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Series: Air, Water and Soil Pollution Science and Technology; Environmental Research Advances
BISAC: NAT011000; SCI026000; TEC010010
DOI: https://doi.org/10.52305/PJPJ7248

Activated Charcoal has proved to be one of the most promising environmentally sustainable material for air, water, and soil remediation. Recently, activated charcoal has also been explored for its use in several other domains including its medicinal benefits. Its superior performance as an adsorbent for controlling contamination and recovery of important resources has led to the augmentation of its applications across industries around the world. Activated charcoal is used in water treatment plants for the exclusion of organic compounds, color, odour, synthetic chemical compounds and antibiotics from wastewater. It proves to be a futuristic substance in terms of health, resources, economy and environmental sustainability.

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Chapter 5. The Removal of Toxic Heavy Metal Ions from Synthetic Wastewater by Bio-Waste Orange Peel Activated Carbon

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Chapter 6. Coconut Shell-Based Activated Carbon: Synthesis and Adsorptive Properties

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Centre of Lipids Engineering and Applied Research (CLEAR), Ibnu-Sina Institute for Scientific and Industrial Research, UTM Johor Bahru, Malaysia

Chapter 7. The Adsorption of Phenol and Bisphenol A (BPA) Using Activated Carbon

Aiman Hakim Supee and Muhammad Abbas Ahmad Zaini

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Chapter 8. Charcoal Production from *Acromonia Aculeata (Macaúba)* and Its Impact on the Environment

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Chapter 9. Persulfate-Activated Charcoal Mixture: An Efficient Oxidant for the Decolorization of Rhodamine-B in Water

Palani Natarajan

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Chapter 10. The Conversion of Scrap Tyres into Activated Carbon Black

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Lakshmi Narain College of Technology, Bhopal, India

Conclusion

Index

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Authors: Shubhangi P Patil, Rajendra R Tayade, Aniruddha B Patil

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Abstract:

Nanocellulose is a remarkable natural polymer that is prevalent on the planet. It demonstrates incredit contemporary needs for sustainability, biodegradability, diverse functionality, tuneable chemistry, and rene may be extracted chemically or mechanically from a variety of natural sources, such as rice husk and su chapter discusses numerous cellulose sources, nanocellulose types and extraction procedures. In this study, we concentrated on modification of nanocelllose to impart or improve certain specifications to the material based on its application. With several current research examples, we show the application of nanocellulose. We cover nanocellulose applicability in packaging, bio-medical environmental amoliaration, energy harvesting, and electronics. Finally, we provide a critical viewpoint on th in the context of innovative, eco - friendly and sustainable materials.

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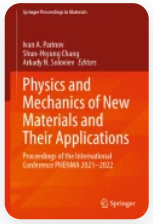

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The effect of chemisorption of molybdenum atom (Mo) on single walled (8, 0) zigzag carbon nanotube (CNT) is studied with band structure, density of state, charge transfer, charge isosurface and HOMO–LUMO molecular orbitals. The binding energy of chemisorption of molybdenum atom on carbon nanotube is found using band structure and density of state. The molybdenum is strongly chemisorbed on carbon nanotube with binding energy range from 0.196 to 0.906 eV. The band structure and density of states clearly illustrates the creation of extra states and reduction in the band gap. The amount of charge transfer is found using mulliken population analysis and it is in the range from 0.508 to 0.603 electron depending upon site of chemisorption. The nature of bonding between molybdenum atom and carbon atom of carbon nanotube is explained with molecular orbitals and the charge density analysis. It shows the formation of sigma bond between Mo and carbon atoms.

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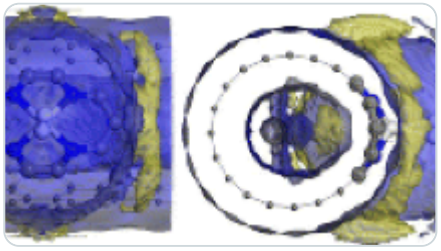

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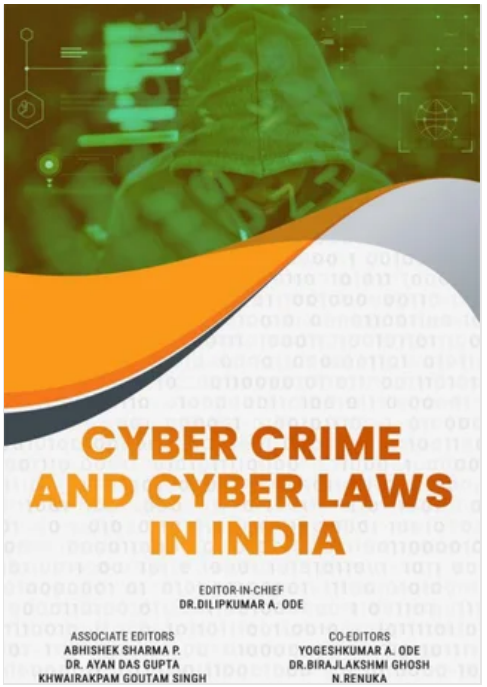

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An Analysis on Security and Privacy Awareness on I-Phone and Android Mobile Users

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ABSTRACT

Mobile phone becomes one of the most famous gadgets in previous few years because of the mixing of powerful technology in it. Now-a-days a mobile phone can offer distinct offerings as like as a computer affords. Telephone holds our vital non-public data which include photographs and movies, SMS, e mail, contact list, social media debts and so on. Therefore, the range of safety and privacy related threats also are growing enormously. Our research objectives at comparing how much the mobile phone users are aware about their safety and privateness. On this look at, first of all we've got taken a survey for phone users to get entry to the level of mobile phone safety attention displayed by way of the general public. We also determine whether or not a standard degree of protection complacency exists amongst phone customers and measure the attention of android users regarding their privacy. From survey result we've found that, the general public are not privy to their smartphone security and privateness. Secondly, primarily based on survey outcomes, we have proven a way to measure the level of cognizance for the smartphone customers. By means of using this technique, a consumer can without difficulty degree his/her phone safety and privateness associated degree of consciousness.

KEYWORDS: Mobile Phone, Smartphone, Issues, Apple, Android, Safety and Private.

INTRODUCTION

The technologies of smartphone had been increasing with a large fee over previous couple of years. Phone gives many services as information sharing, phone calls, internet, distinct on line & offline games etc. Therefore, it increases the threat of safety and privateness related threats relatively. Nearly 80% of sports related to the net, so it is important for us to come to be aware of security and privacy.

Numerous latest studies shown that, whilst security comes to smartphone, maximum of the telephone users are propitious. Which will authentication of telephone, people regularly use unique styles, finger print password, face password, pin passwords and so on. A lot of these aren't sufficient to guard us from safety associated issues. Smartphones are handheld devices in which exceptional personal statistics are stored. We must ensure the safety of our personal data. Most of the time, because of lack of our attention we fail to guard our personal records. If all this data falls into an awful hand, we might be in problem.

According to a current study, Google play posted more than 3.5 million apps from 2009 to December, 2017. The variety of apps is unexpectedly increasing over sucent few years. Another recent safety examine confirmed that, in Google play keep, extra than two hundred malevolent apps were located. Those apps accrued private statistics like touch numbers, places and many others. From users and sent to the attackers" server. Time to time this information became rounding to the attacker's" server when customer's use these apps. Inside the early 2016, Google banned 13 apps from Google play shop because, those apps gathered records from users and promote to other server.

This paper is organized as follows. We start with a dialogue of the various preceding associated works in phase. Then we explain about the mobile phone problems in segment and discuss extraordinary forms of attacks in smartphone. In phase we cognizance on our research technique at the side of pilot look at, studies instrument and goal population, and records evaluation. In segment, we examine the end result of our survey consisting of research questions, evolution of research query and then propose a model which could measure the extent of cognizance. Subsequently, we display a few concluding remarks and future direction in phase.

ABOUT THE I PHONES

The iPhone is a line of smartphones designed and advertised by apple INC. That use apple's IOS cellular operating system. The first-generation iPhone turned into introduced with the aid of former apple CEO Steve jobs on January nine, 2007. Due to the fact then apple has yearly launched new iPhone

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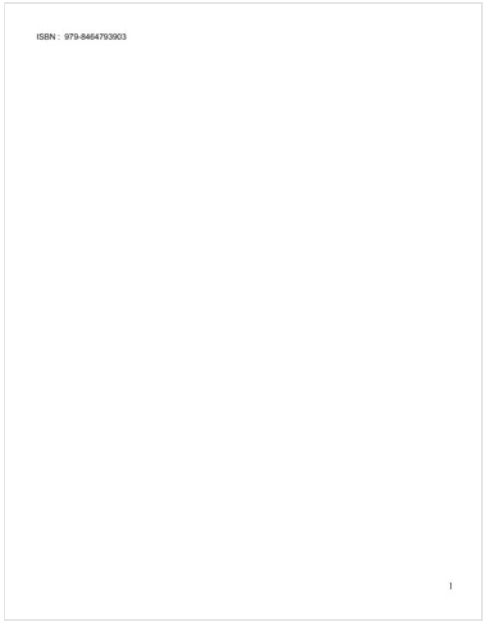

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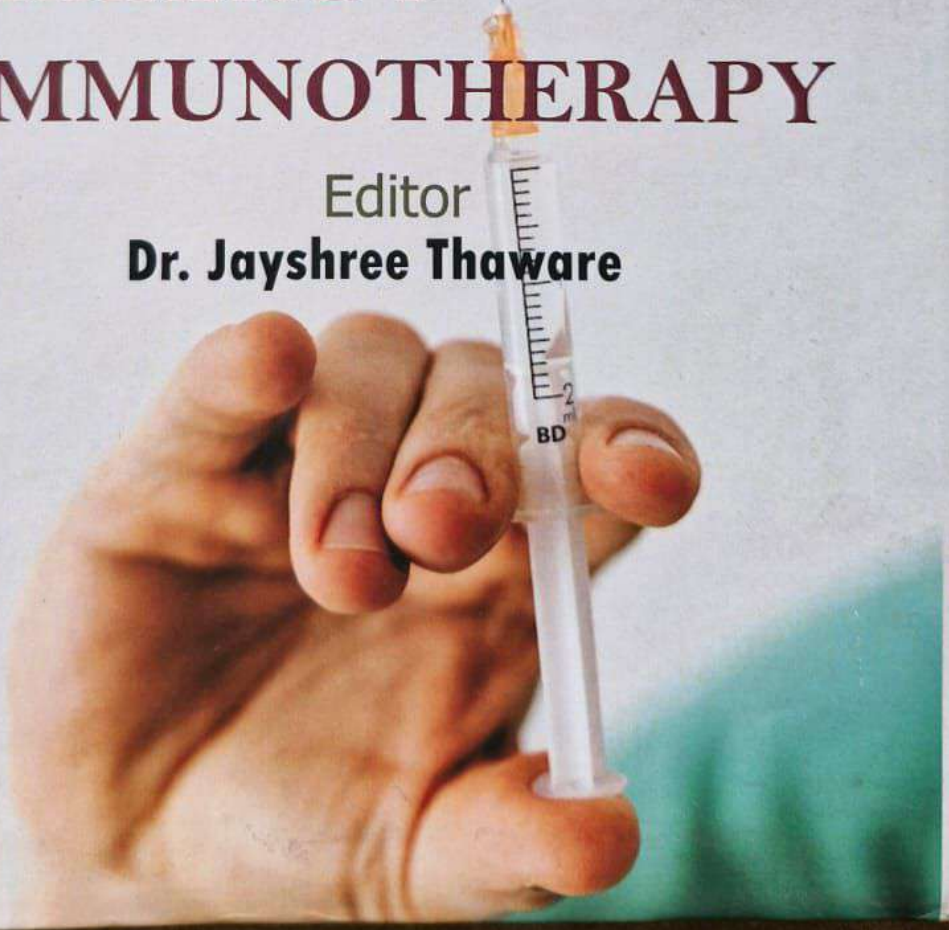

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