

Name of the author/s	Title of paper	Name of journal	Page number	Year of publication
J Singh, AS Dhaliwal	Synthesis of rGO/AgNPs adsorbent for the effective removal of two basic dyes: kinetics, isotherms and thermodynamic studies	International Journal of Environmental Science and Technology	1735-2630	2022
Ankit Kumar, SK Singh, Pravin Kumar, AS Dhaliwal	Structural, morphological, and phase transformation studies of 1.4 MeV Kr ion beam irradiated zirconia thin films	Journal of Materials Research	0884-2914	2022
Prem Pankaj, Prabhdeep Kaur, Kuldip Singh Mann	Dielectric properties of eggshell powder at 2.45 and 5.8 GHz relevant to dielectric heating Authors: Prem Pankaj, Prabhdeep Kaur, Kuldip Singh Mann	Journal of Microwave Power and Electromagnetic Energy	0832-7823	2022
Kailash, SS Verma	Exploring thermoplasmonic profiles of some noble metallic nanospheres	Materials Today Communications	2352-4928	2022
Jaspal Singh, Kulwinder Kaur, Muzzammil Ahmad Bhat, Utkir Bahodirovich Sharopov, Shobhna Dhiman, Megha Goyal, SS Verma, Shakeel Ahmad Khandy	First-principles calculations on the electronic structure and thermoelectric properties of quaternary Heusler compounds: LiScPtSi and LiScPdGe	Materials Today Communications	2352-4928	2022
Pradeep Bhatia, SS Verma, MM Sinha	Nanogap effects on plasmonic properties of dimer	Optical and Quantum Electronics	0306-8919	2022
Ankit Kumar, Pravin Kumar, AS Dhaliwal	Thermally induced phase transformation and structural modifications of E-beam evaporated zirconia thin films	Phase Transitions	1029-0338	2022
Tavneet Kaur, Jaspal Singh, Megha Goyal, Kulwinder Kaur, Shakeel Ahmad	First principles calculation to investigate Li based quaternary Heusler compounds LiHfCoX (X= Ge, Sn) for thermoelectric applications	Physica Scripta	1402-4896	2022

Khandy, Muzzammil Ahmad Bhat, Utkirjon Sharopov, Shobhna Dhiman, Aadil Fayaz Wani, Bindu Rani, MM Sinha, SS Verma				
Akanksha Bhardwaj, Suram Singh Verma	Refractive Index Sensitivity Analysis of Gallium and Gallium Alloy Nanoparticles Using Inflection Point Method	Plasmonics	1557-1963	2022
Jaspal Singh, Tavneet Kaur, Amrit Pal Singh, Megha Goyal, Kulwinder Kaur, Shakeel Ahmad Khandy, Ishtihadah Islam, Aadil Fayaz Wani, Ram Krishan, MM Sinha, SS Verma	LiNbCoX (X= Al, Ga) quaternary Heusler compounds for high-temperature thermoelectric properties: a computational approach	Bulletin of Materials Science	0250-4707	2023
Singh Jaspal, Kaur Kulwinder, Islam Ishtihadah, Jan Mohammad Mir, Megha Goyal' Tavneet Kaur, S.S. Verma, Atif Mossad Ali, Shakeel Ahmad Khandy	Electronic structure, phonon stability, mechanical and high-temperature thermoelectric properties of Li-based quaternary Heusler alloys	Current Applied Physics	1878-1675	2023

Indu Sharma, Shruti Mahajan, Vishal Arora, Mehak Arora, <u>Nitin Mahajan</u> , Nitin Mahajan, Kanika Aggarwal, Anupinder Singh	Effect of Magnetic field on dielectric properties in PLT/BNCFO composites	Emerging Materials Research	2046-0155	2023
Karan Bansal, Jagdeep Singh, AS Dhaliwal	Synthesis of silver-decorated nanocomposite based on reduced graphene oxide and its electrochemical performance	Fullerenes, Nanotubes and Carbon Nanostructures	1536-4046	2023
Karan Bansal, Jagdeep Singh, AS Dhaliwal	Green synthesis and characterization of superparamagnetic nanocomposite based on reduced graphene oxide/Fe ₃ O ₄ prepared using leaf extract of Azadirachta indica	Inorganic and Nano-Metal Chemistry	2470-1556	2023
Kanika Aggarwal, Madan Sharma, Shubhpreet Kaur, Anupinder Singh	Establishment of magneto-dielectric effect and magneto-resistance in composite of PLT and Ba-Based U -type hexaferrite	<u>Journal of Advanced Dielectrics</u>	2010-1368	2023
Prachi Palta, Prabhdeep Kaur, KS Mann	Measurement and modelling of organic matter's altering effect on dielectric behavior of soil in the region of 200 MHz to 14 GHz	Journal of Microwave Power and Electromagnetic Energy	0832-7823	2023
Rahul Sharma, Nihal, Karan Bansal, A.S. Dhaliwal, Mamta Sharma, J.K. Goswamy	Synthesis and characterization of WO ₃ based thin film electrode material for electrochromic device	Materials Today: Proceedings	2214-7853	2023
Pradeep Bhatia, SS Verma	Enhancement of LSPR properties of temperature-dependent gold nanoparticles	Materials Today: Proceedings	2214-7853	2023
Jaspal Singh, Tavneet Kaur, Megha Goyal, Kulwinder Kaur, SS Verma, MM Sinha	Exploring structural, electronic, phonon, mechanical, elastic, thermodynamic, and thermoelectric properties of the Li based quaternary Heusler LiTaCoAl by DFT: A ...	Materials Today: Proceedings	2214-7853	2023

Tavneet Kaur, Amrit Pal Singh, Jaspal Singh, MM Sinha	An ab initio investigation of electronic, elastic, mechanical and vibrational properties of Co ₂ VX (X= Al, Ga)	Materials Today: Proceedings	2214-7853	2023
Rahul Sharma, Karan Bansal, AS Dhaliwal, Mamta Sharma, JK Goswamy	Synthesis and characterization of WO ₃ based thin film electrode material for electrochromic device	Materials Today: Proceedings	2214-7853	2023
Kailash, SS Verma	Thermoplasmonic study of AuxAg(1-x) alloy nanospheres	Optical and Quantum Electronics	0306-8919	2023
Akanksha Bhardwaj, Pradeep Bhatia, Suram Singh Verma	Plasmonic properties of silver coated non-spherical gallium alloy nanoparticles	Optical and Quantum Electronics	0306-8919	2023
Megha Goyal, Murari Mohan Sinha	Topological Phase Transition and Lattice Dynamical Properties of Half-Heusler XPtBi (X= Gd, Nd)	physica status solidi (b)	1521-3951	2023
Pradeep Bhatia, SS Verma, MM Sinha	Investigation of Plasmonic Properties of Egg-like Multilayer Structures	Plasmonics	1557-1963	2023
Prem Pankaj, Prabhdeep Kaur, Kuldip Singh Mann	Dielectric Spectroscopy as a Tool to Distinguish Starch and Flour	Recent Progress in Science and Technology	3067-4573	2023
S Kaur, S Singh, MM Sinha	Design of dual port electromagnetic planar sensor based on single split ring topology	AIP Conference Proceedings	1551-7616	2024
R Rani, B Rani, A Wani, MM Sinha	Structural, electronic and vibrational properties of Pds monolayer: A first principle approach	AIP Conference Proceedings	1551-7616	2024
Karan Bansal, Jagdeep Singh, AS Dhaliwal	Synthesis and characterization of ternary nanocomposite based on Ag-Fe ₃ O ₄ /rGO for electrochemical application	Fullerenes, nanotubes and Carbon Nanostructures	1536-4046	2024
Sanju Mahich, Yogesh Kumar Saini,	Metal-free adsorption and photodegradation methods for methylene blue dye removal using different reduction grades of	Heliyon, 2024	2405-8440	2024

Vijay Devra , Kanika Aggarwal, Anuj Kumar Dinesh Kumar and Amanpal Singh	graphene oxide			
S Kaur, S Singh, MM Sinha	Prototype of Circular Split Ring Resonator based Sensor for Estimating Soil Moisture as a Function of Soil Particle Distribution	IEEE Sensors Journal	1558-1748	2024
Prem Pankaj, Prabhdeep Kaur, Kuldip Singh Mann	Dielectric Heating Protocol of Three Low Moisture Flours as Affected by Moisture, Temperature and Mass at 2.45 and 5.8 GHz	Journal of Culinary Science & Technology	1542-8044 (online) and 1542-8052 (print)	2024
R Rani, MM Sinha	A first principles study of stability, electronic and thermoelectric characteristics of novel high temperature half-heusler alloys ScAgX (X= Si, Ge, Sn)	Physica B: Condensed Matter	1873-2135	2024
Jagdeep Singh, AS Dhaliwal	Electrochemical synthesis of porous Ag@PANI/MWCNTs ternary composite for electrochemical and photocatalytic application	Polymer Bulletin	1436-2449	2024
Prabhdeep Kaur and Prachi Palta	Stubble Burning Effect On Soil's Dielectric Behavior: An Exploration Of Machine Learning-Based Modelling Approaches	SOIL & SEDIMENT CONTAMINATION	1532-0383 (print) and 1549-7887 (online)	,2024
Ankit Kumar, Pravin Kumar, AS Dhaliwal	Phase evolution and surface analysis of electron beam evaporated calcium and yttria-stabilized zirconia thin films	Thin Solid Films	0040-6090	2024
Jagdeep Singh, Santosh K Tiwari, Soumik Bhowmik, Karan Singh Hada, AS Dhaliwal	Electron-beam-Induced Tunable Reduction of Graphene Oxide on Cellulose-based Filter Paper for Flexible Electromagnetic Interference Shielding	Current Applied Physics	1567-1739	2025
S Kaur, S Singh, MM Sinha, D Rajendran, O Kanoun	A Low Profile Self-Similar Geometry-Based Microwave Planar Sensor for Assessing the Impact of Organic Matter Content on Soil Field Capacity	IEEE Sensors Journal	1558-1748	2025
S Kaur, S Singh, MM Sinha	Design and Fabrication of a Low-Profile Planar Sensor for Estimation of Plant-Available Water in Different Textured Soils	IEEE Transactions on	1558-0644	2025

		Geoscience and Remote Sensing			
R Rani, MM Sinha	Strain Induced High Thermoelectric Performance of ScAgX (X= Si, Ge, Sn) Half-Heusler Alloys: A First Principles Approach	Physica B: Condensed Matter,	1873-2135	2025	
Jagdeep Singh, AS Dhaliwal	Ultrasound-assisted synthesis of multilayer ag@ PDA/cellulose nanofibers conductive films with superior EMI shielding and energy storage applications	Reactive and Functional Polymers	1381-5148	2025	
S Kaur, S Singh, MM Sinha	Investigating the Effect of Soil Texture on Dielectric Properties of Soil by Using Square Patch Sensor	Sensing and Imaging	1557-2072	2025	