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In this issue

Research Article

Open Access Research Article PTZAID:AEST-9-190

Antioxidant Activity and Phytochemical Constituents of Pawpaw (Carica papaya) during Ripening

Published On: November 01, 2025 | Pages: 047 - 052

Author(s): Kelvin E Brotoboh, Oluwagbenga J Ogunbiyi*, Harrison E Iyare and Temiloluwa O Amusan

Carica papaya L. (Pawpaw) is one of the most commonly cultivated fruits in tropical and subtropical countries, especially in Nigeria. Nutritionally, Carica papaya is known to be highly nutritious. The effect of ripening on the antioxidant activity and phytochemical constituents (such as alkaloids, flavonoids, phenols, saponins, and tannins) of aqueous extract of two c ...

Abstract View Full Article View DOI: 10.17352/aest.000090

Open Access Research Article PTZAID:AEST-9-186

Impact of Socioeconomic Activities on Biodiversity in Gashaka Local Government Area, Taraba State, Nigeriaq

Published On: April 19, 2025 | Pages: 019 - 026

Author(s): Hikon Nafinji* and Umoru Jafaru

Flora biodiversity plays a critical role in sustaining ecosystems, yet anthropogenic activities continue to threaten its existence. This study examines the effects of socioeconomic activities such as logging, farming, and hunting on flora biodiversity in Gashaka Local Government Area of Taraba State. The study employed a combination of descriptive statistics, time-ser ...

Abstract View Full Article View DOI: 10.17352/aest.000086

Open Access Research Article PTZAID:AEST-9-184

Energy Retainment from Crystalline Elastomer (CrEl) and Lead Zirconate Titanate (PbZrT)

Published On: April 11, 2025 | Pages: 006 - 014

Author(s): Delia Teresa Sponza*

Pyroelectric materials that can generate electric charges when subjected to temperature changes dependent on renewable energy . Conventional pyroelectric energy harvesters suffer from low output. In this study, a nanocomposite was generated with crystalline elastomer (CrEl) and pyroelectric lead zirconate titanate (PbZrT) nanoparticles. As a result, a heat harvesting ...

Abstract View | Full Article View | DOI: 10.17352/aest.000084

Open Access Research Article PTZAID:AEST-9-183

Trends in the Tourism Sector of Kyrgyzstan and Problems of Nature Conservation in its Mid-mountain Zone

Published On: April 05, 2025 | Pages: 001 - 005

Author(s): ET Toktoraliev, DA Beyshenkulova, BU Abylmeyizova, TK Toktokozhoeva, TM Choduraev

The article is devoted to the study of the dynamics of the tourist flow in the territory of Kyrgyzstan, amid socio-political and economic uncertainty , and the study of preventive measures to preserve resources. Its relevance related to the pace of development of this industry in the territory under consideration, which depends on its geographical location, features o ...

Abstract View | Full Article View | DOI: 10.17352/aest.000083

Review Article

Open Access Review Article PTZAID:AEST-9-191

Iodine Enrichment and Climate Change - How Iodine Shaped our World

Published On: December 16, 2025 | Pages: 053 - 057

Author(s): Peter PA Smyth* and Colin D O'Dowd

Data arising from the early history of the Earth demonstrates how iodine contributed to the development of life and how iodine deficiency may have led to the disappearance of our Neanderthal predecessors. In modern times, problems such as the incidence of endemic cretinism (severe hypothyroidism) and goitre (thyroid enlargement) associated with iodine

deficiency were ...

Abstract View | Full Article View | DOI: 10.17352/aest.000091

Open Access Review Article PTZAID:AEST-9-189

The Nexus between Waste Management and Disease Prevalence in Offa Local Government Area, Kwara State

Published On: September 12, 2025 | Pages: 039 - 046

Author(s): Umoru J* and Nafinji H

This study investigates the spatial distribution of solid waste dumpsites and their associated health and environmental impacts in Offa Local Government Area (LGA), Kwara State, Nigeria. Utilizing geospatial mapping, a total of 27 major dumpsites were identified and analyzed for their proximity to residential areas and sensitive ecological zones. Nearest neighbor anal ...

Abstract View | Full Article View | DOI: 10.17352/aest.000089

Open Access Review Article PTZAID:AEST-9-188

The Invisible Threat: A Review of Microplastics in Freshwater Systems, Including Their Presence in Water, Sediment, and Aquatic Insects

Published On: July 26, 2025 | Pages: 030 - 038

Author(s): Richard Olajide Owaseye*

Plastic particles, often referred to as microplastics, are less than 5 mm in diameter, and have become an inescapable and highly pervasive threat across freshwater environments. Their occurrence in the water, sediments and biological structures in water are a major ecological and biological concern. The current review has conducted a systematic analysis of their sourc ...

Abstract View | Full Article View | DOI: 10.17352/aest.000088

Short Communication

Open Access Short Communication PTZAID:AEST-9-187

Thermodynamic Analysis of Ca-Mg-Al-based Refractory Resistance to Na_2CO_3 Corrosion

Published On: June 05, 2025 | Pages: 027 - 029

Author(s): Zheng Quanjun, Zhang Qiushi, Dong Changqing*, Hu Xiaoying and WU Huiyu

Papermaking black liquor contains Na2CO3, which can corrode refractory materials and cause economic losses. It is considered to introduce CaO and MgO alkaline oxides into Al2O3 to prepare calcium magnesium aluminum composite oxides as a substitute for Al2O3 as corrosion shell materials. Using the FactSage material balance module, the optimal ratio of CaO-MgO-Al2O3 was ...

Abstract View | Full Article View | DOI: 10.17352/aest.000087

Mini Review

Open Access Mini Review PTZAID:AEST-9-185

The Power of Liquid Zeolite: A Dual-Purpose Innovation for Health and Oil & Gas Safety Applications

Published On: April 15, 2025 | Pages: 015 - 018

Author(s): Vefa Dervis*

A naturally occurring mineral with a distinctive crystalline structure, zeolite has important uses in both industrial and medical settings. Its main applications in the oil and gas sector are gas filtration, wastewater treatment, oil spill cleaning, and refining process catalysis. Zeolite is useful for resource optimization and environmental protection because of its ...

Abstract View | Full Article View | DOI: 10.17352/aest.000085