Georg Martius

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6684774/publications.pdf

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31	504	840585 11	752573 20
papers	citations	h-index	g-index

34	34	34	379
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A soft thumb-sized vision-based sensor with accurate all-round force perception. Nature Machine Intelligence, 2022, 4, 135-145.	8.3	70
2	Information Driven Self-Organization of Complex Robotic Behaviors. PLoS ONE, 2013, 8, e63400.	1.1	66
3	Deep Reinforcement Learning for Event-Triggered Control. , 2018, , .		43
4	Nonlinear decoding of a complex movie from the mammalian retina. PLoS Computational Biology, 2018, 14, e1006057.	1.5	35
5	The Playful Machine. Cognitive Systems Monographs, 2012, , .	0.1	29
6	Rocking Stamper and Jumping Snakes from a Dynamical Systems Approach to Artificial Life. Adaptive Behavior, 2006, 14, 105-115.	1.1	27
7	Variants of guided self-organization for robot control. Theory in Biosciences, 2012, 131, 129-137.	0.6	22
8	Novel plasticity rule can explain the development of sensorimotor intelligence. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E6224-E6232.	3.3	22
9	Analytical classical density functionals from an equation learning network. Journal of Chemical Physics, 2020, 152, 021102.	1.2	22
10	Guided Self-organisation for Autonomous Robot Development. , 2007, , 766-775.		19
11	Guiding the design of superresolution tactile skins with taxel value isolines theory. Science Robotics, 2022, 7, eabm0608.	9.9	16
12	Compliant control for soft robots: Emergent behavior of a tendon driven anthropomorphic arm. , 2016, , .		11
13	Machine Learning for Haptics: Inferring Multi-Contact Stimulation From Sparse Sensor Configuration. Frontiers in Neurorobotics, 2019, 13, 51.	1.6	11
14	A Sensor-Based Learning Algorithm for the Self-Organization of Robot Behavior. Algorithms, 2009, 2, 398-409.	1.2	10
15	A Reinforcement Learning Approach to View Planning for Automated Inspection Tasks. Sensors, 2021, 21, 2030.	2.1	10
16	Self-Organized Behavior Generation for Musculoskeletal Robots. Frontiers in Neurorobotics, 2017, 11, 8.	1.6	8
17	Predicting the Force Map of an ERT-Based Tactile Sensor Using Simulation and Deep Networks. IEEE Transactions on Automation Science and Engineering, 2023, 20, 425-439.	3.4	8
18	Structure from behavior in autonomous agents. , 2008, , .		7

#	Article	IF	Citations
19	Behavior as broken symmetry in embodied self-organizing robots. , 0, , .		7
20	Linear combination of one-step predictive information with an external reward in an episodic policy gradient setting: a critical analysis. Frontiers in Psychology, 2013, 4, 801.	1.1	5
21	Autonomous Identification and Goal-Directed Invocation of Event-Predictive Behavioral Primitives. IEEE Transactions on Cognitive and Developmental Systems, 2021, 13, 298-311.	2.6	5
22	Quantifying Emergent Behavior of Autonomous Robots. Entropy, 2015, 17, 7266-7297.	1.1	4
23	Robust Affordable 3D Haptic Sensation via Learning Deformation Patterns. , 2018, , .		3
24	Systematic self-exploration of behaviors for robots in a dynamical systems framework. , 2018, , .		3
25	Self-exploration of the Stumpy Robot with Predictive Information Maximization. Lecture Notes in Computer Science, 2014, , 32-42.	1.0	3
26	Learning to feel the physics of a body. , 0, , .		2
27	ROBUSTNESS OF GUIDED SELF-ORGANIZATION AGAINST SENSORIMOTOR DISRUPTIONS. International Journal of Modeling, Simulation, and Scientific Computing, 2013, 16, 1350001.	0.9	2
28	Emergence of behavioral primitives in self-organizing control and composition of behavior for autonomous robots. BMC Neuroscience, 2009, 10, .	0.8	1
29	Emergence of Interaction among Adaptive Agents. Lecture Notes in Computer Science, 2008, , 457-466.	1.0	1
30	Dynamical self-consistency leads to behavioral development and emergent social interactions in robots. , 2016, , .		0
31	Falsification of hybrid systems with symbolic reachability analysis and trajectory splicing. Nonlinear Analysis: Hybrid Systems, 2021, 42, 101093.	2.1	0