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Exploring the Impact of Interactive E-Learning Platforms on Higher Education: A Cross-Cultural Analysis

Ana Martínez, Kenzo Tanaka, Nia Abubakar

Ana Martínez - University of Salamanca, Salamanca, Spain; Kenzo Tanaka - University of Rijeka, Rijeka, Croatia; Nia Abubakar - Universiti Sains Malaysia, Penang, Malaysia

Keywords: e-learning, higher education, cross-cultural analysis, interactive platforms, student engagement, educational outcomes

2.

Epigenetic Modulators in Determining Developmental Pathways and Disease Susceptibility

Dr. Anisha Thapa, Dr. Enkhbayar Davaajargal, Dr. Amina Hassan

Tribhuvan University, Kathmandu, Nepal; National University of Mongolia, Ulaanbaatar, Mongolia; University of Manitoba, Winnipeg, Canada

Keywords: epigenetics, methylation, histone modification, gene expression, developmental pathways, disease susceptibility

3.

Influence of Altitudinal Gradients on Plant Diversity and Ecosystem Dynamics in Tropical Regions

Farah Amanullah, Javier Martinez, Chen Wei

Department of Botany, University of Dhaka, Dhaka, Bangladesh; College of Ecology, Lanzhou University, Lanzhou, China; Department of Plant Biology and Biodiversity Management, Addis Ababa University,

Addis Ababa, Ethiopia

Keywords: altitudinal gradient, plant diversity, tropical ecology, species composition, ecosystem dynamics, conservation strategy

4.

Optimizing Software Development Workflow: Analyzing Agile and DevOps Integration for Improved Efficiency

Dimitrios Papadopoulos, Min-Jae Kim, Amina El-Sayed

University of Patras, Patras, Greece; University of Rostock, Rostock, Germany; University of Tasmania, Hobart, Australia

Keywords: Agile methodology, DevOps, software development, continuous delivery, workflow optimization, team productivity

5.

Advanced Techniques in Solving Polynomial Equations via Algebraic Structures

Anjali Perera, Min-Seok Kim, Leila Hakimi

Department of Mathematics, University of Colombo, Colombo, Sri Lanka; Department of Mathematics, Kyungpook National University, Daegu, South Korea; Department of Pure Mathematics, Ferdowsi University of Mashhad, Mashhad, Iran

Keywords: polynomial equations, algebraic structures, rings, fields, computational efficiency, root-finding algorithms

6.

Global Health Impacts: Analyzing Epidemiological Trends in Communicable Diseases

Jonas Mikulenas, Priya Natarajan, Ibrahim El-Amin, Maria Gonzalez

Vilnius University, Vilnius, Lithuania; University of Rostock, Rostock, Germany; University of Zambia, Lusaka, Zambia

Keywords: epidemiology, communicable diseases, global health, vaccination, antimicrobial resistance, socioeconomic factors

7.

Innovative Nanocomposite Materials for Enhanced Photocatalytic Applications in Environmental Remediation

Marek Kowalski, Li Wei, Samira Al-Khatib, Tawanda Chikowore

Nicolaus Copernicus University, Toruń, Poland; Al-Nahrain University, Baghdad, Iraq; University of Zimbabwe, Harare, Zimbabwe

Keywords: nanocomposite, photocatalysis, environmental remediation, sol-gel method, metal oxides, graphene derivatives

8.

The Impact of Land Use Change on Biodiversity in Mediterranean and Tropical Regions

Luis Herrera, Min-Jae Kim, Fatima Mwangi

University of Salamanca, Salamanca, Spain; Kyungpook National University, Daegu, South Korea; University of Nairobi, Nairobi, Kenya

Keywords: biodiversity, land use change, Mediterranean ecosystems, tropical ecosystems, remote sensing, species richness

9.

Investigating Dark Matter Interactions through Gravitational Lensing in Galaxy Clusters

Dragan Jovanović, Mei-Ling Zhang, Fatima al-Mansoori

Dragan Jovanović: University of Rijeka, Rijeka, Croatia; Mei-Ling Zhang: University of Patras, Patras, Greece; Fatima al-Mansoori: University of Tromsø, Tromsø, Norway

Keywords: dark matter, gravitational lensing, galaxy clusters, Abell 1689, self-interaction, mass distribution

10.

Innovative Irrigation Practices for Climate-Resilient Agriculture: An Intercontinental Study

Lukas Müller, Priyanka Senanayake, Jamal Khalifa

University of Graz, Graz, Austria; University of Colombo, Colombo, Sri Lanka; University of Dar es Salaam, Dar es Salaam, Tanzania

Keywords: irrigation, climate resilience, drip irrigation, water management, agriculture, crop productivity

11.

Advanced Techniques in Adaptive Filtering for Enhanced Signal Processing Applications

Aisha Ahmed, Hiroshi Nakamura, José Martínez, Thandiwe Mwale

University of Zambia, Lusaka, Zambia; University of Concepción, Concepción, Chile; Massey University, Palmerston North, New Zealand

Keywords: adaptive filtering, signal processing, noise reduction, hybrid algorithms, wireless communications, biomedical engineering

12.

Investigating the Role of Cognitive Behavioral Therapy in Reducing Anxiety Disorders Across Cultures

Napat Chaiyachon, Marta Gómez-López, Omar Al-Farhan

Chiang Mai University, Chiang Mai, Thailand; University of Antioquia, Medellín, Colombia; University of Tasmania, Hobart, Australia

Keywords: Cognitive Behavioral Therapy, anxiety disorders, cultural sensitivity, randomized controlled trial, collectivist cultures, emotional well-being

13.

Efficacy and Safety of Novel Antiviral Therapies in Treating Resistant Viral Infections

Carlos Morales, Aisha El-Khalil, Hiroshi Yamamoto

University of Salamanca, Salamanca, Spain; Al-Baath University, Homs, Syria; Cheikh Anta Diop University, Dakar, Senegal

Keywords: antiviral therapy, drug resistance, clinical trials, viral infections, safety profile, novel compounds

14.

Enhancing Agile Methodologies through Machine Learning: A Case Study in Cross-Cultural Software Teams

Mina Karimian, Seong-Jin Park, Camila Rojas

Kyungpook National University, Daegu, South Korea; Ferdowsi University of Mashhad, Mashhad, Iran; University of Concepción, Concepción, Chile

Keywords: Agile Methodologies, Machine Learning, Software Engineering, Cross-Cultural Teams, Project Management, Data-Driven Insights

15.

Molecular Mechanisms of Bacterial Pathogenesis: Insights into Host-Pathogen Interactions

Miguel Santos, Amina Al-Mansoori, Yuki Tanaka

University of the Philippines Diliman, Quezon City, Philippines; Al-Nahrain University, Baghdad, Iraq; University of Vermont, Burlington, USA

Keywords: bacterial pathogenesis, host-pathogen interactions, virulence factors, immune evasion, antimicrobial therapies, genomic analysis

16.

Advancements in Renewable Energy Integration for Sustainable Urban Development in Emerging Economies

Jin-Woo Park, Tariro Moyo, Ayman El-Sayed

Kyungpook National University, Daegu, South Korea; University of Zimbabwe, Harare, Zimbabwe; University of Khartoum, Khartoum, Sudan

Keywords: renewable energy, sustainable development, urban infrastructure, emerging economies, energy policy, carbon footprint

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