Don Kulasiri

List of Publications by Year
in descending order

69	752	566801 15	610482 24
papers	citations	h-index	g-index

72	72	72	747
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Fundamental Boolean network modelling for childhood acute lymphoblastic leukaemia pathways. Quantitative Biology, 2022, 10, 94-121.	0.3	0
2	A machine learning application in wine quality prediction. Machine Learning With Applications, 2022, 8, 100261.	3.0	17
3	A review of molecular mechanisms linked to potential renal injury agents in tropical rural farming communities. Environmental Toxicology and Pharmacology, 2022, 92, 103850.	2.0	3
4	A Large Model Case Study: Solving CME for G1/S Checkpoint Involving the DNA-Damage Signal Transduction Pathway. , 2021, , 135-155.		0
5	Intelligent State Projection. , 2021, , 81-126.		0
6	Comparative Study and Analysis of Methods and Models. , 2021, , 127-134.		0
7	A new hierarchical approach to multi-level model abstraction for simplifying ODE models of biological networks and a case study: The G1/S Checkpoint/DNA damage signalling pathways of mammalian cell cycle. BioSystems, 2021, 203, 104374.	0.9	3
8	Computational Modelling of Synaptic Plasticity: A review of models, parameter estimation using deep learning, and stochasticity. , 2021, , .		0
9	Novel domain expansion methods to improve the computational efficiency of the Chemical Master Equation solution for large biological networks. BMC Bioinformatics, 2020, 21, 515.	1.2	2
10	Towards abstraction of computational modelling of mammalian cell cycle: Model reduction pipeline incorporating multi-level hybrid petri nets. Journal of Theoretical Biology, 2020, 496, 110212.	0.8	1
11	The effects of fungal lipase-treated milk lipids on bread making. LWT - Food Science and Technology, 2020, 128, 109455.	2.5	10
12	Mathematical modelling of core regulatory mechanism in p53 protein that activates apoptotic switch. Journal of Theoretical Biology, 2019, 462, 134-147.	0.8	10
13	What can computational modeling offer for studying the Ca2+ dysregulation in Alzheimerâ€™s disease: current research and future directions. Neural Regeneration Research, 2018, 13, 1156.	1.6	0
14	Global sensitivity analysis of a model related to memory formation in synapses: Model reduction based on epistemic parameter uncertainties and related issues. Journal of Theoretical Biology, 2017, 419, 116-136.	0.8	2
15	A comprehensive complex systems approach to the study and analysis of mammalian cell cycle control system in the presence of DNA damage stress. Journal of Theoretical Biology, 2017, 429, 204-228.	0.8	14
16	Computational investigation of Amyloid-Î²-induced location- and subunit-specific disturbances of NMDAR at hippocampal dendritic spine in Alzheimerâ€™s disease. PLoS ONE, 2017, 12, e0182743.	1.1	14
17	Modelling bidirectional modulations in synaptic plasticity: A biochemical pathway model to understand the emergence of long term potentiation (LTP) and long term depression (LTD). Journal of Theoretical Biology, 2016, 403, 159-177.	0.8	14
18	Stochastic Neural Networks for Modelling Random Processes from Observed Data. Studies in Computational Intelligence, 2016, , 83-107.	0.7	0

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19	Computational modeling and experimental validation of odor detection behaviors of classically conditioned parasitic wasp, Microplitis croceipes. Biotechnology Progress, 2015, 31, 596-606.	1.3	3
20	Ca2+ dysregulation in the endoplasmic reticulum related to Alzheimerâ€™s disease: A review on experimental progress and computational modeling. BioSystems, 2015, 134, 1-15.	0.9	25
21	Mathematical modelling of p53 basal dynamics and DNA damage response. Mathematical Biosciences, 2015, 259, 27-42.	0.9	27
22	Modelling the dynamics of CaMKIIâ€“NMDAR complex related to memory formation in synapses: The possible roles of threonine 286 autophosphorylation of CaMKII in long term potentiation. Journal of Theoretical Biology, 2015, 365, 403-419.	0.8	13
23	Regulation of Meiosis Initiation before the Commitment Point in Budding Yeast: A Review of Biology, Molecular Mechanisms and Related Mathematical Models. Current Bioinformatics, 2015, 10, 208-224.	0.7	0
24	The meioticâ€“mitotic initiation switch in budding yeast maintains its function robustly against sensitive parameter perturbations. BioSystems, 2014, 124, 61-74.	0.9	0
25	Integrated signaling pathway and gene expression regulatory model to dissect dynamics of Escherichia coli challenged mammary epithelial cells. BioSystems, 2014, 126, 27-40.	0.9	6
26	Integrated Analysis of Gene Network in Childhood Leukemia from Microarray and Pathway Databases. BioMed Research International, 2014, 2014, 1-7.	0.9	10
27	A nutrient dependant switch explains mutually exclusive existence of meiosis and mitosis initiation in budding yeast. Journal of Theoretical Biology, 2014, 341, 88-101.	0.8	4
28	Systems biology of synaptic plasticity: A review on N-methyl-d-aspartate receptor mediated biochemical pathways and related mathematical models. BioSystems, 2014, 122, 7-18.	0.9	18
29	Computational experiments reveal the efficacy of targeting CDK2 and CKIs for significantly lowering cellular senescence bar for potential cancer treatment. BioSystems, 2013, 111, 71-82.	0.9	11
30	Novel recurrent neural network for modelling biological networks: Oscillatory p53 interaction dynamics. BioSystems, 2013, 114, 191-205.	0.9	26
31	A GENERALIZED STOCHASTIC SOLUTE TRANSPORT MODEL FOR MULTISCALE DISPERSION IN POROUS MEDIA. Journal of Porous Media, 2012, 15, 153-170.	1.0	0
32	Robustness of CDK2 in triggering cellular senescence based on probability of DNA-damaged cells passing G1/S checkpoint. , 2011, , .		0
33	Computing Molecular Fluctuations in Biochemical Reaction Systems Based on a Mechanistic, Statistical Theory of Irreversible Processes. Methods in Enzymology, 2011, 487, 253-278.	0.4	1
34	Distinct noise-controlling roles of multiple negative feedback mechanisms in a prokaryotic operon system. IET Systems Biology, 2011, 5, 145-156.	0.8	5
35	Robustness of circadian rhythms in the presence of molecular fluctuations: An investigation based on a mechanistic, statistical theory and a simulation algorithm. BioSystems, 2011, 106, 57-66.	0.9	3
36	Robustness of CDK2 in Triggering Cellular Senescence based on Probability of DNA-damaged Cells Passing G1âˆ•S Checkpoint. , 2011, , .		0

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37	An unbiased sensitivity analysis reveals important parameters controlling periodicity of circadian clock. Biotechnology and Bioengineering, 2010, 105, 250-259.	1.7	8
38	Robustness of G1/S checkpoint pathways in cell cycle regulation based on probability of DNA-damaged cells passing as healthy cells. BioSystems, 2010, 101, 213-221.	0.9	21
39	ON EXPLORING EFFECTS OF MOLECULAR NOISE IN A SIMPLE VIRAL INFECTION MODEL. International Journal of Biomathematics, 2010, 03, 1-19.	1.5	1
40	Machine Learning for Childhood Acute Lymphoblastic Leukaemia Gene Expression Data Analysis: A Review. Current Bioinformatics, 2010, 5, 118-133.	0.7	1
41	Towards a generalized colour image segmentation for kiwifruit detection. , 2009, , .		3
42	Synthesizing Neurophysiology, Genetics, Behaviour and Learning to Produce Whole-Insect Programmable Sensors to Detect Volatile Chemicals. Biotechnology and Genetic Engineering Reviews, 2009, 26, 179-204.	2.4	5
43	On the functional diversity of dynamical behaviour in genetic and metabolic feedback systems. BMC Systems Biology, 2009, 3, 51.	3.0	15
44	Modelling variability in full-field displacement profiles and Poisson ratio of wood in compression using stochastic neural networks. Silva Fennica, 2009, 43, .	0.5	6
45	Using insect sniffing devices for detection. Trends in Biotechnology, 2008, 26, 288-294.	4.9	48
46	Digital image analysis based automated kiwifruit counting technique. , 2008, , .		22
47	A Review of Systems Biology Perspective on Genetic Regulatory Networks with Examples. Current Bioinformatics, 2008, 3, 197-225.	0.7	27
48	Modelling Circadian Rhythms in Drosophila and Investigation of VRI and PDP1 Feedback Loops Using a New Mathematical Model. Mathematical Modelling of Natural Phenomena, 2008, 3, 1-26.	0.9	5
49	Investigation of a Stochastic Model for Multiscale Dispersion in Porous Media. Journal of Porous Media, 2008, 11, 507-524.	1.0	0
50	On multiple regulatory mechanisms in the tryptophan operon system in Escherichia coli: in silico study of perturbation dynamics. In Silico Biology, 2008, 8, 485-510.	0.4	4
51	The estimation of parameters for stochastic differential equations using neural networks. Inverse Problems in Science and Engineering, 2007, 15, 629-641.	1.2	8
52	COMPUTATIONAL MODELING OF TURBULENT VELOCITY STRUCTURES FOR AN OPEN CHANNEL FLOW USING KARHUNENâ€“LOÃ‰VE EXPANSION. International Journal of Computational Methods, 2007, 04, 493-519.	0.8	3
53	Modelling of circadian rhythms in Drosophila incorporating the interlocked PER/TIM and VRI/PDP1 feedback loops. Journal of Theoretical Biology, 2007, 245, 290-304.	0.8	36
54	Classification of lamb carcass using machine vision: Comparison of statistical and neural network analyses. Journal of Food Engineering, 2007, 82, 26-34.	2.7	46

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55	Neural networks for predicting fracture toughness of individual wood samples. Silva Fennica, 2007, 41, .	0.5	28
56	Prediction of lamb carcass grades using features extracted from lamb chop images. Journal of Food Engineering, 2006, 74, 116-124.	2.7	19
57	Prediction of lamb tenderness using image surface texture features. Journal of Food Engineering, 2006, 77, 492-499.	2.7	63
58	On modelling the drying of porous materials: analytical solutions to coupled partial differential equations governing heat and moisture transfer. Mathematical Problems in Engineering, 2005, 2005, 275-291.	0.6	20
59	Stress intensity factor of wood from crack-tip displacement fields obtained from digital image processing. Silva Fennica, 2004, 38, .	0.5	27
60	Theory of diffusions applied to stochastic flow in porous media. Mathematical and Computer Modelling, 2003, 38, 1453-1459.	2.0	4
61	Correction to "pseudo 3-D moment method for rapid calculation of electric field distribution in a low loss inhomogeneous dielectric". IEEE Transactions on Antennas and Propagation, 2002, 50, 414-414.	3.1	0
62	Three neural network case studies in biology and natural resource management. , 2002, , .		1
63	A Stochastic Computational Model for Solute Transport in Porous Media. North-Holland Series in Applied Mathematics and Mechanics, 2002, , 169-204.	0.0	2
64	Pseudo-3-D moment method for rapid calculation of electric field distribution in a low-loss inhomogeneous dielectric. IEEE Transactions on Antennas and Propagation, 2001, 49, 1117-1122.	3.1	11
65	A root-morphology based simulation for plant/soil microbial ecosystem modelling. Ecological Modelling, 1997, 99, 275-287.	1.2	13
66	Validating models of complex, stochastic, biological systems. Ecological Modelling, 1996, 86, 129-134.	1.2	34
67	Modelling heat and mass transfer in drying of biological materials: a simplified approach to materials with small dimensions. Ecological Modelling, 1996, 86, 163-167.	1.2	15
68	A simulation model of woollen system carpet yarn manufacture for production planning applications. Computers and Electronics in Agriculture, 1995, 12, 249-260.	3.7	2
69	SYNTHESIZING NEUROPHYSIOLOGY, GENETICS, BEHAVIOUR AND LEARNING TO PRODUCE WHOLE-INSECT PROGRAMMABLE SENSORS TO DETECT VOLATILE CHEMICALS. , 0, , 179-204.		0