

Shankar Subramaniam

List of Publications by Year in descending order

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121
papers

2,474
citations

304602

22
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233338

45
g-index

124
all docs

124
docs citations

124
times ranked

1781
citing authors

#	ARTICLE	IF	CITATIONS
1	Characterization of natural fiber and composites – A review. Journal of Reinforced Plastics and Composites, 2013, 32, 1457-1476.	1.6	253
2	Tensile and flexural properties of snake grass natural fiber reinforced isophthallic polyester composites. Composites Science and Technology, 2012, 72, 1183-1190.	3.8	234
3	Tool condition monitoring techniques in milling process – a review. Journal of Materials Research and Technology, 2020, 9, 1032-1042.	2.6	221
4	Characterization of new cellulose sansevieria ehrenbergii fibers for polymer composites. Composite Interfaces, 2013, 20, 575-593.	1.3	205
5	Prediction of cutting tool wear during milling process using artificial intelligence techniques. International Journal of Computer Integrated Manufacturing, 2019, 32, 174-182.	2.9	78
6	Mechanical properties of randomly oriented snake grass fiber with banana and coir fiber-reinforced hybrid composites. Journal of Composite Materials, 2013, 47, 2181-2191.	1.2	66
7	Effect of Particle Size on Tribological Behavior of Rice Husk Ash-Reinforced Aluminum Alloy (AlSi10Mg) Matrix Composites. Tribology Transactions, 2013, 56, 1156-1167.	1.1	63
8	Effect of Pretreatment Methods on Properties of Natural Fiber Composites: A Review. Polymers and Polymer Composites, 2016, 24, 555-566.	1.0	57
9	Influence of surface texture shape, geometry and orientation on hydrodynamic lubrication performance of plane-to-plane slider surfaces. Lubrication Science, 2017, 29, 153-181.	0.9	57
10	Burr formation and its treatments – a review. International Journal of Advanced Manufacturing Technology, 2020, 107, 2189-2210.	1.5	57
11	Effect of strain hardening in elastic-plastic transition behavior in a hemisphere in contact with a rigid flat. International Journal of Solids and Structures, 2008, 45, 3009-3020.	1.3	53
12	Tool wear prediction in hard turning of EN8 steel using cutting force and surface roughness with artificial neural network. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2020, 234, 329-342.	1.1	50
13	Tool Condition Monitoring While Using Vegetable Based Cutting Fluids During Milling of Inconel 625. Journal of Advanced Manufacturing Systems, 2019, 18, 563-581.	0.4	44
14	A Finite Element Based Study on the Elastic-Plastic Transition Behavior in a Hemisphere in Contact With a Rigid Flat. Journal of Tribology, 2008, 130, .	1.0	43
15	Experimental Investigation of Friction Drilling on Brass, Aluminium and Stainless Steel. Procedia Engineering, 2013, 64, 1219-1226.	1.2	41
16	Investigations on mechanical and tribological properties of Al-Si10-Mg alloy/sugarcane bagasse ash particulate composites. Particulate Science and Technology, 2018, 36, 762-770.	1.1	40
17	Mechanical properties and water absorption of short snake grass fiber reinforced isophthallic polyester composites. Fibers and Polymers, 2014, 15, 1927-1934.	1.1	39
18	Application of coolants during tool-based machining – A review. Ain Shams Engineering Journal, 2023, 14, 101830.	3.5	34

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19	Dry sliding wear and friction behavior of aluminum-rice husk ash composite using Taguchi's technique. <i>Journal of Composite Materials</i> , 2015, 49, 2241-2250.	1.2	32
20	Investigation of work-related musculoskeletal disorders among male kitchen workers in South India. <i>International Journal of Occupational Safety and Ergonomics</i> , 2015, 21, 524-531.	1.1	31
21	Tool condition monitoring in the milling process with vegetable based cutting fluids using vibration signatures. <i>Materialpruefung/Materials Testing</i> , 2019, 61, 282-288.	0.8	27
22	Drilling of titanium alloy (Ti6Al4V) – a review. <i>Machining Science and Technology</i> , 2021, 25, 637-702.	1.4	26
23	Multi-response milling process optimization using the Taguchi method coupled to grey relational analysis. <i>Materialpruefung/Materials Testing</i> , 2016, 58, 462-470.	0.8	26
24	Mechanical properties and water absorption of snake grass longitudinal fiber reinforced isophthalic polyester composites. <i>Journal of Reinforced Plastics and Composites</i> , 2013, 32, 1211-1223.	1.6	24
25	Finite element analysis of different contact bearing couples for human hip prosthesis. <i>International Journal of Biomedical Engineering and Technology</i> , 2013, 11, 66.	0.2	23
26	Finite element submodeling technique to analyze the contact pressure and wear of hard bearing couples in hip prosthesis. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2020, 23, 422-431.	0.9	23
27	Prevalence of work-related musculoskeletal injuries among South Indian hand screen-printing workers. <i>Work</i> , 2017, 58, 163-172.	0.6	22
28	Recast Layer Formation during Wire Electrical Discharge Machining of Titanium (Ti-Al6-V4) Alloy. <i>Journal of Materials Engineering and Performance</i> , 2021, 30, 8926-8935.	1.2	21
29	Burr formation during drilling of mild steel at different machining conditions. <i>Materials and Manufacturing Processes</i> , 2019, 34, 726-735.	2.7	20
30	Investigation of chemically treated longitudinally oriented snake grass fiber-reinforced isophthalic polyester composites. <i>Journal of Reinforced Plastics and Composites</i> , 2013, 32, 1698-1714.	1.6	19
31	Dry Sliding Wear Behavior of Palmyra Shell Ash-Reinforced Aluminum Matrix (AlSi10Mg) Composites. <i>Tribology Transactions</i> , 2017, 60, 469-478.	1.1	19
32	Investigation of chemically treated randomly oriented sansevieria ehrenbergii fiber reinforced isophthalic polyester composites. <i>Journal of Composite Materials</i> , 2014, 48, 2961-2975.	1.2	18
33	Investigations on tribo-mechanical behaviour of Al-Si10-Mg/sugarcane bagasse ash/SiC hybrid composites. <i>China Foundry</i> , 2019, 16, 277-284.	0.5	18
34	Prevalence of work related musculoskeletal disorders among occupational bus drivers of Karnataka, South India. <i>Work</i> , 2020, 66, 73-84.	0.6	17
35	Wear prediction on silicon nitride bearing couple in human hip prosthesis using finite element concepts. <i>Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology</i> , 2014, 228, 717-724.	1.0	16
36	Effect of Radial Clearance on Wear and Contact Pressure of Hard-on-Hard Hip Prostheses Using Finite Element Concepts. <i>Tribology Transactions</i> , 2014, 57, 814-820.	1.1	16

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37	Milling of Nanoparticles Reinforced Al-Based Metal Matrix Composites. Journal of Composites Science, 2018, 2, 13.	1.4	16
38	Workplace factors and prevalence of low back pain among male commercial kitchen workers. Journal of Back and Musculoskeletal Rehabilitation, 2015, 28, 481-488.	0.4	15
39	Quasi-Static Crushing and Energy Absorption Characteristics of Thin-Walled Cylinders with Geometric Discontinuities of Various Aspect Ratios. Latin American Journal of Solids and Structures, 2017, 14, 1767-1787.	0.6	15
40	Prediction of Cutting Force in Turning Process-an Experimental Approach. IOP Conference Series: Materials Science and Engineering, 2018, 310, 012119.	0.3	15
41	Experimental study on frictional characteristics of tungsten carbide versus carbon as mechanical seals under dry and eco-friendly lubrications. International Journal of Refractory Metals and Hard Materials, 2016, 54, 39-45.	1.7	14
42	Computational wear assessment of hard on hard hip implants subject to physically demanding tasks. Medical and Biological Engineering and Computing, 2018, 56, 899-910.	1.6	14
43	Experimental and submodeling technique to investigate the wear of silicon nitride against Ti6Al4V alloy with bio-lubricants for various gait activities. Tribology International, 2020, 151, 106529.	3.0	14
44	Material selection of acetabular component in human hip prosthesis using finite element concepts. International Journal of Experimental and Computational Biomechanics, 2013, 2, 118.	0.4	12
45	Prediction of cutting force in turning process: An experimental and fuzzy approach. Journal of Intelligent and Fuzzy Systems, 2015, 28, 1785-1793.	0.8	12
46	Experimental investigations of vibration and acoustics signals in milling process using kapok oil as cutting fluid. Mechanics and Industry, 2020, 21, 521.	0.5	12
47	PREDICTING THE WEAR OF SOFT-ON-HARD BEARING COUPLES FOR HUMAN HIP PROSTHESIS USING FINITE ELEMENT CONCEPTS. Journal of Mechanics in Medicine and Biology, 2016, 16, 1650020.	0.3	10
48	Management of musculoskeletal shoulder and neck pain through ergonomic intervention: a pre-post design analysis in hand screen printing industry. International Journal of Business Innovation and Research, 2019, 18, 392.	0.1	10
49	Experimental and Finite Element Wear Study of Silicon Nitride Against Alumina for Hip Implants with Bio-Lubricant for Various Gait Activities. Silicon, 2021, 13, 633-644.	1.8	10
50	Investigations on the tribological behaviour, toxicity, and biodegradability of kapok oil bio-lubricant blended with (SAE20W40) mineral oil. Biomass Conversion and Biorefinery, 2023, 13, 3669-3681.	2.9	10
51	Ergonomic evaluation of ergonomically designed chalkboard erasers on shoulder and hand-arm muscle activity among college professors. International Journal of Industrial Ergonomics, 2021, 84, 103170.	1.5	10
52	Low back pain assessment using surface electromyography among industry workers during the repetitive bending tasks. International Journal of Human Factors and Ergonomics, 2018, 5, 277.	0.2	9
53	Occupational physical risk factors and prevalence of musculoskeletal disorders among the traditional lacquerware toy makers of South India. Work, 2021, 70, 405-418.	0.6	9
54	Understanding the Micro-Mechanical Behaviour of Recast Layer Formed during WEDM of Titanium Alloy. Metals, 2022, 12, 188.	1.0	9

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55	DYNAMIC CONTACT ANALYSIS OF TOTAL HIP PROSTHESIS DURING STUMBLING CYCLE. <i>Journal of Mechanics in Medicine and Biology</i> , 2014, 14, 1450041.	0.3	8
56	Effect of Strain Hardening during Unloading for an Elastic-Plastic Hemisphere in Contact with a Rigid Flat. <i>Mechanics of Advanced Materials and Structures</i> , 2014, 21, 139-144.	1.5	8
57	Frictional characteristics of PVD coated mechanical seals against carbon under various classes of liquid lubricants. <i>Industrial Lubrication and Tribology</i> , 2016, 68, 597-602.	0.6	8
58	Evaluation of vibrant muscles over the shoulder region among workers of the hand screen printing industry. <i>International Journal of Occupational Safety and Ergonomics</i> , 2018, 24, 278-285.	1.1	8
59	Optimization of turning parameters for AlSi10Mg/SCBA/SiC hybrid metal matrix composite using response surface methodology. <i>Materials Research Express</i> , 2019, 6, 106553.	0.8	8
60	Substantial reduction of carbon black and balancing the technical properties of styrene butadiene rubber compounds using nanoclay. <i>Journal of Rubber Research (Kuala Lumpur, Malaysia)</i> , 2020, 23, 79-87.	0.4	8
61	Experimental studies on viscosity, thermal and tribological properties of vegetable oil (kapok oil) with boric acid as an additive. <i>Micro and Nano Letters</i> , 2021, 16, 290-298.	0.6	8
62	Design, development, calibration, and testing of indigenously developed strain gauge based dynamometer for cutting force measurement in the milling process. <i>Journal of Mechanical Engineering and Sciences</i> , 2020, 14, 6594-6609.	0.3	8
63	Partial replacement of carbon black by nanoclay in butyl rubber compounds for tubeless tires. <i>Materialpruefung/Materials Testing</i> , 2017, 59, 1054-1060.	0.8	8
64	Predicting long-term wear performance of hard-on-hard bearing couples: effect of cup orientation. <i>Medical and Biological Engineering and Computing</i> , 2016, 54, 1541-1552.	1.6	7
65	Frictional characteristics of diamond like carbon and tungsten carbide/carbon coated high carbon high chromium steel against carbon in dry sliding conformal contact for mechanical seals. <i>Mechanics and Industry</i> , 2017, 18, 115.	0.5	7
66	Contact Stress and Wear Analysis of Zirconia Against Alumina for Normal and Physically Demanding Loads in Hip Prosthesis. <i>Journal of Bionic Engineering</i> , 2020, 17, 1045-1058.	2.7	7
67	Sliding interaction and wear studies between two hemispherical asperities based on finite element approach. <i>International Journal of Surface Science and Engineering</i> , 2008, 2, 71.	0.4	6
68	Dynamic contact analysis of total hip prosthesis during normal active walking cycle. <i>International Journal of Biomedical Engineering and Technology</i> , 2014, 15, 114.	0.2	6
69	Experimental and CFD investigations of carbon/SS316 mechanical face seals under different lubricating conditions. <i>Industrial Lubrication and Tribology</i> , 2015, 67, 124-132.	0.6	6
70	Frictional study of alumina, 316 stainless steel, phosphor bronze versus carbon as mechanical seals under dry sliding conformal contact. <i>Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology</i> , 2015, 229, 1292-1299.	1.0	6
71	Evaluation of tribological properties of Ceiba pentandra (kapok) seed oil as an alternative lubricant. <i>Industrial Lubrication and Tribology</i> , 2018, 70, 506-511.	0.6	6
72	Investigating the Efficacy of Adhesive Tape for Drilling Carbon Fibre Reinforced Polymers. <i>Materials</i> , 2021, 14, 1699.	1.3	6

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73	Sustainability in drilling of aluminum alloy. Cleaner Materials, 2022, 3, 100048.	1.9	6
74	Experimental and CFD Investigations of Mechanical Seals under Dry/Compressed Air/Liquid Lubricating Conditions. Procedia Engineering, 2013, 64, 419-425.	1.2	5
75	Association of Job and Demographical Risk Factor with Occurrence of Neck Pain Among Hand Screen Printing Workers. , 2018, , 131-137.		5
76	Wear prediction of hard carbon coated hard-on-hard hip implants using finite element method. International Journal of Computer Aided Engineering and Technology, 2018, 10, 440.	0.1	5
77	Short term tribological behavior of ceramic and polyethylene biomaterials for hip prosthesis. Materialpruefung/Materials Testing, 2021, 63, 470-473.	0.8	5
78	In-vitro tribological study and submodeling finite element technique in analyzing wear of zirconia toughened alumina against alumina with bio-lubricants for hip implants. Medical Engineering and Physics, 2021, 98, 83-90.	0.8	5
79	Experimental investigation on material removal rate, kerf width, surface roughness and the dimensional accuracy the accuracy of hole in Inconel 718 using wire electric discharge. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 0, , 095440892210960.	1.4	5
80	WEAR PREDICTION OF THE LUMBAR TOTAL DISC REPLACEMENT USING FINITE ELEMENT METHOD. Journal of Mechanics in Medicine and Biology, 2016, 16, 1650004.	0.3	4
81	Mechanical loading characteristics of total hip prosthetics subjected to dynamic loading cycles. Bio-Medical Materials and Engineering, 2018, 29, 723-737.	0.4	4
82	Experimental study and optimisation in turning process of EN8 steel using RSM with hybrid algorithm approach. International Journal of Bio-Inspired Computation, 2019, 13, 242.	0.6	4
83	Analysis of pile-up/sink-in during spherical indentation for various strain hardening levels. Structural Engineering and Mechanics, 2015, 53, 429-442.	1.0	4
84	Design and fabrication of fresh juice vending machine for commercial applications. IOP Conference Series: Materials Science and Engineering, 2021, 1055, 012010.	0.3	3
85	Investigating the Impact of the Hoe handle Length and Angle on the Shoulder and Arm Muscle Activity during Manual Farming Activities. Journal of the Institution of Engineers (India): Series A, 2021, 102, 1053-1060.	0.6	3
86	Assessment of shoulder and low back muscle activity of male kitchen workers using surface electromyography. International Journal of Occupational Medicine and Environmental Health, 2018, 31, 81-90.	0.6	3
87	Management of musculoskeletal shoulder and neck pain through ergonomic intervention: a pre-post design analysis in hand screen printing industry. International Journal of Business Innovation and Research, 2019, 18, 392.	0.1	3
88	Tribological behavior of zirconia-toughened alumina (ZTA) against Ti6Al4V under different bio-lubricants in hip prosthesis using experimental and finite element concepts. Materials Letters, 2022, 307, 131107.	1.3	3
89	Tribo-mechanical behaviour of aluminium alloy (AlSi10Mg) reinforced with palmyra shell ash and silicon carbide particles. Metallurgical Research and Technology, 2022, 119, 315.	0.4	3
90	Study of citation networks in tribology research. Collnet Journal of Scientometrics and Information Management, 2016, 10, 71-96.	0.4	2

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91	A Predictive Model for Galling Phenomenon and Its Applicability for Deep Drawing Processes. Journal of Tribology, 2022, 144, .	1.0	2
92	Long-term wear prediction of zirconia on alumina ceramic for hip prosthesis. International Journal of Surface Science and Engineering, 2020, 14, 192.	0.4	2
93	Studies on diesel engine exhaust gas for retrieving the waste heat through Triple Tube Heat Exchanger (TTHE) through different tubes. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2022, 44, 4149-4164.	1.2	2
94	Evaluation of the Efficacy in Ergonomically Designed Handsaw to Minimize the Muscular Load on Arm and Shoulder Muscles among Carpenters. Journal of the Institution of Engineers (India): Series C, 2022, 103, 1125-1132.	0.7	2
95	Evaluation of Contact Parameters Using Single Asperity Contact Model for the Normal Contact of Rough Surfaces. , 2006, , 1507.		1
96	Predicting wear of ceramicâ€“ceramic hip prosthesis using finite element method for different radial clearances. Tribology - Materials, Surfaces and Interfaces, 2014, 8, 194-200.	0.6	1
97	Wear in ceramic on ceramic type lumbar total disc replacement: Effect of radial clearance. Bio-Medical Materials and Engineering, 2015, 26, 89-96.	0.4	1
98	Combined effect of cup abduction and anteversion angles on long-term wear evolution of PCD-on-PCD hip bearing couple. International Journal of Biomedical Engineering and Technology, 2017, 24, 169.	0.2	1
99	Prevalence of Upper Limb Disorders and Investigation of Risk Factors Among Commercial Kitchen Male Workers in South India. , 2018, , 27-33.		1
100	Experimental and numerical analysis of impact strength of Al6082 for automotive structural applications. Materials Today: Proceedings, 2020, 33, 2863-2867.	0.9	1
101	EXAMINATION OF B ₄ Câ€“FeCrC COMPOSITE LAYER DURING DRY SLIDING USING STATISTICAL METHOD. Surface Review and Letters, 2021, 28, 2150034.	0.5	1
102	ASSESSING THE TRIBOLOGICAL PROPERTIES OF VEGETABLE OIL EMULSIONS AND MACHINING PARAMETER OPTIMIZATION USING RESPONSE SURFACE METHODOLOGY. Surface Review and Letters, 0, , .	0.5	1
103	Use of duck feather waste as a reinforcement medium in polymer composites. Cleaner Materials, 2021, 1, 100014.	1.9	1
104	Hand arm vibration measurement using micro-accelerometer in different brick structures. Smart Structures and Systems, 2014, 13, 959-974.	1.9	1
105	Experimental study and optimisation in turning process of EN8 steel using RSM with hybrid algorithm approach. International Journal of Bio-Inspired Computation, 2019, 13, 242.	0.6	1
106	Tribological Study on Titanium Based Composite Materials in Biomedical Applications. Composites Science and Technology, 2021, , 215-241.	0.4	1
107	Strength and durability performance of modified cement-based concrete incorporated immobilized bacteria. Environmental Science and Pollution Research, 2022, 29, 21670-21681.	2.7	1
108	Augmentation of crashworthiness design of circular tubular structures by engraving grooves of varying depths. Mechanics of Advanced Materials and Structures, 0, , 1-14.	1.5	1

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109	A Finite Element Study of Elastic-Plastic Contact Between Multiple Hemispherical Asperities. , 2005, , 395.		0
110	Effect of temperature on an elastic-plastic hemispherical asperity in contact with a rigid flat. International Journal of Computational Materials Science and Surface Engineering, 2011, 4, 292.	0.2	0
111	New Star-Like Surface texture for Enhanced Hydrodynamic Lubrication Performance. Archives of Metallurgy and Materials, 2017, 62, 1863-1869.	0.6	0
112	Experimental and numerical investigations on plasma sprayed ceramic coatings with varying coating thickness. International Journal of Computational Materials Science and Surface Engineering, 2017, 7, 26.	0.2	0
113	Analysis of motor cycle helmet under static and dynamic conditions considering different materials. Materials Today: Proceedings, 2021, 43, 1098-1102.	0.9	0
114	EFFECT OF LOADS AND BIO-LUBRICANTS ON TRIBOLOGICAL STUDY OF ZIRCONIA AND ZIRCONIA TOUGHENED ALUMINA AGAINST Ti6Al4V FOR HIP PROSTHESIS. Surface Review and Letters, 0, , 2141006.	0.5	0
115	Experimental and numerical investigations on plasma sprayed ceramic coatings with varying coating thickness. International Journal of Computational Materials Science and Surface Engineering, 2017, 7, 26.	0.2	0
116	Combined effect of cup abduction and anteversion angles on long-term wear evolution of PCD-on-PCD hip bearing couple. International Journal of Biomedical Engineering and Technology, 2017, 24, 169.	0.2	0
117	Wear prediction of hard carbon coated hard-on-hard hip implants using finite element method. International Journal of Computer Aided Engineering and Technology, 2018, 10, 440.	0.1	0
118	FEA of SAW penetration of Ramor 500 steel. Materialpruefung/Materials Testing, 2020, 62, 1192-1198.	0.8	0
119	Long-term wear prediction of zirconia on alumina ceramic for hip prosthesis. International Journal of Surface Science and Engineering, 2020, 14, 192.	0.4	0
120	Impact of digital boards on hand and neck muscle activity during online teaching process. Education and Information Technologies, 2022, , 1-14.	3.5	0
121	Influence of grab handle designs on muscle activation level and fatigue in hand and shoulder muscle during bus travel to prevent non collision injuries. Journal of Ambient Intelligence and Humanized Computing, 0, , .	3.3	0