

## PAGES

## PAPERS

645- 652

**Characterization studies on various green synthesized nanoparticles for photovoltaic solar panel applications***Priya Palanichamy, Rajesh Krishnasamy, Senthil Muthu Kumar Thiagamani, Pavitra Rajendran, R.A. Ilyas, Choon Kit Chan*<https://doi.org/10.59038/jjmie/180401>

653- 659

**Natural and Mechanical Ventilations for Reducing the Severity of Hot Gases and Smoke in Fires of Large Stores***Yarub Y. Al-Jahmany, Jawdat A. Al-Jarrah, Diana S. Rbehat, Hassan A. Al Masadeh, Omar A. Al-Qudah*<https://doi.org/10.59038/jjmie/180402>

661- 669

**Microstructural properties and Adhesive Strength of 316L Stainless Steel Coated with Hydroxyapatite Derived from Mussel Shell Wastes via Flame Spray Deposition***Muh Amin, Rifky Ismail, J. Jamari, Athanasius P. Bayuseno*<https://doi.org/10.59038/jjmie/180403>

671- 689

**Structural Quality Model for New Product Development to Enhance Resilience in Closed-Loop Formulated Food Supply Chains***Mohannad Jreissat, Luai Jraisat, Ammar Al-Bazi, Charalampos Makatsoris, Ghazi Samawi*<https://doi.org/10.59038/jjmie/180404>

691- 704

**Selection of Phase Change Materials for Energy Storage Applications Using BHARAT Decision-Making Methodology***Ravipudi Venkata Rao, Trojovský Pavel, Jaya Lakshmi Ravipudi*<https://doi.org/10.59038/jjmie/180405>

705- 709

**Preparation and Evaluation of Nanomembranes for Proton Exchange Membrane Fuel Cells Modeling Using Artificial Neural Networks***Haleemah J. Mohammed, Dhuha R. Nayyaf, Karrar A. Hammoodi, Karrar K. Abdul Hussein, Ahmed Mohsin Alsayah, Saif Ali Kadhim*<https://doi.org/10.59038/jjmie/180406>

711- 719

**Machining parameter optimization and study the turning operation behaviour of hybrid Al/Mg composites***R. Venkatesh*<https://doi.org/10.59038/jjmie/180407>

721- 736

**Control Techniques for Greenhouse Phenomena in Car Cabins to Enhance Fuel Consumption, Emission Reduction, and Air Quality: A Review***Hazem A. Alshakhanbeh, Mohd Z. Abdullah, Jitladda Sakdapipanich, Hani A. Al rawashdeh*<https://doi.org/10.59038/jjmie/180408>

737- 752

**Improvement of Wear Rate Properties of a Brown Pumice and Coal Ash Particulates Reinforced Aluminum Composite for Automobile Brake Manufacturing, Through Optimization and Modelling***Tanimu Kogi IBRAHIM, Julius THADDAEUS, Caleb Abiodun POPOOLA, Ibrahim ILIYASU, Abdulmumin Akoredeley ALABI*<https://doi.org/10.59038/jjmie/180409>

753- 784

**A Review on The Progress in Water Production from Air by Using Solar Driven Technology***Ammar M. al-Tajer, Wissam H. Alawee, Hayder A. Dhahad, Zakaria M. Omara*<https://doi.org/10.59038/jjmie/180410>

## PAGES

## PAPERS

785- 794

**ZnO/LDPE Nano-composites: Effects of Particle Size and Electrical Resistivity on Mechanical, Electrical, and Thermal Properties: A Review***Fatma Zohra Benabid, Hadda Benaceur, Faris M. AL-Oqla, Oum Keltoum Mallem, Foued Zouai*<https://doi.org/10.59038/jjmie/180411>

795- 810

**A Multi Fuzzy-based Variable Step Size P&O MPPT Algorithm for PV Systems***Assem Alkarasneh, Khaled Bataineh, Yusra Aburmaileh*<https://doi.org/10.59038/jjmie/180412>

811- 822

**Design and Force Performance Analysis of a Climbing Robot Based on Halbach Magnetic Array***Hua Zhong, Deshu Wang, Junjie Gong, Caixia Ban, Wei Wei, Yu Long*<https://doi.org/10.59038/jjmie/180413>

823- 834

**Key Enablers for Transitioning to Circular Supply Chains in Electronics: An ISM MICMAC Analysis***Vinod G. Surange, Janak Suthar, Shivagond N. Teli, Agung Sutrisno*<https://doi.org/10.59038/jjmie/180414>

835- 845

**Numerical Simulations of Flow and Flame Characteristics of Double Cavity Trapped Vortex Combustor***Kousik Kumaar. R, Jini Raj. R, Srikanth H V, M. Kesavan*<https://doi.org/10.59038/jjmie/180415>

847- 859

**Integrating between Taguchi methodology and boosted decision trees machine learning: a case study in enhancing quality electrical conductor manufacturing***Hamdia Mansour, Hanaa Abohashima, Heba I Elkhoully*<https://doi.org/10.59038/jjmie/180416>

861- 875

**Designing Optimal Parameters Using Taguchi Method for the Tribological Analysis of Al-Si alloy (LM29) Reinforced with Multi-Walled Carbon Nanotubes via the Liquid Metallurgy Route***Vikram Kedambadi Vasu, Umashankar K S, Vijay Kumar, Hanamantray Gouda M B, Jyothis A M, Chethan D, Vijee Kumar*<https://doi.org/10.59038/jjmie/180417>

877- 889

**Optimal Agricultural Product Central Market Location in Jordan***Izdiad Atallah, Mahmoud Barghash, Mazen Arafeh, Nader Santarisi*<https://doi.org/10.59038/jjmie/180418>

891- 899

**Investigation on Effect of Temperature on Mechanical Properties and Microstructure of Dissimilar Ti-5Al-2.5Sn and AA2219 Alloy Joints through Diffusion Bonding Process***G. C. Tejaswini, B. Lathashankar, R. Suresh, Gowtham Venkatesan, N.G. Siddesh Kumar*<https://doi.org/10.59038/jjmie/180419>