



IC-STAR 2020

**The 6th International Conference on Science,
Technology, and Interdisciplinary
Research 2020**

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**The 2nd International Conference On Materials and
Manufacturing Engineering and
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Kuala Lumpur, 8 - 9 December 2020

Organized by:



The 6th International Conference on Science, Technology, and Interdisciplinary Research

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12:12 - 12:24	S Azizan, G Omar and A M Taib (#80) Influence of Textured Nickel/Palladium/Gold-Silver (Ni/Pd/Au-Ag) Layer on Pre-plated Leadframe for Automotive Applications	N P Jeu, M Mohamad and C K Tsong (#85) Sightseeing the Virtual Walls: Primary School Learners Usage of Information Communication Technology during Virtual Learning Experience for History Education in Malaysia	H Suskito and P Budiman (#44) Battery Performance Monitoring Application on Android-Based Four-Wheeled Vehicles With the Effect of Driving Behavior on Battery Performance	A T Hazmi and F Ahmad (#122) Review on microbial chitosan for the fabrication of piezoelectric thin film	N N M Pauzi, N I Abidin and M Jamil (#21) Potential use of spherical glass sourced from cathode ray tube funnel glass for the application as coarse aggregate in concrete	H Y Ilyanie, N Huda-Faujan and M Y I Muryany (#78) Biopreservation potential of lactic acid bacteria isolated from bosou, a Malaysian fermented fish
12:24 - 12:36	K J Wong and M Johar (#15) Characterisation of mixed-mode I/II/III delamination via ten-point bending plate test	N Syakrani, A R and A A Althania (#92) Steganography of Indonesian License Plates using Least Significant Bit Substitution Method and Pseudorandom Number Generator	Y A Pranata, A Kristianto and A Darmawan (#68) Elastic Cross-Section Modulus of Jabon (Anthocephalus cadamba Miq.) Bolt-Laminated Timber Beams	J Woowong, P Phinyocheep and J Sakdapipanich (#53) Grafting the carboxyl groups onto DPNR by seeded emulsion polymerization to enhance the compatibility with silica filler	O L Sari (#38) Stakeholder awareness on the sustainable circular economy of the construction industry in Balikpapan	N N A Rahman, W M Z W Yunus, N A Halim, S A M Noor, K K Ong, N A M Kasim, R A Mohamed, N S A Latif and H Ariff (#37) Preparation and characterization of palm oil based lotion for organophosphorus compound contaminated skin decontamination
12:36 - 12:48	K M Said, W M Z W Yunus, H Ariffin, K K Ong, N S A Latif, N N S M Shakin and N Andenan (#28) Silver nanoparticle incorporated polyurethane coating for fungi growth inhibition	M F Novriansyah, R Harwahyu and R F Sari (#56) Implementation of Blockchain Technology in Custom E-Voting System	N M Murad, N A Rawi, S Shafie and R Mahat (#47) Unsteady Falkner-Skan flow of hybrid nanofluid over moving wedge	M S Sarjadi, A Awalludin and N Mingu (#72) Extraction and physicochemical properties of Refined Kappa-Carrageenan from Kappaphycus alvarezii Originated from Sempoma, Sabah	A Chalid, I A Humam and B Prasetya (#120) Simulation of Flood Potential Inundation for Adaptation in the Topogeneous Peatland for Agricultural Sustainability	Mohd Sani Sarjadi (#79) Extraction and Characterisation of Musa balbiasana cv. saba Peel Oil
12:48 - 13:00	R Nolos, M Jimena and J Bugarin (#5) Powdered Corn cob as Adsorbent Material for Copper in Water	T W O Putri and M I Mowaviq (#59) Prototype of Automatic Conveyor System with Speed Control Based on Programmable Logic Controller (PLC)	M F M Noor, A Othman, and M S Zainun (#139) Raw Materials Shelve: A Case Study Of Finite Element Analysis for Raw Materials Shelves In Welding Workshop	M Córdova-Suárez, E M Barreno-Avila, D S Pozo-Álvarez and J C C Suárez (#40) Inorganic Flame Retardants' Efficacy, (Aluminum Hydroxide, Magnesium Hydroxide) in the Combustion Rate of Intermediate Calamagrostis from Ecuador' Moorlands	N Azrina Ahmad, N Azliza Ahmad, and M F M Noor (#136) Analysis of detention pond for storm water quantity control	T Shafazila, N L Zakira and F Wahida (#89) Heterogenous heteropoly acid catalyst for valorization of biomass waste
13:00 - 14:00	Lunch and Praying Break					



ABSTRACT ID#122

Review on microbial chitosan for the fabrication of piezoelectric thin film

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Abstract. Chitin has proven to have a good mechanical and electrical properties to be used in making piezoelectric thin films. However, due to the restriction in solubilizing chitosan in many solvents, there is increasing interest in exploring the used of chitosan in producing thin films. Chitosan, compared to chitin, can be easily solubilized in certain dilute acids. Chitosan that has been extracted from fungal biomass can be used for the fabrication of biomaterial thin films. There are different ways that can be used to fabricate a thin film such as electrospinning, spincoating, solvent casting and also the hot press technique.

Keywords: Chitosan; chitin; electrospinning; fungi; piezoelectric; thin films.

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