



Shankar S

Chief Coordinator - R&D Cell,
Kongu Engineering College
, INDIA.

Computational Wear Modelling
Tribology
Biomechanics
Occupational Ergonomics

GET MY OWN PROFILE

	All	Since 2015
Citations	1342	1203
h-index	18	17
i10-index	31	29

TITLE	CITED BY	YEAR
Experimental investigations of vibration and acoustics signals in milling process using kapok oil as cutting fluid S Shankar, M Manikandan, G Raja, A Pramanik Mechanics & Industry 21 (5), 521		2020
Experimental and submodeling technique to investigate the wear of silicon nitride against Ti6Al4V alloy with bio-lubricants for various gait activities S Shankar, R Nithyaprakash, BR Santhosh, GUR Ali Kaya, A Pramanik Tribology International 151 (November), 106529 1-10		2020
Contact stress and wear analysis of zirconia against alumina for normal and physically demanding loads in hip prosthesis S Shankar, R Nithyaprakash, AP Sugunesh, MS Uddin, A Pramanik Journal of Bionic Engineering 17 (5), 1045 -1058		2020
Finite element submodeling technique to analyze the contact pressure and wear of hard bearing couples in hip prosthesis S Shankar, R Nithyaprakash, BR Santhosh, MS Uddin, A Pramanik Computer Methods in Biomechanics and Biomedical Engineering 23 (8), 422-431	2	2020
Experimental and Finite Element Wear study of Silicon Nitride against Alumina for Hip Implants with Bio-Lubricant for Various Gait Activities S Shankar, R Nithyaprakash, AP Sugunesh, KA Selvamani, MS Uddin Silicon, Accepted	2	2020
Long-term Wear Prediction of Zirconia on Alumina Ceramic for Hip Prosthesis S Shankar, R Nithyaprakash, AP Sugunesh, MS Uddin International Journal of Surface Science and Engineering 14 (3), 192-206		2020
Prevalence of Work Related Musculoskeletal Disorders among Occupational Bus Drivers of Karnataka, South INDIA H PradeepKumar, G Sathivel, S Shankar WORK: A Journal of Prevention, Assessment & Rehabilitation 66 (1), 73-84	1 *	2020
Analysis of motor cycle helmet under static and dynamic conditions considering different materials S Shankar, R Nithyaprakash, S Praveen, SS Kumar, AM Sriram Materials Today: Proceedings		2020
Substantial reduction of carbon black and balancing the technical properties of styrene butadiene rubber compounds using nanoclay MK HariKrishna Kumar, S Shankar, R Rajasekar, P Samir Kumar, ... Journal of Rubber Research 23 (2), 79-87		2020

TITLE	CITED BY	YEAR
Tribological behavior of polyethylene and ceramic biomaterials under different bio-lubricants R Nithyaprakash, S Shankar, BR Santhosh, T Karthik kumar, P Kiruba, ... Trends in Biomaterials & Artificial Organs, Accepted		2020
Experimental and numerical analysis of impact strength of Al6082 for automotive structural applications DK Karupannasamy, KSK SasiKumar, S Shankar Materials Today: Proceedings		2020
Burr formation and its treatments—a review SY Jin, A Pramanik, AK Basak, C Prakash, S Shankar, S Debnath The International Journal of Advanced Manufacturing Technology 107 (5-6 ...	7	2020
Design, development, calibration, and testing of indigenously developed strain gauge based dynamometer for cutting force measurement in the milling process T Mohanraj, S Shankar, R Rajasekar, MS Uddin Journal of Mechanical Engineering Sciences 14 (2), 6594 - 6609	1	2020
Tool condition monitoring techniques in milling process - a review T Mohanraj, S Shankar, R Rajasekar, NR Sakthivel, P Alokesh Journal of Materials Research and Technology 9 (1), 1032-1042	20	2020
Tool wear prediction in hard turning of EN8 steel using cutting force and surface roughness with artificial neural network SK Thangarasu, S Shankar, T Mohanraj IMech Part C: Journal of Mechanical Engineering Science 234 (1), 329-342	6 *	2020
Optimization of turning parameters for AlSi10Mg/SCBA/SiC hybrid metal matrix composite using response surface methodology S Shankar, A Balaji, A Pramanik Materials Research Express 6 (10), 106553 1-11	1	2019
Aluminium Alloy Reinforced With Fly Ash: Techniques & Particle Size S Shankar, S Harichandran Jurnal Tribologi 23, 13-37	1	2019
Burr formation during drilling of mild steel at different machining conditions A Pramanik, AK Basak, MS Uddin, S Shankar, S Debnath, MN Islam Materials and Manufacturing Processes 34 (7), 726-735	5	2019
Study of the effect of varying shapes of holes in energy absorption characteristics on aluminium circular windowed tubes under quasi-static loading N Baaskaran, K Ponappa, S Shankar Structural Engineering and Mechanics 70 (2), 153-168		2019
Experimental study and Optimization in turning Process of EN8 steel using RSM with Hybrid Algorithm Approach SK Thangarasu, S Shankar, R Navin Prasath International Journal of Bio-Inspired Computation 13 (4), 242-256	2	2019
Tool condition monitoring in the milling process with vegetable based cutting fluids using vibration signatures M Thangamuthu, S Shankar, R Rathanasamy, D Ramasamy, ... Materials Testing 61 (3), 282-288	6	2019

TITLE	CITED BY	YEAR
Prediction of cutting tool wear during milling process using artificial intelligence techniques S Shankar, T Mohanraj, R Rajasekar International Journal of Computer Integrated Manufacturing 32 (2), 174-182	19	2019
Tool condition monitoring while using vegetable based cutting fluids during milling of INCONEL 625 S Shankar, T Mohanraj, A Pramanik Journal of Advanced Manufacturing Systems 18 (4), 563-581	5	2019
Management of Musculoskeletal Shoulder and Neck Pain through Ergonomic Intervention: A Pre-Post Design analysis in Hand Screen Printing Industry S Shankar, T Naveen Kumar, J Karthick International Journal of Business Innovation and Research 18 (3), 392-409		2019
Investigations on tribo-mechanical behaviour of Al-Si10-Mg/sugarcane bagasse ash/SiC hybrid composites S Shankar, A Balaji, N Kawin, A Pramanik China Foundry 16 (4), 277-284	2	2019
Air suffocation prevention inside a car cabin S Shankar, VG Pratheep, G Pranesh, P Umesh, VM Vignesh International Journal of Scientific and Technology Research 8 (12), 2003-2006		2019
Design and fabrication of portable sugarcane harvesting machine S Shankar, C Maheshwari, R Gowtham, P Kiruba, K Mohansrinivas International Journal of Scientific and Technology Research 8 (12), 2059-2062		2019
Mechanical loading characteristics of total hip prosthetics subjected to dynamic loading cycles M Kalayarasan, S Shankar, M Manikandan, K Adithan Bio-Medical Materials and Engineering 29 (6), 723-737	5	2018
Assessment of dynamic crushing and energy absorption characteristics of thin-walled cylinders due to axial and oblique impact load N Baaskaran, K Ponappa, S Shankar Steel and Composite Structures 28 (2), 179-194	2	2018
Investigations on Mechanical and Tribological Properties of Al-Si10-Mg alloy / Sugarcane Bagasse Ash Particulate Composites S Shankar, A Balaji, N Kawin Particulate Science and Technology 36 (6), 762-770	14	2018
Computational Wear Assessment of Hard on Hard Hip Implants Subject to Physically Demanding Tasks R Nithyaprakash, S Shankar, MS Uddin Medical & Biological Engineering & Computing 56 (5), 899-910	8	2018
Low back pain assessment using Surface Electromyography among industry workers during the repetitive bending tasks S Shankar, R Naveenkumar, S Pradeep, J Karthick, J Srinivasan International Journal of Human Factors and Ergonomics 5 (4), 277-292	1	2018

TITLE	CITED BY	YEAR
Evaluation of Tribological Properties on Ceiba Pentandra (Kapok) Seed Oil as an Alternative Lubricant S Shankar, M Manikandan, G Raja Industrial Lubrication and Tribology 70 (3), 506-511	6	2018
Evaluation of vibrant muscles over shoulder region among the workers of Hand Screen Printing Industry S Shankar, R Naveenkumar, J Karthick, P Mohankumar International Journal of Occupational Safety and Ergonomics 24 (2), 278-285	4	2018
Assessment of shoulder and low back muscle activity of kitchen workers using surface electromyography S Shankar, M Shanmugam, J Srinivasan International Journal of Occupational Medicine and Environmental Health 31 ...	5	2018
Prediction of Cutting Force in Turning Process-an Experimental Approach SK Thangarasu, S Shankar, AT Thomas, G Sridhar IOP conference series: materials science and engineering 310 (1)	6	2018
Milling of Nanoparticles Reinforced Al-Based Metal Matrix Composites A Pramanik, AK Basak, Y Dong, S Shankar, G Littlefair Journal of Composites Science 2 (1), 13	9	2018
Wear prediction of hard carbon coated hard-on-hard hip implants using finite element method S Shankar, R Siddarth, R Nithyaprakash, MS Uddin International Journal of Computer Aided Engineering and Technology 10 (4 ...	1	2018
Partial replacement of carbon black by nanoclay in butyl rubber compounds for tubeless tires MK Harikrishna Kumar, S Shankar, R Rajasekar, P SamirKumar, ... Materials Testing 59 (11-12), 1054-1060	2	2017
A New Star Like Surface Texture Shape for Enhanced Hydrodynamic Lubrication Performance MS Uddin, YW Liu, S Shankar Archives of Metallurgy and Materials 62 (3), 1861-1867		2017
Quasi-Static Crushing and Energy Absorption Characteristics of Thin-Walled Cylinders with Geometric Discontinuities of Various Aspect Ratios N Baaskaran, K Ponappa, S Shankar Latin American Journal of Solids and Structures 14 (9), 1767-1787	6	2017
Ergonomics for Hand Screen Printing Workers: Cognitive Perception S Shankar, J Karthick, R Naveenkumar Ergonomic Design of Products and Worksystems—21st Century Perspectives of ...		2017
Association of Job and Demographical Risk Factor with Occurrence of Neck Pain Among Hand Screen Printing Workers S Shankar, S: Naveen Kumar, R: Mohankumar, P: Karthick, J: Pradeep Ergonomics in Caring for People, Chapter 17, 131-137	2 *	2017
Prevalence of Upper Limb Disorders and Investigation of Risk Factors Among Commercial Kitchen Male Workers in South India S Shankar, J Shanmugam, M: Srinivasan Ergonomics in Caring for People, Chapter 14, 27-33		2017

TITLE	CITED BY	YEAR
Experimental Investigation and Process Parameter Optimization in Milling of 7075 – T6 Hybrid Aluminium Metal Matrix Composite using Response Surface Methodology S Shankar, T Mohanraj Journal of the Balkan Tribological Association 23 (1), 124-138	3	2017
Combined Effect of Cup Abduction and Anteversion Angles on Long-Term Wear Evolution of PCD-on-PCD Hip Bearing Couple S Shankar, K Gowthaman, MS Uddin International Journal of Biomedical Engineering and Technology 24 (2), 169-183	1	2017
Dry Sliding Wear Behaviour of Palmyra Shell Ash Reinforced Aluminium Matrix (AlSi10Mg) Composites S Shankar, S Elango Tribology Transactions 60 (3), 469-478	9	2017
Investigation of Surface Texture Generated by Friction Drilling on Al2024-T6 M Boopathi, S Shankar, T Kanish Mechanics, Materials Science & Engineering MMSE Journal. Open Access 9	2	2017
Influence of Surface Texture Shape, Geometry and Orientation on Hydrodynamic Lubrication Performance of Plane-to-Plane Slider Surfaces MS Uddin, T Ibatan, S Shankar Lubrication Science 29 (3), 153-181	36	2017
Influence of vegetable based cutting fluids on cutting force and vibration signature during milling of Aluminium metal matrix composites S Shankar, T Mohanraj, K Ponappa Jurnal Tribologi 12 (1), 1-17	16	2017
Experimental and numerical investigation on plasma sprayed ceramic coatings for different coating thickness M Kalayarasan, V Prabhu Raja, S Shankar, V Nithin, V Karthi International Journal of Computational Materials Science and Surface ...		2017
Prevalence of work-related musculoskeletal injuries among South Indian hand screen-printing workers S Shankar, R Naveen Kumar, P Mohankumar, J Srinivasan WORK: A Journal of Prevention, Assessment & Rehabilitation 58 (2), 163-172	11	2017
Frictional characteristics of diamond like carbon and tungsten carbide/carbon coated high carbon high chromium steel against carbon in dry sliding conformal contact for ... S Shankar, P Krishna Kumar Mechanics & Industry 18 (1), 115(1-7)	2	2017
Effect of Pretreatment Methods on Properties of Natural Fiber Composites: A Review N Venkatachalam, P Navaneethakrishnan, R Rajsekar, S Shankar Polymers & Polymer Composites 24 (7), 555-566	44	2016
Investigations on Various Thread Designs & Materials for Dental Implants – A 3D Finite Element Study S Shankar, K Gowthaman, G Raja, C Nirmala, N Satheesh Kumar Trends in Biomaterials and Artificial Organs 30 (2), 100-105	1	2016

TITLE	CITED BY	YEAR
Multi-response milling process optimization using the Taguchi method coupled to grey relational analysis S Shankar, T Mohanraj, SK Thangarasu Materials Testing 58 (5), 462-470	13	2016
Study of Citation Networks in Tribology Research B Elango, B Lutz, S Shankar Collnet Journal of Scientometrics and Information Management 10 (1), 71-96	5	2016
Predicting Long-Term Wear Performance of Hard-on-Hard Bearing Couples - Effect of Cup Orientation S Shankar, K Gowthaman, MS Uddin Medical & Biological Engineering & Computing 54 (10), 1541-1552	8	2016
Frictional characteristics of PVD coated mechanical seals against carbon under various classes of liquid lubricants S Shankar, P Krishna Kumar Industrial Lubrication and Tribology 68 (5), 597- 602	7	2016
Experimental study on frictional characteristics of tungsten carbide versus carbon as mechanical seals under dry and eco-friendly lubrications S Shankar, G Praveenkumar, P Krishnakumar International Journal of Refractory Metals and Hard Materials 54, 39-45	7	2016
Predicting the wear of soft on hard bearing couples for human hip prosthesis using finite element concepts S Shankar, R Nithyaprakash Journal of Mechanics in Medicine and Biology 16 (3), 1650020 (1-17)	5	2016
Wear prediction of the lumbar total disc replacement using finite element method S Shankar, D Kesavan Journal of Mechanics in Medicine and Biology 16 (2), 1650004 (1-12)	2	2016
Tool condition monitoring in milling using sensor fusion technique S Shankar, T Mohanraj Proceedings of Malaysian International Tribology Conference 2015 2015, 322-323	7	2015
Wear in ceramic on ceramic type lumbar total disc replacement: effect of radial clearance S Shankar, D Kesavan Bio-Medical Materials and Engineering 26 (1-2), 89-96	1	2015
Frictional study of alumina, 316 stainless steel, phosphor bronze versus carbon as mechanical seals under dry sliding conformal contact S Shankar, G Praveenkumar, P Krishnakumar IMEchE, Part J: Journal of Engineering Tribology 229 (11), 1292-1299	5	2015
Prediction of cutting force in turning process: an experimental and fuzzy approach SK Thangarasu, S Shankar, T Mohanraj Journal of Intelligent & Fuzzy Systems 28 (4), 1785 - 1793	10	2015
Workplace factors and prevalence of Low Back Pain among Male Commercial kitchen workers S Shankar, M Shanmugam, J Srinivasan Journal of Back and Musculoskeletal Rehabilitation 28 (3), 481-488	12	2015

TITLE	CITED BY	YEAR
Dry Sliding Wear and Friction Behavior of Aluminum-Rice Husk Ash Composite using Taguchi's Technique M Senthilkumar, SD Saravanan, S Shankar Journal of Composite Materials 49 (8), 2241-2250	21	2015
Analysis of Pile-up/sink-in during spherical indentation for various strain hardening levels S Shankar, P Loganathan, J Mertnes Structural Engineering and Mechanics, An International Journal 53 (3), 429-442	4	2015
Investigation of Work-related Musculoskeletal Disorders among Male kitchen workers in South India S Shankar, M Shanmugam International Journal of Occupational Safety and Ergonomics 21 (4), 524-531	24	2015
Experimental and CFD investigations of carbon/SS316 mechanical face seals under different lubricating conditions S Kavinprasad, S Shankar, M Karthic Industrial Lubrication and Tribology 67 (2), 124-132	9	2015
Influence of Wear Co-efficient in Computational Wear Prediction for Human Hip Prosthesis S Shankar, R Nithyaprakash International Colloquium on Materials, Manufacturing and Metrology, ICMMM ...		2014
Predicting the Wear of Ceramic-Ceramic Hip Prosthesis using Finite Element Method for different Radial Clearances S Shankar Tribology - Materials, Surfaces & Interfaces 8 (4), 194-200	1	2014
Review article on wheat flour/wheat bran/wheat husk based bio composites RS Shankar, SA Srinivasan, S Shankar, R Rajasekar, RN Kumar, ... Int Journal of Scientific and Research Publications 4 (4), 1-9	9 *	2014
Dynamic contact analysis of total hip prosthesis during normal active walking cycle S Shankar, M Manikandan, M Kalayarasan International Journal of Biomedical Engineering and Technology 15 (2), 114-127	9	2014
Hand arm vibration measurement using micro-accelerometer in different brick structures K Gomathi, A Senthilkumar, S Shankar, S Thangavel, R Mohanapriya Smart Structures and Systems, An international Journal 13 (6), 959-974		2014
Effect of Radial Clearance on Wear and Contact Pressure of Hard-on-Hard Hip Prosthesis using Finite Element Concepts S Shankar, R Nithyaprakash Tribology Transactions 57 (5), 814-820	18	2014
Effect of radial clearance on wear of hard-on-hard hip prosthesis S Shankar, R Nithyaprakash Technology Letters 1 (1), 28-32		2014

TITLE	CITED BY	YEAR
Simulation of muscle activation patterns in the hip joint during normal level walking followed by sit-to-stand movement between two hip implants SN Omkar, V Boobalan, DV Ramesh, S Shankar Trends in Biomaterials and Artificial Organs 28 (1), 19-25	1	2014
Wear prediction on silicon nitride bearing couple in human hip prosthesis using finite element concepts S Shankar, R Nithya Prakash Proc IMechE, Part J: Journal of Engineering Tribology 228 (7), 717-724	14	2014
Design and Fabrication of Semi-Automatic Road Reflector Stud Installation Machine S Shankar, R Deepak Kumar, S Pradeep, M Navin Prasad Journal of Mechanical and Civil Engineering 10 (5), 20-23		2014
Dynamic contact analysis of total hip prosthesis during stumbling cycle S Shankar, M Manikandan Journal of Mechanics in Medicine and Biology 14 (3), 1450041 (1-13)	16	2014
Investigation of chemically treated randomly oriented sansevieria ehrenbergii fiber reinforced isophthallic polyester composites TP Sathishkumar, P Navaneethakrishnan, S Shankar, R Rajasekar Journal of Composite Materials 48 (24), 2961-2975	12	2014
Mechanical properties and water absorption of short snake grass fiber reinforced isophthallic polyester composites TP Sathishkumar, P Navaneethakrishnan, S Shankar, R Rajasekar Fibers and Polymers 15 (9), 1927-1934	22	2014
Effect of Strain Hardening during Unloading for an Elastic-Plastic Hemisphere in Contact with a Rigid Flat S Shankar, KA Arjun Mechanics of Advanced Materials and Structures 21 (2), 139-144	4	2014
Characterization of new cellulose sansevieria ehrenbergii fibers for polymer composites TP Sathishkumar, P Navaneethakrishnan, S Shankar, R Rajasekar Composite Interfaces 20 (8), 575-593	100	2013
Investigation on various proximal femoral stem shapes for human hip prosthesis using finite element concepts S Shankar, V Boobalan Trends in Biomaterials and Artificial Organs 27 (4), 153-161	2	2013
Experimental Investigation of Friction Drilling on Brass, Aluminium and Stainless Steel M Boopathi, S Shankar, S Manikandakumar, R Ramesh Procedia Engineering 64, 1219-1226	51	2013
Experimental and CFD Investigations of Mechanical Seals under Dry/Compressed Air/Liquid Lubricating Conditions M Karthic, S Kavinas, S Shankar Procedia Engineering 64, 419-425	11	2013

TITLE	CITED BY	YEAR
Effect of Particle Size on Tribological Behavior of Rice Husk Ash Reinforced Aluminum alloy (AlSi10Mg) Matrix Composites SD Saravanan, M Senthilkumar, S Shankar Tribology Transactions 56 (6), 1156-1167	52	2013
Characterization of natural fiber and composites - A review TP Sathishkumar, P Navaneethakrishnan, S Shankar, R Rajasekar Journal of Reinforced Plastics and Composites 32 (19), 1457-1476	163	2013
Investigation of chemically treated longitudinally oriented snake grass fiber-reinforced isophthalic polyester composites TP Sathishkumar, P Navaneethakrishnan, S Shankar, R Rajasekar Journal of Reinforced Plastics and Composites 32 (22), 1698-1714	12	2013
Mechanical properties and water absorption of snake grass longitudinal fiber reinforced isophthalic polyester composites TP Sathishkumar, P Navaneethakrishnan, S Shankar, R Rajasekar Journal of Reinforced Plastics and Composites 32 (16), 1211-1223	21	2013
Muscle fatigue due to book arrangements in library shelf S Shankar, A Josin Hippolitus International Journal of Mechanical Engineering and Research 3 (4), 262-265		2013
Material selection of acetabular component in human hip prosthesis using finite element concepts S Shankar, L Prakash, M Kalayarasan International Journal Experimental and Computational Biomechanics 2 (2), 118-135	13	2013
Finite element analysis of different contact bearing couples for human hip prosthesis S Shankar, L Prakash, M Kalayarasan International Journal of Biomedical Engineering and Technology 11 (1), 66-80	27	2013
Mechanical properties of randomly oriented snake grass fiber with banana and coir fiber-reinforced hybrid composites TP Sathishkumar, P Navaneethakrishnan, S Shankar, J Kumar Journal of Composite Materials 47 (18), 2181-2191	44	2013
Tensile and flexural properties of snake grass natural fiber reinforced isophthalic polyester composites TP Sathishkumar, P Navaneethakrishnan, S Shankar Composites Science and Technology 72 (10), 1183-1190	203	2012
Effect of temperature on an elastic-plastic hemispherical asperity in contact with a rigid flat P Loganathan, S Shankar Int. J. of Computational Mat. Science and Surface Engg. 4 (4), 292-310		2011
Experimental and Theoretical Investigations on a Sphere in Contact with the Flat Plate S Shankar, MM Mayuram RSM International Journal of Engineering, Technology and Management 1 (1), 18-33		2009