

# Ina Koch

## List of Publications by Year in descending order

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Version: 2024-02-01

48  
papers

1,539  
citations

430874

18  
h-index

330143

37  
g-index

55  
all docs

55  
docs citations

55  
times ranked

2357  
citing authors

#	ARTICLE	IF	CITATIONS
1	Next-generation sequencing reveals novel differentially regulated mRNAs, lncRNAs, miRNAs, sdRNAs and a piRNA in pancreatic cancer. <i>Molecular Cancer</i> , 2015, 14, 94.	19.2	210
2	Application of Petri net based analysis techniques to signal transduction pathways. <i>BMC Bioinformatics</i> , 2006, 7, 482.	2.6	153
3	Application of Petri net theory for modelling and validation of the sucrose breakdown pathway in the potato tuber. <i>Bioinformatics</i> , 2005, 21, 1219-1226.	4.1	117
4	APADB: a database for alternative polyadenylation and microRNA regulation events. <i>Database: the Journal of Biological Databases and Curation</i> , 2014, 2014, bau076-bau076.	3.0	90
5	Petri net modelling of gene regulation of the Duchenne muscular dystrophy. <i>BioSystems</i> , 2008, 92, 189-205.	2.0	76
6	NOVA: a software to analyze complexome profiling data. <i>Bioinformatics</i> , 2015, 31, 440-441.	4.1	70
7	Modularization of biochemical networks based on classification of Petri net t-invariants. <i>BMC Bioinformatics</i> , 2008, 9, 90.	2.6	63
8	An analysis of the Petri net based model of the human body iron homeostasis process. <i>Computational Biology and Chemistry</i> , 2007, 31, 1-10.	2.3	60
9	Whither systems medicine?. <i>Experimental and Molecular Medicine</i> , 2018, 50, e453-e453.	7.7	49
10	Steady state analysis of metabolic pathways using Petri nets. <i>In Silico Biology</i> , 2003, 3, 367-87.	0.9	46
11	Comparison of machine learning algorithms to predict clinically significant prostate cancer of the peripheral zone with multiparametric MRI using clinical assessment categories and radiomic features. <i>European Radiology</i> , 2020, 30, 6757-6769.	4.5	33
12	Petri Nets. , 0, , 139-179.		32
13	Petri nets in systems biology. <i>Software and Systems Modeling</i> , 2015, 14, 703-710.	2.7	31
14	A Genome-Wide Longitudinal Transcriptome Analysis of the Aging Model <i>Podospora anserine</i> . <i>PLoS ONE</i> , 2013, 8, e83109.	2.5	30
15	MonaLisaâ€™ visualization and analysis of functional modules in biochemical networks. <i>Bioinformatics</i> , 2013, 29, 1469-1470.	4.1	28
16	Petri Nets â€“ A Mathematical Formalism to Analyze Chemical Reaction Networks. <i>Molecular Informatics</i> , 2010, 29, 838-843.	2.5	27
17	In Silico Knockout Studies of Xenophagic Capturing of Salmonella. <i>PLoS Computational Biology</i> , 2016, 12, e1005200.	3.2	24
18	Optimizing the dynamics of protein expression. <i>Scientific Reports</i> , 2019, 9, 7511.	3.3	24

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19	MONALISA for stochastic simulations of Petri net models of biochemical systems. BMC Bioinformatics, 2015, 16, 215.	2.6	21
20	Impact of rescanning and repositioning on radiomic features employing a multi-object phantom in magnetic resonance imaging. Scientific Reports, 2021, 11, 14248.	3.3	21
21	Reduction techniques for network validation in systems biology. Journal of Theoretical Biology, 2012, 315, 71-80.	1.7	15
22	CD30 cell graphs of Hodgkin lymphoma are not scale-free—an image analysis approach. Bioinformatics, 2016, 32, 122-129.	4.1	15
23	Image database analysis of Hodgkin lymphoma. Computational Biology and Chemistry, 2013, 46, 1-7.	2.3	14
24	On Functional Module Detection in Metabolic Networks. Metabolites, 2013, 3, 673-700.	2.9	13
25	Quantitative genome-wide association study of six phenotypic subdomains identifies novel genome-wide significant variants in autism spectrum disorder. Translational Psychiatry, 2020, 10, 215.	4.8	13
26	Quasi-Steady-State Analysis based on Structural Modules and Timed Petri Net Predict System's Dynamics: The Life Cycle of the Insulin Receptor. Metabolites, 2015, 5, 766-793.	2.9	12
27	Path2PPI: an R package to predict protein-protein interaction networks for a set of proteins. Bioinformatics, 2016, 32, 1427-1429.	4.1	12
28	Exhaustive Analysis of the Modular Structure of the Spliceosomal Assembly Network: A Petri Net Approach. In Silico Biology, 2010, 10, 89-123.	0.9	11
29	Unsupervised image segmentation for microarray spots with irregular contours and inner holes. BMC Bioinformatics, 2015, 16, 412.	2.6	11
30	Modeling the Metabolism of Arabidopsis thaliana: Application of Network Decomposition and Network Reduction in the Context of Petri Nets. Frontiers in Genetics, 2017, 8, 85.	2.3	10
31	Bioinformatics analysis of whole slide images reveals significant neighborhood preferences of tumor cells in Hodgkin lymphoma. PLoS Computational Biology, 2020, 16, e1007516.	3.2	10
32	Manatee invariants reveal functional pathways in signaling networks. BMC Systems Biology, 2017, 11, 72.	3.0	9
33	The new protein topology graph library web server. Bioinformatics, 2016, 32, 474-476.	4.1	7
34	Protein super-secondary structure and quaternary structure topology: theoretical description and application. Current Opinion in Structural Biology, 2018, 50, 134-143.	5.7	7
35	isiKnock: <i>in silico</i> knockouts in signaling pathways. Bioinformatics, 2019, 35, 892-894.	4.1	7
36	The canonical and non-canonical NF- $\kappa$ B pathways and their crosstalk: A comparative study based on Petri nets. BioSystems, 2022, 211, 104564.	2.0	7

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37	The autophagy interaction network of the aging model <i>Podospora anserina</i> . BMC Bioinformatics, 2017, 18, 196.	2.6	6
38	Common functional variants of the glutamatergic system in Autism spectrum disorder with high and low intellectual abilities. Journal of Neural Transmission, 2018, 125, 259-271.	2.8	6
39	Potential of high dimensional radiomic features to assess blood components in intraaortic vessels in non-contrast CT scans. BMC Medical Imaging, 2021, 21, 123.	2.7	5
40	Prediction and analysis of redox-sensitive cysteines using machine learning and statistical methods. Biological Chemistry, 2021, 402, 925-935.	2.5	5
41	Petri Nets and GRN Models. , 2010, , 604-637.		5
42	PTGL: extension to graph-based topologies of cryo-EM data for large protein structures. Bioinformatics, 2021, 37, 1032-1034.	4.1	3
43	3D connectomes of reactive and neoplastic CD30 positive lymphoid cells and surrounding cell types. Acta Histochemica, 2021, 123, 151750.	1.8	3
44	Detection of follicular regions in actin-stained whole slide images of the human lymph node byÂshock filter. Biological Chemistry, 2021, 402, 991-999.	2.5	3
45	Petri Nets in the Biosciences. IT - Information Technology, 2014, 56, 43-45.	0.9	1
46	Bioinformatics in theory and applicationÂ€ highlights of the 36th German Conference on Bioinformatics. Biological Chemistry, 2021, 402, 869-870.	2.5	1
47	Hierarchical Representation of Supersecondary Structures Using a Graph-Theoretical Approach. Methods in Molecular Biology, 2012, 932, 7-33.	0.9	0
48	Reconstruction of ProteinÂ€Protein Interaction Networks Using Homology-Based Search: Application to the Autophagy Pathway of Aging in <i>Podospora anserina</i> . Methods in Molecular Biology, 2020, 2074, 45-55.	0.9	0