

Elaya Perumal A

List of Publications by Year in descending order

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82
papers

4,709
citations

159525

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102432

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84
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84
docs citations

84
times ranked

4175
citing authors

#	ARTICLE	IF	CITATIONS
1	Study on mechanical and wear properties of Al 7075/Al ₂ O ₃ /graphite hybrid composites. Composites Part B: Engineering, 2014, 56, 464-471.	5.9	483
2	Influence of B4C on the tribological and mechanical properties of Al 7075/B4C composites. Composites Part B: Engineering, 2013, 54, 146-152.	5.9	424
3	Mechanical and water absorption behaviour of banana/sisal reinforced hybrid composites. Materials & Design, 2011, 32, 4017-4021.	5.1	395
4	Experimental Investigations on Mechanical Properties Of Jute Fiber Reinforced Composites with Polyester and Epoxy Resin Matrices. Procedia Engineering, 2014, 97, 2052-2063.	1.2	283
5	Prediction of tensile properties of hybrid-natural fiber composites. Composites Part B: Engineering, 2012, 43, 793-796.	5.9	280
6	Experimental investigation on mechanical behaviour, modelling and optimization of wear parameters of B4C and graphite reinforced aluminium hybrid composites. Materials & Design, 2014, 63, 620-632.	5.1	261
7	Sustainable thermal energy storage technologies for buildings: A review. Renewable and Sustainable Energy Reviews, 2012, 16, 2394-2433.	8.2	254
8	Banana Fiber Reinforced Polymer Composites - A Review. Journal of Reinforced Plastics and Composites, 2010, 29, 2387-2396.	1.6	225
9	Graphene decorated with MoS ₂ nanosheets: a synergetic energy storage composite electrode for supercapacitor applications. Dalton Transactions, 2016, 45, 2637-2646.	1.6	200
10	Fiber surface treatment and its effect on mechanical and visco-elastic behaviour of banana/epoxy composite. Materials & Design, 2013, 47, 151-159.	5.1	192
11	A Statistical Analysis of Optimization of Wear Behaviour of Al- Al ₂ O ₃ Composites Using Taguchi Technique. Procedia Engineering, 2013, 64, 973-982.	1.2	112
12	Effect of fiber length and fiber content on mechanical properties of banana fiber/epoxy composite. Journal of Reinforced Plastics and Composites, 2011, 30, 1621-1627.	1.6	94
13	Fluidized bed drying of some agro products – A review. Renewable and Sustainable Energy Reviews, 2016, 61, 280-301.	8.2	92
14	Mechanical and water absorption properties of woven jute/banana hybrid composites. Fibers and Polymers, 2012, 13, 907-914.	1.1	77
15	Optimizing wear behavior of TiN coated SS 316L against Ti alloy using Response Surface Methodology. Materials & Design, 2015, 67, 469-482.	5.1	76
16	Effect of Graphite on Tribological and Mechanical Properties of AA7075 Composites. Tribology Transactions, 2015, 58, 1-6.	1.1	70
17	Synthesis of graphene oxide/vanadium pentoxide composite nanofibers by electrospinning for supercapacitor applications. Solid State Ionics, 2014, 268, 321-325.	1.3	63
18	Mechanical and Dynamic Mechanical Analysis of Woven Banana/Epoxy Composite. Journal of Polymers and the Environment, 2012, 20, 565-572.	2.4	62

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19	Hole quality evaluation of natural fiber composite using image analysis technique. Journal of Reinforced Plastics and Composites, 2013, 32, 1188-1197.	1.6	62
20	Fault diagnostics of spur gear using decision tree and fuzzy classifier. International Journal of Advanced Manufacturing Technology, 2017, 89, 3487-3494.	1.5	58
21	Influence of calcium hexaboride reinforced magnesium composite for the mechanical and tribological behaviour. Tribology International, 2017, 111, 18-25.	3.0	50
22	Optimization of wear parameters and their relative effects on TiN coated surface against Ti6Al4V alloy. Materials and Design, 2016, 92, 23-35.	3.3	42
23	Optimization of resistance spot welding process parameters and microstructural examination for dissimilar welding of AISI 316L austenitic stainless steel and 2205 duplex stainless steel. International Journal of Advanced Manufacturing Technology, 2017, 93, 455-465.	1.5	39
24	Thermal, thermo oxidative and ablative behavior of cenosphere filled ceramic/phenolic composites. Polymer Degradation and Stability, 2015, 114, 125-132.	2.7	38
25	Sliding wear behavior of plasma nitrided Austenitic Stainless Steel Type AISI 316LN in the temperature range from 25 to 400°C at 10 ⁴ bar. Wear, 2012, 288, 17-26.	1.5	37
26	GHG emission accounting and mitigation strategies to reduce the carbon footprint in conventional port activities – a case of the Port of Chennai. Carbon Management, 2017, 8, 45-56.	1.2	36
27	Microstructure and dry sliding wear resistance evaluation of plasma nitrided austenitic stainless steel type AISI 316LN against different sliders. Surface and Coatings Technology, 2012, 207, 406-412.	2.2	32
28	Carrier mediated ferromagnetism in Cr doped SrTiO ₃ compounds. Journal of Materials Science: Materials in Electronics, 2015, 26, 6352-6365.	1.1	32
29	The effect of stitching on FRP cylindrical shells under axial compression. International Journal of Impact Engineering, 2004, 30, 923-938.	2.4	31
30	Synthesis, characterisation and sintering behaviour influencing the mechanical, thermal and physical properties of cordierite-doped TiO ₂ . Journal of Materials Research and Technology, 2013, 2, 269-275.	2.6	31
31	Taguchi Analysis of surface roughness and delamination associated with various cemented carbide K10 end mills in milling of GFRP. Journal of Engineering Science and Technology Review, 2010, 3, 58-64.	0.2	31
32	Wear characteristics of electroless NiP/bio-composite coatings on En8 steel. Journal of Manufacturing Processes, 2015, 20, 206-214.	2.8	30
33	Carrier induced ferromagnetism in Yb doped SrTiO ₃ perovskite system. Journal of Materials Science: Materials in Electronics, 2014, 25, 4078-4087.	1.1	29
34	Controlling adhesive wear failure of nickel-phosphorus coating at high load condition using crab shell particle as reinforcement. Engineering Failure Analysis, 2018, 90, 310-323.	1.8	28
35	The role of calcinated sea shell particles on friction-wear behavior of electroless NiP coating: Fabrication and characterization. Surface and Coatings Technology, 2016, 304, 492-501.	2.2	27
36	Experimental investigation on the effect of ceramic coating on engine performance and emission characteristics for cleaner production. Journal of Cleaner Production, 2019, 214, 506-513.	4.6	26

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37	Electroless nickel phosphorus coating on crab shell particles and its characterization. Journal of Solid State Chemistry, 2017, 248, 87-95.	1.4	25
38	Micro/Nanostructure and Tribological Characteristics of Pressureless Sintered Carbon Nanotubes Reinforced Aluminium Matrix Composites. Journal of Nanomaterials, 2016, 2016, 1-10.	1.5	23
39	A study of frictional wear behavior of Ti6Al4V and UHMWPE hybrid composite on TiN surface for bio-medical applications. Tribology International, 2016, 98, 179-189.	3.0	23
40	Wear behavior of HPT processed UFG AZ31B magnesium alloy. Materials Letters, 2018, 227, 194-198.	1.3	22
41	Wear behaviour of electroless Ni-P and Ni-P-TiO ₂ composite coatings on En8 steel. Materials Today: Proceedings, 2020, 22, 1135-1139.	0.9	20
42	Modeling and evaluation of tensile properties of randomly oriented banana/epoxy composite. Journal of Reinforced Plastics and Composites, 2011, 30, 1957-1967.	1.6	19
43	Enhanced ferromagnetism in Cr doped SrMoO ₄ scheelite structured compounds. Journal of Materials Science: Materials in Electronics, 2016, 27, 2545-2556.	1.1	19
44	Drilling of pultruded and liquid composite moulded glass/epoxy thick composites: Experimental and statistical investigation. Measurement: Journal of the International Measurement Confederation, 2018, 114, 109-121.	2.5	19
45	Application of discrete wavelet transform and Zhao-Atlas-Marks transforms in non stationary gear fault diagnosis. Journal of Mechanical Science and Technology, 2013, 27, 641-647.	0.7	18
46	Design and analysis of a proton exchange membrane fuel cells (PEMFC). Renewable Energy, 2013, 49, 161-165.	4.3	16
47	Comparative study on the friction-wear property of As-plated, Nd-YAG laser treated, and heat treated electroless Nickel-Phosphorus/Crab shell particle composite coatings on mild steel. Surface and Coatings Technology, 2019, 357, 543-558.	2.2	16
48	Neural network model for condition monitoring of wear and film thickness in a gearbox. Neural Computing and Applications, 2014, 24, 1943-1952.	3.2	14
49	Fabrication of Gd ₂ O ₃ nanofibers by electrospinning technique using PVA as a structure directing template. Applied Surface Science, 2012, 261, 770-773.	3.1	13
50	Discussion on the feasibility of using proteinized/deproteinized crab shell particles for coating applications: Synthesis and characterization. Journal of Environmental Chemical Engineering, 2016, 4, 3891-3899.	3.3	13
51	Studies on combined cooling and drying of agro products using air cooled internal heat recovered vapour absorption system. Applied Thermal Engineering, 2016, 97, 100-108.	3.0	13
52	Studies on multifunctional behaviour of Cr doped SrWO ₄ Compounds. Journal of Materials Science: Materials in Electronics, 2015, 26, 6926-6938.	1.1	12
53	Impact of nano zinc oxide on the friction and wear property of electroless nickel-phosphorus sea shell composite coatings. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2017, 225, 160-172.	1.7	11
54	Synthesis, characterization and sintering behavior influencing mechanical, thermal and physical properties of pure cordierite and cordierite-ceria. Journal of Advanced Ceramics, 2015, 4, 22-30.	8.9	10

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55	Influence of cooling on the performance of the drilling process of glass fibre reinforced epoxy composites. Archives of Civil and Mechanical Engineering, 2016, 16, 135-146.	1.9	10
56	Investigation on the High Vacuum Tribological Characteristics of Surface Treated Nuclear Grade Stainless Steel Type AISI 316 LN at 25 to 500 Å°C. Strojnicki Vestnik/Journal of Mechanical Engineering, 2011, 57, 927-935.	0.6	9
57	The Effect of Surface Roughness on Sursulf, Gas and Plasma Nitride Coatings on Austenitic Stainless Steel Type AISI 316LN. Applied Mechanics and Materials, 0, 110-116, 758-763.	0.2	6
58	Wear Characteristics of Al 6061 Reinforced with Graphite under Different Loads and Speeds. Advanced Materials Research, 2011, 287-290, 998-1002.	0.3	6
59	Band gap tailoring and enhanced ferromagnetism in Yb doped SrWO ₄ scheelite structured system. Journal of Materials Science: Materials in Electronics, 2015, 26, 6875-6886.	1.1	6
60	Drillability study of pultruded and sheet moulding compound thick polymeric composites. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2017, 231, 268-285.	1.5	6
61	Input advanced control of semi active half car heave model. Journal of Mechanical Science and Technology, 2013, 27, 1225-1231.	0.7	5
62	Effect of the Standard and Special Geometry Design of a Drill Body on Quality Characteristics and Multiple Performance Optimization in Drilling of Thick Laminated Composites. Procedia Engineering, 2014, 97, 390-401.	1.2	5
63	Influence of SMA reinforcement on the impact resistance of GFRP composite laminates under different temperatures. Bulletin of Materials Science, 2016, 39, 889-899.	0.8	5
64	Partial dissolution of precipitated-calcium carbonate (P-CaCO ₃) in electroless nickel-phosphorus (Ni-P) coating and its surface characterization. Materials Research Express, 2019, 6, 066409.	0.8	5
65	Enhancement of the hardness and wear-resistance of aluminum-silicon alloy using atmospheric plasma-sprayed ZrO ₂ , Al ₂ O ₃ -ZrO ₂ multilayer, and Al ₂ O ₃ /ZrO ₂ composite coatings. Surface Topography: Metrology and Properties, 2020, 8, 025027.	0.9	5
66	Hot Vacuum Tribological Properties of Chromium Nitride Coatings against Austenitic Stainless Steel Type AISI 316LN and Colmonoy. Applied Mechanics and Materials, 0, 110-116, 600-605.	0.2	3
67	Sustainability and Environmental Management: Emissions Accounting for Ports. Strategic Planning for Energy and the Environment, 2017, 37, 8-26.	0.9	3
68	Significance of tribolayer on the friction and wear resistance of FSPed AA6082/SiCp composite at various load conditions. Surface Topography: Metrology and Properties, 2020, 8, 025037.	0.9	3
69	Role of biodiesel with nanoadditives in port owned trucks and other vehicles for emission reduction. Thermal Science, 2017, 21, 605-614.	0.5	3
70	Mode I Fracture Toughness of Banana Fiber and Glass Fiber Reinforced Composites. Advanced Materials Research, 0, 622-623, 1320-1324.	0.3	2
71	Experimental study of bitter guard, green peas and okra's drying characteristics in fluidized bed dryer. , 2013, , .		2
72	Influence of Stainless Steel Wire Reinforcement on the Impact Resistance of GFRP Composite Laminates. Arabian Journal for Science and Engineering, 2015, 40, 1111-1122.	1.1	2

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73	Effect of drill point geometry on quality characteristics and multiple performance optimization in drilling of nonlaminated composites. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2016, 230, 558-568.	0.7	2
74	Effect of Calcium Hexaboride Particles on Predicting the Dry Sliding Tribological Process Parameter of Magnesium Composite Using Grey Relational Analysis. Materials Today: Proceedings, 2017, 4, 557-566.	0.9	2
75	Drying and energy aspects of tapioca sago processing-an experimental field study. Journal of Mechanical Science and Technology, 2017, 31, 3035-3042.	0.7	1
76	Optimization of electroless bath process parameter for improving the tribology behavior of Ni-P/CaBr ₂ composite coating against the hardened EN-31 steel. Surface Topography: Metrology and Properties, 2020, 8, 025038.	0.9	1
77	Assessment on the impact of FSP process parameters on microstructural, mechanical and wear behaviour of FSPed AA6082. Surface Topography: Metrology and Properties, 2021, 9, 015016.	0.9	1
78	Analyzing the mechanical and wear behavior of age hardening processed AZ31 magnesium composites. Surface Topography: Metrology and Properties, 2021, 9, 015031.	0.9	1
79	Dynamic Leadership Algorithm for Hierarchical Multi-Smart Robot Coordination in Atomic Power plants. , 2009, , .		0
80	Low Velocity Impact Analysis on GFRP Laminates under Different Temperatures. Applied Mechanics and Materials, 0, 110-116, 632-636.	0.2	0
81	Simulation Prospective - Ride and Handling Characteristics of an ATV using MR Damper Input Control. , 0, , .		0
82	Impact of spark plasma sintering process on tribo surface of Al/CNT composites. Surface Topography: Metrology and Properties, 2021, 9, 045018.	0.9	0