

Dhanalakshmi Kaliaperumal

List of Publications by Year in descending order

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56
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all docs

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57
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215
citing authors

#	ARTICLE	IF	CITATIONS
1	Differential resistance feedback control of a self-sensing shape memory alloy actuated system. ISA Transactions, 2014, 53, 289-297.	3.1	26
2	Shape memory alloy wire for self-sensing servo actuation. Mechanical Systems and Signal Processing, 2017, 83, 36-52.	4.4	25
3	Bidirectional angular control of an integrated sensor/actuator shape memory alloy based system. Measurement: Journal of the International Measurement Confederation, 2015, 69, 210-221.	2.5	23
4	Fuzzy based sliding surface for shape memory alloy wire actuated classical super-articulated control system. Applied Soft Computing Journal, 2015, 32, 580-589.	4.1	16
5	Control Aspects of Shape Memory Alloys in Robotics Applications: A Review over the Last Decade. Sensors, 2022, 22, 4860.	2.1	15
6	Active Vibration Control of SMA Actuated Structures using Fast Output Sampling Based Sliding Mode Control. Instrumentation Science and Technology, 2008, 36, 180-193.	0.9	13
7	Shape memory alloy with bi-functionality in the master system to control a slave. Sensors and Actuators A: Physical, 2016, 238, 351-360.	2.0	13
8	EXPERIMENTAL STUDY ON VIBRATION CONTROL OF SHAPE MEMORY ALLOY ACTUATED FLEXIBLE BEAM. International Journal on Smart Sensing and Intelligent Systems, 2010, 3, 156-175.	0.4	13
9	Interrogation of Undersensing for an Underactuated Dynamical System. IEEE Sensors Journal, 2015, 15, 2203-2211.	2.4	11
10	Shape Memory Alloy Wire for Force Sensing. IEEE Sensors Journal, 2017, 17, 967-975.	2.4	11
11	Modelling and control of dual input boost converter with voltage multiplier cell. IET Circuits, Devices and Systems, 2019, 13, 1267-1276.	0.9	10
12	Design based Active Vibration Control of a flexible structure using shape memory alloy wire actuators. , 2012, , .		9
13	Dynamic stabilization and rapid motion control system driven by antagonistic shape memory alloy actuators. JVC/Journal of Vibration and Control, 2015, 21, 3189-3204.	1.5	9
14	Design of a variable stiffness actuator using shape memory alloy wire. , 2016, , .		7
15	Shape memory alloy actuated structural control with discrete time sliding mode control using multirate output feedback. JVC/Journal of Vibration and Control, 2016, 22, 1338-1357.	1.5	7
16	Effect of stress on bandwidth of antagonistic shape memory alloy actuators. Journal of Intelligent Material Systems and Structures, 2016, 27, 153-165.	1.4	7
17	Design and investigation of a shape memory alloy actuated gripper. Smart Structures and Systems, 2014, 14, 541-558.	1.9	7
18	Angular trajectory tracking using antagonistic shape memory alloy actuators. , 2012, , .		6

#	ARTICLE	IF	CITATIONS
19	Demonstration of self-sensing in Shape Memory Alloy actuated gripper. , 2013, , .		5
20	Position control of shape memory alloy actuated gripper. , 2012, , .		4
21	Design and Control of Shape Memory Alloy Actuated Grippers. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 400-407.	0.4	4
22	Investigation of functional characteristics of a synergistically configured parallel-type shape memory alloy variable stiffness actuator. Journal of Intelligent Material Systems and Structures, 2019, 30, 1772-1788.	1.4	4
23	Synergistically configured shape memory alloy for variable stiffness translational actuation. Journal of Intelligent Material Systems and Structures, 2019, 30, 844-854.	1.4	4
24	Signal flow graph model and control of dual input boost converter with voltage multiplier cell. AEU - International Journal of Electronics and Communications, 2020, 125, 153345.	1.7	4
25	Angular control of differential shape-memory alloy spring actuator for underactuated dynamic system. JVC/Journal of Vibration and Control, 2022, 28, 2829-2843.	1.5	4
26	Structural Design and Realization of Electromechanical Logic Elements Using Shape Memory Alloy Wire Actuator. Physical Mesomechanics, 2020, 23, 446-456.	1.0	4
27	AUTO-ADAPTIVE CONTROL OF A ONE-JOINT ARM DIRECT DRIVEN BY ANTAGONISTIC SHAPE MEMORY ALLOY. International Journal on Smart Sensing and Intelligent Systems, 2013, 6, 833-849.	0.4	4
28	Experimental evaluation of periodic output feedback control for SMA actuated structures. International Journal of Advanced Mechatronic Systems, 2010, 2, 330.	0.1	3
29	Modulated adaptive fuzzy controller for position control of SMA wire actuator. Journal of Intelligent and Fuzzy Systems, 2014, 27, 9-18.	0.8	3
30	An investigation on the stiffness variation in a synergistically configured SMA actuator. , 2016, , .		3
31	Role of Shape Memory Alloy Wires as a SENSAPTIC HMI Device. IEEE Sensors Journal, 2020, 20, 6422-6431.	2.4	3
32	Fine resolution smart force sensor based on lever arm mechanism using shape memory alloy spring. International Journal of Circuit Theory and Applications, 0, , .	1.3	3
33	Design and implementation of fast output sampling feedback control for shape memory alloy actuated structures. Smart Structures and Systems, 2011, 8, 367-384.	1.9	3
34	Design aspects of shape memory wire based resonant force measurement system. Measurement: Journal of the International Measurement Confederation, 2022, 198, 111313.	2.5	3
35	Control of shape memory alloy actuated gripper using Sliding Mode Control. , 2013, , .		2
36	Control of Shape Memory Alloy Actuated Gripper using Pulse-Width Modulation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 408-413.	0.4	2

#	ARTICLE	IF	CITATIONS
37	Sliding mode control of shape memory alloy actuated structure for vibration control. International Journal of Modelling, Identification and Control, 2015, 23, 121.	0.2	2
38	Small-Signal Modelling and Control of a High Voltage Gain Dual Input Boost DC-DC Converter. , 2018, , .		2
39	Intelligent Tuning of PID Controller to Balance the Shape Memory Wire Actuated Ball and Beam System. Physical Mesomechanics, 2020, 23, 621-630.	1.0	2
40	Servo control of an under actuated system using antagonistic shape memory alloy. Smart Structures and Systems, 2014, 14, 643-658.	1.9	2
41	A shape memory alloy bimorph-actuated switch for antenna reconfiguration. Journal of Materials Science: Materials in Electronics, 2022, 33, 4426-4437.	1.1	2
42	Discrete Time Sliding Mode Control for Piezoelectric Actuated Structures. , 2006, , .		1
43	Beam balancing ball driven by shape memory alloy: prospective actuator for stabilised control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 577-584.	0.4	1
44	Design and experimental evaluation of higher order sliding mode control for vibration suppression of shape memory alloy actuated structure. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 1061-1066.	0.4	1
45	Design and investigation of a linear smart actuator. Proceedings of SPIE, 2015, , .	0.8	1
46	Simultaneous Measurements in Shape Memory Alloy Springs to Enable Structural Health Monitoring by Self-Sensing Actuation. Arabian Journal for Science and Engineering, 2021, 46, 6015-6025.	1.7	1
47	Simultaneous measurements for the interlink of electro-thermo-mechano-electro characteristics in shape memory springs. ISA Transactions, 2021, , .	3.1	1
48	Reinforcement learning control of servo actuated centrally pivoted ball on a beam. , 2020, , .		1
49	Variable structure control of flexible smart structure with shape memory alloy actuators. , 2007, 6528, 403.		0
50	Auto-sensing antagonistic shape memory alloy actuated manipulator. , 2013, , .		0
51	Design and characterization of a piston type linear SMA actuator. , 2016, , .		0
52	Electro-Mechanical Characteristics of Shape Memory Spring for Simultaneous Sensing And Actuation. , 2019, , .		0
53	Active stiffness control of a synergistically operated variable stiffness compliant actuator. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2021, 43, 1.	0.8	0
54	A Sensaptic ADAS Device Using Shape Memory Alloy Wires: Design and Control. Materials, 2021, 14, 3494.	1.3	0

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55	The influencing parameters of variable stiffness actuation of shape memory spring for self-sensing. , 2020, , .		0
56	Duo Features of Shape Memory Wire for Resonant Force Sensing. Smart Materials and Structures, 0, , .	1.8	0