2021 | Volume Volume - 6 - Issue Issue - 1

In this issue

Research Article

Open Access Research Article PTZAID:OJC-6-121

Obtaining and studying properties of biodestructable composite films based on polyethylene

Published On: December 11, 2020 | Pages: 030 - 036

Author(s): IH Turdikulov*, BN Mamadiyorov, MQ Saidmuhammedova and AA Atakhanov

At present, polyolefins are a heavily produced thermoplastic, and they are used in different industries. Approximately one-third of produced plastics are used in the packing industry, and this volume will only be increased in the future. The advantages of plastic packaging , such as strength, flexibility, moisture stability, comfort, safety and low cost, are accompani ...

Abstract View Full Article View DOI: 10.17352/ojc.000021

Open Access Research Article PTZAID:OJC-6-120

Bioactive Compounds and Biological Assays of different Prosopis Juliflora Extracts against Groundnut Aphid

Published On: November 17, 2020 | Pages: 021 - 029

Author(s): Mulate Zerihun* and Estifanos Ele

Natural products from medicinal plants, either as pure compounds or as standardized extracts, provide unlimited opportunities for different purposes. Botanical preparations of medicinal plants for insecticidal usage contain various types of bioactive compounds. The aim of this paper focuses on the botanical evaluation of stem bark, seed and leaf extracts of Prosopis j ...

Abstract View Full Article View DOI: 10.17352/ojc.000020

Open Access Research Article PTZAID:OJC-6-119

A SET route to Ethyl Carboxylic Acid from Ethanol and Carbon Monoxide

Published On: September 01, 2020 | Pages: 017 - 020

Author(s): Ragnar Larsson*

As a hypothetical experiment the reaction between carbon monoxide and ethanol to form an ethyl carboxylic acid has been considered. The SET model for catalysis is used. The effect of the catalyst COS on the reactivity of these two species is found to lead to the expected result. ...

Abstract View | Full Article View | DOI: 10.17352/ojc.000019

Open Access Research Article PTZAID:OJC-6-117

Elastomer Thermal Protection Materials Containing Aluminosilicate Microspheres

Published On: May 22, 2020 | Pages: 011 - 012

Author(s): VF Kablov*, VG Kochetkov, OM Novopoltseva and NA Keibal

Elastomer Fire- Heatprotective Materials (FHPM) are used in the construction, working in extreme temperatures (in the missile, aviation and space technology). ...

Abstract View | Full Article View | DOI: 10.17352/ojc.000017

Open Access Research Article PTZAID:OJC-6-116

Biodegradable masterbatch blends: The implications on thermal conversion and recycling stream of polyethylene

Published On: April 04, 2020 | Pages: 008 - 010

Author(s): João Vitor Ferreira Duque, Márcio Ferreira Martins* and Marcos Tadeu D'Azeredo Orlando

In this case report, we are dealing with the implications of blending fossil LDPE with biodegradable masterbatches on the thermal conversion and recycling stream of Low-Density Polyethylene (LDPE). Two types of commercial masterbatch are evaluated against a pure LDPE. The thermal degradation study was carried out by using thermogravimetric analysis guided by X-ray dif ...

Abstract View | Full Article View | DOI: 10.17352/ojc.000016

Open Access Research Article PTZAID:OJC-6-115

Liquid Chromatography-Mass Spectrometry studies on molecular structure of melatonin after Co-60 gamma irradiation

Published On: February 07, 2020 | Pages: 001 - 007

Author(s): Ahmad-Reza Safdari and Mehran Babri*

In this work, effects of gamma rays on melatonin as a natural radioprotective agent, have been studied. Selected samples in the form of a) powder and b) solution, were prepared and irradiated by the use of gammacell radiation system under gamma-ray of Co-60 source, at doses from 20 to 2150Gy. The content of irradiated sample vials compared with of the control samples ...

Abstract View Full Article View DOI: 10.17352/ojc.000015

Mini Review

Open Access Mini Review PTZAID:OJC-6-118

Selenium nanoparticles: Small is the new big: Mini review

Published On: July 22, 2020 | Pages: 013 - 016

Author(s): Jolly Jolly, Mohd Ahmar Rauf and Zeeshan Ahmad*

Nanotechnology is the study of developing peculiar particles (1-100 nanometres (nm)) of matter at an atomic, molecular, and supramolecular scale. These nanoparticles possess unique properties such as large surface area, fewer side effects, bioavailability, decrease the toxicity, and prolonged drug release. Some inorganic metals nanoparticles like Ti, Se, Zn, Ag, Ce, A ...

Abstract View Full Article View DOI: 10.17352/ojc.000018