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Investigating the Role of Dark Matter Haloes in Galactic Formation and Evolution

Marie-Louise Lefevre, Abdul Rahman Khalil, Chen Wei, Gabriela Torres

Keywords: dark matter, galactic evolution, star formation, baryonic matter, haloes, simulations

2.

Advanced Computational Techniques for Solving Nonlinear Partial Differential Equations in Applied Mathematics

Suman Acharya, Amir Khalaf, María Estela Rivera

Keywords: nonlinear PDEs, computational techniques, machine learning, numerical methods, hybrid framework, applied mathematics

3.

Advancements in Electrochemical Sensors: A Multi-Institutional Approach to Trace Metal Detection

Karim El-Badry, Priya Wijesinghe, Carlos Mendoza

Keywords: electrochemical sensors, trace metals, nanomaterials, analytical chemistry, environmental monitoring, sensor development

4.

Integrated Strategies for Conservation of Endangered Species in Fragmented Habitats across Africa and Oceania

Emeka Okoro, Hanae Yamamoto, Carlos Fernández

Keywords: biodiversity, habitat fragmentation, conservation strategies, community engagement, ecosystem services, geospatial technologies

5.

Investigating Entropy Changes in Multi-Phase Systems Using Advanced Thermodynamic Models

Linda Černá, Hiroshi Tanaka, Fatima Al-Mansouri

Keywords: entropy, thermodynamics, multi-phase systems, PC-SAFT, EOS-F, computational simulation, energy efficiency

6.

Evaluating Global Patterns of Antimicrobial Resistance Using Multinational Surveillance Data

Isabella Müller, Hiroshi Tanaka, Amina Al-Farsi, Carlos Mendes

Keywords: antimicrobial resistance, Enterobacteriaceae, Staphylococcus aureus, surveillance, global health, bacterial isolates

7.

Exploring Cross-Cultural Variations in Cognitive Behavioral Therapy Outcomes Across Diverse Populations

Ines Fernández, Rohan Shrestha, Amina Wanjiru

Keywords: Cognitive Behavioral Therapy, cross-cultural psychology, treatment efficacy, cultural variations, psychological interventions, anxiety, depression, coping mechanisms

8.

Enhancing Educational Outcomes through E-Learning: A Comparative Study Across Three Universities

Ajit Maharjan, Leila Aghdam, Amara Moyo

Keywords: e-learning, educational outcomes, student engagement, digital infrastructure, mixed-methods, academic performance