Pushparaj Mani Pathak

List of Publications by Year
in descending order

56	764	623574	610775
papers	citations	14 h-index	24 g-index

59	59	59	503
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Kinematic Calibration of a Multisection Bionic Manipulator. IEEE/ASME Transactions on Mechatronics, 2015, 20, 663-674.	3.7	70
2	Intelligent Mechatronic Systems. , 2013, , .		58
3	Modeling of Continuum Manipulators Using Pythagorean Hodograph Curves. Soft Robotics, 2018, 5, 425-442.	4.6	56
4	Inverse kinematics of mobile manipulator using bidirectional particle swarm optimization by manipulator decoupling. Mechanism and Machine Theory, 2019, 131, 385-405.	2.7	55
5	Impedance Control of Space Robots Using Passive Degrees of Freedom in Controller Domain. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2005, 127, 564-578.	0.9	43
6	A scheme for robust trajectory control of space robots. Simulation Modelling Practice and Theory, 2008, 16, 1337-1349.	2.2	37
7	Trajectory control of a two DOF rigidâ€“flexible space robot by a virtual space vehicle. Robotics and Autonomous Systems, 2013, 61, 473-482.	3.0	33
8	Effects of electromagnetic stirring and rare earth compounds on the microstructure and mechanical properties of hypereutectic Alâ€“Si alloys. International Journal of Advanced Manufacturing Technology, 2012, 63, 415-420.	1.5	28
9	Control oriented model-based simulation and experimental studies on a compliant legged quadruped robot. Robotics and Autonomous Systems, 2015, 72, 217-234.	3.0	28
10	Simulation for whole-body vibration to assess ride comfort of a lowâ€“medium speed railway vehicle. Simulation, 2017, 93, 225-236.	1.1	27
11	Dynamic modelling & simulation of a four legged jumping robot with compliant legs. Robotics and Autonomous Systems, 2013, 61, 221-228.	3.0	26
12	Fault accommodation in compliant quadruped robot through a moving appendage mechanism. Mechanism and Machine Theory, 2018, 121, 228-244.	2.7	26
13	A geometric approach for inverse kinematics of a 4-link redundant In-Vivo robot for biopsy. Robotics and Autonomous Systems, 2013, 61, 1306-1313.	3.0	19
14	Geometric modelling of multisection bionic manipulator: Experimental validation on RobotinoXT. , 2012, , .		18
15	Wireless hybrid visual servoing of omnidirectional wheeled mobile robots. Robotics and Autonomous Systems, 2016, 75, 450-462.	3.0	17
16	Modelling of multisection bionic manipulator: Application to RobotinoXT. , 2011, , .		16
17	Impedance Control of Space Robot. International Journal of Modelling and Simulation, 2006, 26, 316-322.	2.3	15
18	Design and development of a glass faÃ§ade cleaning robot. Mechanism and Machine Theory, 2022, 168, 104585.	2.7	15

#	Article	IF	Citations
19	Performances evaluation of inverse kinematic models of a compact bionic handling assistant. , 2017, , .		13
20	Trajectory control of a mobile manipulator in the presence of base disturbance. Simulation, 2019, 95, 529-543.	1.1	12
21	Control of compliant legged quadruped robots in the workspace. Simulation, 2015, 91, 103-125.	1.1	11
22	Attitude Control of a Free-Flying Space Robot using a Novel Torque Generation Device. Simulation, 2006, 82, 661-677.	1.1	10
23	Workspace analysis and design of large-scale cable-driven printing robot considering cable mass and mobile platform orientation. Mechanism and Machine Theory, 2021, 165, 104426.	2.7	10
24	Optimal work space of parallel continuum manipulator consisting of compact bionic handling arms. , 2017, , .		9
25	Modelling, simulation and experimental validation of wheel and arm locomotion based wall-climbing robot. Robotica, 2023, 41, 433-469.	1.3	9
26	Forward kinematic analysis of in-vivo robot for stomach biopsy. Journal of Robotic Surgery, 2013, 7, 281-287.	1.0	8
27	Curve-constrained collision-free trajectory control of hyper-redundant planar space robot. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2017, 231, 282-298.	0.7	8
28	Docking operation by multiple space robots for minimum attitude disturbance. International Journal of Modelling and Simulation, 2018, 38, 38-49.	2.3	8
29	Experimental investigations on permanent magnet based wheel mechanism for safe navigation of climbing robot. Procedia Computer Science, 2018, 133, 377-384.	1.2	8
30	Neural Network-Based Inverse Kineto-Static Analysis of Cable-Driven Parallel Robot Considering Cable Mass and Elasticity. Mechanisms and Machine Science, 2021, , 50-62.	0.3	8
31	Interaction Torque Control by Impedance Control of Space Robots. Simulation, 2009, 85, 451-459.	1.1	7
32	Curve Reconstruction of Digitized Surface Using K-means Algorithm. Procedia Engineering, 2014, 69, 544-549.	1.2	6
33	Trajectory tracking control of a group of cooperative planar space robot systems. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2015, 229, 885-901.	0.7	6
34	Fault Tolerant Control and Reconfiguration of Mobile Manipulator. Journal of Intelligent and Robotic Systems: Theory and Applications, 2021, 101, 1.	2.0	6
35	Dynamic Modelling of an Elephant Trunk Like Flexible Bionic Manipulator. , 2019, , .		5
36	Bond graph modeling of a spatial multi-section soft bionic robot. Mechanism and Machine Theory, 2022, 174, 104902.	2.7	5

#	Article	IF	Citations
37	Trajectory control of a dual-arm planar space robot with little attitude disturbance. Simulation, 2011, 87, 188-204.	1.1	4
38	Dual Arm Free Flying Space Robot Trajectory Planning Using Polynomial. Journal of Robotics, 2015, 2015, 1-11.	0.6	4
39	Mechatronic design and control of a planar cooperative robot. International Journal of Advanced Mechatronic Systems, 2010, 2, 271.	0.1	3
40	Reconfiguration of joint locked hyper-redundant space manipulator. , 2015, , .		3
41	Kinematics Model of Bionic Manipulator by Using Elliptic Integral Approach. Lecture Notes in Mechanical Engineering, 2022, , 319-325.	0.3	3
42	Adaptive Control of a Master-Slave Based Robotic Surgical System With Haptic Feedback. IEEE Transactions on Automation Science and Engineering, 2023, 20, 1125-1138.	3.4	3
43	Dynamic Modeling, Simulation and Velocity Control of Rocker-Bogie Rover for Space Exploration. International Journal of Intelligent Mechatronics and Robotics, 2011, 1, 27-41.	0.4	2
44	Design of a virtual foundation for impedance control in a dual arm cooperative space robot. Simulation, 2012, 88, 731-745.	1.1	2
45	Inverse Kinematic Model of a Cable-Driven Continuum Manipulator. Lecture Notes in Mechanical Engineering, 2021, , 553-564.	0.3	2
46	Dynamic Modeling of Cooperative Planar Bionic Manipulator. Lecture Notes in Mechanical Engineering, 2019, , 839-849.	0.3	1
47	On Determining Shortest Path in Joint Space of a Cable-Driven Parallel Robot for Point-to-Point Motion. , 2020, , .		1
48	Bond Graph Modeling and Computational Control Analysis of a Rigid-Flexible Space Robot in Work Space. International Journal of Intelligent Mechatronics and Robotics, 2011, 1, 18-30.	0.4	0
49	Development of Magnetic Adhesion Based Wheel-Driven Climbing Machine for Ferrous Surface Applications. , 2018, , .		0
50	Two- and Three-Input Fuzzy PID Controller Structure of Takagi-Sugeno Type. , 2019, , .		0
51	Experimental and Simulation Study ofÂHaptically Enabled Robotic Teleoperation for NOTES. Lecture Notes in Mechanical Engineering, 2022, , 1113-1123.	0.3	0
52	Workspace Evaluation of Robotino-XT Under Reconfiguration. Lecture Notes in Mechanical Engineering, 2022, , 281-288.	0.3	0
53	Road Vehicle Driving Simulator. , 2013, , 909-933.		0
54	Dynamic Modeling, Simulation and Velocity Control of Rocker-Bogie Rover for Space Exploration. , 0, , 103-117.		0

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55	Bond Graph Modeling and Computational Control Analysis of a Rigid-Flexible Space Robot in Work Space. , 0, , 152-164.		0
56	Design analysis of electro-adhesive mechanism for wall-climbing robot. Mechanics Based Design of Structures and Machines, 2023, 51, 6023-6040.	3.4	0