Zoe Doulgeri

List of Publications by Year
in descending order

114 papers	1,833 citations	331670 21 h-index	330143 37 g-index
117 all docs	117 docs citations	117 times ranked	1137 citing authors

#	Article	IF	Citations
1	Dynamics and control of a set of dual fingers with soft tips. Robotica, 2000, 18, 71-80.	1.9	175
2	Prescribed performance tracking for flexible joint robots with unknown dynamics and variable elasticity. Automatica, 2013, 49, 1137-1147.	5.0	154
3	Neuro-Adaptive Force/Position Control With Prescribed Performance and Guaranteed Contact Maintenance. IEEE Transactions on Neural Networks, 2010, 21, 1857-1868.	4.2	107
4	Model-free robot joint position regulation and tracking with prescribed performance guarantees. Robotics and Autonomous Systems, 2012, 60, 214-226.	5.1	99
5	Prescribed Performance Tracking of a Variable Stiffness Actuated Robot. IEEE Transactions on Control Systems Technology, 2015, 23, 1914-1926.	5.2	81
6	Guaranteeing prescribed performance and contact maintenance via an approximation free robot force/position controller. Automatica, 2012, 48, 360-365.	5.0	67
7	Force/position tracking for a robotic manipulator in compliant contact with a surface using neuro-adaptive control. Automatica, 2007, 43, 1281-1288.	5.0	61
8	A Model-Free Controller for Guaranteed Prescribed Performance Tracking of Both Robot Joint Positions and Velocities. IEEE Robotics and Automation Letters, 2016, 1, 267-273.	5.1	57
9	Kinematic control of redundant robots with guaranteed joint limit avoidance. Robotics and Autonomous Systems, 2016, 79, 122-131.	5.1	46
10	Grasping control of rolling manipulations with deformable fingertips. IEEE/ASME Transactions on Mechatronics, 2003, 8, 283-286.	5.8	42
11	Stable pinching by a pair of robot fingers with soft tips under the effect of gravity. Robotica, 2002, 20, 241-249.	1.9	32
12	A robotic system for handling textile and non rigid flat materials. Computers in Industry, 1995, 26, 303-313.	9.9	30
13	A Web Telerobotic System to Teach Industrial Robot Path Planning and Control. IEEE Transactions on Education, 2006, 49, 263-270.	2.4	30
14	Force position control for a robot finger with a soft tip and kinematic uncertainties. Robotics and Autonomous Systems, 2007, 55, 328-336.	5.1	30
15	Loss minimization in DC drives. IEEE Transactions on Industrial Electronics, 1991, 38, 328-336.	7.9	28
16	A position/force control for a robot finger with soft tip and uncertain kinematics. Journal of Field Robotics, 2002, 19, 115-131.	0.7	28
17	Robot handling of flat textile materials. IEEE Robotics and Automation Magazine, 1997, 4, 34-41.	2.0	26
18	Stability of a contact task for a robotic arm modelled as a switched system. IET Control Theory and Applications, 2007, 1, 844-853.	2.1	25

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19	Reaching for redundant arms with human-like motion and compliance properties. Robotics and Autonomous Systems, 2014, 62, 1731-1741.	5.1	23
20	Progressive Automation with DMP Synchronization and Variable Stiffness Control. IEEE Robotics and Automation Letters, 2018, 3, 3789-3796.	5.1	23
21	Adaptive control of robot contact tasks with on-line learning of planar surfaces. Automatica, 2009, 45, 2374-2382.	5.0	22
22	Bimanual Assembly of Two Parts with Relative Motion Generation and Task Related Optimization. , 2018, , .		22
23	A Machine Learning Framework for Real-Time Identification of Successful Snap-Fit Assemblies. IEEE Transactions on Automation Science and Engineering, 2020, 17, 513-523.	5.2	22
24	The Scheduling of Flexible Manufacturing Systems. CIRP Annals - Manufacturing Technology, 1987, 36, 343-346.	3.6	21
25	Picking up flexible pieces out of a bundle. IEEE Robotics and Automation Magazine, 2002, 9, 9-19.	2.0	21
26	Dynamical System Based Robotic Motion Generation With Obstacle Avoidance. IEEE Robotics and Automation Letters, 2017, 2, 712-718.	5.1	21
27	Prescribed contact establishment of a robot with a planar surface under position and stiffness uncertainties. Robotics and Autonomous Systems, 2018, 104, 99-108.	5.1	17
28	Split Deep Q-Learning for Robust Object Singulation. , 2020, , .		17
29	Dynamic Movement Primitives for moving goals with temporal scaling adaptation. , 2020, , .		17
30	On rolling contact motion by robotic fingers via prescribed performance control. , 2013, , .		16
31	A kinematic controller for human-robot handshaking using internal motion adaptation. , 2015, , .		14
32	Slippage Detection Generalizing to Grasping of Unknown Objects using Machine Learning with Novel Features. IEEE Robotics and Automation Letters, 2018, , 1-1.	5.1	14
33	Human-inspired robotic grasping of flat objects. Robotics and Autonomous Systems, 2018, 108, 179-191.	5.1	14
34	Guaranteed Active Constraints Enforcement on Point Cloud-approximated Regions for Surgical Applications. , 2019, , .		14
35	A novel DMP formulation for global and frame independent spatial scaling in the task space. , 2020, , .		14
36	Total Singulation With Modular Reinforcement Learning. IEEE Robotics and Automation Letters, 2021, 6, 4117-4124.	5.1	13

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37	A Controller to Impose a RCM for Hands-on Robotic-Assisted Minimally Invasive Surgery. IEEE Transactions on Medical Robotics and Bionics, 2021, 3, 392-401.	3.2	13
38	Contact stability analysis of a one degree-of-freedom robot using hybrid system stability theory. Robotica, 2005, 23, 607-614.	1.9	12
39	Kinesthetic Guidance Utilizing DMP Synchronization and Assistive Virtual Fixtures for Progressive Automation. Robotica, 2020, 38, 1824-1841.	1.9	12
40	A hierarchical knowledge-based scheduling and control for FMSs. International Journal of Computer Integrated Manufacturing, 1993, 6, 191-200.	4.6	11
41	A passive robot controller aiding human coaching for kinematic behavior modifications. Robotics and Computer-Integrated Manufacturing, 2020, 61, 101824.	9.9	11
42	Force/Position Tracking of a Robot in Compliant Contact with Unknown Stiffness and Surface Kinematics. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	10
43	Prescribed performance control for robot joint trajectory tracking under parametric and model uncertainties. , 2009, , .		10
44	Blind force/position control on unknown planar surfaces. IET Control Theory and Applications, 2009, 3, 595-603.	2.1	10
45	Robot contact tasks in the presence of control target distortions. Robotics and Autonomous Systems, 2010, 58, 596-606.	5.1	10
46	Prescribed performance tracking for flexible joint robots with unknown dynamics and elasticity. , 2012, , .		10
47	A human inspired handover policy using Gaussian Mixture Models and haptic cues. Autonomous Robots, 2019, 43, 1327-1342.	4.8	10
48	A Passive pHRI Controller for Assisting the User in Partially Known Tasks. IEEE Transactions on Robotics, 2020, 36, 802-815.	10.3	10
49	Performance analysis of a soft tip robotic finger controlled by a parallel force/position regulator under kinematic uncertainties. IET Control Theory and Applications, 2007, 1, 273-280.	2.1	9
50	Regressor-free prescribed performance robot tracking. Robotica, 2013, 31, 1229-1238.	1.9	9
51	Stable pinching by controlling finger relative orientation of robotic fingers with rolling soft tips. Robotica, 2018, 36, 204-224.	1.9	9
52	On the decoupling of position and force controllers in constrained robotic tasks. Journal of Field Robotics, 1998, 15, 323-340.	0.7	8
53	Force/Position Regulation for a Robot in Compliant Contact Using Adaptive Surface Slope Identification. IEEE Transactions on Automatic Control, 2008, 53, 2116-2122.	5.7	8
54	Force/position control self-tuned to unknown surface slopes using motion variables. Robotica, 2008, 26, 703-710.	1.9	8

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55	Constrained visual servoing under uncertain dynamics. International Journal of Control, 2019, 92, 2099-2111.	1.9	8
56	A Control Scheme With a Novel DMP-Robot Coupling Achieving Compliance and Tracking Accuracy Under Unknown Task Dynamics and Model Uncertainties. IEEE Robotics and Automation Letters, 2020, 5, 2310-2316.	5.1	8
57	Nonlinear Stability of Hybrid Control. International Journal of Robotics Research, 1998, 17, 792-806.	8.5	7
58	Robot task space PID type regulation with prescribed performance guaranties. , 2010, , .		7
59	Task geometry aware assistance for kinesthetic teaching of redundant robots. , 2021, , .		7
60	A prescribed performance referential control for human-like reaching movement of redundant arms. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 295-300.	0.4	6
61	A passivity based control signal guaranteeing joint limit avoidance in redundant robots. , 2016, , .		6
62	Rolling Contact Motion Generation and Control of Robotic Fingers. Journal of Intelligent and Robotic Systems: Theory and Applications, 2016, 82, 21-38.	3.4	6
63	On the Stability of Robot Kinesthetic Guidance in the Presence of Active Constraints. , 2018, , .		6
64	A Robust Controller for Stable 3D Pinching Using Tactile Sensing. IEEE Robotics and Automation Letters, 2021, 6, 8150-8157.	5.1	6
65	A Reversible Dynamic Movement Primitive formulation. , 2021, , .		6
66	Pick-and-place in dynamic environments with a mobile dual-arm robot equipped with distributed distance sensors. , 2021, , .		6
67	A simple controller for a variable stiffness joint with uncertain dynamics and prescribed performance guarantees. , 2012, , .		5
68	Grasping Flat Objects by Exploiting Non-Convexity of the Object and Support Surface. , 2018, , .		5
69	Human-robot collaborative object transfer using human motion prediction based on Dynamic Movement Primitives. , 2019, , .		5
70	Learning Push-Grasping in Dense Clutter. IEEE Robotics and Automation Letters, 2022, 7, 8783-8790.	5.1	5
71	Robot Control for Task Performance and Enhanced Safety under Impact. Frontiers in Robotics and AI, 2015, 2, .	3.2	4
72	A fast robot deployment strategy for successful snap assembly. , 2016, , .		4

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73	Guaranteeing Field of View Constraints in Visual Servoing Tasks under Uncertain Dynamics. IFAC-PapersOnLine, 2017, 50, 2229-2234.	0.9	4
74	Stability of Active Constraints Enforcement in Sensitive Regions Defined by Point-Clouds for Robotic Surgical Procedures. , 2019, , .		4
75	Human-robot collaborative object transfer using human motion prediction based on Cartesian pose Dynamic Movement Primitives. , 2021, , .		4
76	A passive admittance controller to enforce Remote Center of Motion and Tool Spatial constraints with application in hands-on surgical procedures. Robotics and Autonomous Systems, 2022, 152, 104073.	5.1	4
77	Improving Simulation Project Efficiency Using Web Technology. Simulation, 2002, 78, 568-579.	1.8	3
78	Force/position tracking for a robotic finger in compliant contact with a surface using neuro-adaptive control. , 2006, , .		3
79	Prescribed Performance Regulation for Robot Manipulators. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 573-578.	0.4	3
80	Operational Space Prescribed Tracking Performance and Compliance in Flexible Joint Robots. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2015, 137, .	1.6	3
81	Sinc-Based Dynamic Movement Primitives for Encoding Point-to-point Kinematic Behaviors. , 2018, , .		3
82	Learning by demonstration for constrained tasks. , 2020, , .		3
83	Progressive Automation of Periodic Movements. Springer Proceedings in Advanced Robotics, 2020, , 58-72.	1.3	3
84	Equilibrium Conditions of a Polygonal Object When Grasped by Soft-Rolling Contacts. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2008, 130, .	1.6	2
85	Adaptive control for frictional robot contact tasks on uncertain surface slopes. , 2008, , .		2
86	Model free force/position robot control with prescribed performance. , 2010, , .		2
87	A robot hand-over control scheme for human-like haptic interaction. , 2014, , .		2
88	An impedance control modification guaranteeing compliance strictly within preselected spatial limits. , 2015, , .		2
89	A human inspired stable object load transfer for robots in hand-over tasks. , 2015, , .		2
90	Robot Force/Position Tracking on a Surface of Unknown Orientation. , 2008, , 253-262.		2

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91	Manipulation of a Whole Surgical Tool Within Safe Regions Utilizing Barrier Artificial Potentials. IFMBE Proceedings, 2020, , 1559-1570.	0.3	2
92	Human-guided desired RCM constraint manipulation with applications in robotic surgery: A torque level control approach. , 2020, , .		2
93	Progressive automation of periodic tasks on planar surfaces of unknown pose with hybrid force/position control. , 2020, , .		2
94	A control scheme for haptic inspection and partial modification of kinematic behaviors. , 2020, , .		2
95	Exponential stability of an attitude trajectory tracking controller utilizing unit quaternions. , 2021, , .		2
96	Robotic Assistance in Medication Intake: A Complete Pipeline. Applied Sciences (Switzerland), 2022, 12, 1379.	2.5	2
97	A Neuro-Adaptive Controller for the Force/Position Tracking of a Robot Manipulator under Model Uncertainties in Compliance and Friction. , 2006, , .		1
98	A physical Human Robot Interaction architecture for flexible joint robots. , 2014, , .		1
99	Towards achieving rolling contact motion in a spherical robotic fingertip. , 2015, , .		1
100	Operational space robot control for motion performance and safe interaction under Unintentional Contacts. , 2016, , .		1
101	On Prescribed Contact Establishment * *This work is funded by the EU Horizon 2020 research and innovation programme under grant agreement No 644938, project SARAFun.The authors are with the Center for Research and Technology Hellas (CERTH), 57001 Thessaloniki, Greece and with the Aristotle University of Thessaloniki, Dept. of Electrical and Computer Engineering, 54124, Thessaloniki, Greece. IFAC-PapersOnLine, 2017, 50, 4831-4836.	0.9	1
102	A pHRI Framework for Modifying a Robot's Kinematic Behaviour via Varying Stiffness and Dynamical System Synchronization. , 2018, , .		1
103	Real-Time Event Detection in Time-Series Classification Based on Amplitude Rejection. , 2018, , .		1
104	A model free robot control method for dragging an object on a planar surface by applying top contact forces. , 2022, , .		1
105	Dynamics, Contact Motion and Control of Dual Arm Object Manipulation With Soft Rolling Fingertips. , 2002, , 303.		0
106	An adaptive law for slope identification, position tracking and force regulation for a robot in compliant contact with an unknown surface. , 2007, , .		0
107	A controller to achieve robotic soft fingertip rolling and position/force regulation using motion variables. , 2007, , .		0
108	Force/position/rolling control for spherical tip robotic fingers. , 2015, , .		0

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109	Joint position tracking with prescribed performance of uncertain robotic manipulators using only joint position measurements. , 2015, , .		0
110	Robot finger control for rolling on curved surfaces. , 2016, , .		0
111	A control method for time-variant RCM constraint in hands-on RAMIS procedures. , 2021, , .		0
112	Force/Position Tracking for a Robotic Finger in Compliant Contact with a Surface using Neuro-Adaptive Control. , 2006, , .		0
113	Smooth Reaching and Human-Like Compliance in Physical Interactions for Redundant Arms. Lecture Notes in Computer Science, 2013, , 116-126.	1.3	0
114	Progressive Automation of Repetitive Tasks Involving both Translation and Rotation. Mechanisms and Machine Science, 2019, , 53-62.	0.5	0