Dr.A.Gnanavelbabu

Professor (Associate) in Industrial Engineering, Anna University, Chennai 25, India. Verified email at annauniv.edu agbabu@annauniv.edu

| A simheuristic approach for the flexible job shop scheduling problem with stochastic processing times RH Caldeira, A Gnanavelbabu SIMULATION, 0037549720968891 | 2020 |
|---|------|
| An effective backtracking search algorithm for multi-objective flexible job shop scheduling considering new job arrivals and energy consumption RH Caldeira, A Gnanavelbabu, T Vaidyanathan Computers & Industrial Engineering 149, 106863 | 2020 |
| Electrolyte and Machining Parameters Optimization of Wire Electrochemical Cutting of Aluminum/Titanium Diboride Composite K Rajkumar, M Rajesh, K Ramraji, P Sabarinathan, A Gnanavelbabu Trends in Manufacturing and Engineering Management, 39-50 | 2020 |
| A Comparative Study on Abrasive Water Jet Machining Characteristics of Entry and Exit Layers of Glass and Basalt Woven Polymer Composites K Ramraji, K Rajkumar, M Rajesh, A Gnanavelbabu Trends in Manufacturing and Engineering Management, 27-37 | 2020 |
| Desirability Approach Machining Study on Aluminum Composite Through Wire-Cut Electric Discharge Technique K Rajkumar, C Balasubramaniyan, K Ramraji, A Gnanavelbabu, Trends in Manufacturing and Engineering Management, 15-25 | 2020 |
| Influence of ZrB2/ hBN Particles on Wear Behaviour of AA7075 Composites Fabricated through Stir Followed by Squeeze cast Technique P Loganathan, A Gnanavelbabu, K Rajkumar ImechE, Part J: Journal of Engineering Tribology, DOI: 10.1177/1350650120929501 | 2020 |
| Experimental Characterization of Dimensional and Surface Alternation of Straight and Angular Cutting on Self-lubricating Composite: A Wire EDM Approach A Gnanavelbabu, K Rajkumar Arabian Journal for Science and Engineering 45 (7), 5859-5872. | 2020 |
| Studies on High Temperature Wear and Friction Behaviour of AA6061/B4C/hBN Hybrid Composites S Ayyanar, A Gnanavelbabu, K Rajkumar, P Loganathan | 2020 |

| | 1 |
|---|------|
| Metals and Materials International, https://doi.org/10.1007/s12540-020-00710 | |
| Optimization of Abrasive Water Jet Machining Parameters on AA6061/B4C/hBN Hybrid Composites using Grey-RSM A Gnanavelbabu, V Arunachalam, KTS Surendran, P Saravanan Materials Science and Engineering 764, 012011 | 2020 |
| Optimization of machining parameters in CNC turning of AA6061-B4C-CNT hybrid composites using Grey-fuzzy method A Gnanavelbabu, V Arunachalam, KTS Surendran, K Rajkumar Materials Science and Engineering 764, 012010 | 2020 |
| A comparative study of solid lubricant types on the microstructure and mechanical behaviour of AA7075-zirconium boride aerospace composites P Loganathan, A Gnanavelbabu, K Rajkumar, S Ayyanar Materials Science and Engineering 764, 012001 | 2020 |
| Influence of Ultrasonication Power on Grain Refinement, Mechanical Properties and Wear Behavior of AZ91D/nano-Al2O3 Composites A Gnanavelbabu, KT Sunu Surendiran, S Kumar Materials Research Express, 7 (1), 016544 | 2020 |
| Validation of tensile strength of notched hybrid polymer composite using Whitney-Nusimer point stress model K Rajkumar, K Ramraji, M Manojkumar, A Gnanavelbabu Materials Today: Proceedings 27 (2), 940-945 | 2020 |
| Effect of Solid Lubricant in Dry Machining on Al-B ₄ C Composite KM Nambiraj, K Rajkumar, M Rajesh, A Gnanavelbabu Advances in Lightweight Materials and Structures, 587-596 | 2020 |
| A study on wear assessment of AA6061-B4C-Nanographite hybrid composite K Rajkumar, K Ramraji, KM Nambiraj, A Gnanavelbabu Materials Today: Proceedings 27 (2), 696-701 | 2020 |
| Performance Evaluation of Abrasive Water Jet Machining on AA6061-B ₄ C-HBN Hybrid Composites Using Taguchi Methodology A Gnanavelbabu, KTS Surendran, K Rajkumar Advances in Unconventional Machining and Composites, 651-660 | 2020 |
| The Role of HBN Solid Lubricant Reducing Cutting Forces of Dry Machined Al-B ₄ C Composite M Rajesh, K Rajkumar, A Gnanavelbabu, KM Nambiraj Advances in Unconventional Machining and Composites, 697-705 | 2020 |

| Experimental Investigations of Abrasive Waterjet Machining Parameters on Titanium Alloy Ti-6Al-4V Using RSM and Evolutionary Computational Techniques A Gnanavelbabu, P Saravanan Advances in Unconventional Machining and Composites, 413-425 | 2020 |
|--|------|
| A study of bio and tribo modifier on degradation of magnesium-calcium carbonate biomaterial K Rajkumar, K Ramraji, G Namratha, S Manoj, A Gnanavelbabu Materials Today: Proceedings 27 (2), 691-695 | 2020 |
| Comparison study of mechanical and dynamic vibration properties of hole defect introduced in hybrid polymer composite K Rajkumar, K Ramraji, VP Hariprakash, A Gnanavelbabu Materials Today: Proceedings 27 (2), 677-682 | 2020 |
| Microstructural Characteristics and Mechanical Behaviour of AA7075/TiB2 Composite P Loganathan, A Gnanavelbabu, K Rajkumar, S Ayyanar Materials Science Forum 979, 40-46 | 2019 |
| Experimental Investigations of Abrasive Waterjet Machining Parameters A Gnanavelbabu, P Saravanan Advances in Unconventional Machining and Composites: Proceedings of AIMTDR | 2019 |
| Solving the flexible job shop scheduling problem using an improved Jaya algorithm RH Caldeira, A Gnanavelbabu Computers & Industrial Engineering 137, 106064 | 2019 |
| A sustainable assessment model for material selection in construction industries perspective using hybrid MCDM approaches K Mathiyazhagan, A Gnanavelbabu, B Lokeshprabhuraj Journal of Advances in Management Research 16 (2), 234-259 | 2019 |
| Analysis and characterization of friction behaviour on AA7075/ZrB2 composite under dry sliding condition P Loganathan, A Gnanavelbabu, K Rajkumar Materials Research Express 6 (2), 026576 | 2019 |
| Tribological Analysis by Concentration Effect of Boron Carbide and Graphite on the Aluminum Composites K Rajkumar, S Varun, G Prasanna, C Sreyas, A Gnanavelbabu Materials Science Forum 969, 163-168 | 2019 |
| Accelerated Testing Model Prediction of Fatigue Life of AA5083-H111-AA6061-T6 Friction Stir Weldment K Rajkumar, A Gnanavelbabu, KM Nambiraj Advances in Manufacturing Processes, 573-581 | 2019 |

| | 1 |
|---|------|
| Optimization of WEDM Process Parameters on Multiple Responses in Cutting of Ti-6Al-4V A Gnanavelbabu, P Saravanan, K Rajkumar, S Karthikeyan, R Baskaran Materials Today: Proceedings 5, 27072–27080 | 2018 |
| Mechanical strengthening effect by various forms and orientation of glass fibre reinforced isopthalic polyester polymer composite A Gnanavelbabu, P Saravanan, K Rajkumar, P Sabarinathan, Materials Today: Proceedings 5, 26850–26859 | 2018 |
| Cooperating Function of Graphite in Reducing Frictional Wear of Aluminium Boron Carbide composite K Rajkumar, A Gnanavelbabu, M Solaivenkatesan, K Rajagopalan Materials Today: Proceedings 5, 27801–27809 | 2018 |
| A STUDY OF MACHINING AND QUALITY RESPONSE OF WIRE CUT EDM MACHINED TRIBO COMPOSITES K Rajkumar, A Gnanavelbabu, K Rajagopalan, M Solaivenkatesan International Journal of Mechanical and Production Engineering Research and | 2018 |
| Investigation on the Cutting Quality Characteristics of Abrasive Waterjet Machining on AA6061-B4C-hBN Hybrid Metal Matrix Composites A Gnanavelbabu, K Rajkumar, P Saravanan Materials and Manufacturing Processes 33 (12), 1313-1323 | 2018 |
| Investigation on the Mechanical properties of Coconut Bunch fiber Reinforced Epoxy with Al2O3 Nano particles Composites for Structural Application A Devaraju, K Babu, A Gnanavelbabu Materials Today: Proceedings 5, 14252–14257 | 2018 |
| Experimental and Statistical Analysis of Mgo Nano Fluids for Thermal Enhancement in a Novel Flat Plate Heat Pipes P Pandiyaraj, A Gnanavelbabu, P Saravanan International Journal of Nanoscience 17 (1-2), 1760018 | 2018 |
| Analysis of Formability and Twist Angle in AA5052 Alloy by Single Point Incremental Forming Process V Mugendiran, A Gnanavelbabu Indian Journal of Engineering and Materials Sciences 25, 163-168 | 2018 |
| Machining characteristics evaluation of aluminium composites based on cBN and PCD inserts K Rajkumar, NA Thushal, A Gnanavelbabu, P Sabarinathan Materials Today: Proceedings 5 (2), 8424–8430 | 2018 |
| Effect of Abrasive Water jet Machining Parameters on Hybrid AA6061-B4C-CNT Composites A Gnanavelbabu, P Saravanan, K Rajkumar, S Karthikeyan, R Baskaran | 2018 |

| Materials Today: Proceedings 5, 13438–13450 | |
|---|------|
| Ranking of MUDA using AHP and Fuzzy AHP algorithm A Gnanavelbabu, P Arunagiri Materials Today: Proceedings 5, 13406–13412 | 2018 |
| Experimental Investigations on Multiple Responses in ABWJT Machining of Ti-6Al-4V Alloy A Gnanavelbabu, P Saravanan, K Rajkumar Materials Today: Proceedings 5, 13413–13421 | 2018 |
| Experimental investigations on the Wire Electrochemical Micro Machining (WECM) integrity of AA6061-TiB2 composite K Rajkumar, NA Thushal, A Gnanavelbabu, P Sabarinathan Materials Today: Proceedings 5 (2), 6990–6998 | 2018 |
| Experimental Analysis on Thermal Performance of Fabricated Flat Plate Heat Pipe Using Titanium Dioxide Nanofluid P Pandiayaraj, A Gnanavelbabu, P Saravanan Materials Today: Proceedings 5 (2), 8414–8423 | 2018 |
| Analysis of hole flanging on AA5052 alloy by single point incremental forming process V Mugendiran, A Gnanavelbabu Materials Today: Proceedings 5 (2), 8596–8603 | 2018 |
| Experimental Investigation And Reliability Analysis on Wear Performance of AA6061-B4C-Nanographite Hybrid Composites A Gnanavelbabu, C Muthazhagan, K Rajkumar, S Ayyanar, P Loganathan Materials Today: Proceedings 5 (2), 8436–8445 | 2018 |
| Effect of Pre-Annealing on Thermal and Optical Properties on Zno Al- Zno Thin Films P Saravanan, A Gnanavelbabu, P Pandiaraj International Journal of Nanoscience 17 (1-2), 1760017 | 2018 |
| Electrolytic Concentration Effect on the Abrasive Assisted- Electrochemical Machining of an Aluminum–Boron Carbide Composite M Sankar, A Gnanavelbabu, K Rajkumar, NA Thushal Materials and Manufacturing Processes 32 (6), 687-692. | 2017 |
| Parametric Optimization of Abrasive Assisted Electro Chemical Machining on Al6061-B4C-Gr using Taguchi-Grey Technique M Sankar, A Gnanavelbabu, K Rajkumar Journal of the Balkan Tribological Association 23 (1), 67-87 | 2017 |
| Comparison of Plastic Strains on AA5052 by Single Point Incremental Forming Process using Digital Image Processing † V Mugendiran, A Gnanavelbabu | 2017 |

| Journal of Mechanical Science and Technology 31 (6), 2943-2947 | |
|---|------|
| Implementation of Robotic Welding for the Improvement of Production Systems A Gnanavelbabu, P Arunagiri, D Dhanasekar International Journal of Engineering Trends and Technology 49 (5), 304-309 | 2017 |
| Reduction of Operator's Loading and Unloading Time using Lean Systems for Productivity Improvement A Gnanavelbabu, P Arunagiri, G Bharathiraja, V Jayakumar, International Journal of Mechanical Engineering and Technology 8 (10), 207-216 | 2017 |
| Experimental Investigation on Forming Limit Diagram of the Commercially available AZ31B Magnesium Alloy R Senthil, A Gnanavelbabu, SC Vettivel Asian Journal of Research in Social Sciences and Humanities 7 (1), 282- 289 | 2017 |
| Prediction of Stability and Thermal conductivity of MgO Nanofluids using CCRD Statistical Design Analysis P Pandiyaraj, A Gnanavelbabu, P Saravanan Journal of Advances in Chemistry 12, 5225-5236 | 2016 |
| Identification of major contributing factors for the Transportation waste using Binary Logistics Regression P Arunagiri, A Gnanavelbabu | 2016 |
| Comparative Studies on different forms of Glass Fibre Reinforced Polyester Composite P Sabarinathan, K Rajkumar, A Gnanavelbabu | 2016 |
| Comparative Analysis of AHP and Fuzzy AHP Results for the Identification of Lean Waste P Arunagiri, A Gnanavelbabu | 2016 |
| Tribology Studies and Mechanical Properties of LM25 with Dual Reinforcement SiCp & Grp S Ayyanar, P Loganathan, A Gnanavelbabu, K RajKumar | 2016 |
| Investigation of Mechanical Properties of Luffa Cylindrical and Flax Reinforced Hybrid Polymer Composite P Sabarinathan, K Rajkumar, A Gnanavelbabu Journal of Advanced Engineering Research 3 (2), 124-127 | 2016 |
| Wear and Life Characteristics of Al-B4C Nano Graphite Composite KA Varun, K Rajkumar, A Gnanavelbabu Wear 3 (1), 61-65 | 2016 |

| Identification of Major Lean Waste and Its Contributing Factors Using the Fuzzy Analytical Hierarchy Process P Arunagiri, A Gnanavelbabu Transactions of the Canadian Society for Mechanical Engineering 40 (3), 371 | 2016 |
|--|------|
| Mechanical properties and machinability studies on the human hair-coconut coir-glass fibre hybrid composite D Senthil Nathan, K Rajkumar, A Gnanavelbabu, P Sabarinathan Applied Mechanics and Materials 852, 79-84 | 2016 |
| Electro chemical machining of aluminum-boron carbide-nanographite composites M Sankar, A Gnanavelbabu, K Rajkumar, M Mariyappan Applied Mechanics and Materials 852, 136-141 | 2016 |
| Mechanical properties of almond shell-sugarcane leaves hybrid epoxy polymer composite P Sabarinathan, K Rajkumar, A Gnanavelbabu Applied Mechanics and Materials 852, 43-48 | 2016 |
| Preparation, Properties and Machinability Study of Luffa Fiber- Groundnut Shell Reinforced Epoxy Composite R Panneerdhass, A Gnanavelbabu, K Rajkumar Applied Mechanics and Materials 852, 29-35 | 2016 |
| Effect of hBN Solid Lubricant Concentration on Machinability of Titanium (Ti-6Al-4V) Alloy S Santosh, K Rajkumar, A Gnanavelbabu Materials Science Forum 830, 87-90 | 2015 |
| Synthesis of CuO Nanofluids and Analysis of its increased effective thermal conductivity for Flat Plate Heat Pipe P Pandiaraj, A Gnanavelbabu, P Saravanan International Journal of ChemTech Research 8 (4), 1972-1976 | 2015 |
| Effect of Open Central Hole Stress Concentration on Mechanical Properties of Luffa fiber Reinforced Epoxy Composite R. Panneerdhass, A. Gnanavelbabu, K. Rajkumar, S. Javed Syed Ibrahim International Journal of Applied Engineering Research 10 (2), 1763-1766 | 2015 |
| A Study On Sic Abrasive Assisted Electro Chemical Machining Of Aluminium Boron Carbide Composite M. Sankar, A. Gnanavelbabu, K. Rajkumar, S. Santosh International Journal of Applied Engineering Research 10 (2), 1848-1851 | 2015 |
| Effect of Cooling Rate on Distribution of Boron Carbide and Graphite in Al 6061 Composites During Solidification C. Muthazhagan, A. Gnanavelbabu, K. Rajkumar, S. Santosh International Journal of Applied Engineering Research 10 (2), 1429-1433 | 2015 |