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Review article on Electromagnetic Mechanism of SERS

Subhendu Chandra <subhendu170975@gmail.com> Sun, Apr 24, 2022 at 9:55 PM
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Respected Sir,
I am sending the manuscript as a review article. I am very much glad to you if you kindly allow me to publish the article in your esteemed Journal
Thanking you
--

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52K

ISSN : 0019-5693

INDIAN JOURNAL
OF
THEORETICAL PHYSICS

VOLUME 70 **NOS. 3, 4**

JULY, 2022 – DECEMBER, 2022

Published by the
CALCUTTA INSTITUTE OF THEORETICAL PHYSICS
(Formerly, INSTITUTE OF THEORETICAL PHYSICS)
"BIGNAN KUTIR"
4/1, MOHAN BAGAN LANE, KOLKATA-700004

(Peer-reviewed Journal)

C O N T E N T S

INDIAN JOURNAL OF THEORETICAL PHYSICS, VOL 70, NOS. 3 & 4, 2022

A Brief Review on Metallic Nanoparticles

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[Abstract: Metallic nanoparticles have involved scientist for over a century and are now deeply applied in biomedical sciences and engineering. They are an attention of interest because of their enormous potential in nanotechnology. Today these materials can be synthesized and improved with various chemical functional groups which allow them to be conjugated with antibodies, ligands, and drugs of interest and thus introducing a extensive variety of potential applications in biotechnology, magnetic separation, targeted drug delivery, and automobiles for gene and drug delivery and more significantly diagnostic imaging. Moreover, different imaging modalities have been established over the period of time such as Magnetic resonance imaging (MRI), computed tomography (CT), Positron Emission Tomography (PET), ultrasound, Surface Enhanced Raman Spectroscopy (SERS), and optical imaging as an aid to image various disease states. This led to the invention of various nanoparticulated contrast agent such as magnetic nanoparticles (Fe_3O_4), gold, and silver nanoparticles for their application in these imaging modalities. In addition, to use various imaging techniques in tandem newer multifunctional nanoshells and nanocages have been developed. Thus in this review article, we aim to provide an introduction to magnetic nanoparticles