Ursula KlingmÃ¼ller

List of Publications by Year
in descending order

131 papers	9,277 citations	46984 47 h-index	42364 92 g-index
141 all docs	141 docs citations	141 times ranked	10910 citing authors

#	Article	IF	Citations
1	Structural and practical identifiability analysis of partially observed dynamical models by exploiting the profile likelihood. Bioinformatics, 2009, 25, 1923-1929.	1.8	1,061
2	Specific recruitment of SH-PTP1 to the erythropoietin receptor causes inactivation of JAK2 and termination of proliferative signals. Cell, 1995, 80, 729-738.	13.5	952
3	Comparative Proteomic Phenotyping of Cell Lines and Primary Cells to Assess Preservation of Cell Type-specific Functions. Molecular and Cellular Proteomics, 2009, 8, 443-450.	2.5	426
4	Identification of nucleocytoplasmic cycling as a remote sensor in cellular signaling by databased modeling. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 1028-1033.	3.3	336
5	Interaction of the erythropoietin and stem-cell-factor receptors. Nature, 1995, 377, 242-246.	13.7	290
6	Lessons Learned from Quantitative Dynamical Modeling in Systems Biology. PLoS ONE, 2013, 8, e74335.	1.1	275
7	The liver-specific microRNA miR-122 controls systemic iron homeostasis in mice. Journal of Clinical Investigation, 2011, 121, 1386-1396.	3.9	221
8	Data2Dynamics: a modeling environment tailored to parameter estimation in dynamical systems. Bioinformatics, 2015, 31, 3558-3560.	1.8	206
9	Intramolecular Regulation of Protein Tyrosine Phosphatase SH-PTP1: A New Function for Src Homology 2 Domains. Biochemistry, 1994, 33, 15483-15493.	1.2	202
10	CYTOKINE RECEPTOR SIGNAL TRANSDUCTION AND THE CONTROL OF HEMATOPOIETIC CELL DEVELOPMENT. Annual Review of Cell and Developmental Biology, 1996, 12, 91-128.	4.0	196
11	Multiple tyrosine residues in the cytosolic domain of the erythropoietin receptor promote activation of STAT5.. Proceedings of the National Academy of Sciences of the United States of America, 1996, 93, 8324-8328.	3.3	183
12	Functional interaction of erythropoietin and stem cell factor receptors is essential for erythroid colony formation. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 1806-1810.	3.3	171
13	Identification of a novel pathway important for proliferation and differentiation of primary erythroid progenitors. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 3016-3021.	3.3	166
14	Managing the challenge of drug-induced liver injury: a roadmap for the development and deployment of preclinical predictive models. Nature Reviews Drug Discovery, 2020, 19, 131-148.	21.5	153
15	Covering a Broad Dynamic Range: Information Processing at the Erythropoietin Receptor. Science, 2010, 328, 1404-1408.	6.0	152
16	A mouse model for visualization and conditional mutations in the erythroid lineage. Blood, 2004, 104, 659-666.	0.6	139
17	Interleukin-6 and oncostatinâ€‰M-induced growth inhibition of human A375 melanoma cells is STAT-dependent and involves upregulation of the cyclin-dependent kinase inhibitor p27/Kip1. Oncogene, 1999, 18, 3742-3753.	2.6	130
18	The Glucocorticoid Receptor Controls Hepatic Dyslipidemia through Hes1. Cell Metabolism, 2008, 8, 212-223.	7.2	126

#	ARTICLE	IF	CITATIONS
19	Addressing parameter identifiability by model-based experimentation. IET Systems Biology, 2011, 5, 120-130.	0.8	126
20	Primary mouse hepatocytes for systems biology approaches: a standardized in vitro system for modelling of signal transduction pathways. IET Systems Biology, 2006, 153, 433.	2.0	122
21	Division of labor by dual feedback regulators controls JAK2/STAT5 signaling over broad ligand range. Molecular Systems Biology, 2011, 7, 516.	3.2	110
22	BMP-9 interferes with liver regeneration and promotes liver fibrosis. Gut, 2017, 66, 939-954.	6.1	107
23	The Role of Tyrosine Phosphorylation in Proliferation and Maturation of Erythroid Progenitor Cells. Signals Emanating from the Erythropoietin Receptor. FEBS Journal, 1997, 249, 637-647.	0.2	105
24	Stat5 activation enables erythropoiesis in the absence of EpoR and Jak2. Blood, 2008, 111, 4511-4522.	0.6	101
25	Identifiability and observability analysis for experimental design in nonlinear dynamical models. Chaos, 2010, 20, 045105.	1.0	101
26	Self assembly of the transmembrane domain promotes signal transduction through the erythropoietin receptor. Current Biology, 2001, 11, 110-115.	1.8	100
27	Enhanced transgene expression in primitive hematopoietic progenitor cells and embryonic stem cells efficiently transduced by optimized retroviral hybrid vectors. Gene Therapy, 2002, 9, 477-487.	2.3	92
28	mTOR-mediated cancer drug resistance suppresses autophagy and generates a druggable metabolic vulnerability. Nature Communications, 2020, 11, 4684.	5.8	87
29	Dynamic Mathematical Modeling of IL13-Induced Signaling in Hodgkin and Primary Mediastinal B-Cell Lymphoma Allows Prediction of Therapeutic Targets. Cancer Research, 2011, 71, 693-704.	0.4	82
30	Downregulation of the TGFÎ² Pseudoreceptor BAMBI in Nonâ€"Small Cell Lung Cancer Enhances TGFÎ² Signaling and Invasion. Cancer Research, 2016, 76, 3785-3801.	0.4	75
31	Theoretical and experimental analysis links isoformâ€•specific ERK signalling to cell fate decisions. Molecular Systems Biology, 2009, 5, 334.	3.2	72
32	Protein abundance of AKT and ERK pathway components governs cell typeâ€specific regulation ofÂproliferation. Molecular Systems Biology, 2017, 13, 904.	3.2	72
33	Forced Dimerization of gp130 Leads to Constitutive STAT3 Activation, Cytokine-independent Growth, and Blockade of Differentiation of Embryonic Stem Cells. Molecular Biology of the Cell, 2006, 17, 2986-2995.	0.9	71
34	The microtubule affinity regulating kinase MARK4 promotes axoneme extension during early ciliogenesis. Journal of Cell Biology, 2013, 200, 505-522.	2.3	71
35	A Rapidly Reversible Chemical Dimerizer System to Study Lipid Signaling in Living Cells. Angewandte Chemie - International Edition, 2014, 53, 6720-6723.	7.2	70
36	The Interface between Self-assembling Erythropoietin Receptor Transmembrane Segments Corresponds to a Membrane-spanning Leucine Zipper. Journal of Biological Chemistry, 2004, 279, 3273-3279.	1.6	68

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37	Effects of Telomerase Modulation in Human Hematopoietic Progenitor Cells. Stem Cells, 2004, 22, 741-749.	1.4	67
38	Sox6 cell-autonomously stimulates erythroid cell survival, proliferation, and terminal maturation and is thereby an important enhancer of definitive erythropoiesis during mouse development. Blood, 2006, 108, 1198-1207.	0.6	67
39	Computational processing and error reduction strategies for standardized quantitative data in biological networks. FEBS Journal, 2005, 272, 6400-6411.	2.2	66
40	Distinct roles of Mdm2 and Mdm4 in red cell production. Blood, 2007, 109, 2630-2633.	0.6	63
41	Unbiased RNAi screen for hepcidin regulators links hepcidin suppression to proliferative Ras/RAF and nutrient-dependent mTOR signaling. Blood, 2014, 123, 1574-1585.	0.6	62
42	MODELING THE NONLINEAR DYNAMICS OF CELLULAR SIGNAL TRANSDUCTION. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2004, 14, 2069-2079.	0.7	59
43	Predictive mathematical models of cancer signalling pathways. Journal of Internal Medicine, 2012, 271, 155-165.	2.7	56
44	High-dimensional Bayesian parameter estimation: Case study for a model of JAK2/STAT5 signaling. Mathematical Biosciences, 2013, 246, 293-304.	0.9	56
45	Resolving the Combinatorial Complexity of Smad Protein Complex Formation and Its Link to Gene Expression. Cell Systems, 2018, 6, 75-89.e11.	2.9	55
46	Erythropoietin Receptor Mutations Associated With Familial Erythrocytosis Cause Hypersensitivity to Erythropoietin in the Heterozygous State. Blood, 1999, 94, 2530-2532.	0.6	54
47	Conditional deletion of Nedd4-2 in lung epithelial cells causes progressive pulmonary fibrosis in adult mice. Nature Communications, 2020, 11, 2012.	5.8	52
48	Whither systems medicine?. Experimental and Molecular Medicine, 2018, 50, e453-e453.	3.2	49
49	Quenched Substrates for Live-Cell Labeling of SNAP-Tagged Fusion Proteins with Improved Fluorescent Background. Analytical Chemistry, 2010, 82, 8186-8193.	3.2	48
50	Erythropoiesis and globin switching in compound Klf1::Bcl11a mutant mice. Blood, 2013, 121, 2553-2562.	0.6	46
51	Combining theoretical analysis and experimental data generation reveals IRF9 as a crucial factor for accelerating interferonâ€ƒÎ±â€induced early antiviral signalling. FEBS Journal, 2010, 277, 4741-4754.	2.2	45
52	Quantitative analysis of amino acid metabolism in liver cancer links glutamate excretion to nucleotide synthesis. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 10294-10304.	3.3	45
53	Heterogeneous kinetics of AKT signaling in individual cells are accounted for by variable protein concentration. Frontiers in Physiology, 2012, 3, 451.	1.3	43
54	The virtual liver: state of the art and future perspectives. Archives of Toxicology, 2014, 88, 2071-2075.	1.9	41

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55	Identification of Cell Type-Specific Differences in Erythropoietin Receptor Signaling in Primary Erythroid and Lung Cancer Cells. PLoS Computational Biology, 2016, 12, e1005049.	1.5	41
56	Disentangling molecular mechanisms regulating sensitization of interferon alpha signal transduction. Molecular Systems Biology, 2020, 16, e8955.	3.2	41
57	Identification of Isoform-Specific Dynamics in Phosphorylation-Dependent STAT5 Dimerization by Quantitative Mass Spectrometry and Mathematical Modeling. Journal of Proteome Research, 2014, 13, 5685-5694.	1.8	38
58	A systems biology approach to analyse amplification in the JAK2-STAT5 signalling pathway. BMC Systems Biology, 2008, 2, 38.	3.0	37
59	Transcription Factors KLF1 and KLF2 Positively Regulate Embryonic and Fetal Î²-Globin Genes through Direct Promoter Binding. Journal of Biological Chemistry, 2011, 286, 24819-24827.	1.6	36
60	Cancer cell specific inhibition of Wnt/Î²-catenin signaling by forced intracellular acidification. Cell Discovery, 2018, 4, 37.	3.1	34
61	Tyrosine Residues within the Intracellular Domain of the Erythropoietin Receptor Mediate Activation of AP-1 Transcription Factors. Journal of Biological Chemistry, 1998, 273, 2396-2401.	1.6	33
62	Quantitative data generation for systems biology: the impact of randomisation, calibrators and normalisers. IET Systems Biology, 2005, 152, 193.	2.0	33
63	Quantitative protein microarrays for timeâ€resolved measurements of protein phosphorylation. Proteomics, 2008, 8, 4603-4612.	1.3	30
64	An integrative model links multiple inputs and signaling pathways to the onset of DNA synthesis in hepatocytes. FEBS Journal, 2012, 279, 3290-3313.	2.2	30
65	Dynamics and feedback loops in the transforming growth factor Î² signaling pathway. Biophysical Chemistry, 2012, 162, 22-34.	1.5	29
66	The Erythropoietin Receptor: Biogenesis, Dimerization, and Intracellular Signal Transduction. Cold Spring Harbor Symposia on Quantitative Biology, 1995, 60, 93-104.	2.0	29
67	Protein tyrosine phosphatase 1B participates in the down-regulation of erythropoietin receptor signalling. Biochemical Journal, 2004, 377, 517-524.	1.7	28
68	Tests for cycling in a signalling pathway. Journal of the Royal Statistical Society Series C: Applied Statistics, 2004, 53, 557-568.	0.5	27
69	Erythropoietin Improves the Accumulation and Therapeutic Effects of Carboplatin by Enhancing Tumor Vascularization and Perfusion. Theranostics, 2015, 5, 905-918.	4.6	27
70	Systems biology of JAK/STAT signalling. Essays in Biochemistry, 2008, 45, 109-120.	2.1	27
71	Phosphorylation of erythropoietin receptors in the endoplasmic reticulum by pervanadate-mediated inhibition of tyrosine phosphatases. Biochemical Journal, 1997, 327, 391-397.	1.7	26
72	Cytokinesis failure in RhoA-deficient mouse erythroblasts involves actomyosin and midbody dysregulation and triggers p53 activation. Blood, 2015, 126, 1473-1482.	0.6	26

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73	A Functional Green Fluorescent Protein-tagged Erythropoietin Receptor Despite Physical Separation of JAK2 Binding Site and Tyrosine Residues. Journal of Biological Chemistry, 2002, 277, 26547-26552.	1.6	24
74	Targeted Near-Infrared Imaging of the Erythropoietin Receptor in Human Lung Cancer Xenografts. Journal of Nuclear Medicine, 2012, 53, 304-311.	2.8	24
75	Vegf regulates embryonic erythroid development through Gata1 modulation. Blood, 2010, 116, 2141-2151.	0.6	23
76	The Cytokine-inducible Scr Homology Domain-containing Protein Negatively Regulates Signaling by Promoting Apoptosis in Erythroid Progenitor Cells. Journal of Biological Chemistry, 2003, 278, 2654-2660.	1.6	22
77	High-Content Imaging Platform for Profiling Intracellular Signaling Network Activity in Living Cells. Cell Chemical Biology, 2016, 23, 1550-1559.	2.5	21
78	Standardizing experimental protocols. Current Opinion in Biotechnology, 2008, 19, 354-359.	3.3	20
79	T160â€phosphorylated <scp>CDK</scp>2 defines threshold for <scp>HGF</scp>â€dependent proliferation in primary hepatocytes. Molecular Systems Biology, 2015, 11, 795.	3.2	19
80	Model Based Targeting of IL-6-Induced Inflammatory Responses in Cultured Primary Hepatocytes to Improve Application of the JAK Inhibitor Ruxolitinib. Frontiers in Physiology, 2017, 8, 775.	1.3	19
81	Model-based identification of TNFÎ±-induced IKKÎ²-mediated and IÎºBÎ±-mediated regulation of NFÎºB signal transduction as a tool to quantify the impact of drug-induced liver injury compounds. Npj Systems Biology and Applications, 2018, 4, 23.	1.4	19
82	Cellular ERK Phospho-Form Profiles with Conserved Preference for a Switch-Like Pattern. Journal of Proteome Research, 2013, 12, 637-646.	1.8	18
83	Context-specific flow through the MEK/ERK module produces cell- and ligand-specific patterns of ERK single and double phosphorylation. Science Signaling, 2016, 9, ra13.	1.6	18
84	Hepatocyte-specific S100a8 and S100a9 transgene expression in mice causes Cxcl1 induction and systemic neutrophil enrichment. Cell Communication and Signaling, 2012, 10, 40.	2.7	17
85	Knowledge-based matrix factorization temporally resolves the cellular responses to IL-6 stimulation. BMC Bioinformatics, 2010, 11, 585.	1.2	16
86	Shortâ€term information processing, longâ€term responses: Insights by mathematical modeling of signal transduction. BioEssays, 2012, 34, 542-550.	1.2	16
87	Unraveling liver complexity from molecular to organ level: Challenges and perspectives. Progress in Biophysics and Molecular Biology, 2015, 117, 78-86.	1.4	16
88	TTCA: an R package for the identification of differentially expressed genes in time course microarray data. BMC Bioinformatics, 2017, 18, 33.	1.2	16
89	Packing Density of the Erythropoietin Receptor Transmembrane Domain Correlates with Amplification of Biological Responses. Biochemistry, 2008, 47, 11771-11782.	1.2	15
90	Disentangling the Complexity of HGF Signaling by Combining Qualitative and Quantitative Modeling. PLoS Computational Biology, 2015, 11, e1004192.	1.5	15

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91	Oneâ€source peptide/phosphopeptide standards for accurate phosphorylation degree determination. Proteomics, 2011, 11, 490-494.	1.3	14
92	Hfe Deficiency Impairs Pulmonary Neutrophil Recruitment in Response to Inflammation. PLoS ONE, 2012, 7, e39363.	1.1	14
93	IL-1Î²-induced and p38MAPK-dependent activation of the mitogen-activated protein kinase-activated protein kinase 2 (MK2) in hepatocytes: Signal transduction with robust and concentration-independent signal amplification. Journal of Biological Chemistry, 2017, 292, 6291-6302.	1.6	14
94	Dynamic Pathway Modeling: Feasibility Analysis and Optimal Experimental Design. Annals of the New York Academy of Sciences, 2007, 1115, 212-220.	1.8	13
95	Hepatocellular carcinoma: a systems biology perspective. Frontiers in Physiology, 2013, 4, 28.	1.3	12
96	A Thymic Epithelial Stem Cell Pool Persists throughout Ontogeny and Is Modulated by TGF-Î². Cell Reports, 2016, 17, 448-457.	2.9	12
97	Expression ratio of the TGFÎ²-inducible gene MYO10 is prognostic for overall survival of squamous cell lung cancer patients and predicts chemotherapy response. Scientific Reports, 2018, 8, 9517.	1.6	11
98	Model-based extension of high-throughput to high-content data. BMC Systems Biology, 2010, 4, 106.	3.0	10
99	Correlated receptor transport processes buffer single-cell heterogeneity. PLoS Computational Biology, 2017, 13, e1005779.	1.5	10
100	Cell-to-cell variability in JAK2/STAT5 pathway components and cytoplasmic volumes defines survival threshold in erythroid progenitor cells. Cell Reports, 2021, 36, 109507.	2.9	10
101	A Systems Biology Study on NFÎºB Signaling in Primary Mouse Hepatocytes. Frontiers in Physiology, 2012, 3, 466.	1.3	9
102	Prognostic Significance of Erythropoietin in Pancreatic Adenocarcinoma. PLoS ONE, 2011, 6, e23151.	1.1	8
103	Genome-Wide DNA Methylation Profiling in Early Stage I Lung Adenocarcinoma Reveals Predictive Aberrant Methylation in the Promoter Region of the Long Noncoding RNA PLUT: An Exploratory Study. Journal of Thoracic Oncology, 2020, 15, 1338-1350.	0.5	8
104	Leukemogenic Ptpn11 Allele Causes Defective Erythropoiesis in Mice. PLoS ONE, 2014, 9, e109682.	1.1	8
105	Centrosomal targeting of tyrosine kinase activity does not enhance oncogenicity in chronic myeloproliferative disorders. Leukemia, 2012, 26, 728-735.	3.3	7
106	Receptor Dynamics in Signaling. Advances in Experimental Medicine and Biology, 2012, 736, 313-323.	0.8	6
107	In silico labeling reveals the time-dependent label half-life and transit-time in dynamical systems. BMC Systems Biology, 2012, 6, 13.	3.0	6
108	Spatial aspects in the SMAD signaling pathway. Journal of Mathematical Biology, 2013, 67, 1171-1197.	0.8	6

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109	The hepatotoxic fluoroquinolone trovafloxacin disturbs TNF- and LPS-induced p65 nuclear translocation in vivo and in vitro. Toxicology and Applied Pharmacology, 2020, 391, 114915.	1.3	6
110	Hypoxia Routes Tryptophan Homeostasis Towards Increased Tryptamine Production. Frontiers in Immunology, 2021, 12, 590532.	2.2	6
111	MSPypeline: a python package for streamlined data analysis of mass spectrometry-based proteomics. Bioinformatics Advances, 2022, 2, .	0.9	6
112	Identification of Interleukin1Î² as an Amplifier of Interferon alpha-induced Antiviral Responses. PLoS Pathogens, 2020, 16, e1008461.	2.1	5
113	Theoretical Analysis of Time-to-Peak Responses inÂBiological Reaction Networks. Bulletin of Mathematical Biology, 2011, 73, 978-1003.	0.9	4
114	The ParaHox gene Cdx4 induces acute erythroid leukemia in mice. Blood Advances, 2019, 3, 3729-3739.	2.5	4
115	Deciphering signal transduction networks in the liver by mechanistic mathematical modelling. Biochemical Journal, 2022, 479, 1361-1374.	1.7	4
116	Excemplify: A Flexible Template Based Solution, Parsing and Managing Data in Spreadsheets for Experimentalists. Journal of Integrative Bioinformatics, 2013, 10, 58-70.	1.0	3
117	Biological Foundations of Signal Transduction and the Systems Biology Perspective. , 2006, , 149-168.		2
118	Biological Foundations of Signal Transduction, Systems Biology and Aberrations in Disease. , 2014, , 45-64.		1
119	Automated Detection of Portal Fields and Central Veins in Whole-Slide Images of Liver Tissue. Journal of Pathology Informatics, 2022, 13, 100001.	0.8	1
120	Excemplify: a flexible template based solution, parsing and managing data in spreadsheets for experimentalists. Journal of Integrative Bioinformatics, 2013, 10, 220.	1.0	1
121	Quantification of frap experiments in live cell image sequences by combining segmentation and registration. , 2011, , .		0
122	P117 HOLISTIC APPROACH TO UNRAVEL FUNCTIONS AND REGULATION OF HGF IN LIVER REGENERATION. Journal of Hepatology, 2014, 60, S105.	1.8	0
123	A systems biology approach to unravel the drug-TNFÎ± signaling synergy in idiosyncratic DILI. Toxicology Letters, 2014, 229, S39.	0.4	0
124	P0428 : LPS-stimulated mouse hepatic stellate cells secrete specific factors that directly contribute to the acute phase response of hepatocytes. Journal of Hepatology, 2015, 62, S473.	1.8	0
125	Characterisation of cell-type-specific responses in the liver towards IL-1Î² by a mathematical model for the p38MAPK/MK2 pathway. Journal of Hepatology, 2017, 66, S642.	1.8	0
126	Liver progenitor cells regulate ductular reaction and induce fibrosis upon severe liver injury via RAGE signaling. Zeitschrift Fur Gastroenterologie, 2021, 59, .	0.2	0

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127	Interaction Between Experiment, Modeling and Simulation of Spatial Aspects in the JAK2/STAT5 Signaling Pathway. Contributions in Mathematical and Computational Sciences, 2013, , 125-143.	0.3	0
128	Cellular and nuclear hepatocyte ploidy represent a repository in regenerating livers. Zeitschrift Fur Gastroenterologie, 2019, 57, .	0.2	0
129	Prediction of Pathway Desensitization by Mathematical Modeling of IFNÎ± Signal Transduction. Zeitschrift Fur Gastroenterologie, 2019, 57, .	0.2	0
130	Extracellular vesicles from steatotic hepatocytes influence stellate cells in liver fibrosis. Zeitschrift Fur Gastroenterologie, 2020, 58, .	0.2	0
131	Interference of TGFb with the activation state of liver macrophages and consequences for liver injury and regeneration. Zeitschrift Fur Gastroenterologie, 2022, 60, .	0.2	0