

**VELAMMAL COLLEGE OF ENGINEERING AND TECHNOLOGY
MADURAI**

Published research papers in the Journals during the last five years

Department of Mechanical Engineering

S.No	Title of the Paper	Name of the Author's	Name of the Journal	Year of Publication
1	Enhancement of heat transfer in SAH with polygonal and trapezoidal shape of the rib using CFD	B. Varun Kumar, G. Manikandan, P. Rajesh Kanna	Energy	2021
2	Kinematic modelling and simulation of PID controlled SCARA robot with multiple tool end effector	Anbumalar V Saravana Mohan M Thirumalai Kumaran	International Journal of Modelling, Identification and Control	2021
3	Machine cell formation and part family identification by combined algorithm	V.Anbumalar M Shunmugasundaram, R Kamalakannan, D Maneiah	Progress in Industrial Ecology, an International Journal	2021
4	An experimental insight of friction stir welding of dissimilar AA 6061/Mg AZ 31 B joints	N Rajesh Jesudoss Hynes, M Vivek Prabhu, P Shenbaga Velu, R Kumar, R Tharmaraj, Muhammad Umar Farooq	Journal of Engineering Manufacture	2021
5	Evaluate the structural and thermal analysis of solid and cross drilled rotor by using finite element analysis	Amuthan T, Leta Tesfaye Jule	Materials Today: Proceedings	2021
6	Experimental study of mechanical properties of AA6061 and AA7075 alloy joints using friction stir welding	Amuthan T, Nagaprasad N	Materials Today: Proceedings	2021
7	Experimental Investigation of Injecion Moulding Using Thermoplastic Polyurethane	Karuppaiah Rajkumar M Suruthi Devi R	Materials Today: Proceedings	2021
8	Performances of solar air heater using polygonal and trapezoidal rib absorber plate for augmentation of heat transfer	B. Varun Kumar, G. Manikandan, P. Rajesh Kanna,	Tierärztliche Praxis	2020
9	Investigation of Forced Convection Heat Transfer from a Block Located in a Square Cavity with Rotating Cylinders	Meenakshi Sundar K, G. Manikandan, P. Rajesh Kanna	Tierärztliche Praxis	2020
10	Effect of Pin Profiles on the Mechanical Properties of Friction-Stir-Welded AA5383 and AA7075*	V.Anbumalar Pandy Madhan Kumar	Materials and technology	2020
11	Cellular layout formation by using weighted similarity-based modified flow matrix with process sequence data	V.Anbumalar M Shunmugasundaram	International Journal of Manufacturing Technology and Management	2020
12	Suitability evaluation of sida mysorensis plant fiber as reinforcement in polymer	M.Maran	Journal of Natural Fibers, Taylor & Francis	2020

	composite			
13	Healthcare relational coordination: a review on parameter selection for modified high performance work practices	T.Kamatchi	International Journal of Services and Operations Management – Inderscience	2020
14	Conceptual Design of fluidized Dual Bed Gasification system	I.Ambrose Edward V.Anbumalar	Tierärztliche Praxis	2020
15	Numerical investigation of heat transfer from flow over square cylinder placed in a confined channel using cu-water nanofluid	Arun Senthil Kumar Athinarayanan, Manikandan Gurunathan, Rajesh Kanna Parthasarathy, Jan Taler, Pawel Oclon, Dawid Taler	Thermal science	2019
16	Investigation of forced convective heat transfer from a block located staggered cavity with parallel and anti-parallel wall motion	Meenakshi Sundar Kannan Manikandan Gurunathan	Thermal Science	2019
17	Gas distributor and bed material effects in a cold flow model of a novel multi-stage biomass gasifier	Veerabathiran Anbumalar Maryem Dhrioua, Walid Hassen, Lioua Kolsi, , Ali Sulaiman Alsagri, Mohamed Naceur Borjini	Biomass and Bioenergy	2019
18	Experimental investigation and analysis of the effect of tool pin profile on the mechanical properties of friction stir welded dissimilar aluminium alloys	V.Anbumalar Pandey Madhan Kumar	Caribbean Journal of Science	2019
19	Enhancement of Screw Life in Biomass Briquetting System with Various Tungsten Carbide Based Materials Coatings	Nagarajan S Manika Anbumalar V Balasubramani Palaniyandi Maheandera Prabu Paulraj	Caribbean Journal of Science	2019
20	An experimental analysis and process parameter optimization on AA7075 T6-AA6061 T6 alloy using friction stir welding	V Anbumalar KR Ramesh Babu	Journal of Advanced Mechanical Design, Systems, and Manufacturing	2019
21	Influence of circumferential curve shapes and surface options on curve length and volume of axisymmetric components in modelling for reverse engineering applications	D Sangupandy, K. Chockalingam. V Anbumalar M. Ramesh	Journal of the Chinese Institute of Engineers	2019
22	Design of cellular manufacturing system for power press industry to reduce total travelling time by hybrid algorithm	M Shunmugasundaram, V Anbumalar, P Anand, P Sivakumar, S Nagarajan	International Journal of Services and Operations Management	2019
23	The role of diversified control strategies in scara robot research and development: a state of the art	M Saravanamohan V Anbumalar	International Journal of Mechanical and Production Engineering Research and Development	2019
24	Quality improvement in carbon bush machining	Arun Senthil Kumar A, Kamatchi T, Bhuvanesh M, Kishore S, Karthikeyan M	International Journal of Advance Research Ideas and Innovations in Technology	2019
25	Elimination of Idle Time in Choking Machine for Nut Module	A Arun Senthil Kumar, N Eswara Prasath, G. Natarajan, M.Karthick raja,	International Journal of Recent Trends in Engineering and Research	2019

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26	Numerical investigation of flow through venturi for various angular positions of the butterfly valve	A Arun Senthil Kumar, Divakar Rajesh, N Eswara Prasath	International Journal of Recent Trends in Engineering and Research	2019
27	Investigations on Flexural Performance of Honeycomb Sandwich Composites Filled With Natural Fillers	Amuthan T, Hariharasudhan H, Aathi J, Dhamodaran P	Research and Reviews: Journal of Mechanics and Machines	2019
28	Assembly Line Collision Control	M.Karuppaiah Rajkumar	International Journal of Recent Trends in Engineering and Research	2019
29	Kinematic Modelling and Simulation of 8 Degrees of Freedom SCARA Robot	Saravana Mohan M Anbumalar V	Handbook of Research on Green Engineering Techniques for Modern Manufacturing	2019
30	A Performance Evaluation of Solar Air Heater Using Different Shape of Ribs Mounted in Absorber Plate -A Review	B. Varun Kumar, G. Manikandan, P. Rajesh Kanna Dawid Taler, Jan Taler, Marzena Nowak-Ocło 'n , Karol Mzyk and Hoong Thiam Toh	Energies	2018
31	CFD modeling of gas-particles flow in a circulating fluidized G-Volution gasification reactor	Walid Hassen, Maryem Dhrioua, Lioua Kolsi, V Anbumalar, Abdullah AAA Al-Rashed, Mohamed N Borjini	International Journal of Mechanical Sciences	2018
32	Improvement of Fist Time through in Heater	M.Maran	International Journal of Innovative Research in Science, Engineering and Technology,	2018
33	Snowmow System	M.Maran	Recent and Development in Machine Design	2018
34	Comparative analysis of mechanical and water absorption behaviour of jute/glass fibre reinforced epoxy and polyester hybrid composites	R.Karthick V.Anbumalar	International Journal of Materials Engineering Innovation	2018
35	Cellular layout cell assignment in cellular manufacturing system layout using colonel selection algorithm with considering entry and exit position of the parts to be processed in the layout	V. Anbumalar, R. Mayandy M. Shunmugasundaram	International Journal of Manufacturing Technology and Management	2018
36	Developing a Sustainable Framework of Biomass Briquetting Cooperatives to Harness Agro Residues in India,	Balasubramani Palaniyandi Anbumalar V Nagarajan S Manika	Asian Journal of Research in Social Sciences and Humanities	2017
37	Investigation on thermal behavior of alkali and benzoyl treated hemp fiber reinforced cellulose filled epoxy hybrid green composites	P Anand V Anbumalar	Cellulose Chemistry and Technology	2017

38	Fluid Bed Gasification System is Suitable for Multiple Feedstock- A Review	I.Ambrose Edward V.Anbumalar	International Journal of Innovative and Emerging Research in Engineering	2017
39	Joining of hybrid AA6063-6SiC p-3Gr p composite and AISI 1030 steel by friction welding	Rajesh Jesudoss Hynes N, Vivek Prabhu M, Nagaraj P	Defence Technology	2017
40	Investigations of natural fiber reinforced polymer matrix hybrid composites	Amuthan T, Paramasivam V	International Journal of Research in Advanced Technology	2017
41	Automatic Fixation of RD Cap in IRDS Condenser Tube	M.Raja Chandra Sekar	International Journal of Latest Engineering Research and Applications	2017
42	Design of mini hybrid turbine for hydro electric power generation	H.Ramkumaresh, N.M.Sailesh,	International Journal of Innovative and Emerging Research in Engineering	2017
43	Evaluation of mechanical behavior of banana fibre reinforced hybrid epoxy composites	R. Karthick	Materials Today: Proceedings, ELSEVIER	2017
44	Dynamic mechanical analysis and crystalline analysis of hemp fiber reinforced cellulose filled epoxy composite	Anand P Anbumalar V, Rajesh Duruvasal Saranraj Iyyanar Ramesh Velumayil	Polímeros	2017
45	Assignment Of Machines In Cell Layout Using Modified Artificial Bee Colony Algorithm	Adinarayanan, M Uthayakumar, G V Anbumalar A Prabhakaran G	International Journal of Computer Aided Engineering and Technology	2017
46	Competency enhancement and employee empowerment in a TPM organization - an empirical study	M.Maran, G.Manikandan.	International Journal of Advanced Engineering Technology E-ISSN 0976-3945	2016
47	Modelling and simulation of multi spindle drilling redundant SCARA robot using SolidWorks and MATLAB/SimMechanics	M Saravana Mohan, V Anbumalar	Revista Facultad de Ingeniería	2016
48	Biomass briquette manufacturing system model for environment	Balasubramani Palaniyandi Anbumalar V Nagarajan S Manika	Journal of Alloys and Compounds	2016
49	Landfill Selection Criteria in recycling sector using MCDM tools	Ezhilvannan, R Amuthan T, Godwin Barnabas S	Ecology, Environment and Conservation Paper	2016
50	Numerical analysis on simply supported two beam system connected elastically subjected to forced vibration under the action of axial compression	N.Dinesh kumar, K.P.Padmanaban	International Journal of Printing, Packaging & Allied sciences	2016
51	Landfill selection for solid waste disposal system using fuzzy AHP approach	I Ambrose Edward, Godwin Barnabas S	EM International	2016
52	Implementation of Lean Manufacturing Tool In Dairy Industry: A Review	Varunkumar B, Vignesh V	International Journal of Innovative Research in Science Engineering and Technology,	2016
53	Experimenting and analyzing electrical conductivity of natural fiber composites	Amuthan T, Paramasivam V	Advances in Environmental Biology	2016

54	Performance evaluation of the mechanical behavior of natural fibers under various reinforced materials	Amuthan T, Paramasivam V	International Journal of Printing, Packaging and Allied Sciences	2016
55	A New Method For Integrating Feasibility Assessment And Cell Formation Problem Considering Operation Sequence	V Anbumalar S Raja	International Journal Of Advanced Engineering Technology	2016
56	An effective methodology for cell formation and intra-cell machine layout design in cellular manufacturing system using parts visit data and operation sequence data	V Anbumalar S Raja	Journal of the Brazilian Society of Mechanical Sciences and Engineering	2016
57	Cell Formation and Part Family Identification by Using Combined Algorithm	M. Shunmuga sundaram V. Anbumalar P. Anand	World Applied Sciences Journal	2016
58	Cell Formation and Part Family Identification by Using Traditional Methods	M.Shunmuga Sundaram, V. Anbumalar, P. Anand B. Aswinkumar	Applied Mechanics and Materials	2016
59	Remanufacturing in Reverse Supply Chain Management	Amuthan T, Godwin Barnabas S	Asian Journal of Applied Sciences	2015
60	Effects of chemical treatment and Evaluation on Mechanical properties of Natural Fiber Reinforced Polymer Composites	Amuthan T, Paramasivam V	International Journal of Applied Engineering Research	2015
61	Methods for solving Cell formation, Static layout and Dynamic layout of a Cellular Manufacturing system: A Review	M.Raja Chandra Sekar, V.Anbumalar	Asian Journal of Science and Technology	2015