



Dr.M.Uthayakumar

Senior Professor

Verified email at klu.ac.in

Manufacturing

SL.NO	Title	Cited by	Year
1	Microdrilling of AA (6351)-SiC-B4C Composite Using Hybrid Micro-ECDM Process M Uthayakumar, ST Kumaran, MA Khan, S Skoczypiec, W Bizon Journal of Testing and Evaluation 48 (4)	4	2020
2	Air Jet Erosion Studies on Mg/SiC Composite K Balamurugan, M Uthayakumar, M Ramakrishna, UTS Pillai Silicon 12 (2), 413-423	4	2020
3	Investigation of WEDM process parameters of Al-SiC-B4C composites using response surface methodology SS Kumar, F Erdemir, T Varol, ST Kumaran, M Uthayakumar, A Canakci International Journal of Lightweight Materials and Manufacture 3 (2), 127-135	8	2020
4	Processing of functionally graded aluminum composite brake disc and machining parameters optimization KV Babu, S Marichamy, P Ganesan, D Madan, M Uthayakumar, ... Materials Today: Proceedings 21, 563-567	3	2020
5	Prediction and Analysis of Abrasive Water Jet Machining Performance on Hybrid Composite S Vigneshwaran, M Uthayakumar, V Arumugaprabu Journal of Testing and Evaluation 48 (2), 1505-1519	5	2020
6	Recent advancement in the natural fiber polymer composites: a comprehensive review S Vigneshwaran, R Sundarakannan, KM John, RDJ Johnson, KA Prasath, ... Journal of Cleaner Production, 124109	1	2020
7	Drilling study on lightweight structural Mg/SiC composite for defence applications K Balamurugan, M Uthayakumar, ST Kumaran, GS Samy, UTS Pillai Defence Technology 15 (4), 557-564	10	2019
8	Study on the machining of Al-SiC functionally graded metal matrix composite using die-sinking EDM M Uthayakumar, KV Babu, ST Kumaran, SS Kumar, JTW Jappes, ... Particulate Science and Technology 37 (1), 103-109	10	2019
9	Investigating the surface integrity of aluminium based composites machined by EDM SS Kumar, M Uthayakumar, ST Kumaran, T Varol, A Canakci Defence Technology 15 (3), 338-343	19	2019
10	Predicting correlations in abrasive waterjet cutting parameters of Lanthanum phosphate/Yttria composite by response surface methodology K Balamurugan, M Uthayakumar, S Sankar, US Hareesh, KGK Warriar Measurement 131, 309-318	7	2019
11	Performance of surface-textured end-mill insert on AISI 1045 steel V Arumugaprabu, TJ Ko, ST Kumaran, R Kurniawan, Y Kwak, Z Yu, ... Materials and Manufacturing Processes 34 (1), 18-29	3	2019
12	Solid particle erosion studies on fibre composite with egg shell as filler materials MA Khan, S Manikandan, G Ebenezer, M Uthayakumar, ST Kumaran International Journal of Surface Science and Engineering 13 (1), 1-13	3	2019

13	Abrasive Waterjet Cutting of Lanthanum Phosphate—Yttria Composite: A Comparative Approach K Balamurugan, M Uthayakumar, S Sankar, US Hareesh, KGK Warriar Micro and Nano Machining of Engineering Materials, 101-119	3	2019
14	Failure analysis in hybrid composites prepared using industrial wastes V Arumugaprabu, TJ Ko, M Uthayakumar, RDJ Johnson Failure Analysis in Biocomposites, Fibre-Reinforced Composites and Hybrid ...	3	2019
15	Development and sustainability of industrial waste-based red mud hybrid composites S Vigneshwaran, M Uthayakumar, V Arumugaprabu Journal of Cleaner Production 230, 862-868	18	2019
16	Wear studies of copper-fly ash composite under dry sliding conditions P Balamurugan, M Uthayakumar, M Niemczewska-Wójcik Materials Research Express 6 (10), 1065d5	1	2019
17	Effect of chemical treatment on erosion properties of jute polyester composites S Vigneshwaran, M Uthayakumar, V Arumugaprabu, A Ramesh, ... AIP Conference Proceedings 2057 (1), 020063	1	2019
18	Multicriteria Optimization of Machining Parameters in WEDM of Titanium Alloy 6242 R Prasanna, PM Gopal, M Uthayakumar, S Aravind Advances in Manufacturing Technology, 65-75	1	2019
19	Solid particle erosion study on redmud-an industrial waste reinforced sisal/polyester hybrid composite S Vigneshwaran, M Uthayakumar, V Arumugaprabu Materials Research Express 6 (6), 065307	5	2019
20	A study on kerf characteristics of hybrid aluminium 7075 metal matrix composites machined using abrasive water jet machining technology KSK Sasikumar, KP Arulshri, K Ponappa, M Uthayakumar Proceedings of the Institution of Mechanical Engineers, Part B: Journal of ...	36	2018
21	Abrasive water jet machining of fiber-reinforced composite materials S Vigneshwaran, M Uthayakumar, V Arumugaprabu Journal of Reinforced Plastics and Composites 37 (4), 230-237	19	2018
22	Influence of filler on erosion behavior of polymer composites: A comprehensive review S Vigneshwaran, M Uthayakumar, V Arumugaprabu, ... Journal of Reinforced Plastics and Composites 37 (15), 1011-1019	12	2018
23	A study on the compressive residual stress due to waterjet cavitation peening K Balamurugan, M Uthayakumar, S Gowthaman, R Pandurangan Engineering Failure Analysis 92, 268-277	11	2018
24	Influence of redmud particle hybridization in banana/sisal and sisal/glass composites VA Prabu, ST Kumaran, M Uthayakumar Particulate Science and Technology 36 (4), 402-407	11	2018
25	Erosion performance studies on sansevieria cylindrica reinforced vinylester composite RDJ Johnson, V Arumugaprabu, M Uthayakumar, S Vigneshwaran, ... Materials Research Express 5 (3), 035309	11	2018
26	Modeling and surface texturing on surface roughness in machining $\text{LaPO}_4\text{-Y}_2\text{O}_3$ composite K Balamurugan, M Uthayakumar, S Sankar, US Hareesh, KGK Warriar Materials and Manufacturing Processes 33 (4), 405-413	11	2018
27	A brief review on the erosion-corrosion behavior of engineering materials R Kuruvila, ST Kumaran, MA Khan, M Uthayakumar Corrosion Reviews	11	2018

28	A brief review on importance of surface texturing in materials to improve the tribological performance V Arumugaprabu, TJ Ko, T Kumaran, R Kurniawan, M Uthayakumar Reviews on Advanced Materials Science 53 (1), 40-48	6	2018
29	Solid particle erosive behaviour of sillimanite reinforced aluminium metal matrix composites M Pethuraj, M Uthayakumar, S Rajakarunakaran, S Rajesh Materials Research Express 5 (6), 066514	5	2018
30	Effect of abrasive waterjet machining on LaPO ₄ /Y ₂ O ₃ ceramic matrix composite K Balamurugan, M Uthayakumar, S Sankar, US Hareesh, KGK Warriar Journal of the Australian Ceramic Society 54 (2), 205-214	5	2018
31	Electrical Discharge Machining of Sillimanite Reinforced Aluminium Metal Matrix Composites M Pethuraj, M Uthayakumar, S Rajakarunakaran, S Rajesh Journal of Advanced Microscopy Research 13 (2), 171-175	1	2018
32	Preparation, characterisation and machining of LaPO ₄ -Y ₂ O ₃ composite by abrasive water jet machine K Balamurugan, M Uthayakumar, S Sankar, US Hareesh, KGK Warriar International Journal of Computer Aided Engineering and Technology 10 (6 ...	1	2018
33	Review on machinability of fiber reinforced polymers: a drilling approach S Vigneshwaran, M Uthayakumar, V Arumugaprabu Silicon 10 (5), 2295-2305	14	2018
34	Garnet and Al-flyash composite under dry sliding conditions S Sivakumar, S Senthil Kumaran, M Uthayakumar, A Daniel Das Journal of Composite Materials 52 (17), 2281-2288	9	2018
35	A review on erosion studies of fiber-reinforced polymer composites S Vigneshwaran, M Uthayakumar, V Arumugaprabu Journal of Reinforced Plastics and Composites 36 (14), 1019-1027	10	2017
36	Rotary ultrasonic machining of woven CFRP composite in a cryogenic environment ST Kumaran, TJ Ko, C Li, Z Yu, M Uthayakumar Journal of Alloys and Compounds 698, 984-993	46	2017
37	Prediction of surface roughness in abrasive water jet machining of CFRP composites using regression analysis ST Kumaran, TJ Ko, M Uthayakumar, MM Islam Journal of Alloys and Compounds 724, 1037-1045	38	2017
38	Performance evaluation of abrasive water jet machining on banana fiber reinforced polyester composite VA Prabu, ST Kumaran, M Uthayakumar Journal of Natural Fibers 14 (3), 450-457	27	2017
39	ANFIS modeling of surface roughness in abrasive waterjet machining of carbon fiber reinforced plastics ST Kumaran, TJ Ko, R Kurniawan, C Li, M Uthayakumar Journal of Mechanical Science and Technology 31 (8), 3949-3954	19	2017
40	Mathematical modelling on multiple variables in machining LaPO ₄ /Y ₂ O ₃ composite by abrasive waterjet K Balamurugan, M Uthayakumar, S Sankar, US Hareesh, KGK Warriar International Journal of Machining and Machinability of Materials 19 (5 ...	9	2017
41	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 ...	2	2017
42	Numerical Simulation of Steady Flow and Forced Convection Heat Transfer from Two Offset Square Cylinders Placed in a Channel PR Kanna, M Sivasubramanian, PM Prabu, M Uthayakumar Arabian Journal for Science and Engineering 42 (5), 1795-1815	2	2017

43	Numerical investigation of forced convection heat transfer from square cylinders in a channel covered by solid wall: Conjugate situation RP Kanna, M Sivasubramanian, M Uthayakumar FME Transactions 45 (1), 16-25	2	2017
44	An analysis of end milling performance on B ₄ C particle reinforced aluminum composite GS Samy, ST Kumaran, M Uthayakumar Journal of the Australian Ceramic Society 53 (2), 373-383	8	2017
45	Some experimental investigations on drilling AA (6351)-SiC-B ₄ C composite ST Kumaran, TJ Ko, M Uthayakumar, MA Khan, I Muhammad Materials and Manufacturing Processes 32 (13), 1557-1564	7	2017
46	Optimization of drilling process on Al-SiC Composite using grey relation analysis KV Babu, M Uthayakumar, JTW Jappes, TPD Rajan Materials Science and Engineering: Concepts, Methodologies, Tools, and ...	7	2017
47	Surface texturing by dimple formation in TiAlSiZr alloy using μ -EDM ST Kumaran, TJ Ko, M Uthayakumar, MA Khan, M Niemczewska-Wójcik Journal of the Australian Ceramic Society 53 (2), 821-828	3	2017
48	Process optimization and wear behavior of red mud reinforced aluminum composites R Shanmugavel, TK Sundaresan, U Marimuthu, P Manickaraj Advances in Tribology 2016	6	2016
49	Electrical discharge machining of Al (6351) alloy: role of electrode shape SS Kumar, M Uthayakumar, ST Kumaran, P Parameswaran, E Mohandas International Journal of Materials and Product Technology 53 (1), 86-97	8	2016
50	Mechanical characterization of coir/palmyra waste fiber hybrid composites V Arumugaprabu, M Uthayakumar, F Cardona, MTH Sultan IOP Conf. Ser. Mater. Sci. Eng 152	4	2016
51	Studies on the static and Dynamics Behaviors of Surface Treated Luffa Cylindrica Polyester Composites G Kalusuraman Virudhunagar	3	2016
52	Synthesis of petri net based model of a discrete event manufacturing system for nonlinear process plan A Słota, J Zając, M Uthayakumar Management and Production Engineering Review 7 (2), 62--72	3	2016
53	Machinability of nickel-based superalloy by abrasive water jet machining M Uthayakumar, MA Khan, ST Kumaran, A Słota, J Zając Materials and Manufacturing Processes 31 (13), 1733-1739	62	2016
54	Machinability of Hybrid Natural Fiber Composite with and without Filler as Reinforcement MUK S. P. Jani , A. Senthil Kumar , M. Adam Khan Materials and Manufacturing Processes 31, 1393-1399	51	2016
55	Dry sliding wear behavior of SiC and B ₄ C-reinforced AA6351 metal matrix composite produced by stir casting process S Thirumalai Kumaran, M Uthayakumar, S Aravindan, S Rajesh Proceedings of the Institution of Mechanical Engineers, Part L: Journal of ...	23	2016
56	Machining behavior of AA6351-SiC-B ₄ C hybrid composites fabricated by stir casting method ST Kumaran, M Uthayakumar, A Słota, S Aravindan, J Zając Particulate Science and Technology 34 (5), 586-592	18	2016