Kirstin H Petersen

List of Publications by Year
in descending order

35	2,678	840585 11	752573 20
papers	citations	h-index	g-index

35	35	35	3568
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Soft Actuators for Smallâ€Scale Robotics. Advanced Materials, 2017, 29, 1603483.	11.1	973
2	Soft Robotics: Review of Fluidâ€Driven Intrinsically Soft Devices; Manufacturing, Sensing, Control, and Applications in Humanâ€Robot Interaction. Advanced Engineering Materials, 2017, 19, 1700016.	1.6	707
3	Designing Collective Behavior in a Termite-Inspired Robot Construction Team. Science, 2014, 343, 754-758.	6.0	475
4	A review of collective robotic construction. Science Robotics, 2019, 4, .	9.9	116
5	Inflated Soft Actuators with Reversible Stable Deformations. Advanced Materials, 2016, 28, 3690-3696.	11.1	84
6	TERMES: An Autonomous Robotic System for Three-Dimensional Collective Construction. , 0, , .		67
7	Microrobot collectives with reconfigurable morphologies, behaviors, and functions. Nature Communications, 2022, 13, 2239.	5.8	59
8	Collective behavior of swarmalators on a ring. Physical Review E, 2022, 105, 014211.	0.8	25
9	Imperfect comb construction reveals the architectural abilities of honeybees. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	23
10	Inchworm-Inspired Locomotion in Untethered Soft Robots. , 2019, , .		19
11	Leveraging fluid resistance in soft robots. , 2018, , .		14
12	Arrestant property of recently manipulated soil on Macrotermes michaelseni as determined through visual tracking and automatic labeling of individual termite behaviors. Behavioural Processes, 2015, 116, 8-11.	0.5	12
13	Complex Design by Simple Robots: A Collective Embodied Intelligence Approach to Construction. Architectural Design, 2017, 87, 44-49.	0.1	11
14	A Compiler for Scalable Construction by the TERMES Robot Collective. Robotics and Autonomous Systems, 2019, 121, 103240.	3.0	11
15	System design for inferring colony-level pollination activity through miniature bee-mounted sensors. Scientific Reports, 2021, 11, 4239.	1.6	11
16	Scalable and Robust Fabrication, Operation, and Control of Compliant Modular Robots. Frontiers in Robotics and AI, 2020, 7, 44.	2.0	9
17	Fluid-driven intrinsically soft robots. , 2019, , 61-84.		8
18	Soft Robotic Oscillators With Strain-Based Coordination. IEEE Robotics and Automation Letters, 2021, 6, 7557-7563.	3.3	8

#	Article	IF	Citations
19	Asymmetric stable deformations in inflated dielectric elastomer actuators. , 2017, , .		6
20	Simple, Low-Cost Fabrication of Soft Sensors for Shape Reconstruction. IEEE Robotics and Automation Letters, 2020, 5, 4049-4054.	3.3	6
21	Artificial shaking signals in honey bee colonies elicit natural responses. Scientific Reports, 2020, 10, 3746.	1.6	6
22	Scalable Compiler for the TERMES Distributed Assembly System. Springer Proceedings in Advanced Robotics, 2019, , 125-138.	0.9	5
23	Robots Building Bridges, Not Walls. , 2018, , .		4
24	Towards a Scalable, Self-Reconfigurable Robot with Compliant Modules. , 2019, , .		4
25	Low-Cost, Computer Vision-Based, Prebloom Cluster Count Prediction in Vineyards. Frontiers in Agronomy, 2021, 3, .	1.5	4
26	Construction and Excavation by Collaborative Double-Tailed SAW Robots. IEEE Robotics and Automation Letters, 2022, 7, 3742-3748.	3.3	3
27	Mobile, Inflatable Interface to Support Human Robot Interaction Studies. , 2021, , .		2
28	Errors in Collective Robotic Construction. Springer Proceedings in Advanced Robotics, 2022, , 269-281.	0.9	2
29	Strain-Based Consensus in Soft, Inflatable Robots. , 2022, , .		2
30	Comparative Analysis of Sensors in Rigid and Deformable Modular Robots for Shape Estimation. , 2019, , .		1
31	Mapping Unknown Environments With Instrumented Honey Bees. , 2022, , .		1
32	Imaging and Detection of Botrytis Cinerea with Gigahertz Ultrasonic Imager. , 2021, , .		0
33	Automated Monitoring of Pollinators With Agricultural Robots. , 2022, , .		0
34	Automated entrance monitoring of managed bumble bees. Artificial Life and Robotics, 0, , 1.	0.7	0
35	A customizable, low-cost alternative for distributed 2D flow sensing in swarms. Artificial Life and Robotics, 2022, 27, 272-277.	0.7	0