Andreas A Schuppert

List of Publications by Year
in descending order

54	1,747	361045 20	315357 38
papers	citations	h-index	g-index

68	68	68	2846
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	From hype to reality: data science enabling personalized medicine. BMC Medicine, 2018, 16, 150.	2.3	278
2	Stem Cell Differentiation as a Non-Markov Stochastic Process. Cell Systems, 2017, 5, 268-282.e7.	2.9	178
3	Nanog-dependent feedback loops regulate murine embryonic stem cell heterogeneity. Nature Cell Biology, 2012, 14, 1139-1147.	4.6	141
4	Few inputs can reprogram biological networks. Nature, 2011, 478, E4-E4.	13.7	96
5	Smart Medical Information Technology for Healthcare (SMITH). Methods of Information in Medicine, 2018, 57, e92-e105.	0.7	89
6	Swarm learning for decentralized artificial intelligence in cancer histopathology. Nature Medicine, 2022, 28, 1232-1239.	15.2	77
7	Enabling multiscale modeling in systems medicine. Genome Medicine, 2014, 6, 21.	3.6	76
8	Principal components analysis and the reported low intrinsic dimensionality of gene expression microarray data. Scientific Reports, 2016, 6, 25696.	1.6	72
9	6-month mortality and readmissions of hospitalized COVID-19 patients: A nationwide cohort study of 8,679 patients in Germany. PLoS ONE, 2021, 16, e0255427.	1.1	65
10	Physiologically-based modelling in mice suggests an aggravated loss of clearance capacity after toxic liver damage. Scientific Reports, 2017, 7, 6224.	1.6	57
11	Inflammatory processes during acute respiratory distress syndrome: a complex system. Current Opinion in Critical Care, 2018, 24, 1-9.	1.6	52
12	Epigenetic Biomarker to Support Classification into Pluripotent and Non-Pluripotent Cells. Scientific Reports, 2015, 5, 8973.	1.6	49
13	Whither systems medicine?. Experimental and Molecular Medicine, 2018, 50, e453-e453.	3.2	49
14	A systematic atlas of chaperome deregulation topologies across the human cancer landscape. PLoS Computational Biology, 2018, 14, e1005890.	1.5	46
15	Future Medical Artificial Intelligence Application Requirements and Expectations of Physicians in German University Hospitals: Web-Based Survey. Journal of Medical Internet Research, 2021, 23, e26646.	2.1	46
16	Using Bayesian-PBPK modeling for assessment of inter-individual variability and subgroup stratification. In Silico Pharmacology, 2013, 1, 6.	1.8	41
17	Bayesian Population Physiologically-Based Pharmacokinetic (PBPK) Approach for a Physiologically Realistic Characterization of Interindividual Variability in Clinically Relevant Populations. PLoS ONE, 2015, 10, e0139423.	1.1	37
18	Different spreading dynamics throughout Germany during the second wave of the COVID-19 pandemic: a time series study based on national surveillance data. Lancet Regional Health - Europe, The, 2021, 6, 100151.	3.0	37

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19	Local identification of scalar hybrid models with tree structure. IMA Journal of Applied Mathematics, 2008, 73, 449-476.	0.8	36
20	Robust PBPK/PD-Based Model Predictive Control of Blood Glucose. IEEE Transactions on Biomedical Engineering, 2016, 63, 1492-1504.	2.5	26
21	PhysioSpace: Relating Gene Expression Experiments from Heterogeneous Sources Using Shared Physiological Processes. PLoS ONE, 2013, 8, e77627.	1.1	17
22	Application of Data Mining and Evolutionary Optimization in Catalyst Discovery and High-Throughput Experimentation - Techniques, Strategies, and Software. QSAR and Combinatorial Science, 2005, 24, 29-37.	1.5	16
23	Translational learning from clinical studies predicts drug pharmacokinetics across patient populations. Npj Systems Biology and Applications, 2017, 3, 11.	1.4	14
24	Quantifying stability in gene list ranking across microarray derived clinical biomarkers. BMC Medical Genomics, 2011, 4, 73.	0.7	13
25	Extrapolability of structured hybrid models: a key to optimization of complex processes. , 2000, , 1135-1151.		11
26	Effectiveness of extended shutdown measures during the Â´BundesnotbremseÂ´ introduced in the third SARS-CoV-2 wave in Germany. Infection, 2021, 49, 1331-1335.	2.3	11
27	Methodological challenges in translational drug response modeling in cancer: A systematic analysis with FORESEE. PLoS Computational Biology, 2020, 16, e1007803.	1.5	9
28	Algorithmic surveillance of ICU patients with acute respiratory distress syndrome (ASIC): protocol for a multicentre stepped-wedge cluster randomised quality improvement strategy. BMJ Open, 2021, 11, e045589.	0.8	9
29	Combined Population Dynamics and Entropy Modelling Supports Patient Stratification in Chronic Myeloid Leukemia. Scientific Reports, 2016, 6, 24057.	1.6	8
30	A modified Ising model of BarabÃ¡siâ€“Albert network with gene-type spins. Journal of Mathematical Biology, 2020, 81, 769-798.	0.8	8
31	Quality-targeting dynamic optimization of monoclonal antibody production. Computers and Chemical Engineering, 2020, 142, 107004.	2.0	7
32	Combination of a Proteomics Approach and Reengineering of Meso Scale Network Models for Prediction of Mode-of-Action for Tyrosine Kinase Inhibitors. PLoS ONE, 2013, 8, e53668.	1.1	7
33	Efficient reengineering of meso-scale topologies for functional networks in biomedical applications. Journal of Mathematics in Industry, 2011, 1, 6.	0.7	6
34	Systems Medicine in Pharmaceutical Research and Development. Methods in Molecular Biology, 2016, 1386, 87-104.	0.4	6
35	Towards Model-Based Optimization for Quality by Design in Biotherapeutics Production. Computer Aided Chemical Engineering, 2019, , 25-30.	0.3	6
36	FORESEE: a tool for the systematic comparison of translational drug response modeling pipelines. Bioinformatics, 2019, 35, 3846-3848.	1.8	6

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37	Power-Laws and the Use of Pluripotent Stem Cell Lines. PLoS ONE, 2013, 8, e52068.	1.1	6
38	Assessing interindividual variability by Bayesian-PBPK modeling. Drug Discovery Today: Disease Models, 2016, 22, 15-19.	1.2	5
39	How to Use Mechanistic Metabolic Modeling to Ensure High Quality Glycoprotein Production. Computer Aided Chemical Engineering, 2017, , 2839-2844.	0.3	5
40	Two-step multi-omics modelling of drug sensitivity in cancer cell lines to identify driving mechanisms. PLoS ONE, 2020, 15, e0238961.	1.1	5
41	Plant PhysioSpace: a robust tool to compare stress response across plant species. Plant Physiology, 2021, 187, 1795-1811.	2.3	3
42	A neural network assisted Metropolis adjusted Langevin algorithm. Monte Carlo Methods and Applications, 2020, 26, 93-111.	0.3	3
43	Effectiveness of extended shutdown measures during the Â´BundesnotbremseÂ´ introduced in the third SARS-CoV-2 wave in Germany. Infection, 2021, 49, 1331-1335.	2.3	2
44	Data Mining mit Prozessdaten (Data Mining with Process Data). Automatisierungstechnik, 2005, 53, 342-349.	0.4	1
45	An elastic network model to identify characteristic stress response genes. Computational Biology and Chemistry, 2010, 34, 193-202.	1.1	1
46	A new Perspective on Closed-Loop Glucose Control using a Physiology-Based Pharmacokinetic / Pharmacodynamic Model Kernel. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 420-425.	0.4	1
47	Markov-Chain Monte-Carlo methods and non-identifiabilities. Monte Carlo Methods and Applications, 2018, 24, 203-214.	0.3	1
48	Different Spreading Dynamics Throughout Germany During the Second Wave of the COVID-19 Pandemic: Link to Public Health Interventions. SSRN Electronic Journal, 0, , .	0.4	1
49	Global hierarchy vs local structure: Spurious self-feedback in scale-free networks. Physical Review Research, 2021, 3, .	1.3	1
50	Modelling the influence of monomer properties on hydrogen bond density in oriented, rigid copolymer systems. Journal of the Chemical Society, Faraday Transactions, 1995, 91, 2629.	1.7	0
51	Application of Data Mining and Evolutionary Optimization in Catalyst Discovery and High-Throughput Experimentation: Techniques, Strategies, and Software. ChemInform, 2005, 36, no.	0.1	0
52	What Can Networks Do for You?. , 2012, , 173-194.		0
53	â€œBig Data and Dynamicsâ€â€”The Mathematical Toolkit Towards Personalized Medicine. Springer Proceedings in Mathematics and Statistics, 2017, , 338-369.	0.1	0
54	Big Data und kÃ¼nstliche Intelligenz in der Medizin. , 2021, , 423-436.		0