

# Mohamed Sultan Mohamed Ali

## List of Publications by Year in descending order

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Version: 2024-02-01

67  
papers

1,510  
citations

304368

22  
h-index

329751

37  
g-index

70  
all docs

70  
docs citations

70  
times ranked

1514  
citing authors

#	ARTICLE	IF	CITATIONS
1	Thermoelectric Generator: Materials and Applications in Wearable Health Monitoring Sensors and Internet of Things Devices. <i>Advanced Materials Technologies</i> , 2022, 7, .	3.0	42
2	Development of 4D-printed shape memory polymer large-stroke XY micropositioning stages. <i>Journal of Micromechanics and Microengineering</i> , 2022, 32, 065006.	1.5	11
3	Non-traditional machining techniques for silicon wafers. <i>International Journal of Advanced Manufacturing Technology</i> , 2022, 121, 29-57.	1.5	5
4	Wearable thermoelectric generator with vertically aligned PEDOT:PSS and carbon nanotubes thermoelements for energy harvesting. <i>International Journal of Energy Research</i> , 2022, 46, 15824-15836.	2.2	9
5	Variable stiffness 4D printing. , 2022, , 407-433.		3
6	Energy Harvesters for Wearable Electronics and Biomedical Devices. <i>Advanced Materials Technologies</i> , 2021, 6, 2000771.	3.0	49
7	Microelectrical discharge machining of silicon wafers. , 2021, , 219-244.		1
8	Design of Inductor-Capacitor Circuits for Wireless Power Transfer for Biomedical Applications. <i>Advances in Intelligent Systems and Computing</i> , 2021, , 81-90.	0.5	0
9	Non-Invasive Treatment for Coronary In-Stent Restenosis via Wireless Revascularization With Nitinol Active Stent. <i>IEEE Transactions on Biomedical Engineering</i> , 2021, 68, 3681-3689.	2.5	10
10	Heat-assisted $\hat{1}/4$ -electrical discharge machining of silicon. <i>International Journal of Advanced Manufacturing Technology</i> , 2021, 113, 1727-1738.	1.5	4
11	Effect of laser parameters on sequential laser beam micromachining and micro electro-discharge machining. <i>International Journal of Advanced Manufacturing Technology</i> , 2021, 114, 709-723.	1.5	10
12	Enhancement of spin Seebeck effect of reverse spin crossover Fe (II) micellar charge transport using PMMA polymer electrolyte. <i>Applied Organometallic Chemistry</i> , 2021, 35, e6268.	1.7	4
13	Advanced Nanoscale Surface Characterization of CuO Nanoflowers for Significant Enhancement of Catalytic Properties. <i>Molecules</i> , 2021, 26, 2700.	1.7	6
14	Development of 4D Printed PLA Actuators with an Induced Internal Strain Upon Printing. , 2021, , .		5
15	Finite Element Analysis of Thermoelectric Power Generation from Human Wrist. , 2021, , .		0
16	Dual-stage artificial neural network (ANN) model for sequential LBMM- $\hat{1}/4$ EDM-based micro-drilling. <i>International Journal of Advanced Manufacturing Technology</i> , 2021, 117, 3343-3365.	1.5	4
17	MEMS Gas Sensors: A Review. <i>IEEE Sensors Journal</i> , 2021, 21, 18381-18397.	2.4	75
18	Review on recent advances in 4D printing of shape memory polymers. <i>European Polymer Journal</i> , 2021, 159, 110708.	2.6	51

#	ARTICLE	IF	CITATIONS
19	Investigation of Si-based thermoelectrochemical cells (TECs) towards semiconductor fabrication and processing. <i>Semiconductor Science and Technology</i> , 2021, 36, 115006.	1.0	4
20	Electrical discharge machining for the formation of bulk-shape memory alloy actuators. , 2021, , 195-217.		1
21	Structural Optimization of a Bismuth Telluride-Based Thermoelectric Generator Using Finite Element Analysis. , 2021, , .		0
22	MEMS actuators for biomedical applications: a review. <i>Journal of Micromechanics and Microengineering</i> , 2020, 30, 073001.	1.5	54
23	Micromachined Shape Memory Alloy Active Stent with Wireless Monitoring and Re-Expansion Features. , 2020, , .		6
24	Inorganic thermoelectric materials: A review. <i>International Journal of Energy Research</i> , 2020, 44, 6170-6222.	2.2	119
25	Modelling and simulation of magnesium antimonide based thermoelectric generator. <i>Indonesian Journal of Electrical Engineering and Computer Science</i> , 2020, 19, 686.	0.7	2
26	Copper–Cobalt Thermoelectric Generators: Power Improvement Through Optimized Thickness and Sandwiched Planar Structure. <i>IEEE Transactions on Electron Devices</i> , 2019, 66, 3459-3465.	1.6	9
27	A multi-segmented shape memory alloy-based actuator system for endoscopic applications. <i>Sensors and Actuators A: Physical</i> , 2019, 296, 92-100.	2.0	31
28	PDMS-based dual-channel pneumatic micro-actuator. <i>Smart Materials and Structures</i> , 2019, 28, 115044.	1.8	16
29	PDMS-based Dual-Channel Pneumatic Microactuator Using Sacrificial Molding Fabrication Technique. , 2019, , .		4
30	Geometrical Analysis of Diffuser-Nozzle Elements for Valveless Micropumps. , 2019, , .		4
31	Hybrid PSO-Tuned PID and Hysteresis-Observer Based Control for Piezoelectric Micropositioning Stages. , 2019, , .		6
32	Simulation Study of Two-Phase Fluid 3D Imaging Using Lab-on-Chip ECT. , 2019, , .		1
33	Methodological reviews and analyses on the emerging research trends and progresses of thermoelectric generators. <i>International Journal of Energy Research</i> , 2019, 43, 113-140.	2.2	44
34	State-of-the-Art Reviews and Analyses of Emerging Research Findings and Achievements of Thermoelectric Materials over the Past Years. <i>Journal of Electronic Materials</i> , 2019, 48, 745-777.	1.0	39
35	Characterization of heat flow in silicon nanowire arrays for efficient thermoelectric power harvesting. <i>Experimental Heat Transfer</i> , 2018, 31, 470-481.	2.3	3
36	The effects of the silicon wafer resistivity on the performance of microelectrical discharge machining. <i>International Journal of Advanced Manufacturing Technology</i> , 2018, 95, 257-266.	1.5	13

#	ARTICLE	IF	CITATIONS
37	Design, fabrication, and characterization of lateral-structured Cu-Ni thermoelectric devices. , 2018, , .		5
38	Copperâ€“Nickel and Copperâ€“Cobalt Thermoelectric Generators: Power-Generating Optimization through Structural Geometrics. IEEE Transactions on Electron Devices, 2018, 65, 3394-3400.	1.6	11
39	A wirelessly-controlled piezoelectric microvalve for regulated drug delivery. Sensors and Actuators A: Physical, 2018, 279, 191-203.	2.0	43
40	Silicon nanowire arrays thermoelectric power harvester. , 2017, , .		5
41	Frequency-Controlled Wireless Passive Thermopneumatic Micromixer. Journal of Microelectromechanical Systems, 2017, 26, 691-703.	1.7	14
42	RF MEMS Inductors and Their Applicationsâ€”A Review. Journal of Microelectromechanical Systems, 2017, 26, 17-44.	1.7	44
43	Modeling and Simulation of a Wireless Passive Thermopneumatic Micromixer. Communications in Computer and Information Science, 2017, , 312-322.	0.4	3
44	Soft dielectric elastomer actuator micropump. Sensors and Actuators A: Physical, 2017, 263, 276-284.	2.0	83
45	Wireless Valving for Centrifugal Microfluidic Disc. Journal of Microelectromechanical Systems, 2017, 26, 1327-1334.	1.7	6
46	Design and fabrication of a novel XYZ monolithic micro-positioning stage driven by NiTi shape-memory-alloy actuators. Smart Materials and Structures, 2016, 25, 105004.	1.8	23
47	Thermal analysis of wirelessly powered thermo-pneumatic micropump based on planar LC circuit. Journal of Mechanical Science and Technology, 2016, 30, 2659-2665.	0.7	29
48	Development of a shape-memory-alloy micromanipulator based on integrated bimorph microactuators. Mechatronics, 2016, 38, 16-28.	2.0	58
49	Micro-scale energy harvesting devices: Review of methodological performances in the last decade. Renewable and Sustainable Energy Reviews, 2016, 54, 1035-1047.	8.2	184
50	Thermomechanical behavior of bulk NiTi shape-memory-alloy microactuators based on bimorph actuation. Microsystem Technologies, 2016, 22, 2125-2131.	1.2	23
51	Micromachined Shape-Memory-Alloy Microactuators and Their Application in Biomedical Devices. Micromachines, 2015, 6, 879-901.	1.4	55
52	Development of Miniature Stewart Platform Using TiNiCu Shape-Memory-Alloy Actuators. Advances in Materials Science and Engineering, 2015, 2015, 1-9.	1.0	4
53	Miniature parallel manipulator using TiNiCu shape-memory-alloy microactuators. , 2015, , .		3
54	Wireless powered thermo-pneumatic micropump using frequency-controlled heater. Sensors and Actuators A: Physical, 2015, 233, 1-8.	2.0	56

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55	A stainless-steel-based capacitive pressure sensor chip and its microwelding integration. , 2015, , .		1
56	Wireless Displacement Sensing of Micromachined Spiral-Coil Actuator Using Resonant Frequency Tracking. Sensors, 2014, 14, 12399-12409.	2.1	12
57	Analysis of Thermomechanical Behavior of Shape-Memory-Alloy Bimorph Microactuator. , 2014, , .		6
58	Analysis of micropatterned wireless resonant heaters for wireless-control of MEMS thermal actuators. Microsystem Technologies, 2014, 20, 235-241.	1.2	2
59	A recoil resilient lumen support, design, fabrication and mechanical evaluation. Journal of Micromechanics and Microengineering, 2013, 23, 065001.	1.5	6
60	Planar Variable Inductor Controlled by Ferrofluid Actuation. IEEE Transactions on Magnetics, 2013, 49, 1402-1406.	1.2	12
61	Radio-Controlled Microactuator Based on Shape-Memory-Alloy Spiral-Coil Inductor. Journal of Microelectromechanical Systems, 2013, 22, 331-338.	1.7	23
62	Inductive antenna stent: design, fabrication and characterization. Journal of Micromechanics and Microengineering, 2013, 23, 025015.	1.5	32
63	High-power MEMS switch enabled by carbon nanotube contact and shape-memory alloy actuator. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 631-638.	0.8	20
64	Piezoresistive strain sensing using carbon nanotube forests suspended by Parylene-C membranes. Applied Physics Letters, 2012, 100, 213510.	1.5	10
65	Transforming carbon nanotube forest from darkest absorber to reflective mirror. Applied Physics Letters, 2012, 101, 061913.	1.5	37
66	Radio aneurysm coils for noninvasive detection of cerebral embolization failures: A preliminary study. Biosensors and Bioelectronics, 2011, 30, 300-305.	5.3	11
67	High-aspect-ratio, free-form patterning of carbon nanotube forests using micro-electro-discharge machining. Diamond and Related Materials, 2010, 19, 1405-1410.	1.8	43