

Alois C Knoll

List of Publications by Year in descending order

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612
papers

10,690
citations

117625

34
h-index

95266

68
g-index

632
all docs

632
docs citations

632
times ranked

9464
citing authors

#	ARTICLE	IF	CITATIONS
1	Gradient boosting machines, a tutorial. <i>Frontiers in Neurorobotics</i> , 2013, 7, 21.	2.8	1,521
2	The Human Brain Project: Creating a European Research Infrastructure to Decode the Human Brain. <i>Neuron</i> , 2016, 92, 574-581.	8.1	235
3	Improved recurrent neural network-based manipulator control with remote center of motion constraints: Experimental results. <i>Neural Networks</i> , 2020, 131, 291-299.	5.9	166
4	Event-Based Neuromorphic Vision for Autonomous Driving: A Paradigm Shift for Bio-Inspired Visual Sensing and Perception. <i>IEEE Signal Processing Magazine</i> , 2020, 37, 34-49.	5.6	147
5	Human-robot interaction in handing-over tasks. , 2008, , .		143
6	What the Constant Velocity Model Can Teach Us About Pedestrian Motion Prediction. <i>IEEE Robotics and Automation Letters</i> , 2020, 5, 1696-1703.	5.1	130
7	PM-Huber: PatchMatch with Huber Regularization for Stereo Matching. , 2013, , .		126
8	OPC UA versus ROS, DDS, and MQTT: Performance Evaluation of Industry 4.0 Protocols. , 2019, , .		119
9	Introducing the Human Brain Project. <i>Procedia Computer Science</i> , 2011, 7, 39-42.	2.0	118
10	A Survey of Robotics Control Based on Learning-Inspired Spiking Neural Networks. <i>Frontiers in Neurorobotics</i> , 2018, 12, 35.	2.8	111
11	Connecting Artificial Brains to Robots in a Comprehensive Simulation Framework: The Neurorobotics Platform. <i>Frontiers in Neurorobotics</i> , 2017, 11, 2.	2.8	102
12	Robot-Assisted Vitreoretinal Surgery. <i>Ophthalmology</i> , 2009, 116, 1538-1543.e2.	5.2	99
13	A System for Robotic Heart Surgery that Learns to Tie Knots Using Recurrent Neural Networks. <i>Advanced Robotics</i> , 2008, 22, 1521-1537.	1.8	97
14	Energy optimization for real-time multiprocessor system-on-chip with optimal DVFS and DPM combination. <i>Transactions on Embedded Computing Systems</i> , 2014, 13, 1-21.	2.9	97
15	Artificial Cognition in Production Systems. <i>IEEE Transactions on Automation Science and Engineering</i> , 2011, 8, 148-174.	5.2	94
16	A comparison of rotating disc electrode, floating electrode technique and membrane electrode assembly measurements for catalyst testing. <i>Journal of Power Sources</i> , 2018, 392, 274-284.	7.8	94
17	A Survey of the Four Pillars for Small Object Detection: Multiscale Representation, Contextual Information, Super-Resolution, and Region Proposal. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , 2022, 52, 936-953.	9.3	94
18	A Partition-Based Match Making Algorithm for Dynamic Ridesharing. <i>IEEE Transactions on Intelligent Transportation Systems</i> , 2015, 16, 2587-2598.	8.0	90

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19	Toward Anthropomorphic Robotics: Development, Simulation, and Control of a Musculoskeletal Torso. <i>Artificial Life</i> , 2013, 19, 171-193.	1.3	71
20	Joint-action for humans and industrial robots for assembly tasks. , 2008, , .		70
21	The introduction of a new robot for assistance in ophthalmic surgery. , 2013, 2013, 5682-5.		70
22	RACE: A Centralized Platform Computer Based Architecture for Automotive Applications. , 2013, , .		68
23	Goal-directed imitation for robots: A bio-inspired approach to action understanding and skill learning. <i>Robotics and Autonomous Systems</i> , 2006, 54, 353-360.	5.1	66
24	The Human Brain Projectâ€™Synergy between neuroscience, computing, informatics, and brain-inspired technologies. <i>PLoS Biology</i> , 2019, 17, e3000344.	5.6	64
25	Graph Neural Networks for Modelling Traffic Participant Interaction. , 2019, , .		63
26	Deep neural networks for Markovian interactive scene prediction in highway scenarios. , 2017, , .		57
27	Tactical cooperative planning for autonomous highway driving using Monte-Carlo Tree Search. , 2016, , .		56
28	Towards Robotic-Assisted Subretinal Injection: A Hybrid Parallelâ€™Serial Robot System Design and Preliminary Evaluation. <i>IEEE Transactions on Industrial Electronics</i> , 2020, 67, 6617-6628.	7.9	56
29	Anthrob - A printed anthropomorphic robot. , 2013, , .		55
30	Neuromorphic implementations of neurobiological learning algorithms for spiking neural networks. <i>Neural Networks</i> , 2015, 72, 152-167.	5.9	55
31	A Survey of Encoding Techniques for Signal Processing in Spiking Neural Networks. <i>Neural Processing Letters</i> , 2021, 53, 4693-4710.	3.2	55
32	A System for Robotic Heart Surgery that Learns to Tie Knots Using Recurrent Neural Networks. , 2006, , .		54
33	Interacting in time and space: Investigating human-human and human-robot joint action. , 2010, , .		54
34	Multimodal Human Activity Recognition for Industrial Manufacturing Processes in Robotic Workcells. , 2015, , .		53
35	Balancing exploration and exploitation in motion planning. , 2008, , .		52
36	Automation of tissue piercing using circular needles and vision guidance for computer aided laparoscopic surgery. , 2010, , .		51

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37	Human activity recognition in the context of industrial human-robot interaction. , 2014, , .		51
38	Musculoskeletal Robots: Scalability in Neural Control. IEEE Robotics and Automation Magazine, 2016, 23, 128-137.	2.0	51
39	Towards autonomous driving in a parking garage: Vehicle localization and tracking using environment-embedded LIDAR sensors. , 2013, , .		50
40	Guessing Smart: Biased Sampling for Efficient Black-Box Adversarial Attacks. , 2019, , .		50
41	Biological movement increases acceptance of humanoid robots as human partners in motor interaction. AI and Society, 2011, 26, 339-345.	4.6	48
42	Intuitive instruction of industrial robots: Semantic process descriptions for small lot production. , 2016, , .		48
43	5G for Robotics: Ultra-Low Latency Control of Distributed Robotic Systems. , 2017, , .		48
44	Modular Fault Ascription and Corrective Maintenance Using a Digital Twin. IFAC-PapersOnLine, 2018, 51, 1041-1046.	0.9	48
45	Analysis and optimization of fault-tolerant task scheduling on multiprocessor embedded systems. , 2011, , .		46
46	Towards adaptable manufacturing systems. , 2013, , .		45
47	End to End Learning of Spiking Neural Network Based on R-STDP for a Lane Keeping Vehicle. , 2018, , .		45
48	Framework of automatic robot surgery system using Visual servoing. , 2010, , .		44
49	Toward increased autonomy in the surgical OR: needs, requests, and expectations. Surgical Endoscopy and Other Interventional Techniques, 2013, 27, 1681-1688.	2.4	44
50	Uncertainty Estimation for Deep Neural Object Detectors in Safety-Critical Applications. , 2018, , .		44
51	An ontology for CAD data and geometric constraints as a link between product models and semantic robot task descriptions. , 2015, , .		43
52	Energy-Aware Task Allocation for Network-on-Chip Based Heterogeneous Multiprocessor Systems. , 2011, , .		42
53	Vehicle detection based on LiDAR and camera fusion. , 2014, , .		42
54	Haptic Feedback in a Telepresence System for Endoscopic Heart Surgery. Presence: Teleoperators and Virtual Environments, 2007, 16, 459-470.	0.6	41

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55	Design Abstraction and Processes in Robotics: From Code-Driven to Model-Driven Engineering. Lecture Notes in Computer Science, 2010, , 324-335.	1.3	41
56	Orthogonal Image Features for Visual Servoing of a 6-DOF Manipulator With Uncalibrated Stereo Cameras. IEEE Transactions on Robotics, 2016, 32, 452-461.	10.3	41
57	Towards autonomous locomotion: CPG-based control of smooth 3D slithering gait transition of a snake-like robot. Bioinspiration and Biomimetics, 2017, 12, 035001.	2.9	41
58	Design and Control of a Highly Redundant Rigid-flexible Coupling Robot to Assist the COVID-19 Oropharyngeal-Swab Sampling. IEEE Robotics and Automation Letters, 2022, 7, 1856-1863.	5.1	39
59	Social behavior recognition using body posture and head pose for human-robot interaction. , 2012, , .		37
60	A price-responsive dispatching strategy for Vehicle-to-Grid: An economic evaluation applied to the case of Singapore. Journal of Power Sources, 2014, 256, 345-353.	7.8	37
61	Simulation-assisted exploration of charging infrastructure requirements for electric vehicles in urban environments. Journal of Computational Science, 2016, 12, 1-10.	2.9	37
62	Mixed Frame-/Event-Driven Fast Pedestrian Detection. , 2019, , .		37
63	Design Principles for Safety in Human-Robot Interaction. International Journal of Social Robotics, 2010, 2, 253-274.	4.6	36
64	Efficient compositional approaches for real-time robust direct visual odometry from RGB-D data. , 2013, , .		36
65	SEMSim Cloud Service: Large-scale urban systems simulation in the cloud. Simulation Modelling Practice and Theory, 2015, 58, 157-171.	3.8	36
66	Moving Just Like You: Motor Interference Depends on Similar Motility of Agent and Observer. PLoS ONE, 2012, 7, e39637.	2.5	35
67	Path planning with orientation-aware space exploration guided heuristic search for autonomous parking and maneuvering. , 2015, , .		34
68	An Automated Electric Vehicle Prototype Showing New Trends in Automotive Architectures. , 2015, , .		34
69	Neuromorphic Vision Datasets for Pedestrian Detection, Action Recognition, and Fall Detection. Frontiers in Neurorobotics, 2019, 13, 38.	2.8	33
70	EDDD: Event-Based Drowsiness Driving Detection Through Facial Motion Analysis With Neuromorphic Vision Sensor. IEEE Sensors Journal, 2020, 20, 6170-6181.	4.7	33
71	Nonlinear Model Predictive Control for Mobile Medical Robot Using Neural Optimization. IEEE Transactions on Industrial Electronics, 2021, 68, 12636-12645.	7.9	33
72	Mutual Information-Based 3D Object Tracking. International Journal of Computer Vision, 2008, 78, 107-118.	15.6	32

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73	A skill-based approach towards hybrid assembly. <i>Advanced Engineering Informatics</i> , 2010, 24, 329-339.	8.0	32
74	Kinematics and dynamics analysis of a hybrid parallel-serial micromanipulator designed for biomedical applications. , 2013, , .		32
75	Uncertainty in Machine Learning: A Safety Perspective on Autonomous Driving. <i>Lecture Notes in Computer Science</i> , 2018, , 458-464.	1.3	32
76	Towards Model-Free Tool Dynamic Identification and Calibration Using Multi-Layer Neural Network. <i>Sensors</i> , 2019, 19, 3636.	3.8	32
77	A Survey on Agent-based Simulation Using Hardware Accelerators. <i>ACM Computing Surveys</i> , 2019, 51, 1-35.	23.0	32
78	Indirect and direct training of spiking neural networks for end-to-end control of a lane-keeping vehicle. <i>Neural Networks</i> , 2020, 121, 21-36.	5.9	32
79	The software car: Building ICT architectures for future electric vehicles. , 2012, , .		31
80	Services to the Field: An Approach for Resource Constrained Sensor/Actor Networks. , 2009, , .		30
81	Towards Robotic Eye Surgery: Marker-Free, Online Hand-Eye Calibration Using Optical Coherence Tomography Images. <i>IEEE Robotics and Automation Letters</i> , 2018, 3, 3944-3951.	5.1	30
82	Energy-efficient and damage-recovery slithering gait design for a snake-like robot based on reinforcement learning and inverse reinforcement learning. <i>Neural Networks</i> , 2020, 129, 323-333.	5.9	30
83	The mechatronic support system "HVSPS" and the way to NOTES. <i>Minimally Invasive Therapy and Allied Technologies</i> , 2008, 17, 341-345.	1.2	29
84	Markerless, vision-assisted flight control of a quadcopter. , 2010, , .		29
85	Analysis and semantic modeling of modality preferences in industrial human-robot interaction. , 2015, , .		29
86	Incubator-independent cell-culture perfusion platform for continuous long-term microelectrode array electrophysiology and time-lapse imaging. <i>Royal Society Open Science</i> , 2015, 2, 150031.	2.4	29
87	A Generic Plug & Produce System Composed of Semantic OPC UA Skills. <i>IEEE Open Journal of the Industrial Electronics Society</i> , 2021, 2, 128-141.	6.8	29
88	KVP: A knowledge of volumes approach to robot task planning. , 2013, , .		28
89	Targetless Rotational Auto-Calibration of Radar and Camera for Intelligent Transportation Systems. , 2019, , .		28
90	A sensor fusion approach for localization with cumulative error elimination. , 2012, , .		27

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91	Intuitive robot tasks with augmented reality and virtual obstacles. , 2014, , .		27
92	A scalable joint-space controller for musculoskeletal robots with spherical joints. , 2011, , .		26
93	Selective automation and skill transfer in medical robotics: a demonstration on surgical knot-tying. International Journal of Medical Robotics and Computer Assisted Surgery, 2012, 8, 384-397.	2.3	26
94	Combining unsupervised learning and discrimination for 3D action recognition. Signal Processing, 2015, 110, 67-81.	3.7	26
95	A Hardware-Agnostic OPC UA Skill Model for Robot Manipulators and Tools. , 2019, , .		26
96	NeuroIV: Neuromorphic Vision Meets Intelligent Vehicle Towards Safe Driving With a New Database and Baseline Evaluations. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 1171-1183.	8.0	26
97	Integrating Language, Vision and Action for Human Robot Dialog Systems. Lecture Notes in Computer Science, 2007, , 987-995.	1.3	26
98	Adaptive Control for Human-Robot Skilltransfer: Trajectory Planning Based on Fluid Dynamics. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	25
99	An ontology-based Plug-and-Play approach for in-vehicle Time-Sensitive Networking (TSN). , 2016, , .		25
100	Ontology-based traffic scene modeling, traffic regulations dependent situational awareness and decision-making for automated vehicles. , 2017, , .		25
101	OPC UA for plug & produce: Automatic device discovery using LDS-ME. , 2017, , .		25
102	Time-sensitive networking (TSN): An experimental setup. , 2017, , .		25
103	Deep Reinforcement Learning for Predictive Longitudinal Control of Automated Vehicles. , 2018, , .		25
104	Kinematics and Modelling of a System for Robotic Surgery. , 2004, , 181-190.		24
105	The roles of haptic-ostensive referring expressions in cooperative, task-based human-robot dialogue. , 2008, , .		24
106	Supervised Learning in SNN via Reward-Modulated Spike-Timing-Dependent Plasticity for a Target Reaching Vehicle. Frontiers in Neurobotics, 2019, 13, 18.	2.8	24
107	Automation of Manual Tasks for Minimally Invasive Surgery. , 2008, , .		23
108	Human workflow analysis using 3D occupancy grid hand tracking in a human-robot collaboration scenario. , 2011, , .		23

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109	User friendly Matlab-toolbox for symbolic robot dynamic modeling used for control design. , 2012, , .		23
110	HSTA: A Hierarchical Spatio-Temporal Attention Model for Trajectory Prediction. IEEE Transactions on Vehicular Technology, 2021, 70, 11295-11307.	6.3	23
111	VCANet: Vanishing-Point-Guided Context-Aware Network for Small Road Object Detection. Automotive Innovation, 2021, 4, 400-412.	5.1	23
112	Evaluation of a novel biologically inspired trajectory generator in human-robot interaction. , 2009, , .		22
113	Static scheduling of a Time-Triggered Network-on-Chip based on SMT solving. , 2012, , .		22
114	Traffic State Estimation Using Floating Car Data. Procedia Computer Science, 2016, 80, 2008-2018.	2.0	22
115	A graphical modeling tool supporting automated schedule synthesis for time-sensitive networking. , 2017, , .		22
116	Needle Segmentation in Volumetric Optical Coherence Tomography Images for Ophthalmic Microsurgery. Applied Sciences (Switzerland), 2017, 7, 748.	2.5	22
117	Neuromorphic Vision Based Multivehicle Detection and Tracking for Intelligent Transportation System. Journal of Advanced Transportation, 2018, 2018, 1-13.	1.7	22
118	OPC UA NodeSet Ontologies as a Pillar of Representing Semantic Digital Twins of Manufacturing Resources. , 2019, , .		22
119	Nonlinear Model Predictive Control for Mobile Robot Using Varying-Parameter Convergent Differential Neural Network. Robotics, 2019, 8, 64.	3.5	22
120	Multi-Cue Event Information Fusion for Pedestrian Detection With Neuromorphic Vision Sensors. Frontiers in Neurorobotics, 2019, 13, 10.	2.8	22
121	Fusion-Based Feature Attention Gate Component for Vehicle Detection Based on Event Camera. IEEE Sensors Journal, 2021, 21, 24540-24548.	4.7	22
122	Linking Brain Structure, Activity, and Cognitive Function through Computation. ENeuro, 2022, 9, ENEURO.0316-21.2022.	1.9	22
123	Ultrasonic holography techniques for localizing and imaging solid objects. IEEE Transactions on Automation Science and Engineering, 1991, 7, 449-467.	2.3	21
124	Flexible Automation of Cell Culture and Tissue Engineering Tasks. Biotechnology Progress, 2004, 20, 1825-1835.	2.6	21
125	Conforming the runtime inputs for hard real-time embedded systems. , 2012, , .		21
126	Bounding WCET of applications using SDRAM with Priority Based Budget Scheduling in MPSoCs. , 2012, , .		21

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127	Stochastic model predictive controller with chance constraints for comfortable and safe driving behavior of autonomous vehicles. , 2015, , .		21
128	Haptic interface for robot-assisted ophthalmic surgery. , 2015, 2015, 4906-9.		21
129	Graph Neural Networks and Reinforcement Learning for Behavior Generation in Semantic Environments. , 2020, , .		21
130	Interactive assembly by a two-arm robot agent. Robotics and Autonomous Systems, 1999, 29, 91-100.	5.1	20
131	Human-Robot dialogue for joint construction tasks. , 2006, , .		20
132	Computed muscle control for an anthropomorphic elbow joint. , 2012, , .		20
133	Using Time-to-React based on Naturalistic Traffic Object Behavior for Scenario-Based Risk Assessment of Automated Driving. , 2018, , .		20
134	Pseudo-Image and Sparse Points: Vehicle Detection With 2D LiDAR Revisited by Deep Learning-Based Methods. IEEE Transactions on Intelligent Transportation Systems, 2021, 22, 7699-7711.	8.0	20
135	Deep Reinforcement Learning Based Trajectory Planning Under Uncertain Constraints. Frontiers in Neurorobotics, 2022, 16, 883562.	2.8	20
136	Towards robotic heart surgery: introduction of autonomous procedures into an experimental surgical telemanipulator system. International Journal of Medical Robotics and Computer Assisted Surgery, 2005, 1, 74-79.	2.3	19
137	A workflow for runtime adaptive task allocation on heterogeneous MPSoCs. , 2011, , .		19
138	Virtual fixture control of a hybrid parallel-serial robot for assisting ophthalmic surgery: An experimental study. , 2014, , .		19
139	Information impact on transportation systems. Journal of Computational Science, 2015, 9, 88-93.	2.9	19
140	Toward Brain-Inspired Learning With the Neuromorphic Snake-Like Robot and the Neuromorphic Platform. IEEE Transactions on Cognitive and Developmental Systems, 2019, 11, 1-12.	3.8	19
141	Multiobjective Scheduling Strategy With Genetic Algorithm and Time-Enhanced A* Planning for Autonomous Parking Robotics in High-Density Unmanned Parking Lots. IEEE/ASME Transactions on Mechatronics, 2021, 26, 1547-1557.	5.8	19
142	A Novel Illumination-Robust Hand Gesture Recognition System With Event-Based Neuromorphic Vision Sensor. IEEE Transactions on Automation Science and Engineering, 2021, 18, 508-520.	5.2	19
143	Pole-Curb Fusion Based Robust and Efficient Autonomous Vehicle Localization System With Branch-and-Bound Global Optimization and Local Grid Map Method. IEEE Transactions on Vehicular Technology, 2021, 70, 11283-11294.	6.3	19
144	GAVS+: An Open Platform for the Research of Algorithmic Game Solving. Lecture Notes in Computer Science, 2011, , 258-261.	1.3	19

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145	A Multi-threaded Execution Model for the Agent-Based SEMSim Traffic Simulation. Communications in Computer and Information Science, 2013, , 1-12.	0.5	19
146	Formalizing Traffic Rules for Machine Interpretability. , 2020, , .		19
147	E/E Architecture Synthesis: Challenges and Technologies. Electronics (Switzerland), 2022, 11, 518.	3.1	19
148	Workflow analysis and surgical phase recognition in minimally invasive surgery. , 2012, , .		18
149	Modeling production workflows in a mass customization era. , 2015, , .		18
150	Task level robot programming using prioritized non-linear inequality constraints. , 2016, , .		18
151	An Efficient and Time-Optimal Trajectory Generation Approach for Waypoints Under Kinematic Constraints and Error Bounds. , 2018, , .		18
152	A Novel Visible Light Positioning System With Event-Based Neuromorphic Vision Sensor. IEEE Sensors Journal, 2020, 20, 10211-10219.	4.7	18
153	Context awareness in process monitoring of additive manufacturing using a digital twin. International Journal of Advanced Manufacturing Technology, 2022, 119, 3483-3500.	3.0	18
154	EasyLab: Model-Based Development of Software for Mechatronic Systems. , 2008, , .		17
155	Multiple Vehicle Cooperative Localization with Spatial Registration Based on a Probability Hypothesis Density Filter. Sensors, 2014, 14, 995-1009.	3.8	17
156	Formally verifiable modeling of in-vehicle time-sensitive networks (TSN) based on logic programming. , 2016, , .		17
157	Computation by Time. Neural Processing Letters, 2016, 44, 103-124.	3.2	17
158	Precision Needle Tip Localization Using Optical Coherence Tomography Images for Subretinal Injection. , 2018, , .		17
159	Smart Manufacturing with Prescriptive Analytics. , 2019, , .		17
160	Cooperative Multi-Vehicle Behavior Coordination for Autonomous Driving. , 2019, , .		17
161	FFOB: efficient online mode-switch procrastination in mixed-criticality systems. Real-Time Systems, 2019, 55, 471-513.	1.3	17
162	Parking Slot Detection on Around-View Images Using DCNN. Frontiers in Neurobotics, 2020, 14, 46.	2.8	17

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163	A spiking central pattern generator for the control of a simulated lamprey robot running on SpiNNaker and Loihi neuromorphic boards. <i>Neuromorphic Computing and Engineering</i> , 2021, 1, 014005.	5.9	17
164	Human-computer interfaces for interaction with surgical tools in robotic surgery. , 2012, , .		16
165	Design, development and evaluation of a highly versatile robot platform for minimally invasive single-port surgery. , 2012, , .		16
166	Single camera visual odometry based on Random Finite Set Statistics. , 2012, , .		16
167	Variational PatchMatch MultiView Reconstruction and Refinement. , 2015, , .		16
168	Constraint-based task programming with CAD semantics: From intuitive specification to real-time control. , 2015, , .		16
169	A Framework for Coupled Simulations of Robots and Spiking Neuronal Networks. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2017, 85, 71-91.	3.4	16
170	A simulation-based heuristic for city-scale electric vehicle charging station placement. , 2017, , .		16
171	From Specifications to Behavior: Maneuver Verification in a Semantic State Space. , 2019, , .		16
172	NeuroGrasp: Multimodal Neural Network With Euler Region Regression for Neuromorphic Vision-Based Grasp Pose Estimation. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2022, 71, 1-11.	4.7	16
173	First Steps in Robot Automation of Sampling and Sample Management during Cultivation of Mammalian Cells in Pilot Scale. <i>Biotechnology Progress</i> , 2000, 16, 822-828.	2.6	15
174	Handing Over a Cube. <i>Annals of the New York Academy of Sciences</i> , 2009, 1164, 380-382.	3.8	15
175	Priority division: A high-speed shared-memory bus arbitration with bounded latency. , 2011, , .		15
176	A data mining approach to reduce the false alarm rate of patient monitors. , 2012, 2012, 5935-8.		15
177	Mechanisms and capabilities for human robot collaboration. , 2014, , .		15
178	Action recognition using ensemble weighted multi-instance learning. , 2014, , .		15
179	Schedule Integration Framework for Time-Triggered Automotive Architectures. , 2014, , .		15
180	The effect of information uncertainty in road transportation systems. <i>Journal of Computational Science</i> , 2016, 16, 170-176.	2.9	15

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181	Addressing Inherent Uncertainty: Risk-Sensitive Behavior Generation for Automated Driving using Distributional Reinforcement Learning. , 2019, , .		15
182	A Reference Architecture Based on Edge and Cloud Computing for Smart Manufacturing. , 2019, , .		15
183	NeuroAED: Towards Efficient Abnormal Event Detection in Visual Surveillance With Neuromorphic Vision Sensor. IEEE Transactions on Information Forensics and Security, 2021, 16, 923-936.	6.9	15
184	Energy-Efficient Slithering Gait Exploration for a Snake-Like Robot Based on Reinforcement Learning. , 2019, , .		15
185	Distributed contract networks of sensor agents with adaptive reconfiguration: modelling, simulation, implementation and experiments. Journal of the Franklin Institute, 2001, 338, 669-705.	3.4	14
186	Human-machine skill transfer extended by a scaffolding framework. , 2008, , .		14
187	A unifying software architecture for model-based visual tracking. Proceedings of SPIE, 2008, , .	0.8	14
188	Constraint task-based control in industrial settings. , 2009, , .		14
189	Towards fault-tolerant embedded systems with imperfect fault detection. , 2012, , .		14
190	Fusing vision and odometry for accurate indoor robot localization. , 2012, , .		14
191	GPU accelerated ray launching for high-fidelity virtual test drives of VANET applications. , 2015, , .		14
192	Towards Cross-Verification and Use of Simulation in the Assessment of Automated Driving. , 2019, , .		14
193	End to End Learning of a Multi-Layered Snn Based on R-Stdp for a Target Tracking Snake-Like Robot. , 2019, , .		14
194	Ground Moving Vehicle Detection and Movement Tracking Based on the Neuromorphic Vision Sensor. IEEE Internet of Things Journal, 2020, 7, 9026-9039.	8.7	14
195	NeuroBiometric: An eye blink based biometric authentication system using an event-based neuromorphic vision sensor. IEEE/CAA Journal of Automatica Sinica, 2021, 8, 206-218.	13.1	14
196	Comparison of TSEP Performances Operating at Homogeneous and Inhomogeneous Temperature Distribution in Multichip IGBT Power Modules. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 6282-6292.	5.4	14
197	Adaptive Workload Management in Mixed-Criticality Systems. Transactions on Embedded Computing Systems, 2017, 16, 1-27.	2.9	14
198	∈SOA - Service Oriented Architectures adapted for embedded networks. , 2009, , .		13

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199	Distributed control for an anthropomorphic robot. , 2010, , .		13
200	Using Embodied Multimodal Fusion to Perform Supportive and Instructive Robot Roles in Human-Robot Interaction. International Journal of Social Robotics, 2013, 5, 345-356.	4.6	13
201	A lane marking extraction approach based on Random Finite Set Statistics. , 2013, , .		13
202	A framework for reliability-aware embedded system design on multiprocessor platforms. Microprocessors and Microsystems, 2014, 38, 539-551.	2.8	13
203	Kinodynamic motion planning with Space-Time Exploration Guided Heuristic Search for car-like robots in dynamic environments. , 2015, , .		13
204	Influence of Charging Behaviour Given Charging Station Placement at Existing Petrol Stations and Residential Car Park Locations in Singapore. Procedia Computer Science, 2016, 80, 335-344.	2.0	13
205	On-the-fly fast overrun budgeting for mixed-criticality systems. , 2016, , .		13
206	Evaluation of Conflict Resolution Methods for Agent-Based Simulations on the GPU. , 2018, , .		13
207	6DOF Needle Pose Estimation for Robot-Assisted Vitreoretinal Surgery. IEEE Access, 2019, 7, 63113-63122.	4.2	13
208	Retina-Based Pipe-Like Object Tracking Implemented Through Spiking Neural Network on a Snake Robot. Frontiers in Neurorobotics, 2019, 13, 29.	2.8	13
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210	Measurement of the mass sensitivity of QCM with ring electrodes using electrodeposition. Electrochemistry Communications, 2020, 116, 106744.	4.7	13
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