Asan G A Muthalif

List of Publications by Year
in descending order

84	774	758635 12	642321 23
papers	citations	h-index	g-index

89	89	89	650
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Optimal piezoelectric beam shape for single and broadband vibration energy harvesting: Modeling, simulation and experimental results. Mechanical Systems and Signal Processing, 2015, 54-55, 417-426.	4.4	140
2	Harvesting vibration energy using piezoelectric material: Modeling, simulation and experimental verifications. Mechatronics, 2013, 23, 61-66.	2.0	48
3	Fuzzy-PID Controller for Semi-Active Vibration Control Using Magnetorheological Fluid Damper. Procedia Engineering, 2012, 41, 1221-1227.	1.2	44
4	A LabVIEW based data acquisition system for vibration monitoring and analysis. , 0, , .		40
5	Fuzzy-based Temperature and Humidity Control for HV AC of Electric Vehicle. Procedia Engineering, 2012, 41, 904-910.	1.2	39
6	Experimental study on improving Î¼-WEDM and Î¼-EDM of doped silicon by temporary metallic coating. International Journal of Advanced Manufacturing Technology, 2015, 78, 1651-1663.	1.5	29
7	A hybrid piezoelectric-electromagnetic energy harvester from vortex-induced vibrations in fluid-flow; the influence of boundary condition in tuning the harvester. Energy Conversion and Management, 2022, 256, 115371.	4.4	25
8	Active control of high-frequency vibration: Optimisation using the hybrid modelling method. Journal of Sound and Vibration, 2012, 331, 2969-2983.	2.1	24
9	In-Socket Sensory System for Transfemoral Amputees Using Piezoelectric Sensors: An Efficacy Study. IEEE/ASME Transactions on Mechatronics, 2016, 21, 2466-2476.	3.7	21
10	H_{âˆž} robust controller for autonomous helicopter hovering control. Aircraft Engineering and Aerospace Technology, 2011, 83, 363-374.	0.8	18
11	Vibration Energy Harvesting using Single and Comb-shaped Piezoelectric Beam Structures: Modeling and Simulation. Procedia Engineering, 2012, 41, 1228-1234.	1.2	17
12	Control of transtibial prosthetic limb with magnetorheological fluid damper by using a fuzzy PID controller. Journal of Low Frequency Noise Vibration and Active Control, 2018, 37, 1067-1078.	1.3	16
13	Experimental Investigation of Static Properties of Magnetorheological Elastomer. Iranian Journal of Science and Technology - Transactions of Mechanical Engineering, 2018, 42, 185-197.	0.8	14
14	Parametric Estimation From Empirical Data Using Particle Swarm Optimization Method for Different Magnetorheological Damper Models. IEEE Access, 2021, 9, 72602-72613.	2.6	13
15	An enhanced hybrid piezoelectricâ€“electromagnetic energy harvester using dual-mass system for vortex-induced vibrations. JVC/Journal of Vibration and Control, 2021, 27, 2848-2861.	1.5	13
16	Resonant coils analysis for inductively coupled wireless power transfer applications. , 2016, , .		12
17	Optimization of PID controller for flexible link system using a pareto-based multi-objective differential (PMODE) evolution. , 2011, , .		11
18	Vibration based energy harvesting using piezoelectric material. , 2011, , .		11

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19	Optimizing dynamic range of Magnetorheological fluid dampers: Modeling and simulation. , 2011, , .		11
20	Novel design of a self powered and self sensing magneto-rheological damper. IOP Conference Series: Materials Science and Engineering, 2013, 53, 012048.	0.3	10
21	Comparative study of conventional and magnetically coupled piezoelectric energy harvester to optimize output voltage and bandwidth. Microsystem Technologies, 2017, 23, 2663-2674.	1.2	10
22	Development and Implementation of Energy-Efficient Magnetorheological Fluid Bypass Damper for Prosthetics Limbs Using a Fuzzy-Logic Controller. IEEE Access, 2022, 10, 18978-18987.	2.6	10
23	Ant Colony Optimization for Controller and Sensor-Actuator Location in Active Vibration Control. Journal of Low Frequency Noise Vibration and Active Control, 2013, 32, 293-308.	1.3	9
24	Hybrid DE-PEM algorithm for identification of UAV helicopter. Aircraft Engineering and Aerospace Technology, 2014, 86, 385-405.	0.8	9
25	3D numerical modelling and analysis of a magnetorheological elastomer (MRE). Journal of Vibroengineering, 2020, 22, 1251-1265.	0.5	9
26	Magnetorheological Elastomer based torsional vibration isolator for application in a prototype drilling shaft. Journal of Low Frequency Noise Vibration and Active Control, 2022, 41, 676-700.	1.3	9
27	Dynamic Tuning of Torsional Transmissibility Using Magnetorheological Elastomer: Modelling and Experimental Verification. Iranian Journal of Science and Technology - Transactions of Mechanical Engineering, 2016, 40, 181-187.	0.8	7
28	An Experimental Investigation on the Effect of Nanopowder for Micro-Wire Electro Discharge Machining of Gold Coated Silicon. Procedia Engineering, 2017, 184, 171-177.	1.2	7
29	Intelligent glove for suppression of resting tremor in Parkinsonâ€™s disease. Vibroengineering PROCEDIA, 2019, 29, 176-181.	0.3	7
30	Robust H-infinity controller synthesis using multi-objectives differential evolution algorithm (MODE) for two-mass-spring system. , 2011, , .		6
31	Evaluation of Different Control Policies of Semi-Active MR Fluid Damper of a Quarter-Car Model. Applied Mechanics and Materials, 2012, 165, 310-315.	0.2	6
32	Active Dynamic Vibration Absorber for Broadband Control of a Multi-Mode System: Simulation and Experimental Verification. Journal of Low Frequency Noise Vibration and Active Control, 2012, 31, 159-173.	1.3	6
33	Wideband Vibration Control in Multi Degree of Freedom System: Experimental Verification Using Labview. Procedia Engineering, 2012, 41, 1235-1243.	1.2	6
34	Estimating ensemble average power delivered by a piezoelectric patch actuator to a non-deterministic subsystem. Journal of Sound and Vibration, 2014, 333, 1149-1162.	2.1	6
35	Optimization of Piezoelectric Sensor-Actuator for Plate Vibration Control Using Evolutionary Computation: Modeling, Simulation and Experimentation. IEEE Access, 2021, 9, 100725-100734.	2.6	6
36	Optimal piezoelectric shunt dampers for non-deterministic substructure vibration control: estimation and parametric investigation. Scientific Reports, 2021, 11, 4642.	1.6	6

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37	A hybrid piezoelectricâ€“electromagnetic nonlinear vibration energy harvester excited by fluid flow. Comptes Rendus - Mecanique, 2021, 349, 65-81.	0.3	6
38	Magnetorheological Elastomer Based Flexible Metamaterials Coupler for Broadband Longitudinal Vibration Isolation: Modeling and Experimental Verification. IEEE Access, 2021, 9, 165451-165461.	2.6	6
39	Animal sound activity detection using multi-class support vector machines. , 2011, , .		5
40	Design and development of an Active Mass Damper for broadband vibration control. , 2011, , .		5
41	Low voltage DC power supply with spike-blocking features. , 2013, , .		5
42	Towards achieving nanofinish on silicon (Si) wafer by Î¼-wire electro-discharge machining. International Journal of Advanced Manufacturing Technology, 2018, 99, 3005-3015.	1.5	5
43	Estimation and measurement of effective line mobility on a non-deterministic thin plate excited by a piezoelectric patch. Journal of Vibroengineering, 2020, 22, 98-110.	0.5	5
44	Hysteresis behaviour of different magnetorheological elastomer models: modelling and simulation. Vibroengineering PROCEDIA, 2020, 31, 7-14.	0.3	5
45	PAVEMENT CONDITION ANALYSIS VIA VEHICLE MOUNTED ACCELEROMETER DATA. IIUM Engineering Journal, 2020, 21, 73-84.	0.5	5
46	Enhancement of reflectance of densified vertically aligned carbon nanotube forests. Carbon Letters, 2016, 18, 67-70.	3.3	5
47	Development of a Performance-Enhanced Hybrid Magnetorheological Elastomer-Fluid for Semi-Active Vibration Isolation: Static and Dynamic Experimental Characterization. Materials, 2022, 15, 3238.	1.3	5
48	Investigation of Annular Gap Size for Optimizing the Dynamic Range of MR Damper Using Comsol Multiphysics Software. Applied Mechanics and Materials, 0, 606, 187-192.	0.2	4
49	Optical characterization of tip bended Vertically Aligned Carbon Nanotubes array. Chemical Physics Letters, 2018, 711, 37-41.	1.2	4
50	Vibration faults simulation system (VFSS): a system for teaching and training on fault detection and diagnosis. , 0, , .		3
51	Optimization in Active Vibration Control: Virtual Experimentation Using COMSOL Multiphysics - MATLAB Integration. , 2014, , .		3
52	A Piezoelectric Based Energy Harvester with Magnetic Interactions: Modelling and Simulation. Advanced Materials Research, 2015, 1115, 549-554.	0.3	3
53	Broadband vibration energy harvesting from a non-deterministic system: Performance of different piezoelectric patch shapes. Materials Research Express, 2021, 8, 025702.	0.8	3
54	Power Input to non-deterministic Subsystems via Piezoelectric Patch Actuators: Effect of the patch size and location. Journal of Physics: Conference Series, 2013, 423, 012065.	0.3	2

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55	Development of real time experimental system for investigating photochromic response to UV irradiation. IOP Conference Series: Materials Science and Engineering, 2013, 53, 012083.	0.3	2
56	Investigation of anisotropic reflectance from densified arrays of vertically aligned carbon nanotube forests (VACNTs). Chemical Physics Letters, 2016, 658, 343-346.	1.2	2
57	Optical anisotropy in micromechanically rolled carbon nanotube forest. Electronic Materials Letters, 2017, 13, 442-448.	1.0	2
58	Active Vibration Isolation System to Improve Free Space Optics Communication. Lecture Notes in Electrical Engineering, 2013, , 369-378.	0.3	2
59	DEVELOPMENT OF LOW POWER WIRELESS POWER TRANSFER SYSTEM USING RESONANCE PRINCIPLE WITH SECURITY FEATURES. IIUM Engineering Journal, 2017, 18, 117-127.	0.5	2
60	Comparison Vibration Amplitude for Magnetic Damping in Turning of Stainless Steel AISI 304. Applied Mechanics and Materials, 2013, 394, 251-255.	0.2	1
61	Influence of Magnetic Field on Chip Serration Frequency for Turning Stainless Steel AISI 304. Applied Mechanics and Materials, 0, 394, 217-221.	0.2	1
62	Optimal particle ratio to maximize the dynamic range of magnetorheological fluid (MRF) damper for prosthetic limb. , 2015, , .		1
63	Hybrid of conical and spiral approach for Wireless Power Transfer. , 2016, , .		1
64	Mechatronics technology in predictive maintenance method. IOP Conference Series: Materials Science and Engineering, 2017, 260, 012006.	0.3	1
65	Active Vibration Isolation System (AVIS) using a Voice Coil Actuator to improve Free Space Optics Communication. , 2019, , .		1
66	Geometrical Investigation of Piezoelectric Patches for Broadband Energy Harvesting in Non-Deterministic Composite Plates. Materials, 2021, 14, 7370.	1.3	1
67	Energy harvesting from railway slab-tracks with continuous slabs. JVC/Journal of Vibration and Control, 0, , 107754632110542.	1.5	1
68	Optimal Damper Location for Mid-High Frequency Vibration Control on Built-Up Structures: Case Study Using VA One. Applied Mechanics and Materials, 0, 105-107, 705-709.	0.2	0
69	Active Vibration Isolation System for Free Space Optic Communication: Virtual Prototyping Using LabVIEW-SolidWorks. Applied Mechanics and Materials, 2011, 105-107, 733-737.	0.2	0
70	Parallel Manipulator for Auto Tracking System: Virtual Prototyping Using LabVIEW- Solidworks. Advanced Materials Research, 0, 576, 777-780.	0.3	0
71	Design and Fabrication of Active Vibration Isolation System for Free Space Optics Communication. Advanced Materials Research, 0, 576, 753-756.	0.3	0
72	Ripple voltage and its elimination in low voltage power supply. , 2012, , .		0

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73	Regulation of stable low voltage power supply through phase angle modulation: Simulation details. , 2012, , .		0
74	A comparative study of power consumption of electric power steering system. , 2012, , .		0
75	Machinability Improvement for Stainless Steel AISI 304 in Turning by Applying Magnetically Damped Cutting. Applied Mechanics and Materials, 2013, 393, 177-182.	0.2	0
76	Estimating perturbation in eigenvalues for robust vibration controller design: analytical derivation and simulation. International Journal of Engineering Systems Modelling and Simulation, 2015, 7, 95.	0.2	0
77	Preliminary work for SiC-based piezoelectric energy harvester with mathematical modelling and simulation study. AIP Conference Proceedings, 2015, , .	0.3	0
78	Robust vibration control of flexible panel: modeling and simulation. World Journal of Engineering, 2017, 14, 433-442.	1.0	0
79	Empirical modeling of micromechanical bending process of vertically aligned carbon nanotube forest using response surface methodology. Cogent Engineering, 2017, 4, 1347078.	1.1	0
80	Prototype of single degree of freedom optical resolver. IOP Conference Series: Materials Science and Engineering, 2019, 488, 012004.	0.3	0
81	Improved Parameter Estimation for MRF Models for Varying Current. Advanced Science Letters, 2017, 23, 11002-11006.	0.2	0
82	Active Vibration Control using Piezoelectric Actuator: Implementation of Ant Colony Optimization Technique in Virtual Experimentation. International Journal of Simulation: Systems, Science and Technology, 0, , .	0.0	0
83	Islamisation of Engineering Education â€“ A Case at IIUM. Universal Journal of Educational Research, 2020, 8, 355-361.	0.1	0
84	On the Suitability of Vibration Acceptance Criteria of Process Pipework. Advances in Materials Science and Engineering, 2022, 2022, 1-9.	1.0	0