Stephan K Chalup

List of Publications by Year
in descending order

90 papers	686 citations	687363 13 h-index	794594 19 g-index
97 all docs	97 docs citations	97 times ranked	634 citing authors

#	Article	IF	Citations
1	A decentralised multi-agent system for rail freight traffic management. Annals of Operations Research, 2023, 320, 631-661.	4.1	4
2	A call to scale up biodiversity monitoring from idiosyncratic, small-scale programmes to coordinated, comprehensive and continuous monitoring across large scales. Australian Zoologist, 2022, , .	1.1	0
3	Multimodal Emotion Recognition Based on Speech and Physiological Signals Using Deep Neural Networks. Lecture Notes in Computer Science, 2021, , 289-300.	1.3	4
4	Affective analysis of visual scenes using face pareidolia and scene-context. Neurocomputing, 2021, 437, 72-83.	5.9	3
5	Evolutionary Hyperparameter Optimisation for Sentence Classification. , 2021, , .		2
6	Cognitive Radio Spectrum Sensing and Prediction Using Deep Reinforcement Learning. , 2021, , .		4
7	Performance of evolutionary wavelet neural networks in acrobot control tasks. Neural Computing and Applications, 2020, 32, 8493-8505.	5.6	0
8	DQR: Deep Q-Routing in Software Defined Networks. , 2020, , .		9
9	Voxelâ€based supervised machine learning of peripheral zone prostate cancer using noncontrast multiparametric MRI. Journal of Applied Clinical Medical Physics, 2020, 21, 179-191.	1.9	10
10	Recognition of emotion from speech using evolutionary cepstral coefficients. Multimedia Tools and Applications, 2020, 79, 35739-35759.	3.9	6
11	Robust Multi-Objective optimization using Conditional Pareto Optimal Dominance. , 2020, , .		2
12	Optimisation of 2D U-Net Model Components for Automatic Prostate Segmentation on MRI. Applied Sciences (Switzerland), 2020, 10, 2601.	2.5	10
13	A Novel U-Shaped Transfer Function forÂBinary Particle Swarm Optimisation. Advances in Intelligent Systems and Computing, 2020, , 241-259.	0.6	22
14	Fast Evolution of CNN Architecture for Image Classification. Natural Computing Series, 2020, , 209-229.	2.2	8
15	A Deep Reinforcement Learning Approach to Fair Distributed Dynamic Spectrum Access. , 2020, , .		0
16	Parallel LSTM Architectures for Non-Intrusive Load Monitoring in Smart Homes. , 2020, , .		3
17	Fast Automatic Optimisation of CNN Architectures for Image Classification Using Genetic Algorithm. , 2019, , .		19
18	From Face Recognition to Facial Pareidolia: Analysing Hidden Neuron Activations in CNNs for Cross-Depiction Recognition. , 2019, , .		2

#	Article	IF	Citations
19	Estimating Betti Numbers Using Deep Learning. , 2019, , .		2
20	Semi-Supervised Manifold Alignment Using Parallel Deep Autoencoders. Algorithms, 2019, 12, 186.	2.1	2
21	Improving the reliability of implicit averaging methods using new conditional operators for robust optimization. Swarm and Evolutionary Computation, 2019, 51, 100579.	8.1	4
22	An automatic HyLoggerTM mineral mapping method using a machine-learning-based computer vision technique. Australian Journal of Earth Sciences, 2019, 66, 1063-1073.	1.0	1
23	The Impact of Image Resolution on Facial Expression Analysis with CNNs. , 2019, , .		1
24	Testing the Robustness of Manifold Learning on Examples of Thinned-Out Data. , 2019, , .		1
25	Bulk Anatomical Density Based Dose Calculation for Patient-Specific Quality Assurance of MRI-Only Prostate Radiotherapy. Frontiers in Oncology, 2019, 9, 997.	2.8	16
26	Visual Mesh: Real-Time Object Detection Using Constant Sample Density. Lecture Notes in Computer Science, 2019, , 45-56.	1.3	5
27	A Smart Meter Firmware Update Strategy Through Network Coding for AMI Network. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2019, , 68-77.	0.3	1
28	RoboCup Junior in the Hunter Region: Driving the Future of Robotic STEM Education. Lecture Notes in Computer Science, 2019, , 362-373.	1.3	2
29	Comparing Ellipse Detection and Deep Neural Networks for the Identification of Drinking Glasses in Images. Lecture Notes in Computer Science, 2019, , 319-329.	1.3	4
30	[Regular Paper] Adjacent Network for Semantic Segmentation of Liver CT Scans. , 2018, , .		1
31	Monocular ORB-SLAM on a Humanoid Robot for Localization Purposes. Lecture Notes in Computer Science, 2018, , 77-82.	1.3	1
32	Uncertainty Estimation in the Neural Model for Aeromagnetic Compensation. IEEE Geoscience and Remote Sensing Letters, 2018, 15, 1942-1946.	3.1	11
33	Sliding window bag-of-visual-words for low computational power robotics scene matching. , 2018, , .		1
34	Comparing Computing Platforms for Deep Learning on a Humanoid Robot. Lecture Notes in Computer Science, 2018, , 120-131.	1.3	7
35	Evolutionary Wavelet Neural Network ensembles for breast cancer and Parkinsonâ€™s disease prediction. PLoS ONE, 2018, 13, e0192192.	2.5	29
36	Aligning Manifolds of Double Pendulum Dynamics Under the Influence of Noise. Lecture Notes in Computer Science, 2018, , 74-85.	1.3	0

#	Article	IF	Citations
37	Evolving multi-dimensional wavelet neural networks for classification using Cartesian Genetic Programming. Neurocomputing, 2017, 247, 39-58.	5.9	25
38	A study on validating non-linear dimensionality reduction using persistent homology. Pattern Recognition Letters, 2017, 100, 160-166.	4.2	12
39	Group emotion recognition in the wild by combining deep neural networks for facial expression classification and scene-context analysis. , 2017, , .		19
40	Training Deep Neural Networks for Detecting Drinking Glasses Using Synthetic Images. Lecture Notes in Computer Science, 2017, , 354-363.	1.3	12
41	NUClear: A Loosely Coupled Software Architecture for Humanoid Robot Systems. Frontiers in Robotics and AI, 2016, 3, .	3.2	14
42	RTCSS. , 2016, , .		0
43	A study on detecting three-dimensional balls using boosted classifiers. , 2016, , .		1
44	Parkinsonâ€™s Disease Data Classification Using Evolvable Wavelet Neural Networks. Lecture Notes in Computer Science, 2016, , 113-124.	1.3	6
45	A multi-agent cooperative reinforcement learning model using a hierarchy of consultants, tutors and workers. Vietnam Journal of Computer Science, 2015, 2, 213-226.	1.2	43
46	A Fast Method for Adapting Lookup Tables Applied to Changes in Lighting Colour. Lecture Notes in Computer Science, 2015, , 190-201.	1.3	5
47	Learning Nursery Rhymes Using Adaptive Parameter Neurodynamic Programming. Lecture Notes in Computer Science, 2015, , 196-209.	1.3	0
48	Affective Visual Perception Using Machine Pareidolia of Facial Expressions. IEEE Transactions on Affective Computing, 2014, 5, 352-363.	8.3	7
49	Software Development in the City Evolutions Project. , 2014, , .		1
50	Support vector clustering of time series data with alignment kernels. Pattern Recognition Letters, 2014, 45, 129-135.	4.2	10
51	Motivated Reinforcement Learning for Improved Head Actuation of Humanoid Robots. Lecture Notes in Computer Science, 2014, , 268-279.	1.3	2
52	Scene perception using pareidolia of faces and expressions of emotion. , 2013, , .		7
53	Robot emotions generated and modulated by visual features of the environment. , 2013, , .		0
54	GDTW-P-SVMs: Variable-length time series analysis using support vector machines. Neurocomputing, 2013, 99, 270-282.	5.9	15

#	Article	IF	Citations
55	A component based approach for classifying the seven universal facial expressions of emotion. , 2013, , .		3
56	Wayfinding: a method for the empirical evaluation of structural saliency using 3D Isovists. Architectural Science Review, 2013, 56, 220-231.	2.2	15
57	Segmenting Salient Objects in 3D Point Clouds of Indoor Scenes Using Geodesic Distances. Journal of Signal and Information Processing, 2013, 04, 102-108.	0.4	4
58	Visual gaze analysis of robotic pedestrians moving in urban space. Architectural Science Review, 2012, 55, 213-223.	2.2	8
59	An experimental evaluation of pairwise adaptive support vector machines. , 2012, , .		5
60	Analysis of pedestrian spatial behaviour using GDTW-P-SVMs. , 2012, , .		0
61	Application of Intelligent Systems for News Analytics. Springer Optimization and Its Applications, 2012, , 71-101.	0.9	1
62	Architectural evaluation of simulated pedestrian spatial behaviour. Architectural Science Review, 2011, 54, 132-140.	2.2	14
63	A component based approach improves classification of discrete facial expressions over a holistic approach. , 2010, , .		5
64	Intelligent evaluation of urban streetscape designs by analysing pedestrian body dynamics. , 2010, , .		2
65	A Computational Approach to Fractal Analysis of a Cityscape's Skyline. Architectural Science Review, 2009, 52, 126-134.	2.2	10
66	A small spiking neural network with LQR control applied to the acrobot. Neural Computing and Applications, 2009, 18, 369-375.	5.6	22
67	A Liver Segmentation Algorithm Based on Wavelets and Machine Learning. , 2009, , .		14
68	A Computational Investigation into the Fractal Dimensions of the Architecture of Kazuyo Sejima. Design Principles and Practices, 2009, 3, 231-244.	0.7	4
69	Anthropocentric Biocybernetic Computing for Analysing the Architectural Design of House FaÃ§ades and Cityscapes. Design Principles and Practices, 2009, 3, 65-80.	0.7	0
70	Kernel Methods in Finance. , 2008, , 655-687.		7
71	Quadratic Leaky Integrate-and-Fire Neural Network Tuned with an Evolution-Strategy for a Simulated 3D Biped Walking Controller. , 2008, , .		1
72	Regime Type and International Conflict: Towards a General Model. Journal of Peace Research, 2008, 45, 743-763.	2.9	12

#	Article	IF	Citations
73	A face-house paradigm for architectural scene analysis. , 2008, , .		5
74	Towards visualisation of sound-scapes through dimensionality reduction. , 2008, , .		0
75	Representations of Streetscape Perceptions Through Manifold Learning in the Space of Hough Arrays. , 2007, , .		3
76	Variations of the two-spiral task. Connection Science, 2007, 19, 183-199.	3.0	13
77	Machine Learning With AIBO Robots in the Four-Legged League of RoboCup. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 2007, 37, 297-310.	2.9	32
78	Modelling Architectural Visual Experience Using Non-linear Dimensionality Reduction. , 2007, , 84-95.		1
79	Impact of tactical variations in the RoboCup four-legged league. , 2006, , .		0
80	The machine intelligence Hex project. Computer Science Education, 2005, 15, 245-273.	3.7	2
81	Towards Robot Soccer Team Behaviours Through Approximate Simulation. , 2005, , .		0
82	Machine Learning in the Four-Legged League. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 723-728.	0.4	3
83	Traction Monitoring for Collision Detection with Legged Robots. Lecture Notes in Computer Science, 2004, , 374-384.	1.3	6
84	Incremental training of first order recurrent neural networks to predict a context-sensitive language. Neural Networks, 2003, 16, 955-972.	5.9	19
85	INCREMENTAL LEARNING IN BIOLOGICAL AND MACHINE LEARNING SYSTEMS. International Journal of Neural Systems, 2002, 12, 447-465.	5.2	19
86	Software for Analysing Recurrent Neural Nets That Learn to Predict Non-regular Languages. Lecture Notes in Computer Science, 2002, , 296-298.	1.3	0
87	Hill climbing in recurrent neural networks for learning the a/sup n/b/sup n/c/sup n/ language. , 0, , .		2
88	A study on hill climbing algorithms for neural network training. , 0, , .		17
89	Support vector clustering through proximity graph modelling. , 0, , .		36
90	Towards staged evolution of an artificial player for hex by enlarging the boardsize during training. , 0, , .		0