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Assessing the Role of Parental Engagement in Cognitive Development of Early Adolescents

Li Wei, Amina Khalil, Felipe Santos

Department of Psychology, University of Tartu, Tartu, Estonia; Institute of Human Development, University of Nairobi, Nairobi, Kenya; School of Psychological Sciences, University of Tasmania, Hobart, Australia

Keywords: cognitive development, parental engagement, early adolescence, problem-solving skills, memory retention, educational outcomes

2.

Enhancing Robustness in Neural Networks: A Cross-Validation Approach for Dynamic Environments

Lukas Schmidt, Aditi Sharma, Amira Al-Hussein, Santiago Moreno

Lukas Schmidt: University of the South Pacific, Suva, Fiji; Aditi Sharma: Banaras Hindu University, Varanasi, India; Amira Al-Hussein: Oklahoma State University, Stillwater, USA; Santiago Moreno: University of the South Pacific, Suva, Fiji

Keywords: neural networks, robustness, cross-validation, dynamic environments, machine learning, adaptive algorithms

3.

Entanglement Dynamics in Quantum Systems: An Analytical Study of Decoherence Effects

Davaa Ganbold, Yuto Nakamura, Laila Al-Mansour

National University of Mongolia, Ulaanbaatar, Mongolia; Kanazawa University, Kanazawa, Japan; Banaras Hindu University, Varanasi, India

Keywords: quantum mechanics, entanglement, decoherence, quantum systems, superposition, quantum error correction

4.

Exploring the Properties of Generalized Fermat Numbers in Modern Number Theory

Diego Márquez, Aisha Al-Mansoori, Haruto Yoshida

Diego Márquez - University of Antioquia, Medellín, Colombia; Aisha Al-Mansoori - University of Ibadan, Ibadan, Nigeria; Haruto Yoshida - National University of La Plata, La Plata, Argentina

Keywords: Generalized Fermat numbers, Number theory, Divisibility properties, Prime testing, Cryptography, Security protocols

5.

Advanced Computational Techniques for Enhancing Structural Integrity in Seismic Zones

Dr. Aisha Musa, Prof. Rajendra Shrestha, Dr. María González

Universiti Sains Malaysia, Penang, Malaysia; Tribhuvan University, Kathmandu, Nepal; University of Dar es Salaam, Dar es Salaam, Tanzania

Keywords: structural integrity, seismic zones, finite element analysis, dynamic response, adaptive damping, engineering design

6.

Patterns and Drivers of Plant Diversity in Tropical and Temperate Ecosystems: A Comparative Study

Anaïs Dupont, Nimal Karunaratne, Li Wei, Fatima Hassan

University of Colombo, Colombo, Sri Lanka; University of Guadalajara, Guadalajara, Mexico; University of Manitoba, Winnipeg, Canada

Keywords: plant diversity, tropical ecosystems, temperate ecosystems, species richness, ecological drivers, conservation strategies

7.

Optimizing a Novel Catalytic Pathway for Stereoselective Synthesis of Chiral Alcohols

Gry Jørgensen, Sujal Ahmed, Oscar Akintola

University of Tromsø, Tromsø, Norway; Yarmouk University, Irbid, Jordan; Oklahoma State University, Stillwater, USA

Keywords: stereoselectivity, chiral alcohols, transition metal catalyst, enantioselectivity, organic synthesis, NMR, chiral HPLC

8.

Enhancing Crop Yield through Integrated Nutrient Management in Diverse Agro-Ecological Zones

Jonas Kazlauskas, Mei Ling Zhang, Ibrahim Mboup

Vilnius University, Vilnius, Lithuania; Lanzhou University, Lanzhou, China; Cheikh Anta Diop University, Dakar, Senegal

Keywords: integrated nutrient management, crop yield, agro-ecological zones, soil health, sustainable agriculture, fertilizer reduction

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