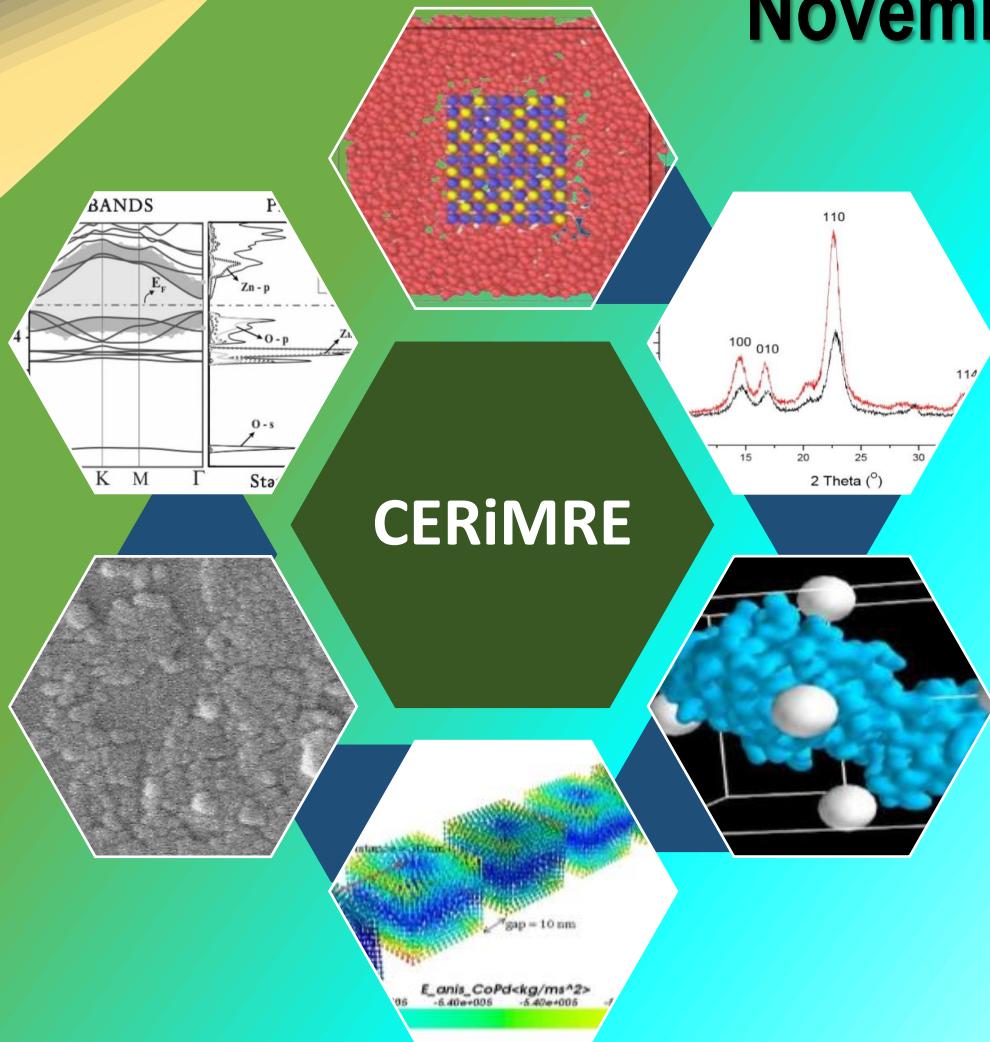




# COMPUTATIONAL AND EXPERIMENTAL RESEARCH IN MATERIALS AND RENEWABLE ENERGY

<https://jurnal.unej.ac.id/index.php/CERiMRE>

**Volume 7 Issue 2  
November 2024**



**CERiMRE**

KMTE Research Group  
Physics Department, Faculty of Mathematics and Natural Sciences  
University of Jember, Indonesia

## TABLE OF CONTENTS

**Volume 7, Issue 2**  
November – 2024

**eISSN 2747-173X**

|  | Page    |
|--|---------|
| <b>Cover</b>   | i       |
| <b>Table of Contents</b>   | ii      |
| <b>Editorial Board</b>   | iii     |
| <b>Statistical Analysis of Electrical Component Aging in Group 6 of the Inga 2 Hydroelectric Plant Following Abrupt Shutdowns</b>                                  | 78-92   |
| André Mampuya Nzita, Léon Mwanda Mizengi, Guy Wanlogo Ndiwulu,<br>Guyh Dituba Ngoma, Clément N'zau Umba-di-Mbudi, Robert Muanda<br>Ngimbi, Edmond Phuku Phuati     |         |
| <b>Design and Implementation of Solar Cells as an Alternative Power Source for Pinisi Ships</b>  | 93-104  |
| Suardi Suardi, Mohammad Khafid Maulana, Rodlian Jamal Ikhwani,<br>Muhammad Usrah Pawara, Faisal Mahmuddin, Muhdar Tasrief  |         |
| <b>Applications of Green Inhibitors of Sugarcane Bagasse and Garcinia Kola Fruit Pod for Mild Steel Natural Gas Pipeline Corrosion Inhibition in Acidic Medium</b> | 105-118 |
| Teddy E. Jemine, Sylvia Igbafe, Adekunle Timisiriyu Adeniyi, Anselm<br>Iuebego IGBAFE  |         |
| <b>Design and COMSOL Simulation of Different Shaped Piezoelectric Vibration Energy Harvesters: A Study on MEMS Vibrational Energy Harvesters</b>                   | 119-140 |
| Aimal Khan, Muhammad Qasim Nawaz, Xu Lu  |         |
| <b>Design of Waste Management in Nuclear Medicine Isolation Room of Dr. Sardjito Central General Hospital</b>  | 141-153 |
| Ahmad Mudzakir Efendi, Mondjo Mondjo, Eli Purwanti   |         |
| <b>Evaluation of Bunsen Reaction Kinetics in Iodine-sulfur Thermochemical Process for Hydrogen Production</b>  | 154-167 |
| Nafees Ahmed Vakil, Shriniwas A Rao  |         |
| <b>Fuel Properties of Briquettes Made from Acacia Mangium Pods and Plantain (<i>Musa Paradisiaca</i>) Peduncles with Cassava Starch Binder</b>                     | 168-189 |
| Patrick Katamani, Kwaku Antwi, Stephen Jobson Mitchual   |         |