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Exploring Homotopy Preserving Functions in Topological Spaces Using New Techniques

Siti Nurhaliza, Juan Carlos Mendes, Fatima Al-Mansouri

Keywords: homotopy, topological spaces, continuous transformations, algebraic topology, invariance properties, robotics, computer graphics

2.

Advancements in Understanding the Variability of Photosynthetic Efficiency Across Plant Species

Nevenka Jurić, Mei-Lin Zhang, Abdallah Al-Hakim

Keywords: photosynthesis, chlorophyll fluorescence, carbon cycle, genetic diversity, gas exchange, leaf anatomy

3.

Adaptive Strategies for Climate Change Resilience in Diverse Ecological Regions

Maya Thapa, Ahmed Al-Hussein, Dela Boateng

Keywords: climate change, ecological adaptation, biodiversity, phenological shifts, indigenous knowledge, ecosystem resilience

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Investigating Quantum Entanglement and Decoherence in Multipartite Systems

Dr. Jin-Ho Park, Dr. Fatima El-Badawi, Dr. Carlos M. Fuentes

Keywords: quantum entanglement, decoherence, multipartite systems, quantum state, quantum error correction, entanglement sudden death

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Enhancing Network Security via Adaptive Machine Learning Models for Threat Detection

Marta Novak, Li Wei, Ahmed El-Masry

Keywords: cybersecurity, machine learning, threat detection, adaptive models, network security, false-positive reduction

6.

Comprehensive Insights into Epigenetic Mechanisms: Implications for Disease and Therapeutic Strategies

Ana Marija Petrović, Ling Wang, María Fernanda García

Keywords: epigenetics, DNA methylation, histone modification, therapeutic targets, gene expression, disease pathogenesis

7.

Evaluating Novel Treatment Protocols in Multicultural Settings: Interdisciplinary Approaches and Outcomes

Jonas Petraitis, Napat Jindapornchai, Fatima Ba, Roberto Reyes

Keywords: treatment protocols, cultural sensitivity, patient compliance, healthcare delivery, clinical effectiveness, multicultural settings

8.

The Impact of Financial Inclusion on Economic Growth in Sub-Saharan Africa: A Case Study Approach

Elena Petrova, Aisha Chen, Olufemi Mburu

Keywords: financial inclusion, economic growth, Sub-Saharan Africa, mobile banking, microfinance, inclusive development, regulatory frameworks, financial literacy