loss of foxo rescues stem cell aging in Drosophila germ line. ELife, 2017, 6, .	2.8	20
79	Mature Let-7 miRNAs fine tune expression of LIN28B in pluripotent human embryonic stem cells. Stem Cell Research, 2016, 17, 498-503.	0.3	18
80	PIXUL-ChIP: integrated high-throughput sample preparation and analytical platform for epigenetic studies. Nucleic Acids Research, 2019, 47, e69-e69.	6.5	16
81	Chronic Hypoxia Impairs Muscle Function in the Drosophila Model of Duchenne's Muscular Dystrophy (DMD). PLoS ONE, 2010, 5, e13450.	1.1	15
82	Amino acid primed mTOR activity is essential for heart regeneration. IScience, 2022, 25, 103574.	1.9	15
83	Embryonal carcinoma cell induction of miRNA and mRNA changes in coâ€cultured prostate stromal fibromuscular cells. Journal of Cellular Physiology, 2011, 226, 1479-1488.	2.0	14
84	Germline stem cell aging in the Drosophila ovary. Current Opinion in Insect Science, 2020, 37, 57-62.	2.2	14
85	Inducible CRISPR genome editing platform in naive human embryonic stem cells reveals JARID2 function in self-renewal. Cell Cycle, 2018, 17, 00-00.	1.3	13
86	Fâ€domain valency determines outcome of signaling through the angiopoietin pathway. EMBO Reports, 2021, 22, e53471.	2.0	12
87	dCas9 fusion to computer-designed PRC2 inhibitor reveals functional TATA box in distal promoter region. Cell Reports, 2022, 38, 110457.	2.9	12
88	microRNAs Regulating Human and Mouse NaÃ¯ve Pluripotency. International Journal of Molecular Sciences, 2019, 20, 5864.	1.8	11
89	Epigenetic metabolites license stem cell states. Current Topics in Developmental Biology, 2020, 138, 209-240.	1.0	11
90	Combinatorial metabolism drives the naive to primed pluripotent chromatin landscape. Experimental Cell Research, 2020, 389, 111913.	1.2	11

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91	Fringe-dependent notch activation and tramtrack function are required for specification of the polar cells inDrosophilaoogenesis. Developmental Dynamics, 2005, 232, 1013-1020.	0.8	10
92	The conserved WW-domain binding sites in Dystroglycan C-terminus are essential but partially redundant for Dystroglycan function. BMC Developmental Biology, 2009, 9, 18.	2.1	10
93	Drosophilaas a starting point for developing therapeutics for the rare disease Duchenne Muscular Dystrophy. Rare Diseases (Austin, Tex), 2013, 1, e24995.	1.8	10
94	Loss-of-Function Screen Reveals Novel Regulators Required for Drosophila Germline Stem Cell Self-Renewal. G3: Genes, Genomes, Genetics, 2012, 2, 343-351.	0.8	7
95	Metabolic RemodeLIN of Pluripotency. Cell Stem Cell, 2016, 19, 3-4.	5.2	6
96	PIWI Goes Solo in the Soma. Developmental Cell, 2009, 16, 627-628.	3.1	5
97	Chemical Genetic Screen in Drosophila Germline Uncovers Small Molecule Drugs That Sensitize Stem Cells to Insult-Induced Apoptosis. Cells, 2021, 10, 2771.	1.8	1
98	Epigenetics and regenerative medicine. , 2021, , 853-872.		0
99	Improved detection of compound arrhythmogenicity in 2D cardiac stem cell models via advanced maturation strategies. Journal of Pharmacological and Toxicological Methods, 2021, 111, 107028.	0.3	0
100	miRNAs in Muscle Diseases. Pancreatic Islet Biology, 2016, , 295-307.	0.1	0
101	Cardiac Directed Differentiation Using Small Molecule WNT Modulation at Single-Cell Resolution. SSRN Electronic Journal, 0, , .	0.4	0
102	Using Mitochondrial Trifunctional Protein Deficiency to Understand Maternal Health. Journal of Cellular Signaling, 2020, 1, 97-101.	0.5	0