

Rajkumar Kaliyamoorthy

List of Publications by Year in descending order

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117
papers

2,168
citations

331670

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276875

41
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127
all docs

127
docs citations

127
times ranked

1433
citing authors

#	ARTICLE	IF	CITATIONS
1	Tribological performance of microwave sintered copperâ€“TiCâ€“graphite hybrid composites. Tribology International, 2011, 44, 347-358.	5.9	194
2	Wear performance of Alâ€“SiCâ€“B4C hybrid composites under dry sliding conditions. Materials & Design, 2013, 47, 456-464.	5.1	194
3	Microwave sintering of copperâ€“graphite composites. Journal of Materials Processing Technology, 2009, 209, 5601-5605.	6.3	151
4	Tribological behavior of microwave processed copperâ€“nanographite composites. Tribology International, 2013, 57, 282-296.	5.9	122
5	Tribological studies on microwave sintered copperâ€“carbon nanotube composites. Wear, 2011, 270, 613-621.	3.1	113
6	Mechanical Properties of Luffa Fiber and Ground nut Reinforced Epoxy Polymer Hybrid Composites. Procedia Engineering, 2014, 97, 2042-2051.	1.2	78
7	Fabrication of copperâ€“TiCâ€“graphite hybrid metal matrix composites through microwave processing. International Journal of Advanced Manufacturing Technology, 2010, 48, 645-653.	3.0	73
8	Investigation on the cutting quality characteristics of abrasive water jet machining of AA6061-B ₄ C-hBN hybrid metal matrix composites. Materials and Manufacturing Processes, 2018, 33, 1313-1323.	4.7	72
9	Characterization on chemical and mechanical properties of silane treated fish tail palm fibres. International Journal of Biological Macromolecules, 2020, 163, 2457-2464.	7.5	56
10	Studies on High Temperature Wear and Friction Behaviour of AA6061/B4C/hBN Hybrid Composites. Metals and Materials International, 2021, 27, 3040-3057.	3.4	41
11	Effect of reinforcement particles on the abrasive assisted electrochemical machining of Aluminium-Boron carbide-Graphite composite. Procedia Engineering, 2014, 97, 381-389.	1.2	36
12	Abrasive water jet machining on Ti metal-interleaved basalt-flax fiber laminate. Materials and Manufacturing Processes, 2021, 36, 329-340.	4.7	35
13	Influence of Deep Cryogenic Treatment on the Mechanical Properties of AISI 440C Bearing Steel. Procedia Engineering, 2014, 97, 1683-1691.	1.2	34
14	Electrolytic concentration effect on the abrasive assisted-electrochemical machining of an aluminumâ€“boron carbide composite. Materials and Manufacturing Processes, 2017, 32, 687-692.	4.7	33
15	Accelerated wear testing for evaluating the life characteristics of copperâ€“graphite tribological composite. Materials & Design, 2011, 32, 3029-3035.	5.1	32
16	Mechanical and free vibration properties of skin and core designed basalt woven intertwined with flax layered polymeric laminates. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2020, 234, 4505-4519.	2.1	31
17	Tribological Performance of Microwave-Heat-Treated Copperâ€“Graphite Composites. Tribology Letters, 2010, 37, 131-139.	2.6	30
18	Wire-EDM machinability investigation on quaternary Ni ₄₄ Ti ₅₀ Cu ₄ Zr ₂ shape memory alloy. Materials and Manufacturing Processes, 0, , 1-10.	4.7	28

#	ARTICLE	IF	CITATIONS
19	Wear and Life Characteristics of Microwave-Sintered Copper-Graphite Composite. Journal of Materials Engineering and Performance, 2012, 21, 2389-2397.	2.5	26
20	Sustainable application of grinding wheel waste as abrasive for abrasive water jet machining process. Journal of Cleaner Production, 2020, 261, 121225.	9.3	26
21	Microwave Heat Treatment on Aluminium 6061 Alloy-Boron Carbide Composites. Procedia Engineering, 2014, 86, 34-41.	1.2	24
22	Tribological Properties of Magnesium Nano-Alumina Composites under Nano-Graphite Lubrication. Tribology Transactions, 2012, 55, 334-344.	2.0	23
23	Corrosion Behavior of Aluminium-Boron Carbide-Graphite Composites. Applied Mechanics and Materials, 0, 591, 51-54.	0.2	23
24	Influence of Graphite Reinforcement on Mechanical Properties of Aluminum-Boron Carbide Composites. Advanced Materials Research, 0, 845, 398-402.	0.3	22
25	Effect of Microwave Heat Treatment on Mechanical Properties of AA6061 Sheet Metal. Procedia Engineering, 2014, 97, 1692-1697.	1.2	22
26	Mechanical Properties of Almond Shell-Sugarcane Leaves Hybrid Epoxy Polymer Composite. Applied Mechanics and Materials, 2016, 852, 43-48.	0.2	22
27	Wear and tribofilm characterization of bamboo CNT (B-CNT)-peek composite with incremental blending of submicron synthetic diamond particles. Wear, 2021, 466-467, 203556.	3.1	22
28	Effect of Electrical Discharge Machining Parameters on Microwave Heat Treated Aluminium-boron Carbide-graphite Composites. Procedia Engineering, 2014, 97, 1543-1550.	1.2	21
29	Experimental Investigations on Multiple Responses in Abrasive Waterjet Machining of Ti-6Al-4V Alloy. Materials Today: Proceedings, 2018, 5, 13413-13421.	1.8	20
30	Evaluation of thermal stability and damping behavior of electrical insulator waste reinforced thermoset polymer composite. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2019, 233, 3603-3618.	2.1	20
31	Effect of Recovered Silicon Filler Inclusion on Mechanical and Tribological Properties of Polytetrafluoroethylene (PTFE) Composite. Silicon, 2022, 14, 4601-4610.	3.3	20
32	Tailoring of tensile and dynamic thermomechanical properties of interleaved chemical-treated fine almond shell particulate flax fiber stacked vinyl ester polymeric composites. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2019, 233, 2311-2322.	1.1	19
33	Experimental investigations of electrochemical micromachining of nickel aluminum bronze alloy. Materials and Manufacturing Processes, 2020, 35, 1860-1869.	4.7	17
34	Mechanical and Wear Characteristics Investigation on 3D Printed Silicon Filled Poly (Lactic Acid) Biopolymer Composite Fabricated by Fused Deposition Modeling. Silicon, 2022, 14, 9379-9391.	3.3	17
35	Analysis and characterization of friction behaviour on AA7075/ZrB ₂ composite under dry sliding condition. Materials Research Express, 2019, 6, 026576.	1.6	16
36	Key Experimental Investigations of cutting dimensionality by Abrasive Water Jet Machining on Basalt Fiber /Fly ash Reinforced Polymer Composite. Materials Today: Proceedings, 2020, 22, 1351-1359.	1.8	16

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37	A spatial distribution effect of almond shell bio filler on physical, mechanical, thermal deflection and water absorption properties of vinyl ester polymer composite. <i>Polymer Composites</i> , 2022, 43, 3204-3218.	4.6	16
38	<i>Kigelia africana</i> fruit biofibre polysaccharide extraction and biofibre development by silane chemical treatment. <i>International Journal of Biological Macromolecules</i> , 2022, 209, 1248-1259.	7.5	16
39	Static and dynamic behavior of micrometric agro <i>Prunus amygdalus</i> particulate distributed interpolymer layer kenaf composite. <i>Polymer Composites</i> , 2020, 41, 3309-3321.	4.6	15
40	Influence of ZrB ₂ /hBN particles on the wear behaviour of AA7075 composites fabricated through stir followed by squeeze cast technique. <i>Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology</i> , 2021, 235, 149-160.	1.8	15
41	Effect of Nano and Micro Graphite Particle on Tribological Performance of Aluminium Metal Matrix Composites. <i>Applied Mechanics and Materials</i> , 0, 592-594, 917-921.	0.2	14
42	Comparison study of mechanical and dynamic vibration properties of hole defect introduced in hybrid polymer composite. <i>Materials Today: Proceedings</i> , 2020, 27, 677-682.	1.8	14
43	Comparative Study of Cutting Insert Wear and Roughness Parameter (Ra) while turning Nimonic 90 and Hastelloy C-276 by Coated Carbide Inserts. <i>Materials Today: Proceedings</i> , 2020, 22, 1409-1416.	1.8	13
44	Synthesis and characterization of randomly oriented silane-grafted novel bio-cellulosic fish tail palm fiber reinforced vinyl ester composite. <i>Biomass Conversion and Biorefinery</i> , 2023, 13, 16067-16084.	4.6	13
45	A Novel Approach on Reusing Silicon Wafer Kerf Particle as Potential Filler Material in Polymer Composite. <i>Silicon</i> , 2022, 14, 1537-1548.	3.3	12
46	Effects of recovered brown alumina filler loading on mechanical, hygrothermal and thermal properties of glass fiber reinforced epoxy polymer composite. <i>Polymers and Polymer Composites</i> , 2021, 29, S1092-S1102.	1.9	12
47	Mechanical, thermogravimetric, and dynamic mechanical analysis of basalt and flax fibers intertwined vinyl ester polymer composites. <i>Polymer Composites</i> , 2022, 43, 2196-2207.	4.6	12
48	Effect of Abrasive Waterjet Machining Parameters on Hybrid AA6061-B4C- CNT Composites. <i>Materials Today: Proceedings</i> , 2018, 5, 13438-13450.	1.8	11
49	Utilization of waste tyre rubber and carbon black to develop a neoprene rubber hybrid composite. <i>Materials Today: Proceedings</i> , 2020, 27, 724-728.	1.8	11
50	Photovoltaic Industrial Waste as Substitutional Reinforcement in the Preparation of Additively Manufactured Acrylonitrile Butadiene Styrene Composite. <i>Arabian Journal for Science and Engineering</i> , 2022, 47, 15851-15863.	3.0	11
51	Effect of Magnesium Addition on Processing the Al-0.8 Mg-0.7 Si/SiC Metal Matrix Composites. <i>Applied Mechanics and Materials</i> , 0, 787, 553-557.	0.2	10
52	Effect of hBN Solid Lubricant Concentration on Machinability of Titanium (Ti-6Al-4V) Alloy. <i>Materials Science Forum</i> , 0, 830-831, 87-90.	0.3	9
53	Preparation of Super Hydrophobic Loofah Sponge for Fast and Efficient Separation of Oil from Seawater. <i>Materials Today: Proceedings</i> , 2018, 5, 14367-14374.	1.8	9
54	Mechanical strengthening effect by various forms and orientation of glass fibre reinforced isophthalic polyester polymer composite. <i>Materials Today: Proceedings</i> , 2018, 5, 26850-26859.	1.8	9

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55	Parametric investigation on surface roughness and hole quality of Ti metal hybrid fibers cored laminate (MFL) during abrasive water jet drilling. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2022, 236, 4147-4165.	2.1	9
56	Mechanical Properties of Chopped Randomly Oriented Epoxy - Luffa Fiber Reinforced Polymer Composite. Applied Mechanics and Materials, 0, 591, 103-107.	0.2	8
57	Experimental investigations on the Wire Electrochemical Micro Machining (WECM) integrity of AA6061-TiB2 composite. Materials Today: Proceedings, 2018, 5, 6990-6998.	1.8	8
58	Experimental Characterization of Dimensional and Surface Alternation of Straight and Angular Cutting on Self-lubricating Composite: A Wire EDM Approach. Arabian Journal for Science and Engineering, 2020, 45, 5859-5872.	3.0	8
59	Influence of silicon filler size and concentration on thermal stability and erosion wear resistance of polymer composite. Silicon, 2022, 14, 9595-9608.	3.3	8
60	Abrasive Assisted Electro Chemical Machining of Aluminum-Boron Carbide-Graphite Hybrid Composite. Applied Mechanics and Materials, 2014, 591, 89-93.	0.2	7
61	Machining characteristics evaluation of aluminium composites based on cBN and PCD inserts. Materials Today: Proceedings, 2018, 5, 8424-8430.	1.8	7
62	Optimization of WEDM Process Parameters on Multiple Responses in Cutting of Ti-6Al-4V. Materials Today: Proceedings, 2018, 5, 27072-27080.	1.8	7
63	Analysis of Triangular WEDM Cut Corner Inaccuracy of Aluminium Composite Mold Material. Materials Today: Proceedings, 2020, 22, 1341-1350.	1.8	7
64	Investigations on the influence of particle reinforcement and wire materials on the surface quality and machining characteristics of AA6061-TiB2 alloy in WEDM. Surface Topography: Metrology and Properties, 2021, 9, 035029.	1.6	6
65	Cooperating Function of Graphite in Reducing Frictional Wear of Aluminium Boron Carbide composite. Materials Today: Proceedings, 2018, 5, 27801-27809.	1.8	5
66	Investigation on mechanical and wear behaviour of AA2024/hBN composites synthesized via powder metallurgy routine. Materials Today: Proceedings, 2021, 45, 7865-7870.	1.8	5
67	Microstructure and mechanical properties of AZ91D/Al ₂ O ₃ bimodal composite fabricated through stir-ultrasonic-squeeze casting process. Materials Today: Proceedings, 2021, 45, 7822-7828.	1.8	5
68	Sustainable solution to low-cost alternative abrasive from electric ceramic insulator waste for use in abrasive water jet machining. International Journal of Advanced Manufacturing Technology, 2022, 120, 5243-5257.	3.0	5
69	Influencing Behavior Study of Natural Almond Shell Filler on the Tensile, Thermal, and Free Vibrational Properties of Flax Fiber Intertwined Vinyl Ester Composites. Journal of Natural Fibers, 2022, 19, 12959-12970.	3.1	5
70	Effect of Boron Carbide and Graphite on Machining Characteristics of Aluminium Boron Carbide Composite. Applied Mechanics and Materials, 0, 592-594, 181-185.	0.2	4
71	Mechanical Properties and Machinability Studies on the Human Hair-Coconut Coir-Glass Fibre Hybrid Composite. Applied Mechanics and Materials, 2016, 852, 79-84.	0.2	4
72	Experimental Investigation and Reliability Analysis on Wear Performance of AA6061-B4C-Nanographite Hybrid Composites. Materials Today: Proceedings, 2018, 5, 8436-8445.	1.8	4

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73	Cryogenic turning of Hastelloy C-22. <i>Materials Today: Proceedings</i> , 2020, 22, 3075-3081.	1.8	4
74	Effect of TiB ₂ particles on high temperature wear and friction behaviour of AA7075 composites fabricated through squeeze cast technique. <i>Materials Today: Proceedings</i> , 2021, 45, 7859-7864.	1.8	4
75	The Role of HBN Solid Lubricant Reducing Cutting Forces of Dry Machined Al-B ₄ C Composite. <i>Lecture Notes on Multidisciplinary Industrial Engineering</i> , 2020, , 697-705.	0.6	4
76	Investigations on the Cutting Quality of Interleaved Flax Fiber with Fly Ash-Reinforced Hybrid Polymer Composite. <i>Springer Proceedings in Materials</i> , 2020, , 419-430.	0.3	4
77	Enhancement of machining and surface quality of quaternary alloyed NiTiCuZr shape memory alloy through ultrasonic vibration coupled WEDM. <i>Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications</i> , 2022, 236, 816-833.	1.1	4
78	Mechanical and dynamic mechanical analysis of calcium carbonate filler interleaved with basalt polymeric laminates. <i>Materials Today: Proceedings</i> , 2022, 62, 1342-1346.	1.8	4
79	Stacking layer effect on mechanical and vibration behaviour of woven glass intertwined with kenaf fiber polymeric composites. <i>Materials Today: Proceedings</i> , 2022, 62, 1356-1360.	1.8	4
80	Effect of Sliding Speed on Tribological Properties of Microwave Sintered Copper-Graphite Composites. <i>Applied Mechanics and Materials</i> , 0, 592-594, 1305-1309.	0.2	3
81	Abrasive Assisted Electrochemical Machining of Al-B ₄ C Nanocomposite. <i>Applied Mechanics and Materials</i> , 0, 787, 523-527.	0.2	3
82	Nano Graphite Powder Assisted Electric Discharge Machining Characteristics of ZM21 Magnesium Alloy. <i>Applied Mechanics and Materials</i> , 0, 787, 406-410.	0.2	3
83	Electro Chemical Machining of Aluminum-Boron Carbide-Nanographite Composites. <i>Applied Mechanics and Materials</i> , 2016, 852, 136-141.	0.2	3
84	A study of bio and tribo modifier on degradation of magnesium-calcium carbonate biomaterial. <i>Materials Today: Proceedings</i> , 2020, 27, 691-695.	1.8	3
85	Optimization of machining parameters in CNC turning of AA6061-B ₄ C-CNT hybrid composites using Grey-fuzzy method. <i>IOP Conference Series: Materials Science and Engineering</i> , 2020, 764, 012010.	0.6	3
86	A comparative study of solid lubricant types on the microstructure and mechanical behaviour of AA7075-zirconium boride aerospace composites. <i>IOP Conference Series: Materials Science and Engineering</i> , 2020, 764, 012001.	0.6	3
87	Microstructural Characteristics and Mechanical Behaviour of AA7075/TiB ₂ Composite. <i>Materials Science Forum</i> , 2020, 979, 40-46.	0.3	3
88	Tribological Properties of PEEK Reinforced with Synthetic Diamond Composite. <i>Lecture Notes in Mechanical Engineering</i> , 2021, , 371-380.	0.4	3
89	Investigation and optimization of AWJM on flax fiber stacked laminate by desirability approach. <i>Materials Today: Proceedings</i> , 2022, 62, 1146-1151.	1.8	3
90	Comparison Studies on Microwave & Muffle Furnace Heat Treatment for Al-B ₄ C Composite. <i>Advanced Materials Research</i> , 0, 768, 280-284.	0.3	2

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91	Evaluation of Mechanical Property of Friction Welded EN24 Steel Joints. Applied Mechanics and Materials, 2014, 591, 108-111.	0.2	2
92	A study on wear assessment of AA6061-B4C-Nanographite hybrid composite. Materials Today: Proceedings, 2020, 27, 696-701.	1.8	2
93	Process Parameters Effect Investigations on Viscosity of Water-ethylene Glycol-based $\hat{\pm}$ -alumina Nanofluids: An Ultrasonic Experimental and Statistical Approach. Arabian Journal for Science and Engineering, 2021, 46, 11909-11921.	3.0	2
94	Validation of tensile strength of notched hybrid polymer composite using Whitney-Nusimer point stress model. Materials Today: Proceedings, 2020, 27, 940-945.	1.8	2
95	Study of Hexagonal Boron Nitride Particulate as Vibration Behaviour Modifier of Alternate Stacked Glassâ€œNatural Fibre Polymer Composite Laminate. Lecture Notes in Mechanical Engineering, 2021, , 451-460.	0.4	2
96	Experimental investigation and striation study of Inconel 718 by using abrasive water jet drilling. Materials Today: Proceedings, 2022, 62, 1277-1281.	1.8	2
97	Aluminium Silicate Concentration and Coordination effect with Tungsten sulphide improving Dry Sliding Wear Characteristics of AA7075 alloy Composites. Silicon, 0, , .	3.3	2
98	Flaw Quantification in Colmonoy Overlays Using Immersion Ultrasonic Testing. Applied Mechanics and Materials, 0, 787, 912-916.	0.2	1
99	Preparation, Properties and Machinability Study of Luffa Fiber - Groundnut Shell Reinforced Epoxy Composite. Applied Mechanics and Materials, 2016, 852, 29-35.	0.2	1
100	A Comparative Study on the Brass-Steel Tribo-Pair under Dry and Lubricated Sliding Conditions. Applied Mechanics and Materials, 2016, 852, 416-421.	0.2	1
101	Tribological Analysis by Concentration Effect of Boron Carbide and Graphite on the Aluminum Composites. Materials Science Forum, 0, 969, 163-168.	0.3	1
102	Wire Electrical Discharge Machining Integrity Studies on the Aluminium Nanocomposite. Lecture Notes in Mechanical Engineering, 2019, , 543-554.	0.4	1
103	Accelerated Testing Model Prediction of Fatigue Life of AA5083-H111â€œAA6061-T6 Friction Stir Weldment. Lecture Notes in Mechanical Engineering, 2019, , 573-581.	0.4	1
104	A brass wire electric discharge machining variable optimization of aluminiumâ€œnano alumina composite. Materials Today: Proceedings, 2020, 27, 702-706.	1.8	1
105	Optimization of CO2 Laser Cutting Parameters for AA6061/B4C/hBN Hybrid Composites using Taguchi-based Response Surface Methodology. Lecture Notes in Mechanical Engineering, 2021, , 111-122.	0.4	1
106	Spark plasma processing of semi-conductive titanium carbide dispersed alumina composites. Materials and Manufacturing Processes, 0, , 1-9.	4.7	1
107	Tribological Characteristics of Copper-Nano Carbon Crystalline Composites. Advances in Chemical and Materials Engineering Book Series, 2015, , 107-125.	0.3	1
108	Tribo-effectiveness of co-equal concentration of hard and soft particulates in aluminium matrix. Materials Today: Proceedings, 2022, , .	1.8	1

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109	Identification of self-lubricative mode for the ultrasonic treated AA6061-B ₄ C-CNT hybrid composites. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2023, 237, 784-797.	1.8	1
110	Performance Evaluation of Abrasive Water Jet Machining on AA6061-B ₄ C-HBN Hybrid Composites Using Taguchi Methodology. Lecture Notes on Multidisciplinary Industrial Engineering, 2020, , 651-660.	0.6	0
111	Pulse and Work Revolution Parameters of Wire Electrical Discharge Turning on Ti-6Al-4V Alloy. Lecture Notes on Multidisciplinary Industrial Engineering, 2020, , 611-620.	0.6	0
112	Turning Process Characteristics of Aluminium Matrix Hybrid Composite Using Grey Relational Surface Methodology. Lecture Notes in Mechanical Engineering, 2021, , 523-533.	0.4	0
113	ZrB ₂ Influences on the Dry Sliding Wear Resistance of AA7075 Alloy. Lecture Notes in Mechanical Engineering, 2021, , 809-818.	0.4	0
114	A Feasibility Study on Microwave Joining of GFRP Composite Pipes with Interlayer Coupling Agents. Lecture Notes in Mechanical Engineering, 2021, , 433-439.	0.4	0
115	Effect of Solid Lubricant in Dry Machining on Al-B ₄ C Composite. Springer Proceedings in Materials, 2020, , 587-596.	0.3	0
116	Accelerated tribological testing based life prediction of aluminium-graphite tribo composite. Materials Today: Proceedings, 2022, , .	1.8	0
117	Performance of different wire electrode materials on kerf width in WEDM of aluminum hybrid composite. Materials Today: Proceedings, 2022, , .	1.8	0