Elango Natarajan

List of Publications by Year
in descending order

76 papers	1,160 citations	361413 20 h-index	477307 29 g-index
79 all docs	79 docs citations	79 times ranked	712 citing authors

#	Article	IF	Citations
1	Experimental and numerical analysis on suitability of S-Glass-Carbon fiber reinforced polymer composites for submarine hull. Defence Technology, 2023, 19, 1-11.	4.2	8
2	Polyoxymethylene/talc composite: Investigation of warpage, mechanical and thermal properties for thin walledâ€injection molding applications. Journal of Applied Polymer Science, 2022, 139, 51762.	2.6	4
3	Evaluation of a Suitable Material for Soft Actuator Through Experiments and FE Simulations. , 2022, , 339-353.		0
4	Optimal Training of Feedforward Neural Networks Using Teaching-Learning-Based Optimization with Modified Learning Phases. Lecture Notes in Electrical Engineering, 2022, , 867-887.	0.4	10
5	Hybrid Deep Learning Model for Fault Detection and Classification of Grid-Connected Photovoltaic System. IEEE Access, 2022, 10, 13852-13869.	4.2	25
6	Enhanced Thermal Stability, Mechanical Properties and Structural Integrity of MWCNT Filled Bamboo/Kenaf Hybrid Polymer Nanocomposites. Materials, 2022, 15, 506.	2.9	31
7	Production Wastage Avoidance Using Modified Multi-Objective Teaching Learning Based Optimization Embedded With Refined Learning Scheme. IEEE Access, 2022, 10, 19186-19214.	4.2	9
8	Mechanical and wear behaviour of PEEK, PTFE and PU: review and experimental study. Journal of Polymer Engineering, 2022, 42, 407-417.	1.4	5
9	PTFE in Wet and Dry Drilling: Two-Tier Modeling and Optimization through ANFIS. Mathematical Problems in Engineering, 2022, 2022, 1-10.	1.1	4
10	Gorilla Troops Optimizer Combined with ANFIS for Wire Cut EDM of Aluminum Alloy. Advances in Materials Science and Engineering, 2022, 2022, 1-14.	1.8	6
11	Performance Analysis of Nano Silicon Carbide Reinforced Swept Friction Stir Spot Weld Joint in AA6061-T6 Alloy. Silicon, 2021, 13, 3399-3412.	3.3	26
12	Crystallinity Change and Reduced Warpages on Thin Walled Parts-the Effect of Nano Fumed Silica on Polyacetal. Silicon, 2021, 13, 4611-4622.	3.3	4
13	Evaluation of mechanical properties of coconut flower cover fibre-reinforced polymer composites for industrial applications. Progress in Rubber, Plastics and Recycling Technology, 2021, 37, 3-18.	1.8	28
14	Mechanical integrity of PEEK bone plate in internal fixation of femur: experimental and finite element analysis towards performance measurement. International Journal of Enterprise Network Management, 2021, 12, 17.	0.3	2
15	The hydrodynamic behaviour of biologically inspired bristled shark skin vortex generator in submarine. Materials Today: Proceedings, 2021, 46, 3945-3950.	1.8	8
16	Implications on the influence of mica on the mechanical properties of cast hybrid (Al+10%B4C+Mica) metal matrix composite. Journal of Materials Research and Technology, 2021, 10, 99-109.	5.8	38
17	Smart Manufacturingâ€"A Lead Way to Sustainable Manufacturing. Materials Forming, Machining and Tribology, 2021, , 1-7.	1.1	2
18	Modeling of multiwall carbon nanotubes reinforced natural rubber for soft robotic applications â€" A comprehensive presentation. Materials Today: Proceedings, 2021, 46, 3251-3258.	1.8	9

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19	The functionalization of the electrospun PLLA fibrous scaffolds reduces the hydrogen peroxide induced cytokines secretion in vitro. Materials Today Communications, 2021, 26, 101812.	1.9	5
20	Analysis of Potential Project Work Accidents: A Case Study of a Construction Project in Malaysia. , 2021, , .		1
21	Assessments of Process Parameters on Cutting Force and Surface Roughness during Drilling of AA7075/TiB2 In Situ Composite. Materials, 2021, 14, 1726.	2.9	16
22	E-Glass/phenolic matrix/APP laminate as a potential candidate for battery casing of e-vehicle - experimental investigations. Materials Research Express, 2021, 8, 045310.	1.6	16
23	Effects of bone-plate materials on the healing process of fractured tibia bone under time-varying conditions: a finite element analysis. Materials Research Express, 2021, 8, 095308.	1.6	7
24	Mechanical integrity of PEEK bone plate in internal fixation of femur: experimental and finite element analysis towards performance measurement. International Journal of Enterprise Network Management, 2021, 12, 17.	0.3	3
25	A Hybridized Pre-Processing Method for Detecting Tuberculosis using Deep Learning. , 2021, , .		2
26	Drilling Parameters Analysis on In-Situ Al/B4C/Mica Hybrid Composite and an Integrated Optimization Approach Using Fuzzy Model and Non-Dominated Sorting Genetic Algorithm. Metals, 2021, 11, 2060.	2.3	24
27	Influence of tool rotational speed on the properties of friction stir spot welded AA7075-T6/Al2O3 composite joint. Materials Today: Proceedings, 2020, 27, 62-67.	1.8	20
28	Non-dominated sorting modified teaching–learning-based optimization for multi-objective machining of polytetrafluoroethylene (PTFE). Journal of Intelligent Manufacturing, 2020, 31, 911-935.	7.3	44
29	Development of Rheumatoid Arthritis Classification from Electronic Image Sensor Using Ensemble Method. Sensors, 2020, 20, 167.	3.8	25
30	Sustainable friction stir spot welding of 6061-T6 aluminium alloy using improved non-dominated sorting teaching learning algorithm. Journal of Materials Research and Technology, 2020, 9, 11650-11674.	5.8	41
31	Evaluation of a Suitable Material for Soft Actuator Through Experiments and FE Simulations. International Journal of Manufacturing, Materials, and Mechanical Engineering, 2020, 10, 64-76.	0.4	4
32	Influence of Feeding Techniques in Bottom Tapping Stir Casting Process for Fabrication of Alumina Nano-filler-reinforced Aluminium Composites. Transactions of the Indian Institute of Metals, 2020, 73, 1265-1272.	1.5	10
33	A Constrained Teaching-learning-based Optimization with Modified Learning Phases for Constrained Optimization. Journal of Advanced Research in Dynamical and Control Systems, 2020, 12, 1442-1456.	0.2	4
34	Optimum Control Parameters During Machining of LM13 Aluminum Alloy Under Dry Electrical Discharge Machining (EDM) With A Modified Tool Design. Medziagotyra, 2019, 25, 407-412.	0.2	7
35	Measurement of range of motions of L3-L4 healthy spine through offsetting reflective markers and in silico analysis of meshed model. Medical and Biological Engineering and Computing, 2019, 57, 2305-2318.	2.8	5
36	Structural and modal Analysis of Scooter Frame for Design Improvement. Materials Today: Proceedings, 2019, 16, 1106-1116.	1.8	13

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37	Compression after Impact Behaviour and Failure Analysis of Nanosilica-Toughened Thin Epoxy/GFRP Composite Laminates. Materials, 2019, 12, 3057.	2.9	16
38	Prediction of surface quality and optimization of process parameters in drilling of Delrin using neural network. Progress in Rubber, Plastics and Recycling Technology, 2019, 35, 149-169.	1.8	27
39	Effect of Chitosan Nanoparticle-Loaded Thymus serpyllum on Hydrogen Peroxide-Induced Bone Marrow Stromal Cell Damage. Stem Cells International, 2019, 2019, 1-12.	2.5	3
40	Magnetic, thermal stability and dynamic mechanical properties of beta isotactic polypropylene/natural rubber blends reinforced by NiZn ferrite nanoparticles. Defence Technology, 2019, 15, 958-963.	4.2	18
41	Dynamic Analysis of Compliant LEG of a Stewart-Gough Type Parallel Mechanism. , 2019, , .		2
42	Classification of Rheumatoid Arthritis using Machine Learning Algorithms. , 2019, , .		9
43	Design Topology Optimization and Kinematics of a Multi-Modal Quadcopter and Quadruped. , 2019, , .		4
44	A review on graph search algorithms for optimal energy efficient path planning for an unmanned air vehicle. Indonesian Journal of Electrical Engineering and Computer Science, 2019, 15, 743.	0.8	24
45	Evaluating weld properties of conventional and swept friction stir spot welded 6061-T6 aluminium alloy. Materials Express, 2019, 9, 851-860.	0.5	19
46	A Self-Adaptive Topologically Connected-Based Particle Swarm Optimization. IEEE Access, 2018, 6, 65347-65366.	4.2	25
47	Assessments of Secondary Reinforcement of Epoxy Matrix-Glass Fibre Composite Laminates through Nanosilica (SiO2). Materials, 2018, 11, 2186.	2.9	27
48	Enhanced Multi-Objective Teaching-Learning-Based Optimization for Machining of Delrin. IEEE Access, 2018, 6, 51528-51546.	4.2	39
49	Influence of SiC Nanoparticle Reinforcement on FSS Welded 6061-T6 Aluminum Alloy. Journal of Nanomaterials, 2018, 2018, 1-11.	2.7	29
50	Design and Development of a Robot Gripper for Food Industries using Coanda Effect. , 2018, , .		6
51	IoT Based Smart Parking System for Large Parking Lot. , 2018, , .		28
52	Observation on Multivariable Regression Methods for Various Near Infrared Spectra Data. , 2018, , .		2
53	Study on the repeatability of manufacturing nano-silica (SiO2) reinforced composite laminates. IOP Conference Series: Materials Science and Engineering, 2018, 346, 012083.	0.6	6
54	EXPERIMENTAL INVESTIGATION OF STRUCTURE, WEAR, AND EROSION RESISTANCE OF SS316 SUBSTRATE COATED WITH Tiâ€"Al2O3 COMPOSITE BY LASER CLADDING. High Temperature Material Processes, 2018, 22, 63-71.	0.6	11

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55	SUPERIOR MATERIAL PROPERTIES OF HYBRID FILLER-REINFORCED ALUMINUM MMC THROUGH DOUBLE-LAYER FEEDING TECHNIQUE ADOPTED IN BOTTOM TAPPING STIR CASTING. High Temperature Material Processes, 2018, 22, 249-258.	0.6	10
56	Investigation of Densification Behaviour on Yttrium Oxide Reinforced Ti-6AL-4V Nano-Composite Through Powder Metallurgy. International Journal of Mechanical and Production Engineering Research and Development, 2018, 8, 433-442.	0.1	6
57	Multi Wall Carbon Nanotube Reinforced Silicone for Aerospace Applications. International Journal of Mechanical and Production Engineering Research and Development, 2018, 8, 775-784.	0.1	5
58	Incorporation of Human-Platelet-Derived Growth Factor-BB Encapsulated Poly(lactic-*co*-glycolic acid) Microspheres into 3D CORAGRAF Enhances Osteogenic Differentiation of Mesenchymal Stromal Cells. ACS Applied Materials & Interfaces, 2017, 9, 9291-9303.	8.0	15
59	The Effect of High Loaded Multiwall Carbon Nanotubes in Natural Rubber and Their Nonlinear Material Constants. Journal of Nanomaterials, 2017, 2017, 1-15.	2.7	28
60	Grasp Stability Analysis of an Isotropic Direct Driven Three-Finger Soft Robot Hand. International Journal on Advanced Science, Engineering and Information Technology, 2017, 7, 1627.	0.4	6
61	Correlation and measurement of density and viscosity of aqueous mixtures of glycerol and N-methyldiethanolamine, monoethanolamine, piperazine and ionic liquid. Journal of Molecular Liquids, 2016, 221, 1155-1161.	4.9	19
62	Optimization of Processing Parameters in ECM of Die Tool Steel Using Nanofluid by Multiobjective Genetic Algorithm. Scientific World Journal, The, 2015, 2015, 1-6.	2.1	23
63	A review article: investigations on soft materials for soft robot manipulations. International Journal of Advanced Manufacturing Technology, 2015, 80, 1027-1037.	3.0	124
64	Integrating Servo-Pneumatic Actuator with Ball Beam System based on Intelligent Position Control. Jurnal Teknologi (Sciences and Engineering), 2014, 69, .	0.4	3
65	Optimization of Intervening Variables in MicroEDM of SS 316L using a Genetic Algorithm and Response-Surface Methodology. Strojniski Vestnik/Journal of Mechanical Engineering, 2014, 60, 656-664.	1.1	27
66	Two chambers soft actuator realizing robotic gymnotiform swimmers fin. , 2014, , .		17
67	Experimental investigations of skin-like material and computation of its material properties. International Journal of Precision Engineering and Manufacturing, 2014, 15, 1909-1914.	2.2	24
68	Simulations of Two Patterns Fiber Weaves Reinforced in Rubber Actuator. Jurnal Teknologi (Sciences) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.4	7
69	3-D finite-element analysis of fiber-reinforced soft bending actuator for finger flexion. , 2013, , .		18
70	Determination of Non-Linear Material Constants of RTV Silicone Applied to a Soft Actuator for Robotic Applications. Key Engineering Materials, 2013, 594-595, 1099-1104.	0.4	9
71	Experimental Study of Non-Contact Robot Gripper for Food Industries. Applied Mechanics and Materials, 2012, 232, 392-397.	0.2	3
72	Application of Coanda Effect in Robots â€" A Review. Advances in Intelligent and Soft Computing, 2012, , 411-418.	0.2	5

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73	Analysis on the fundamental deformation effect of a robot soft finger and its contact width during power grasping. International Journal of Advanced Manufacturing Technology, 2011, 52, 797-804.	3.0	26
74	Numerical Dynamic Analysis of a Single Link Soft Robot Finger. Applied Mechanics and Materials, 0, 459, 449-454.	0.2	6
75	Non-Linear Finite Element Analysis of Biologically Inspired Robotic Fin Actuated by Soft Actuators. Applied Mechanics and Materials, 0, 528, 272-277.	0.2	8
76	Kinematic Analysis of Three Fingered Robot Hand Using Graphical Method. International Journal of Engineering and Technology, 0, , 518-522.	0.2	2