

# Curriculum Vitae

**Prof. (Dr.) Manoj Kumar Singh**

**Designation: Professor**

**Qualification: PhD (Physics, IIT Bombay); Postdoctoral Fellow (USF, USA)**

**Area of Interest:** Nanoengineering and nanotechnology, advanced 2D materials (MXenes, MoS<sub>2</sub>, WS<sub>2</sub>, g-C<sub>3</sub>N<sub>4</sub>, hBN...etc.) and Based Composites; CVD techniques for diamond thin-films, epitaxial graphene, Raman Spectroscopy and Mapping, SPM, XPS, MBE-LEED, UHV systems, Electrical Energy Storage and Conversion, Photocatalytic degradation and detection of organic contaminants such as textile dyes, and pesticides from wastewater for Environmental and other Biomedical Applications, Nanofluids for Thermal Energy Storage

**Experience:** 17 Years

**E-mail ID:** [manojksingh@cuh.ac.in](mailto:manojksingh@cuh.ac.in)

**Contact No.:** (+91-7237986500)

**(Total publications # 118; total citation # 9300; h-index = 45; i10-index = 89)**

Google Scholar: <https://scholar.google.com/citations?user=YUNQMT4AAAAJ&hl=en>

(Sex: Male, born: 15<sup>th</sup> January 1975, Married, Nationality: Indian, Hometown: Varanasi (UP))

---



## **Biography**

Dr. MK. Singh has been working as Professor in the Department of Physics under School of Engineering and Technology (SOET) at Central University of Haryana (CUH) since December 30, 2022. Recently Dr Singh's name appear among **Stanford University's Top 2 percent Scientists list (published in Elsevier)**.

Dr. Singh completed his Master and PhD in Condensed Matter Physics from Lucknow University, Lucknow in 1998 and IIT Bombay in Dec, 2004, respectively. Immediately after the completion of his Ph.D., he joined the Nanotechnology Research and Education Center, University of South Florida, USA; during the one year and a half of the tenure of this position, he filed 2 US patents, published 2 research papers in peer-reviewed journals.

After coming back to India Dr. Singh joined as a Lecturer at Birla Institute of Technology (BIT-Mesra), Ranchi, Jharkhand, India for 6 Months. Further for the development of the research carrier Dr. Singh joined as Scientific Officer (Independent Research Position) Equivalent to Assistant Professor, University of Aveiro, Government of Portugal (EU - PT) From October, 2006 to

September, 2018 (12 years). During above said period Dr. Singh involved in research/teaching and worked various research topics such as Applied Surface Science; X-ray Photoelectron Spectroscopy/Low Electron Energy Loss Spectroscopy (LEED); Ultra-high Vacuum Systems; NanoEngineering, Nanoelectronics, CVD Diamond, Graphene- and other 2D Materials, Photovoltaics, and NanoFluids for Heat-transfer & Energy. During this period, he was person in-charge of multi-technique (XPS/UPS, AES in Ultra-High Vacuum condition) and supervised several Master, PhD and Postdoctoral students as Principal Supervisor. Furthermore, Dr. Singh joined as Associate Professor at Centre for Nano and Material Sciences (CNMS) Jain (Deemed – to – be University) (A++ Grade by NAAC), Bangalore, India; during the short stay, he published several research papers in peer-reviewed journals and supervised Master and PhD students. On 30<sup>th</sup> December, 2020 Dr. Singh joined as Associate Professor in the Department of Physics under SOET, CUH, and he is actively involved in teaching/research activities of UG/PG, PhD students.

Dr. Singh is recently awarded with 2 US patents, published more than 115 research papers in peer-reviewed International Journals (**total citation # 9300; h-index = 45; i10-index = 89**)

**Google Scholar:** <https://scholar.google.com/citations?user=YUNQMT4AAAAJ&hl=en>); **several Book chapters; Invited talks in scientific research organizations; in organizing committee of international conferences.**

Furthermore, Dr. Singh developed research collaboration with internationally reputed research institutes such as CSIC Madrid, Spain, IPCMS, Strasbourg, France, Luxembourg, Italy, Germany, UCL London & Portugal and publish research papers in high-impact journals include Scientific Reports (Nature Publisher), ACS Nano, Renewable and Sustainable Energy Reviews, IntComm Heat and Mass Transfer, ICHMT, J Thermal Science and Engineering Application, Advanced Functional Materials, Nanoscale, Appl. Phys. Lett., J. Mater. Chem., Carbon, and Chem. Materials, and also cited in Nanotechnology News (Nanowerk, Nanoscienceworks, etc.).

Dr. Singh is also involved as active team member (PI and co-PI) in various National and International Projects (PTDC/CTM-NAN/121108/2010; PTDC/EME-MFE/103051/2008; NANO/NMedAT/0115/2007; PTDC/CTM/100468/2008; PEst-C/EME/UI0481/2011).

In addition to this, Dr. Singh is winner of “Starting Grant” under FCT Investigator Programme 2013 call, Portuguese Science and Technology (research topic: “Tuning the Electronic Properties of Graphene by gas-phase Plasma Chemistry for Nanoelectronic Gas Sensor Devices” IF/00976/2013; 5-Year research funding programme) through worldwide open competition across all scientific areas. Furthermore, Dr. Singh was in organizing committee of the International Conference on Advanced Nano Materials (ANM 2008 & 2010, 2014), Invited speaker in various International conference/meetings, Guest Editor JNN and Visiting Professor at Kazakh National Technical University.

## Educational Details

- **M.Sc. (Physics), Lucknow University**, Specialization: Electronics, **1996-1998**, Lucknow University, Lucknow, (UP) Major Subjects: Quantum Mechanics, Solid State Physics, Electronics, Nuclear Physics, X-Rays, Laser & Opto-Electronics
- **Ph.D (Condensed Matter Physics), Indian Institute of Technology Bombay (IIT Bombay)**, Thesis Title: *Transition metal doping of Carbon Nanotubes: Theoretical and Experimental Studies*, **2000-Dec 2004** (Principal supervisor : Prof. P.P. Singh & Prof. D.S. Misra, Department of Physics, IIT Bombay)

## Professional Experience (Total # 17 Years Research/Teaching Experience)

<b>December 30, 2022 – Till Date</b>	Professor, Department of Physics, SOET, Central University of Haryana (CUH), <b>India</b>
<b>December 30, 2019 – December 29, 2022</b>	Associate Professor, Department of Physics, SOET, Central University of Haryana (CUH), <b>India</b>
<b>August 2017 – August 2019</b>	Associate Professor, Center for Nanomaterial Sciences, Jain (Deemed to be University) (Private) A++ grade with a CGPA of 3.71 on a four-point scale, Bangalore, Karnataka, <b>India</b>
<b>October 2006 – September 2018</b>	Scientific Officer (Independent Research Position) Equivalent to Assistant Professor, University of Aveiro, <b>Portugal (EU - PT)</b>
<b>May 2006 – September 2006</b>	Assistant Professor, BIT- Mesra, Ranchi, Jharkhand, <b>India</b>
<b>January 2005 – February 2006</b>	Postdoctoral Fellow (Fabrication of Nano-crystalline Diamond thin-films by Microwave Plasma CVD for MEMS and Biomedical Applications; NSF-NIRT), NREC, University of South Florida (USF), <b>USA</b>

## Short Visits for Collaborative Work and Experience in Abroad

1. 09/2001-12/2001; IPCMS, **Strasbourg, France** Project sponsored by the Indo-French Centre for the Promotion of Advanced Research (IFCPAR Project No. 1908-1); working with Dr. F. LeNORMAND
2. 11/2008-01/2009; Física e Ingeniería de Superficies, ICMM-CSIC, **Madrid, Spain**, Perform UHV STM measurements with Dr. José Angel Martín Gago, staff scientist of

the “instituto Ciencia de Materiales de Madrid” and leader of the ESISNA group ([www.icmm.csic.es/esisna](http://www.icmm.csic.es/esisna))

3. 06/2010-07/2010; Centre de Recherche Public Henri Tudor, **Luxembourg** ([www.tudor.lu](http://www.tudor.lu)), performed “Melanin and Graphene multi-layer (LBL) nanocomposite film for Electrochemical Biosensor” with Prof. Vincent BALL
4. 12/04/2011-15/04/2011; Visited **Omicron NanoTechnology, GmbH company, Germany** ([www.omicron.de](http://www.omicron.de)), for the aquisition of MULTIPROBE´S system
5. 12/10/2011-15/11/2011; Visited IMEM-CNR, **Parma, Italy** (<http://www.imem.cnr.it>) with Prof. Dr. Salvatore Iannotta (Director) regarding EU-project on Graphene for real time sensing device applications
6. 16/10/2011-20/11/2011; Física e Ingeniería de Superficies, ICMM-CSIC, **Madrid, Spain**, Perform UHV STM measurements on Epitaxial grown Graphene samples with Dr. José Angel Martín Gago ([www.icmm.csic.es/esisna](http://www.icmm.csic.es/esisna))
7. 23/10/2011-02/11/2011; **Kazakh National Technical University, Kazakhstan**, Visiting Professor

#### **Other activities/Responsibilities: (Academic/Administrative)**

1. Director University Consultancy Cell (07-12-2021 – till date)
2. Deputy Registrar (Estate and General Administration) (From 14 Jan. 2021 to 14 April 2022)
3. Hostel Warden Boys (06-09-2021 – 03-01-2023)
4. Center Superintendent for UG/PG Term End Examination 2022 - 23
5. Deputy Center Superintendent for PhD Entrance Examination 2022
6. Appointment of Centre Superintendent for CUCET 2020
7. Member - Departmental admission committee member for B. Tech admission, SOET, CUH
8. Space Allotment Committee Member
9. Member – Academic Council, CUH
10. Health Committee Member
11. Convener - Technical Support Committee in 7th Annual Convocation
12. Member - Departmental Research Committee (DRC), Department of Physics, CUH
13. Member - NSS, OBC Cell
14. Member - For the Judgment of models/exhibition for Science Day
15. Member - Working group for safe Arrival, Screening, and Safe Stay of Hostellers

16. Member - Hostel Mess Tendering Committee, Canteen & Shops Tendering Committee
17. Member - Central Purchase Committee
18. Member - Opening of Kendriya Vidyalaya in the Campus
19. Member – Hostel Manual Revision Committee
20. Member – Judgement of Projects (Anveshan – 2022)
21. Convener – M.Tech Ordinance, SOET, CUH
22. Special Invitee – School Board Meeting in SOET
23. Member - Departmental Research Committee (DRC), Department of Physics, CUH
24. Question paper setting, Invigilation/Proctoring duties in End Term Examinations (Year 2020 – 2021)
25. Member – Technical specification committee for Purchasing Scanning Probe Microscope (SPM)
26. Member - Departmental Research Committee (DRC), RAC member

### **Contribution to Society**

President of Haryana Kendriya Vishwavidyalaya Shaikshik Sangh, Mahendragarh (Haryana) (<https://abrsn.in/affiliated-universities>)

### **Academic Achievements**

<b>S. No</b>	<b>Name of Award</b>	<b>Awarding Year</b>	<b>Agency</b>
1	Bilateral Indo-Portuguese Project Award (Graphene-Based Flexible, Transparent Electrodes For Organic Light Emitting diodes and Photovoltaics) Between University of Aveiro, and Delhi Technological University, Delhi, India	2015	Funding agency FCT-DST
2	Winning of 2013 FCT Investigador Award Starting Grant (5 years fellowship)	2013	FCT, Ministry of Science and Technology, Gov. of Portugal

3	Project awarded title: "Production of Epitaxial graphene thin film by CVD for electronic device applications" (PTDC/CTM-NAN/121108/2010)	2012	FCT, Ministry of Science and Technology, Portugal
4	Investigador Auxiliar Research Position Awarded by (Cinecia 2007 Program, Ministry of Science and Technology, Portugal)	2007	FCT, Ministry of Science and Technology, Gov. of Portugal
5	FCT, Postdoctoral Fellowship Award	2006	FCT, Ministry of Science and Technology, Gov. of Portugal
6	Junior Research Fellowship, Department of Physics, Indian Institute of Technology Bombay	2000	MHRD, Gov. of India
7	Qualified Graduate Aptitude Test in Engineering (GATE)	1999	GATE, (MHRD), Gov. of India

### **Research Interests**

Nanoengineering and nanotechnology, advanced 2D materials (MXenens, MoS<sub>2</sub>, WS<sub>2</sub>, hBN...etc.) and Based Composites; CVD techniques for diamond thin-films, epitaxial graphene, Raman Spectroscopy and Mapping, SPM, XPS, MBE-LEED, UHV systems, Electrical Energy Storage and Conversion, Photocatalytic degradation and detection of organic contaminates such as textile dyes, and pesticides from wastewater for Environmental and other Biomedical Applications, Nanofluids for Thermal Energy Storage

### **Technical Experience**

1. Develop photoelectron spectroscopy lab (XPS/UPS-AES, UHV systems) for applied surface science
2. Design and Development of Experimental Set-Up (Thermal, Hot Filament and Microwave Chemical Vapor Deposition (CVD) Systems) for Diamond, graphene and other 2D materials
3. Physical Vapor Deposition (Sputtering Techniques, Thermal Evaporation, Electron Beam Evaporation, Pulsed Laser Deposition).
4. Electron Microscopy (Scanning Electron Microscopy, Transmission Electron Microscopy), Raman spectroscopy and mapping

5. Scanning Probe Microscopy (Atomic Force Microscopy, Scanning Tunneling Microscopy), Field-emission, and four probe electrical-transport measurements.

## Research Guidance

### [03-Postdoc (completed) + 02-PhD (completed) + 03-PhD (ongoing)]

1. 2018 - July 22, 2022 Shinde Pratik Vitthal (PhD student)  
Thesis Title: Fabrication and Characterization of Functional Two-dimensional Materials for Electrochemical Energy Conversion and Storage (July 22, 2022 Notification number: JU/18PHRSC028/2022-23/040; Co-Supervisor: **Prof. (Dr.) Manoj K. Singh**)
2. 2013- July, 2017, Dhananjay Kumar Sharma (PhD student)  
Erasmus Mundus Action-2 (Svagata.eu 3 Years Project; Lot11-India)  
Thesis Title: Growth and Characterization of Large Area Epitaxial Graphene and Molybdenum disulphide by Chemical Vapor Deposition (*Thesis submitted on August 1, 2017 and defended on 8th January 2018 in the PhD Program Nanoscience and Nanotechnology*)  
Principal Supervisor's: **Prof. (Dr.) Manoj K. Singh** and Andrei Kholkin
3. 2011- July, 2017 Syam Sundar (Postdoctoral Fellow)  
Project title: Heat Transfer and Friction Factor of Carbon Nanotubes (CNTs) Doped with Magnetic Fe<sub>3</sub>O<sub>4</sub> Nanoparticles in a Plain Tube and with Inserts (SFRH/BPD/79104/2011)  
Principal Supervisor: **Prof. (Dr.) Manoj K. Singh**
4. 2011-2012 Ranjit Hawaldar (Postdoctoral Fellow)  
Project title: Solution Processed Graphene based Transparent Dye Sensitized Solar Cells (SFRH/BPD/79016/2011)  
Principal Supervisor: **Prof. (Dr.) Manoj K. Singh**
5. 2012-2016 Gonzalo Guillermo Otero Irueta (Postdoctoral Fellow), (SFRH/BPD/90562/2012), Project title: New strategies for functionalize Epitaxial-Graphene: towards a well- controlled Click-Chemistry in 2D  
Principal Supervisor: **Prof. (Dr.) Manoj K. Singh**

## Research projects, Innovation & Development:

### List of Awarded Projects

1. Project awarded from FCT, (<http://www.fct.pt/index.phtml.en>), Ministry of Science and Technology, Portugal (PTDC/CTM-NAN/121108/2010) Production of Epitaxial graphene thin film by CVD for electronic device applications 76,140.00€ (01/05/2012- 31/05/2015) (PI)

2. Bilateral Indo-Portuguese Project (Graphene-Based Flexible, Transparent Electrodes For Organic Light Emitting diodes and Photovoltaics) between University of Aveiro, Aveiro Portugal and Delhi Technological University, Delhi, India (from 2015-2017) (PI)
3. The research project on Corporate R & D Cooperation entitled "SGH - SMART GREEN HOMES - project no. 7678" (POCI-01-0247-FEDER-007678), financed by the European Regional Development Fund (ERDF) through the Competitiveness and Internationalization Operational Program (POCI) (co-PI)
4. FCT, (<http://www.fct.pt/index.phtml.en>), Ministry of Science and Technology, Portugal (PTDC/EME-MFE/103051/2008) Graphene-Zeolite nanocomposite for hydrogen storage: The role of catalyst in spillover mechanism 105,00.00 € (01/05/2010-01/04/2013) (co-PI)
5. INL-Portugal/Spain International Nanotechnology Laboratory Capacitating Program in Nanotechnology, Nanomedicine Therapeutically Applications and Drug Delivery (<http://inl.int/about-inl/what-is-inl>) 183,240.00€ (01/01/2007-31/12/2010) (co-PI)
6. FCT, (<http://www.fct.pt/index.phtml.en>), Ministry of Science and Technology, Portugal (PTDC/CTM/100468/2008) Structural and chemical characterization at the nanometer scale, 165,000.00€ (01-05-2010- 30-04-2013) (co-PI)
7. Project co-financed by the National Strategic Reference Framework (QREN) under the programme "Mais Centro" and the European Union through the European Regional Development Fund, "Harvesting the energy of the sun for a sustainable future" (co-PI)
8. Collaborative Project on "Skill Formation and Employability: A study of Youth in India" (Reference: F. No. 02/SF-Study/VS/2021 Dated 08.12.2021, NIEPA, New Delhi)

### **Scientific Events Organization**

1. Co-organizer and member of the scientific committee of the 5th International Conference on Advanced Nano Materials (ANM2014), 2-4 July 2014, Aveiro, PT.
2. Co-organizer and member of the scientific committee of the 3rd International Conference on Advanced Nano Materials (ANM2010), 12-15 September 2010, Agadir, Morocco.
3. Co-organizer and member of the scientific committee of the 2nd International Conference on Advanced Nano Materials (ANM2008), 22-25 June 2008, Aveiro, PT.
4. Co-organizer and member of the scientific committee of the International Conference on ECAT 2016-2017 (<http://ecat-conference.com/committees/>), and International Workshop (Surface Analysis by XPS and AFM) July 17-19, 2017, Aveiro, PT.

### **One – Week Online Faculty Development Programme (FDP) for Assessment Period**



1. Development and Delivery of MOOCs and E – Content, jointly organized by Central university of Haryana, and IQAC, Deshlabdhu College, University of Delhi, 26 June – 01 July 2020
2. Nanomaterials and Devices, organized by Applied Science Department, NITTTR, Chandigarh 25/05/2020 to 29/05/2020 (One Week)
3. Thin films and their applications, Applied Science Department, NITTTR, Chandigarh 22/06/2020 to 26/06/2020 (One Week)
4. Quantum and Energy Materials: Potential & Applications, Applied Science Department, NITTTR, Chandigarh 18/05/2020 to 22/05/2020 (One Week)

### **Participation in Evaluation Juries**

- April 2013 – Jury member for the PhD thesis defense of João Nuno Barbosa Rodrigues, entitled “*Extended Stone-Wales defects in graphene*”, Department of Physics and Astronomy of Porto University.

## **List of publications (International Peer-Reviewed or UGC listed)**

**(Total publications # 116; total citation # 9300; h-index = 45; i10-index = 89)**

Google Scholar: <https://scholar.google.com/citations?user=YUNQMT4AAAAJ&hl=en>

1. A facile synthesis of ternary hybrid nanocomposite of WS<sub>2</sub>/ZnO/PPy: An efficient Photocatalyst for the degradation of Chromium Hexavalent, Nahid Tyagi, Waseem Ashraf, Honey Mittal, Tarab Fatima, Manika Khanuja and Manoj Kumar Singh, Dyes and Pigments (Elsevier) ISSN 0143-7208 Manuscript Number: DYPI-D-22-01337R1 (Accepted) 2022 (Impact Factor: 5.112)
2. Solar energy absorbed thermosyphon flat plate collector analysis using Cu/H<sub>2</sub>O nanofluid– An experimental study, LS Sundar, V Punnaiah, MK Singh, AMB Pereira, ACM Sousa, Energy and Climate Change 2, 100028 6 2021 (Impact Factor: 2.945)
3. Ternary VS<sub>2</sub>/ZnS/CdS hybrids as efficient electrocatalyst for hydrogen evolution reaction: Experimental and theoretical insights, PV Shinde, DS Gavali, R Thapa, MK Singh, CS Rout  
a. AIP Advances 11 (10), 105010 5 2021 (Impact Factor: 1.548)
4. Thermosyphon solar water heating system with Cu/water nanofluid and wire coil configurations: Efficiency, energy, economic, environmental, and heat transfer study, LS Sundar, TT Akanaw, MK Singh, ACM Sousa, Environmental Progress & Sustainable Energy 40 (5), e13648 2021 (Impact Factor: 2.431)
5. Facile Hydrothermal Synthesis of CoFe<sub>2</sub>O<sub>4</sub>/Co<sub>3</sub>O<sub>4</sub> Nanostructures for Efficient Oxygen Evolution Reaction, MK Singh, PV Shinde, R Samal, CS Rout, Nanomaterials Science & Engineering 3 (1), 22-30 2021 (Impact Factor: 7.139)
6. Optimized performance of nickel in crystal-layered arrangement of NiFe<sub>2</sub>O<sub>4</sub>/rGO hybrid for high-performance oxygen evolution reaction, P Shinde, CS Rout, D Late, PK Tyagi, MK Singh  
a. International Journal of Hydrogen Energy 46 (2), 2617-2629 26 2021 (Impact Factor: 7.139)
7. ENERGY, ECONOMIC, ENVIRONMENTAL AND HEAT TRANSFER ANALYSIS OF A SOLAR FLAT-PLATE COLLECTOR WITH pH-TREATED Fe<sub>3</sub>O<sub>4</sub>/WATER, LS Sundar, S Mesfin, Z Said, MK Singh, V Punnaiah, ACM Sousa, International Journal of Energy for a Clean Environment 22 (6) 11 2021 (Impact Factor: 1.683)
8. Efficiency analysis of thermosyphon solar flat plate collector with low mass concentrations of ND–Co<sub>3</sub>O<sub>4</sub> hybrid nanofluids: an experimental study, L Syam Sundar, AH Misganaw, MK Singh, A Sousa, HM Ali, Journal of Thermal Analysis and Calorimetry 143 (2), 959-97215 2021 (Impact Factor: 4.626)
9. Combination of Co<sub>3</sub>O<sub>4</sub> deposited rGO hybrid nanofluids and longitudinal strip inserts: Thermal properties, heat transfer, friction factor, and thermal performance evaluations, LS

10. Efficiency, energy and economic analysis of twisted tape inserts in a thermosyphon solar flat plate collector with Cu nanofluids, LS Sundar, AH Misganaw, MK Singh, AMB Pereira, ACM Sousa, Renewable Energy Focus 35, 10-31 17 2020 (Impact Factor: 5.72)
11. Augmentation of Heat Transfer of High Prandtl Number Fe<sub>3</sub>O<sub>4</sub>/vacuum pump oil nanofluids flow in a tube with twisted tape inserts in laminar flow, LS Sundar, MK Singh, A Pereira, A Sousa, Heat and Mass Transfer 56 (11), 3111-3125 4 2020 (Impact Factor: 1.867)
12. Thermal Energy Storage in Phase Change Materials and Its Applications, MK Singh, LS Sundar, MB Pereira, ACM Sousa, Latent Heat-Based Thermal Energy Storage Systems, 29-49 2020
13. Energy, efficiency, economic impact, and heat transfer aspects of solar flat plate collector with Al<sub>2</sub>O<sub>3</sub> nanofluids and wire coil with core rod inserts, LS Sundar, YT Sintie, Z Said, MK Singh, V Punnaiah, ACM Sousa, Sustainable Energy Technologies and Assessments 40, 100772 53 2020 (Impact Factor: 7.632)
14. Experimental Heat Transfer and Friction Factor of Fe<sub>3</sub>O<sub>4</sub> Magnetic Nanofluids Flow in a Tube under Laminar Flow at High Prandtl Numbers, LS Sundar, HM Abebaw, MK Singh, AMB Pereira, ACM Sousa, Heat Technol.(Pisa, Italy) 38, 301-313 4 2020
15. Heat transfer and effectiveness experimentally-based analysis of wire coil with core-rod inserted in Fe<sub>3</sub>O<sub>4</sub>/water nanofluid flow in a double pipe U-bend heat exchanger, LS Sundar, NTR Kumar, BM Addis, P Bhramara, MK Singh, ACM Sousa, International Journal of Heat and Mass Transfer 134, 405-419 34 2019 (Impact Factor: 5.584)
16. Experimental Study on Heat Transfer and Friction Factor of Nanodiamond-Nickel (ND-Ni) Nanocomposite Nanofluids Flow in a Tube With Twisted Tape Inserts, LS Sundar, MK Singh, A Sousa, Journal of Nanofluids 8 (5), 980-989 1 2019
17. Functionalized-Ferroelectric-Coatings-Driven Enhanced Biomineralization and Protein-Conformation on Metallic Implants, MHVFP MV Sebastian Zlotnik, Marisa Maltez da Costa, Nathalie Barroca, Maria, Journal of Materials Chemistry B 10 2019 (Impact Factor: 6.331)
18. Heat transfer and effectiveness experimentally-based analysis of wire coil with core-rod inserted in Fe<sub>3</sub>O<sub>4</sub>/water nanofluid flow in a double pipe U-bend heat exchanger, L.Syam Sundar, Manoj K.Singh, and Antonio C.M.Sousa International Journal of Heat and Mass Transfer 134, 405-435 (2019) (<https://doi.org/10.1016/j.ijheatmasstransfer.2019.01.041>) ISSN: 0017-9310 Journal No. as per the UGC List # 22877; Pergamon-Elsevier Science Ltd I.F: 3.891
19. Effectiveness analysis of solar flat plate collector with Al<sub>2</sub>O<sub>3</sub> water nanofluids and with longitudinal strip inserts, L.Syam Sundar, A.Kirubei, V.Punnaiah, Manoj K. Singh, Antonio C.M.Sousa, International Journal of Heat and Mass Transfer 127, 422-419 (2018)

(<https://doi.org/10.1016/j.ijheatmasstransfer.2018.08.025>) ISSN: 0017-9310 Journal No. as per the UGC List # 22877; Pergamon-Elsevier Science Ltd I.F: 3.891

20. Effect of Twisted Tape Inserts on Heat Transfer Friction Factor of Fe<sub>3</sub>O<sub>4</sub> Nanofluids Flow in a Double Pipe U-Bend Heat Exchanger, N.T. Ravi Kumar, P. Bhramar, A. Kirubeil, L. Syam Sundar, MK Singh\*, International Communications in Heat and Mass Transfer 95, 53-62 (2018) (<https://doi.org/10.1016/j.icheatmasstransfer.2018.03.020>) ISSN: 0735-1933; Pergamon-Elsevier Science Ltd I.F: 4.463
21. Turbulent heat transfer and friction factor of nanodiamond-nickel hybrid nanofluids flow in a tube: An experimental study, L. Syam Sundar, MK Singh\*, Antonio C.M. Sousa, International Journal of Heat and Mass Transfer (Elsevier) 117, 223–234 (2018) ISSN: 0017-9310 (<https://doi.org/10.1016/j.ijheatmasstransfer.2017.09.109>); Journal No. as per the UGC List # 22877; Pergamon-Elsevier Science Ltd I.F: 3.891
22. Heat transfer and friction factor of nanodiamond-nickel hybrid nanofluids flow in a tube with longitudinal strip inserts, L. Syam Sundar, M K. Singh\*, Antonio C.M. Sousa, International Journal of Heat and Mass Transfer 121, 390–401 (2018) (<https://doi.org/10.1016/j.ijheatmasstransfer.2017.12.096>) ISSN: 0017-9310; Journal No. as per the UGC List # 22877; Pergamon-Elsevier Science Ltd I.F: 3.891
23. Experimental Investigation of Al<sub>2</sub>O<sub>3</sub>/Water Nanofluid on the Effectiveness of Solar Flat-Plate Collectors with and without Twisted Tape Inserts, LS Sundar, MK Singh\*, ACM Sousa, Renewable Energy Volume 119, Pages 820-833 (2018) (<https://doi.org/10.1016/j.renene.2017.10.056>) ISSN: 0960-1481 Journal No. as per the UGC List # 10267; Pergamon-Elsevier Science Ltd I.F: 4.900
24. Optimization of post-deposition annealing in Cu<sub>2</sub>ZnSnS<sub>4</sub> thin film solar cells and its impact on device performance, MG Sousa, AF da Cunha, JP Teixeira, JP Leitão, G Otero-Irurueta, MK Singh, Solar Energy Materials and Solar Cells 170, 287-294 (2017) (<https://doi.org/10.1016/j.solmat.2017.05.065>) ISSN: 0927-0248 Journal No. as per the UGC List # 33284; Elsevier Science Bv I.F: 5.018
25. Charge injection in large area multilayer graphene by ambient Kelvin probe force microscopy, I Bdkin, DK Sharma, G Otero-Irurueta, MJ Horigüela, PK Tyagi, V Neto, MK Singh\*, Applied Materials Today 8, 18-25 (2017) (<https://doi.org/10.1016/j.apmt.2016.11.005>) ISSN: 2352-9407, Journal No. as per the UGC List # 15907 Elsevier Science Bv CiteScore: 9.90
26. Effect of samarium and vanadium co-doping on structure, ferroelectric and photocatalytic properties of bismuth titanate, E. Venkata Ramana, N. V. Prasad, David Maria Tobaldi, M. K. Singh, M. P. Seabra, G. Prasad and M. A. Valente, RSC Adv., 2017, 7, 9680–9692 (2017) (<https://doi.org/10.1039/c7ra00021a>) ISSN: 2046-2069 Journal No. as per the UGC List # 23625 Royal Soc Chemistry I.F: 2.936
27. Filled-carbon nanotubes: 1 D nanomagnets possessing uniaxial magnetization axis and reversal magnetization switching, R Kumari, A Singh, BS Yadav, DR Mohapatra, A Ghosh, P Guha, MK Singh, PK Tyagi, CARBON 119, 464-475 (2017)

(<https://doi.org/10.1016/j.carbon.2017.04.053>) ISSN: 0008-6223 Journal No. as per the UGC List # 5037 Pergamon-Elsevier Science Ltd I.F: 7.28

28. Heat transfer, friction factor and effectiveness of Fe<sub>3</sub>O<sub>4</sub> nanofluid flow in an inner tube of double pipe U-bend heat exchanger with and without longitudinal strip inserts, NTR Kumar, P Bhramara, LS Sundar, MK Singh\*, ACM Sousa, Experimental Thermal and Fluid Science 85, 331-343(2017) (<https://doi.org/10.1016/j.expthermflusci.2017.03.019>) ISSN: 0894-1777 Journal No. as per the UGC List # 29111 Elsevier Science Inc I.F: 3.204
29. Experimental heat transfer, friction factor and effectiveness analysis of Fe<sub>3</sub>O<sub>4</sub> nanofluid flow in a horizontal plain tube with return bend and wire coil inserts, LS Sundar, P Bhramara, NTR Kumar, MK Singh\*, ACM Sousa, International Journal of Heat and Mass Transfer 109, 440-453 (2017) (<https://doi.org/10.1016/j.ijheatmasstransfer.2017.02.022>) ISSN: 0017-9310 Journal No. as per the UGC List # 22877 Pergamon-Elsevier Science Ltd I.F: 3.891
30. Experimental investigation of the thermal transport properties of graphene oxide/Co<sub>3</sub>O<sub>4</sub> hybrid nanofluids, LS Sundar, MK Singh\*, MC Ferro, ACM Sousa, International Communications in Heat and Mass Transfer 84, 1-10 (2017) (<https://doi.org/10.1016/j.icheatmasstransfer.2017.03.001>) ISSN: 0735-1933 Journal No. as per the UGC List # 2281 Pergamon-Elsevier Science Ltd I.F: 4.463
31. Defect concentration in nitrogen-doped graphene grown on Cu substrate: A thickness effect, DK Sharma, S Fateixa, MJ Hortigüela, R Vidyasagar, G Otero-Irurueta, MK Singh, Physica B: Condensed Matter 513, 62-68 (2017) (<https://doi.org/10.1016/j.physb.2017.03.004>) ISSN: 0921-4526 Journal No. as per the UGC List # 30753 Elsevier Bv I.F: 1.453
32. Purely Visible-Light-Induced Photochromism in Ag–TiO<sub>2</sub> Nanoheterostructures, DM Tobaldi, MJ Hortigüela Gallo, G Otero-Irurueta, MK Singh, RC Pullar, Langmuir 33 (20), 4890-4902 (2017) (<https://doi.org/10.1021/acs.langmuir.6b04474>) ISSN: 0743-7463 Journal No. as per the UGC List # 4326 American Chemical Society I.F: 3.789
33. Biocompatibility and biotoxicity of in-situ synthesized carboxylatednanodiamond-cobalt oxide nanocomposite, LS Sundar, NA Anjum, MC Ferro, E Pereira, MK Singh\*, ACM Sousa, Journal of Materials Science & Technology, Volume 33, Issue 8, 879-888 (2017) (<https://doi.org/10.1016/j.jmst.2017.03.016>) ISSN: 1005-0302 Journal No. as per the UGC List # 24462 Allerton Press Inc. I.F: 3.609
34. Heat transfer, friction factor and effectiveness analysis of Fe<sub>3</sub>O<sub>4</sub>/water nanofluid flow in a double pipe heat exchanger with return bend, NTR Kumar, P Bhramara, BM Addis, LS Sundar, MK Singh\*, ACM Sousa, International Communications in Heat and Mass Transfer 81, 155-163 (2017) (<https://doi.org/10.1016/j.icheatmasstransfer.2016.12.019>) ISSN: 0735-1933 Journal No. as per the UGC List # 2281 Pergamon-Elsevier Science Ltd I.F: 4.463
35. Hybrid nanofluids preparation, thermal properties, heat transfer and friction factor—A review, LS Sundar, KV Sharma, MK Singh\*, ACM Sousa, Renewable and Sustainable Energy Reviews 68, 185-198 (2017) (<https://doi.org/10.1016/j.rser.2016.09.108>) ISSN: 1364-0321 Journal No. as per the UGC List # 10266 Elsevier Bv I.F: 9.184
36. Experimental thermal conductivity and viscosity of nanodiamond-based propylene glycol and water mixtures, LS Sundar, MK Singh\*, ACM Sousa, Diamond and Related Materials 69, 49-60 (2016) (<https://doi.org/10.1016/j.diamond.2016.07.007>) ISSN: 0925-9635 as per the UGC List # 13134 Elsevier Science Sa I.F: 2.232
37. Nanographene Oxide Functionalization with Organic and Hybrid Organic–Inorganic Polymers by Molecular Layer Deposition, A Jaggernauth, RM Silva, MA Neto, MJ Hortigüela, G Gonçalves, MK Singh et al., The Journal of Physical Chemistry C 120 (42), 24176-24186

- (2016) (<http://pubs.acs.org/doi/abs/10.1021/acs.jpcc.6b07909>) ISSN: 1932-7447 Journal No. as per the UGC List #19195 American Chemical Society I.F: 4.484
- 38.** Heat transfer and friction factor of multi-walled carbon nanotubes–Fe<sub>3</sub>O<sub>4</sub> nanocomposite nanofluids flow in a tube with/without longitudinal strip inserts, LS Sundar, G Otero-Irurueta, MK Singh\*, ACM Sousa, International Journal of Heat and Mass Transfer 100, 691-703 (2016)(<https://doi.org/10.1016/j.ijheatmasstransfer.2016.04.065>) ISSN: 0017-9310 Journal No. as per the UGC List # 22877 Pergamon-Elsevier Science Ltd I.F: 3.891
- 39.** Effects of additives on kinetics, morphologies and lead-sensing property of electrodeposited bismuth films, AR Rajamani, S Jothi, MD Kumar, S Srikanth, MK Singh, The Journal of Physical Chemistry C 120 (39), 22398-22406 (2016) (<http://pubs.acs.org/doi/abs/10.1021/acs.jpcc.6b06924>) ISSN: 1932-7447 Journal No. as per the UGC List # 19195 American Chemical Society I.F: 4.484
- 40.** Thermal conductivity and viscosity of water based nanodiamond (ND) nanofluids: An experimental study, LS Sundar, MJ Hortiguera, MK Singh\*, ACM Sousa, International Communications in Heat and Mass Transfer 76, 245-255 (2016) (<https://doi.org/10.1016/j.icheatmasstransfer.2016.05.025>) ISSN: 0017-9310 Journal No. as per the UGC List # 2281 Pergamon-Elsevier Science Ltd I.F: 4.463
- 41.** Crystal structure, phase stoichiometry and chemical environment of Mg<sub>x</sub>Nb<sub>y</sub>O<sub>x+y</sub> nanoparticles and their impact on hydrogen storage in MgH<sub>2</sub>, D Pukazhselvan, G Otero-Irurueta, J Pérez, B Singh, I Bdikin, MK Singh, International journal of hydrogen energy 41 (27), 11709-11715 (2016)(<https://doi.org/10.1016/j.ijhydene.2016.04.029>) ISSN: 0360-3199 Journal No. as per the UGC List # 22910 Pergamon-Elsevier Science Ltd I.F: 4.229
- 42.** Exclusive Endothermic Oxidation of Fe<sub>3</sub>C-Filled Multi-Walled Carbon Nanotubes, L Krishnia, V Kumar, R Kumari, P Garg, BS Yadav, A Rath, A Ghosh, MK Singh, PK Tyagi, Advanced Science, Engineering and Medicine 8 (6), 460-467 (2016)(<https://doi.org/10.1166/ asem.2016.1876>) ISSN: 2164-6627 Journal No. as per the UGC List # 11660 American Scientific Publishers I.F: 0.9
- 43.** Nanodiamond-Fe<sub>3</sub>O<sub>4</sub> nanofluids: preparation and measurement of viscosity, electrical and thermal conductivities, LS Sundar, EV Ramana, MPF Graça, MK Singh\*, ACM Sousa, International Communications in Heat and Mass Transfer 73, 62-74 (2016)(<https://doi.org/10.1016/j.icheatmasstransfer.2016.02.013>) ISSN: 0017-9310 Journal No. as per the UGC List # 2281 Pergamon-Elsevier Science Ltd I.F: 4.463
- 44.** Thermal conductivity and viscosity of hybrid nanofluids prepared with magnetic nanodiamond-cobalt oxide (ND-Co<sub>3</sub>O<sub>4</sub>) nanocomposite, LS Sundar, GO Irurueta, EV Ramana, MK Singh\*, ACM Sousa, Case Studies in Thermal Engineering 7, 66-77 (2016)(<https://doi.org/10.1016/j.csite.2016.03.001>) ISSN: 2214-157X Journal No. as per the UGC List # 5145 Elsevier Bv CiteScore: 3.26
- 45.** Enhanced thermal properties of nanodiamond nanofluids, LS Sundar, MK Singh\*, ACM Sousa, Chemical Physics Letters 644, 99-110 (2016)(<https://doi.org/10.1016/j.cplett.2015.11.028>) ISSN: 0009-2614 Journal No. as per the UGC List # 5475 Elsevier Bv I.F: 1.686
- 46.** Electrostatic self-assembled graphene oxide-collagen scaffolds towards a three-dimensional microenvironment for biomimetic applications, AF Girão, G Gonçalves, KS Bhangra, JB Phillips, J Knowles, G Irurueta, MK Singh, Paula AAP Marques, RSC Advances 6 (54),

47. Heat Transfer and Friction Factor of Al<sub>2</sub>O<sub>3</sub> Nanofluid Flow in a Double Pipe U-Tube Heat Exchanger and with Longitudinal Strip Inserts: An Experimental Study, PV Prasad, A Gupta, LS Sundar, MK Singh\*, A Sousa, *Journal of Nanofluids* 4 (3), 293-301 (2015) (<https://doi.org/10.1166/jon.2015.1161>) ISSN: 2169-432X Journal No. as per the UGC List 48725 American scientific publishers I.F: 0.9
48. Heat transfer enhancement of low volume concentration of carbon nanotube-Fe<sub>3</sub>O<sub>4</sub>/water hybrid nanofluids in a tube with twisted tape inserts under turbulent flow, LS Sundar, ACM Sousa, MK Singh\*, *Journal of Thermal Science and Engineering Applications* 7 (2), 021015 (2015) (doi: 10.1115/1.4029622) ISSN: 19485085 Journal No. as per the UGC List 11385 ASME I.F: 0.993
49. Experimental study of heat transfer and friction factor of Al<sub>2</sub>O<sub>3</sub> nanofluid in U-tube heat exchanger with helical tape inserts, PVD Prasad, A Gupta, M Sreeramulu, LS Sundar, MK Singh\*, ACM Sousa, *Experimental thermal and fluid science* 62, 141-150 (2015) (<https://doi.org/10.1016/j.expthermflusci.2014.12.006>) ISSN: 0894-1777 Journal No. as per the UGC List 2911 Elsevier Science Inc I.F: 3.204
50. Magnetic Field Induced Enhancement in Thermal Conductivity and Viscosity of Stabilized Vacuum Pump Oil (VPO)—Fe<sub>3</sub>O<sub>4</sub> Magnetic Nanofluids, LS Sundar, EV Ramana, MK Singh\*, A Sousa, *Journal of Nanofluids* 4 (1), 7-15 (2015) (<https://doi.org/10.1166/jon.2015.1124>) ISSN: 2169-432X I.F: 0.90
51. Quantitative XRD characterisation and gas-phase photocatalytic activity testing for visible-light (indoor applications) of KRONOClean 7000®, DM Tobaldi, MP Seabra, G Otero-Irurueta, YR de Miguel, RJ Ball, MK Singh, *RSC Advances* 5 (124), 102911-102918 (2015) (doi: 10.1039/C5RA22816F) ISSN: 2046-2069 I.F: 2.936
52. Nitrogen-modified nano-titania: True phase composition, microstructure and visible-light induced photocatalytic NO<sub>x</sub> abatement, DM Tobaldi, RC Pullar, AF Gualtieri, G Otero-Irurueta, MK Singh, MP Seabra, JA Labrincha, *Journal of Solid State Chemistry*, 231, 87-100 (2015) (<https://doi.org/10.1016/j.jssc.2015.08.008>) ISSN: 0022-4596 I.F: 2.130
53. Electrical conductivity enhancement of nanodiamond–nickel (ND–Ni) nanocomposite based magnetic nanofluids, LS Sundar, K Shusmitha, MK Singh\*, ACM Sousa, *International Communications in Heat and Mass Transfer* 57, 1-7 (2014) (<https://doi.org/10.1016/j.icheatmasstransfer.2014.07.003>) ISSN: 0735-1933 I.F: 4.463
54. Comparative study on thermal performance of twisted tape and wire coil inserts in turbulent flow using CuO/water nanofluid, MT Naik, SS Fahad, LS Sundar, MK Singh\*, *Experimental Thermal and Fluid Science* 57, 65-76(2014) (<https://doi.org/10.1016/j.expthermflusci.2014.04.006>) ISSN: 0894-1777 I.F: 3.204
55. Preparation, Thermal and Rheological Properties of Propylene Glycol and Water Mixture Based Fe<sub>3</sub>O<sub>4</sub> Nanofluids, LS Sundar, EV Ramana, MK Singh\*, J Gracio, A Sousa, *Journal of Nanofluids* 3 (3), 200-209(2014) (<https://doi.org/10.1166/jon.2014.1108>) ISSN: 2169-432X I.F: 0.90
56. Thermal conductivity and viscosity of stabilized ethylene glycol and water mixture Al<sub>2</sub>O<sub>3</sub> nanofluids for heat transfer applications: an experimental study, LS Sundar, EV Ramana, MK Singh\*, ACM Sousa, *International Communications in Heat and Mass Transfer* 56, 86-

- 95(2014) (<https://doi.org/10.1016/j.icheatmasstransfer.2014.06.009>) ISSN: 0735-1933 I.F: 4.463
- 57.** Experimental investigations in heat transfer and friction factor of magnetic Ni nanofluid flowing in a tube, LS Sundar, MK Singh\*, I Bidkin, ACM Sousa, International Journal of Heat and Mass Transfer 70, 224-234(2014)(<https://doi.org/10.1016/j.ijheatmasstransfer.2013.11.004>) ISSN: 0017-9310 I.F: 3.891
- 58.** Enhanced heat transfer and friction factor of MWCNT–Fe<sub>3</sub>O<sub>4</sub>/water hybrid nanofluids, LS Sundar, MK Singh\*, ACM Sousa, International Communications in Heat and Mass Transfer 52, 73-83(2014) (<https://doi.org/10.1016/j.icheatmasstransfer.2014.01.012>) ISSN: 0735-1933 I.F: 4.463
- 59.** Single-bilayer graphene oxide sheet impacts and underlying potential mechanism assessment in germinating faba bean (*Vicia faba* L.), NA Anjum, N Singh, MK Singh, I Sayeed, AC Duarte, E Pereira, I Ahmad, Science of the Total Environment 472, 834-841 (2014) (<https://doi.org/10.1016/j.scitotenv.2013.11.018>) ISSN: 0048-9697 I.F: 4.610
- 60.** Enhanced thermal conductivity and viscosity of nanodiamond-nickel nanocomposite nanofluids, LS Sundar, MK Singh\*, EV Ramana, B Singh, J Grácio, ACM Sousa, Scientific Reports 4 (4039) (2014) Nature Publisher (doi: 10.1038/srep04039) ISSN: 2045-2322 I.F: 4.609
- 61.** Thermal conductivity of ethylene glycol and water mixture based Fe<sub>3</sub>O<sub>4</sub> nanofluid, LS Sundar, MK Singh\*, ACM Sousa, International Communications in Heat and Mass Transfer 49, 17-24 (2013) (<https://doi.org/10.1016/j.icheatmasstransfer.2013.08.026>) ISSN: 0735-1933 I.F: 4.463
- 62.** Comparison of Synthetic Dopamine–Eumelanin Formed in the Presence of Oxygen and Cu<sup>2+</sup> Cations as Oxidants, V Ball, J Gracio, M Vila, MK Singh, MH Metz-Boutigue, M Michel, J Bour, Langmuir 29 (41), 12754-12761(2013) (<https://doi.org/10.1021/la4029782>) ISSN: 0743-7463 I.F:3.789
- 63.** Empirical and theoretical correlations on viscosity of nanofluids: a review, LS Sundar, KV Sharma, MT Naik, MK Singh, Renewable and Sustainable Energy Reviews 25, 670-686(2013) (<https://doi.org/10.1016/j.rser.2013.04.003>) ISSN: 1364-0321 I.F:9.184
- 64.** Nanodiamonds activate blood platelets and induce thromboembolism, S Kumari, MK Singh, SK Singh, JJA Grácio, D Dash, Nanomedicine 9 (3), 427-440 (2014) (<https://doi.org/10.2217/nnm.13.23>) (<https://doi.org/10.2217/nnm.13.23>) ISSN: 1549-9634 I.F:5.005
- 65.** Investigation of thermal conductivity and viscosity of Fe<sub>3</sub>O<sub>4</sub> nanofluid for heat transfer applications, LS Sundar, MK Singh\*, ACM Sousa, International communications in heat and mass transfer 44, 7-14(2013) (<https://doi.org/10.1016/j.icheatmasstransfer.2013.02.014>) ISSN: 0735-1933 I.F: 4.463



- 66.** Convective heat transfer and friction factor correlations of nanofluid in a tube and with inserts: a review, LS Sundar, MK Singh\*, Renewable and Sustainable Energy Reviews 20, 23-35(2013) (<https://doi.org/10.1016/j.rser.2012.11.041>) ISSN: 1364-0321 I.F:9.184
- 67.** Single-bilayer graphene oxide sheet tolerance and glutathione redox system significance assessment in faba bean (*Vicia faba* L.), NA Anjum, N Singh, MK Singh, ZA Shah, AC Duarte, E Pereira, I Ahmad, Journal of nanoparticle research 15 (7), 1770 (2013) (DOI: 10.1016/j.scitotenv.2013.11.018) ISSN: 1388-0764 I.F:2.127
- 68.** Morphological, compositional and ultrastructural changes in the *Scrobiculariaplana* shell in response to environmental mercury—An indelible fingerprint of metal exposure?, I Ahmad, MK Singh, ML Pereira, M Pacheco, MA Santos, AC Duarte, Chemosphere 90 (11), 2697-2704(2013) (<https://doi.org/10.1016/j.chemosphere.2012.11.049>) ISSN: 0045-6535 I.F:4.427
- 69.** Experimental thermal conductivity of ethylene glycol and water mixture based low volume concentration of Al<sub>2</sub>O<sub>3</sub> and CuO nanofluids, LS Sundar, MH Farooky, SN Sarada, MK Singh\*, International Communications in Heat and Mass Transfer 41, 41-46(2013) (<https://doi.org/10.1016/j.icheatmasstransfer.2012.11.004>) ISSN: 0735-1933 I.F: 4.463
- 70.** Self-assembly of tetramers of 5, 6-dihydroxyindole explains the primary physical properties of eumelanin: Experiment, simulation, and design, CT Chen, V Ball, JJ de Almeida Gracio, MK Singh, V Toniazzo, D Ruch, ACS NANO 7 (2), 1524-1532 (2013) (<http://pubs.acs.org/doi/abs/10.1021/nn305305d>) ISSN 1936-0851 I.F: 13.709
- 71.** Viscosity of low volume concentrations of magnetic Fe<sub>3</sub>O<sub>4</sub> nanoparticles dispersed in ethylene glycol and water mixture, LS Sundar, EV Ramana, MK Singh\*, ACM Sousa, Chemical physics letters 554, 236-242 (2012) (<https://doi.org/10.1016/j.cplett.2012.10.042>) ISSN: 0009-2614 I.F: 1.686
- 72.** Large-area high-throughput synthesis of monolayer graphene sheet by Hot Filament Thermal Chemical Vapor Deposition, R Hawaldar, P Merino, MR Correia, I Bdikin, J Grácio, J Méndez, MK Singh\*, Scientific Reports 2, 682 (2012) Nature Publisher (doi:10.1038/srep00682) ISSN: 2045-2322; I.F: 4.609
- 73.** Direct nucleation of silver nanoparticles on graphene sheet, MK Singh\*, E Titus, R Krishna, RR Hawaldar, G Goncalves, P Marques, Journal of nanoscience and nanotechnology 12 (8), 6731-6736 (2012) (<https://doi.org/10.1166/jnn.2012.4572>) ISSN 0974 - 3081 I.F: 1.354
- 74.** Graphene oxide and hydroxyapatite as fillers of polylactic acid nanocomposites: preparation and characterization, PAAP Marques, G Gonçalves, MK Singh, J Grácio, Journal of nanoscience and nanotechnology 12 (8), 6686-6692 (2012) (<https://doi.org/10.1166/jnn.2012.4565>) ISSN 0974 - 3081 I.F: 1.354
- 75.** Non-thrombotic and haemocompatible amine-modified graphene is a safer alternative to graphene oxide for biomedical use, PP Kulkarni, SK Singh, MK Singh, VK Sonkar, JJA Grácio, D Dash, The FASEB Journal 26 (1 Supplement), 681.18-681.18 (2012) ([http://www.fasebj.org/content/26/1\\_Supplement/681.18.short](http://www.fasebj.org/content/26/1_Supplement/681.18.short)) ISSN: 0892-6638 I.F: 5.595

- 76.** Amine-modified graphene: thrombo-protective safer alternative to graphene oxide for biomedical applications, SK Singh, MK Singh, PP Kulkarni, VK Sonkar, JJA Grácio, D Dash, ACS NANO 6 (3), 2731-2740 (2012) (<http://pubs.acs.org/doi/abs/10.1021/nn300172t>) ISSN: 1936-0851 I.F: 13.709
- 77.** Deposition mechanism and properties of thin polydopamine films for high added value applications in surface science at the nanoscale, V Ball, D Del Frari, M Michel, MJ Buehler, V Toniazzo, MK Singh, J Gracio, BioNanoScience 2 (1), 16-34 (2012) (<https://link.springer.com/article/10.1007/s12668-011-0032-3>) ISSN: 2191-1630 I.F: 2.5
- 78.** Experimental investigation of forced convection heat transfer and friction factor in a tube with Fe<sub>3</sub>O<sub>4</sub> magnetic nanofluid, LS Sundar, MT Naik, KV Sharma, MK Singh\*, TCS Reddy, Experimental Thermal and Fluid Science 37, 65-71 (2012) (<https://doi.org/10.1016/j.expthermflusci.2011.10.004>) ISSN: 0894-1777 I.F: 3.204
- 79.** Heat Transfer Enhancement and Friction Factor of Water/Al<sub>2</sub>O<sub>3</sub> Nanofluid in Circular Tube with Longitudinal Strip Inserts Under Laminar Flow, L. Syam Sundar, K. V. Sharma, Rosli A. Bakar and M. K. Singh, International Journal of Microscale and Nanoscale Thermal and Fluid Transport Phenomena 3(4) 309 (Nova Science Publishers, Inc. (2012)) ISSN: 1949-4955 I.F: 1.453
- 80.** Characterization of graphene oxide by flow cytometry and assessment of its cellular toxicity, SK Singh, MK Singh, MK Nayak, S Kumari, JJA Grácio, D Dash, Journal of biomedical nanotechnology 7 (1), 30-31 (2011) (<https://doi.org/10.1166/jbn.2011.1186>) ISSN: 1550-7033 I.F: 5.068
- 81.** Thrombus inducing property of atomically thin graphene oxide sheets, SK Singh, MK Singh, MK Nayak, S Kumari, S Shrivastava, JJA Grácio, ACS NANO 5 (6), 4987-4996 (2012) (<http://pubs.acs.org/doi/abs/10.1021/nn201092p>) ISSN: 1936-0851 I.F: 13.709
- 82.** Size distribution analysis and physical/fluorescence characterization of graphene oxide sheets by flow cytometry, SK Singh, MK Singh, MK Nayak, S Kumari, JJA Grácio, D Dash, CARBON 49 (2), 684-692 (2011) (<https://doi.org/10.1016/j.carbon.2010.10.020>) ISSN: 0008-6223 I.F: 7.082
- 83.** Automated high-throughput screening of carbon nanotube-based bio-nanocomposites for bone cement applications, PP Gonçalves, MK Singh, VS Silva, F Marques, A Marques, PR LeDuc, Pure and Applied Chemistry 83 (11), 2063-2069 (2011) (<https://doi.org/10.1351/PAC-CON-11-04-06>) ISSN: 1365-3075 I.F: 5.294
- 84.** UV Emission from Patterned Growth of ZnO Nanowires, MK Singh\*, E Titus, J Gracio Journal of nanoscience and nanotechnology 10 (4), 2764-2767 (2010) (<https://doi.org/10.1166/jnn.2010.1453>) ISSN 0974 - 3081 I.F: 1.354
- 85.** Synthesis and Field Emission Properties of Ultra-Nanocrystalline Diamond Fibers and Helices, MK Singh\*, E Titus, MG Willinger, J Grácio, Journal of nanoscience and nanotechnology 10 (4), 2422-2433 (2010) (<https://doi.org/10.1166/jnn.2010.1451>) ISSN 0974 - 3081 I.F: 1.354

- 86.** Integrated biomimetic carbon nanotube composites for in vivo systems, MK Singh\*, J Gracio, P LeDuc, PP Gonçalves, PAAP Marques, *Nanoscale* 2 (12), 2855-2863 (2010) (<http://pubs.rsc.org/en/content/articlehtml/2010/nr/c0nr00237b>; DOI: 10.1039/C0NR00237B) ISSN: 2040-3372 I.F: 7.233
- 87.** Atomic-scale observation of rotational misorientation in suspended few-layer graphene sheets, MK Singh\*, E Titus, G Gonçalves, PAAP Marques, I Bdikin, AL Kholkin, *Nanoscale* 2 (5), 700-708 (2010) (<http://pubs.rsc.org/en/content/articlehtml/2010/nr/b9nr00256a>; DOI: 10.1039/B9NR00256A) ISSN: 2040-3372 I.F: 7.233
- 88.** Graphene oxide modified with PMMA via ATRP as a reinforcement filler, G Gonçalves, PAAP Marques, A Barros-Timmons, I Bdkin, MK Singh, *Journal of Materials Chemistry* 20 (44), 9927-9934 (2010) (<http://pubs.rsc.org/en/content/articlelanding/2010/jm/c0jm01674h/unauth#!divAbstract>) ISSN: 0959-9428 I.F: 9.931
- 89.** Surface modification of graphene nanosheets with gold nanoparticles: the role of oxygen moieties at graphene surface on gold nucleation and growth, G Goncalves, PAAP Marques, CM Granadeiro, HIS Nogueira, MK Singh, P AAP Marques, *Chemistry of Materials* 21 (20), 4796-4802 (2009) (<http://pubs.acs.org/doi/abs/10.1021/cm901052s>) ISSN: 0897-4756 I.F: 9.890
- 90.** Microstructure and electron field emission study of diamond nanorod decorated a-SiO<sub>2</sub> nanowires by microwave Ar-CH<sub>4</sub>/H<sub>2</sub> plasma chemical vapor deposition with addition of N<sub>2</sub>, MK Singh\*, E Titus, MG Willinger, JC Madaleno, J Grácia, *Diamond and Related Materials* 18 (5), 865-869 (2009) (<https://doi.org/10.1016/j.diamond.2009.02.021>) ISSN: 0925-9635 I.F: 2.232
- 91.** Fabrication and field emission property studies of vertically aligned multiwalled carbon nanotubes grown by double plasma chemical vapour deposition technique, E Titus, MK Singh, G Cabral, RP Babu, WJ Blau, J Gracio, *Diamond and related materials* 18 (5), 967-971 (<https://doi.org/10.1016/j.diamond.2009.01.021>) ISSN: 0925-9635 I.F: 2.232
- 92.** Biotoxicity study of bone cement based on a functionalised multi-walled carbon nanotube-reinforced PMMA/HAp nanocomposite, MK Singh, PAAP Marques, ACM Sousa, J Gracio, V Silva, P Goncalves, *International Journal of Nano and Biomaterials* 2 (1-5), 442-453 (2009) (<http://www.inderscienceonline.com/doi/abs/10.1504/IJNBM.2009.027742>) ISSN: 1752-8941 I.F: 1.354
- 93.** Fabrication of vertically aligned carbon nanotubes for spintronic device applications, E Titus, MK Singh, G Cabral, V Paserin, PR Babu, WJ Blau, J Ventura, *Journal of Materials Chemistry* 19 (39), 7216-7221 (2009) (<http://pubs.rsc.org/en/content/articlelanding/2009/jm/b907717k/unauth#!divAbstract>) ISSN: 0959-9428 I.F: 9.931
- 94.** Nanocrystalline diamond on SiO<sub>2</sub> fiber: A new class of hybrid material, MK Singh\*, E Titus, JC Madaleno, L Pereira, G Cabral, VF Neto, J Gracio, *Diamond and Related Materials* 17

(7), 1106-1109 (2008) (<https://doi.org/10.1016/j.diamond.2008.02.023>) ISSN: 0925-9635 I.F: 2.232

- 95.** Hydroxyapatite Modified with Carbon-Nanotube-Reinforced Poly (methyl methacrylate): A Nanocomposite Material for Biomedical Applications, MK Singh\*, T Shokuhfar, JJA Gracio, ACM De Sousa, JMDF Ferreira, *Advanced Functional Materials* 18 (5), 694-700 (2008) (DOI: 10.1002/adfm.200700888) ISSN: 1616-3028 I.F: 13.325
- 96.** Novel two-step method for synthesis of high-density nanocrystalline diamond fibers, MK Singh\*, E Titus, JC Madaleno, G Cabral, J Gracio, *Chemistry of Materials* 20 (5), 1725-1732 (2008) (<http://pubs.acs.org/doi/abs/10.1021/cm0714741>) ISSN: 0897-4756 I.F: 13.325
- 97.** Electron field emission from patterned nanocrystalline diamond coated a-Si O<sub>2</sub> micrometer-tip arrays, JC Madaleno, MK Singh\*, E Titus, G Cabral, J Gracio, L Pereira, *Applied Physics Letters* 92 (2), 023113 (2008) (<http://dx.doi.org/10.1063/1.2835905>) ISSN: 1077-3118 I.F: 3.386
- 98.** Optical Properties of Zigzag Twinned Geometry of Zn<sub>2</sub>SnO<sub>4</sub> Nanowires, S Jeedigunta, MK Singh, A Kumar, M Shamsuzzoha, *Journal of nanoscience and nanotechnology* 7 (2), 486-489 (2007) (<https://doi.org/10.1166/jnn.2007.119>) ISSN: 0974 - 3081 I.F: 1.354
- 99.** Melting and defect generation in chemical vapor deposited diamond due to irradiation with 100 MeV Au<sup>+</sup> and Ag<sup>+</sup> ions, DS Misra, U Palnitkar, PK Tyagi, MK Singh, E Titus, DK Avasthi, P Vasa, *Thin Solid Films* 503 (1), 121-126(2006) (<https://doi.org/10.1016/j.tsf.2005.11.029>) ISSN: 0040-6090 I.F: 1.939
- 100.** Step growth in single crystal diamond grown by microwave plasma chemical vapor deposition, PK Tyagi, A Misra, KNN Unni, P Rai, MK Singh, U Palnitkar, DS Misra, *Diamond and Related Materials* 15 (2), 304-308(2006) (<https://doi.org/10.1016/j.diamond.2005.08.054>) ISSN: 0925-9635 I.F: 2.232
- 101.** Structural damage on multiwalled carbon nanotubes and encapsulated single crystal nickel nanorods irradiated with Au<sup>+</sup> 7 ions of 100 MeV, A Misra, PK Tyagi, MK Singh, DS Misra, J Ghatak, PV Satyam, DK Avasthi, *Diamond and related materials* 15 (2), 300-303(2006) (<https://doi.org/10.1016/j.diamond.2005.10.021>) ISSN: 0925-9635 I.F: 2.232
- 102.** FTIR studies of nitrogen doped carbon nanotubes, A Misra, PK Tyagi, MK Singh, DS Misra, *Diamond and related materials* 15 (2), 385-388 (2006) (<https://doi.org/10.1016/j.diamond.2005.08.013>) ISSN: 0925-9635 I.F: 2.232
- 103.** Quantitative analysis of hydrogen in chemical vapor deposited diamond films, E Titus, DS Misra, AK Sikder, PK Tyagi, MK Singh, A Misra, N Ali, *Diamond and related materials* 14 (3), 476-481 (2005) (<https://doi.org/10.1016/j.diamond.2004.12.001>) ISSN: 0925-9635 I.F: 2.232
- 104.** High-resolution transmission electron microscopy mapping of nickel and cobalt single-crystalline nanorods inside multiwalled carbon nanotubes and chirality calculations, PK Tyagi, A Misra, MK Singh, DS Misra, J Ghatak, PV Satyam, *Applied Physics Letters* 86 (25), 253110(2005) (<http://dx.doi.org/10.1063/1.1953881>) ISSN: 1077-3118 I.F: 3.386

- 105.** Single crystalline nickel nanorods inside carbon nanotubes: Growth behavior, structure, and magnetic properties, PK Tyagi, A Misra, MK Singh, E Titus, DS Misra, J Ghatak, PV Satyam, *Journal of nanoscience and nanotechnology* 5 (4), 596-600(2005) (<https://doi.org/10.1166/jnn.2005.070>) ISSN: 0974 - 3081 I.F: 1.354
- 106.** Preparation of Ni-filled carbon nanotubes for key potential applications in nanotechnology, PK Tyagi, MK Singh, A Misra, U Palnitkar, DS Misra, E Titus, N Ali, *Thin Solid Films* 469, 127-130 (2004) (<https://doi.org/10.1016/j.tsf.2004.08.070>) ISSN: 0040-6090 I.F: 1.939
- 107.** Growth of (100) oriented diamond grains by the application of lateral temperature gradients across silicon substrates, E Titus, DS Misra, MK Singh, PK Tyagi, A Misra, F Le Normand, J Gracio, *Journal of Materials Research* 19 (11), 3206-3213 (2004) (DOI: <https://doi.org/10.1557/JMR.2004.0433>) ISSN: 0884-2914 I.F: 1.495
- 108.** Filling of Carbon Nanotubes, PK Tyagi, MK Singh, DS Misra, *Encyclopedia of Nanoscience and Nanotechnology* 3 (430), 417-430 (2004) ISSN: 0974 - 3081 I.F: 1.354
- 109.** A new polarised hot filament chemical vapor deposition process for homogeneous diamond nucleation on Si (100), CS Cojocar, M Larijani, DS Misra, MK Singh, P Veis, F Le Normand, *Diamond and related Materials* 13 (2), 270-276 (2004) (<https://doi.org/10.1016/j.diamond.2003.10.076>) ISSN: 0925-9635 I.F: 2.232
- 110.** Diamond nucleation and growth on zeolites, E Titus, MK Singh, KNN Unni, PK Tyagi, AK Dua, M Roy, DS Misra, *Diamond and related materials* 12 (10), 1647-1652 (2003) ([https://doi.org/10.1016/S0925-9635\(03\)00307-8](https://doi.org/10.1016/S0925-9635(03)00307-8)) ISSN: 0925-9635 I.F: 2.232
- 111.** Effect of heavy ion irradiation on self-supported diamond sheets, U Palnitkar, VS Shirodkar, MK Singh, E Titus, PK Tyagi, KN Unni, *Diamond and related materials* 12 (10), 1771-1775 (2003) ([https://doi.org/10.1016/S0925-9635\(03\)00287-5](https://doi.org/10.1016/S0925-9635(03)00287-5)) ISSN: 0925-9635 I.F: 2.232
- 112.** Ni and Ni/Pt filling inside multiwalled carbon nanotubes, MK Singh, E Titus, PK Tyagi, U Palnitkar, DS Misra, M Roy, AK Dua, *Journal of nanoscience and nanotechnology* 3 (1-1), 165-170 (2003) (<https://doi.org/10.1166/jnn.2003.200>) ISSN: 0974 - 3081 I.F: 1.354
- 113.** Enhancement of (100) texture in diamond films grown using a temperature gradient, E Titus, AK Sikder, U Palnitkar, MK Singh, DS Misra, *Diamond and related materials* 11 (7), 1403-1408 (2002) ([https://doi.org/10.1016/S0925-9635\(02\)00033-X](https://doi.org/10.1016/S0925-9635(02)00033-X)) ISSN: 0925-9635 I.F: 2.232
- 114.** High density of multiwalled carbon nanotubes observed on nickel electroplated copper substrates by microwave plasma chemical vapor deposition, MK Singh, PP Singh, E Titus, DS Misra, F LeNormand, *Chemical Physics Letters* 354 (3), 331-336 (2002) ([https://doi.org/10.1016/S0009-2614\(02\)00133-1](https://doi.org/10.1016/S0009-2614(02)00133-1)) ISSN: 0009-2614 I.F: 1.686
- 115.** Adsorption and coupling of 4-aminophenol on Pt (111) surfaces, G Otero-Irurueta, JI Martínez, RA Bueno, FJ Palomares, HJ Salavagione, MK Singh, J Méndez, GJ Ellis, MF

López, JA Martín-Gago, Surface science 646, Pages, 5-12 (2016) ISSN: 0039-6028 I.F: 1.849

116. Tuning the synergistic effects of MoS<sub>2</sub> and spinel NiFe<sub>2</sub>O<sub>4</sub> nanostructures for high performance energy storage and conversion applications, PV Shinde, S Babu, SK Mishra, D Late, CS Rout, MK Singh, Sustainable Energy & Fuels 5 (15), 3906-39175 2021 (Impact Factor: 6.813)

### **Patents Awarded**

1. International United States Patent (Patent No.: US 8,404,313 B1; Date of Patent Awarded: Mar. 26, 2013; Synthesis of Nanocrystalline Diamond Fibers)
2. International United States Patent (Patent No.: US 8,642,123 B1; Date of Patent Awarded: Feb.4, 2014; Integration of ZnO nanowires with nanocrystalline diamond fibers)

### **Book Chapters**

1. Manoj Kumar Singh, (2019), "Recent advances in chemical vapor deposition of flat monolayer of 2D atomics honeycomb structure, and their applications",), for the Book "Advances in Chemical Vapor Deposition (CVD) and its Applications" to be published by US publisher, Taylor & Francis. 245-271  
eBook ISBN 9780429342363
2. L. Syam Sundar, Manoj K. Singh and Antonio C.M. Sousa (2017), "Heat Transfer Augmentation with Nanocomposite Based Hybrid Nanofluids Flowing in a Tube with Inserts", (Book Title: Advances in Heat Transfer Fluids: From Numerical to Experimental Techniques; Taylor and Francis Group, CRC Press) ISBN: 9781498751858 - CAT# K27275.
3. Paula A. A. P. Marques, Gil Gonçalves, Sandra Cruz, Nuno Almeida, Manoj K. Singh, José Grácio, Antonio C. M. Sousa (2011) Functionalized Graphene Composites Publish in the book "Nanocomposites" ISBN 978-953-308-55-0. Book edited by: Dr. Abbass Hashim, Sheffield Hallam University, UK Intech Open Access Publisher (<http://www.intechweb.org/>) DOI: 10.5772/18209; ISBN 978-953-307-347-7, Published: July 27, 2011 under CC BY-NC-SA 3.0 license. © The Author(s).

4. L. Syam Sundar, Ranjit Hawaldar, Elby Titus, Jose Gracio & Manoj Kumar Singh (2012) Integrated Biomimetic Carbon Nanotube Composites for Biomedical Applications, publish in the book "Biomedical Engineering - Technical Applications in Medicine", book edited by Radovan Hudak, Marek Penhaker and Jaroslav Majernik, ISBN 978-953-51-0733-0, Published: September 6, 2012 under CC BY 3.0 license; UK Intech Open Access Publisher (<http://www.intechweb.org/>) DOI: 10.5772/48385
5. E. Titus, J. Gracio, Manoj K. Singh, and A. C. M. Sousa, book chapter "Bio-inspired Magnetic carbon material" is published in ninth volume of the NmLS series by Wiley-VCH in the Book "Carbon Nanomaterials" (Editor: Challa S.S. R. Kumar; ISBN: 978-3-527-32169-8; March 2011; 482 pages) DOI: 10.1002/9783527610419.ntls0232
6. Elby Titus, Manoj Kumar Singh, Rahul Krishna, Ricardo G. Dias, Antonio Ferreira and Jose Gracio, Carbon nanotubes and Spintronics, has been accepted for publication in the book "Carbon Nanotubes / Book 5", InTech - Open Access Publisher Web: <http://www.intechweb.org/> DOI: 10.5772/16539; ISBN 978-953-307-499-3, Published: July 27, 2011 under CC BY-NC-SA 3.0 license. © The Author(s).
7. Elby Titus, Rahul Krishna, José Grácio, Manoj Kumar Singh, Antonio Luis Ferreira and Ricardo G Dias, Carbon Nanotube Based Magnetic Tunnel Junctions (MTJs) for Spintronics Application, (2011) DOI: 10.5772/16539; ISBN 978-953-307-499-3, Published: July 27, 2011 under CC BY-NC-SA 3.0 license. © The Author(s).  
Elby Titus, Rahul Krishna, José Grácio, Manoj Singh, Antonio Luis Ferreira and Ricardo G Dias  
Submitted: October 13th, 2010 Published: July 27th, 2011; Electronic Properties of Carbon Nanotubes  
Edited by Jose Mauricio Marulanda; DOI: 10.5772/16539
8. Chapter 4 - Synthesis, Characterization, and Properties of Graphene Analogs of 2D Material, 91-143, 15 2019; Book - Fundamentals and Sensing Applications of 2D Materials, Woodhead Publishing Series in Electronic and Optical Materials, June, 2019, Pages 91-143; <https://doi.org/10.1016/B978-0-08-102577-2.00004-X>
9. Chapter 11 - Recent Developments in Graphene-Based Two-Dimensional Heterostructures for Sensing, PV Shinde, M Saxena, MK Singh, Fundamentals and sensing applications of 2D materials, 407-436, 7, June, 2019; <https://doi.org/10.1016/B978-0-08-102577-2.00011-7>
10. Manoj Kumar Singh (2018), "Advancement in Latent heat storage materials", to be published by Apple Academic Press, USA, exclusively distributed worldwide by CRC Press (Taylor and Francis Group, USA). in the book title: Latent Heat based Thermal Energy Storage Systems: Materials, Applications and their Market, (published)

11. Two-Dimensional Materials for Advanced Solar Cells, Manoj Kumar Singh, Pratik V. Shinde, Pratap Singh and Pawan Kumar Tyagi, Submitted: June 10th, 2020 Reviewed: September 18th, 2020 Published: September 22nd, 2021, DOI: 10.5772/intechopen.94114, Book - Solar Cells - Theory, Materials and Recent Advances, Intech (UK) Publication
12. Surface modified graphene oxide (GO) for chemotherapeutic drug delivery” CRC press (Taylor and Francis Group) (Accepted) (2022) Manoj Kumar Singh, Pratap Singh, Nahid Tyagi and Manika Khanuja
13. The Cobalt Oxide-Based Composite Nanomaterial Synthesis and Its Biomedical and Engineering Applications, Lingala Syam Sundar, Manoj K. Singh, António M.B. Pereira and Antonio C.M. Sousa  
Submitted: December 21st, 2018 Reviewed: June 27th, 2019 Published: August 22nd, 2019  
DOI: 10.5772/intechopen.88272, Book - Cobalt Compounds and Applications

### **Invited Talks in International Meetings/Conferences**

1. Invited talk in BIT´ 2nd World Congress of Industrial Biotechnology-2009 (<http://www.bitibio.com/program.asp/>)
2. Invited talk in first international conference on Nanomaterials and Nanocomposites (ICNM-2009); <http://www.polymer.in/icnm2009/index.html>
3. Oral presentation in 2008 7th International Vacuum Electron Sources Conference (IVESC) at Queen Mary, University of London
4. Two Oral presentation in 1st Nano Today Conference (August 2-5, 2009) in Biopolis, Singapore
5. Invited Oral presentation in Advanced Nanomaterials and Nanotechnology (Dec. 9-11, ICANN-2009), IIT-Guwahati, India
6. Invited talk in International conference on Carbon Nanotechnology: Potentail and Challenges, IIT Kanpur (15-17 Dec) 2010.
7. Invited talk in International Conference on Nanomaterials and Nanotechnology NANO-2010, Organized by Center for Nanoscience and Nanotechnology, Thiruchengode, India.
8. Invited as Visitor to present at SEMICON Europa 2015, Dresden, Germany
9. Invited Talk on “Synergetic effects of MoS<sub>2</sub>/NiFe<sub>2</sub>O<sub>4</sub> nanocomposites for high-performance energy conversion and storage applications” held in the University of Aveiro, Portugal, 9 July 2021 (Online)



10. Workshop Attended on Low-dimensional materials: experiment, theory, application (WLDM-2021), held in the University of Aveiro, Portugal, 6 July 2021 (Online)

### **Publications in scientific conference papers/proceedings**

1. "Nanocrystalline diamond coated on a-SiO<sub>2</sub> fiber: a new class of hybrid material", Manoj K. Singh\*, E Titus, G Cabral, JC Madaleno and J Gracio, 18th European Conference on Diamond, Diamond-Like Materials, Carbon Nanotubes and Nitrides 9-14 September (2007), Berlin, Germany
2. "Microstructure and Electron Field Emission Study of Diamond Nanorod decorated a-SiO<sub>2</sub> Nanowires by Microwave Ar-CH<sub>4</sub>/H<sub>2</sub> Plasma Chemical Vapour Deposition with addition of N<sub>2</sub>", Manoj Singh\*, Titus Elby, Jose Gracio 19th European Conference on Diamond, Diamond-Like Materials, Carbon Nanotubes and Nitrides 7-11 September (2008), Meliá Sitges Hotel, Sitges, Spain (Accepted for publication)
3. "Role of Temperature Gradient across the substrate in the growth of (100) oriented on Si (100)", E.Titus, Manoj K. Singh and D.S.Misra, proceedings of sixth applied diamond conference / second frontier carbon technology joint conference (ADC/FCT '01), Auburn University, Alabama, USA, August 6-10, 2001
4. "Microporous diamond films on zeolites by CVD technique, E.Titus", Manoj K. Singh, K.N.N.Unni, P.K.Tyagi and D.S.Misra, 8th International conference on New Diamond Science and Technology, Australia, Melbourne July-21-26th 2002
5. "Effect of heavy ion treatment on diamond films", U.A.Paltnikar, Manoj K. Singh, and D.S.Misra, 8th International conference on New Diamond Science and Technology, Australia, Melbourne July-21-25th 2002
6. "High density of the carbon nanotubes deposited on Nickel Electroplated Copper Substrate by Microwave plasma deposition", Manoj K. Singh, E.Titus and D.S.Misra, International workshop on Advanced Materials, WAM II , JNCASR, Bangalore, India, 15-20th February (2002)
7. "Role of Temperature Gradient across the substrate in the growth of (100) oriented on Si (100)", E.Titus, Manoj K. Singh and D.S.Misra. Sixth applied diamond conference / second frontier carbon technology joint conference (ADC/FCT '01), Auburn University, Alabama, USA, August 6-10, 2001

8. "Theoretical Study of 3d Transition-Metal Impurities in Single-Wall Carbon Nanotubes", Manoj K. Singh, Prabhakar P. Singh and D.S.Misra. International Conference on Nanoscience and Technology (ICONSAT 2003) at Saha Institute of Nuclear Physics, Organized by Department of Science and Technology, India (December 17-20, 2003)
9. "Carbon nanotubes for reaction vessels", E.Titus, Manoj K. Singh and D.S.Misra 45th Department of Atomic Energy (DAE) solid state symposium, held in Chandigarh, Punjab, India - December 2002
10. "Microporous diamond films for filters and sensors, Manoj K. Singh and D.S.Misra 45th Department of Atomic Energy (DAE) solid state symposium, held in Chandigarh, Punjab, India - December 2002
11. "Growth of uniformly distributed carbon nanotubes by CVD routes" E.Titus, Manoj K. Singh and D.S.Misra (Indo – Carbon 2001) - October'2001, held at Sardar Patel University, Gujarat State, India
12. "Synthesis of Bamboo-shaped carbon nanotubes on Ni-Electroplated copper substrate by MPCVD technique", Manoj K. Singh, E.Titus and D.S.Misra 44th Department of Atomic Energy (DAE) solid state symposium - December 2001, at Bhabha Atomic Research Centre (BARC), Bombay, India
13. "Nucleation Mechanism in CVD diamond", E.Titus, Manoj K. Singh and D.S.Misra 44th Department of Atomic Energy (DAE) solid state symposium - December 2001, at Bhabha Atomic Research Centre ( BARC), Bombay, India
14. "IR studies of carbon nanotubes grown by CVD technique", Abha Misra, E.Titus Manoj K. Singh and D.S.Misra, 46th DAE conference on solid state physics, held in Gwalior, India - December 26 –30, 2003
15. "Single crystal nickel nanorods inside carbon nanotube", P.K Tyagi, Manoj K. Singh, Prabhakar P. Singh and D.S.Misra. International Conference on Nanoscience and Technology (ICONSAT 2003) at Saha Institute of Nuclear Physics, Organized by Department of Science and Technology, India (December 17-20, 2003)
16. Diamond Nanorod, Nanoplate Decorated a-SiO<sub>2</sub> Nanowires: Synthesis, Characterization and Field Emission Study, Manoj K. Singh, IVESC-2008 (3-6 August 2008) Queen Mary, University of London,
17. Microstructure and Electron Field Emission Study of Diamond Nanorod decorated a-SiO<sub>2</sub> Nanowires by Microwave Ar-CH<sub>4</sub>/H<sub>2</sub> Plasma Chemical Vapour Deposition with addition of N<sub>2</sub>,

Manoj K. Singh, E Titus, G Cabral, JC Madaleno and J Gracio, 19th European Conference on Diamond, Diamond-Like Materials, Carbon Nanotubes and Nitrides 7-11 September (2008), Sitges, Spain

### **Paper in Proceedings**

1. Synthesis of Uniformly Distributed Carbon Nanotubes on Large Areas Following Electrolysis and CVD Routes, MK Singh, E Titus, DS Misra, Advances in carbon and carbon materials, 243 , 2002
2. Synthesis of bamboo-shaped carbon nanotubes on Ni-Electroplated Copper Substrate by MPCVD technique, MK Singh, E Titus, DS Misra, Solid State Physics 44, 251 , 2002, NUCLEATION MECHANISM OF CVD DIAMOND FILM
3. The FTIR Studies of (100) Oriented Diamond Films grown on Si Substrate Using Temperature Gradient Across the Substrate, E Titus, MK Singh, DS Misra, Solid State Physics 44, 103, 2002
4. Proceedings of the Sixth Applied Diamond Conference/Second Frontier Carbon, 2001, E Titus, AK Sikder, U Paltnikar, MK Singh, DS Misra
5. “Automated high-throughput screening of orthopedic bioactive materials through cell morphology approaches”, Paula P. Gonçalves, Virgília S. Silva, Filipa Marques, Ana Marques, Philip R. LeDuc, Manoj K. Singh, José Grácio, Paula A.A.P. Marques, Gil Gonçalves, António C.M.Sousa, accepted for publication in the Proceeding of International Conference on Nanomaterials and Nanotechnology NANO-2010, Organized by Center for Nanoscience and Nanotechnology, Thiruchengode, India.
6. “Nanotechnology for Biomedical applications”, Jose Gracio, Manoj Kumar Singh, accepted for publication in the Proceeding of International Conference on Nanomaterials and Nanotechnology NANO-2010, Organized by Center for Nanoscience and Nanotechnology Thiruchengode

### **Other Publications**

Encyclopedia of Nanoscience and Nanotechnology

Filling of Carbon Nanotubes, P.K.Tyagi, M.K.Singh, D.S.Misra, Encyclopedia of Nanoscience and Nanotechnology, 3, ed. H. S. Nalwa, 2004

### **Research News Releases**

1. <http://www.nanoscienceworks.org/slidecast/a-novel-nanocomposite-material-for-biomedical-applications>
2. <http://www.nanowerk.com/spotlight/spotid=5220.php>
3. <http://www.nanowerk.com/spotlight/spotid=5043.php>

## **Journal Reviewers**

- AIP Publications: Journal of Applied Physics.
- Advanced Functional Materials
- RSC Publications: Nanoscale, ACS Nano, chemistry of materials
- Scientific reports (Nature publisher)
- Elsevier Publications: Carbon, Diamond and related materials, Materials Research Bulletin, Applied Surface Science, International Journal of Heat and Mass Transfer, Renewable Energy

**Prof. (Dr.) Manoj Kumar Singh**



## Prof. (Dr.) Manoj Kumar Singh, Professor of Physics

Central University of Haryana (CUH), INDIA

Nano-engineering

Surface - Interface Physics

Optoelectronics

Materials for Energy Storage

2D Materials for Micro and Nano-de

	All	Since 2018
Citations	9308	5674
h-index	45	41
i10-index	89	71

30 articles

23 articles

not available

available

Based on funding mandates

TITLE	CITED BY	YEAR
<a href="#">Surface modification of graphene nanosheets with gold nanoparticles: the role of oxygen moieties at graphene surface on gold nucleation and growth</a> G Goncalves, PAAP Marques, CM Granadeiro, HIS Nogueira, MK Singh, ... Chemistry of Materials 21 (20), 4796-4802	929	2009
<a href="#">Graphene oxide modified with PMMA via ATRP as a reinforcement filler</a> G Gonçalves, PAAP Marques, A Barros-Timmons, I Bdkin, MK Singh, ... Journal of Materials Chemistry 20 (44), 9927-9934	491	2010
<a href="#">Enhanced heat transfer and friction factor of MWCNT-Fe<sub>3</sub>O<sub>4</sub>/water hybrid nanofluids</a> LS Sundar, MK Singh, ACM Sousa International Communications in Heat and Mass Transfer 52, 73-83	482	2014
<a href="#">Amine-modified graphene: thrombo-protective safer alternative to graphene oxide for biomedical applications</a> SK Singh, MK Singh, PP Kulkarni, VK Sonkar, JJA Grácio, D Dash ACS nano 6 (3), 2731-2740	458	2012
<a href="#">Investigation of thermal conductivity and viscosity of Fe<sub>3</sub>O<sub>4</sub> nanofluid for heat transfer applications</a> LS Sundar, MK Singh, ACM Sousa International communications in heat and mass transfer 44, 7-14	425	2013
<a href="#">Hybrid nanofluids preparation, thermal properties, heat transfer and friction factor—a review</a> LS Sundar, KV Sharma, MK Singh, ACM Sousa Renewable and Sustainable Energy Reviews 68, 185-198	403	2017
<a href="#">Thrombus inducing property of atomically thin graphene oxide sheets</a> SK Singh, MK Singh, MK Nayak, S Kumari, S Shrivastava, JJA Grácio, ...	296	2011

TITLE	CITED BY	YEAR
ACS nano 5 (6), 4987-4996		
<a href="#">Thermal conductivity and viscosity of stabilized ethylene glycol and water mixture Al<sub>2</sub>O<sub>3</sub> nanofluids for heat transfer applications: An experimental study</a> LS Sundar, EV Ramana, MK Singh, ACM Sousa International Communications in Heat and Mass Transfer 56, 86-95	269	2014
<a href="#">Experimental investigation of forced convection heat transfer and friction factor in a tube with Fe<sub>3</sub>O<sub>4</sub> magnetic nanofluid</a> LS Sundar, MT Naik, KV Sharma, MK Singh, TCS Reddy Experimental Thermal and Fluid Science 37, 65-71	263	2012
<a href="#">Experimental thermal conductivity of ethylene glycol and water mixture based low volume concentration of Al<sub>2</sub>O<sub>3</sub> and CuO nanofluids</a> LS Sundar, MH Farooky, SN Sarada, MK Singh International Communications in Heat and Mass Transfer 41, 41-46	260	2013
<a href="#">FTIR studies of nitrogen doped carbon nanotubes</a> A Misra, PK Tyagi, MK Singh, DS Misra Diamond and related materials 15 (2-3), 385-388	246	2006
<a href="#">Empirical and theoretical correlations on viscosity of nanofluids: a review</a> LS Sundar, KV Sharma, MT Naik, MK Singh Renewable and sustainable energy reviews 25, 670-686	216	2013
<a href="#">Large-area high-throughput synthesis of monolayer graphene sheet by Hot Filament Thermal Chemical Vapor Deposition</a> R Hawaldar, P Merino, MR Correia, I Bdiqin, J Grácio, J Méndez, ... Scientific reports 2 (1), 1-9	187	2012
<a href="#">Thermal conductivity of ethylene glycol and water mixture based Fe<sub>3</sub>O<sub>4</sub> nanofluid</a> LS Sundar, MK Singh, ACM Sousa International communications in heat and mass transfer 49, 17-24	186	2013
<a href="#">Enhanced thermal conductivity and viscosity of nanodiamond-nickel nanocomposite nanofluids</a> LS Sundar, MK Singh, EV Ramana, B Singh, J Grácio, A Sousa Scientific reports 4 (1), 1-14	176	2014
<a href="#">Convective heat transfer and friction factor correlations of nanofluid in a tube and with inserts: a review</a> LS Sundar, MK Singh	168	2013

TITLE	CITED BY	YEAR
Renewable and Sustainable Energy Reviews 20, 23-35		
<a href="#">Nanodiamond-Fe<sub>3</sub>O<sub>4</sub> nanofluids: preparation and measurement of viscosity, electrical and thermal conductivities</a> LS Sundar, EV Ramana, MPF Graça, MK Singh, ACM Sousa International Communications in Heat and Mass Transfer 73, 62-74	146	2016
<a href="#">Self-assembly of tetramers of 5, 6-dihydroxyindole explains the primary physical properties of eumelanin: Experiment, simulation, and design</a> CT Chen, V Ball, JJ de Almeida Gracio, MK Singh, V Toniazzi, D Ruch, ... ACS nano 7 (2), 1524-1532	143	2013
<a href="#">Single-bilayer graphene oxide sheet impacts and underlying potential mechanism assessment in germinating faba bean (<i>Vicia faba</i> L.)</a> NA Anjum, N Singh, MK Singh, I Sayeed, AC Duarte, E Pereira, I Ahmad Science of the total environment 472, 834-841	142	2014
<a href="#">Hydroxyapatite modified with carbon-nanotube-reinforced poly (methyl methacrylate): a nanocomposite material for biomedical applications</a> MK Singh, T Shokuhfar, JJA Gracio, ACM de Sousa, JMDF Ferreira, ... Advanced functional materials 18 (5), 694-700	141	2008
<a href="#">Deposition mechanism and properties of thin polydopamine films for high added value applications in surface science at the nanoscale</a> V Ball, D Del Frari, M Michel, MJ Buehler, V Toniazzi, MK Singh, J Gracio, ... BioNanoScience 2 (1), 16-34	140	2012
<a href="#">Experimental investigation of Al<sub>2</sub>O<sub>3</sub>/water nanofluids on the effectiveness of solar flat-plate collectors with and without twisted tape inserts</a> LS Sundar, MK Singh, V Punnaiah, ACM Sousa Renewable energy 119, 820-833	135	2018
<a href="#">Viscosity of low volume concentrations of magnetic Fe<sub>3</sub>O<sub>4</sub> nanoparticles dispersed in ethylene glycol and water mixture</a> LS Sundar, EV Ramana, MK Singh, ACM De Sousa Chemical physics letters 554, 236-242	135	2012
<a href="#">Experimental investigation of the thermal transport properties of graphene oxide/Co<sub>3</sub>O<sub>4</sub> hybrid nanofluids</a> LS Sundar, MK Singh, MC Ferro, ACM Sousa International Communications in Heat and Mass Transfer 84, 1-10	113	2017

TITLE	CITED BY	YEAR
<p><a href="#">Thermal conductivity and viscosity of water based nanodiamond (ND) nanofluids: An experimental study</a>            LS Sundar, MJ Hortiguera, MK Singh, ACM Sousa            International Communications in Heat and Mass Transfer 76, 245-255</p>	108	2016
<p><a href="#">Comparative study on thermal performance of twisted tape and wire coil inserts in turbulent flow using CuO/water nanofluid</a>            MT Naik, SS Fahad, LS Sundar, MK Singh            Experimental Thermal and Fluid Science 57, 65-76</p>	106	2014
<p><a href="#">Thermal conductivity and viscosity of hybrid nanofluids prepared with magnetic nanodiamond-cobalt oxide (ND-Co<sub>3</sub>O<sub>4</sub>) nanocomposite</a>            LS Sundar, GO Irurueta, EV Ramana, MK Singh, ACM Sousa            Case studies in thermal engineering 7, 66-77</p>	103	2016
<p><a href="#">Heat transfer, friction factor and effectiveness analysis of Fe<sub>3</sub>O<sub>4</sub>/water nanofluid flow in a double pipe heat exchanger with return bend</a>            NTR Kumar, P Bhramara, BM Addis, LS Sundar, MK Singh, ACM Sousa            International Communications in Heat and Mass Transfer 81, 155-163</p>	91	2017
<p><a href="#">Experimental investigations in heat transfer and friction factor of magnetic Ni nanofluid flowing in a tube</a>            LS Sundar, MK Singh, I Bidkin, ACM Sousa            International Journal of Heat and Mass Transfer 70, 224-234</p>	88	2014
<p><a href="#">Experimental study of heat transfer and friction factor of Al<sub>2</sub>O<sub>3</sub> nanofluid in U-tube heat exchanger with helical tape inserts</a>            PVD Prasad, A Gupta, M Sreeramulu, LS Sundar, MK Singh, ACM Sousa            Experimental thermal and fluid science 62, 141-150</p>	84	2015
<p><a href="#">Heat Transfer Enhancement of Low Volume Concentration of Carbon Nanotube-Fe<sub>3</sub>O<sub>4</sub>/Water Hybrid Nanofluids in a Tube With Twisted Tape Inserts Under ...</a>            L Syam Sundar, ACM Sousa, MK Singh            Journal of Thermal Science and Engineering Applications 7 (2), 021015</p>	81	2015
<p><a href="#">Comparison of Synthetic Dopamine–Eumelanin Formed in the Presence of Oxygen and Cu<sup>2+</sup> Cations as Oxidants</a>            V Ball, J Gracio, M Vila, MK Singh, MH Metz-Boutigue, M Michel, J Bour, ...            Langmuir 29 (41), 12754-12761</p>	80	2013



TITLE	CITED BY	YEAR
<p><a href="#">Single-bilayer graphene oxide sheet tolerance and glutathione redox system significance assessment in faba bean (<i>Vicia faba</i> L.)</a></p> <p>NA Anjum, N Singh, MK Singh, ZA Shah, AC Duarte, E Pereira, I Ahmad Journal of Nanoparticle Research 15 (7), 1-12</p>	71	2013
<p><a href="#">Turbulent heat transfer and friction factor of nanodiamond-nickel hybrid nanofluids flow in a tube: an experimental study</a></p> <p>LS Sundar, MK Singh, ACM Sousa International Journal of Heat and Mass Transfer 117, 223-234</p>	69	2018
<p><a href="#">Experimental heat transfer, friction factor and effectiveness analysis of Fe<sub>3</sub>O<sub>4</sub> nanofluid flow in a horizontal plain tube with return bend and wire coil inserts</a></p> <p>LS Sundar, P Bhramara, NTR Kumar, MK Singh, ACM Sousa International Journal of Heat and Mass Transfer 109, 440-453</p>	69	2017
<p><a href="#">Functionalized graphene nanocomposites</a></p> <p>P Marques, G Gonçalves, S Cruz, N Almeida, M Singh, J Grácio, A Sousa Advances in nanocomposite technology 11, 247-272</p>	67	2011
<p><a href="#">Heat transfer and friction factor of multi-walled carbon nanotubes–Fe<sub>3</sub>O<sub>4</sub> nanocomposite nanofluids flow in a tube with/without longitudinal strip inserts</a></p> <p>LS Sundar, G Otero-Irurueta, MK Singh, ACM Sousa International Journal of Heat and Mass Transfer 100, 691-703</p>	61	2016
<p><a href="#">Energy, efficiency, economic impact, and heat transfer aspects of solar flat plate collector with Al<sub>2</sub>O<sub>3</sub> nanofluids and wire coil with core rod inserts</a></p> <p>LS Sundar, YT Sintie, Z Said, MK Singh, V Punnaiah, ACM Sousa Sustainable Energy Technologies and Assessments 40, 100772</p>	58	2020
<p><a href="#">Effect of twisted tape inserts on heat transfer, friction factor of Fe<sub>3</sub>O<sub>4</sub> nanofluids flow in a double pipe U-bend heat exchanger</a></p> <p>NTR Kumar, P Bhramara, A Kirubeil, LS Sundar, MK Singh, ACM Sousa International Communications in Heat and Mass Transfer 95, 53-62</p>	58	2018
<p><a href="#">Experimental thermal conductivity and viscosity of nanodiamond-based propylene glycol and water mixtures</a></p> <p>LS Sundar, MK Singh, ACM Sousa Diamond and Related Materials 69, 49-60</p>	53	2016
<p><a href="#">Optimization of post-deposition annealing in Cu<sub>2</sub>ZnSnS<sub>4</sub> thin film solar cells and its impact on device performance</a></p>	51	2017

TITLE	CITED BY	YEAR
MG Sousa, AF Da Cunha, JP Teixeira, JP Leitão, G Otero-Irurueta, ... Solar Energy Materials and Solar Cells 170, 287-294		
<a href="#">Effectiveness analysis of solar flat plate collector with Al<sub>2</sub>O<sub>3</sub> water nanofluids and with longitudinal strip inserts</a> LS Sundar, A Kirubeil, V Punnaiah, MK Singh, ACM Sousa International Journal of Heat and Mass Transfer 127, 422-435	48	2018
<a href="#">Electrical conductivity enhancement of nanodiamond–nickel (ND–Ni) nanocomposite based magnetic nanofluids</a> LS Sundar, K Shusmitha, MK Singh, ACM Sousa International Communications in Heat and Mass Transfer 57, 1-7	48	2014
<a href="#">Quantitative analysis of hydrogen in chemical vapor deposited diamond films</a> E Titus, DS Misra, AK Sikder, PK Tyagi, MK Singh, A Misra, N Ali, ... Diamond and related materials 14 (3-7), 476-481	48	2005
<a href="#">Atomic-scale observation of rotational misorientation in suspended few-layer graphene sheets</a> MK Singh, E Titus, G Gonçalves, PAAP Marques, I Bdikin, AL Kholkin, ... Nanoscale 2 (5), 700-708	47	2010
<a href="#">Quantitative XRD characterisation and gas-phase photocatalytic activity testing for visible-light (indoor applications) of KRONOClean 7000®</a> DM Tobaldi, MP Seabra, G Otero-Irurueta, YR De Miguel, RJ Ball, ... RSC advances 5 (124), 102911-102918	44	2015
<a href="#">Nanodiamonds activate blood platelets and induce thromboembolism</a> S Kumari, MK Singh, SK Singh, JJA Grácio, D Dash Nanomedicine 9 (3), 427-440	44	2014
<a href="#">Purely Visible-Light-Induced Photochromism in Ag–TiO<sub>2</sub> Nanoheterostructures</a> DM Tobaldi, MJ Hortigüela Gallo, G Otero-Irurueta, MK Singh, RC Pullar, ... Langmuir 33 (20), 4890-4902	43	2017
<a href="#">Heat transfer, friction factor and effectiveness of Fe<sub>3</sub>O<sub>4</sub> nanofluid flow in an inner tube of double pipe U-bend heat exchanger with and without longitudinal strip inserts</a> NTR Kumar, P Bhramara, LS Sundar, MK Singh, ACM Sousa Experimental Thermal and Fluid Science 85, 331-343	42	2017
<a href="#">Size distribution analysis and physical/fluorescence characterization of graphene oxide sheets by flow cytometry</a>	42	2011

TITLE	CITED BY	YEAR
SK Singh, MK Singh, MK Nayak, S Kumari, JJA Grácio, D Dash Carbon 49 (2), 684-692		
<a href="#">High-resolution transmission electron microscopy mapping of nickel and cobalt single-crystalline nanorods inside multiwalled carbon nanotubes and chirality calculations</a> PK Tyagi, A Misra, MK Singh, DS Misra, J Ghatak, PV Satyam, ... Applied Physics Letters 86 (25), 253110	41	2005
<a href="#">Graphene oxide and hydroxyapatite as fillers of polylactic acid nanocomposites: preparation and characterization</a> PAAP Marques, G Gonçalves, MK Singh, J Grácio Journal of Nanoscience and Nanotechnology 12 (8), 6686-6692	40	2012
<a href="#">Effect of samarium and vanadium co-doping on structure, ferroelectric and photocatalytic properties of bismuth titanate</a> EV Ramana, NV Prasad, DM Tobaldi, J Zavašnik, MK Singh, ... RSC advances 7 (16), 9680-9692	39	2017
<a href="#">High density of multiwalled carbon nanotubes observed on nickel electroplated copper substrates by microwave plasma chemical vapor deposition</a> MK Singh, PP Singh, E Titus, DS Misra, F LeNormand Chemical physics letters 354 (3-4), 331-336	37	2002
<a href="#">Electrostatic self-assembled graphene oxide-collagen scaffolds towards a three-dimensional microenvironment for biomimetic applications</a> AF Girão, G Gonçalves, KS Bhangra, JB Phillips, J Knowles, G Irurueta, ... RSC advances 6 (54), 49039-49051	36	2016
<a href="#">Combination of Co3O4 deposited rGO hybrid nanofluids and longitudinal strip inserts: Thermal properties, heat transfer, friction factor, and thermal performance evaluations</a> LS Sundar, Z Said, B Saleh, MK Singh, ACM Sousa Thermal Science and Engineering Progress 20, 100695	35	2020
<a href="#">Heat transfer and effectiveness experimentally-based analysis of wire coil with core-rod inserted in Fe3O4/water nanofluid flow in a double pipe U-bend heat exchanger</a> LS Sundar, NTR Kumar, BM Addis, P Bhramara, MK Singh, ACM Sousa International Journal of Heat and Mass Transfer 134, 405-419	35	2019
<a href="#">Electron field emission from patterned nanocrystalline diamond coated <math>\alpha</math>-SiO<sub>2</sub> micrometer-tip arrays</a> JC Madaleno, MK Singh, E Titus, G Cabral, J Grácio, L Pereira	35	2008

TITLE	CITED BY	YEAR
Applied Physics Letters 92 (2), 023113		
<a href="#">Integrated biomimetic carbon nanotube composites for in vivo systems</a> MK Singh, J Gracio, P LeDuc, PP Gonçalves, PAAP Marques, ... Nanoscale 2 (12), 2855-2863	34	2010
<a href="#">Effects of additives on kinetics, morphologies and lead-sensing property of electrodeposited bismuth films</a> AR Rajamani, S Jothi, MD Kumar, S Srikaanth, MK Singh, ... The Journal of Physical Chemistry C 120 (39), 22398-22406	33	2016
<a href="#">Heat transfer and friction factor of nanodiamond-nickel hybrid nanofluids flow in a tube with longitudinal strip inserts</a> ACMS L. Syam Sundar, M.K. Singh* Int. Journal of Heat and Mass Transfer 121 (1), Pages 390–401	32	2018
<a href="#">Enhanced thermal properties of nanodiamond nanofluids</a> LS Sundar, MK Singh, ACM Sousa Chemical Physics Letters 644, 99-110	31	2016
<a href="#">Step growth in single crystal diamond grown by microwave plasma chemical vapor deposition</a> PK Tyagi, A Misra, KNN Unni, P Rai, MK Singh, U Palnitkar, DS Misra, ... Diamond and related materials 15 (2-3), 304-308	30	2006
<a href="#">A new polarised hot filament chemical vapor deposition process for homogeneous diamond nucleation on Si (100)</a> CS Cojocar, M Larijani, DS Misra, MK Singh, P Veis, F Le Normand Diamond and related Materials 13 (2), 270-276	29	2004
<a href="#">Optimized performance of nickel in crystal-layered arrangement of NiFe<sub>2</sub>O<sub>4</sub>/rGO hybrid for high-performance oxygen evolution reaction</a> P Shinde, CS Rout, D Late, PK Tyagi, MK Singh International Journal of Hydrogen Energy 46 (2), 2617-2629	28	2021
<a href="#">Structural damage on multiwalled carbon nanotubes and encapsulated single crystal nickel nanorods irradiated with Au<sup>+</sup> 7 ions of 100 MeV</a> A Misra, PK Tyagi, MK Singh, DS Misra, J Ghatak, PV Satyam, DK Avasthi Diamond and related materials 15 (2-3), 300-303	27	2006
<a href="#">Crystal structure, phase stoichiometry and chemical environment of Mg<sub>x</sub>Nb<sub>y</sub>O<sub>x+y</sub> nanoparticles and their impact on hydrogen storage in MgH<sub>2</sub></a> D Pukazhselvan, G Otero-Irurueta, J Pérez, B Singh, I Bdikin, MK Singh, ...	25	2016

TITLE	CITED BY	YEAR
international journal of hydrogen energy 41 (27), 11709-11715		
<b>Enhancement of (100) texture in diamond films grown using a temperature gradient</b> E Titus, AK Sikder, U Paltnikar, MK Singh, DS Misra Diamond and related materials 11 (7), 1403-1408	24	2002
<b>Efficiency analysis of thermosyphon solar flat plate collector with low mass concentrations of ND–Co3O4 hybrid nanofluids: an experimental study</b> L Syam Sundar, AH Misganaw, MK Singh, A Sousa, HM Ali Journal of Thermal Analysis and Calorimetry 143 (2), 959-972	22	2021
<b>Nitrogen-modified nano-titania: True phase composition, microstructure and visible-light induced photocatalytic NOx abatement</b> DM Tobaldi, RC Pullar, AF Gualtieri, G Otero-Irurueta, MK Singh, ... Journal of Solid State Chemistry 231, 87-100	22	2015
<b>Characterization of graphene oxide by flow cytometry and assessment of its cellular toxicity.</b> SK Singh, MK Singh, MK Nayak, S Kumari, JJ Grácio, D Dash Journal of biomedical nanotechnology 7 (1), 30-31	22	2011
<b>Direct nucleation of silver nanoparticles on graphene sheet</b> MK Singh, E Titus, R Krishna, RR Hawaldar, G Goncalves, P Marques, ... Journal of Nanoscience and Nanotechnology 12 (8), 6731-6736	21	2012
<b>Carbon nanotube based magnetic tunnel junctions (MTJs) for spintronics application</b> E Titus, R Krishna, J Grácio, M Singh, AL Ferreira, RG Dias Electronic Properties of Carbon Nanotubes	20	2011
<b>Efficiency, energy and economic analysis of twisted tape inserts in a thermosyphon solar flat plate collector with Cu nanofluids</b> LS Sundar, AH Misganaw, MK Singh, AMB Pereira, ACM Sousa Renewable Energy Focus 35, 10-31	19	2020
<b>Synthesis, characterization, and properties of graphene analogs of 2D material</b> PV Shinde, MK Singh Fundamentals and Sensing Applications of 2D Materials, 91-143	16	2019

TITLE	CITED BY	YEAR
<p><a href="#">ENERGY, ECONOMIC, ENVIRONMENTAL AND HEAT TRANSFER ANALYSIS OF A SOLAR FLAT-PLATE COLLECTOR WITH pH-TREATED Fe<sub>3</sub>O<sub>4</sub>/WATER ...</a></p> <p>LS Sundar, S Mesfin, Z Said, MK Singh, V Punnaiah, ACM Sousa International Journal of Energy for a Clean Environment 22 (6)</p>	14	2021
<p><a href="#">Optical properties of zigzag twinned geometry of Zn<sub>2</sub>SnO<sub>4</sub> nanowires</a></p> <p>S Jeedigunta, MK Singh, A Kumar, M Shamsuzzoha Journal of Nanoscience and Nanotechnology 7 (2), 486-489</p>	14	2007
<p><a href="#">Preparation, thermal and rheological properties of propylene glycol and water mixture based Fe<sub>3</sub>O<sub>4</sub> nanofluids</a></p> <p>LS Sundar, EV Ramana, MK Singh, J Gracio, A Sousa Journal of Nanofluids 3 (3), 200-209</p>	13	2014
<p><a href="#">Nanographene oxide functionalization with organic and hybrid organic–inorganic polymers by molecular layer deposition</a></p> <p>A Jaggernauth, RM Silva, MA Neto, MJ Hortiguera, G Goncalves, ... The Journal of Physical Chemistry C 120 (42), 24176-24186</p>	12	2016
<p><a href="#">Ni and Ni/Pt filling inside multiwalled carbon nanotubes</a></p> <p>MK Singh, E Titus, PK Tyagi, U Palnitkar, DS Misra, M Roy, AK Dua, ... Journal of Nanoscience and Nanotechnology 3 (1-2), 165-170</p>	12	2003
<p><a href="#">Recent developments in graphene-based two-dimensional heterostructures for sensing applications</a></p> <p>PV Shinde, M Saxena, MK Singh Fundamentals and sensing applications of 2D materials, 407-436</p>	11	2019
<p><a href="#">Charge injection in large area multilayer graphene by ambient Kelvin probe force microscopy</a></p> <p>I Bdikin, DK Sharma, G Otero-Irurueta, MJ Hortigüela, PK Tyagi, V Neto, ... Applied Materials Today 8, 18-25</p>	11	2017
<p><a href="#">Heat transfer and friction factor of Al<sub>2</sub>O<sub>3</sub> nanofluid flow in a double pipe U-tube heat exchanger and with longitudinal strip inserts: an experimental study</a></p> <p>PV Prasad, A Gupta, LS Sundar, MK Singh, A Sousa Journal of Nanofluids 4 (3), 293-301</p>	11	2015
<p><a href="#">Optimization of process parameters of aluminum alloy (Al-6082 T-6) machined on CNC lathe machine for low surface roughness</a></p> <p>MK Singh, D Chauhan, MK Gupta, A Diwedi</p>	11	2015

TITLE	CITED BY	YEAR
J Mater Sci Eng 4 (6), 2169-0022		
<a href="#">Advances in Nanocomposite Technology</a> P Marques, G Gonçalves, S Cruz, N Almeida, MK Singh, J Grácio, ... InTech	11	2011
<a href="#">Novel two-step method for synthesis of high-density nanocrystalline diamond fibers</a> MK Singh, E Titus, JC Madaleno, G Cabral, J Gracio Chemistry of Materials 20 (5), 1725-1732	11	2008
<a href="#">Solar energy absorbed thermosyphon flat plate collector analysis using Cu/H2O nanofluid–An experimental study</a> LS Sundar, V Punnaiah, MK Singh, AMB Pereira, ACM Sousa Energy and Climate Change 2, 100028	10	2021
<a href="#">Functionalized-Ferroelectric-Coatings-Driven Enhanced Biomineralization and Protein-Conformation on Metallic Implants</a> MHVFPMV Sebastian Złotnik, Marisa Maltez da Costa, Nathalie Barroca, Maria ... Journal of Materials Chemistry B	10	2019
<a href="#">Adsorption and coupling of 4-aminophenol on Pt (111) surfaces</a> G Otero-Irurueta, JI Martínez, RA Bueno, FJ Palomares, HJ Salavagione, ... Surface science 646, 5-12	10	2016
<a href="#">The Cobalt Oxide-Based Composite Nanomaterial Synthesis and Its Biomedical and Engineering Applications</a> LS Sundar, MK Singh, AMB Pereira, ACM Sousa Cobalt Compounds and Applications	9	2019
<a href="#">Amine-modified graphene: thrombo-protective safer alternative to graphene oxide for biomedical applications. ACS Nano 6 (3): 2731–2740</a> SK Singh, MK Singh, PP Kulkarni, VK Sonkar, JJA Grácio, D Dash	9	2012
<a href="#">Ternary VS<sub>2</sub>/ZnS/CdS hybrids as efficient electrocatalyst for hydrogen evolution reaction: Experimental and theoretical insights</a> PV Shinde, DS Gavali, R Thapa, MK Singh, CS Rout AIP Advances 11 (10), 105010	8	2021
<a href="#">Filled-carbon nanotubes: 1 D nanomagnets possessing uniaxial magnetization axis and reversal magnetization switching</a> R Kumari, A Singh, BS Yadav, DR Mohapatra, A Ghosh, P Guha, ... Carbon 119, 464-475	7	2017

TITLE	CITED BY	YEAR
<p><b>Biocompatibility and biotoxicity of in-situ synthesized carboxylated nanodiamond-cobalt oxide nanocomposite</b>            LS Sundar, NA Anjum, MC Ferro, E Pereira, MK Singh, ACM Sousa            Journal of materials science &amp; technology 33 (8), 879-888</p>	7	2017
<p><b>Magnetic Field Induced Enhancement in Thermal Conductivity and Viscosity of Stabilized Vacuum Pump Oil (VPO)—            Fe<sub>3</sub>O<sub>4</sub> Magnetic Nanofluids</b>            LS Sundar, EV Ramana, MK Singh, A Sousa            Journal of Nanofluids 4 (1), 7-15</p>	7	2015
<p><b>Fabrication and field emission property studies of vertically aligned multiwalled carbon nanotubes grown by double            plasma chemical vapour deposition technique</b>            E Titus, MK Singh, G Cabral, RP Babu, WJ Blau, J Gracio            Diamond and related materials 18 (5-8), 967-971</p>	7	2009
<p><b>Fabrication of vertically aligned carbon nanotubes for spintronic device applications</b>            E Titus, MK Singh, G Cabral, V Paserin, PR Babu, WJ Blau, J Ventura, ...            Journal of Materials Chemistry 19 (39), 7216-7221</p>	7	2009
<p><b>Tuning the synergistic effects of MoS<sub>2</sub> and spinel NiFe<sub>2</sub>O<sub>4</sub> nanostructures for high performance energy storage and            conversion applications</b>            PV Shinde, S Babu, SK Mishra, D Late, CS Rout, MK Singh            Sustainable Energy &amp; Fuels 5 (15), 3906-3917</p>	6	2021
<p><b>Experimental Heat Transfer and Friction Factor of Fe<sub>3</sub>O<sub>4</sub> Magnetic Nanofluids Flow in a Tube under Laminar Flow at            High Prandtl Numbers</b>            LS Sundar, HM Abebaw, MK Singh, AMB Pereira, ACM Sousa            Heat Technol.(Pisa, Italy) 38, 301-313</p>	6	2020
<p><b>Microstructure and electron field emission study of diamond nanorod decorated a-SiO<sub>2</sub> nanowires by microwave Ar–            CH<sub>4</sub>/H<sub>2</sub> plasma chemical vapor deposition with addition of N<sub>2</sub></b>            MK Singh, E Titus, MG Willinger, JC Madaleno, J Grácioa            Diamond and related materials 18 (5-8), 865-869</p>	6	2009
<p><b>Biotoxicity study of bone cement based on a functionalised multi-walled carbon nanotube-reinforced PMMA/HAp            nanocomposite</b>            MK Singh, PAAP Marques, ACM Sousa, J Gracio, V Silva, P Goncalves, ...            International Journal of Nano and Biomaterials 2 (1-5), 442-453</p>	6	2009



TITLE	CITED BY	YEAR
<p><a href="#">Thrombus inducing property of atomically thin graphene oxide sheets, ACS Nano 5 (2011) 4987–4996</a> SK Singh, MK Singh, MK Nayak, S Kumari, S Shrivastava, JJA Grácio, ...</p>	6	
<p><a href="#">Augmentation of Heat Transfer of High Prandtl Number Fe<sub>3</sub>O<sub>4</sub>/vacuum pump oil nanofluids flow in a tube with twisted tape inserts in laminar flow</a> LS Sundar, MK Singh, A Pereira, A Sousa Heat and Mass Transfer 56 (11), 3111-3125</p>	5	2020
<p><a href="#">Nanocrystalline diamond on SiO<sub>2</sub> fiber: A new class of hybrid material</a> MK Singh, E Titus, JC Madaleno, L Pereira, G Cabral, VF Neto, J Gracio Diamond and related materials 17 (7-10), 1106-1109</p>	5	2008
<p><a href="#">Melting and defect generation in chemical vapor deposited diamond due to irradiation with 100 MeV Au<sup>+</sup> and Ag<sup>+</sup> ions</a> DS Misra, U Palnitkar, PK Tyagi, MK Singh, E Titus, DK Avasthi, P Vasa, ... Thin solid films 503 (1-2), 121-126</p>	5	2006
<p><a href="#">Defect concentration in nitrogen-doped graphene grown on Cu substrate: A thickness effect</a> DK Sharma, S Fateixa, MJ Hortigüela, R Vidyasagar, G Otero-Irurueta, ... Physica B: Condensed Matter 513, 62-68</p>	4	2017
<p><a href="#">Exclusive Endothermic Oxidation of Fe<sub>3</sub>C-Filled Multi-Walled Carbon Nanotubes</a> L Krishnia, V Kumar, R Kumari, P Garg, BS Yadav, A Rath, A Ghosh, ... Advanced Science, Engineering and Medicine 8 (6), 460-467</p>	4	2016
<p><a href="#">Thermal conductivity and viscosity of hybrid nanofluids prepared with magnetic nanodiamond-cobalt oxide (ND-Co<sub>3</sub>O<sub>4</sub>) nanocomposite</a> L Syam Sundar, GO Irurueta, E Venkata Ramana, K Manoj, A Singh Case Studies in Thermal Engineering 7, 66-77</p>	4	2016
<p><a href="#">Morphological, compositional and ultrastructural changes in the Scrobicularia plana shell in response to environmental mercury—An indelible fingerprint of metal exposure?</a> I Ahmad, MK Singh, ML Pereira, M Pacheco, MA Santos, AC Duarte, ... Chemosphere 90 (11), 2697-2704</p>	4	2013
<p><a href="#">Integrated biomimetic carbon nanotube composites for biomedical applications</a> LS Sundar, R Hawaldar, E Titus, J Gracio, MK Singh Biomedical Engineering—Technical Applications in Medicine, 115-136</p>	4	2012

TITLE	CITED BY	YEAR
<p><a href="#">Growth of (100) oriented diamond grains by the application of lateral temperature gradients across silicon substrates</a> E Titus, DS Misra, MK Singh, PK Tyagi, A Misra, F Le Normand, J Gracio, ... Journal of materials research 19 (11), 3206-3213</p>	4	2004
<p><a href="#">Diamond nucleation and growth on zeolites</a> E Titus, MK Singh, KNN Unni, PK Tyagi, AK Dua, M Roy, DS Misra Diamond and related materials 12 (10-11), 1647-1652</p>	4	2003
<p><a href="#">Thermosyphon solar water heating system with Cu/water nanofluid and wire coil configurations: Efficiency, energy, economic, environmental, and heat transfer study</a> LS Sundar, TT Akanaw, MK Singh, ACM Sousa Environmental Progress &amp; Sustainable Energy 40 (5), e13648</p>	3	2021
<p><a href="#">Experimental Study on Heat Transfer and Friction Factor of Nanodiamond-Nickel (ND-Ni) Nanocomposite Nanofluids Flow in a Tube With Twisted Tape Inserts</a> LS Sundar, MK Singh, A Sousa Journal of Nanofluids 8 (5), 980-989</p>	3	2019
<p><a href="#">Synthesis and Field Emission Properties of Ultra-Nanocrystalline Diamond Fibers and Helices</a> MK Singh, E Titus, MG Willinger, J Grácio Journal of Nanoscience and Nanotechnology 10 (4), 2422-2433</p>	3	2010
<p><a href="#">Single crystalline nickel nanorods inside carbon nanotubes: Growth behavior, structure, and magnetic properties</a> PK Tyagi, A Misra, MK Singh, E Titus, DS Misra, J Ghatak, PV Satyam, ... Journal of nanoscience and nanotechnology 5 (4), 596-600</p>	3	2005
<p><a href="#">Filling of Carbon Nanotubes</a> PK Tyagi, MK Singh, DS Misra Encyclopedia of Nanoscience and Nanotechnology 3 (430), 417-430</p>	3	2004
<p><a href="#">HEAT TRANSFER ENHANCEMENT AND FRICTION FACTOR OF WATER/AL<sup>2</sup>O<sup>3</sup> NANOFUID IN CIRCULAR TUBE WITH LONGITUDINAL STRIP INSERTS UNDER LAMINAR FLOW</a> LS Sundar, KV Sharma, RA Bakar, MK Singh International Journal of Microscale and Nanoscale Thermal and Fluid ...</p>	2	2012
<p><a href="#">Effect of heavy ion irradiation on self-supported diamond sheets</a> U Palnitkar, VS Shirodkar, MK Singh, E Titus, PK Tyagi, KN Unni, ... Diamond and related materials 12 (10-11), 1771-1775</p>	2	2003

TITLE	CITED BY	YEAR
<p><a href="#">Effect of irrigation, nitrogen and phosphorus levels on the growth, development and yield of potato tuber.</a> A Misra, M Singh Indian Journal of Agricultural Research</p>	2	1983
<p><a href="#">Two-Dimensional Materials for Advanced Solar Cells</a> MK Singh, PV Shinde, P Singh, PK Tyagi Solar Cells-Theory, Materials and Recent Advances</p>	1	2021
<p><a href="#">Non-thrombotic and haemocompatible amine-modified graphene is a safer alternative to graphene oxide for biomedical use</a> PP Kulkarni, SK Singh, MK Singh, VK Sonkar, JJA Grácio, D Dash The FASEB Journal 26, 681.18-681.18</p>	1	2012
<p><a href="#">Automated high-throughput screening of carbon nanotube-based bio-nanocomposites for bone cement applications</a> PP Gonçalves, MK Singh, VS Silva, F Marques, A Marques, PR LeDuc, ... Pure and Applied Chemistry 83 (11), 2063-2069</p>	1	2011
<p><a href="#">UV Emission from Patterned Growth of ZnO Nanowires</a> MK Singh, E Titus, J Gracio Journal of Nanoscience and Nanotechnology 10 (4), 2764-2767</p>	1	2010
<p><a href="#">Integrated Biomimetic Carbon Nanotube Composites for Biomedical Applications</a> MK Singh, LS Sundar, R Hawaldar, E Titus, J Gracio Biomedical Engineering/Book 1</p>	1	
<p><a href="#">A facile synthesis of ternary hybrid nanocomposite of WS<sub>2</sub>/ZnO/PPy: An efficient photocatalyst for the degradation of chromium hexavalent</a> N Tyagi, W Ashraf, H Mittal, T Fatima, M Khanuja, MK Singh Dyes and Pigments 210, 110998</p>		2023
<p><a href="#">Surface Modified Graphene Oxide (GO) for Chemotherapeutic Drug Delivery</a> MK Singh, P Singh, N Tyagi, M Khanuja Advanced Porous Biomaterials for Drug Delivery Applications, 337-371</p>		2022
<p><a href="#">Facile Hydrothermal Synthesis of CoFe<sub>2</sub>O<sub>4</sub>/Co<sub>3</sub>O<sub>4</sub> Nanostructures for Efficient Oxygen Evolution Reaction</a> MK Singh, PV Shinde, R Samal, CS Rout Nanomaterials Science &amp; Engineering 3 (1), 22-30</p>		2021

TITLE	CITED BY	YEAR
<p><a href="#">Thermal Energy Storage in Phase Change Materials and Its Applications</a>            MK Singh, LS Sundar, MB Pereira, ACM Sousa            Latent Heat-Based Thermal Energy Storage Systems, 29-49</p>		2020
<p><a href="#">CVD of flat monolayer of 2D atomics honeycomb structure and their applications</a>            MK Singh, DK Sharma, G Otero-Irurueta, MJ Hortigüela            Chemical Vapour Deposition (CVD), 245-271</p>		2019
<p><a href="#">Heat Transfer Augmentation with Nanocomposite-Based Hybrid Nanofluids Flowing in a Tube with Inserts</a>            LS Sundar, MK Singh, ACM Sousa            Advances in New Heat Transfer Fluids, 145-180</p>		2017
<p><a href="#">ADVANCES IN NEW HEAT TRANSFER FLUIDS: FROM NUMERICAL TO EXPERIMENTAL TECHNIQUES</a>            G Huminic, A Huminic, F Dumitrache, C Fleacă, SL Syam, MK Singh, ...            Heat transfer 75, 112</p>		2017
<p><a href="#">Case Studies in Thermal Engineering</a>            LS Sundar, GO Irurueta, EV Ramana, MK Singh, ACM Sousa</p>		2016
<p><a href="#">Adsorption and coupling of 4-aminophenol on Pt (111) surfaces</a>            G Otero, JI Martínez, RA Bueno, FJ Palomares, HJ Salavagione, ...            Elsevier</p>		2016
<p><a href="#">Nitrogen-modified nano-titania: True phase composition, microstructure and visible-light induced photocatalytic NO<sub>x</sub> abatement</a>            RC Pullar, AF Gualtieri, G Otero-Irurueta, MK Singh, MP Seabra, ...            Journal of Solid State Chemistry 231</p>		2015
<p><a href="#">Synthesis of nanocrystalline diamond fibers</a>            A Kumar, MK Singh</p>		2013
<p><a href="#">Selected Peer-Reviewed Articles from International Conference on Advanced Nano Materials (ANM 2010)</a>            J Grácio, E Titus, V Neto, P Marques, DP Fagg, MK Singh, M Coelho, ...            Journal of Nanoscience and Nanotechnology 12 (8), 6599-6601</p>		2012
<p><a href="#">Microstructure, tribological response, and mechanical properties of fiber bonded silicon carbide ceramics</a>            MC Vera, J Ramirez, J Martinez, M Singh</p>		2012

TITLE	CITED BY	YEAR
<p><a href="#">Integrated biomimetic carbon nanotube composites for in vivo systems</a>            MK Singh, J Gracio, P Leduc, P Gonçalves, P Marques, G Gonçalves, ...            research@ ua 2, 27-27</p>		2011
<p><a href="#">Ferromagnetic behaviour of nickel contacted multiwalled carbon nanotubes</a>            E Titus, MK Singh, G Cabral, V Paserin, P Ramesh Babu, WJ Blau, ...            Journal of Nanoscience and Nanotechnology 10 (4), 2606-2610</p>		2010
<p><a href="#">New developments in Nanotechnology</a>            MK Singh, E Titus, G Gonçalves, P Marques, I Bdikin, A Kholkin, J Gracio            research@ ua 1</p>		2010
<p><a href="#">Effect of zinc nutrition on bio-chemical properties of zinc-efficient and zinc-inefficient genotypes of rice grown in sodic soil.</a>            AK Singh, PK Rajput, MK Singh            Advances in Plant Sciences 22 (2), 461-463</p>		2009
<p><a href="#">Bio-Inspired Magnetic Carbon Materials</a>            E Titus, J Gracio, DP Fagg, MK Singh, ACM Sousa            Nanotechnologies for the Life Sciences: Online</p>		2007
<p><a href="#">Synthesis of bamboo-shaped carbon nanotubes on Ni-Electroplated copper Substrate by MPCVD technique</a>            MK Singh, E Titus, DS Misra            Solid State Physics 44, 251</p>		2002
<p><a href="#">The FTIR Studies of(100) Oriented Diamond Films grown on Si Substrate Using Temperature Gradient Across the Substrate</a>            E Titus, AK Sikder, U Paltnikar, MK Singh, DS Misra            Proceedings of the Sixth Applied Diamond Conference/Second Frontier Carbon ...</p>		2001
<p><a href="#">A novel extracellular synthesis of gold nano particles using marine alga from the gulf of mannar region</a>            M Singh            Madurai</p>		
<p><a href="#">Electrostatic self-assembled graphene oxide-collagen scaffolds towards a three-dimensional environment for biomimetic applications</a>            AF Girão, G Gonçalves, KS Bhangra, JB Phillips, J Knowles, G Hurietta, ...</p>		
<p><a href="#">Ferromagnetic Behaviour of Nickel Contacted Multiwalled Carbon Nanotubes</a></p>		

TITLE

CITED BY

YEAR

---

MK Singh, G Cabral, R Babu, WJ Blau