



Centurion
UNIVERSITY

*Shaping Lives...
Empowering Communities...*

SDG 16 | Research on Peace, Justice and Strong Institutions

SDG 16

REPORT 2021



THE CONTEXT

Centurion University conducts research in the area of “Peace, Justice and Strong Institutions” through its various schools and research centres. Faculty and students are engaged in and publish many research articles striving towards the standalone topic and others which are cross disciplinary. the University's production units, industry sponsored action learning laboratories and community engagement provide an excellent basis for research in this area.

In the year 2020, there were 5 research papers published in journals of national and international repute which increased to 12 in the year 2021. The following section serves as a link to last three-year research endeavour in SDG 16.

Jaggannath Padhi

Director,
Centurion University



Research Articles

1. Erratum for “Attribution of Hydrologic Changes in a Tropical River Basin to Rainfall Variability and Land-Use Change: Case Study from India
2. A Series of Mixed Ligand Metal Complexes: Synthesis, Characterization and Molecular Docking Investigations Against Coronavirus Spike Protein
3. Evaluation of medicinal potential and antibacterial activity of selected plants against *Streptococcus mutans*
4. Relation of change in geometrical parameters in the thermal performance of solar chimney
5. Characterization of Pure Rutile Titania Nanoparticle Prepared by Feasible Method for Coatings and Visible Light-Driven Dye Removal Application
6. Magnetic property applications of microwave method prepared zinc ion modified CoAl_2O_4 nanoparticles
7. Study of physical and magnetic properties of Mg: Co_3O_4 spinels using L-Arginine as fuel
8. Reinforce Modified Equilibrium Optimization Technique based MS-PID Frequency Regulator for a Hybrid Power System with Renewable Energy Sources, *Soft Computing*, Springer,
9. Harmonic Profile Enhancement of Grid Connected Fuel Cell through Cascaded H-Bridge Multi-Level Inverter and Improved Squirrel Search Optimization Technique. *Energies*
10. WRAPPER-Based Metaheuristic Optimization Algorithms for Android Malware Detection: A Correlative Analysis of Firefly, BAT & WHALE Optimization
11. In silico studies on phytochemicals to combat the emerging COVID-19 infection
12. Repurposing benzimidazole and benzothiazole derivatives as potential inhibitors of SARS-CoV-2: DFT, QSAR, molecular docking, molecular dynamics simulation, and in-silico pharmacokinetic and toxicity studies
13. The Consecutive Hits of COVID-19 in India - The Mystery of Plummeting Cases and Current Scenario
14. Omicron (B.1.1.529 variant of SARS-CoV-2); an emerging threat: current global scenario
15. Transition Metal-Catalyzed Carboamination of Alkenes and Allenes: Recent Progress
16. Metal-Free Intramolecular Hydroalkoxylation of Alkyne: Recent Advances
17. Rice husk and Rice straw-based materials for toxic metals and dyes removal: a comprehensive and critical review

