

Dinesh Kalyanasundaram

List of Publications by Year in descending order

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Version: 2024-02-01

68
papers

1,048
citations

471061

17
h-index

500791

28
g-index

70
all docs

70
docs citations

70
times ranked

1167
citing authors

#	ARTICLE	IF	CITATIONS
1	Tribodynamic studies of textured gearsets lubricated with fresh and MoS ₂ blended greases. Tribology International, 2022, 165, 107247.	3.0	22
2	Design and development of 3D printing assisted microwave sintering of elbow implant with biomechanical properties similar to human elbow. Rapid Prototyping Journal, 2022, 28, 390-403.	1.6	3
3	Protein Patterning on Microtextured Polymeric Nanobrush Templates Obtained by Nanosecond Fiber Laser. Macromolecular Bioscience, 2022, 22, e2100454.	2.1	7
4	Cellular studies and sustained drug delivery via nanostructures fabricated on 3D printed porous Neovius lattices of Ti ₆ Al ₄ V ELI. Biomedical Materials (Bristol), 2022, 17, 045004.	1.7	2
5	Modified Surface Composition and Biocompatibility of Core-Shell Nitinol Nanoparticles Fabricated via Laser Ablation of Differently Passivized Targets. Frontiers in Materials, 2022, 9, .	1.2	2
6	A novel, minimally invasive implant to assist in repeated intraocular drug delivery. Biomedical Microdevices, 2022, 24, 17.	1.4	0
7	An open-source OpenSim® ankle-foot musculoskeletal model for assessment of strains and forces in dense connective tissues. Computer Methods and Programs in Biomedicine, 2022, 224, 106994.	2.6	1
8	Controlled manipulation of CNTs in glass/epoxy composites with cut-outs using non-uniform electric field. Advanced Composite Materials, 2021, 30, 205-221.	1.0	7
9	Enhancement of open hole tensile strength via alignment of carbon nanotubes infused in glass fiber - epoxy - CNT multi-scale composites. Composites Part A: Applied Science and Manufacturing, 2021, 140, 106155.	3.8	24
10	A cadaveric study on the rate of strain-dependent behavior of human anterior cruciate ligament. Acta of Bioengineering and Biomechanics, 2021, 23, .	0.2	3
11	An exploration of frictional and vibrational behaviors of textured deep groove ball bearing in the vicinity of requisite minimum load. Friction, 2021, 9, 1749-1765.	3.4	25
12	Epoxy based sandwich composite using three-dimensional integrally woven fabric as core strengthened with additional carbon face-sheets. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 116, 104317.	1.5	6
13	Estimation of forces on anterior cruciate ligament in dynamic activities. Biomechanics and Modeling in Mechanobiology, 2021, 20, 1533-1546.	1.4	8
14	Functionalized Co ₂ FeAl Nanoparticles for Detection of SARS CoV-2 Based on Reverse Transcriptase Loop-Mediated Isothermal Amplification. ACS Applied Nano Materials, 2021, 4, 5871-5882.	2.4	10
15	Thermo-physical modeling and experimental validation of core-shell nanoparticle fabrication of nickel-titanium (nitinol) alloy. Optics and Laser Technology, 2021, 138, 106880.	2.2	4
16	Improvement of Deep Groove Ball Bearing's Performance Using a Bionic Textured Inner Race. Journal of Bionic Engineering, 2021, 18, 974-990.	2.7	23
17	Mitigation of notch sensitivity by controlled alignment of carbon nanotubes in epoxy using electric field application. Composites Part A: Applied Science and Manufacturing, 2021, 149, 106544.	3.8	3
18	Laser based micro texturing of freeform surfaces of implants using a Stewart platform. Precision Engineering, 2021, 72, 294-303.	1.8	3

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19	Investigation of the mechanical performance of carbon/polypropylene 2D and 3D woven composites manufactured through multi-step impregnation processes. <i>Composites Part A: Applied Science and Manufacturing</i> , 2020, 130, 105733.	3.8	14
20	Tribological and Vibration Studies of Textured Spur Gear Pairs under Fully Flooded and Starved Lubrication Conditions. <i>Tribology Transactions</i> , 2020, 63, 1103-1120.	1.1	12
21	Optimization of laser parameters for improved corrosion resistance of nitinol. <i>Materials and Manufacturing Processes</i> , 2020, 35, 1661-1669.	2.7	17
22	Levels of TGF- β 1 in peri-miniscrew implant crevicular fluid. <i>Journal of Oral Biology and Craniofacial Research</i> , 2020, 10, 93-98.	0.8	1
23	Graphene Quantum Dots in the Game of Directing Polymer Self-Assembly to Exotic Kagome Lattice and Janus Nanostructures. <i>ACS Nano</i> , 2019, 13, 9397-9407.	7.3	11
24	Investigation, modelling and validation of material separation mechanism during fiber laser machining of medical grade titanium alloy Ti6Al4V and stainless steel SS316L. <i>Mechanics of Materials</i> , 2019, 137, 103125.	1.7	17
25	Simultaneous and high sensitive detection of <i>Salmonella typhi</i> and <i>Salmonella paratyphi a</i> in human clinical blood samples using an affordable and portable device. <i>Biomedical Microdevices</i> , 2019, 21, 95.	1.4	7
26	Box-Behnken technique based multi-parametric optimization of electrostatic spray coating in the manufacturing of thermoplastic composites. <i>Materials and Manufacturing Processes</i> , 2019, 34, 1638-1645.	2.7	20
27	An open-source plugin for OpenSim [®] to model the non-linear behaviour of dense connective tissues of the human knee at variable strain rates. <i>Computers in Biology and Medicine</i> , 2019, 110, 186-195.	3.9	7
28	Relationship between Dislocation Density and Antibacterial Activity of Cryo-Rolled and Cold-Rolled Copper. <i>Materials</i> , 2019, 12, 200.	1.3	16
29	Self-functionalized ultrastable water suspension of luminescent carbon quantum dots. <i>Materials Chemistry and Physics</i> , 2019, 225, 23-27.	2.0	41
30	Development and characterization of electric field directed preferentially aligned CNT nanocomposites. <i>Mechanics of Advanced Materials and Structures</i> , 2019, 26, 35-41.	1.5	14
31	Influence of various forms of polypropylene matrix (fiber, powder and film states) on the flexural strength of carbon-polypropylene composites. <i>Composites Part B: Engineering</i> , 2019, 166, 56-64.	5.9	28
32	Experimental assessment of biomechanical properties in human male elbow bone subjected to bending and compression loads. <i>Journal of Applied Biomaterials and Functional Materials</i> , 2019, 17, 228080001879381.	0.7	15
33	Outcome and safety analysis of 3D-printed patient-specific pedicle screw jigs for complex spinal deformities: a comparative study. <i>Spine Journal</i> , 2019, 19, 56-64.	0.6	84
34	Dry Electrostatic Spray Coated Towpregs for Thermoplastic Composites. <i>Fibers and Polymers</i> , 2018, 19, 364-374.	1.1	15
35	An extended OpenSim knee model for analysis of strains of connective tissues. <i>BioMedical Engineering OnLine</i> , 2018, 17, 42.	1.3	13
36	Rapid Detection Device for <i>Salmonella typhi</i> in Milk, Juice, Water and Calf Serum. <i>Indian Journal of Microbiology</i> , 2018, 58, 381-392.	1.5	13

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37	Volumetric locking free 3D finite element for modelling of anisotropic visco-hyperelastic behaviour of anterior cruciate ligament. <i>Journal of Biomechanics</i> , 2018, 73, 1-8.	0.9	11
38	Liquid Slippage in Confined Flows: Effect of Periodic Micropatterns of Arbitrary Pitch and Amplitude. <i>Journal of Heat Transfer</i> , 2018, 140, .	1.2	2
39	Mechanical Properties of the Human Elbow Bones Measured by Nanoindentation and Microindentation. , 2018, , .		1
40	Numerical and Experimental Studies on the Development of Variable Density Nanocomposites for Structural Applications. , 2018, , .		1
41	Microwave Sintering of Ti6Al4V: Optimization of Processing Parameters for Maximal Tensile Strength and Minimal Pore Size. <i>Metals</i> , 2018, 8, 1086.	1.0	8
42	Reduction of Hydraulic Friction in Confined Flows by Laser Texturing: Experiments and Theoretical Validation. , 2018, , .		0
43	Optimization of pressure-less microwave sintering of Ti6Al4V by response surface methodology. <i>Materials and Manufacturing Processes</i> , 2018, 33, 1835-1844.	2.7	16
44	Open hole fatigue testing of laser machined MD-CFRPs. <i>Composites Part A: Applied Science and Manufacturing</i> , 2018, 111, 33-41.	3.8	26
45	A Review on Biomechanics of Anterior Cruciate Ligament and Materials for Reconstruction. <i>Applied Bionics and Biomechanics</i> , 2018, 2018, 1-14.	0.5	75
46	An Affordable Insole-Sensor-Based Trans-Femoral Prosthesis for Normal Gait. <i>Sensors</i> , 2018, 18, 706.	2.1	36
47	Oxidation facilitated antimicrobial ability of laser micro-textured titanium alloy against gram-positive <i>Staphylococcus aureus</i> for biomedical applications. <i>Journal of Laser Applications</i> , 2018, 30, .	0.8	15
48	Highly-sensitive detection of <i>Salmonella typhi</i> in clinical blood samples by magnetic nanoparticle-based enrichment and in-situ measurement of isothermal amplification of nucleic acids. <i>PLoS ONE</i> , 2018, 13, e0194817.	1.1	21
49	Sound4All: Towards affordable large-scale hearing screening. , 2017, , .		3
50	Confinement Effects on Effective Slip of Patterned Surfaces. , 2017, , .		0
51	A review of biomarkers in peri-miniscrew implant crevicular fluid (PMICF). <i>Progress in Orthodontics</i> , 2017, 18, 42.	1.3	11
52	Highly-sensitive detection of <i>Salmonella typhi</i> in human blood using a portable optical system for detection of nucleic acids amplification. , 2017, , .		0
53	Permeability and effective slip in confined flows transverse to wall slippage patterns. <i>Physics of Fluids</i> , 2016, 28, .	1.6	18
54	Liquid Slippage in Confined Flows: Effect of Periodic Micropatterns of Arbitrary Pitch and Amplitude. , 2016, , .		1

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55	Laser machining of Kevlar fiber reinforced laminates – Effect of polyetherimide versus polypropylene matrix. Composites Science and Technology, 2016, 134, 267-274.	3.8	23
56	Machining damage in FRPs: Laser versus conventional drilling. Composites Part A: Applied Science and Manufacturing, 2016, 82, 42-52.	3.8	86
57	Surface deterioration and elemental composition of retrieved orthodontic miniscrews. American Journal of Orthodontics and Dentofacial Orthopedics, 2015, 147, S88-S100.	0.8	20
58	Authors' response. American Journal of Orthodontics and Dentofacial Orthopedics, 2015, 148, 362-363.	0.8	0
59	Hybrid CO2 Laser/Waterjet Machining of Polycrystalline Diamond Substrate: Material Separation Through Transformation Induced Controlled Fracture. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2014, 136, .	1.3	12
60	Rapid extraction and preservation of genomic DNA from human samples. Analytical and Bioanalytical Chemistry, 2013, 405, 1977-1983.	1.9	7
61	Nanotips for single-step preparation of DNA for qPCR analysis. Analyst, The, 2013, 138, 3135.	1.7	4
62	Electric field-induced concentration and capture of DNA onto microtips. Microfluidics and Nanofluidics, 2012, 13, 217-225.	1.0	11
63	Application of chemical transformation induced fracture for cutting of superhard materials. Journal of Manufacturing Processes, 2012, 14, 336-342.	2.8	5
64	Immunosensor towards low-cost, rapid diagnosis of tuberculosis. Lab on A Chip, 2012, 12, 1437.	3.1	56
65	Fracture mechanics-based analysis for hybrid laser/waterjet (LWJ) machining of yttria-partially stabilized zirconia (Y-PSZ). International Journal of Machine Tools and Manufacture, 2010, 50, 97-105.	6.2	25
66	Obtaining a Relationship Between Process Parameters and Fracture Characteristics for Hybrid CO2 Laser Waterjet Machining of Ceramics. Journal of Engineering Materials and Technology, Transactions of the ASME, 2009, 131, .	0.8	15
67	Electrodeposition of nanodiamond particles on aluminium alloy A319 for improved tribological properties. Micro and Nano Letters, 2008, 3, 110.	0.6	9
68	Design and validation of a hybrid laser/water-jet machining system for brittle materials. Journal of Laser Applications, 2008, 20, 127-134.	0.8	29