

List of Publications

Publication	Year
Evaluation of mechanical, thermal and water absorption behaviors of Polyalthia longifolia seed reinforced vinyl ester composites B Stalin, N Nagaprasad, V Vignesh, M Ravichandran, N Rajini, SO Ismail, ... Carbohydrate Polymers 248, 116748	2020
Influence of Fibre Inter-ply Orientation on the Mechanical and Free Vibration Properties of Banana Fibre Reinforced Polyester Composite Laminates M Chandrasekar, I Siva, TSM Kumar, K Senthilkumar, S Siengchin, ... Journal of Polymers and the Environment 28 (11), 2789-2800	2020
Applicability of cellulosic-based Polyalthia longifolia seed filler reinforced vinyl ester biocomposites on tribological performance N Nagaprasad, B Stalin, V Vignesh, M Ravichandran, N Rajini, SO Ismail Polymer Composites	2020
Characterization, Thermal and Antimicrobial Properties of Hybrid Cellulose Nanocomposite Films with in-Situ Generated Copper Nanoparticles in Tamarindus indica Nut Powder TSM Kumar, M Chandrasekar, K Senthilkumar, RA Ilyas, SM Sapuan, ... Journal of Polymers and the Environment, 1-9	2020
Influence of Titanium Dioxide Particles on the Filtration of 1, 4-Dioxane and Antibacterial Properties of Electrospun Cellulose Acetate and Polyvinylidene Fluoride Nanofibrous ... TSM Kumar, K Senthilkumar, M Ratanit, N Rajini, N Chanunpanich, ... Journal of Polymers and the Environment, 1-10	2020
Performance of Sisal/Hemp Bio-based Epoxy Composites Under Accelerated Weathering K Senthilkumar, T Ungtrakul, M Chandrasekar, TSM Kumar, N Rajini, ... Journal of Polymers and the Environment, 1-13	2020
Tribological studies of surface-modified sansevieria cylindrica fiber-reinforced polyester composites C Bennet, K Mayandi, JTW Jappes, N Rajini, I Siva Tribology of Polymer Composites: Characterization, Properties, and ...	2020
Dual cantilever creep and recovery behavior of sisal/hemp fibre reinforced hybrid biocomposites: Effects of layering sequence, accelerated weathering and temperature K Senthilkumar, S Subramaniam, T Ungtrakul, TSM Kumar, ... Journal of Industrial Textiles, 1528083720961416	2020
Inorganic Nanofillers-Based Thermoplastic and Thermosetting Composites M Chandrasekar, TSM Kumar, K Senthilkumar, NM Nurazzi, MR Sanjay, ... Lightweight Polymer Composite Structures, 309-330	2020
A Study on The Entrepreneurial Opportunities, Global and Indian Economy in 3D Printing Sector K Mayandi, N Rajini, N Ayilmis	2020
Effect of Gauge Length on Tensile Properties of Veldt Grape Fibre K Mayandi, N Rajini, S Rajesh	2020

A Study on The Entrepreneurial Opportunities, Global and Indian Economy in 3D Printing Sector P Sethu Ramalingam, K Mayandi, N Rajini, N Ayrilmis	2020
Large-scale tribological characterisation of eco-friendly basalt and jute fibre reinforced thermoset composites LF Tóth, J Sukumaran, G Szebényi, Á Kalácska, D Fauconnier, ... Wear, 203274	2020
Effect of cellulosic filler loading on mechanical and thermal properties of date palm seed/vinyl ester composites N Nagaraj, S Balasubramaniam, V Venkataraman, R Manickam, ... International Journal of Biological Macromolecules 147, 53-66	2020
Characterization of Novel Lignocellulosic <i>Spinifex littoreus</i> Fibers and Their Composites M Soosai, C Thankian, WJJ Thangiah, R Nagarajan, M Kalimuthu, ... Journal of Bionic Engineering 17, 393-404	2020
Analysis on Thermal Properties of Polyethylene–Vinyl Acetate (PEVA) Matrix with Polytetrafluoroethylene (PTFE) Particle-Reinforced Composites RM Kumar, N Rajini, K Mayandi, N Ayrilmis, M Srisuryadharan, ... Advances in Materials and Manufacturing Engineering, 187-193	2020
Hybrid Approach for Prediction and Modelling of Abrasive Water Jet Machining Parameter on Al-NiTi Composites S Rajesh, A Nair, MA Khan, N Rajini Intelligent Manufacturing, 173-193	2020
Water Hyacinth for Biocomposites—An Overview A Ajithram, JTW Jappes, TSM Kumar, N Rajini, AV Rajulu, SM Rangappa, ... Biofibers and Biopolymers for Biocomposites, 171-179	2020
Influence of Fillers on the Thermal and Mechanical Properties of Biocomposites: An Overview TSM Kumar, K Senthilkumar, M Chandrasekar, S Subramaniam, ... Biofibers and Biopolymers for Biocomposites, 111-133	2020
Influence of Ply Stacking Sequences on the Impact Response of Carbon Fibre Reinforced Polymer Composite Laminates KG Andersen, G Jombo, SO Ismail, S Adeyemi, N Rajini, S Akram	2019
An overview of burst, buckling, durability and corrosion analysis of lightweight FRP composite pipes and their applicability MM Prabhakar, N Rajini, N Ayrilmis, K Mayandi, S Siengchin, ... Composite Structures 230, 111419	2019
Recent advances in thermal properties of hybrid cellulosic fiber reinforced polymer composites S Krishnasamy, SMK Thiagamani, CM Kumar, R Nagarajan, ... International journal of biological macromolecules 141, 1-13	2019
Investigation into mechanical, absorption and swelling behaviour of hemp/sisal fibre reinforced bioepoxy hybrid composites: Effects of stacking sequences SMK Thiagamani, S Krishnasamy, C Muthukumar, J Tengsuthiwat, ... International journal of biological macromolecules 140, 637-646	2019
A comprehensive review of electrospun nanofibers: Food and packaging perspective TSM Kumar, KS Kumar, N Rajini, S Siengchin, N Ayrilmis, AV Rajulu Composites Part B: Engineering 175, 107074	2019
Characterization, thermal and dynamic mechanical properties of poly (propylene carbonate) lignocellulosic Cocos nucifera shell particulate biocomposites K Senthilkumar, M Chandrasekar, N Rajini, S Siengchin, V Rajulu Materials Research Express 6 (9), 096426	2019
Influence of <i>Musa acuminate</i> bio-filler on the thermal, mechanical and visco-elastic behavior of poly (propylene) carbonate biocomposites	2019

T Senthil Muthu Kumar, N Rajini, S Siengchin, A Varada Rajulu, ... International Journal of Polymer Analysis and Characterization 24 (5), 439-446	
Improved mechanical and thermal properties of spent coffee bean particulate reinforced poly (propylene carbonate) composites TSM Kumar, N Rajini, T Huafeng, AV Rajulu, N Ayrilmis, S Siengchin Particulate Science and Technology 37 (5), 643-650	2019
Impact response of basalt composite pipe using filament winding M ManojPrabhakar, N Rajini, K Mayandi, K Subash, S Subramanian, ... Journal of Physics: Conference Series 1240 (1), 012104	2019
Antimicrobial properties of poly (propylene) carbonate/Ag nanoparticle-modified tamarind seed polysaccharide with composite films ID MP, N Nallamuthu, N Rajini, S Siengchin, V Rajulu, N Hariram Ionics 25 (7), 3461-3471	2019
Effect of alkali treatment on mechanical and morphological properties of pineapple leaf fibre/polyester composites K Senthilkumar, N Rajini, N Saba, M Chandrasekar, M Jawaaid, ... Journal of Polymers and the Environment 27 (6), 1191-1201	2019
Effect of fibre loading and Ca (OH) 2 treatment on thermal, mechanical, and physical properties of pineapple leaf fibre/polyester reinforced composites S Krishnasamy, C Muthukumar, R Nagarajan, SMK Thiagamani, N Saba, ... Materials Research Express 6 (8), 085545	2019
Tribological Properties of <i>Cyperus pangorei</i> Fiber-Reinforced Polyester Composites (Friction and Wear Behavior of <i>Cyperus pangorei</i> Fiber/Polyester Composites) N Rajini, K Mayandi, S Siengchin, N Ayrilmis, C Bennet, S O. Ismail Journal of Natural Fibers, 1-13	2019
Thermal and structural characterization of acrylonitrile butadiene styrene (ABS) copolymer blended with polytetrafluoroethylene (PTFE) particulate composite RM Kumar, N Rajini, TSM Kumar, K Mayandi, S Siengchin, SO Ismail Materials Research Express 6 (8), 085330	2019
Biodegradable poly (propylene) carbonate using in-situ generated CuNPs coated Tamarindus indica filler for biomedical applications MPI Devi, N Nallamuthu, N Rajini, TSM Kumar, S Siengchin, AV Rajulu, ... Materials Today Communications 19, 106-113	2019
Development and Analysis of Completely Biodegradable Cellulose/Banana Peel Powder Composite Films N Rajini, A Alavudeen, S Siengchin, V Rajulu, N Ayrilmis Journal of Natural Fibers	2019
Influence of silver nanoparticles on the mechanical, thermal and antimicrobial properties of cellulose-based hybrid nanocomposites SMK Thiagamani, N Rajini, S Siengchin, AV Rajulu, N Hariram, N Ayrilmis Composites Part B: Engineering 165, 516-525	2019
Effects of Dual-Phase Reinforcement Particles (Fly Ash + Al ₂ O ₃) on the Wear and Tensile Properties of the AA 7075 Al Alloy Based Composites TR Prabhu, M Murugan, BP Chiranth, RK Mishra, N Rajini, P Marimuthu, ... Journal of The Institution of Engineers (India): Series D 100 (1), 29-35	2019
Mechanical and thermal properties of spent coffee bean filler/poly (3-hydroxybutyrate-co-3-hydroxyvalerate) biocomposites: Effect of recycling K Yorseng, N Rajini, S Siengchin, N Ayrilmis, V Rajulu Process Safety and Environmental Protection 124, 187-195	2019
Tribological characteristics of cast polyamide 6 (PA6G) matrix and their composite (PA6G SL) under normal and overload conditions using dynamic pin-on-plate system R Keresztes, M Odrobina, R Nagarajan, K Subramanian, G Kalacska, ... Composites Part B: Engineering 160, 119-130	2019

Evaluation of mechanical and free vibration properties of the pineapple leaf fibre reinforced polyester composites K Senthilkumar, N Saba, M Chandrasekar, M Jawaid, N Rajini, ... Construction and Building Materials 195, 423-431	2019
Influence of curing temperature on the mechanical and free vibration properties of sisal fiber reinforced polyester composites K Senthilkumar, I Siva, M Chandrasekar, N Rajini, G Kalusuraman, ... AIP Conference Proceedings 2057 (1), 020066	2019
Wear behaviour of the PLA and Cu ₂ O composite under different temperature K Senthilkumar, N Rajini, S Karthikeyan, S Siengchin, K Yorseng, ... AIP Conference Proceedings 2057 (1), 020027	2019
Friction and wear properties of PTFE blended ABS polymer composite RM Kumar, N Rajini, K Mayandi, N Ayrilmis AIP Conference Proceedings 2057 (1), 020046	2019
Investigation into mechanical, absorption and swelling behaviour of hemp/sisal fibre reinforced bioepoxy hybrid composites: Effects of stacking sequences TSM Kumar, K Senthilkumar, M Chandrasekar, J Tengsuthiwat, N Rajini, ...	2019
Thermal Performance of Acrylonitrile Butadiene Styrene (ABS) Copolymer Blended with PTFE Particle/Polymer Composite RM Kumar, N Rajini, K Mayandi, S Siengchin Materials Science Forum 969, 444-450	2019
Biomedical Applications of Polymer/Layered Double Hydroxide Bionanocomposites MR Sanjay, S Siengchin, CI Pruncu, M Jawaid, TSM Kumar, N Rajini Nanostructured Polymer Composites for Biomedical Applications, 315-322	2019
Preparation and characterization studies of modified cellulosic textile fabric composite with in situ-generated AgNPs coating P Sivaranjana, ER Nagarajan, N Rajini, N Ayrilmis, AV Rajulu, ... Journal of Industrial Textiles, 1528083719855312	2019
Mechanical Property and Morphological Analysis of Polyester Composites Reinforced with Cyperus pangorei Fibers NA Mayandi Kalimuthu, Rajini Nagarajan, Alavudeen Azeez Batcha, Suchart ... Journal of Bionic Engineering 16, 164–174	2019
Recent studies on durability of natural/synthetic fiber reinforced hybrid polymer composites K Mayandi, N Rajini, M Manojprabhakar, S Siengchin, N Ayrilmis Durability and Life Prediction in Biocomposites, Fibre-Reinforced Composites ...	2019
Effect of treated coir fiber/coconut shell powder and aramid fiber on mechanical properties of vinyl ester PA Udaya Kumar, B Suresha, N Rajini, KG Satyanarayana Polymer Composites 39 (12), 4542-4550	2018
Cellulose hybrid nanocomposites using Napier grass fibers with in situ generated silver nanoparticles as fillers for antibacterial applications MPI Devi, N Nallamuthu, N Rajini, AV Rajulu, NH Ram, S Siengchin International journal of biological macromolecules 118, 99-106	2018
Synthesis and Tribological Applications of Hybrid Materials M Jawaid, R Nagarajan, J Sukumaran, P De Baets John Wiley & Sons	2018
Morphological Examination of Worn out Surfaces of Basalt Fiber-PEI Composites with Varying Loading Conditions K Mayandi, S Karthikeyan, N Rajini, AB Alavudeen Synthesis and Tribological Applications of Hybrid Materials, 215-226	2018
Modification of natural fibers from <i>Thespesia lampas</i> plant by <i>in situ</i> generation of silver nanoparticles in single-step hydrothermal method	2018

B Ashok, K Obi Reddy, K Yorseng, N Rajini, N Hariram, S Siengchin, ... International Journal of Polymer Analysis and Characterization 23 (6), 509-516	
Tensile, thermal, and antibacterial characterization of composites of cellulose/modified <i>Pennisetum purpureum</i> natural fibers with <i>in situ</i> generated copper ... MP Indira Devi, N Nallamuthu, N Rajini, A Varada Rajulu, N Hariram, ... International Journal of Polymer Analysis and Characterization 23 (6), 502-508	2018
Characterization of cotton fabric nanocomposites with <i>in situ</i> generated copper nanoparticles for antimicrobial applications S Paramasivan, N ER, R Nagarajan, VR Anumakonda Preparative Biochemistry and Biotechnology 48 (7), 574-581	2018
Investigation on thermal properties of Styrene Acrylonitrile (SAN) matrix with Polytetrafluoroethylene (PTFE) particle reinforced composites R Mahesh Kumar, N Rajini, K Mayandi, M Gnanaguru, SH Jasim Farid MS&E 390 (1), 012003	2018
Investigation on thermal properties of Styrene Acrylonitrile (SAN) matrix with Polytetrafluoroethylene (PTFE) particle reinforced composites RM Kumar, N Rajini, K Mayandi, M Gnanaguru, SHJ Farid IOP Conference Series: Materials Science and Engineering 390 (1), 012003	2018
Mechanical properties evaluation of sisal fibre reinforced polymer composites: a review K Senthilkumar, N Saba, N Rajini, M Chandrasekar, M Jawaaid, ... Construction and Building Materials 174, 713-729	2018
An efficient social spider optimization for flexible job shop scheduling problem S Kavitha, P Venkumar, N Rajini, P Pitchipoo Journal of Advanced Manufacturing Systems 17 (02), 181-196	2018
All-cellulose composite films with cellulose matrix and Napier grass cellulose fibril fillers TSM Kumar, N Rajini, KO Reddy, AV Rajulu, S Siengchin, N Ayrilmis International journal of biological macromolecules 112, 1310-1315	2018
Effect of sunlight on the preparation and properties of cellulose/silver nanoparticle composite films by <i>in situ</i> method using <i>Ocimum sanctum</i> leaf extract as a ... V Sadanand, N Rajini, A Varada Rajulu, B Satyanarayana International Journal of Polymer Analysis and Characterization 23 (4), 313-320	2018
Suchart Siengchin 2 1Kalasalingam University, Krishnankoil, Tamil Nadu, India, 2King Mongkut's University of Technology North Bangkok, Bangkok, Thailand K Senthilkumar, I Siva, N Rajini, JTW Jappes Sustainable Composites for Aerospace Applications, 35	2018
AWJ machinability performance of CS/UPR composites with the effect of chemical treatment S Kalirasu, N Rajini, S Rajesh, S Seingchin, SN Ramaswamy Materials and Manufacturing Processes 33 (4), 452-461	2018
Effect of Curing Temperature on Mechanical Properties of Sansevieria Cylindrica Polyester Composites C Bennet, N Rajini, JT Jappes, S Siengchin Advanced Science, Engineering and Medicine 10 (3-4), 416-419	2018
Properties of untreated and chemically treated Cissus quadrangularis natural fibers and their composites with polyester as the matrix K Mayandi, N Rajini, P Pitchipoo, JT Winowlin Jappes, A Varada Rajulu Polymer Composites 39 (3), 876-886	2018
Dynamic mechanical and thermogravimetric analysis of PTFE blended tailor-made textile woven basalt-vinyl ester composites K Subramanian, R Nagarajan, S Saravanasankar, J Sukumaran, ... Journal of Industrial Textiles 47 (6), 1226-1240	2018

Formulation and characterization of in situ generated copper nanoparticles reinforced cellulose composite films for potential antimicrobial applications P Sivaranjana, ER Nagarajan, N Rajini, M Jawaid, AV Rajulu Journal of Macromolecular Science, Part A 55 (1), 58-65	2018
Preparation and Properties of Cellulose/Tamarind Nut Powder Green Composites: (Green composite using agricultural waste reinforcement) T Senthil Muthu Kumar, N Rajini, M Jawaid, A Varada Rajulu, ... Journal of Natural Fibers 15 (1), 11-20	2018
Mechanical characteristics of tri-layer eco-friendly polymer composites for interior parts of aerospace application K Senthilkumar, I Siva, N Rajini, JTW Jappes, S Siengchin Sustainable Composites for Aerospace Applications, 35-53	2018
Development of polymer nanocomposites using cellulose/silver for antifouling applications: A preliminary investigations of silver-coated cellulose composite film for ... L Muthulakshmi, N Rajini, H Nellaiah, T Kathiresan, BA Kumar, AV Rajulu Polymer-based Nanocomposites for Energy and Environmental Applications, 397-405	2018
Reduction of blind spots in heavy transport vehicles through the optimisation of driver seat design DS Vincent, P Pitchipoo, N Rajini, S Rajakarunakaran International Journal of Computer Aided Engineering and Technology 10 (1-2 ...	2018
Green Synthesis of Copper-Reinforced Cellulose Nanocomposites for Packaging Applications P Sivaranjana, ER Nagarajan, N Rajini, AV Rajulu, S Siengchin Bionanocomposites for Packaging Applications, 179-189	2018
A review on tribological properties of natural fiber based sustainable hybrid composite S Karthikeyan, N Rajini, M Jawaid, JT Winowlin Jappes, MTH Thariq, ... Proceedings of the Institution of Mechanical Engineers, Part J: Journal of ...	2017
Characterization of sisal/cotton fibre woven mat reinforced polymer hybrid composites TP Sathishkumar, J Naveen, P Navaneethakrishnan, S Satheeshkumar, ... Journal of Industrial Textiles 47 (4), 429-452	2017
Machinability performance of Al–NiTi and Al–NiTi–nano SiC composites with parametric optimization using GSA P Mekkandi, M Jayamani, B Sekarbabu, JP Kadambarajan, R Nagarajan, ... Journal of the Australian Ceramic Society 53 (2), 599-609	2017
Utilization of chemically treated municipal solid waste (spent coffee bean powder) as reinforcement in cellulose matrix for packaging applications VA Senthil Muthu Kumar Thiagamani , Rajini Nagarajan , Mohammad Jawaid Waste Management	2017
Synthesis and characterization of cellulose/silver nanocomposites from bioflocculant reducing agent L Muthulakshmi, N Rajini, AV Rajulu, S Siengchin, T Kathiresan International journal of biological macromolecules 103, 1113-1120	2017
Static and Dynamic Properties of Sisal Fiber Polyester Composites– Effect of Inerlamina Fiber Orientation AH 1. Krishnasamy Senthilkumar, Irulappasamy Siva, Mohammad Thariq ... BioResources	2017
Synergy Of Cashew Nut Shell Filler On Tribological Behaviours Of Natural Fiber Reinforced Epoxy Composite KGS P.A. Udaya Kumar, Ramalingaiah, B. Suresha, N. Rajini Polymer composites	2017
Synergy of cashew nut shell filler on tribological behaviors of natural-fiber-reinforced epoxy composite	2017

NR T. P. Sathishkumar, S. Arun kumar, P. Navaneethakrishnan, I. Siva Sci Eng Compos Mater	
Development and analysis of biodegradable poly (propylene carbonate)/tamarind nut powder composite films TSM Kumar, N Rajini, H Tian, AV Rajulu, JT Winowlin Jappes, ... International Journal of Polymer Analysis and Characterization 22 (5), 415-423	2017
Fire and thermal resistance properties of chemically treated ligno-cellulosic coconut fabric–reinforced polymer eco-nanocomposites N Rajini, JT Winowlin Jappes, I Siva, A Varada Rajulu, ... Journal of Industrial Textiles 47 (1), 104-124	2017
Cellulose nanocomposite films with in situ generated silver nanoparticles using Cassia alata leaf extract as a reducing agent P Sivaranjana, ER Nagarajan, N Rajini, M Jawaid, AV Rajulu International journal of biological macromolecules 99, 223-232	2017
Some studies on drilling of red mud reinforced aluminum composite S Rajesh, M Pethuraj, ST Kumaran, M Uthayakumar, N Rajini Proceedings of the Institution of Mechanical Engineers, Part L: Journal of ...	2017
Identification and production of biofloculants by <i>Enterobacter</i> sp. and <i>Bacillus</i> sp. and their characterization studies L Muthulakshmi, H Nellaiah, T Kathiresan, N Rajini, F Christopher Preparative Biochemistry and Biotechnology 47 (5), 458-467	2017
Mechanical and Machinability characteristics of Al–NiTi composites reinforced with SiC particulates R Shanmugavel, P Mekkandi, M Jayamani, N Rajini, M Uthayakumar, ... Journal of the Australian Ceramic Society 53 (1), 177-185	2017
Preparation and characterization of regenerated cellulose films using borassus fruit fibers and an ionic liquid KO Reddy, CU Maheswari, MS Dhlamini, BM Mothudi, J Zhang, J Zhang, ... Carbohydrate polymers 160, 203-211	2017
Preparation and properties of cellulose nanocomposite films with in situ generated copper nanoparticles using Terminalia catappa leaf extract L Muthulakshmi, N Rajini, H Nellaiah, T Kathiresan, M Jawaid, AV Rajulu International journal of biological macromolecules 95, 1064-1071	2017
Development of Natural fiber composites in Electrical Applications KS N.Rajini Applied Mechanics and Materials	2017
Effect of Chemical Treatment on Tensile and flexural Performance of Cyperus Pangorei Fibre Reinforced Polyester Composites KM N.Rajini Applied Mechanics and Materials	2017
Effect Of Curing Temperature On Mechanical Properties Of Sansevieria Cylindrica Polyester Composites CB N.Rajini Applied Mechanics and Materials	2017
AWJ Machinability Performance of CS/UPR Composites with the Effect of Chemical Treatment SSHRSN Kalirasu. S, Rajini. N, Rajesh. S Materials and Manufacturing Process, DOI: 10.1080/10426914.2017.1328114	2017
Machinability performance of Al–NiTi and Al–NiTi–nano SiC composites with parametric optimization using GSA RS Purusothaman Mekkandi, Manivannan Jayamani, Balakiruthiha Sekarbabu, Jeya ... Journal of the Australian Ceramic Society, pp 1–11	2017
AWJM Performance of jute/polyester composite using MOORA and analytical models	2017

JTWJJKK S. Kalirasu, N. Rajini, S. Rajesh Materials and Manufacturing Processes 2017 (doi.org/10.1080/10426914.2017 ...	
AWJM Performance of jute/polyester composite using MOORA and analytical models JTWJJKK Altmetric Original Articles AWJM Performance of jute/polyester ... Materials and Manufacturing Process 2017, 1 -10	2017
Experimental Investigation of Cellulose/Silver Nanocomposites Using In Situ Generation Method AVR L. Muthulakshmi, N. Rajini, H. Nellaiah, T. Kathiresan, M. Jawaid Journal of Polymers and the Environment, 1-12	2016
Preparation of cellulose composites with <i>in situ</i> generated copper nanoparticles using leaf extract and their properties V Sadanand, N Rajini, AV Rajulu, B Satyanarayana Carbohydrate polymers 150, 32-39	2016
Preparation and properties of cellulose/silver nanoparticle composites with <i>in situ</i> -generated silver nanoparticles using <i>Ocimum sanctum</i> leaf extract V Sadanand, N Rajini, B Satyanarayana, AV Rajulu International Journal of Polymer Analysis and Characterization 21 (5), 408-416	2016
Investigation on corrosion performance of multilayer Ni-P/TiO ₂ composite coating on steel ME Sahayaraj, JTW Jappes, I Siva, N Rajini Science and Engineering of Composite Materials 23 (3), 309-314	2016
Extraction and characterization of new natural lignocellulosic fiber <i>Cyperus pangorei</i> K Mayandi, N Rajini, P Pitchipoo, JTW Jappes, AV Rajulu International Journal of Polymer Analysis and Characterization 21 (2), 175-183	2016
Layering pattern effects on vibrational behavior of coconut sheath/banana fiber hybrid composites KS Kumar, I Siva, N Rajini, JTW Jappes, SC Amico Materials & Design 90, 795-803	2016
Tribological performance of basalt fiber-PEI composite developed using hot compression technique K Subramanian, R Nagarajan, J Sukumaran, W Thangiah 11th INTERNATIONAL CONFERENCE OF THE CARPATHIAN EURO-REGION SPECIALIS TS IN ...	2016
Friction and wear properties of jute/polyester composite systems LF Tóth, J Sukumaran, R Nagarajan, G Szebényi, WJ Thangiah, ... 2nd International conference on Polymer Tribology (PolyTrib 2016)	2016
Eco-friendly mono-layered PTFE blended polymer composites for dry sliding tribo-systems JS Karthikeyan Subramanian a, Rajini Nagarajan a,n, Patrick DeBaets b ... Tribology International 102, 569-579	2016
Free vibration characteristics of banana/sisal natural fibers reinforced hybrid polymer composite beam M Rajesh, J Pitchaimani, N Rajini Procedia Engineering 144, 1055-1059	2016
Effect of Nanoclay on the Dielectric, Transport, Thermal and Fire Properties of Coconut Sheath/MMT Clay Polyester Hybrid Composites N Rajini, JTW Jappes, S Karthikeyan, AV Rajulu Nanoclay Reinforced Polymer Composites, 127-150	2016
Mechanical, dynamic mechanical and vibration behavior of nanoclay dispersed natural fiber hybrid intra-ply woven fabric composite M Rajesh, P Jeyaraj, N Rajini Nanoclay reinforced polymer composites, 281-296	2016
Fuzzy Analytical Hierarchy Process Based Optimization of Rear View Mirror Design Parameters for Blind Spots Reduction in Heavy Transport Vehicles	2015

P Pitchipoo, DS Vincent, N Rajini, S Rajakarunakaran International Journal of Vehicle Structures & Systems 7 (4), 136	
Mechanical performance of Cissus quadrangularis/polyester composite K Mayandi, N Rajini, P Pitchipoo, JTW Jappes, I Siva Materials Today Communications 4, 222-232	2015
Mechanical and machining performance of glass and coconut sheath fibre polyester composites using AWJM S Kalirasu, N Rajini, JT Winowlin Jappes, M Uthayakumar, S Rajesh Journal of Reinforced Plastics and Composites 34 (7), 564-580	2015
Effect of curing temperature and layering pattern on performance studies: a novel hybrid composite C Bennet, N Rajini, I Siva, JTW Jappes, SC Amico Journal of Polymer Engineering 35 (2), 127-134	2015
Mechanical properties of banana/kenaf fiber-reinforced hybrid polyester composites: Effect of woven fabric and random orientation A Alavudeen, N Rajini, S Karthikeyan, M Thiruchitrambalam, ... Materials & Design (1980-2015) 66, 246-257	2015
A comparative study on characterisations of <i>Cissus quadrangularis</i> and <i>Phoenix reclinata</i> natural fibres K Mayandi, N Rajini, P Pitchipoo, VS Sreenivasan, JTW Jappes, ... Journal of Reinforced Plastics and Composites 34 (4), 269-280	2015
Effect of the stacking sequence on vibrational behavior of Sansevieria cylindrica/coconut sheath polyester hybrid composites C Bennet, N Rajini, JTW Jappes, I Siva, VS Sreenivasan, SC Amico Journal of Reinforced Plastics and Composites 34 (4), 293-306	2015
Dynamic mechanical and thermo-gravimetric analysis of Sansevieria cylindrica/polyester composite: Effect of fiber length, fiber loading and chemical treatment VS Sreenivasan, N Rajini, A Alavudeen, V Arumugaprabu Composites Part B: Engineering 69, 76-86	2015
Dry sliding wear properties of jute/polymer composites in high loading applications K Subramanian, R Nagarajan, J Sukumaran, W Thangiah, P De Baets Synergy 2015 international Conference 12, 7-18	2015
Effect of Alkali Treatment on Tensile and Physicochemical Characterization of Cissus quadrangularis Fiber K Mayandi, N Rajini, P Pitchipoo, V Arumugaprabu, PK Vishnudev, ... Applied Mechanics and Materials 813, 172-178	2015
An investigation on Kerf Geometry for Abrasive Waterjet Cutting of Jute Fibre Reinforced Polyester Composite JS John peter durairaj.R, Kalirasu.S* ,Rajini.N , Rajesh.S , Muthukumar.A International Journal of Applied Engineering Research 10 (57), 179-181	2015
Effect of Feed Rate on Abrasive Water jet Cutting of Glass Fibre Reinforce Polyester Composite MK Nagaraj.M Kalirasu.S* ,Rajini.N , Rajesh.S , Gurusami pandian.V International Journal of Applied Engineering Research 10 (57), 182-184	2015
Optimization of Abrasive Water Jet Machining (AWJM) Parameters for Jute/Polyester Composites Using Taguchi Method MA Jegadeesan.R Kalirasu.S* ,Rajini.N , Rajesh.S International Journal of Applied Engineering Research 10 (57), 176-178	2015
Analysis of kerf formation in basalt fibre reinforced polyester by using co2 laser machining, International Conference on Emerging Trends in Engineering and Technology S C.Suren S.Kalirasu, N.Rajini, M.Subbiah International Journal of Applied Engineering Research 10 (2), 1586-1589	2015

Studies of abrasive water jet machining (AWJM) parameters on banana/polyester composites using robust design concept S Kalirasu, N Rajini, N Bharath Sagar, D Mahesh Kumar, ... Applied Mechanics and Materials 787, 573-577	2015
Effect of fibre length and weight percentage on mechanical properties of short sisal/polyester composite K Senthilkumar, I Siva, N Rajini, P Jeyaraj International Journal of Computer Aided Engineering and Technology 7 (1), 60-71	2015
Effect of process parameters in chemical modifications on mechanical properties of Sansevieria cylindrica/polyester composite using Taguchi technique C Bennet, I Siva, JTW Jappes, N Rajini International Journal of Computer Aided Engineering and Technology 7 (1), 15-28	2015
Influence of redmud on the mechanical, damping and chemical resistance properties of banana/polyester hybrid composites M Uthayakumar, V Manikandan, N Rajini, P Jeyaraj Materials & Design 64, 270-279	2014
Tensile, impact, and vibration properties of coconut sheath/sisal hybrid composites: Effect of stacking sequence KS Kumar, I Siva, N Rajini, P Jeyaraj, JTW Jappes Journal of Reinforced Plastics and Composites 33 (19), 1802-1812	2014
Effect of organically modified montmorillonite clay on wear behavior of naturally woven coconut sheath/polyester composite N Rajini, JTW Jappes, B Suresha, S Rajakarunakaran, I Siva, ... Proceedings of the Institution of Mechanical Engineers, Part J: Journal of ...	2014
Synergy of fiber length and content on free vibration and damping behavior of natural fiber reinforced polyester composite beams KS Kumar, I Siva, P Jeyaraj, JTW Jappes, SC Amico, N Rajini Materials & Design (1980-2015) 56, 379-386	2014
Effect of Redmud on Dry Sliding Wear Behavior of Polymer Matrix Composites: Taguchi Approach VA Prabu, MU Kumar, V Manikandan, N Rajini Journal of Advanced Microscopy Research 9 (1), 34-38	2014
Effect of Fiber Length and Loading of Sansevieria Fiber on dry sliding wear behavior of polyester composites N Anjum, B Suresha, S Prasad, N Rajini Technology Letters 1 (4), 14-18	2014
COPRAS decision model to optimize blind spot in heavy vehicles: A comparative perspective P Pitchipoo, DS Vincent, N Rajini, S Rajakarunakaran Procedia Engineering 97, 1049-1059	2014
Effect of Lamina Fiber Orientation on Tensile and Free Vibration (by Impulse Hammer Technique) Properties of Coconut Sheath/Sansevieria cylindrica Hybrid Composites C Bennet, N Rajini, JT Winowlin Jappes, A Venkatesh, S Harinarayanan, ... Advanced Materials Research 984, 172-177	2014
Dynamic mechanical analysis and free vibration behavior in chemical modifications of coconut sheath/nano-clay reinforced hybrid polyester composite N Rajini, JTW Jappes, S Rajakarunakaran, P Jeyaraj Journal of Composite Materials 47 (24), 3105-3121	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	2013
Influence of MMT nanoclay on impedance spectroscopy analysis of naturally woven coconut sheath/polyester hybrid composite	2013

N Rajini, JTW Jappes, S Rajakarunakaran, M Prabu, C Bennet Journal of Applied Polymer Science 129 (6), 3746-3756	
Effects of chemical modifications and MMT nanoclay addition on transport phenomena of naturally woven coconut sheath/polyester nanocomposites N Rajini, JTW Jappes, S Rajakarunakaran, C Bennet Chinese Journal of Polymer Science 31 (8), 1074-1086	2013
Effect of montmorillonite nanoclay on temperature dependence mechanical properties of naturally woven coconut sheath/polyester composite N Rajini, JTW Jappes, P Jeyaraj, S Rajakarunakaran, C Bennet Journal of reinforced plastics and composites 32 (11), 811-822	2013
Effect of processing variables on mechanical properties of montmorillonite clay/unsaturated polyester nanocomposite using Taguchi based grey relational analysis N Rajini, JTW Jappes, S Rajakarunakaran, I Siva Journal of Polymer Engineering 32 (8-9), 555-566	2012
Mechanical and free vibration properties of montmorillonite clay dispersed with naturally woven coconut sheath composite N Rajini, JTW Jappes, S Rajakarunakaran, P Jeyaraj Journal of Reinforced Plastics and Composites 31 (20), 1364-1376	2012
Processing and characterization of redmud filled sisal fibre reinforced polymer composite VA Prabu, S Kalirasu, M Uthayakumar, V Manikandan IEEE-International Conference On Advances In Engineering, Science And ...	2012
Electrical properties of montmorillonite nanoclay reinforced unsaturated polyester nanocomposite N Rajini, JTW Jappes, S Rajakarunakaran, P Poornanand IEEE-International Conference On Advances In Engineering, Science And ...	2012
Fractography analysis of naturally woven coconut sheath reinforced polyester composite: A novel reinforcement JTW Jappes, I Siva, N Rajini Polymer-Plastics Technology and Engineering 51 (4), 419-424	2012
Tensile and flexural properties of MMT-clay/unsaturated polyester using robust design concept N Rajini, JT Winowlin Jappes, C Rajakarunakaran, I Siva Nano hybrids 2, 87-101	2012

Supervisor

Director / Head of the Center