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3.4 Research Publications and Awards

3.4.4 Number of books and chapters in edited volumes/books published per teacher during last five years

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2020-2021

Edited by Senthilkumar Krishnasamy, Rajini Nagarajan,
Senthil Muthu Kumar Thiagamani, and Suchart Siengchin

Mechanical and Dynamic Properties of Biocomposites



9.4.3	Acoustic Properties	186
9.5	Conclusion	187
	References	187

10 **Effect of Micro-Dry-Leaves Filler and Al-SiC Reinforcement on the Thermomechanical Properties of Epoxy Composites** 191

Mohit Hemath, Govindrajulu Hemath Kumar, Varadhappan Arul Mozhi Selvan, Mavinkere R. Sanjay, and Suchart Siengchin

10.1	Introduction	191
10.2	Materials and Methods	193
10.2.1	Materials	193
10.2.2	Production of Al-SiC Nanoparticles	193
10.2.3	Fabrication of Epoxy Composites	194
10.2.4	Epoxy Composite Characterization	194
10.2.4.1	Porosity, Density, and Volume Fraction	194
10.2.4.2	Tensile Properties	194
10.2.4.3	Flexural Properties	194
10.2.4.4	Impact Strength	195
10.2.4.5	Dynamic Mechanical Analysis (DMA)	195
10.2.4.6	Morphological Properties	195
10.3	Results and Discussion	195
10.3.1	Quality of Fabrication and Volume Fraction of Epoxy Composites	195
10.3.2	Tensile Characteristics	196
10.3.3	Flexural Characteristics	197
10.3.4	Impact Characteristics	198
10.3.5	Dynamic Mechanical Analysis	199
10.3.5.1	Storage Modulus	199
10.3.5.2	Loss Modulus	200
10.3.5.3	Damping Factor	201
10.3.6	Morphological Characteristics	201
10.4	Conclusion	201
	References	202

11 **Effect of Fillers on Natural Fiber–Polymer Composite: An Overview of Physical and Mechanical Properties** 207

Annamalai Saravanakumar, Arunachalam Senthilkumar, and Balasundaram Muthu Chozha Rajan

11.1	Introduction	207
11.2	Influence of Cellulose Micro-filler on the Flax, Pineapple Fiber-Reinforced Epoxy Matrix Composites	208
11.3	Influence of Sugarcane Bagasse Filler on the Cardanol Polymer Matrix Composites	208
11.4	Influence of Sugarcane Bagasse Filler on the Natural Rubber Composites	209
11.5	Influence of Fly Ash on Wood Fiber Geopolymer Composites	210

Chapter 9

Data Security and Privacy Requirements in Edge Computing: A Systemic Review

Chinnasamy Ponnusamy

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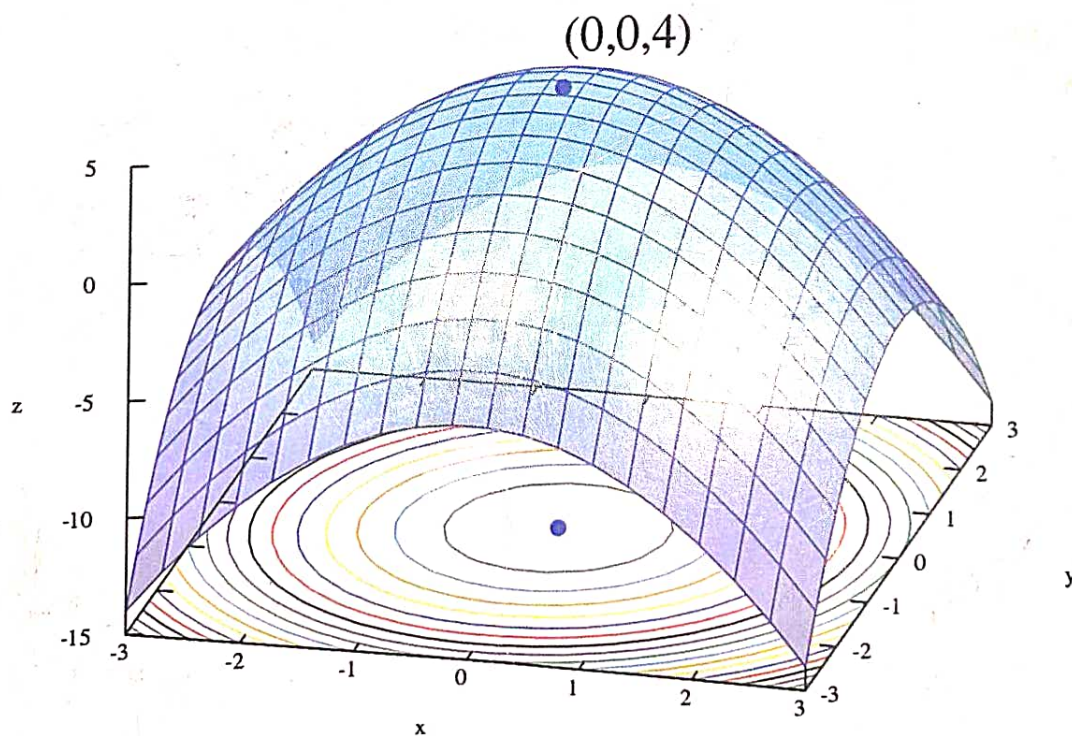
Several researchers analyzed the information security problems in edge computing, though not all studied the criteria for security and confidentiality in detail. This chapter intends to extensively evaluate the edge computing protection and confidentiality standards and the different technical approaches utilized by the technologies often used to mitigate the risks. This study describes the latest research and emphasizes the following: (1) the definition of edge computing protection and confidentiality criteria, (2) state-of-the-art strategies used to mitigate protection and privacy risks, (3)

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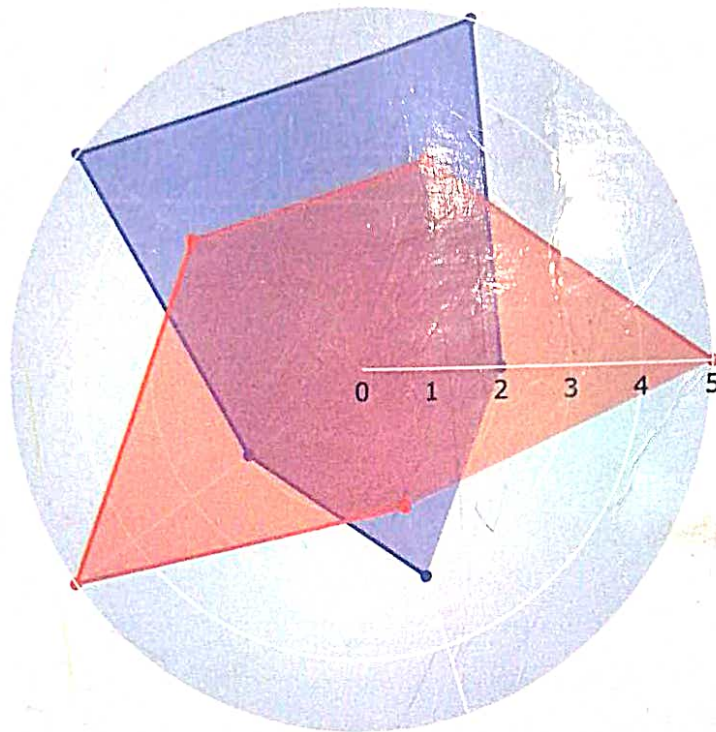


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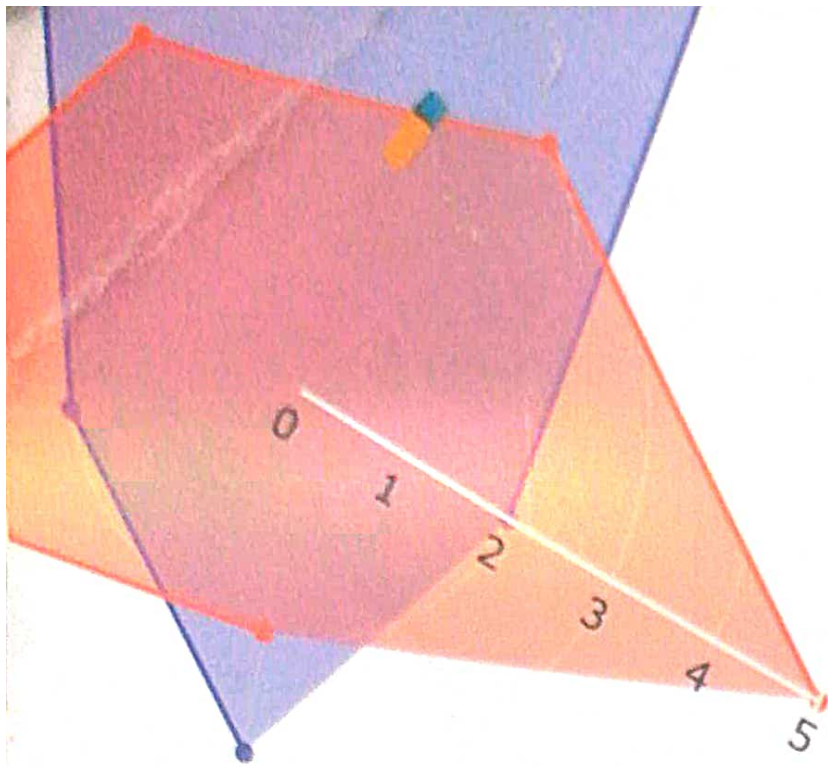
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ISSN 2522-5162

ISSN 2522-5170 (electronic)

Asset Analytics

ISBN 978-981-15-3642-7

ISBN 978-981-15-3643-4 (eBook)

<https://doi.org/10.1007/978-981-15-3643-4>

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Contents

1	Application of Demand-Side Management Techniques for Sustainable Energy	1
	Sheikh Suhail Mohammad, Umar Maqbool, Aaquib Firdous, Tahleela Navid, Zahid Nazir Padder, and Shafqat Nabi Mughal	
2	Effect of Internal Customer Satisfaction Index on Revamping of ISO Implementation Structure in a R&D Organization	13
	Sharma Ritu, Kaur Jatinder, Singh Jaspreet, and Srivastava Niraj	
3	An Empirical Research on the Role of Cloud-Based HRIS & HRM Functions in Organizational Performance	21
	Rinku Sanjeev and Nidhi Shridhar Natrajan	
4	Synchronization of UPFC in Active Distribution Systems	37
	Shiva Pujan Jaiswal and Vivek Shrivastava	
5	Study of FM/FM(FM)/1/L Queue with Server Startup Under Threshold N-Policy Using Parametric Non-linear Programming Method	51
	Anjali Ahuja and Anamika Jain	
6	NHPP-Based SRGM Using Time-Dependent Fault Reduction Factors (FRF) and Gompertz TEF	81
	M. Jain, P. Agarwal, and R. Solanki	
7	Implementation of Low-Carbon Logistics in Indian SMEs—A Statistical Study	91
	K. M. Ahamed Sheriff, M. Elango, and K. M. Mahaboob Sheriff	
8	A Game-Theoretic Model of Deceptive Ambush as Counter Measure for Habitat Selection in Cross-Border Infiltration	107
	Shivam Sharma and Ashok Kumar Sinha	

Book Front page Proof for Digital filter design

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Publication Home

[f](#) [t](#) [G+](#) [in](#)

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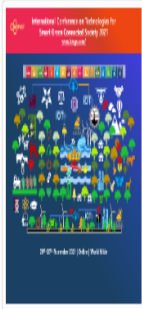
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ECS Transactions	
Table of contents	
Volume 107	
Number 1, 2022	
◀ Previous issue Next issue ▶	
First International Conference on Technologies for Smart Green Connected Society 2021	
Open all abstracts	
Chapter 1	
Influence of Deposition Conditions on Properties of Ta ₂ O ₅ Films Deposited by Ion Beam Sputtering Coating Technique	3
Laxminarayana Gangalakurti, K Venugopal Reddy, M V Y S. Ravi kumar, I M Chhabra and Sreerama Varaprasad	
+ Open abstract View article PDF	
Sustainable Development-Adopting a Balanced Approach between Development and Development Induced Changes	15
Neha Garg and Bhupinder Singh	
+ Open abstract View article PDF	
Satellite Internet Communication: A Race with Contemporary Optical Fiber Network with the Help of SPT Algorithm	33
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Predictors of Severe COVID-19 Outcome: A Meta-Analysis of Common Laboratory Biomarkers	8531
Anush N, A Jasmin, Pranav K Prabhakar, Riya Mathew and C P Bineesh	
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Uma Maheshwari M, Tamilsevi R, Parisa Beham M and Amjath Hasan M	
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Quasi-Crystalline Behavior of Imidazolium Based Pure Ionic Liquids Over the Extended Pressure Range	8583
Archana Sirohi, Ankit Dogra, Devinder P Singh and Arun Upmanyu	
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Evaluation of CO ₂ Transport Design Via Pipeline in the CCS System with Various Distance Combinations	8593
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Automated Pneumonia Detection Method Using Hybrid Semantic Segmentation Network

Uma Maheshwari M¹, Tamilsevi R¹, Parisa Beham M¹ and Amjath Hasan M²

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[ECS Transactions, Volume 107, Number 1](#)

Citation Uma Maheshwari M et al 2022 *ECS Trans.* 107 8571

+ Article information

Abstract

Pneumonia is a potentially life-threatening condition that causes the air sacs in the lungs to become full of pus or fluid. Pneumonia is one of the lung infection diseases that can sometimes lead to severe or life-threatening illness and even death. Chest X-rays are mainly used for the diagnosis of pneumonia. Early detection of pneumonia is a challenge in the X-ray imaging due to the limited color scheme of X-ray imaging. Another major drawback in the early diagnosis of pneumonia is the human-



Design and Fabrication of Flexible Antenna Using Foam Substrate for WiMAX Applications

M. Pandimadevi[✉] & R. Tamilselvi

Conference paper | First Online: 29 May 2021

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Abstract

In present scenario, world interoperability for microwave access (WiMAX) is gaining great momentum among broadband wireless technologies. Employing flexible antenna will enable high-performance of radio frequency transmission as well as cost effective for such wireless applications. In this work, a flexible antenna is designed, simulated, and fabricated using foam substrate material for world interoperability for microwave access (WiMAX) band applications. The operating frequency is chosen as 3.5 GHz. The proposed antenna is bendable, wearable, low cost, and smaller in size, reduced reflection co-efficient, greater directivity, and wider bandwidth. The antenna is simulated using computer simulation technology software and is

Table of contents (56 papers)

Search within book



← Previous Page **1** of 3 Next →

Front Matter

[PDF](#) ↓

Pages i–xxiv

A Review on MIMO Dielectric Resonator Antenna for 5G Application

Rajeshwari R. Malekar, Hema Raut, Laxmikant Shevada, Sumit Kumar
Pages 1–8

Comparative Study of CMOS and FinFET-Based SRAM Cell Using SVL Technique

Deepika Sharma, Shilpi Birla
Pages 9–18

Capacity Evaluation and Analysis of Long Range for IoT

Asmita Singh, Abhishek Tyagi, Sindhu Hak Gupta
Pages 19–27

VLSI Implementation of PN Sequence Generator Using Two Different Multiplication Algorithms

Machine Learning Technique for Target-Based Sentiment Analysis

Jyoti Srivastava, Neha Katiyar
Pages 161-169

Performance Improvement in Target Detection Using Various Techniques in Complex Matched Filter in Radar Communication

Ajay Suri, Soham Gautam, Ridhi Aggarwal
Pages 171-179

Unhindered Safety Monitoring System for Underground Workers

G. Shanmugaraj, B. V. Santhosh Krishna, S. SriSahithya, M. Sandhya, T. H. Monikca
Pages 181-190

Design and Fabrication of Flexible Antenna Using Foam Substrate for WiMAX Applications

M. Pandimadevi, R. Tamilselvi
Pages 191-202

Breast Cancer Prediction Through Multilayer Artificial Neural Network

Kumari Alka, Rajeev Kumar Gupta
Pages 203-214

An Energy Efficient Microwave Based Wireless Solar Power Transmission System

To cite this article: P Sabarish et al 2020 IOP Conf. Ser.: Mater. Sci. Eng. 937 012013

An Energy Efficient Microwave Based Wireless Solar Power Transmission System

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Abstract: Worldwide force age is estimate to increment by some 60% somewhere in the range of 2017 and 2040 to cover a fourth of essential vitality request, the IEA said in its World Energy Outlook 2018. "Power markets are experiencing a special change with more popularity brought by the advanced economy, electric vehicles" however numerous components are impacting the agreeableness of vitality innovation. The change of the vitality area is searching for clean vitality innovation that is additionally appropriate for base burden power generation. The sun based vitality is most utilized clean vitality today, but Terrestrial sun oriented vitality has several obstructions. Putting colossal sun based power satellite systems for arena addresses a lot of creative mechanical benefits than may give gigantic degree, normally clean base weight power into natural markets and it is one of the way in which satisfied essentialist demand in best in class days. Later, a symmetric concentrated with a high sun-based arrangement competence has been proposed.

1. Introduction

The present power age and transmission framework isn't extremely productive as far as vitality move. Around 25 to 30% vitality is lost during the transmission and dissemination of the power. So the force part is chipping away at the tasks to improve a definitive power supply. Researchers are searching for interchange and productive innovations to give 100% power move and age [1-2]. That way was the sunlight based remote force transmission framework the sun based vitality is one of the most spotless and environmentally friendly power vitality: it was no expense of energy. In space there is a

Implementation of a new Bi-Directional Switch multilevel Inverter for the reduction of harmonics

To cite this article: S. Vijayalakshmi et al 2020 IOP Conf. Ser.: Mater. Sci. Eng. 937 012026

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Implementation of a new Bi-Directional Switch multilevel Inverter for the reduction of harmonics

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Abstract. In the current scenario, multilevel inverter plays a major role in heavy duty drive systems. MLI is one of the most advanced power converters for highly efficient AC output. But there is more to the requirement of number of control switches and total number of input sources which often generates more losses. This paper presents a new multilevel inverter design with limited number of control switches and with just one DC source to reduce these demerits. It uses a smaller number of Bi-directional switches. So that complexity of the circuit is reduced. Finally, an eleven-level inverter is designed and simulated using MATLAB/SIMULINK and THD reduction has been analyzed. This paper also provides a comparative statement of required components for various conventional methods.

1. Introduction

Staggered inverters are a truly appropriate setup to arrive at high power evaluations and excellent yield waveforms [1]. In the group of staggered inverter, topologies dependent on arrangement associated H-spans are especially appealing a result of their measured quality and straight forwardness of control structure for the uncompromising electric drives would require electronic forced control inverters to meet the needs [2-10].

Staggered converters do not cursively generate low mutilation voltages, but also minimize dv / dt-tension, thus reducing problems with electromagnetic compatibility [11-20]. Shockingly, staggered converters have a few detriments. One inconvenience is the large number of semi-conductor switch requirement [21-30], the possibility of using low voltage control switches, each switch requires a driver circuit. This may make the general framework gradually very expensive and complex [31-35].

The Harmonics can be reduced by increasing the levels. It is compulsory that an output voltage with low THD is required, but greater the number of levels requires more elements; also the control will be very complex.

For eleven level yield voltages, five helper switches, four principle switches and five capacitors are required. To demonstrate the decrease in segment numbers accomplished by this rearranged H-

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👤 Jessica Koehne

Abstract 🗨️ 317 |

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Abstract 🗨️ 330 |

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Artificial Intelligence Based Technique for Base Station Sleeping

[Deepa Palani](#) & [Merline Arulraj](#) 

Chapter | [First Online: 28 September 2020](#)

23 Accesses

Abstract

In the progress of 5G wireless cellular network the heterogeneous network plays an important role. In this paper energy consumption is investigated. First, the placement of Small Base station with Macro Base station which reduces the power consumption then by applying Genetic Algorithm to reduce the power ingestion by switch off the Base station depends upon the load. Before that, the path loss (Okumura–Hata) which is an important parameter in the wireless network can be calculated using the different components like various parameters such as transmitting power, height and distance. Simulation results show that the optimization algorithm achieves nearly optimal performance.

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Implementation of a new Bi-Directional Switch multilevel Inverter for the reduction of harmonics

S. Vijayalakshmi¹, P R Sivaraman², R Karthick³ and A. Nazar Ali⁴

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IOP Conference Series: Materials Science and Engineering, Volume 937, Recent Trends on Renewable Energy Smart Grid and Electric Vehicle Technologies (RESGEVT 2020) 9 July 2020, Vellore, India

Citation S. Vijayalakshmi *et al* 2020 *IOP Conf. Ser.: Mater. Sci. Eng.* **937** 012026

DOI 10.1088/1757-899X/937/1/012026

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Modeling Techniques and Applications

Edited By Asis Kumar Tripathy, Chiranjil Lal Chowdhary, Mahasweta Sarkar, Sanjaya Kumar Panda

Edition	1st Edition
First Published	2021
eBook Published	30 March 2021
Pub. Location	Boca Raton
Imprint	CRC Press
DOI	https://doi.org/10.1201/9781003121619 (https://doi.org/10.1201/9781003121619)
Pages	296
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ABSTRACT

TABLE OF CONTENTS



1 of 1

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Communication Technologies and Virtual Mobile Networks, ICICV 2021 • Tirunelveli • 4 February 2021 through 6 February 2021 • Code 168213

Document type

Conference Paper

Source type

Conference Proceedings

ISBN

978-073811183-4

DOI

10.1109/ICICV50876.2021.9388537

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Quality span prediction (QSP) of solar photovoltaic panels

Abraham, J. Dani^a ; Sasiraja R.M.^b ; Winston, D. Prince^c

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Sustainable Development Goals 2022

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Abstract

One of the most beneficial systems to generate green energy are the solar panels. At present various types of photovoltaic panels are in use depending on the energy requirement of the user. But, all panels are not in good conditions. Sometimes the users are supplied with very old and degraded quality panels. This reduced the power production of PV panels which are lower than their rated value. So the users have to install a new PV system within a very short span of time. Hence the choice of solar power system is decreasing in certain regions. This paper is focused on finding the age and quality of the PV

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Aarich, N. , Bennouna, A. , Erraissi, N.
(2017) *Proceedings of 2016 International Renewable and Sustainable Energy Conference, IRSEC 2016*

Performance Evaluation of 4 kWp grid-connected photovoltaic system in Casablanca, Morocco

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(2021) *Journal of Electrical Systems*

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Conference Proceedings

ISBN

978-073811183-4

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10.1109/ICICV50876.2021.9388551

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An efficient dynamic key generation architecture for distributed wireless networks

Mathankumar M.^a ; Karthikeyani S.^b ; Kumar, S. Gowdham^c ; Mahesh N.^d ;

Savitha N.J.^e ; Rajaguru R.^f

[Save all to author list](#)^a Electrical and Electronics Engineering, Kumaraguru College of Technology, Coimbatore, India^b Applied Electronics, Sri Krishna College of Engineering and Technology, Coimbatore, India^c PSG Industrial Institute, PSG College of Technology, Coimbatore, India^d Electronics and Instrumentation Engineering, Kongu Engineering College, Erode, India[View additional affiliations](#)

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Abstract

Distributed wireless networks are capable of delivering solutions for countless engineering and viable applications. The sensor nodes of these wireless networks tolerate tons of limitations namely low computation capability, secured data transmission, tiny memory, fractional energy resources, etc. Within this environment any sensor node can initiate the communication over a period, hence it is imperative to enhance the reliability of data which is communicated. In a secured communication,

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An Effective Hybrid Threefold Encrypted and Double Protected Cryptographic Technique in Wireless Sensor Networks

Prasad, G.L.V. , Sreenath, K. , Kiran, P.
(2022) *ICDCS 2022 - 2022 6th International Conference on Devices, Circuits and Systems*

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Korlepara, N.S.D.P. , Chandra, G.P. , Seshagiri, B.
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Mohan Raj, C. , Mathan Kumar, M. , Manivannan, D.
(2013) *Journal of Artificial Intelligence*

Design a dynamic key management protocol for data gathering in wireless sensor network

Chen, C.-L. , Chen, C.-C.
(2013) *IEEE International Symposium on Industrial Electronics*

Mobile device based dynamic key management protocols for wireless sensor networks

Chen, C.-L. , Chen, C.-C. , Li, D.-K.
(2015) *Journal of Sensors*

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Document type

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Source type

Journal

ISSN

22147853

DOI

10.1016/j.matpr.2021.04.628

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Experimental study of mechanical properties of AA6061 and AA7075 alloy joints using friction stir welding

[Amuthan, Tamilselvan^a](#); [Nagaprasad, Nagaraj^b](#) ; [Krishnaraj, Ramaswamy^c](#); [Narasimharaj, Venugopal^d](#); [Stalin B.^e](#); [Vignesh, Venkataraman^f](#)

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^a Department of Mechanical Engineering, Velammal College of Engineering and Technology, Tamil Nadu, Madurai, 625 009, India

^b Department of Mechanical Engineering, ULTRA College of Engineering and Technology, Tamil Nadu, Madurai, 625 107, India

^c Department of Mechanical Engineering, Dambi Dollo University, Ethiopia

^d Department of Mechatronics Engineering, Sri Krishna College of Engineering and Technology, Tamil Nadu, Coimbatore, 641 008, India

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(2022) *International Journal on Interactive Design and Manufacturing*

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(2022) *International Journal on Interactive Design and Manufacturing*

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(2022) *Materials Today: Proceedings*

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Document type

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Source type

Journal

ISSN

22147853

DOI

10.1016/j.matpr.2021.01.511

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Experimental investigation on tensile and flexural properties of randomly oriented treated palmyra fibre reinforced polyester composites

Sivakumar S.^a; Vignesh V.^b; Arasu, I. Vijay^b; Venkatesan G.^b; Mohamed Rabi, B. Raja^b;

Adam Khan M.^a

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^a Department of Mechanical Engineering, School of Automotive and Mechanical Engineering (SAME), Centre for Surface Engineering, Kalasalingam Academy of Research and Education, Virudhunagar Dist., Tamilnadu, India

^b Department of Mechanical Engineering, Sethu Institute of Technology, Kariapatti, Virudhunagar Dist., Tamil Nadu, India

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Abstract

The natural fiber is a best replacement for synthetic fiber which is reinforced with polymer composites for advanced engineering application. The main purpose of this paper is to study the tensile and flexural properties of untreated and treated palmyra natural fiber reinforced polyester composites. Palmyra fibre is used as a reinforcement and the polyester resin is used as a matrix. Composites plates were fabricated through handlayup moulding techniques. The treated palmyra fiber composites yields excellent tensile and flexural properties. Tensile tests revealed that the ultimate strength is about

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Extraction and Characterization of Agricultural Discarded Sesbania Aculeata Stem Waste as Potential Alternate for Synthetic Fibers in Polymer Composites

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Materials Today: Proceedings • Volume 45, Pages 5759 - 5763 • 2021 • 2nd International Conference on Aspects of Materials Science and Engineering, ICAMSE 2021 • Chandigarh • 5 March 2021 through 6 March 2021 • Code 169287

Document type

Conference Paper

Source type

Journal

ISSN

22147853

DOI

10.1016/j.matpr.2021.02.587

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Design and analysis of serial drilled hole in composite material

Jule, Leta Tesfaye^{a, b}; Ramaswamy, Krishnaraj^{a, c} ; Nagaprasad, Nagaraj^d; Shanmugam, Vigneshwaran^e; Vignesh, Venkataraman^f

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^a Centre for Excellence-Indigenous Knowledge, Innovative Technology Transfer and Entrepreneurship, Dambi Dollo University, Ethiopia

^b Department of Physics, College of Natural and Computation Science, Dambi Dollo University, Ethiopia

^c Department of Mechanical Engineering, Dambi Dollo University, Ethiopia

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Abstract[Author keywords](#)[Indexed keywords](#)[SciVal Topics](#)[Metrics](#)**Abstract**

During last two decades the growth of composite materials was remarkable. The volume and number of applications of composite materials are rapidly growing and continuously conquering new market fields. The demand for these engineered materials varies from consumer goods to advanced niche applications, reflecting substantially development of composite materials. However, the composites losses its properties during secondary processing methods such as drilling, and cutting. The main objective of this paper is to study the loss of strength in composites while cutting serial fastener holes

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Influence of reduced graphene oxide addition on kerf width in abrasive water jet machining of nanofiller added epoxy-glass fibre composite

Kavimani, V. , Gopal, P.M. , Stalin, B.
(2022) *PLoS ONE*

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(2022) *Journal of Pharmaceutical Negative Results*

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(2021) *Materials Today: Proceedings*

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Document type

Conference Paper

Source type

Journal

ISSN

22147853

DOI

10.1016/j.matpr.2020.09.262

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The effect of process parameters for synthesized copper metal matrix using stir casting process

Vairamuthu J.^a ; Stalin B.^b; Sivakumar G.D.^a; Fazil, B. Mohmed^a; Balaji R.^a; Natarajan, V. Ananda^a

Save all to author list

^a Department of Mechanical Engineering, Sethu Institute of Technology, Kariapatti, Pulloor, 626 115, India

^b Department of Mechanical Engineering, Anna University, Regional Campus Madurai, Madurai, 625 019, India

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Abstract

In recent days, the role of the stir casting process has been increased in metal manufacturing sectors. It can be produced the components with good quality and less casting defects. The experimental work has been discussed about the effect of stir casting process parameters for synthesized Copper Metal Matrix Composite (Cu-MMC) reinforced with Titanium Carbide (TiC). The hardness, impact, and tensile strength were determined through the variation of input stir casting factors such as particle size, the weight percentage of TiC, and stirring time. The experiment was conducted as per L₉ orthogonal based Taguchi design. The influential factor was measured through variance test. © 2021 Elsevier Ltd. All rights reserved. Selection and peer-review under responsibility of the scientific committee of the International Conference on Advances in Materials Research - 2019.

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Effect of Hybrid Reinforcements on the Mechanical Properties of Copper Nanocomposites

Singh, K. , Khanna, V. , Chaudhary, V. (2022) *ECS Journal of Solid State Science and Technology*

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Document type

Conference Paper

Source type

Journal

ISSN

22147853

DOI

10.1016/j.matpr.2020.10.116

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Dual loop control for single phase PWM inverter for distributed generation

Kalavalli C.^a ; Meenalochini P.^b; Selvaprasanth P.^b; Haq, S. Syed Abdul^b

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^a K.Ramakrishnan College of Technology, Trichy, Tamilnadu, 621112, India

^b Sethu Institute of Technology, Kariapatty, Tamilnadu, India

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[Abstract](#)[Author keywords](#)[Indexed keywords](#)[SciVal Topics](#)[Metrics](#)**Abstract**

In this paper the design of synchronous frame DQ control based double loop control for single phase inverter in distributed generation system is proposed. For synchronous frame control, the orthogonal signal is generated by second order generalized integrator method. In Dual-loop control systems, the inner capacitor current feedback control and outer synchronous frame control is used to achieve better performance with zero steady state error. The better performance of load is achieved by providing load current as an additional feedback instead of using inductor current feedback. The proposed system is simulated using Matlab and results were presented. The designed controller gives the inverter output voltage with good transient response and reduced harmonic distortion. © 2021 Elsevier Ltd. All rights reserved. Selection and peer-review under responsibility of the scientific committee of the International Conference on Advances in Materials Research - 2019.

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Patra, A.K. , Rath, D. (2023) *Iranian Journal of Science and Technology - Transactions of Electrical Engineering*

Nitrogen (N₂) based antenna design for real-time mechanical applications

Srinivas Rao, M.P. , Revathi, S. , Rajaprasanna, R. (2022) *Materials Today: Proceedings*

Model Predictive Control Technique of Voltage Source Inverter for Linear and Non Linear Load

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Design of a Synchronous Reference Frame Controller for Single Phase Standalone Photovoltaic Inverter

Chander, A.H. , Kumar, L. (2018) *2017 14th IEEE India Council International Conference, INDICON 2017*

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1 Blaabjerg, F., Teodorescu, R., Liserre, M., Timbus, A.V.

Overview of control and grid synchronization for distributed power generation systems ([Open Access](#))

(2006) *IEEE Transactions on Industrial Electronics*, 53 (5), pp. 1398-1409. Cited 4204 times.
doi: 10.1109/TIE.2006.881997

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2 Ruan, X., Wang, X., Pan, D., Yang, D., Li, W., Bao, C.

(2018) *Control Techniques for LCL-Type Grid-Connected Inverters*. Cited 156 times.
Springer Singapore



3 Gu, Y., Wang, Y., Xiang, X., Li, W., He, X.

Improved virtual vector control of single-phase inverter based on unified model

(2014) *IEEE Transactions on Energy Conversion*, 29 (3), art. no. 6832554, pp. 611-618. Cited 25 times.
doi: 10.1109/TEC.2014.2323974

[View at Publisher](#)



4 Wang, Y., Gu, Y., Li, W., He, X.

Analysis of pre-compensator for disturbance signal elimination in single-phase inverters with virtual vector control

(2015) *9th International Conference on Power Electronics - ECCE Asia: "Green World with Power Electronics", ICPE 2015-ECCE Asia*, art. no. 7167780, pp. 157-162. Cited 4 times.
ISBN: 978-895708254-6
doi: 10.1109/ICPE.2015.7167780

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5 Roshan, A., Burgos, R., Baisden, A.C., Wang, F., Boroyevich, D.

A D-Q frame controller for a full-bridge single phase inverter used in small distributed power generation systems

(2007) *Conference Proceedings - IEEE Applied Power Electronics Conference and Exposition - APEC*, art. no. 4195786, pp. 641-647. Cited 162 times.
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Document type

Conference Paper

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Journal

ISSN

22147853

DOI

10.1016/j.matpr.2020.11.339

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Energy efficient distance based clustering protocol for heterogeneous wireless sensor networks

Dawood, M. Sheik^a; Benazer, S. Sakena^a; Saravanan, S.K. Vijaya^a; Karthik V.^b

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^a Sethu Institute of Technology, Virudhunagar, Pulloor, Tamil Nadu, India^b Sri Krishna College of Engineering and Technology, Coimbatore, India

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Wireless Sensor nodes are considered for range of applications such as temperature, humidity monitoring and etc. Sensor nodes are finished up of non-replaceable battery power, limited memory and processing capabilities. So the life span of the sensor node and network depends on the energy utilization. As the deployment area is not reasonable for manual intercession, energy spending is crucial to enhance the existence of the network. Many Authors have proposed many routing protocols to operate the energy very efficiently. Clustering is one of main technique to condense the energy consumption in the network. Selecting Cluster head is the major process for energy efficiency of clustering algorithms. As maximum energy is dissipated during data transfer, communication within the cluster is paramount. Communication distance between the Cluster head and member node is paramount. Node with elevated communication distance within the Cluster will acquire more energy. So the proposed protocol reduces the communication distance between in the cluster to condense the

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Kumar, R. , Mathur, R. (2017) *International Journal of Systems, Control and Communications*

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Rashed, M.G.D., Kabir, M.H., Ullah, S.E.
WEP: An energy efficient protocol for cluster based heterogeneous wireless sensor network
(2011) *Int. J. Distrib. Parallel Syst. (IJDPSS)*, 2 (2), pp. 54-60. Cited 20 times.

☐ 2

Kumar, D., Aseri, T.C., Patel, R.B.
Distributed cluster head election (DCHE) scheme for improving lifetime of heterogeneous sensor networks
(2010) *Tamkang Journal of Science and Engineering*, 13 (3), pp. 337-348. Cited 13 times.

☐ 3

Katiyar, V., Chand, N., Soni, S.
A survey on clustering algorithms for heterogeneous wireless sensor networks
(2011) *Int. J. Adv. Netw. Appl.*, 4 (2), pp. 745-754. Cited 101 times.

☐ 4

Akyildiz, I.F., Su, W., Sankarasubramaniam, Y., Cayirci, E.
Wireless sensor networks: A survey
(2002) *Computer Networks*, 38 (4), pp. 393-422. Cited 13388 times.
doi: 10.1016/S1389-1286(01)00302-4
[View at Publisher](#)

☐ 5

Yarvis, M., Kushalnagar, N., Singh, H., Rangarajan, A., Liu, Y., Singh, S.
Exploiting heterogeneity in sensor networks
(2005) *Proceedings - IEEE INFOCOM*, 2, pp. 878-890. Cited 413 times.
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☐ 6

Katiyar, V., Chand, N., Soni, S.
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(2011) *Int. J. Adv. Netw. Appl.* 02, pp. 745-754. Cited 101 times.
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Document type

Conference Paper

Source type

Journal

ISSN

22147853

DOI

10.1016/j.matpr.2020.08.390

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Investigation on performance of solar photovoltaic fed hybrid semi impedance source converters

Sabarish P.^a ; **Karthick R.**^b; Sindhu A.^b; Sathiyathan N.^b

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^a K.Ramakrishnan College of Technology, Trichy, Tamilnadu, 621112, India^b Sethu Institute of Technology, Karriyapatti, Tamilnadu, India

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[Abstract](#)[Author keywords](#)[Indexed keywords](#)[Sustainable Development Goals 2022](#)[SciVal Topics](#)[Metrics](#)**Abstract**

Normally the output voltage of the solar photovoltaic panel is very low; it varies widely under the influence of environment and climatic conditions. In this paper the combination of each power system and the output of the dc-dc converters are regulated by some kind of increased dc input voltage. The structure of the dc-dc converter is also very important for photo voltaic power systems. Various voltage raising technologies have indeed been thoroughly tested to date, such as rectifier circuit, managed to switch inductance, capacity to change, coupled inductance, impedance matching, and spiralled raising technologies. However, these processes are both dynamic with poor accuracy and greater cost. The effectiveness of the hybrid semi impedance source converter is greater. © 2021 Elsevier Ltd. All rights reserved. Selection and peer-review under responsibility of the scientific committee of the International Conference on Advances in Materials Research - 2019.

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Nitrogen (N₂) based antenna design for real-time mechanical applications

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(2022) *Materials Today: Proceedings*

A review on electro-mechanical properties of solar photovoltaic panels with graphene material

Sabarish, P. , Ramani, U. , Sundararaju, K.
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Monitoring the high-speed engine application using ferro magnetic system

Rajagopal, R. , Karthik, M. , Soni, M.
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Efficient model for IoT based railway crack detection system

Benazer, S. Sakena^a ; Dawood, M. Sheik^a; Ramanathan, Sulochanan Karthick^b; Saranya G.^c

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^a Sethu Institute of Technology, Virudhunagar, Pulloor, India^b Almusanna College of Technology, Oman^c Sri Krishna College of Engineering and Technology, Coimbatore, India

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Abstract

In present's world, transport is a key requirement. The fourth biggest railway set of connections in India is the human race. This paper discuss about the detection of crack in a railway track. In previous methods GPS module and the GSM modem were used. It leads to high cost. The effective railway crack detection system utilizing the simple components inclusive of a RF transmitter and receiver, LED -LDR set up. It has low cost compared to the existing techniques. In this paper LED and LDR assembly is utilized to find out the crack in a railway track. RF is an obvious option for message, because it allows more information to be transferred at high speed and over long remoteness. Here the sensor data is transferred to control room or monitoring unit. In this paper we proposed an IoT Based crack detection

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Performance analysis of modified on-demand multicast routing protocol for MANET using non forwarding nodes

Benazer, S. Sakena^a; **Dawood, M. Sheik^a**; Suganya G.^a; Ramanatha, Sulochanan Karthick^b

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^a Sethu Institute of Technology, Pulloor, Virudhunagar, India

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ODMRP (On-Demand Multicast Routing Protocol) is an admired multicast protocol in wireless ad-hoc networks. ODMRP flood a route applies for over the total network to go for a set of forwarding nodes for packet delivery. On the other hand, a on its own forwarding path is exposed to node failures, which are common due to the vibrant nature of mobile ad hoc networks. Still, a set of mischievous or malicious nodes can generate network partitions and mount Denial-of- Service (DoS) attacks. We recommend a new ODMRP-based wireless multicast protocol that offer more forwarding paths in face of link failures. A subset of the nodes that are not on forwarding path rescreen received packets to nodes in their neighbourhoods to beat perceived node failure. This rebroadcasting creates superfluous forwarding paths to skirt unsuccessful areas in the network. Each node makes this forwarding conclusion probabilistically. Our simulation results indicate the unbiased packet delivery ratio with

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A sinusoidal pulse width modulation (SPWM) technique for capacitor voltage balancing of nested I-type four-level inverter

Haq, S. Syed Abdul^a; JeyaRohini R.^b; **Meenalochini P.**^a ; Jeyakanth K.^a; Immanuel C.^a; HarishBabu T.^a
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Abstract

This article proposes a new control method based on a sinusoidal-width modulation (PWM) scheme to control the voltage of the I-type inverter. The four-stage FC type I inverter has fewer switches and components than the classic and advanced four-stage inverter, making this chassis attractive for high-performance high voltage applications. This structure was designed and studied assuming a constant current source rather than a flying capacitor. In this circuit, a medium power single phase rectifier is designed to balance the voltage of the flying capacitor. The efficiency and qualification of the proposed control methods are evaluated experimentally under constant and temporary conditions and at various modulation rates and loads. Experimental results show the effectiveness of the control method developed to control the capacitor voltage. © 2021 Elsevier Ltd.



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Design of rectenna for wireless sensor networks

Dawood, M. Sheik^a ; Benazer, S. Sakena^a; Nanthini N.^b; Devika R.^a; Karthick R.^a

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^a Sethu Institute of Technology, Virudhunagar, Pulloor, India^b Sri Krishna College of Engineering and Technology, India

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Abstract

Nowadays most used technology is Wireless sensor network which provides increasing efficiency of data collection and processing, which controls the flow of data applications. Rectenna is a device that converts Radio waves into Electrical signal by utilize of rectifying bridge circuit which is directly connected to the normal antenna. The common purpose of antenna is used in transmission of microwave energy. The purpose of rectenna is to receive RF energy from the atmosphere and transmit through the circuit. This provide high efficiency while conversion of microwaves into the Electrical energy. © 2021 Elsevier Ltd. All rights reserved. Selection and peer-review under responsibility of the scientific committee of the International Conference on Advances in Materials Research - 2019.

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Microstrip patch antenna design for wireless network applications

Kadhar, S. Mohideen Abdul^a ; Yasodai A.^b

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^a Department of Electronics and Communication Engineering, Sethu Institute of Technology, Kariapatty, 626115, India

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Abstract

Advances in communication systems involve the promotion of low cost, low weight, light weight and low profile antennas has been improved over last few years. It has capable of maintaining higher performance over a large range of frequency spectrum. This technological trend has focused a great deal of effort on growing of micro strip patch antennas due to its unalienable characteristics. It meets the requirement of modern communication devices. In this work, the inset feed technique was used to present the design and simulation of a compact rectangular slot patch antenna for double frequency operation at 5.27 GHz. The simulation of the built antenna was performed using the 2019 studio suite of computer simulation technology (CST) and MATLAB which will be used to measure the parameters. The substrate used for the proposed antenna is the four flame-resistant (FR-4) with a dielectric constant of 4.3 and a loss tangent of 0.023. The antenna proposed could find applications in Wireless Local Area (Wi-Fi) and Bluetooth technology. © 2021 Elsevier Ltd.



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Suppression of four wave mixing effect in DWDM system

Suresh, Helina Rajini^a; Vinitha V.^a; Girinath N.^b; Karthick R.^a

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Abstract

This article discusses the nonlinear effect, four-wave mixing (FWM), which lowers the performance of optical communication systems. The concept of orthogonal polarization was introduced to reduce the effects of FWM. Here, orthogonal polarization is used with various modulation techniques such as NRZ, RZ, GAUSSIAN and RAISED COSINE. Orthogonal polarization was found to reduce the effect of FWM more than round polarization. Weaknesses of the four wavelength mixes were analyzed for various levels of input power. The capacity of a four-wave mixing product (FWM) is assessed by an optical spectrum analyzer. System performance is analyzed in terms of quality factors and BER. © 2021 Elsevier Ltd. All rights reserved. Selection and peer-review under responsibility of the scientific committee of the International Conference on Advances in Materials Research - 2019.

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Hardness performance analysis of chromel composite using end and lateral quenching method

Raman, Santhanakrishnan^a ; **Vairamuthu J.**^b; Stalin B.^c; Subbiah, Ram^d; Maniraj S.^e

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^a Department of Aerospace Engineering, Amity University - Maharashtra, Mumbai-Pune Expressway, Bhatan, Panvel, Navi Mumbai, 410 206, India

^b Department of Mechanical Engineering, Sethu Institute of Technology, Kariapatti, Pulloor, Tamil Nadu, 626 115, India

^c Department of Mechanical Engineering, Anna University, Regional Campus Madurai, Madurai, Tamil Nadu, 625 019, India

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Abstract

The achievement of materials hardness was difficult in heat treatment through quenching methods. At the same time, the quenching medium was not covered the entire surface of the work piece. In present topic was discussed about the development of water quenching method for chromel composite. For these experimental investigations, the different levels of control factors were considered such as water velocity, the rotational speed of the work piece, and Standoff Distance (SOD). The response such as

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Enhancing network-on-chip performance by 32-bit RISC processor based on power and area efficiency

Soundari D.V.^a; Ganesh, M.K. Shanker^b; Raman, Indira^c; **Karthick R.^c**

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^a Sri Krishna College of Engineering and Technology, Coimabatore, India

^b East Point College of Engineering and Technology, Karnataka, India

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This paper deals with the base design of the RISC-V 32b processor. It is used to support many additional commands including hardware loops, post-upgrade and save instructions and additional ALU instructions. RISC processors can be used in different ways, depending on speed and power consumption. Organized to design low power RISC processors through design and solution processes. The speed can also be increased by using the correct clock method. Decoding of execution, memory and rewriting. A one-sided clock signal is used for the middle stage. MIPS V adds a new data type, Single Associated (PS), which stores two single-point floating point numbers (32-bit) in a list of 64-bit floating point numbers. Existing floating point statement variants have been added for arithmetic operations, suitability and limitations to work with this type of data using the SIMD method. New instructions for downloading, transferring and transferring PS data have been added. This is the first

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Experimental investigation and the performance evaluation of a mixed mode solar dryer for coconut

Subbian V.^a ; Murugavel, K. Kalidasa^b; Raja, R. Satheesh^c; Shanawaz A.M.^d

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^a Mechanical Engineering, ACE College of Engineering, Pachaloor, Kerala, Trivandrum, India

^b Mechanical Engineering, National Engineering College, Kovilpatti, Tamilnadu, India

^c Mechanical Engineering, James College of Engineering and Technology, Kanyakumari DT, Tamilnadu, India

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Abstract

The agricultural and food products may be enhanced by reducing their moisture contents, by means of a drying process. The aim of the work is to evaluate a mathematical modelling based on the experimental analysis of forced circulation of mixed mode solar dryer. From previous literature four different models (Newton, Page, Henderson & Pabis and Wang & Singh) are chosen for testing the performance of solar dryer. Selected models are evaluated by using E_{MD} , E_{RMS} , R^2 and v^2 and it is concluded that Page model is more suitable for the fabricated mixed mode solar dryer at air flow rate 0.009 Kg/s based on the experimental analysis. © 2021 Elsevier Ltd. All rights reserved.

Author keywords

Coconut; Drying capacity; Mathematical model; Solar dryer; Solar energy

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Combinatorial optimization technique for improving performance of PV modules under partial shading conditions

Viswanathan, Tamilarasu^a; Mathankumar M.^a; **Rajaguru R.**^b; Sasikumar C.^a

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^a Department of EEE, Kumaraguru College of Technology, Coimbatore, 641049, India

^b Department of CSE, Sethu Institute of Technology, Virudhunagar, 626115, India

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In this work, the development of Photo Voltaic (PV) modules operation under partial shading conditions is attained over and done with combinatorial optimization technique. The different power - voltage peak values attained by means of partial shading in the solar panels. The outcomes of progression significantly disturb the overriding algorithms and cause enormous power depletion in energy gathering. The current algorithms are incompetent to apprehending the difference and performance speedy. Combinatorial optimization has proficient of diverse strengthening and divergence mechanisms with each other (power - voltage). Different performance parameters like voltage current variation, precision, and response time are engaged for interpretation. The simulation conceded out for different partial shading patterns and validated the mathematical concept of the

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Mansur, A.A. , Amin, M.R. , Islam, K.K. (2019) *2nd International Conference on Electrical, Computer and Communication Engineering, ECCE 2019*

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Document type

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Journal

ISSN

22147853

DOI

10.1016/j.matpr.2020.10.231

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Optimization of mould sand properties by mixing of granite powder using Taguchi method

Rajan, A. John^a; Kailasanathan C.^b ; Stalin B.^c; Rajkumar P.R.^b; Gangadharan T.^b; Perumal A.^b

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^a School of Mechanical Engineering, VIT University, Vellore, Tamil Nadu, India

^b Department of Mechanical Engineering, Sethu Institute of Technology, Kariapatti, Pulloor, Tamil Nadu, 626 115, India

^c Department of Mechanical Engineering, Anna University, Regional Campus Madurai, Madurai, Tamil Nadu, 625 019, India

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Abstract

The casting quality is depended on many properties of moulding sand like dry compressive strength, wet tensile strength, permeability, etc. and these properties are dependent more or less on parameters like setting/curing time, resin amount, hardener amount, content of moisture and so on. This paper focuses on studying the mechanical properties of silica sand when granite powder is added to it and how it affects the properties or composition of the moulding sand. The strength of mould of the silica sand specimen by using the Taguchi technique was studied. Random experiments are conducted using the L9 orthogonal array. Setting Time, Resin and Hardener are some of the main factors taken into

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Experimental Study on Effect of Sand Grain Size and Heat Dissipation on the Properties of Moulding Sand

Ajay, R. , Lovneesh, S.
(2023) *IOP Conference Series: Earth and Environmental Science*

Machinability of Titanium alloy 6242 by AWJM through Taguchi method

Perumal, A. , Kailasanathan, C. , Wilson, V.H.
(2022) *Materials Today: Proceedings*

Influence of Optimization Techniques on Wire Electrical Discharge Machining of Ti–6Al–2Sn–4Zr–2Mo Alloy using Modeling Approach

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The squeeze casting parametric effect on magnesium metal matrix composite

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Source type

Journal

ISSN

22147853

DOI

10.1016/j.matpr.2020.10.737

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Evaluation of EDM process parameters on titanium alloy through Taguchi approach

Perumal A.^a; Kailasanathan C.^a ; Stalin B.^b; Rajkumar P.R.^c; Gangadharan T.^c; Venkatesan G.^c

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^a Department of Mechanical Engineering, Sethu Institute of Technology, Kariapatti, Virudhunagar District, Pulloor, Tamil Nadu, 626 115, India

^b Department of Mechanical Engineering, Anna University, Regional Campus Madurai, Madurai, Tamil Nadu, 625 019, India

^c Centre for Materials Research, Department of Mechanical Engineering, Sethu Institute of Technology, Kariapatti, Virudhunagar District, Pulloor, Tamil Nadu, 626 115, India

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Abstract[Author keywords](#)[Indexed keywords](#)[Sustainable Development Goals 2022](#)[SciVal Topics](#)[Metrics](#)**Abstract**

Titanium alloy due to its high strength and rigidity is extremely difficult for machining and is commonly used in a variety of industries. The reddening of contaminants from the inter-electrode gap is the major concern during EDM operation. EDM spark erosion is the same as creating an electrical problem that sparks a small hole in the center of metal that comes into contact with it. Both the machining process and the electrode material must be electrical conductors in the EDM phase. An experiment is also carried out in this project to examine and optimize the impact of variables for

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Electrical discharge machining- a futuristic technique for surface engineering of biomedical alloys: a concise review

Mahajan, A. , Devgan, S. , Kalyanasundaram, D. (2022) *Surface Topography: Metrology and Properties*

Analysis of EDM machining parameters for keyway on Ti-6Al-4V alloy and modelling by artificial neural network and regression analysis methods

Çakiroğlu, R. (2022) *Sadhana - Academy Proceedings in Engineering Sciences*

Tribological and Mechanical Properties of Hybrid nHAp/SiO₂/chitosan Composites Fabricated from Snail Shell Using Grey Rational Grade (GRG) Analysis

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The squeeze casting parametric effect on magnesium metal matrix composite

Vairamuthu, J. , Tilahun, S. , Vijayakumar, M.D. (2020) *IOP Conference Series: Materials Science and Engineering*

Parametric optimization and abrasive water jet drilling on bronze metal matrix composite

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Document type

Conference Paper

Source type

Journal

ISSN

22147853

DOI

10.1016/j.matpr.2020.08.420

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Overcome the challenges in bio-medical instruments using IOT - A review

Karthick R.^a; Ramkumar R.^b ; Akram, Muhammad^c; Kumar, M. Vinoth^d

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^a Sethu Institute of Technology, Kariapatti, Tamil Nadu, India^b K.Ramakrishnan College of Technology, Trichy, Tamil Nadu, India^c Government College University, Faisalabad, Pakistan^d MAM College of Engineering and Technology, Trichy, Tamil Nadu, India

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Internet of Things (IoT) is a term associated with the use of IP (Internet Protocol) address sensors. It can connect to the internet and collect sensor data. The information is analyzed and a decision is made automatically. With an IoT medical device, your doctor can monitor the patient's health, health, and well-being. Physiological medical devices and methods can be easily traced. Timely monitoring of the patient's physiological parameters can be helpful to avoid early health problems. Security issues identified in medical IoT communication can be weak due to the reliability or vulnerability of the system. We later suggested filtering for anonymity. It is known for its features such as anonymous sensors, sensor traceability, playback, and ensuring that clone attacks are carried out. The proposed

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Document type

Conference Paper

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Journal

ISSN

22147853

DOI

10.1016/j.matpr.2020.08.631

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Recent developments of graphene composites for energy storage devices

Dhinakaran V.^a ; Stalin B.^b; Sai, M. Swapna^a; **Vairamuthu J.^c**; Marichamy S.^d

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^a Centre for Applied Research, Chennai Institute of Technology, Chennai, Tamil Nadu, 600 069, India

^b Department of Mechanical Engineering, Anna University, Regional Campus Madurai, Madurai, Tamil Nadu, 625 019, India

^c Department of Mechanical Engineering, Sethu Institute of Technology, Kariapatti, Pulloor, Tamil Nadu, 626 115, India

^d Department of Mechanical Engineering, Sri Indu College of Engineering and Technology, Hyderabad, Telangana, 501 510, India

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Abstract

Graphene, one of the limited constituents, has attracted attention of researchers in various industrial applications owing to its exceptional structural, thermal, electrical and biocompatibility properties. Generally, Graphene (allotrope of Carbon) forms a monolayer of atoms to exhibit a plane of sp² hybridised carbon atoms which are covalently bonded together and organized in the hexagonal lattice. The exclusive material, Graphene is extensively used as conducting material in energy storage devices

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17578981

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10.1088/1757-899X/988/1/012112

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The squeeze casting parametric effect on magnesium metal matrix composite

Vairamuthu J.^a ; Tilahun, Samuel^b; Vijayakumar M.D.^c; Ramesh Kannan C.^d; Manivannan S.^e; Stalin B.^f

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^a Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Kariapatti, Tamil Nadu, 626 115, India

^b Department of Mechanical Engineering, School of Mechanical and Automotive Engineering, College of Engineering and Technology, Dilla University, Dilla, Ethiopia

^c Department of Mechanical Engineering, Chennai Institute of Technology, Kundrathur, Chennai, Tamil Nadu, 600 069, India

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Abstract[Author keywords](#)[Reaxys Chemistry database information](#)[SciVal Topics](#)[Metrics](#)**Abstract**

The reinforced Metal Matrix Composite (MMC) was broadly used in various engineering applications. The light weight and high strength metal matrix components were used in aerospace and automotive applications. The silicon carbide, boron carbide, aluminum oxide and carbon fiber were used as common reinforcement materials. The magnesium and its alloys were recently has a maximum role in

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Semenov, V. , Shuster, L. , Lin, H.-C.
(2022) *Tribology in Industry*

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Investigation of cryogenic soaking period on flank wear in turning using Response Surface Methodology

Ramesh Kannan C.^a ; Manivannan S.^b; **Vairamuthu J.**^c; Tilahun, Samuel^d; Vijayakumar M.D.^e; Stalin B.^f

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^a Department of Mechanical Engineering, PET Engineering College, Tirunelveli, Tamil Nadu, India^b Department of Mechanical Engineering, Karpagam Academy of Higher Education, Coimbatore, Tamil Nadu, 21, India^c Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Kariapatti, Tamil Nadu, 626 115, India^d Department of Mechanical Engineering, School of Mechanical and Automotive Engineering, College of Engineering and Technology, Dilla University, Dilla, Ethiopia[View additional affiliations](#)

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In this investigation, the effects of cryogenic soaking time on cutting insert were investigated. Cryogenic treatments were carried out at -196°C for various soaking times of 12, 24, and 48 hours followed by tempering at 200°C for 2 hours. The Scanning Electron Microscope image and X-Ray Diffraction pattern analysis validate the structure of γ -carbide on the surfaces of the inserts. The hardness result

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Vairamuthu, J. , Velmurugan, P. , Janaki Manohar, N. (2020) *IOP Conference Series: Materials Science and Engineering*

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Finite Element Analysis of Automotive Truck Chassis

Vijayakumar M.D.^a ; Ramesh Kannan C.^b; Manivannan S.^c; **Vairamuthu J.**^d; Tilahun, Samuel^e; Bupathi Ram P.M.^f

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^a Department of Mechanical Engineering, Chennai Institute of Technology, Kunderathur, Chennai, Tamil Nadu, 600 069, India

^b Department of Mechanical Engineering, PET Engineering College, Tirunelveli, Tamil Nadu, India

^c Department of Mechanical Engineering, Karpagam Academy of Higher Education, Tamil Nadu, Coimbatore, India

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[Abstract](#)[SciVal Topics](#)[Metrics](#)**Abstract**

The transportation industries at present world play a chief role in field of current commercial economy and developed countries. The usage of trucks is intensely increasing to carry the loads and materials. To enterprise a truck chassis many features to be considered including material selection, packaging, strength-to-weight ratio, stiffness. This paper mostly reviews on most research works and focuses on stress study of the truck chassis using four Finite Element Analysis (FEA) namely ANSYS. The result of this research paper gives the researcher instantaneous solution on modern and present developments in truck chassis field using FEA. © Published under licence by IOP Publishing Ltd.

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Document type

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ISSN

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DOI

10.1088/1757-899X/988/1/012113

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A Review on Ultrasonic Welding of Various Materials and Their Mechanical Properties

Tilahun, Samuel^a ; Vijayakumar M.D.^b; Ramesh Kannan C.^c; Manivannan S.^d; **Vairamuthu J.^e**; Manoj Kumar K.P.^f

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^a Department of Mechanical Engineering, School of Mechanical and Automotive Engineering, College of Engineering and Technology, Dilla University, Dilla, Ethiopia

^b Department of Mechanical Engineering, Chennai Institute of Technology, Kundrathur, Chennai, Tamil Nadu, 600 069, India

^c Department of Mechanical Engineering, PET Engineering College, Tirunelveli, Tamil Nadu, India

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Abstract[Author keywords](#)[Reaxys Chemistry database information](#)[SciVal Topics](#)[Metrics](#)**Abstract**

In recent years, in contrast with conventional welding methods, ultrasonic welding has been one of great importance among its relevant applications and materials. The bonding of different materials is always difficult, as the unregulated scale of the grain and the fragile mechanical properties are different than conventional welding techniques. In addition, this research paper offers numerous explanations and uses of the ultrasonic welding technique on different materials and its alloys such as

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Submerged ultrasonic plastic welding: A computational and experimental investigation

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Cheng, X.M. , Yang, K. , Wang, J. (2022) *Journal of Manufacturing Processes*

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The squeeze casting parametric effect on magnesium metal matrix composite

Vairamuthu J.^a ; Tilahun, Samuel^b; Vijayakumar M.D.^c; Ramesh Kannan C.^d; Manivannan S.^e; Stalin B.^f

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^a Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Kariapatti, Tamil Nadu, 626 115, India

^b Department of Mechanical Engineering, School of Mechanical and Automotive Engineering, College of Engineering and Technology, Dilla University, Dilla, Ethiopia

^c Department of Mechanical Engineering, Chennai Institute of Technology, Kundrathur, Chennai, Tamil Nadu, 600 069, India

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Abstract

The reinforced Metal Matrix Composite (MMC) was broadly used in various engineering applications. The light weight and high strength metal matrix components were used in aerospace and automotive applications. The silicon carbide, boron carbide, aluminum oxide and carbon fiber were used as common reinforcement materials. The magnesium and its alloys were recently has a maximum role in

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(2022) *China Foundry*

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MMC due to its high strength and light weight. In addition to the magnesium, the aluminium and copper was included through the reinforcement of boron carbide (B₄C). It was formulated through squeeze casting technique. The copper has good electrical conductivity and it has more corrosion resistance. The magnesium metal matrix was fabricated through squeeze casting technique. The Vickers hardness was determined through the different input squeeze casting factors such as pressure, pouring temperature and die temperature. The Response Surface Methodology (RSM) optimization was used to analyze the parametric effects. © Published under licence by IOP Publishing Ltd.

Author keywords

boron carbide; Magnesium MMC; RSM optimization; squeeze casting; Vickers hardness

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Ghomashchi, M.R., Vikhrov, A.

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(2000) *Journal of Materials Processing Technology*, 101 (1), pp. 1-9. Cited 499 times.

doi: 10.1016/S0924-0136(99)00291-5

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Dhanashekar, M., Senthil Kumar, V.S.

Squeeze casting of aluminium metal matrix composites - An overview ([Open Access](#))

(2014) *Procedia Engineering*, 97, pp. 412-420. Cited 90 times.

<http://www.sciencedirect.com/science/journal/18777058>

doi: 10.1016/j.proeng.2014.12.265

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Maleki, A., Shafyei, A., Niroumand, B.

Effects of squeeze casting parameters on the microstructure of LM13 alloy

(2009) *Journal of Materials Processing Technology*, 209 (8), pp. 3790-3797. Cited 74 times.

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Material synthesis, characterization and machining performance of terbium metal matrix composite

Vishnu Vardhan T.^a; Stalin B.^b ; Marichamy S.^c; Ravichandran M.^d; **Vairamuthu J.^e**; Dhinakaran V.^f
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^a Department of Mechanical Engineering, Cmr Institute of Technology, Hyderabad, Telangana, 501 401, India^b Department of Mechanical Engineering, Anna University, Regional Campus Madurai, Madurai, Tamil Nadu, 625 019, India^c Department of Mechanical Engineering, Sri Indu College of Engineering and Technology, Hyderabad, Telangana, 501 510, India^d Department of Mechanical Engineering, K.Ramakrishnan College of Engineering, Trichy, Tamil Nadu, 621 112, India[View additional affiliations](#)

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Rare materials are playing an important role in current material research. The excellent material properties were achieved by adding the rare materials to the existing materials. In this work, terbium is one of the rare materials which is added into the silicon. Titanium carbide is considered as the reinforcement material. Terbium metal matrix is fabricated through stir casting route. The material properties, namely density, hardness, impact strength are evaluated. Frictional wear properties are also

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Stalin, B. , Ravichandran, M. , Marichamy, S.
(2020) *AIP Conference Proceedings*

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Updatable features for two-wheeler's by IOT

[Nigal Ashik P.A.](#)^a ; [Manoj N.](#)^a ; [Subashchandrabose P.](#)^a ; [Vairamuthu J.](#)^b ;

[Suseendhar P.](#)^c

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^a Department of Mechanical Engineering, Jai Shriram Engineering College, Tirupur, Tamil Nadu, India

^b Department of Mechanical Engineering, Sethu Institute of Technology, Virudhunagar, Tamil Nadu, India

^c Department of Electrical and Electronics Engineering, Jai Shriram Engineering College, Tirupur, Tamil Nadu, India

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Updating of two-wheeler for increasing safety and new features for attracting customers, plays vital role in every automobile industry. This device is also developed for enhancing safety and attracting customers. Here two technical devices developed. One is alcohol detecting helmet and finger print based engine starting system. But both are connected by IOT technology. There are two layers protecting vehicles and users from the accidents. First layer is alcohol detecting sensor which is fitted on the helmet. The sensor not only sensing alcohol content from the human being breathe which is also used for checking proper fitting of helmet on user's head. If the first layer is opened simultaneously finger print sensor will come in front of digital meter. Then the user should use fingerprint sensor for engine start up, once the engine starts, the sensor goes down. When the user removed his/her helmet during travelling automatically the engine will get turn off. © 2020 Author(s).

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Investigations on ultrasonic machining of tellurium copper metal matrix

Stalin B.^a ; Vishnu Vardhan T.^b; Marichamy S.^c; Vairamuthu J.^d; Ravichandran M.^e; Dhinakaran V.^f
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^a Department of Mechanical Engineering, Anna University, Regional Campus Madurai, Madurai, Tamil Nadu, 625 019, India

^b Department of Mechanical Engineering, Cmr Institute of Technology, Hyderabad, Telangana, 501 401, India

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In present days, metal matrix composite research is rapidly increased due to its excellent properties. In metal matrix composite, alloying elements are playing a vital role and gradually changing the material properties. Material hardness, strength, density, toughness may be changed by the addition of the alloying elements into the MMC. In this work, copper based tellurium metal matrix is produced. Material properties, ultrasonic machining performance and applications of newly synthesized

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(2021) *Materials Today: Proceedings*

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Implementation of a new Bi-Directional Switch multilevel Inverter for the reduction of harmonics

[Vijayalakshmi S.^a](#); [Sivaraman P.R.^b](#); [Karthick R.^c](#); [Nazar Ali A.^d](#)

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^a Department of Electrical and Electronics Engineering, K. Ramakrishnan College of Technology, Trichy, Tamilnadu, India

^b Department of Electrical and Electronics Engineering, Rajalakshmi Engineering College, Rajalakshmi Nagar, Thandalam, Tamilnadu, India

^c Department of Electronics and Communication Engineering, Sethu Institute of Technology, Karriyapatti, Tamilnadu, India

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In the current scenario, multilevel inverter plays a major role in heavy duty drive systems. MLI is one of the most advanced power converters for highly efficient AC output. But there is more to the requirement of number of control switches and total number of input sources which often generates more losses. This paper presents a new multilevel inverter design with limited number of control switches and with just one DC source to reduce these demerits. It uses a smaller number of Bi-directional switches. So that complexity of the circuit is reduced. Finally, an eleven-level inverter is

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Fuzzy based Regional Thresholding for Cyst Segmentation in Dental Radiographs

Karthika Devi R.^a; [Sheik Dawood M.^a](#); [Murugan R.^a](#); [Lenamika R.^a](#); [Kaviya S.^a](#); [Vasinik, Laxmi^b](#)

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Dental cysts are the major problem caused due to infection in the tooth. Cysts cause any symptoms rarely, if not treated they become infected secondarily. The image processing helps to improve the diagnostic outcomes and provide effective early diagnostic yield. To achieve the highest possible degrees of automatization for the computer-aided diagnosis or detection of diseases, the proposed methodology utilizes both fuzzy membership function of each pixel and local spatial information of the neighbourhood pixels. There are five steps in implementing the fuzzy-based multi-region thresholding. From the comparative analysis of the results obtained by different segmentation methods like histogram-based multilevel thresholding methods. The proposed hybrid multi-region segmentation performs well and the outputs show that it is automated, accurate and it shows the well-connected boundary of the cystic region and there are no isolated cyst pixels. © 2020 IEEE.

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BRAMSIT: A Database for Brain Tumor Diagnosis and Detection

Tamilselvi R. ; Nagaraj A. ; Beham, M. Parisa ; Sandhiya, M.Bharkavi

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^a Sethu Institute of Technology, Department of ECE, kariapatti, India



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MRI is the most frequently used imaging technique to detect brain tumor. The brain is composed of nerve cells and supportive tissues such as glial cells and meninges. A brain tumor is a collection, or mass, of the brain in abnormal cells. Primary brain tumors can be either malignant or benign. A primary brain tumor is a tumor located in the brain tissue. New technologies in supplement to existing imaging modalities improve brain tumor screening. Most brain tumor databases are not publicly available. BRAMSIT is a resource for possible use by the MRI image analysis research community. The projected MRI database is a termed BRAMSIT, characterized by an attempt to offer a group of normal and malignant brain tumor images. The details such as age, and the MRI axial position (i.e., trans-axial, coronal and sagittal) of the patient are interpreted in the database. © 2020 IEEE.

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(1997) *International Journal of Pattern Recognition and Artificial Intelligence*, 11 (8), pp. 1345-1365. Cited 27 times.
<http://www.worldscinet.com/ijprai/>
doi: 10.1142/S0218001497000627

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2

Coupé, P., Mansencal, B., Clément, M., Giraud, R., De Senneville, B.D., Ta, V., Lepetit, V., (...), Manjon, J.V.
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3

Gladis Pushpa Rathi, V.P., Palani, D.S.
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(2012) *International Journal of Information Sciences and Techniques (IJIST)*, 2 (4). Cited 38 times.
July

☐

4

Kumar Rohit, A., Chitaliya, N.G.
Novel approach for content based mri brain image retrieval
(2014) *International Journal of Soft Computing and Engineering (IJSCE)*, 4 (3). Cited 2 times.
July

☐

5

Pareek, M., Jha, C.K., Mukherjee, S., Joshi, C.
Brain tumor detection using wathershed segmentation techniques and area calculation
(2018) *International Journal of Informatics and Communication Technology (IJ-ICT)*, 7 (71), pp. 71-76. Cited 2 times.

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6

Cui, S., Mao, L., Jiang, J., Liu, C., Xiong, S.
Automatic semantic segmentation of brain gliomas from MRI images using a deep cascaded neural network (Open Access)

(2018) *Journal of Healthcare Engineering*, 2018, art. no. 4940593. Cited 110 times.
<http://www.hindawi.com/journals/jhe/contents/>
doi: 10.1155/2018/4940593

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7

Chakrabarty, N.
(2019) *Brain MRI Images for BrainTumorDetection*. Cited 93 times.
<https://www.kaggle.com/navoneel/brainmri-images-for-brain-tumor-detection>

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Cited by 5 documents

Modeling of glioma growth using modified reaction-diffusion equation on brain MR images

Zhang, Y. , Liu, P.X. , Hou, W.
(2022) *Computer Methods and Programs in Biomedicine*

Analysis of Brain Disorder Neuroimages by Feature Extraction

Vijay, K.S. , Poornapushpakala, S.
(2022) *3rd IEEE 2022 International Conference on Computing, Communication, and Intelligent Systems, ICC CIS 2022*

Precise Medical Diagnosis for Brain Tumor Detection and Data Sample Imbalance Analysis using Enhanced Kernel Extreme Learning Machine Model with Deep Belief Network Compared to Extreme Machine Learning

Reddy, V.V.V. , Uma Priyadarsini, P.S. , Tiwari, S.K.
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(2000) *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*

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Park, H. , Meyer, C.R.
(2012) *Proceedings of the 2012 International Conference on Image Processing, Computer Vision, and Pattern Recognition, IPCV 2012*

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(2002) *IEEE International Conference on Image Processing*

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2020 6th International Conference on Bio Signals, Images, and Instrumentation, ICBSII 2020 • February 2020 • Article number 9167573 • 6th International Conference on Bio Signals, Images, and Instrumentation, ICBSII 2020 • Chennai • 27 February 2020 through 28 February 2020 • Code 162725

Document type

Conference Paper

Source type

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ISBN

978-172811047-9

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10.1109/ICBSII49132.2020.9167573

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A Deep Learning Approach on Segmentation of Bone for BMD Measurement from DEXA Scan Images

Fathima, S.M.Nazia ; Tamilselvi R. ; Beham, M.Parisa ; Nagaraj A.

[Save all to author list](#)^a Sethu Institute of Technology, Dept. of Electronics and Communication Engineering, Virudhunagar, India

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[Full text options](#) [Export](#)
[Abstract](#)[Author keywords](#)[Indexed keywords](#)[SciVal Topics](#)[Metrics](#)**Abstract**

Osteoporosis is a silent disease which increases fracture risk condition in the body. The disease is noticed more in women, but can affect both men and women in all ages. The disease is alarmed by means of a parameter called Bone Mineral Density (BMD). BMD is estimated in both X-ray and DEXA images by means of various image processing algorithms and machine learning algorithms. Lot of literature also exists for the detection of osteoporosis condition. In recent years, deep learning methods show its face for the measurement of BMD. The paper focusses with the measurement of BMD and segmentation of bone region in DEXA image using U net architecture. The parameters used in the architecture shown better results in terms of Dice, F1 score. © 2020 IEEE.

Author keywords

Deep learning; DEXA images; DEXSIT; Dice; U-net

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Osteoporosis detection using convolutional neural network based on dual-energy X-ray absorptiometry images

Mohammed, A.Z. , George, L.E. (2023) *Indonesian Journal of Electrical Engineering and Computer Science*

Detection of Osteoporosis with DEXA Scan Images using Deep Learning Models

Varalakshmi, P. , Sathyamoorthy, S. , Darshan, V. (2022) *Proceedings - IEEE International Conference on Advances in Computing, Communication and Applied Informatics, ACCAI 2022*

Vertebrae Pose Segmentation based on Temporal Anisotropic Diffusion and Ensembled Gradient

Klinwicht, P. , Ham, J.G. , Chinnasarn, K. (2021) *JCSSE 2021 - 18th International Joint Conference on Computer Science and Software Engineering: Cybernetics for Human Beings*

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Osteoporosis detection using convolutional neural network based on dual-energy X-ray absorptiometry images

Mohammed, A.Z. , George, L.E. (2023) *Indonesian Journal of Electrical Engineering and Computer Science*

Diagnosis of Osteoporosis using modified U-net architecture with attention unit in DEXA and X-ray images

Nazia Fathima, S.M. , Tamilselvi, R. , Parisa Beham, M. (2020) *Journal of X-Ray Science and Technology*

Assessment of BMD and statistical analysis for osteoporosis detection

Nazia Fathima, S.M. , Tamil Selvi, R. , Parisa Beham, M. (2019) *Biomedical and Pharmacology Journal*



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IOP Conference Series: Materials Science and Engineering • Open Access • Volume 988, Issue 1 • 15 December 2020 • Article number 012107 • 2020 International Conference on Recent Developments in Material Science and Applications, ICRDMSA 2020 • Chennai • 25 September 2020 through 26 September 2020 • Code 165826

Document type

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Source type

Conference Proceedings

ISSN

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DOI

10.1088/1757-899X/988/1/012107

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Electrochemical studies and corrosion resistance of activated Tungsten inert gas AISI SS316L weldments

[Manivannan S.](#)^a ; [Vairamuthu J.](#)^b; [Velmurugan P.](#)^c; [Janaki Manohar N.](#)^d; [Ramesh Kannan C.](#)^e; [Stalin B.](#)^f

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^a Department of Mechanical Engineering, Karpagam Academy of Higher Education, Coimbatore, Tamil Nadu, 21, India

^b Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Kariapatti, Tamil Nadu, 626 115, India

^c Department of Mechanical Engineering, School of Mechanical and Automotive Engineering, College of Engineering and Technology, Dilla University, Dilla, Ethiopia

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[Abstract](#)[SciVal Topics](#)[Metrics](#)**Abstract**

Welding is the most convenient fabrication process with tremendous development in past few decades. The noteworthy technique is Activated flux TIG welding method (also known as A-TIG welding) that was well-equipped a little while back, which enhances productivity and quality of weld joints by better depth of penetration. In this research work, the electrochemical studies are performed to investigate the corrosion resistance of excellent depth of penetration A-TIG welded 316L stainless

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Effect of trace elements on machining characteristics of C45 steel using coated carbide tool inserts

N., P.K. , Srikantappa, A.S. (2022) *Materials Today: Proceedings*

Development of activated tungsten inert gas welding and its current status: A review

Fande, A.W. , Taiwade, R.V. , Raut, L. (2022) *Materials and Manufacturing Processes*

Effect of welding conditions and flux compositions on the metallurgy of welded duplex stainless steel

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Surface roughness prediction and parametric optimization of shot blasting of Al7068 using RSM

Pritima, D. , Dhinakaran, V. , Stalin, B. (2020) *IOP Conference Series: Materials Science and Engineering*

Taguchi Optimization and Flame Hardening Experimental Investigation on Eglin Steel

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Document type

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Vibration Analysis of Cutting Tool insert in Turning of 42CrMo4 alloy steel

Ramesh Kannan C.^a ; Manivannan S.^b; Vairamuthu J.^c; Velmurugan P.^d; Manohar, N. Janaki^e; Stalin B.^f

[Save all to author list](#)^a Department of Mechanical Engineering, PET Engineering College, Tirunelveli, Tamil Nadu, India^b Department of Mechanical Engineering, Karpagam Academy of Higher Education, Coimbatore, Tamil Nadu, 21, India^c Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Kariapatti, Tamil Nadu, 626 115, India^d Department of Mechanical Engineering, School of Mechanical and Automotive Engineering, College of Engineering and Technology, Dilla University, Dilla, Ethiopia[View additional affiliations](#)

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[Abstract](#)[SciVal Topics](#)[Metrics](#)**Abstract**

This investigation, vibration analysis of cutting tool in turning of 42CrMo4 alloy steel using CNMG120408SMRH13A insert. Tool vibration is the important phenomenon which affects the life of the cutting tool, machining quality and behaviour of the metal cutting process. In metal cutting, tool vibration is the significant factor affecting the surface quality of machined surfaces. In this experimental work, control this vibration should be arrested by external force. In the proposed system damper method has used to control the tool vibration. It will be predicted by comparing the

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Kannan, C.R. , Das, A.D. , Manivannan, S. (2022) *AIP Conference Proceedings*

Influence of Tool Geometry on Tool Wear in Turning of EN24 Steel by using GRA and RSM

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Electrochemical studies and corrosion resistance of activated Tungsten inert gas AISI SS316L weldments

Manivannan, S. , Vairamuthu, J. , Velmurugan, P. (2020) *IOP Conference Series: Materials Science and Engineering*

Vibrant regressive neural network control with adaptive Levenberg-Marquardt optimization in magneto-rheological fluid based chattering suppression for turning applications

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A Study on development of Induction Welding of Thermoplastic Composites

[Velmurugan P.^a](#) ; [Manohar, Janaki^b](#); [Ramesh Kannan C.^c](#); [Manivannan S.^d](#); [Vairamuthu J.^e](#); [Stalin B.^f](#)

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^a Department of Mechanical Engineering, School of Mechanical and Automotive Engineering, College of Engineering and Technology, Dilla University, Dilla, Ethiopia

^b Department of Mechanical Engineering, Sri Venkateswara College of Technology, Sriperumbudur, Tamil Nadu, 602105, India

^c Department of Mechanical Engineering, PET Engineering College, Tirunelveli, Tamil Nadu, India

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The inductive thermal method of welding has been used for heating metals most commonly by all the industries. This method of heating is actually a very efficient means of treating high speed fibre-reinforced thermoplastic composites over past years for enormous applications. The present research work clarifies the thermoplastic welding process. The primary goal is to explain the nature of the inductive welding process and to identify a broad variety of research efforts. The focus is on the method of heat generation dynamics during the inductive heating process and the parameters

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Morphology and Tensile Properties as a Function of Welding Current in Thermoplastic Induction Welds

Ma, W.P. , Bu, H.C. , Wang, F.Y. (2021) *International Polymer Processing*

Study on the interface morphology in the induction welding joint of PEEK plate at low power

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Wear experimentation and parametric optimization on synthesized copper titanium composite

[Vairamuthu J.](#)^a ; [Velmurugan P.](#)^b; [Janaki Manohar N.](#)^c; [Ramesh Kannan C.](#)^d; [Manivannan S.](#)^e; [Stalin B.](#)^f

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^a Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Kariapatti, Tamil Nadu, 626 115, India

^b Department of Mechanical Engineering, School of Mechanical and Automotive Engineering, College of Engineering and Technology, Dilla University, Dilla, Ethiopia

^c Department of Mechanical Engineering, Sri Venkateswara College of Technology, Sriperumbudur, Tamil Nadu, 602105, India

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The applications of non ferrous alloys have been significantly increased due to its desirable substance properties. The material strength and hardness were depend on the nature of reinforcements were added to it. In this chapter was utilized to formulate the Copper Titanium (Cu-Ti) Metal Matrix Composite (MMC) has been reinforced with Tungsten Carbide (WC). The stir casting of material

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Pavan, N.S.N.S. , Dileep Kumar, K. , Thangaraj, K. (2021) *Materials Today: Proceedings*

Fabricated and analyzed the mechanical properties of textile waste/glass fiber hybrid composite material

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Document type

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Source type

Conference Proceedings

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DOI

10.1088/1757-899X/988/1/012124

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Optimization of Wear Parameters of aluminium composites (AA6082/12wt%ZrO₂) utilizing Taguchi technique

[Mohanavel V.^a](#) ; [Ramesh Kannan C.^b](#); [Vairamuthu J.^c](#); [Stalin B.^d](#); [Balaji R.^c](#); [Rajarajan S.^e](#); [Ganeshan P.^c](#)

[Save all to author list](#)^a Department of Mechanical Engineering, Chennai Institute of Technology, Chennai, Tamil Nadu, 600069, India^b Department of Mechanical Engineering, PET Engineering College, Tirunelveli, Tamilnadu, 627002, India^c Department of Mechanical Engineering, Sethu Institute of Technology, Virudhunagar, Tamilnadu, 626115, India^d Department of Mechanical Engineering, Anna University, Regional Campus Madurai, Madurai, India[View additional affiliations](#)

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Abstract

Optimization of the wear properties of AA6082/12%ZrO₂ AMCs prepared through compo casting process using Taguchi's S/N analysis was evaluated. Taguchi's process was utilized and L9 orthogonal array was elected for behaving the wear tests. Optimal process parameters are estimated to eliminate the wear characteristics of the composite. Moreover, the effect of ANOVA also demonstrates that the sliding distance, the applied force and the sliding velocity have an essential function in the reduction of wear (gram). The values of the tests are consistent with the methodology of Taguchi. © Published under licence by IOP Publishing Ltd.

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Machinability Study on Uncoated, Coated and Coated with Treated Tool in Turning of GFRP

Kannan, C.R. , Das, A.D. , Manivannan, S. (2022) *AIP Conference Proceedings*

Dynamic mechanical properties and thermal properties of madar fiber reinforced composites

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CNC Machining parameters optimization of AA7050 with reinforcement of ZrO₂ composites

Mohanavel, V. , Vairamuthu, J. , Ramesh Kannan, C. (2020) *IOP Conference Series: Materials Science and Engineering*

Optimization of drilling process parameters of AA7150/MoO₃ composites using Taguchi method

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Document typeConference Paper • *Bronze Open Access***Source type**

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The influence of rare earth cerium addition on mechanical and corrosion properties cast Mg-6Al-1Zn magnesium alloy

Manivannan S.^a ; Vairamuthu J.^b; Tilahun, Samuel^c; Vijayakumar M.D.^d; Ramesh Kannan C.^e; Stalin B.^f

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^a Department of Mechanical Engineering, Karpagam Academy of Higher Education, Coimbatore, Tamil Nadu, 21, India

^b Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Kariapatti, Tamil Nadu, 626 115, India

^c Department of Mechanical Engineering, School of Mechanical and Automotive Engineering, College of Engineering and Technology, Dilla University, Dilla, Ethiopia

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Influence of the Structural State of the Mg-1%Ca Magnesium Alloy on Tribological Properties

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Mechanical performance of TiC filled chopped basalt fibre reinforced epoxy composites

Anand Chairman, C. , Marichamy, S. , Dhinakaran, V.
(2020) *IOP Conference Series: Materials Science and Engineering*

Investigations on Mechanical Properties of Basalt Powder filled Vinyl Ester Composites

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Document type

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10.1088/1757-899X/988/1/012121

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Optimization of CNC machining process parameters for AA2014/WC composite

Mohanavel V.^a ; Suresh Kumar S.^b; Vishnukumar R.^c; Sivaraman V.^b; Vairamuthu J.^d; Ravichandran M.^e

[Save all to author list](#)^a Department of Mechanical Engineering, Chennai Institute of Technology, Chennai, Tamil Nadu, 600069, India^b Department of Mechanical Engineering, Panimalar Polytechnic College, Chennai, Tamilnadu, 600029, India^c Department of Mechanical Engineering, Panimalar Engineering College, Chennai, Tamilnadu, 600123, India^d Department of Mechanical Engineering, Sethu Institute of Technology, Virudhunagar, Tamilnadu, 626115, India[View additional affiliations](#)

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In this developed environment, most of the machineries and automobile parts are manufactured by using CNC machines. The working process for these requirements is common facing, turning, milling and so on. Of these surface roughness plays an important role. Since the strength and stability of the materials depends on the operation in which it undergoes on. The Taguchi method is adopted to reduce work effort. This method replaces the work of turning to minimize the surface roughness (SR). The goal

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Material removal rate comparison of aluminium alloy 6063 machined using HSS tool and novel chromium nitride coated drill tool in CNC drilling

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Effect of turning parameters in cylindricity and circularity for o1 steel using ANN

Allen Jeffrey, J. , Suresh Kumar, S. , Vaidyaa, P. (2022) *Materials Today: Proceedings*

Effect on abrasive water jet machining of aluminum alloy 7475 composites reinforced with CNT particles

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CNC Machining parameters optimization of AA7050 with reinforcement of ZrO2composites

Mohanavel, V. , Vairamuthu, J. , Ramesh Kannan, C. (2020) *IOP Conference Series: Materials Science and Engineering*

Optimization of drilling process parameters of AA7150/MoO3composites using Taguchi method

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Document type

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Conference Proceedings

ISSN

17578981

DOI

10.1088/1757-899X/988/1/012120

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CNC Machining parameters optimization of AA7050 with reinforcement of ZrO₂ composites

Mohanavel V.^a ; Vairamuthu J.^b ; Ramesh Kannan C.^c ; Stalin B.^d ; Balaji R.^b ; Venkatesha P.^e ; Suresh Kumar S.^f

[Save all to author list](#)^a Department of Mechanical Engineering, Chennai Institute of Technology, Chennai, Tamil Nadu, 600069, India^b Department of Mechanical Engineering, Sethu Institute of Technology, Virudhunagar, Tamilnadu, 626115, India^c Department of Mechanical Engineering, PET Engineering College, Tirunelveli, Tamilnadu, 627002, India^d Department of Mechanical Engineering, Anna University, Regional Campus Madurai, Madurai, India[View additional affiliations](#)

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Abstract

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Abstract

The foremost target of this evaluation is to optimize the impacts of Computer Numerical Control (CNC) machining factors of CNC turning machine for the AA7050/ZrO₂ AMCs with response of material removal rate (CMRR) by utilizing Taguchi approach. The CNC turning aspects of this evaluation are Depth of cut, Speed and Feed rate. Taguchi route as L16 orthogonal array and 3 levels of machining factors are employed to guess the output like CMRR. The 16 samples of experiments are employed to determine the CMRR. © Published under licence by IOP Publishing Ltd.

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Effect of turning parameters in cylindricity and circularity for o1 steel using ANN

Allen Jeffrey, J. , Suresh Kumar, S. , Vaidyaa, P. (2022) *Materials Today: Proceedings*

Measurement and Multi-response Optimization of Spark Erosion Machining Parameters for Titanium Alloy Using Hybrid Taguchi–Grey Relational Analysis–Principal Component Analysis Approach

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Optimization of Wear Parameters of aluminium composites (AA6082/12wt%ZrO₂) utilizing Taguchi technique

Mohanavel, V. , Ramesh Kannan, C. , Vairamuthu, J. (2020) *IOP Conference Series: Materials Science and Engineering*

Optimization of CNC machining process parameters for AA2014/WC composite

Mohanavel, V. , Suresh Kumar, S. , Vishnukumar, R. (2020) *IOP Conference Series: Materials Science and Engineering*

Optimization of drilling process parameters of AA7150/MoO₃ composites using Taguchi method

Vasudevan, A. , Kolappan, S. , Subramani, K. (2021) *Materials Today: Proceedings*

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Document type

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Conference Proceedings

ISSN

17578981

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10.1088/1757-899X/988/1/012129

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Wear experimentation on Tantalum carbide-based Niobium MMC

[Arravind R.^a](#) ; [Vairamuthu J.^b](#) ; [Stalin B.^c](#) ; [Shanmugam S.^b](#) ; [Balaji R.^b](#) ; [Dhinakaran V.^d](#)

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^a Department of Aeronautical Engineering, Paavai Engineering College, Namakkal, Tamil Nadu, India^b Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Kariapatti, Tamil Nadu, 626 115, India^c Department of Mechanical Engineering, Anna University, Regional Campus Madurai, Madurai, Tamil Nadu, 625 019, India^d Centre for Applied Research, Department of Mechanical Engineering, Chennai Institute of Technology, Kundrathur, Chennai, Tamil Nadu, 600 069, India1 54th percentile
Citation in Scopus0.46
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Abstract

The niobium and its alloys have been used for automobile, marine, and aerospace due to its superior properties such as a lightweight ratio, strength, corrosion resistance, thermal and electrical conductivity. The present work was used to improve the substance properties such as hardness and wear. Tantalum Carbide (TaC) reinforced niobium metal matrix composite (MMC) was produced through the stir casting route. The specific wear rate was determined through a pin on disc tribometer

Cited by 1 document

Analysis of hybrid aluminium composite material reinforced with Ti and NbC nanoparticles processed through stir casting

Joslin Vijaya, D. , Pradeep Kumar, J. , Robinson Smart, D.S. (2021) *Materials Today: Proceedings*

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Surface roughness prediction and parametric optimization of shot blasting of Al7068 using RSM

Pritima, D. , Dhinakaran, V. , Stalin, B. (2020) *IOP Conference Series: Materials Science and Engineering*

Wear experimentation and parametric optimization on synthesized copper titanium composite

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Materials Today: Proceedings • Volume 33, Pages 4617 - 4620 • 2020 • 2019 International Conference on Nanotechnology: Ideas, Innovation and Industries, ICN 2019 • Tamilnadu • 12 December 2019 through 14 December 2019 • Code 165932

Document type

Conference Paper

Source type

Journal

ISSN

22147853

DOI

10.1016/j.matpr.2020.08.198

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Enhancement of welding strength on Eglin steel using MIG welding process

[Louie Frango T.^a](#) ; [Prabhakaran M.^b](#); [Sivakandhan C.^c](#); [Vinoth Babu K.^d](#); [Vairamuthu J.^e](#)

[Save all to author list](#)

^a Department of Mechanical Engineering, Sri Vidya College of Engineering and Technology, Virudhunagar, Tamilnadu, 626 005, India

^b Department of Mechanical Engineering, Podhigai College of Engineering and Technology, Tirupattur, Tamilnadu, 635 601, India

^c Department of Mechanical Engineering, P.S.V College of Engineering and Technology, Krishnagiri, Tamilnadu, 635108, India

^d Department of Mechanical Engineering, Sri Indu Institute of Engineering and Technology, Hyderabad, Telangana, 501 510, India

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Abstract[Author keywords](#)[Indexed keywords](#)[Sustainable Development Goals 2022](#)[SciVal Topics](#)[Metrics](#)**Abstract**

The welding technique plays an essential role in the metal forming process. The various welding methods are used to weld steel materials. The Metal Inert Gas (MIG) welding is an advanced welding method to produce excellent joints with good strength. At the same time, hard materials are also easily

Cited by 3 documents

Numerical and experimental investigation for the cladding of AISI 304 stainless steel on mild steel substrate using Gas Metal Arc Welding

Aslam, M. , Sahoo, C.K. (2022) *CIRP Journal of Manufacturing Science and Technology*

Variant of MIG welding of similar and dissimilar metals: A review

Singh, S. , Kumar, V. , Kumar, S. (2022) *Materials Today: Proceedings*

Process Parameters Optimization for GMA Welding of AISI 1008 Steel Joints for Optimal Tensile Strength

Abima, C.S. , Akinlabi, S.A. , Madushele, N. (2021) *Revue des Composites et des Matériaux Avances*

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Enhancement of welding strength through electric current and resistance on ERSW process using chromium steel

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Optimization and enhancement of friction stir welding strength on high yield strength deformed steel

Kumar, R.S. , Elango, V. , Giridharan, K. (2021) *Materials Today: Proceedings*

Heat capacity improvement in the electric furnace through amendment of the electric circuit on melting of hardox steel

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Document type

Conference Paper

Source type

Journal

ISSN

22147853

DOI

10.1016/j.matpr.2020.08.441

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Analyses of particle size and abrasive water jet drilling of synthesized chromel metal matrix

Anix Joel Singh J.^a; Vishnu Vardhan T.^b ; Vairamuthu J.^c; Stalin B.^d; Subbiah, Ram^e

Save all to author list

^a Department of Mechanical Engineering, Ponjesly College of Engineering, Parvathipuram, Nagercoil, Tamilnadu, 629 003, India

^b Department of Mechanical Engineering, CMR Institute of Technology, Hyderabad, Telangana, 501 401, India

^c Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Kariapatti, Tamilnadu, 626 115, India

^d Department of Mechanical Engineering, Anna University, Regional Campus Madurai, Madurai, Tamilnadu, 625 019, India

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SciVal Topics

Metrics

Abstract

The chromel was one type of nickel-based metal matrix (MMC) and it was fabricated through stir casting technique. The titanium carbide (TiC) was used as a reinforcement material. The particles were analyzed through Atomic Force Microscopy (AFM) and Dynamic Light Scattering (DLS). Abrasive Water

Cited by 21 documents

Surface investigation on aluminium composite by additive manufacturing process

Sellamuthu, P. , Srinivas Reddy, P. , Ramesh, R.
(2023) *Materials Today: Proceedings*

Effect of parameters and surface analysis on eglin steel by shot blasting method

Srinivas Reddy, P. , Ravi Kumar, P. , Prasad, D.V.S.S.S.V.
(2023) *Materials Today: Proceedings*

Experimental investigation of different unconventional machined surface on hardox steel

Shanmuganathan, A. , Suresh, R. , Manirathnam, D.
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Heat capacity improvement in the electric furnace through amendment of the electric circuit on melting of hardox steel

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Mohan Babu, P. , Rajamuneeswaran, S. , Pritima, D.
(2020) *Materials Today: Proceedings*

Assessment of weld joint strengths on dissimilar alloys of Inconel 625 and aluminium 7068 using FSW process

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Document type

Conference Paper

Source type

Journal

ISSN

22147853

DOI

10.1016/j.matpr.2020.08.196

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Parametric optimization of Al 7068 metal matrix using spark plasma sintering process

Sivakandhan C.^a ; Munusamy P.^b; Anandan K.^c; Balaji R.^b; Vairamuthu J.^d

Save all to author list

^a Department of Mechanical Engineering, P.S.V College of Engineering and Technology, Krishnagiri, Tamil Nadu, 635 108, India

^b Department of Mechanical Engineering, Er. Perumal Manimekalai College of Engineering, Koneripalli, Hosur, 635 117, India

^c Department of Mechanical Engineering, P.S.V College of Engineering and Technology, Krishnagiri, 635108, India

^d Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Kariapatti, 626 115, India

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Metrics

Abstract

The Spark Plasma Sintering (SPS) is one of the effective methods to fabricate the reinforced metal matrix. The heating rate and holding time is very less compared to other casting processes. It is a time-consuming process as well as fabricated components are free from defects. Aluminium alloys are involved in engineering applications such as structures, panels, automobile and aerospace. In present concept deals one of the aerospace alloys such as Al 7068. This alloy is converted to Metal Matrix

Cited by 1 document

Effects of sintering temperature and holding time on microstructure and mechanical properties of Ti-1Al-8V-5Fe prepared by spark plasma sintering | 烧结温度和保温时间对放电等离子烧结制备 Ti-1Al-8V-5Fe 合金 微观组织和力学性能的影响

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Peel test experimentation on polycarbonate-based aluminium using fusion deposition modeling technique

Chandrika, K.K.N. , Karthikeyan, K. , Bharath, N. (2021) *Materials Today: Proceedings*

Assessment of weld joint strengths on dissimilar alloys of Inconel 625 and aluminium 7068 using FSW process

Balasubramanian, M. , Stalin, B. , Marichamy, S. (2020) *Materials Today: Proceedings*

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Document type

Conference Paper

Source type

Journal

ISSN

22147853

DOI

10.1016/j.matpr.2020.04.569

[View more](#)

Mechanical properties of titanium matrix composites fabricated via powder metallurgy method

Yoganandam K.^a ; Mohanavel V.^b; Vairamuthu J.^c; Kannadhasan V.^d

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^a Department of Mechanical Engineering, Saveetha School of Engineering, SIMATS, Chennai, Tamilnadu, 602105, India

^b Department of Mechanical Engineering, Chennai Institute of Technology, Chennai, Tamilnadu, 600069, India

^c Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Tamilnadu, 626115, India

^d Department of Mechanical Engineering, Solamalai College of Engineering, Madurai, Tamilnadu, 625020, India

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Abstract

The betterment of properties in the material can be enhanced by means of composite technology. The composite technology applied in the matrix of polymers as well as metals by reinforcement. This research comes under the classification of metal matrix composite. The titanium is widely used material. The properties of titanium proposed to reinforce by a limited weight percentage of boron carbide and graphite. The selected quantity of boron carbide 5 wt% and graphite 5 wt% used to reinforce the titanium by means of powder metallurgy technology. The prepared specimens of

Cited by 9 documents

Flame structures and particle-combustion mechanisms in nano and micron titanium dust explosions

Wang, Z.-H. , Cheng, Y.-F. , Mogi, T.
(2022) *Journal of Loss Prevention in the Process Industries*

Physical and Mechanical Properties of Powder-Metallurgy-Processed Titanium Alloys and Composites: A Comparative Analysis

Kumar, N. , Bharti, A.
(2022) *Metal Science and Heat Treatment*

Analysis and prediction of cutting force through lathe tool dynamometer in CNC turning process

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Conference Paper

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Journal

ISSN

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10.1016/j.matpr.2020.08.195

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Spark erosion machining behaviour of coconut shell ash reinforced silicon metal matrix

Mohan Babu P.^a; Rajamuneeswaran S.^b; Pritima D.^c; Marichamy S.^d ; Vairamuthu J.^e

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^a Department of Mechanical Engineering, Arulmurugan College of Engineering, Karur Main Road, Mulanur, Tamilnadu, 638 106, India

^b Department of Mechanical Engineering, Pandian Saraswathi Yadav Engineering College, Arasanoor, Thirumansolai Post, Sivagangai, Tamilnadu, 630 561, India

^c Department of Mechatronics Engineering, Sri Krishna College of Engineering and Technology, Coimbatore, Tamilnadu, India

^d Department of Mechanical Engineering, Sri Indu College of Engineering and Technology, Hyderabad, Tamilnadu, 501 510, India

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SciVal Topics

Metrics

Abstract

In recent days, the production of a metal matrix with excellent properties is a challenging task. The contribution of silicon in industries particularly, the demand is increased in electronics industries. The quality of the metal matrix is focused on new reinforcements and composition. In this concept,

Cited by 8 documents

An overview of mechanical and corrosion properties of aluminium matrix composites reinforced with plant based natural fibres

Aliyu, I. , Sapuan, S.M. , Zainudin, E.S.
(2023) *Biopolymer Composites: Production and Modification from Tropical Wood and Non-Wood Raw Materials*

Surprisingly highly reactive silica that dissolves rapidly in dilute alkali (NaOH) solution even at ambient temperatures (25 °C)

Rao, B. , Dai, H. , Gao, L.
(2022) *Journal of Cleaner Production*

Wear mechanisms and methods of wear testing

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Parametric optimization of Al 7068 metal matrix using spark plasma sintering process

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Peel test experimentation on polycarbonate-based aluminium using fusion deposition modeling technique

Chandrika, K.K.N. , Karthikeyan, K. , Bharath, N.
(2021) *Materials Today: Proceedings*

Assessment of weld joint strengths on dissimilar alloys of Inconel 625 and aluminium 7068 using FSW process

Balasubramanian, M. , Stalin, B. , Marichamy, S.
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Document type

Conference Paper

Source type

Journal

ISSN

22147853

DOI

10.1016/j.matpr.2020.08.001

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Performance analysis on synthesized reinforced carbon steel for structural applications

Keshav, Lakshmi^a ; Sai Teja V.^b; Vairamuthu J.^c

[Save all to author list](#)

^a Department of Civil Engineering, Velagapudi Ramakrishna Siddhartha Engineering College, Kanuru -520 007, Vijayawada, AP, India

^b Department of Civil Engineering, CMR Institute of Technology, Hyderabad, Telangana, 501 401, India

^c Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Kariapatti, 626 115, India

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Sustainable Development Goals 2022

SciVal Topics

Metrics

Abstract

In the current scenario, excellent material properties of steel play a considerable role in civil engineering applications. The modified compositions and processing of materials are used to achieve excellent material properties. This research work can satisfy the demand for modified carbon steel which is used in structural applications. The continuous casting method is used to synthesize carbon steel. Molybdenum carbide (Mo₂C) and tantalum carbide (TaC) are used for reinforcement in the manufacturing of developed carbon steel. The responses have been noted when carbon contents are varied from 0.25 to 1.25 wt%. The various experiments such as continuous casting process, evaluation

Cited by 2 documents

Electrodeposition of NiP/SiC Composite Coating on A105 Steel and Its Corrosion Resistance in Simulated Concrete Pore Solution

Gao, X.
(2022) *International Journal of Electrochemical Science*

The inhibition performance of a novel benzenesulfonamide-based benzoxazine compound in the corrosion of X60 carbon steel in an acidizing environment

Alamry, K.A. , Hussein, M.A. , Musa, A.
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Analyses of particle size and abrasive water jet drilling of synthesized chromel metal matrix

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(2020) *Materials Today: Proceedings*

Wear study and elaborate the parametric effect on cupronickel metal matrix

Vairamuthu, J. , Stalin, B. , Khan, M.A.
(2021) *Materials Today: Proceedings*

Heat capacity improvement in the electric furnace through amendment of the electric circuit on melting of hardox steel

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Document type

Conference Paper

Source type

Journal

ISSN

22147853

DOI

10.1016/j.matpr.2020.08.059

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Experiment investigation and analysis of fish scale reinforced polymer composite materials

Raja Sekaran P.^a; Ganesh Kumar S.^a ; Anix Joel Singh J.^b; Vairamuthu J.^c

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^a Department of Mechanical Engineering, Er.Perumal Manimekalai College of Engineering, Koneripalli, Hosur, 635 117, India

^b Department of Mechanical Engineering, Ponjesly College of Engineering, Parvathipuram, Nagercoil, 629 003, India

^c Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Kariapatti, 626 115, India

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Abstract[Author keywords](#)[Indexed keywords](#)[Sustainable Development Goals 2022](#)[SciVal Topics](#)[Metrics](#)**Abstract**

Due to the establishment of disposal methods for fish scale powder reinforced plastics. Among various natural fiber, fish scale powder fiber is of particular interest in that its composites have eco-friendly natural it's a low cost, and ease of availability and food waste material. The paper mainly concentrated on the reinforcement of polymer plastics with different proportions of fish scale fiber powder composites. These composites are subjected to the shear stress to find the fracture. The manipulate of fish scale normal fiber operating (5-25v/v %) on the material properties of the Epoxy LY-556 was performed. The working materials were manufactured by compression molding. The better substance

Cited by 4 documents

Inspired with fish scale to manufacture biomimetic MXene derivative for the reinforcement on tribological and mechanical properties of PPS fabric/phenolic composites

He, Y. , Zhang, Z. , Wang, Y. (2023) *Tribology International*

Inspired by placoid scale to fabricate MXene derivative biomimetic structure on the improvement of interfacial compatibility, mechanical property, and fire safety of epoxy nanocomposites

Yin, Z. , Wang, B. , Tang, Q. (2022) *Chemical Engineering Journal*

Marine-based reinforcing materials for biocomposites

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Ravichandran, M. , Balasubramanian, M. , Anand Chairman, C. (2020) *IOP Conference Series: Materials Science and Engineering*

Mechanical performance of TiC filled chopped basalt fibre reinforced epoxy composites

Anand Chairman, C. , Marichamy, S. , Dhinakaran, V. (2020) *IOP Conference Series: Materials Science and Engineering*

Investigations on Mechanical Properties of Basalt Powder filled Vinyl Ester Composites

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Materials Today: Proceedings • Volume 33, Pages 4431 - 4435 • 2020 • 2019 International Conference on Nanotechnology: Ideas, Innovation and Industries, ICN 2019 • Tamilnadu • 12 December 2019 through 14 December 2019 • Code 165932

Document type

Conference Paper

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Journal

ISSN

22147853

DOI

10.1016/j.matpr.2020.07.672

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Response analysis on synthesized aluminium-scandium metal matrix composite using unconventional machining processes

Pritima D.^a ; Vairamuthu J.^b; Gopi Krishnan P.^c; Marichamy S.^d; Stalin B.^e; Sheeba Rani S.^f

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^c Department of Mechanical Engineering, Dr. N.G.P Institute of Technology, Coimbatore, 641 048, India

^d Department of Mechanical Engineering, Sri Indu College of Engineering and Technology, Hyderabad, India

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Abstract

The research work and applications of aluminium based Metal Matrix Composite (MMC) has been increased. It has more attractive material properties like strength, ductility, corrosion and wear resistance. The current work reports the Titanium Carbide (TiC) and Vanadium Carbide (VC) reinforced aluminium scandium MMC is formulated through metallurgy technique. The synthesized MMC is

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10.1016/j.matpr.2019.07.404

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Surface morphology and parametric optimization of AWJM parameters using GRA on aluminum HMMC

[Senthilkumar T.S.^a](#) ; [Muralikannan R.^b](#); [Senthil Kumar S.^c](#)

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^a Department of Mechanical Engineering, Sree Sowdambika College of Engineering, Aruppukottai, Tamil Nadu, 626 134, India

^b Department of Mechanical Engineering, Sethu Institute of Technology, Kariapatti, Tamil Nadu, 626 115, India

^c Department of Mechanical Engineering, Sri Vidya College of Engineering and Technology, Virudhunagar, Tamil Nadu, 626 005, India

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Abstract[Author keywords](#)[Reaxys Chemistry database information](#)[Indexed keywords](#)[SciVal Topics](#)[Metrics](#)**Abstract**

Cutting force arises as a major problem in machining of Hybrid Metal Matrix Composites (HMMCs) using conventional machining owed to the presence of reinforcement materials. Hence a non-conventional machining process namely Abrasive Water Jet Machining (AWJM) is preferred. The objective of this project is to investigate the cutting performance of AWJM on Aluminum HMMCs. The cutting parameters such as pressure, standoff distance (SOD) and feed rate are analyzed based on the L₂₇ orthogonal array and the machining parameters such as kerf angle, SR and MRR were intended. The

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Optimization by Grey Relational Analysis of AWJM Parameters on Machining Titanium Alloy

Chaturvedi, C. , Sudhakar Rao, P. , Yunus Khan, M. (2022) *Advances in Manufacturing Technology: Computational Materials Processing and Characterization*

Experimental investigation on abrasive water jet cutting of high strength aluminium 7068 alloy

Gunamgari, B.R. , Kharub, M. (2022) *Materials Today: Proceedings*

Recent progress trend on abrasive waterjet cutting of metallic materials: A review

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Empirical modeling and optimization of kerf width in abrasive water jet machining - A short review

Venkata Subbaiah, K. , Baburaja, K. (2018) *International Journal of Engineering and Technology(UAE)*

Surface roughness report and 3D surface analysis of hybrid Metal Matrix Composites (MMC) during Abrasive Water Jet (AWJ) cutting

Srivastava, A.K. , Dwivedi, S.P. , Maurya, N.K. (2020) *Revue des Composites et des Matériaux Avances*

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Document type

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Journal

ISSN

22147853

DOI

10.1016/j.matpr.2019.04.226

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Optimization of brazing process parameters in butt joint of brass 319 using Taguchi method

Stalin B.^a ; Ravichandran M.^b; Vadivel K.^a; Vairamuthu J.^c

[Save all to author list](#)^a Department of Mechanical Engineering, Anna University, Regional Campus Madurai, Madurai, 625 019, India^b Department of Mechanical Engineering, K. Ramakrishnan College of Engineering, Trichy, 621 112, India^c Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Kariapatti, 626115, India

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Abstract[Author keywords](#)[Reaxys Chemistry database information](#)[Indexed keywords](#)[SciVal Topics](#)[Metrics](#)[Funding details](#)**Abstract**

Brazing is the metal joining processes of melting a filler metal into the joint, the filler metal having a lower melting point than the adjoining metal. The oxyacetylene brazing processes are executed with 18 brass plates, where each pair of same plates is joined together as butt joint. The copper flux powder is used, in order to control the oxidation during brazing processes. Brazed brass 319 joints are tested for the tensile and impact strength observation. The objective of this work is to optimize the process parameters involved in brazing processes using Taguchi optimization with L9 orthogonal array, signal

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Machinability of Titanium alloy 6242 by AWJM through Taguchi method

Perumal, A. , Kailasanathan, C. , Wilson, V.H.
(2022) *Materials Today: Proceedings*

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Document type

Conference Paper

Source type

Journal

ISSN

22147853

DOI

10.1016/j.matpr.2019.04.212

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Experimental investigation and characterization of brass-AlN composites synthesized using powder metallurgy technique

Stalin B.^a ; Ravichandran M.^b; Jasper S.^a; Vairamuthu J.^c

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^a Department of Mechanical Engineering, Anna University, Regional Campus Madurai, Madurai, 625 019, India

^b Department of Mechanical Engineering, K. Ramakrishnan College of Engineering, Trichy, 621 112, India

^c Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Kariapatti, 626115, India

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Abstract

This paper is focused on the synthesis of brass-AlN composite based on powder metallurgy technique. By varying the weight percentages (0, 4, 8, 12) of aluminium nitride (AlN) as reinforcement. The high energy ball milling are used the brass-AlN composite. The green cylindrical compacts were produced by hydraulic press. In addition the green compacts are sintered on 1 h at 800 °C in electric muffle furnace under controlled argon atmosphere. The results show that the increase in weight percentage the AlN content of the brass matrix composite increases the density, hardness, strength coefficient of composite and decreases the porosity. © 2019 Elsevier Ltd. All rights reserved.

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Crawler Framework for Category Search Engine

Ragavan N.^a; Yesubai Rubavathi C.^b; John Singh K.^c

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^a Anna University, Tamil Nadu, India^b Sethu Institute of Technology, Department of Computer Science and Engineering, Kariapatti, Tamil Nadu, India^c SITE, VIT, Vellore, India

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Abstract

Due to the increasing in size of web information, it is needed to make a crawler with good scalability. Category based search engines are going to be the next generation search engines. Crawlers with good load balancing are required for Category based search engines. In this paper, we present a distributed web crawler architecture that holds goods for category support Search engine. Our category based search engine crawler splits the crawled data based upon the web page metadata into categories and distributes their storage and computing resources, with minimized communication cost. We also analyze the performance and scalability of the category based web crawler over traditional distributed web crawlers. © 2020 IEEE.

Author keywords

Big Data; Category Crawler; Category Search Engine; Computing; Crawler File System; Distributed Web Crawler

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Palani, Deepa; Arulraj, Merline

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A Novel Region Based Thresholding for Dental Cyst Extraction in Digital Dental X-Ray Images

Karthika Devi R.^a ; Banumathi A.^b; Sangavi G.^a; Sheik Dawood M.^a

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^a Sethu Institute of Technology, Tamil Nadu, Kariapatti, India

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Journal

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22147853

DOI

10.1016/j.matpr.2021.02.333

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Improved performance of grid connected converters using PCB- embedded transformer

Sonia C.^a ; Tamilselvi S.^b; Visvesvaran C.^c

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^a Sethu Institute of Technology, Virudhunagar, Kariapatti, 626115, India

^b Sri Siva Subramaniya Nadar College of Engineering, Chennai, 603103, India

^c Sri Krishna College of Engineering and Technology, Coimbatore, India

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In a confounded power system, Photovoltaic as circled made source is expanding and it can cause a collection of issue. Most gave issue is an islanding wonder. To thwart islanding wonder, three sorts of dynamic islanding revelation procedures are thought of. Islanding area might be a necessary limit with respect to network related converters. The popular slip mode repeat move (SMS) and auto stage move dynamic islanding distinguishing proof strategies are investigated and an improved (IM)- SMS strategy is proposed during this assessment. Dynamic repeat drift using repeat quicken as opposed to speed-down is exhibited to be ideal for inductive weights, yet conditions that caused islanding may be

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Sun, B. , Burgos, R. , Boroyevich, D.
(2019) *IEEE Transactions on Power Electronics*

A 2.86-TOPS/W CMCB based Edge ML and RO-PUF engine for IoT based nano-electronic material applications

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Document type

Conference Paper

Source type

Journal

ISSN

22147853

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10.1016/j.matpr.2021.02.287

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Performance analysis of efficient video transmission using EvalSVC, EvalVid-NT, EvalVid

[Sheik Dawood M.^a](#); [Sakena Benazer S.^a](#); [Karthick R.^a](#) ; [Senthil Ganesh R.^b](#); [Sugirtha Mary S.^a](#)

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^a Sethu Institute of Technology, Sethu Institute of Technology, Virudhunagar, Kariapatti, 626115, India

^b Sri Krishna College of Engineering and Technology, Coimbatore, 641008, India

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[Abstract](#)[Author keywords](#)[Reaxys Chemistry database information](#)[Indexed keywords](#)[SciVal Topics](#)[Metrics](#)**Abstract**

Video transmission in bandwidth constrained networks such as adhoc networks is a challenging task. In bandwidth constrained networks, video losses its original quality. To improve video quality during transmission over adhoc networks, different frameworks such as EvalSVC, EvalVid, EvalVid-NT are developed. These frameworks are integrated with Network Simulator. The video is transmitted over these frameworks and the video quality is evaluated by the PSNR Value. © 2020 Elsevier Ltd. All rights reserved.

Author keywords

EvalSVC; EvalVid framework; Evalvid-NT; MPEG Video; Network Simulator; PSNR

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Zhu, Y. , Li, J.-Z. , Wu, M.-Q.
(2009) *Beijing Youdian Daxue Xuebao/Journal of Beijing University of Posts and Telecommunications*

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Document type

Conference Paper

Source type

Journal

ISSN

22147853

DOI

10.1016/j.matpr.2020.08.436

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Tribological analysis on magnesium alloy AZ31B with reinforced ZrSiO₄ through Taguchi technique

[Arunachalam U.^a](#) ; [Vairamuthu J.^b](#)

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^a Department of Mechanical Engineering, University College of Engineering, Nagercoil, Tamilnadu, 629004, India^b Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Tamilnadu, 626115, India
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Optimization of the wear characteristics of composites (AZ31B/ZrSiO₄) prepared through stir casting process using Taguchi's S/N analysis was examined. L9 OA has been chosen to perform dry sliding wear experiments using pin on the disk device. The foremost goal is to employ S/N ratio and analysis of variance to inspect the impact of sliding distance, applied load and mass fraction of incorporation particles on wear rate (WR). The microstructure exploration revealed that there is a ZrSiO₄ particle which diminishes wear of the specimens. Wear tests were functioned on a pin on a disc machine according to ASTM G99 - 05 standard. Wear rate were calculated from the ANOVA study as strongly contributing parameters to interrupt the composite properties. © 2020 Published by Elsevier Ltd.

Author keywords

ANOVA; Hardness taguchi; Magnesium alloy; Wear rate

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Analysis of Mechanical Properties for Al-MMC Fabricated through an Optimized Stir Casting Process

Gugulothu, B. , Nagarajan, N. , Pradeep, A.
(2022) *Journal of Nanomaterials*

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Subash, P. , Nagendharan, S. , Gurusamy, P.
(2020) *Materials Today: Proceedings*

Investigation on the tribological properties of copper alloy reinforced with Gr/ZrO₂ particulates by stir casting route

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Document type

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Journal

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DOI

10.1016/j.matpr.2020.08.714

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Mechanical properties of RCC column with kevlar and banana fibre wrapping

[Prakash N.^a](#); [Sakthivel P.^b](#); [Karthick, M. Dhivakar^c](#); [Swaminathan P.^d](#); [Rahman, D. Zunaithur^e](#)

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^a Department of Civil Engineering, K. Ramakrishnan College of Technology, Tamilnadu, Trichy, 621 112, India

^b Department of Civil Engineering, Kongunadu College of Engineering And Technology, Thottiam, Trichy, Tamilnadu, 621 215, India

^c Department of Civil Engineering, Sengunthar Engineering College (Autonomous), Perundurai, Erode, Tamilnadu, 638 057, India

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Abstract

The development of high-performance materials made from fibers increasing worldwide in recent years. Fibers offer both cost savings as well as an extension of the life span of the building when compared to other conventional materials. However, the strength of building can improve using fibers. The following preliminary research investigated the use of Kevlar, Banana Fabric fiber as possible to improve the impact properties. The main reason for choosing these fibers has high mechanical

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Feasibility Study on Temperature Tests of Roller Compacted Concrete Pavement Using Nano Silica and Banana Fibre

Gokulanadh, V. , Khed, V.C. , Adamu, M.
(2022) *AIP Conference Proceedings*

Investigation of physical, strength, and ductility characteristics of concrete reinforced with banana (Musaceae) stem fiber

Ali, B. , Azab, M. , Ahmed, H.
(2022) *Journal of Building Engineering*

High-strength light-weight aramid fibre/polyamide 12 composites printed by Multi Jet Fusion

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Modeling and fabrication of automatic blackboard dust remover

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[Save all to author list](#)^a Department of Mechanical Engineering, Chennai Institute of Technology, Chennai, Tamil Nadu, 600069, India^b Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Tamil Nadu, 626115, India^c Department of Mechanical Engineering, Saveetha School of Engineering, SIMATS, Chennai, Tamil Nadu, 602105, India^d Department of Mechanical Engineering, Solamalai College of Engineering, Madurai, Tamil Nadu, 625020, India[View additional affiliations](#)

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(2021) *Materials Today: Proceedings*

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Sivaraj, S. , Nagendharan, S. , Mohanavel, V.
(2020) *Materials Today: Proceedings*

Mechanical properties of titanium matrix composites fabricated via powder metallurgy method

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Conference Paper

Source type

Journal

ISSN

22147853

DOI

10.1016/j.matpr.2020.08.069

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Computational investigations on helical heat flow exchanger in automotive radiator tubes with computational fluid dynamics

Sadhasivam C.^a ; Murugan S.^b; Manikandaprabu P.^c; Priyadharshini, S. Mohana^c; Vairamuthu J.^d
 Save all to author list

^a Department of Mechanical Engineering, Saveetha School of Engineering, SIMATS, Chennai, 602105, India^b Department of Mechanical Engineering, Seshasayee Institute of Technology, Trichy, Tamilnadu, 620010, India^c Department of Mechanical Engineering, Sona College of Technology, Salem, Tamilnadu, 636005, India^d Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Tamilnadu, 626115, India

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The Present work is employed to heat transfer from one fluid in a pipe in different wavy paths is named as helical coiled heat exchanger. The heat exchanger features a wide use in burning engine as radiator. It's used for alternative functions like area heating, fossil fuel process, power stations, fossil oil refineries, air con, power stations, organic compound plants, refrigeration, and waste matter treatment. During this we have a tendency to be aiming to associate degree analysis the exchange of warmth transfer co-efficient and temperature between two fluids mistreatment turbine tubes as heat

Cited by 2 documents

Numerical investigation of heat transfer in helical tubes modified with aluminum oxide nanofluid and modeling of data obtained by artificial neural network

Boumari, E. , Amiri, M.M. , Khadang, A.
(2023) *Numerical Heat Transfer; Part A: Applications*

Behaviour of a Non-Newtonian Fluid in a Helical Tube Under the Influence of Thermal Buoyancy

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Aerodynamic braking system analysis of horizontal axis wind turbine using slotted airfoil

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(2020) *Materials Today: Proceedings*

Analysis of composite leaf spring using ANSYS software

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10.1016/j.matpr.2020.08.541

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Electrokinetic remediation: An innovation for heavy metal contamination in the soil environment

[Rahman, Zunaithur^a](#); [Jagadheeswari^b](#); [Mohan, Arun^a](#); [Tharini^c](#); [Selvendran^d](#); [Priya, Shanmuga^e](#)

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^a Department of Civil Engineering, Sethu Institute of Technology, Kariapatti, Tamil Nadu, 626 115, India^b Department of Civil Engineering, K.Ramakrishnan College of Technology, Tamilnadu, Trichy, 621 112, India^c Department of Civil Engineering, SRM Valliammai Engineering College, Tamilnadu, Kattankulatur, 603 203, India^d Department of Civil Engineering, Vel Tech Rangarajan Dr.Saguntala R and D Institute of Science and Technology, Chennai, Tamilnadu, 600 062, India[View additional affiliations](#)

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The pollution load to the earth's crust is being added by the atmospheric deposition of heavy metals like arsenic, cadmium, lead, zinc emitted from vehicles, and several industrial plants. Numerous urban and thick urban communities with Critical Industrial waste generation were found to have contaminated Indian soil. These Heavy metals have lethal and mutagenic impacts even at a low level.

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Preparation of a novel iron oxychloride (FeOCl) auxiliary electrode in promoting electrokinetic remediation of Cr(VI) contaminated soil: An experimental and DFT calculation analysis

Zhao, D. , Liu, X. , Zhao, B. (2023) *Journal of Hazardous Materials*

A comprehensive study on microbial-surfactants from bioproduction scale-up toward electrokinetics remediation of environmental pollutants: Challenges and perspectives

Phulpoto, I.A. , Yu, Z. , Qazi, M.A. (2023) *Chemosphere*

Analysis of electric field efficacy and remediation performance of triclosan contaminated soil by Co-Fe/al oxidation electrodes coupled with peroxymonosulfate (PMS) in an ECGO system with diversified electrode configurations

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Enhanced remediation of arsenic and chromium co-contaminated soil by eletrokinetic-permeable reactive barriers with different reagents

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Removal of cadmium in contaminated kaolin by new-style electrokinetic remediation using array electrodes coupled with permeable reactive barrier

Zhou, H. , Xu, J. , Lv, S. (2020) *Separation and Purification Technology*

Removing fluorine in soil by using ammonia circulation enhanced electrokinetics

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Modeling and fabrication of automatic blackboard dust remover

Mohanavel V.^a ; Kailasanathan C.^b; Sathish T.^c; Kannadhasan V.^d; Marshal, S. Vinoth Joe^e; Sakthivel K.^e

[Save all to author list](#)^a Department of Mechanical Engineering, Chennai Institute of Technology, Chennai, Tamil Nadu, 600069, India^b Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Tamil Nadu, 626115, India^c Department of Mechanical Engineering, Saveetha School of Engineering, SIMATS, Chennai, Tamil Nadu, 602105, India^d Department of Mechanical Engineering, Solamalai College of Engineering, Madurai, Tamil Nadu, 625020, India[View additional affiliations](#)

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Advancement and execution of quality assurance in bored cast in-situ piles

[Rahman, D. Zunaithur^a](#); [Sirajudeen K.^b](#); [Nasar Ali R.^c](#); [Muthumari G.^b](#); [Alagumurugan G.^d](#); [Vani E.^b](#);

[Kumar, P. Sathees^b](#); [Sivaranjani S.^e](#)

[Save all to author list](#)^a Department of Civil Engineering, Sethu Institute of Technology, Kariapatti, Tamilnadu, 626 115, India^b Department of Civil Engineering, Mohamed Sathak Engineering College, Kilakarai, Tamil Nadu, 623 806, India^c Department of Civil Engineering, College of Engineering and Technology, Samara University, Afar, 7260, Ethiopia^d Department of Civil Engineering, Fatima Michael College of Engineering and Technology, Madurai, Tamil Nadu, 625 020, India[View additional affiliations](#)

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This paper identifies the effect of working conditions and the developing nature of new lodging in the deal cost and capital development. To quantify development quality, the upside of a special circumstance in Singapore was recently finished private activities are evaluated freely on their workmanship under the Construction Quality Assessment System (CONQUAS). Despite the expansion of the action, the development of the board is certainly not a much-considered or arranged subject. There are still just pockets of greatness in an ocean of seat-of-the-pants. Most second-level



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Journal

ISSN

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10.1016/j.matpr.2020.05.720

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Modelling and manufacturing of light weight materials based stretcher cum wheelchair

Mohanavel V.^a ; **Vairamuthu J.**^b; Jegan A.^c; Sathish T.^d; Rajesh K.^e; Tamilselvam S.^e

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^a Department of Mechatronics Engineering, Chennai Institute of Technology, Chennai, Tamil Nadu, 600069, India^b Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Tamil Nadu, 626115, India^c Department of Mechanical Engineering, VSVN Polytechnic College, Virudhunagar, Tamil Nadu, 626001, India^d Department of Mechanical Engineering, Saveetha School of Engineering, SIMATS, Chennai, Tamil Nadu, 602105, India[View additional affiliations](#)

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Abstract

The emergency in present world plays a major role. There are many accidents which take place on the roads due to various factors and mostly due to emergency In India the number of disabled individuals is increasing every year. The transferring of patients from the wheelchair to stretcher is always an issue for the helper or attender. Hence we are going to design and fabricate the stretcher cum wheel chair with portable type. The material used for the fabrication of the stretcher is stainless steel. So that the

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Modeling and Prediction of User Stability and Comfortability on Autonomous Wheelchairs With 3-D Mapping

Luo, H. , Yang, Z. , Yin, P.
(2022) *IEEE Transactions on Human-Machine Systems*

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Vasudevan, A. , Kumar, B.N. , Depoures, M.V.
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Thermal and mechanical properties of titanium matrix composites synthesized through solid state technique

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Document type

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DOI

10.1016/j.matpr.2020.08.395

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Day and night yield performance analysis of solar still for saline water using energetic materials with thermocol insulation

[Karthikeyan J.^a](#); [Selvaraj P.^b](#); [Nagaraj G.^c](#)
[Save all to author list](#)^a Mangayarkarasi College of Engineering, Madurai, India^b Chandy College of Engineering, Tuticorin, India^c Mechanical Engineering, Sethu Institute of Technology, Madurai, India7^{90th} percentile

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Abstract

A new approach is proposed to improve the performance of solar still. The Solar desalination process proves that the pure good water is produced without salt content from the salty water including the earth bore water and sea water. In this technology, the solar still along with solar energy absorber material such as Nano material (Aluminium Oxide) is used and getting high performance of solar still. Result shows a considerable increase in rate of pure good water production. When comparing with the various solar energy absorbing materials such as glass ball, pebbles, gravels, and Nano material, the

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Current and Future Challenges of Nanomaterials in Solar Energy Desalination Systems in Last Decade

Gajbhiye, T.S. , Shelare, S.D. , Aglawe, K.R. (2022) *Transdisciplinary Journal of Engineering and Science*

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Malaiyappan, P. , Elumalai, N. (2015) *Journal of Chemical and Pharmaceutical Sciences*

Experimental and numerical investigations with environmental impacts of affordable square pyramid solar still

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ISSN

22147853

DOI

10.1016/j.matpr.2020.08.366

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A comparative study on mechanical properties of coir fiber reinforced polymer composites filled with calcium carbonate particles

Rajamuneeswaran S.^a ; Vairamuthu J.^b; Nagarajan S.^a; Stalin B.^c; Jayabal S.^d

[Save all to author list](#)

^a Department of Mechanical Engineering, Pandian Saraswathi Yadav Engineering College, Sivagangai, 630 561, India

^b Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Kariapatti, 626 115, India

^c Department of Mechanical Engineering, Anna University, Regional Campus Madurai, Madurai, 625 019, India

^d Department of Mechanical Engineering, Government College of Engineering, Sengipatti, Thanjavur, 613 402, India

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Abstract

The current work is a study on the comparison of mechanical properties of different thermosetting polymers reinforced with coir fiber and calcium carbonate filler materials. Coir fiber is the load-carrying member in the reinforced composites and particle Calcium Carbonate (CaCO₃) is used to get

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Liu, J. , Jin, X. , Liu, H. (2022) *Nordic Pulp and Paper Research Journal*

Mechanical and physical characteristics of hybrid particles/fibers-polymer composites: A review

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ISSN

22147853

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10.1016/j.matpr.2020.08.198

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Enhancement of welding strength on Eglin steel using MIG welding process

[Louie Frango T.^a](#) ; [Prabhakaran M.^b](#); [Sivakandhan C.^c](#); [Vinoth Babu K.^d](#); [Vairamuthu J.^e](#)

[Save all to author list](#)

^a Department of Mechanical Engineering, Sri Vidya College of Engineering and Technology, Virudhunagar, Tamilnadu, 626 005, India

^b Department of Mechanical Engineering, Podhigai College of Engineering and Technology, Tirupattur, Tamilnadu, 635 601, India

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^d Department of Mechanical Engineering, Sri Indu Institute of Engineering and Technology, Hyderabad, Telangana, 501 510, India

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Abstract[Author keywords](#)[Indexed keywords](#)[Sustainable Development Goals 2022](#)[SciVal Topics](#)[Metrics](#)**Abstract**

The welding technique plays an essential role in the metal forming process. The various welding methods are used to weld steel materials. The Metal Inert Gas (MIG) welding is an advanced welding method to produce excellent joints with good strength. At the same time, hard materials are also easily

Cited by 3 documents

Numerical and experimental investigation for the cladding of AISI 304 stainless steel on mild steel substrate using Gas Metal Arc Welding

Aslam, M. , Sahoo, C.K. (2022) *CIRP Journal of Manufacturing Science and Technology*

Variant of MIG welding of similar and dissimilar metals: A review

Singh, S. , Kumar, V. , Kumar, S. (2022) *Materials Today: Proceedings*

Process Parameters Optimization for GMA Welding of AISI 1008 Steel Joints for Optimal Tensile Strength

Abima, C.S. , Akinlabi, S.A. , Madushele, N. (2021) *Revue des Composites et des Materiaux Avances*

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Enhancement of welding strength through electric current and resistance on ERSW process using chromium steel

Radhika, A. , Thenmozhi, G. , Balakarthikeyan, M. (2020) *Materials Today: Proceedings*

Optimization and enhancement of friction stir welding strength on high yield strength deformed steel

Kumar, R.S. , Elango, V. , Giridharan, K. (2021) *Materials Today: Proceedings*

Heat capacity improvement in the electric furnace through amendment of the electric circuit on melting of hardox steel

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Document type

Conference Paper

Source type

Journal

ISSN

22147853

DOI

10.1016/j.matpr.2020.08.441

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Analyses of particle size and abrasive water jet drilling of synthesized chromel metal matrix

Anix Joel Singh J.^a; Vishnu Vardhan T.^b ; **Vairamuthu J.**^c; Stalin B.^d; Subbiah, Ram^e

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^a Department of Mechanical Engineering, Ponjesly College of Engineering, Parvathipuram, Nagercoil, Tamilnadu, 629 003, India

^b Department of Mechanical Engineering, CMR Institute of Technology, Hyderabad, Telangana, 501 401, India

^c Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Kariapatti, Tamilnadu, 626 115, India

^d Department of Mechanical Engineering, Anna University, Regional Campus Madurai, Madurai, Tamilnadu, 625 019, India

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Abstract

The chromel was one type of nickel-based metal matrix (MMC) and it was fabricated through stir casting technique. The titanium carbide (TiC) was used as a reinforcement material. The particles were analyzed through Atomic Force Microscopy (AFM) and Dynamic Light Scattering (DLS). Abrasive Water

Cited by 21 documents

Surface investigation on aluminium composite by additive manufacturing process

Sellamuthu, P. , Srinivas Reddy, P. , Ramesh, R.
(2023) *Materials Today: Proceedings*

Effect of parameters and surface analysis on eglin steel by shot blasting method

Srinivas Reddy, P. , Ravi Kumar, P. , Prasad, D.V.S.S.S.V.
(2023) *Materials Today: Proceedings*

Experimental investigation of different unconventional machined surface on hardox steel

Shanmuganathan, A. , Suresh, R. , Manirathnam, D.
(2022) *Materials Today: Proceedings*

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(2020) *Materials Today: Proceedings*

Assessment of weld joint strengths on dissimilar alloys of Inconel 625 and aluminium 7068 using FSW process

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Document type

Conference Paper

Source type

Journal

ISSN

22147853

DOI

10.1016/j.matpr.2020.08.196

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Parametric optimization of Al 7068 metal matrix using spark plasma sintering process

Sivakandhan C.^a ; Munusamy P.^b; Anandan K.^c; Balaji R.^b; **Vairamuthu J.**^d

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^a Department of Mechanical Engineering, P.S.V College of Engineering and Technology, Krishnagiri, Tamil Nadu, 635 108, India

^b Department of Mechanical Engineering, Er. Perumal Manimekalai College of Engineering, Koneripalli, Hosur, 635 117, India

^c Department of Mechanical Engineering, P.S.V College of Engineering and Technology, Krishnagiri, 635108, India

^d Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Kariapatti, 626 115, India

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SciVal Topics

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Abstract

The Spark Plasma Sintering (SPS) is one of the effective methods to fabricate the reinforced metal matrix. The heating rate and holding time is very less compared to other casting processes. It is a time-consuming process as well as fabricated components are free from defects. Aluminium alloys are involved in engineering applications such as structures, panels, automobile and aerospace. In present concept deals one of the aerospace alloys such as Al 7068. This alloy is converted to Metal Matrix

Cited by 1 document

Effects of sintering temperature and holding time on microstructure and mechanical properties of Ti-1Al-8V-5Fe prepared by spark plasma sintering | 烧结温度和保温时间对放电等离子烧结制备 Ti-1Al-8V-5Fe 合金 微观组织和力学性能的影响

Li, Y.-Z. , Liu, S.-F. , Zhang, G.-X. (2021) *Journal of Central South University*

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Peel test experimentation on polycarbonate-based aluminium using fusion deposition modeling technique

Chandrika, K.K.N. , Karthikeyan, K. , Bharath, N. (2021) *Materials Today: Proceedings*

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Document type

Conference Paper

Source type

Journal

ISSN

22147853

DOI

10.1016/j.matpr.2020.04.569

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Mechanical properties of titanium matrix composites fabricated via powder metallurgy method

Yoganandam K.^a ; Mohanavel V.^b; **Vairamuthu J.**^c; Kannadhasan V.^d

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^a Department of Mechanical Engineering, Saveetha School of Engineering, SIMATS, Chennai, Tamilnadu, 602105, India

^b Department of Mechanical Engineering, Chennai Institute of Technology, Chennai, Tamilnadu, 600069, India

^c Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Tamilnadu, 626115, India

^d Department of Mechanical Engineering, Solamalai College of Engineering, Madurai, Tamilnadu, 625020, India

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Abstract

The betterment of properties in the material can be enhanced by means of composite technology. The composite technology applied in the matrix of polymers as well as metals by reinforcement. This research comes under the classification of metal matrix composite. The titanium is widely used material. The properties of titanium proposed to reinforce by a limited weight percentage of boron carbide and graphite. The selected quantity of boron carbide 5 wt% and graphite 5 wt% used to reinforce the titanium by means of powder metallurgy technology. The prepared specimens of

Cited by 9 documents

Flame structures and particle-combustion mechanisms in nano and micron titanium dust explosions

Wang, Z.-H. , Cheng, Y.-F. , Mogi, T.
(2022) *Journal of Loss Prevention in the Process Industries*

Physical and Mechanical Properties of Powder-Metallurgy-Processed Titanium Alloys and Composites: A Comparative Analysis

Kumar, N. , Bharti, A.
(2022) *Metal Science and Heat Treatment*

Analysis and prediction of cutting force through lathe tool dynamometer in CNC turning process

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Modeling and assessment of pump impeller

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(2020) *Materials Today: Proceedings*

Finite element analysis with experimental validation of crack initiation in valve housing

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Document type

Conference Paper

Source type

Journal

ISSN

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DOI

10.1016/j.matpr.2020.08.195

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Spark erosion machining behaviour of coconut shell ash reinforced silicon metal matrix

Mohan Babu P.^a; Rajamuneeswaran S.^b; Pritima D.^c; Marichamy S.^d ; **Vairamuthu J.^e**

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^a Department of Mechanical Engineering, Arulmurugan College of Engineering, Karur Main Road, Mulanur, Tamilnadu, 638 106, India

^b Department of Mechanical Engineering, Pandian Saraswathi Yadav Engineering College, Arasanoor, Thirumansolai Post, Sivagangai, Tamilnadu, 630 561, India

^c Department of Mechatronics Engineering, Sri Krishna College of Engineering and Technology, Coimbatore, Tamilnadu, India

^d Department of Mechanical Engineering, Sri Indu College of Engineering and Technology, Hyderabad, Tamilnadu, 501 510, India

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Abstract

In recent days, the production of a metal matrix with excellent properties is a challenging task. The contribution of silicon in industries particularly, the demand is increased in electronics industries. The quality of the metal matrix is focused on new reinforcements and composition. In this concept,

Cited by 8 documents

An overview of mechanical and corrosion properties of aluminium matrix composites reinforced with plant based natural fibres

Aliyu, I. , Sapuan, S.M. , Zainudin, E.S.
(2023) *Biopolymer Composites: Production and Modification from Tropical Wood and Non-Wood Raw Materials*

Surprisingly highly reactive silica that dissolves rapidly in dilute alkali (NaOH) solution even at ambient temperatures (25 °C)

Rao, B. , Dai, H. , Gao, L.
(2022) *Journal of Cleaner Production*

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Chandrika, K.K.N. , Karthikeyan, K. , Bharath, N.
(2021) *Materials Today: Proceedings*

Assessment of weld joint strengths on dissimilar alloys of Inconel 625 and aluminium 7068 using FSW process

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Document type

Conference Paper

Source type

Journal

ISSN

22147853

DOI

10.1016/j.matpr.2020.08.001

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Performance analysis on synthesized reinforced carbon steel for structural applications

Keshav, Lakshmi^a ; Sai Teja V.^b; **Vairamuthu J.**^c

Save all to author list

^a Department of Civil Engineering, Velagapudi Ramakrishna Siddhartha Engineering College, Kanuru -520 007, Vijayawada, AP, India

^b Department of Civil Engineering, CMR Institute of Technology, Hyderabad, Telangana, 501 401, India

^c Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Kariapatti, 626 115, India

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Abstract

In the current scenario, excellent material properties of steel play a considerable role in civil engineering applications. The modified compositions and processing of materials are used to achieve excellent material properties. This research work can satisfy the demand for modified carbon steel which is used in structural applications. The continuous casting method is used to synthesize carbon steel. Molybdenum carbide (Mo₂C) and tantalum carbide (TaC) are used for reinforcement in the manufacturing of developed carbon steel. The responses have been noted when carbon contents are varied from 0.25 to 1.25 wt%. The various experiments such as continuous casting process, evaluation

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Electrodeposition of NiP/SiC Composite Coating on A105 Steel and Its Corrosion Resistance in Simulated Concrete Pore Solution

Gao, X.
(2022) *International Journal of Electrochemical Science*

The inhibition performance of a novel benzenesulfonamide-based benzoxazine compound in the corrosion of X60 carbon steel in an acidizing environment

Alamry, K.A. , Hussein, M.A. , Musa, A.
(2021) *RSC Advances*

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(2020) *Materials Today: Proceedings*

Wear study and elaborate the parametric effect on cupronickel metal matrix

Vairamuthu, J. , Stalin, B. , Khan, M.A.
(2021) *Materials Today: Proceedings*

Heat capacity improvement in the electric furnace through amendment of the electric circuit on melting of hardox steel

Geethamani, R. , Jaganathan, S. , Prem Anand, S.
(2020) *Materials Today: Proceedings*

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Document type

Conference Paper

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Journal

ISSN

22147853

DOI

10.1016/j.matpr.2020.08.059

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Experiment investigation and analysis of fish scale reinforced polymer composite materials

Raja Sekaran P.^a; Ganesh Kumar S.^a ; Anix Joel Singh J.^b; **Vairamuthu J.**^c

[Save all to author list](#)

^a Department of Mechanical Engineering, Er.Perumal Manimekalai College of Engineering, Koneripalli, Hosur, 635 117, India

^b Department of Mechanical Engineering, Ponjesly College of Engineering, Parvathipuram, Nagercoil, 629 003, India

^c Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Kariapatti, 626 115, India

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Abstract[Author keywords](#)[Indexed keywords](#)[Sustainable Development Goals 2022](#)[SciVal Topics](#)[Metrics](#)**Abstract**

Due to the establishment of disposal methods for fish scale powder reinforced plastics. Among various natural fiber, fish scale powder fiber is of particular interest in that its composites have eco-friendly natural it's a low cost, and ease of availability and food waste material. The paper mainly concentrated on the reinforcement of polymer plastics with different proportions of fish scale fiber powder composites. These composites are subjected to the shear stress to find the fracture. The manipulate of fish scale normal fiber operating (5-25v/v %) on the material properties of the Epoxy LY-556 was performed. The working materials were manufactured by compression molding. The better substance

Cited by 4 documents

Inspired with fish scale to manufacture biomimetic MXene derivative for the reinforcement on tribological and mechanical properties of PPS fabric/phenolic composites

He, Y. , Zhang, Z. , Wang, Y. (2023) *Tribology International*

Inspired by placoid scale to fabricate MXene derivative biomimetic structure on the improvement of interfacial compatibility, mechanical property, and fire safety of epoxy nanocomposites

Yin, Z. , Wang, B. , Tang, Q. (2022) *Chemical Engineering Journal*

Marine-based reinforcing materials for biocomposites

Bin Bakri, M.K. , Rahman, M.R. , Matin, M.M. (2022) *Recycled Plastic Biocomposites*

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Recent developments in Polymer Matrix Composites - A review

Ravichandran, M. , Balasubramanian, M. , Anand Chairman, C. (2020) *IOP Conference Series: Materials Science and Engineering*

Mechanical performance of TiC filled chopped basalt fibre reinforced epoxy composites

Anand Chairman, C. , Marichamy, S. , Dhinakaran, V. (2020) *IOP Conference Series: Materials Science and Engineering*

Investigations on Mechanical Properties of Basalt Powder filled Vinyl Ester Composites

Anand Chairman, C. , Pritima, D. , Dhinakaran, V. (2020) *IOP Conference Series: Materials Science and Engineering*

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Document type

Conference Paper

Source type

Journal

ISSN

22147853

DOI

10.1016/j.matpr.2020.07.672

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Response analysis on synthesized aluminium-scandium metal matrix composite using unconventional machining processes

[Pritima D.^a](#) ; [Vairamuthu J.^b](#); [Gopi Krishnan P.^c](#); [Marichamy S.^d](#); [Stalin B.^e](#); [Sheeba Rani S.^f](#)

[Save all to author list](#)^a Department of Mechatronics Engineering, Sri Krishna College of Engineering and Technology, Coimbatore, India^b Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Kariapatti, 626 115, India^c Department of Mechanical Engineering, Dr. N.G.P Institute of Technology, Coimbatore, 641 048, India^d Department of Mechanical Engineering, Sri Indu College of Engineering and Technology, Hyderabad, India[View additional affiliations](#)

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The research work and applications of aluminium based Metal Matrix Composite (MMC) has been increased. It has more attractive material properties like strength, ductility, corrosion and wear resistance. The current work reports the Titanium Carbide (TiC) and Vanadium Carbide (VC) reinforced aluminium scandium MMC is formulated through metallurgy technique. The synthesized MMC is

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Effects of Nanoparticles on the MRR and TWR of graphene-based Composite by Electro discharge Machining

Sharma, S. , Mausam, K. , Sharma, K. (2022) *Evergreen*

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Analyze the effect of abrasives in water jet Machining on strenx steel

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Heat capacity improvement in the electric furnace through amendment of the electric circuit on melting of hardox steel

Geethamani, R. , Jaganathan, S. , Prem Anand, S. (2020) *Materials Today: Proceedings*

The effect of process parameters for synthesized copper metal matrix using stir casting process

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Document type

Conference Paper

Source type

Journal

ISSN

22147853

DOI

10.1016/j.matpr.2019.07.404

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Surface morphology and parametric optimization of AWJM parameters using GRA on aluminum HMMC

[Senthilkumar T.S.^a](#) ; [Muralikannan R.^b](#); [Senthil Kumar S.^c](#)

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^a Department of Mechanical Engineering, Sree Sowdambika College of Engineering, Aruppukottai, Tamil Nadu, 626 134, India

^b Department of Mechanical Engineering, Sethu Institute of Technology, Kariapatti, Tamil Nadu, 626 115, India

^c Department of Mechanical Engineering, Sri Vidya College of Engineering and Technology, Virudhunagar, Tamil Nadu, 626 005, India

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Abstract[Author keywords](#)[Reaxys Chemistry database information](#)[Indexed keywords](#)[SciVal Topics](#)[Metrics](#)**Abstract**

Cutting force arises as a major problem in machining of Hybrid Metal Matrix Composites (HMMCs) using conventional machining owed to the presence of reinforcement materials. Hence a non-conventional machining process namely Abrasive Water Jet Machining (AWJM) is preferred. The objective of this project is to investigate the cutting performance of AWJM on Aluminum HMMCs. The cutting parameters such as pressure, standoff distance (SOD) and feed rate are analyzed based on the L₂₇ orthogonal array and the machining parameters such as kerf angle, SR and MRR were intended. The

Cited by 5 documents

Optimization by Grey Relational Analysis of AWJM Parameters on Machining Titanium Alloy

Chaturvedi, C. , Sudhakar Rao, P. , Yunus Khan, M. (2022) *Advances in Manufacturing Technology: Computational Materials Processing and Characterization*

Experimental investigation on abrasive water jet cutting of high strength aluminium 7068 alloy

Gunamgari, B.R. , Kharub, M. (2022) *Materials Today: Proceedings*

Recent progress trend on abrasive waterjet cutting of metallic materials: A review

Llanto, J.M. , Tolouei-Rad, M. , Vafadar, A. (2021) *Applied Sciences (Switzerland)*

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Investigation and optimization of machining through hole by abrasive water jet machining in AA6063/Bagasseash/TiN hybrid composites

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Empirical modeling and optimization of kerf width in abrasive water jet machining - A short review

Venkata Subbaiah, K. , Baburaja, K. (2018) *International Journal of Engineering and Technology(UAE)*

Surface roughness report and 3D surface analysis of hybrid Metal Matrix Composites (MMC) during Abrasive Water Jet (AWJ) cutting

Srivastava, A.K. , Dwivedi, S.P. , Maurya, N.K. (2020) *Revue des Composites et des Matériaux Avances*

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Materials Today: Proceedings • Volume 21, Pages 237 - 243 • 2020 • 2019 International Conference on Recent Trends in Nanomaterials for Energy, Environmental and Engineering Applications, ICONEEEA 2019 • Tiruchirappalli • 14 March 2019 through 15 March 2019 • Code 157771

Document type

Conference Paper

Source type

Journal

ISSN

22147853

DOI

10.1016/j.matpr.2019.04.226

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Optimization of brazing process parameters in butt joint of brass 319 using Taguchi method

Stalin B.^a ; Ravichandran M.^b; Vadivel K.^a; **Vairamuthu J.**^c

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^a Department of Mechanical Engineering, Anna University, Regional Campus Madurai, Madurai, 625 019, India^b Department of Mechanical Engineering, K. Ramakrishnan College of Engineering, Trichy, 621 112, India^c Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Kariapatti, 626115, India

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Abstract[Author keywords](#)[Reaxys Chemistry database information](#)[Indexed keywords](#)[SciVal Topics](#)[Metrics](#)[Funding details](#)**Abstract**

Brazing is the metal joining processes of melting a filler metal into the joint, the filler metal having a lower melting point than the adjoining metal. The oxyacetylene brazing processes are executed with 18 brass plates, where each pair of same plates is joined together as butt joint. The copper flux powder is used, in order to control the oxidation during brazing processes. Brazed brass 319 joints are tested for the tensile and impact strength observation. The objective of this work is to optimize the process parameters involved in brazing processes using Taguchi optimization with L9 orthogonal array, signal

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Machinability of Titanium alloy 6242 by AWJM through Taguchi method

Perumal, A. , Kailasanathan, C. , Wilson, V.H.
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Evaluate the structural and thermal analysis of solid and cross drilled rotor by using finite element analysis

Jule, L.T. , Krishnaraj, R. , Nagaprasad, N.
(2021) *Materials Today: Proceedings*

Experimental study of mechanical properties of AA6061 and AA7075 alloy joints using friction stir welding

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Optimization of process parameter of brass butt joint using brazing process

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(2020) *AIP Conference Proceedings*

Evaluation of mechanical and metallurgical properties of submerged arc welded plate joint

Rajkumar, T. , Prabakaran, M.P. , Arunkumar, G.
(2020) *Materials Today: Proceedings*

Enhancing corrosion resistance of a-tig welded uns s32750 joint by optimizing its technological parameters | Pobljšanje korozione otpornosti a-tig zavarenih uns s32750 spojeva optimizacijom njihovih tehnoloških parametara

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Document type

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Journal

ISSN

22147853

DOI

10.1016/j.matpr.2019.04.212

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Experimental investigation and characterization of brass-AlN composites synthesized using powder metallurgy technique

Stalin B.^a ; Ravichandran M.^b; Jasper S.^a; **Vairamuthu J.**^c

Save all to author list

^a Department of Mechanical Engineering, Anna University, Regional Campus Madurai, Madurai, 625 019, India

^b Department of Mechanical Engineering, K. Ramakrishnan College of Engineering, Trichy, 621 112, India

^c Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Kariapatti, 626115, India

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This paper is focused on the synthesis of brass-AlN composite based on powder metallurgy technique. By varying the weight percentages (0, 4, 8, 12) of aluminium nitride (AlN) as reinforcement. The high energy ball milling are used the brass-AlN composite. The green cylindrical compacts were produced by hydraulic press. In addition the green compacts are sintered on 1 h at 800 °C in electric muffle furnace under controlled argon atmosphere. The results show that the increase in weight percentage the AlN content of the brass matrix composite increases the density, hardness, strength coefficient of composite and decreases the porosity. © 2019 Elsevier Ltd. All rights reserved.

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Effect of volume fraction on microstructure and wear behavior of dual-phase brass/W surface composites fabricated via friction stir processing

Karpagarajan, S. , Balamurugan, C. , Vigneshwaran, S. (2023) *Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications*

Optimization of parameters for hardness of brass – AlN composite

Jasper, S. , Vijayakumar, D. , Sankarlal, R.L. (2023) *Materials Today: Proceedings*

The effect of particle content and sintering time on the properties of Al-Al9Co<... composites, made by powder metallurgy

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Optimization of parameters for hardness of brass – AlN composite

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Self-propagating high-temperature synthesis method for synthesis of AlN powder

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Document type

Conference Paper

Source type

Journal

ISSN

22147853

DOI

10.1016/j.matpr.2020.08.491

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Strength and ductility behaviour of FRC beams strengthened with externally bonded GFRP laminates

Jagadheeswari^a; Sivarethinamohan^b; Muthumari^c; Ramalakshmi^c; Ilayaraja^c; **Rahman, Zunaithur**^d

[Save all to author list](#)^a Department of Civil Engineering, K.Ramakrishnan College of Technology, Trichy, Tamil Nadu, 621 112, India^b Department of Professional Studies, CHRIST (Deemed to be University), Bangalore, Karnataka, 560 029, India^c Department of Civil Engineering, Mohamed Sathak Engineering College, Kilakarai, Tamil Nadu, 623 806, India^d Department of Civil Engineering, Sethu Institute of Technology, Kariapatti, Tamil Nadu, 626 115, India

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[Abstract](#)[Author keywords](#)[Indexed keywords](#)[SciVal Topics](#)[Metrics](#)**Abstract**

The repair and rehabilitation of structural members are perhaps one of the most crucial problems in civil engineering applications. One of the advanced techniques of strengthening the reinforced concrete members is done by fiber-reinforced polymer composites. FRP is very effective to repair and strengthen the structural members that have become structurally weak over their life span. FRP repair system provides an economically viable alternative to traditional repair systems and materials. This experimental study focuses on the flexural strengthening of fiber reinforced concrete beams externally bonded with FRP laminates of different thicknesses. Six beams were cast for the study and tested

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Mechanical Response of Timber Beams Strengthened with Variable Amounts of CFRP and Bamboo Scrimber Layers

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(2020) *Engineering Structures*

Strengthening of One-Way Slabs Using Composite Laminates of HPFRCC Including Synthetic Fibers PPS

Kheyroddin, A. , Madah, Z. , Hasanabade, M.A.
(2022) *Mechanics of Advanced Composite Structures*

Effectiveness of various methods of jacketing for RC beams

Raval, S.S. , Dave, U.V.
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Document type

Conference Paper

Source type

Journal

ISSN

22147853

DOI

10.1016/j.matpr.2020.05.055

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Effect on the behaviour of dynamic mechanical analysis for hybrid epoxy nanocomposite

Yamunadevi V.^a ; Vijayanand G.^b ; Ganeshan P.^c ; Sowmiya S.^a ; Raja K.^d

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^a Department of Mechanical Engineering, AMET University, Kanathur, Chennai, Tamil Nadu, India

^b Department of Mechanical Engineering, VSB Engineering College, Karur, Tamil Nadu, India

^c Department of Mechanical Engineering, Sethu Institute of Technology, Virdhunagar, Tamil Nadu, India

^d Department of Mechanical Engineering, University College of Engineering Dindigul, Anna University Campus, Dindigul, Tamil Nadu, India

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Abstract[Author keywords](#)[Indexed keywords](#)[SciVal Topics](#)[Metrics](#)[Funding details](#)**Abstract**

The dynamic mechanical analysis of hybrid epoxy nanocomposite, resulting from the addition of the mixed metal oxide nanoparticle as reinforcement was analyzed. The amount of Cerium(IV)Zirconium (IV)Oxide has been varied. Results of dynamic mechanical analysis such as viscoelastic behavior were studied in accordance with the addition of nano nano particle at varying concentration. Finally the glass transition temperature was effectively improving with the nanoparticle inclusion. © 2020 Elsevier Ltd. All rights reserved.

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Dynamic mechanical behavior of a nano sized alumina fiber reinforced epoxy hybrid composites

Kishor Das, R. , Nayak, B. , Ganeshan, P. (2023) *Materials Today: Proceedings*

Investigations of Thermal, Mechanical, and Gas Barrier Properties of PA11-SiO2 Nanocomposites for Flexible Riser Application

Wen, J. , Huang, D. , Li, Y. (2022) *Polymers*

Mechanical properties of polymer matrix/glass fiber composites containing metal/hybrid nanoparticles-an overview

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Fabrication and evaluation of tribological behaviour and hardness of Aluminium-LM4 reinforced with nano alumina and micro Mo

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Document type

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ISSN

22147853

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10.1016/j.matpr.2020.07.574

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Design and analysis of two-cylinder exhaust manifold with improved performance in CFD

Sadhasivam C.^a ; Murugan S.^b; **Vairamuthu J.**^c; Priyadharshini, S. Mohana^d

[Save all to author list](#)^a Department of Mechanical Engineering, Saveetha School of Engineering, SIMATS, Chennai, 602105, India^b Department of Mechanical Engineering, Seshasayee Institute of Technology, Trichy, Tamilnadu, 620010, India^c Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Tamilnadu, 626115, India^d Department of Mechanical Engineering, Sona College of Technology, Salem, Tamilnadu, 636005, India

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CFD analysis facilitates to evaluate and keep away from pace and temperature peaks in manifold sections which might be of special relevance concerning cloth pressure and deposit formation. CFD evaluation enables to are expecting the temperature, pace and strain distribution within the gadget. Exhaust manifolds are components of diesel engines sensitive to crack harm. Even progressed materials like forged alloys be afflicted by tremendously excessive operational temperatures that may cause great stresses and displacements. Fluid glide, temperature and strain analysis are analyzed and results are given beneath in form of temperature, stress and speed distribution plots. The fluid float and the warmth transfer through the exhaust manifold are computed by way of a CFD evaluation the usage of the CFD Fluent 6.3. Although the float distribution of the exhaust machine can possibly be

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Vibration analysis of composite exhaust manifold for diesel engine using CFD

Ramesh Kumar, R. , Razak, A. , Alshahrani, S. (2022) *Case Studies in Thermal Engineering*

Computational Investigation of Engine Exhaust Manifold with Different Alternative Fuels By Using CFD

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Journal

ISSN

22147853

DOI

10.1016/j.matpr.2020.07.500

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Elimination of nickel (II) ions using various natural/modified clay minerals: A review

Gafoor, Abdul^a; Dhanasekar^b; Kumar, Sathees^a; Sankaran^c; Sivaranjani^d; Begum, Sabeena^e;

Rahman, Zunaithur^f

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^a Department of Civil Engineering, Mohamed Sathak Engineering College, Kilakarai, Tamil Nadu, 623 806, India

^b Department of Civil Engineering, SRM Institute of Science and Technology, Chennai, Tamilnadu, 603 203, India

^c Department of Marine Engineering, Mohamed Sathak Engineering College, Kilakarai, Tamil Nadu, 623 806, India

^d Department of Civil Engineering, Vel Tech Rangarajan Dr.Saguntala R and D Institute of Science and Technology, Chennai, Tamilnadu, 600 062, India

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Abbassi, H. , Mezni, M. , Abidi, R. (2022) *Chemical Physics Letters*

Nickel isotopic composition of the upper continental crust

Wu, G. , Zhu, J.-M. , Wang, X. (2022) *Geochimica et Cosmochimica Acta*

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Vijayaraghavan, J. , Zunaithur Rahman, D. , Thivya, J. (2022) *Iranian Journal of Chemistry and Chemical Engineering*

The removal of heavy metal ions from wastewater/aqueous solution using polypyrrole-based adsorbents: A review

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22147853

DOI

10.1016/j.matpr.2020.08.540

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Impact of air pollution in health and socio-economic aspects: Review on future approach

Sivarethinamohan R.^a ; Sujatha S.^b; Priya, Shanmuga^c; Sankaran^d; Gafoor, Abdul^e; Rahman, Zunaithur^f

[Save all to author list](#)^a Department of Professional Studies, CHRIST (Deemed to be University), Bangalore, Karnataka, 560 029, India^b Department of Civil Engineering, K.Ramakrishnan College of Technology, Trichy, Tamil Nadu, 621 112, India^c Department of Chemical Engineering, Mohamed Sathak Engineering College, Kilakarai, Tamil Nadu, 623 806, India^d Department of Marine Engineering, Mohamed Sathak Engineering College, Kilakarai, Tamil Nadu, 623 806, India[View additional affiliations](#)

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Air contamination is mainly induced by human activity and environmental pollution. Consumption of Air pollution in fewer amounts leads to a significant range of harmful effects on public safety. Nevertheless, with the accelerated pace of economic growth and modernization and the high quantity of electricity need results in huge amounts of pollutants and waste creates significant air pollution. The

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