Roel S Pieters

List of Publications by Year
in descending order

39 papers	601 citations	1163117 8 h-index	839539 18 g-index
39 all docs	39 docs citations	39 times ranked	783 citing authors

#	Article	IF	Citations
1	AR-based interaction for human-robot collaborative manufacturing. Robotics and Computer-Integrated Manufacturing, 2020, 63, 101891.	9.9	131
2	Cellular forces and matrix assembly coordinate fibrous tissue repair. Nature Communications, 2016, 7, 11036.	12.8	98
3	Review of vision-based safety systems for human-robot collaboration. Procedia CIRP, 2018, 72, 111-116.	1.9	95
4	Magnetoelectric micromachines with wirelessly controlled navigation and functionality. Materials Horizons, 2016, 3, 113-118.	12.2	64
5	RodBot: A rolling microrobot for micromanipulation. , 2015, , .		26
6	Model Predictive Control of a Magnetically Guided Rolling Microrobot. IEEE Robotics and Automation Letters, 2016, 1, 455-460.	5.1	24
7	Automated capsulorhexis based on a hybrid magnetic-mechanical actuation system. , 2014, , .		21
8	Learning environment for robotics education and industry-academia collaboration. Procedia Manufacturing, 2019, 31, 79-84.	1.9	18
9	Direct Motion Planning for Vision-Based Control. IEEE Transactions on Automation Science and Engineering, 2014, 11, 1282-1288.	5.2	12
10	Architecture for Safe Human-Robot Collaboration: Multi-Modal Communication in Virtual Reality for Efficient Task Execution. , 2019, , .		10
11	Assistive Device for Efficient Intravitreal Injections. Ophthalmic Surgery Lasers and Imaging Retina, 2016, 47, 752-762.	0.7	10
12	Coordinating Shared Tasks in Human-Robot Collaboration by Commands. Frontiers in Robotics and AI, 2021, 8, 734548.	3.2	9
13	Navigation of a rolling microrobot in cluttered environments for automated crystal harvesting. , 2015, , .		7
14	Automated Particle Collection for Protein Crystal Harvesting. IEEE Robotics and Automation Letters, 2017, 2, 1391-1396.	5.1	7
15	Soft Robotic Gripper With Compliant Cell Stacks for Industrial Part Handling. IEEE Robotics and Automation Letters, 2020, 5, 6821-6828.	5.1	6
16	Digital innovation hubs for robotics â€“ TRINITY approach for distributing knowledge via modular use case demonstrations. Procedia CIRP, 2021, 97, 45-50.	1.9	6
17	Human-Robot Interactive Learning Architecture using Ontologies and Symbol Manipulation. , 2018, , .		5
18	Teaching semantics and skills for human-robot collaboration. Paladyn, 2019, 10, 318-329.	2.7	5

#	Article	IF	Citations
19	Many Faced Robot - Design and Manufacturing of a Parametric, Modular and Open Source Robot Head. , 2019, , .		4
20	Proof of concept of a projection-based safety system for human-robot collaborative engine assembly. , 2019, , .		4
21	Concept for distributed robotics learning environment - Increasing the access to the robotics via modularisation of systems and mobility. Procedia Manufacturing, 2020, 45, 152-157.	1.9	4
22	"How are you today, Panda the Robot?" â€“ Affectiveness, Playfulness and Relatedness in Human-Robot Collaboration in the Factory Context. , 2021, , .		4
23	Real-Time Center Detection of an OLED Structure. Lecture Notes in Computer Science, 2009, , 400-409.	1.3	4
24	Demo: An embedded vision system for high frame rate visual servoing. , 2011, , .		3
25	Benchmarking pose estimation for robot manipulation. Robotics and Autonomous Systems, 2021, 143, 103810.	5.1	3
26	Evaluation of cyber security in agile manufacturing: Maturity of Technologies and Applications. , 2022, , .		3
27	Mobile and adaptive User interface for human robot collaboration in assembly tasks. , 2021, , .		3
28	Feed forward visual servoing for object exploration. , 2012, , .		2
29	Non-contact manipulation for automated protein crystal harvesting using a rolling microrobot. , 2014, , .		2
30	Cognitive Semantics For Dynamic Planning In Human-Robot Teams. , 2019, , .		2
31	Virtual Teaching for Assembly Tasks Planning. , 2020, , .		2
32	Digital Innovation Hubs for Enhancing the Technology Transfer and Digital Transformation of the European Manufacturing Industry. IFIP Advances in Information and Communication Technology, 2021, , 210-219.	0.7	2
33	Technical Maturity for Industrial Deployment of Robot Demonstrators. , 2021, , .		2
34	High performance visual servoing for controlled µm-positioning. , 2010, , .		1
35	Microrobots for Active Object Manipulation. Microsystems and Nanosystems, 2017, , 61-72.	0.1	1
36	Exploration and Exploitation of Sensorimotor Contingencies for a Cognitive Embodied Agent. , 2020, , .		1

#	Article	IF	Citations
37	An Inhibition of Return Mechanism for the Exploration of Sensorimotor Contingencies. , 2020, , .		0
38	Monolithic vs. hybrid controller for multi-objective Sim-to-Real learning. , 2021, , .		0
39	Robotic grasping in agile production. , 2022, , 407-433.		0