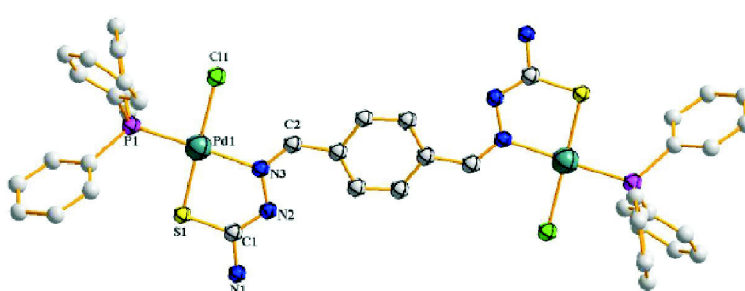


CONTENTS

Di-palladium complex of terephthalaldehyde bis(thiosemicarbazone) ligand: Synthesis, structure and catalytic application

Piyali Paul and Samaresh Bhattacharya

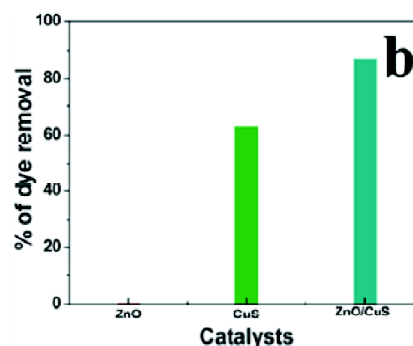
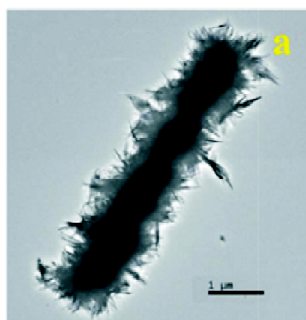
pp. 2517-2524



Design of nanostructured materials for photocatalysis and photoelectrochemical applications

Ashok K. Ganguli, Anirban Das, Saikumar Manchala and Shalini Tiwari

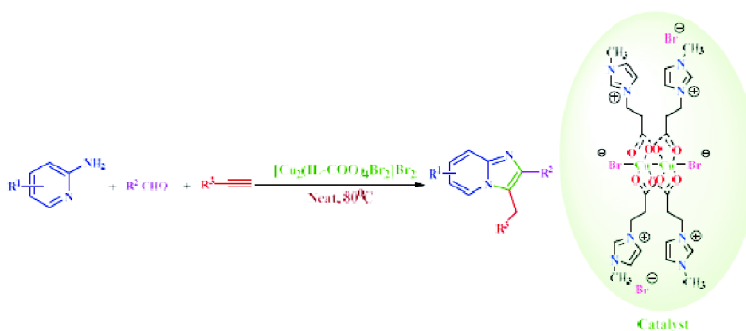
pp. 2525-2532



Functionalized ionic liquid tagged Cu(II) catalyst: Design, characterization, and application in synthesis of imidazo[1,2-a]pyridine

Sumit Ghosh, Dhiman Kundu, Amrita Dey, Adinath Majee and Alakananda Hajra

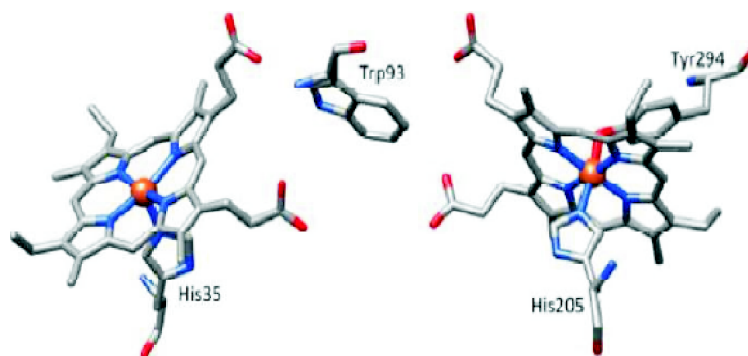
pp. 2533-2539



Electronic coupling in heterobimetallic porphyrin dimers: A spectroscopic investigation

Satabdi Roy, Sayantani Banerjee, Samali Sanfui and Sankar Prasad Rath

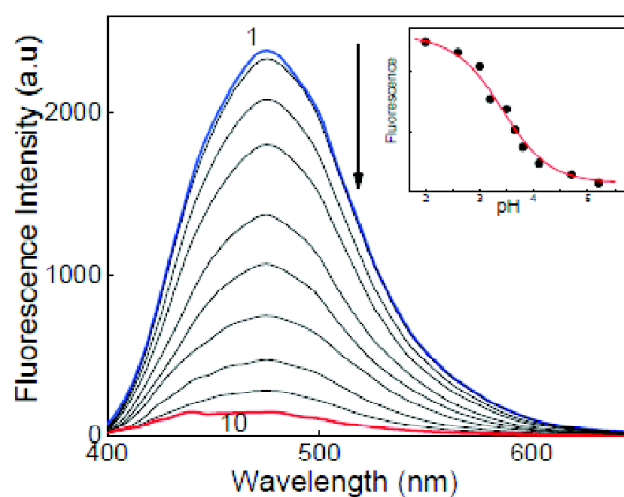
pp. 2541-2552



Recognition-mediated supramolecular assemblies of 4',6-diamidino-2-phenylindole (DAPI) with cationic receptors: Modulation in the photophysical properties and prospects

Meenakshi N. Shinde, Jyotirmayee Mohanty and Achikanath C. Bhasikuttan

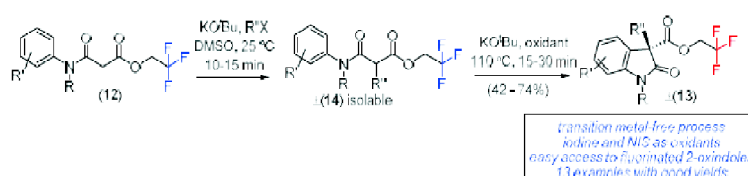
pp. 2553-2565



Synthesis of fluorinated 2-oxindoles via intramolecular dehydrogenative coupling

Saina Shaheeda M. K., Nivesh Kumar, Arindam Maity and Alakesh Bisai

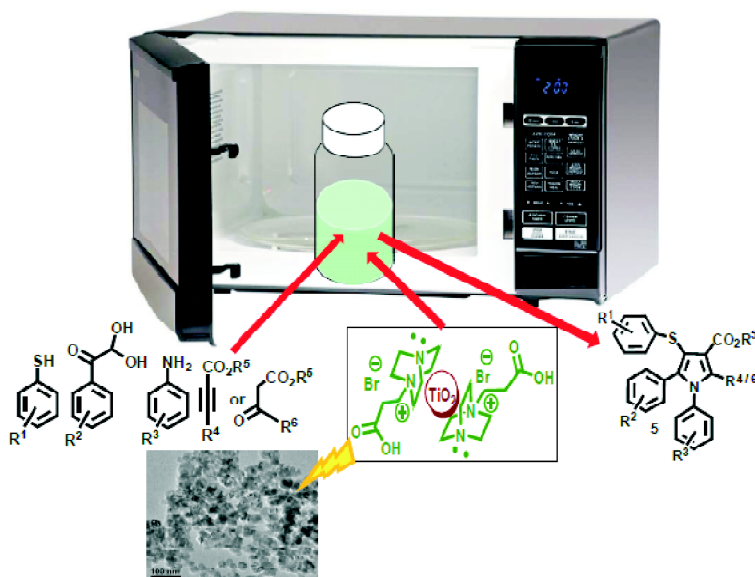
pp. 2567-2578



A synergistic effect of microwave irradiation and nano-TiO₂@[DABCO(CH₂CH₂CO₂H)]⁺[Br]⁻ for the expeditious synthesis of fully functionalised pyrroles incorporating benzo-thio unit

Priya Mondal and Chhanda Mukhopadhyay

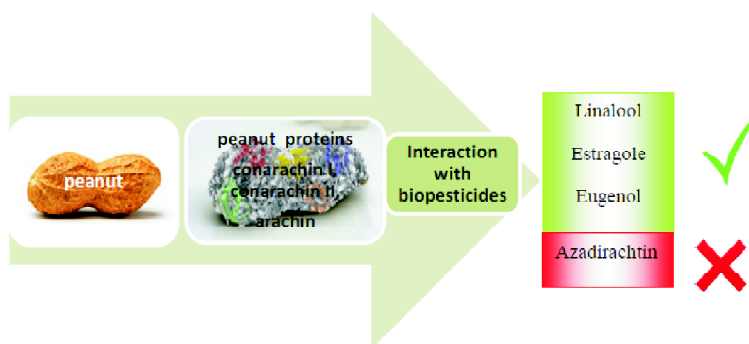
pp. 2579-2591



Molecular interaction of peanut proteins with some bio-pesticides: A comparative spectral study

Sumanta Kumar Ghatak, Pabitra Chattopadhyay and Kamalika Sen

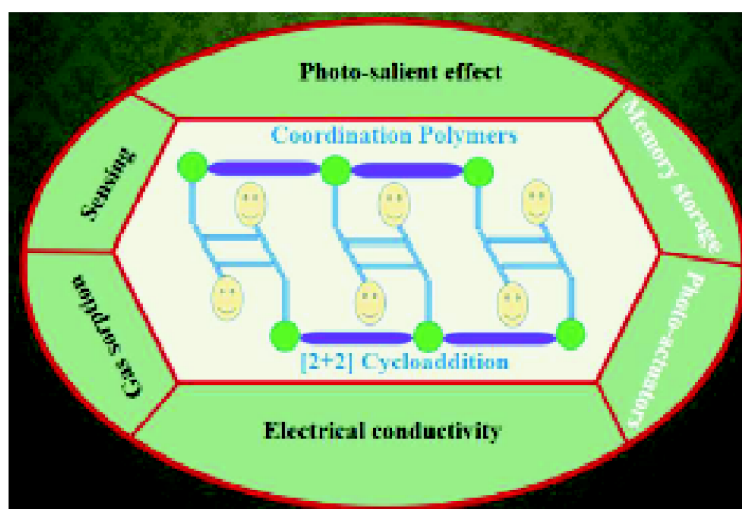
pp. 2593-2600



Exploration of [2+2] photodimerization of coordination polymers in various applications

Basudeb Dutta, Chittaranjan Sinha and Mohammad Hedayetullah Mir

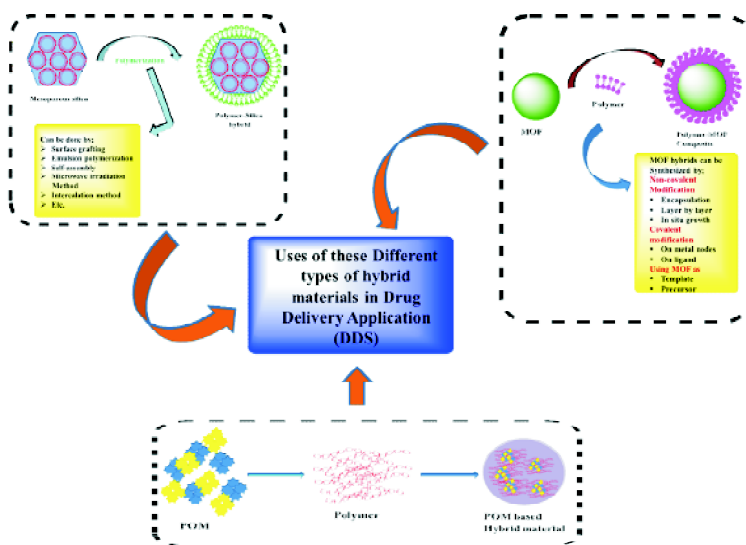
pp. 2601-2607



Design of polymer based inorganic-organic hybrid materials for drug delivery application

Ruby Kumari, S. S. Narvi and P. K. Dutta

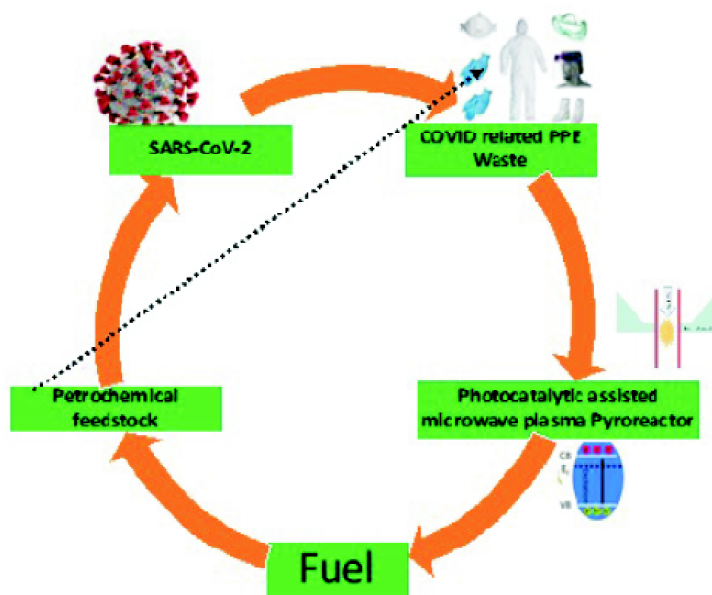
pp. 2609-2622



Photocatalytic assisted microwave-based plasma pyrolyser: A solution for COVID-19 related wastes?

Sundaramurthy Suresh, Arisutha Suresh, Sanjeev Katti and Jyoti Verma

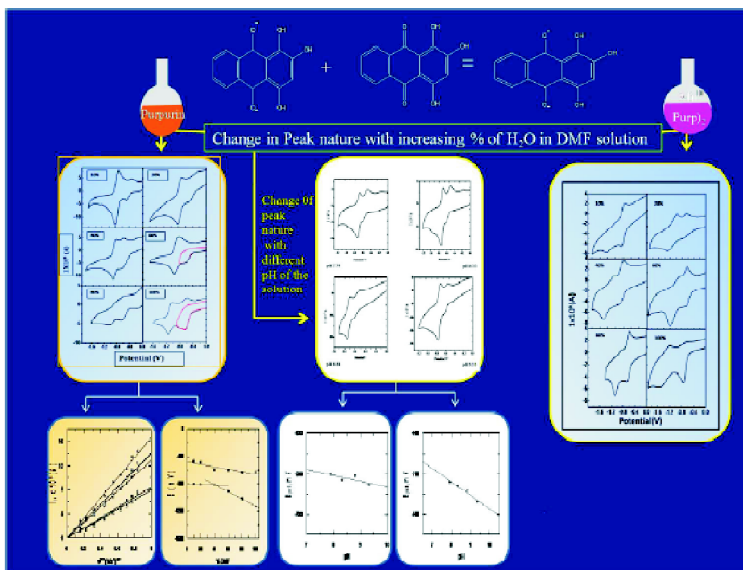
pp. 2623-2632



Electrochemical reduction of purpurin, its Mn(II) complex in DMF and aqueous-DMF mixed solvent: A cyclic voltammetric study

Bitapi Mandal and Saurabh Das

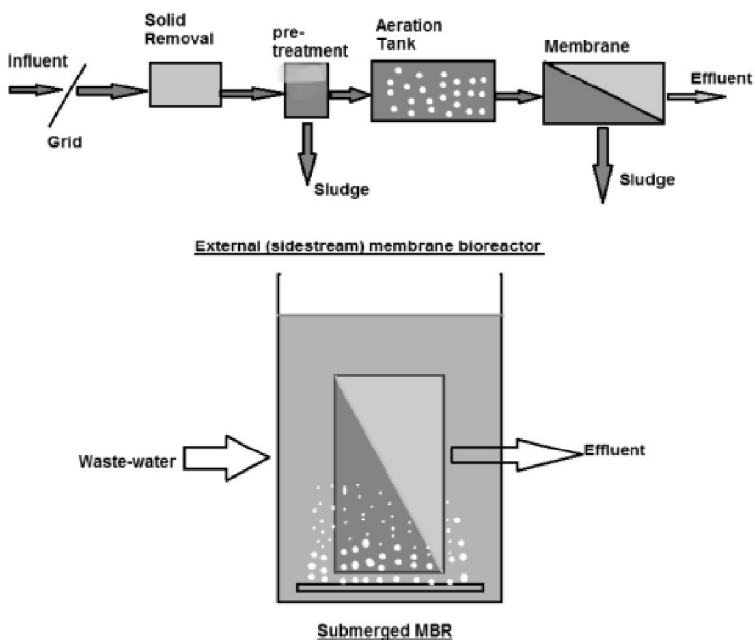
pp. 2633-2642



Advanced wastewater treatment using membrane bioreactor system

Soumyadeep Bhaduri and Debabrata Mazumder

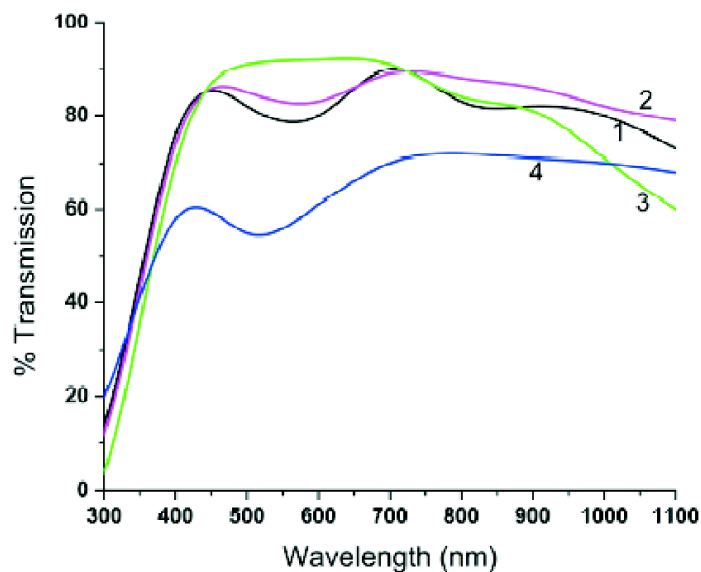
pp. 2643-2655



Influence of hydrogen on RF-magnetron sputtered ITO films and post hydrogen plasma treatment

Himadri Sekhar Das, Rajesh Das, Gourisankar Roymahapatra, Subir Kumar Maity and Prasanta Kumar Nandi

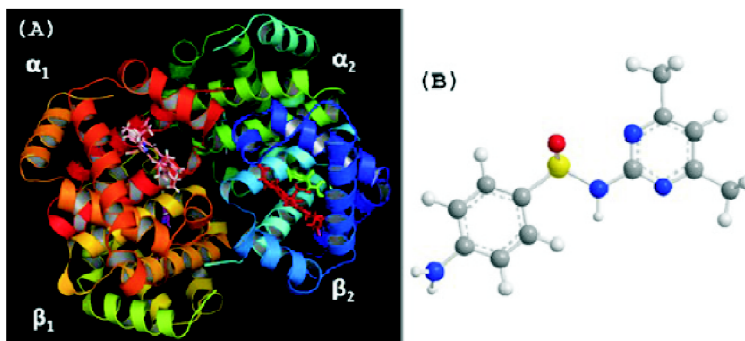
pp. 2657-2665



Interaction of hemoglobin and sulfamethazine: A spectrofluorimetric characterization of the binding thermodynamics

Aben Oving, Soching Luikham and Jhimli Bhattacharyya

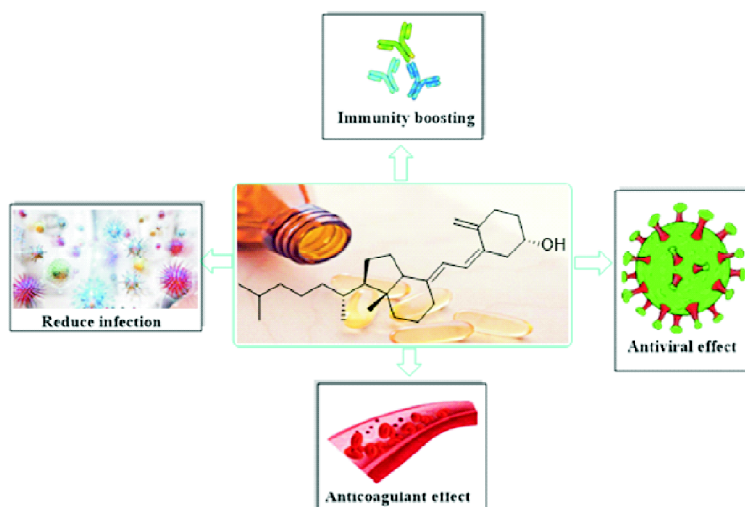
pp. 2667-2672



Optimal dose of vitamin-D supplement reduces death risk in covid patients – A review

Jhimli Sengupta, Arpan Basu and Nandagopal Hudait

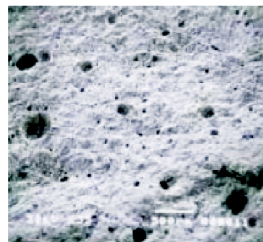
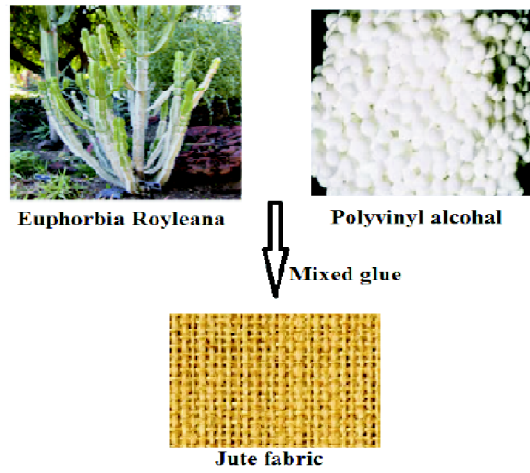
pp. 2673-2678



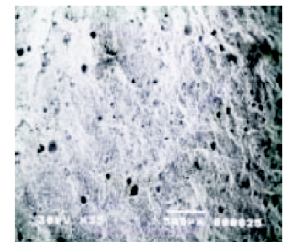
Development of fire retardant eco-composite board from jute and bio based *Euphorbia latex*-polyvinyl alcohol (PVA) copolymer for structural purpose

Rajarshi Maity, Sabir Ali Khan, Anjan Mishra, Timir Baran Sinha, Amalesh Khan, Sujit Kumar Ghosh and Pijus Kanti Khatua

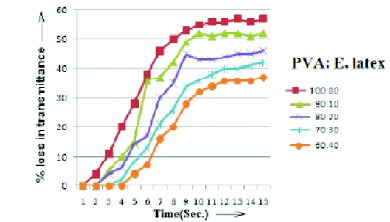
pp. 2679-2688



SEM micrographs of composite made from jute (2% NaOH scouring for two hour)and Polyvinyl alcohol



SEMmicrographs of of composite made from jute (2% NaOH scouring for two hour) and Polyvinyl alcohol: E. late mixed glue at a ratio 70:30

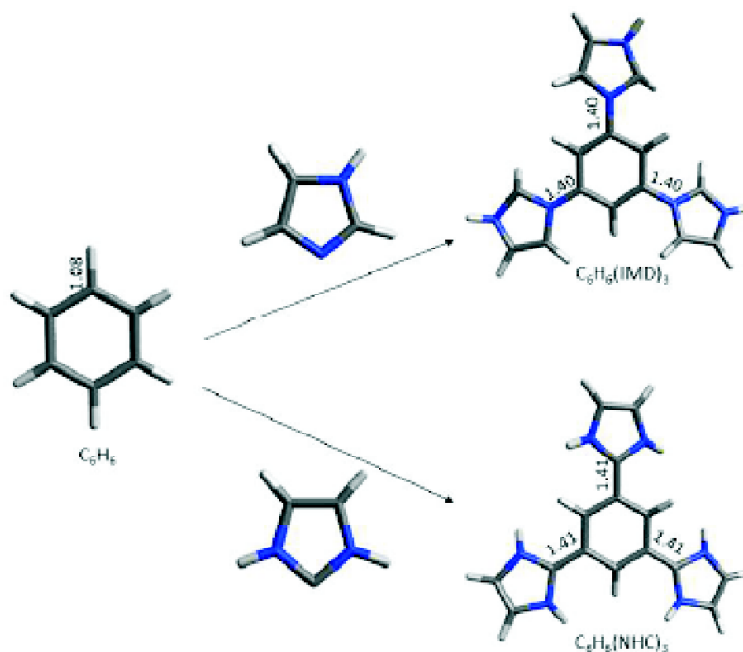


Smoke density results of composite board made from jute and mixed glue at different proportion.

Organic and inorganic benzene transform to superalkalis: An *in silico* study

Rakesh Parida, Medha Rath, Swapan Sinha,
Gourisankar Roymahapatra and Santanab Giri

pp. 2689-2697



A comparative analysis of Ru(II) complexes containing non-annulated and annulated N-heterocyclic carbene ligand towards structure, spectra, electrochemistry and biological activity

Bidyut Kumar Rana, Joydev Dinda, Himadri Sekhar Das, Marlon Henrique Cardoso, Octávio Luiz Franco, Partha Pratim Bag, Pradip Kumar Mahapatra, Santanab Giri and Gourisankar Roymahapatra

pp. 2699-2712

