**CURRICULUM VITAE**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Title (Ms. /Mr./Dr./Prof.) | | Dr. | | First Name | Savita | Last Name | | Sharma | | Photograph | |
| Designation | | Assistant Professor | | | | | | | | Savita photo.jpeg | |
| Department | | Physics | | | | | | | |  | |
| Address (Official) | |  | | | | | | | |  | |
| Phone No. | |  | | | | | | | |  | |
| Email | | savitasharma@kalindi.du.ac.in | | | | | | | |  | |
| **Education** | | | | | | | | | | | |
| Subject | | | Institution | | | | Year | | Details | | |
| B.Sc. (Physics) | | | Kalindi College, University of Delhi | | | | 2007 | | Physics Hons. | | |
| M.Sc. (Physics) | | | Hindu College, University of Delhi | | | | 2010 | | With Electronics Specialization | | |
| B.Ed. | | | G.G.S. Indraprastha University, Delhi | | | | 2008 | | Teaching of Science & Mathematics | | |
| Ph.D. | | | Delhi Technological University | | | | 2016 | | Material Sciences | | |
|  | | |  | | | |  | |  | | |
| **Career Profile** | | | | | | | | | | | |
| Organisation/Institution | | | Designation | | | | Duration | | Role | | |
| Department of Physics & Astrophysics, University of Delhi | | | Project Assistant | | | | Aug. 2010 –Aug. 2011 | | Research | | |
| National Physical Laboratory, Delhi | | | Project Assistant | | | | April 2012- July 2012 | | Research | | |
| Delhi Technological University | | | Assistant Professor (Guest) | | | | Aug. 2012- July 2013 | | Teaching | | |
| Delhi Technological University | | | Teaching Research Fellow | | | | Aug. 2013-December 2015 | | Teaching | | |
| Delhi Technological University | | | Assistant Professor (Guest) | | | | Aug. 2016-Decem 2016 | | Teaching | | |
| Kalindi College, University of Delhi | | | Assistant Professor | | | | Jan.2017- April 2017 | | Teaching | | |
| Kalindi College, University of Delhi | | | Assistant Professor | | | | July 2017- Present | | Teaching | | |
| **Research Interests/Specialization** | | | | | | | | | | | |
| Electronics, Nanotechnology, Material Sciences: Thin Film Technology, Sensors & Transducers, Memory devices, Solar Cells, High energy Ion beam irradiation.  **AREAS OF RESEARCH**  · Study of multiferroic properties of various multilayered and single-layered thin films.  · Energy Harvesting by Ferroelectric Photovolataic effect in multilayered thin films.  . Energy storage using perovskite materials.  . Resistive switching in ferroelectric & metal-oxide thin films for memory devices applications.  · Synthesis of perovskite materials by low-cost, low-temperature hydrothermal synthesis and to study its multiferroic properties.  · Exploitation of metal-oxides and perovskites thin films for gas sensing applications.  · Development of UV-Photodetectors using synthesized perovskite thin films.  **RESEARCH EXPERTISE**  · Specialization in thin film deposition using Physical Vapor Deposition techniques like Magnetron Sputtering, RF Diode Sputtering, DC Sputtering, Thermal Evaporation, Pulsed Laser Deposition, Thermal Evaporation and Chemical Solution Deposition for various application.  · Handling and analysis of characterization techniques like X-Ray Diffraction, Micro Raman Spectroscopy, UV-Visible Spectrophotometer, Fourier Infra-red Spectroscopy, Scanning Electron Microscopy, Atomic force Microscopy, Cyclic Voltammetry, Semiconductor Characterization Unit (Keithely 4200), Radiant ferroelectric loop tracer, Vibrating Sample Magnetometer (VSM) and LCR meter-Dielectric Measurements. | | | | | | | | | | | |
| **Administrative Assignments / Contribution to corporate life** | | | | | | | | | | | |
| 1. President, Alumni Association, Kalindi College 2. Co-Convener, E-Content development Committee, Kalindi College 3. Member, Management Information System (MIS) Committee, Kalindi College 4. Member, Criteria II Committee, Kalindi College 5. Member, Prize Committee, Kalindi College 6. Member, Repository committee, Kalindi College 7. Member, Farewell committee, Kalindi College 8. Member, Rangoli Cultural Club, Kalindi College 9. Member, Swachhta Abhiyan, Science Block, First Floor, Kalindi College. 10. Member, organizing committee, “Dimenzie” an inter-college fest, held on 15th Feb 2017. Guided students for project in event "Science in everyday life”. 11. Member, organizing committee of National seminar on “A paradigm shift towards empowerment   of women”, held on 3-4 Feb 2017 organized by Science Departments of Kalindi college.   1. Member, Momento Committee, “Lehrein 2017” 2. Represented Kalindi College along with Undergraduate students in the National Science Day Programme organized by the Inter-University Accelerator Centre, Delhi, India on 28th February 2017. 3. Member, organizing committee “Workshop on “Quantum Physics: An Insight” held on October 25-26, 2017 organized by the The National Academy of Sciences India-Delhi Chapter & Physics Department, Kalindi College, University of Delhi. 4. Faculty Volunteer, Organizing committee at **94th , 95th & 96th Annual Convocation,** **University of Delhi** **held on November, 2017-2019** 5. Member, Organizing committee of “International symposium on Integrated functionalities ISIF-2017” held on December 10-13, 2017 at Shangri-La Ero’s Hotel, New Delhi, jointly organized by University of Delhi, IISc Banglore & IIT Delhi under the aegis of MRSI. 6. Member, organizing committee, “Technowave-2k18” an inter-college fest, held on 7-8th Feb 2018. Guided students for events "Q-Fiesta” & “Circuit Making”. 7. Convener, Communication System -- 3rd year Physics Hons. Subject at committee formed during 4-Days Workshop held on 31st Jan-5th Feb. 2018 at Department of Physics & Astrophysics, University of Delhi. 8. Examiner, at Department of Physics & Astrophysics, University of Delhi. 9. Organizer and Trainer of “SKILL ENHANCEMENT WORKSHOP FOR LABORATORY STAFF” organized by Internal Quality Assurance Cell & Science Departments at Kalindi College, University of Delhi, Delhi, India held from 13th to 14th March 2018. 10. Resource person for the teaching Solid State Physics paper in Summer M.Sc. Entrance Coaching classes organized by Department of Physics & Astrophysics, University of Delhi. 11. Organized Field visit to Electronic Materials and Devices Laboratory, Department of Physics & Astrophysics for students of B.Sc. (H) Physics & B.Sc. Physical Science IIIrd Year Kalindi College | | | | | | | | | | | |
| **Teaching Experiences (Subject/Courses taught)** | | | | | | | | | | | |
| **Subjects taught in Kalindi College, University of Delhi**   |  |  | | --- | --- | | **Class** | **Paper Name & Details** | | 1. B.Sc. (H) Physics III Year | Communication Systems (DSE) Theory & Lab | | 2. B.Sc. Physical Science II Year | Thermal Physics & Statistical Mechanics Theory | | 3. B.Sc. (H) I Year | Digital, Analog & Instrumentation Theory & Lab | | 4. B.Sc. (H) I Year | Mechanics (GE) Lab | | 5. B.Sc. (H) III Year | Nanomaterials & Applications Lab | | 6. B.Sc. Physical Science III Year | Elements of Modern Physics Lab | | | | | | | | | | | | |
| **Research Guidance** | | | | | | | | | | | |
| 1. Guided M.Sc. students of University of Delhi in their M.Sc. final year project under the supervision of Prof. Vinay Gupta. 2. Guided M.Sc. & M.Tech. students of Amity University in their M.Sc. final year project under the supervision of Prof. Vinay Gupta. 3. Guiding 01 Ph.D. student- Shiva Lamichhane with Late Prof. Vinay Gupta & Dr. Arijit Chowdhuri. Till date there have been 04 publications out of this association. | | | | | | | | | | | |
| **Publications/Review as Book Chapters & any other credential, significant contributions, responsibilities, etc. not mentioned earlier.**   1. **Savita Sharma**, **Chapter 6 – An overview on ferroelectric photovoltaic materials**, January 2021, In book: Sustainable Material Solutions for Solar Energy Technologies by Elsevier. Editor(s): Mariana Amorim Fraga, Delaina Amos, Savas Sonmezoglu, Velumani Subramaniam, **In Solar Cell Engineering, Sustainable Material Solutions for Solar Energy Technologies, Elsevier, 2021, Pages 175-199, ISBN 9780128215920**   DOI: <https://doi.org/10.1016/B978-0-12-821592-0.00002-9>.   1. **Savita Sharma,** K. Uday Kumar, D. Haranath, R. Rakesh Kumar and Hitesh Borkar,   **Chapter 5 - Organic-Inorganic Perovskites Nanogenerators for Energy Harvesting Applications**, November 2021, In book: Advances in Energy Research Volume 35 (Numbered Series), Nova, Science and Technology, Technology and Engineering, **BISAC: SCI024000, ISBN: 978-1-68507-373-2, DOI:** [**https://doi.org/10.52305/EEEQ2450**](https://doi.org/10.52305/EEEQ2450)   1. **Sharma, S.,** Paliwal, A., Kumar, P., Saxena, N. **(2023). II–VI Semiconductor-Based Optical Gas Sensors. In: Korotcenkov, G. (eds) Handbook of II-VI Semiconductor-Based Sensors and Radiation Detectors. Springer, Cham. pp. 307-333, ISBN: 978-3-031-23999-1** [**https://doi.org/10.1007/978-3-031-24000-3\_12**](https://doi.org/10.1007/978-3-031-24000-3_12)  1. [Vikas Narayan Thakur](https://www.researchgate.net/profile/Vikas-Thakur-8?_sg%5B0%5D=uJPACYIrWwmGXXx88_4GhVvmJV9TqK7bc3BGhXA5MJEfHDyee21hqcqQuqbEIqHTpidNIac.uipd9LHgFUFcKzjJdycf553XSS8BfUbENA1aXRApzp8TzjtXsr0ZV5JY6WCZlGiET9IigrUrav_mEOwGf0snpg&_sg%5B1%5D=vFeSy5DaBnoVhSotOpMjCAWuMlr_JdvwrTQ_hyPnYxWb8m45izzu5IS1Zm_6fSAPbZoxmqE.xwvxwBUf0id3kayI4erDUEWep5ivzV3iyuYGi5P2n2aSnJsCTbE63mjD5lWPAxoQ_1TBFS207Ou7Z5_KcjBkyg&_tp=eyJjb250ZXh0Ijp7ImZpcnN0UGFnZSI6Il9kaXJlY3QiLCJwYWdlIjoicHVibGljYXRpb24iLCJwcmV2aW91c1BhZ2UiOiJwcm9maWxlIiwicG9zaXRpb24iOiJwYWdlSGVhZGVyIn19), **Savita Sharma**, Hitesh Borkar, [**Flexoelectricity in lead-based ceramics: theories and progress**](https://www.researchgate.net/publication/370359764_Flexoelectricity_in_lead-based_ceramics_theories_and_progress?_sg%5B0%5D=hIyWXDSD_WJXS1VvU6GwdOKhyamC-_HnGqV4B--RsG8VCvi-Immwe1bYzIKCqGyBwnar-mTuLpm7biauwZnXh_tFn3yR9YrEp7dIYnVD.bJtG6-rM9SFC7a2v9JFjQTm2yVS9uAYGe1djwJbrMX6KN2foOYZmRyP7egIhzMhxUNuzbSnHqu9bR1ZZqTK4pA&_tp=eyJjb250ZXh0Ijp7ImZpcnN0UGFnZSI6Il9kaXJlY3QiLCJwYWdlIjoicHJvZmlsZSIsInByZXZpb3VzUGFnZSI6InByb2ZpbGUiLCJwb3NpdGlvbiI6InBhZ2VDb250ZW50In19) **(2023)**. In: Flexoelectricity in Ceramics and their Application, **Elsevier, 2023, Paperback ISBN: 9780323952705**, eBook ISBN: 9780323952712. 2. Nupur Saxena, **Savita Sharma**, Pragati Kumar, Book Chapter-10 - **All metal oxide-based photodetectors**, In Metal Oxides, Metal Oxides for Next-Generation Optoelectronic, Photonic, and Photovoltaic Applications, **Elsevier, 2024**, Pages 277-300, ISBN 9780323991438,[**https://doi.org/10.1016/B978-0-323-99143-8.00012-2**](https://doi.org/10.1016/B978-0-323-99143-8.00012-2) 3. **Reviewed the Table of Contents for Resnick Halliday Krane Physics, 5th edition, Volume 1 (ISBN: 9780471320579) and Volume 2 (ISBN: 9780471401940)** and suggested scope of changes for their Indian Adaptation. Also contributed some additional content and problems for the Chapter: Entropy and The Second Law of Thermodynamics, in Volume 1 of the title. 4. **Resource person for delivering lecture on Solid State Physics and Thermal Physics** subjects at an 11-week Course (July 27, 2020 to October 11, 2020) on Learning Physics with Conceptual & Problem-based Approach organized By The National Academy of Sciences India (NASI)- Delhi Chapter on 03.10.2020, 05.10.2020 and 10.10.2020. | | | | | | | | | | | |
| **Patents Filed:**   1. **Title of the invention**: Electrochemical based genosensor for the Detection of PUCCINIA STRIIFORMIS F. SP. TRITICI and method thereof. Ref. No./Application No. 202011027298, Application No. TEMP/E-1/30053/2020-DEL, **INVENTOR(S):** Neelam R. Yadav**,** Rizwana Rehsawla, Nidhi Dhull, **Savita Sharma**, Vinay Gupta, Monika Tomar, **APPLICANT(S):** Chaudhary Charan Singh Haryana Agricultural University. 2. **Title of the invention**: Surface Plasmon Resonance based DNA biosensor for the detection of PUCCINIA STRIIFORMIS F. SP. TRITICI and method thereof. Ref. No./Application No. 202011022741, Application No. TEMP/E-1/24707/2020-DEL, **INVENTOR(S):** Neelam R. Yadav**,** Rizwana Rehsawla, Surbhi Jain, **Savita Sharma**, Vinay Gupta, Monika Tomar, **APPLICANT(S):** Chaudhary Charan Singh Haryana Agricultural University. | | | | | | | | | | | |
| **Publication (Peer Reviewed/Indexed Journals)** | | | | | | | | | | | |
| **Year of Publication** | **Title** | | | | | **Journal (Name of the journal. Vol. Issue ISSN)** | | | | | **Co-Author** |
|  |  | | | | |  | | | | |  |
| 1. **2024** | Role of laser energy  variation on energy storage capacity of bilayer BFO/WO3 thin film  structure | | | | | **Materials Science in Semiconductor Processing**, 114, 7-8, pp: 633-640 (2024); DOI: <https://doi.org/10.1515/ijmr-2021-8723> **Online ISSN: 1873-4081**  **Print ISSN: 1369-8001**  **IF: 4.2** | | | | | Shiva Lamichhane, Monika Tomar, Arijit Chowdhuri and **Savita Sharma** |
| 1. **2023** | Impact of top metal electrodes on current conduction in WO3 thin films | | | | | **International** **Journal** **of** **Materials** **Research**, 114, 7-8, pp: 633-640 (2023); DOI: <https://doi.org/10.1515/ijmr-2021-8723>  Online ISSN: 2195-8556. IF: 0.8 | | | | | **Savita Sharma**, Monika Tomar and Sudha Gulati |
| 1. **2023** | Studies on photovoltaic properties of BFO/WO3 bilayer thin films for solar energy harvesting applications | | | | | **Results in Optics**, 13(3), 100539 (2023); DOI: <https://doi.org/10.1016/j.rio.2023.100539>  Print ISSN: 2666-9501. Cite score: 1.8 | | | | | Shiva Lamichhane, **Savita Sharma**, Monika Tomar and Arijit Chowdhuri |
| 1. **2023** | Effect of annealing on Resistive Switching properties of GLAD assisted WO 3 thin films | | | | | **Physica Status Solidi (A) Applications and Materials,** 220(20), 2300358 (2023); [**https://doi.org/10.1002/pssa.202300358**](https://doi.org/10.1002/pssa.202300358); Online ISSN: 1862-6319. IF: 2.0 | | | | | Shiva Lamichhane, **Savita Sharma**, Monika Tomar and Arijit Chowdhuri |
| 1. **2023** | [Nanofilm-Enhanced Electrochemical DNA Sensing: A Breakthrough for Yellow Rust Detection in Wheat](https://www.researchgate.net/publication/374424941_Nanofilm-Enhanced_Electrochemical_DNA_Sensing_A_Breakthrough_for_Yellow_Rust_Detection_in_Wheat?_sg%5B0%5D=M7S4x6R350l4oQ5iqiA-8WJG4IWOIR6daWnl02Sie3CBzI7fT0ja9Fdzwe4fJHrIK0zDA01fE_Y8ks0n8K9yAVJSekazf_oO40IgKbAv.1S3uzB5IlKoju7NXvM0TJFyfsVKhdiDr0-wxHxDlXyaeogIF-Nn1IwxkVrwW3A0RBnEFsgyacffeqOAX1lFxuQ&_tp=eyJjb250ZXh0Ijp7ImZpcnN0UGFnZSI6Il9kaXJlY3QiLCJwYWdlIjoicHJvZmlsZSIsInByZXZpb3VzUGFnZSI6InByb2ZpbGUiLCJwb3NpdGlvbiI6InBhZ2VDb250ZW50In19) | | | | | **Materials Research Express**, Volume 10, Number 11, 116402, (2023), DOI: [10.1088/2053-1591/acffac](http://dx.doi.org/10.1088/2053-1591/acffac) Online ISSN: 2053-1591; IF: 2.3 | | | | | Rizwana Rehsawla, Nidhi Dhull, Monika Tomar, **Savita Sharma** and Neelam R Yadav |
| 1. **2022** | Effect of variation in glancing angle deposition on resistive switching property of WO3 thin films for RRAM devices | | | | | **Journal of Applied Physics, AIP Publications, 132, 134102 (2022); DOI:** [**https://doi.org/10.1063/5.0103236**](https://doi.org/10.1063/5.0103236) **ISSN:** 0021-8979. **IF: 2.877** | | | | | Shiva Lamichhane, **Savita Sharma**, Monika Tomar and Arijit Chowdhuri |
| 1. **2022** | Impact of laser energy on resistive switching properties of BiFeO3 thin films | | | | | **Materials Chemistry and Physics, 293, 126824 (2022).**  **DOI:** [**https://doi.org/10.1016/j.matchemphys.2022.126824**](https://doi.org/10.1016/j.matchemphys.2022.126824)  **ISSN: 0254-0584 IF: 4.778** | | | | | Shiva Lamichhane, **Savita Sharma**, Monika Tomar and Arijit Chowdhuri |
| 1. **2022** | Studies on energy storage properties of BFO/WO3 bilayer thin film capacitor | | | | | **Energy Storage, Wiley Publications, e342, 1-11 (2022).**  **DOI:** [**https://doi.org/10.1002/est2.342**](https://doi.org/10.1002/est2.342)  **ISSN: 2578-4862** | | | | | Shiva Lamichhane, **Savita Sharma**, Monika Tomar and Arijit Chowdhuri |
| 1. **2021** | Investigation of charge transport mechanism in hydrothermally synthesized reduced graphene oxide (rGO) incorporated zinc oxide (ZnO) nanocomposite films | | | | | **Journal of Material Science: Materials in Electronics, 33, 1307-1323 (2021) DOI:** [**https://doi.org/10.1007/s10854-021-07445-6**](https://doi.org/10.1007/s10854-021-07445-6)  **ISSN: 0957-4522. IF: 2.324** | | | | | Nitika Jain, **Savita Sharma,** Nitin K. Puri |
| 1. **2021** | Investigation of Adulteration in Milk using Surface Plasmon Resonance | | | | | **ECS Journal of Solid State Science and Technology,** Volume 10, Number 9, Page 091004 (2021).  **ISSN: 2162-8769**  **Impact Factor: 2.070**  **DOI:** <https://iopscience.iop.org/article/10.1149/2162-8777/ac1f71> | | | | | **Savita Sharma**, Ayushi Paliwal, Monika Bassi, Monika Tomar, Vinay Gupta, and Sudha Gulati |
| 1. **2021** | Bipolar Resistive Switching in Magnetostrictive Ni/PZT/Pt Structure for Non-Volatile Memory Applications | | | | | **ECS Journal of Solid State Science and Technology,** Volume 10, Number 7, Page 071001 (2021).  **ISSN: 2162-8769**  **Impact Factor: 2.070**  **DOI:** <https://doi.org/10.1149/2162-8777/ac0cc7> | | | | | **Savita Sharma**, Surbhi Gupta, Reema Gupta, Hitesh Borkar, Ashok Kumar,Vinay Gupta, and Monika Tomar |
| 1. **2021** | Comparison of Ferroelectric Photovoltaic Performance in BFO/BTO Multilayer Thin Film Structure Fabricated Using CSD & PLD Techniques | | | | | **Journal of Electronic Materials,** volume50, pages1835–1844 (2021)  ISSN: 0361-5235  <https://doi.org/10.1007/s11664-021-08793-z>  **Impact Factor : 1.938** | | | | | **Savita Sharma**, Anjali Sharma, Vinay Gupta, Nitin K. Puri and Monika Tomar |
| 1. **2020** | Fresnel's equations in  transition from single to multiple  interfaces and evaluation of optical  parameter | | | | | **Sambodhi,** Volume 43, 4, Page 131, 2020.  ISSN: 2249-6661 | | | | | Rachana Kumar, Seema Gupta and **Savita Sharma** |
| 1. **2020** | Influence of laser fluence in modifying energy storage property of BiFeO3 thin film capacitor | | | | | **Journal of Energy Storage**  Volume 32, 101769 (2020)  ISSN: 2352-152X <https://doi.org/10.1016/j.est.2020.101769>  **Impact Factor : 6.5** | | | | | Shiva Lamichhane, **Savita Sharma**, Monika Tomar, Ashok Kumar and Vinay Gupta |
| 1. **2020** | Effect of Laser fluence on multiferroic BFO ferroelectric Photovoltaic Cells | | | | | **Journal of Physics and Chemistry of Solids**, Volume 146, 109602, (2020).  ISSN: 0022-3697.  **Impac**<https://doi.org/10.1016/j.jpcs.2020.109602>  **t Factor : 3.94** | | | | | Shiva Lamichhane, **Savita Sharma**, Monika Tomar, and Vinay Gupta |
| 1. **2020** | Non-volatile resistive switching in WO3  Thin films | | | | | **AIP Conference Proceedings** 2220, 040035 (2020); https://doi.org/10.1063/5.0002679 | | | | | Shiva Lamichhane, **Savita Sharma**, Monika Tomar, and Vinay Gupta |
| 1. **2020** | Designing and Analysis of Swamped Transistor Amplifier and study of effect of Swamping on gain Stabilization | | | | | **Kalindi College, Yearly Academic Journal**, Vol. XIX, ISSN: 2348-9014, 2019-2020. | | | | | Monika Bassi, Sudha Gulati, **Savita Sharma** |
| 1. **2019** | Multiferroic BFO/BTO multilayer structures based magnetic field sensor | | | | | **Physica B** 571 (2019) 1-4. <https://doi.org/10.1016/j.physb.2019.06.056> | | | | | **Savita Sharma**, Ayushi Paliwal, Monika Tomar and Vinay Gupta |
| 1. **2019** | Impact of plasma dynamics on magneto optic kerr effect (MOKE) in Mn doped BFO thin films | | | | | **Physica B** 571 (2019) 57-63. <https://doi.org/10.1016/j.physb.2019.06.054> | | | | | Ayushi Paliwal, **Savita Sharma**, Monika Tomar and Vinay Gupta |
| 1. **2018** | Effect of top metal contact on the ferroelectric photovoltaic response of BFO thin film capacitors | | | | | **Vacuum** 158 (2018) 117-120. Impact factor: 2.067. ISSN: 0042-207X. DOI: [**https://doi.org/**10.1016/j.vacuum.2018.09.032](https://doi.org/10.1016/j.vacuum.2018.09.032) | | | | | **Savita Sharma,** Monika Tomar, Vinay Gupta |
| 1. **2018** | Structural, morphological and optical properties of BiFe0.99Cr0.01O3 thin films | | | | | **Vacuum** 158 (2018) 166-171.Impact factor: 2.067. ISSN: 0042-207X DOI : [**https://doi.org/**10.1016/j.vacuum.2018.09.051](https://doi.org/10.1016/j.vacuum.2018.09.051) | | | | | Shaan Ameer, Kajal Jindal,**Savita Sharma**, Pradip K. Jha, Monika Tomar, Vinay Gupta |
| 1. **2018** | Detailed optical analysis of 100  MeV Ni7+ ion irradiated WO3 thin films using Surface Plasmon Resonance | | | | | **Radiation Physics and Chemistry** 153 (2018) 51-57.  Impact factor: 1.435. ISSN: 0969-806X**.**  [**https://doi.org/10.1016/j.radphyschem.2018.09.004**](https://doi.org/10.1016/j.radphyschem.2018.09.004) | | | | | **Savita Sharma**, Ayushi Paliwal, Monika Tomar, Fouran Singh, Nitin K. Puri, Vinay Gupta |
| 1. **2018** | WO3/BTO heterostructures based NO2 sensor with enhanced response characteristics | | | | | **Integrated Ferroelectrics** 193 **(**2018) 106–120.  [**https://doi.org/10.1080/10584587.2018.1516069**](https://doi.org/10.1080/10584587.2018.1516069) | | | | | **Savita Sharma**, Monika Tomar, Nitin K. Puri, Vinay Gupta |
| 1. **2018** | [Studies on the effect of integration of metal nanoclusters on the electrical and ferroelectric properties of barium titanate thin film](https://coms.events/imf2017/data/abstracts/en/abstract_0064.html). | | | | | **Ferroelectrics** 533(1) 43-48 (2018)  Impact factor: 0.728. Print ISSN: 0015-0193 Online ISSN: 1563-5112  [**https://doi.org/10.1080/00150193.2018.1470829**](https://doi.org/10.1080/00150193.2018.1470829) | | | | | **Savita Sharma,**Monika Tomar, Ashok Kumar, Vinay Gupta |
| 1. **2017** | Influence of 100 MeV Au+8 ion on photovoltaic response of BiFeO3/BaTiO3 multilayer structures. | | | | | **Materials and Design** 114 (2017) 345–354.  Impact factor: 3.99. ISSN: 0264-1275**.**  DOI: [**https://doi.org/**10.1016/j.matdes.2016.11.011](https://doi.org/10.1016/j.matdes.2016.11.011) | | | | | **Savita Sharma**, Monika Tomar, Ashok Kumar, Fouran Singh, Nitin K. Puri, Vinay Gupta |
| 1. **2017** | Photovoltaic response of hydrothermally derived BFO ceramics | | | | | **Emerging Materials Research** 6(1) (2017) 1-17.  ISSN 2046-0147  [**https://doi.org/10.1680/jemmr.15.00065**](https://doi.org/10.1680/jemmr.15.00065) | | | | | **Savita Sharma,** Nitin K.Puri, Vinay Gupta |
| 1. **2016** | Effect of insertion of low leakage polar layer on leakage current and multiferoic properties of BiFeO3/BaTiO3 multilayer structure.v | | | | | **RSC Advances** 6 (2016) 59150-59154.  Impact factor: 3.289.  ISSN: 2046-2069.  DOI: [**https://doi.org/**10.1039/C6RA09326D](https://doi.org/10.1039/C6RA09326D) | | | | | **Savita Sharma**, Monika Tomar, Ashok Kumar, Nitin K.Puri, Vinay Gupta |
| 1. **2016** | Effect of Ion beam irradiation on dielectric properties of BaTiO3 thin film studied using Surface Plasmon resonance | | | | | **Journal of Material science** 51 (2016) 4055-4060.  Impact factor: 2.302. ISSN: 0022-2461  DOI: [**https://doi.org/**10.1007/s10853-016-9725-x](https://doi.org/10.1007/s10853-016-9725-x) | | | | | **Savita Sharma**, Ayushi Paliwal, Monika Tomar, Fouran Singh, Nitin K. Puri and Vinay Gupta |
| 1. **2015** | Enhanced Ferroelectric photovoltaic response of BiFeO3/BaTiO3 multilayer structures | | | | | **Journal of Applied Physics** 118 (2015) 074103-1-74109  Impact factor: 2.183. ISSN: 0021-8979.  <https://doi.org/10.1063/1.4928964> | | | | | **Savita Sharma**, Monika Tomar, Ashok Kumar, Nitin K. Puri, Vinay Gupta |
| 1. **2016** | Photovoltaic properties of BiFeO3/BaTiO3 multilayered thin films prepared by Sol-gel Method | | | | | **Journal of Physics and Chemistry of Solids** 93 (2016) 63-67.  Impact factor: 2.048. ISSN: 0022-3697.  <https://doi.org/10.1016/j.jpcs.2016.02.010> | | | | | **Savita Sharma**, Monika Tomar, Nitin K.Puri, Vinay Gupta |
| 1. **2016** | BiFeO3/BaTiO3 multilayered structures for solar energy harvesting applications | | | | | **Energy Harvesting and Systems** 3 (2016) 237-243.  ISSN: 2329-8766.  **DOI:** [https://doi.org/**10.1515/ehs-2016-0001**](https://doi.org/10.1515/ehs-2016-0001) | | | | | **Savita Sharma,** Monika Tomar, Nitin K.Puri, Vinay Gupta |
| 1. **2015** | Stress induced enhanced polarization in multilayer BiFeO3/BaTiO3 structure with improved energy storage properties | | | | | **AIP Advances** 5 (2015) 107216.  Impact Factor: 1.444.  E-ISSN: 2158-3226.  <https://doi.org/10.1063/1.4934578> | | | | | **Savita Sharma**, Monika Tomar, Nitin K. Puri, Vinay Gupta |
| 1. **2015** | Ultraviolet radiation detection by barium titanate thin films grown by Sol-gel hydrothermal Method | | | | | **Sensors & Actuators A** 230 (2015) 175–181. Impact factor: 2.201. ISSN: 0924-4247.  <https://doi.org/10.1016/j.sna.2015.04.019> | | | | | **Savita Sharma**, Monika Tomar, Nitin K. Puri, Vinay Gupta |
| 1. **2014** | Multiferroic Properties of BiFeO3/BaTiO3 Multilayered Thin Films | | | | | **Physica B** 448 (2014) 125-127.  Impact factor: 1.352. ISSN: 0921-4526.  <https://doi.org/10.1016/j.physb.2014.03.089> | | | | | **Savita Sharma**, Monika Tomar, Ashok Kumar, Nitin K. Puri, Vinay Gupta |
| 1. **2014** | Properties of Barium titanate thin films grown by Sol-gel-hydrothermal process. | | | | | **Advanced Science Letters** 20 (2014) 1143-1146.  Impact factor: 1.253. ISSN: 1936-6612.  [**https://doi.org/10.1166/asl.2014.5499**](https://doi.org/10.1166/asl.2014.5499) | | | | | **Savita Sharma,** Monika Tomar, Ashok Kumar, Nitin K. Puri, Vinay Gupta |
| 1. **2014** | Photovoltaic Properties of BiFeO3/BaTiO3 bilayered thin films | | | | | **Advanced Science Letters** 20 (7) (2014) 1316-1320.  Impact factor: 1.253. ISSN: 1936-6612.  <https://doi.org/10.1166/asl.2014.5573> | | | | | **Savita Sharma**, Monika Tomar, Ashok Kumar, Nitin K. Puri, Vinay Gupta |
| 1. **2016** | Refractive index dispersion of swift heavy ion irradiated BFO thin films using Surface Plasmon Resonance technique | | | | | **Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms** 379 (2016) 126–130.  Impact factor: 1.389. ISSN: 0168-583X.  <https://doi.org/10.1016/j.nimb.2016.04.051> | | | | | Ayushi Paliwal, **Savita Sharma**, Monika Tomar, Fouran Singh, Vinay Gupta |
| 1. **2016** | Swift Heavy Ion irradiated SnO2 thin film sensor for efficient detection of SO2 gas | | | | | **Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms** 379 (2016) 219–223. Impact factor: 1.389. ISSN: 0168-583X.  <https://doi.org/10.1016/j.nimb.2016.03.048> | | | | | Punit Tyagi, **Savita Sharma**, Monika Tomar, Fouran Singh, Vinay Gupta |
| **Proceedings in National/ International conferences** | | | | | | | | | | | |
| 1. **2016** | Prominent photovoltaic response in multiferroic BFO/BTO heterostructures | | | | | **IEEE Conference Proceedings** Pages 1-4 (2016); DOI: <https://doi.org/10.1109/ISAF.2016.7578092>. : 978-1-5090-1871-0 | | | | | **Savita Sharma**, Nitin K. Puri, Vinay Gupta and Monika Tomar |
| 1. **2016** | Dielectric studies of multilayered BiFeO3/BaTiO3 capacitors deposited by pulsed laser deposition | | | | | **AIP Conference Proceedings** 1724, 020098 (2016)  DOI: <https://doi.org/10.1063/1.4945218>  ISSN: 0094-243X | | | | | **Savita Sharma***,* Monika Tomar, Ashok Kumar, Nitin K. Puri and Vinay Gupta |
| 1. **2015** | Multiferroic BiFeO3/BaTiO3 thin films fabricated by chemical solution deposition technique | | | | | **Mater. Res. Soc. Symp. Proc.** Vol. 1805 (2015). Impact factor: 1.25.  ISSN: 02729172.  [**https://doi.org/10.1557/opl.2015.622**](https://doi.org/10.1557/opl.2015.622) | | | | | **Savita Sharma**, Monika Tomar, Nitin K.Puri, Vinay Gupta |
| 1. **2014** | NO2 sensing properties of WO3 thin films deposited by Rf-magnetron sputtering | | | | | **Conference papers in Science, Hindawi Publishing Corporation** Volume 2014, Article ID 683219, 5 pages <http://dx.doi.org/10.1155/2014/683219> (2014)  ISSN: 2356-6108. | | | | | **Savita Sharma,** Monika Tomar, Nitin K. Puri, Vinay Gupta |
| 1. **2014** | Ultraviolet radiation detection by barium titanate thin films grown by Sol-gel hydrothermal method | | | | | **Procedia Engineering** 87 (2014) 1172 – 1175.  ISSN: 1877-7058.  [**https://doi.org/10.1016/j.proeng.2014.11.375**](https://doi.org/10.1016/j.proeng.2014.11.375) | | | | | **Savita Sharma**, Monika Tomar, Nitin K.Puri, Vinay Gupta |
| 1. **2014** | NOx Sensing properties of Barium Titanate thin films | | | | | **Procedia Engineering** 87 (2014) 1067 – 1070. ISSN: 1877-7058**.**  <https://doi.org/10.1016/j.proeng.2014.11.347> | | | | | **Savita Sharma,** Monika Tomar, Nitin K.Puri, Vinay Gupta |
| **Seminar/Workshop/Conferences Presentation/Organisation** | | | | | | | | | | | |
| 1. “NOx Sensing properties of Barium Titanate Thin Films”, **Savita Sharma**, Monika Tomar, Nitin K. Puri, Vinay Gupta, presented at **1st winter workshop on Engineering at Nanocale: From Materials to Bio-sensors** held at **IIT Indore** from **10th – 12th December 2012**. 2. “Barium Titanate Thin Film based NOx Gas Sensor”, **Savita Sharma**, Monika Tomar, Nitin K. Puri, Vinay Gupta, presented at **International conference on Emerging Technologies: Micro to Nano 2013 (ETMN- 2013)** held at **BITS Pilani, Goa, India** from **23rd – 24th February, 2013**. 3. “Properties of Barium titanate thin films grown by Sol-gel-hydrothermal process”, Savita Sharma, Monika Tomar, Ashok Kumar, Nitin K. Puri, Vinay Gupta, presented at **International Conference for Nanoscience and Nanotechnology (2013)**, held at **BBAU, Lucknow, India** from **18th - 20th November 2013**. 4. “Multiferroic Properties of BiFeO3/BaTiO3 Multilayered Thin Films”, **Savita Sharma**, Monika Tomar, Ashok Kumar, Nitin K. Puri, Vinay Gupta, presented at **Magnetic Materials and Applications (MagMA-2013)**, held at **IIT Guwahati, India** from **5th -7th December 2013**. 5. “Multiferroic Properties of BiFeO3/BaTiO3 Multilayered Thin Films”, **Savita Sharma**, Monika Tomar, Nitin K. Puri, Vinay Gupta, presented at **IUMRS-ICA 2013**, held at **IISc, Bangalore, India** from **16th -20th December 2013**. 6. “NO2 sensing properties of WO3 thin films deposited by Rf-magnetron sputtering”, **Savita Sharma**, Monika Tomar, Nitin K. Puri, Vinay Gupta, presented at **Advances in Material Sciences For Energy applications (AMSEA 2014),** held at **UPES campus, Dehradun, India** from **9th – 10th January 2014**. 7. “Photovoltaic properties of BiFeO3/BaTiO3 bilayered thin film”, **Savita Sharma**, Monika Tomar, Ashok Kumar, Nitin K.Puri, Vinay Gupta, presented at **National Conference on Nanotechnology and Renewable Energy (NCNRE 2014)**, held at **Jamia Millia Islamia**, Delhi, India from **28th-29th April 2014**. 8. **DST Sponsored Workshop on Indigenously Developed Low Cost Surface Plasmon Resonance Technique and its Applications,** held at **University of Delhi**, Delhi, India from **8th-9th May 2014**. 9. “Multiferroic properties of BiFeO3/BaTiO3 bilayered thin film prepared by Sol-gel Spin coating method”, **Savita Sharma**, Monika Tomar, Ashok Kumar, Nitin K. Puri and Vinay Gupta, presented at **National conference on Multifunctional Advanced Materials (MAM 2014)**, held at **Shoolini University**, Solan, Himachal Pradesh, India from **11th-13th June 2014**. 10. “Ultraviolet radiation detection by barium titanate thin films grown by Sol-gel hydrothermal method”, **Savita Sharma**, Monika Tomar, Nitin K.Puri, Vinay Gupta, presented at **The 28th European conference on solid-state transducers (EUROSENSORS 2014)**, held at, **Brescia, Italy** from **7th-10th September 2014**. 11. “NOx Sensing properties of Barium Titanate thin films”, **Savita Sharma**, Monika Tomar, Nitin K.Puri, Vinay Gupta, presented at **The 28th European conference on solid-state transducers (EUROSENSORS 2014)**, held at, **Brescia, Italy** from **7th-10th September 2014**. 12. “Electrical properties of BiFeO3/BaTiO3 bilayered thin film prepared by chemical route” **Savita Sharma**, Monika Tomar, Ashok Kumar, Nitin K.Puri, Vinay Gupta, presented at **3rd International Conference NANOCON 014**, held at, **Bharati Vidyapeeth University Pune, India** from **14th -15th October 2014.** 13. “Photovoltaic properties of BiFeO3/BaTiO3 multilayered thin films prepared by Sol-gel Method”, **Savita Sharma**, Monika Tomar, Ashok Kumar, Nitin K.Puri, Vinay Gupta, presented at **6th World Conference on Photovoltaic Energy Conversion (WCPEC-6)** held in **Kyoto, Japan** from **23rd November to 27th November 2014.** 14. Attended the **UGC Sponsored** One Day **“National Seminar on Recent Advances in Physics (NSRAP-2015)”** held at **Delhi Technological University, Delhi, India** on **16th February, 2015.** 15. “Effect of swift heavy ion irradiation on the structural and optical properties of Tungsten Oxide thin films”, **Savita Sharma**, Monika Tomar, Fouran Singh, Nitin K.Puri, Vinay Gupta, presented at **4th International Conference on Current Developments in Atomic, Molecular, Optical and Nano Physics with applications,** held at **Conference Centre, University of Delhi, India,** from **11th-14th March 2015.** 16. “Multiferroic BiFeO3/BaTiO3 thin films fabricated by chemical solution deposition technique”, **Savita Sharma**, Monika Tomar, Nitin K.Puri, Vinay Gupta, presented at **Materials Research Society Spring Meeting & Exhibit (MRS-2015),** held at **San Francisco, California, USA,** from **6th-10th April 2015.** 17. “Photovoltaic response of hydrothermally derived BFO ceramics”, **Savita Sharma**, Nitin K.Puri, Vinay Gupta, presented at **9th National Conference on Solid State Chemistry and Allied Areas,** held at **Conference Centre, University of Delhi, India,** from **8th-10th May 2015.** 18. “Dielectric studies of multilayered BiFeO3/BaTiO3 capacitors deposited by pulsed laser deposition”, **Savita Sharma***,* Monika Tomar, Ashok Kumar, Nitin K. Puri and Vinay Gupta**,** presented at **2nd International Conference on Emerging Technologies: Micro to Nano** **(ETMN-2015)** held at **Manipal University, Jaipur, India** from **24th-25th October 2015.** 19. “Swift heavy ion irradiation effects on structural and optical properties of Tungsten Oxide thin films”, **Savita Sharma***,* Monika Tomar, Fouran singh, Nitin K. Puri and Vinay Gupta**,** presented at **18th International Conference on Radiation Effects in Insulators (REI-18)** held at **Hotel Royal Orchid, Jaipur, Rajasthan, India** from **26th-31st October 2015.** 20. **“**A-site doped Bismuth Ferrite (Bi0.97La0.03FeO3) thin film for photovoltaic applications**”,** Shaan Ameer, **Savita Sharma**, Monika Tomar and Vinay Gupta, presented at **International Conference on Materials Science & Technology (ICMTECH-2016),** held at **Conference Centre, University of Delhi, New Delhi, India** from **7th to 10th March 2016**. 21. “Prominent photovoltaic response in multiferroic BFO/BTO heterostructures”, **Savita Sharma**, Nitin K. Puri, Vinay Gupta and Monika Tomar, presented at **2016 Joint IEEE International symposium on the Applications of Ferroelectrics, European Conference on Application of Polar Dielectrics, and Piezoelectric Force Microscopy Workshop (ISAF/ECAPD/PFM)** held at **Technische Universität Darmstadt, Darmstadt, Germany** from **August 21-25, 2016.** 22. Attended the **TEQIP-II** Sponsored **One Week Faculty Development Programme on “Advances in Microelectronics and Plasma Diagnostics”** organized by **Department of Applied Physics, Delhi Technological University (DTU)** from **August 29-September 02, 2016.** 23. **“**Au/BiYFeO3/ITO MMM structure for photovoltaic studies having potential solar energy harvesting applications**”,** Shaan Ameer, **Savita Sharma**, Monika Tomar and Vinay Gupta, presented at **International Conference on Advances in Nanomaterials and Nanotechnology (ICANN-2016),** held at **Jamia Milia Islamia, New Delhi, India** from **4th to 5th November, 2016.** 24. “Enhanced Photovoltaic response in metal nanocluster loaded multiferroic BFO thin film”, **Savita Sharma**, Monika Tomar and Vinay Gupta, presented at **International Conference on Technologically Advanced Materials & Asian Meeting on Ferroelectrics (ICTAM-AMF10)** held at **University of Delhi, Delhi, India** from **November 7-11, 2016.** 25. “Effectof Cr doping on dielectric properties of Bismuth Ferrite thin films”**,** Shaan Ameer, **Savita Sharma**, Monika Tomar and Vinay Gupta, presented at **International Conference on Technologically Advanced Materials & Asian Meeting on Ferroelectrics (ICTAM-AMF10)** held at **University of Delhi, Delhi, India** from **November 7-11, 2016.** 26. “Effectof Cr doping on dielectric properties of Bismuth Ferrite thin films”**, Savita Sharma**, Monika Tomar and Vinay Gupta, presented at **National Seminar on “A PARADIGM SHIT TOWARDS EMPOWERMENT OF WOMEN”** held at **Kalindi College, University of Delhi, Delhi, India** from **February 3-4, 2017.** 27. Participated in the **National Science Day Programme** organized by the **Inter-University Accelerator Centre, Delhi, India** on **28th February 2017.** 28. “[Bipolar resistive switching in Pt/BFO/BTO/Pt sandwiched structures](https://coms.events/imf2017/data/abstracts/en/abstract_0133.html)”**, Savita Sharma,**Surbhi Gupta, Vinay Gupta and Monika Tomar, presented at **“The 14th International Meeting on Ferroelectrics IMF-2017”** held at **Grand Hyatt, San Antonio, Texas, USA** from **September 4-8, 2017**. 29. “[Studies on the effect of integration of metal nanoclusters on the electrical and ferroelectric properties of barium titanate thin film](https://coms.events/imf2017/data/abstracts/en/abstract_0064.html)”, **Savita Sharma,**Monika Tomar, Ashok Kumar, Vinay Gupta, presented at **“The 14th International Meeting on Ferroelectrics IMF-2017”** held at **Grand Hyatt San Antonio, Texas, USA** from **September 4-8, 2017**. 30. Participated in the **Workshop on “Quantum Physics: An Insight”** organized by the **The National Academy of Sciences India-Delhi Chapter & Physics Department, Kalindi College, University of Delhi, Delhi, India** from **October 25-26, 2017.** 31. “Comparison of Photovoltaic response in multiferroic BFO thin film with different top metal electrodes”, **Savita Sharma**, Harish K. Yadav, Monika Tomar and Vinay Gupta presented at **“International symposium on Integrated functionalities ISIF-2017”** held at **Shangri-La Ero’s Hotel, New Delhi, INDIA** from **December 10-13, 2017**. 32. “WO3/BTO heterostructures based NO2 sensor with enhanced response characteristics”, **Savita Sharma**, Dheeraj Kumar, Monika Tomar, G.S. Chilana,  Nitin K. Puri and Vinay Gupta presented at **“International symposium on Integrated functionalities ISIF-2017”** held at **Shangri-La Ero’s Hotel, New Delhi, INDIA** from **December 10-13, 2017**. 33. **Organizer and Trainer** of “SKILL ENHANCEMENT WORKSHOP FOR LABORATORY STAFF” organized by Internal Quality Assurance Cell & Science Departments at **Kalindi College, University of Delhi, Delhi, India** held from **13th to 14th March 2018.** 34. “Enhanced Photovoltaic response in metal nanocluster loaded multiferroic BFO thin film”, **Savita Sharma**, Monika Tomar and Vinay Gupta presented at **“International symposium on functional materials ISFM-2018”** held at **Hotel Shivalik View, Chandigarh, INDIA** from **April 13-15, 2018.** 35. Attended One-Day Seminar **on “Life and works of Prof. M. N. Saha and Prof. S. N. Bose”** organized by Department of Physics and Material Science & Engineering, **Jaypee Institute of Information Technology, Noida** on **15th September, 2018.** 36. Participated in the **Conclave on “Biodiversity for Everyone’s Life”** organized by the Institute of Bioresources and Sustainable Development (IBSD), Manipur & Miranda House University of Delhi held at  **Miranda House, University of Delhi, Delhi, India** on **31st August, 2018.** 37. Attended the **TEQIP-III** Sponsored **One Week Faculty Development Programme** on **“Recent Trends in Material Science and Engineering”** organized by **Department of Applied Physics, Delhi Technological University (DTU)** from **September 17th - September 21st, 2018.** 38. “BFO/BTO multilayer structures by Pulsed Laser deposition technique for ferroelectric photovoltaic applications”**, Savita Sharma**, Monika Tomar, Ashok Kumar, Nitin K. Puri and Vinay Gupta, presented at **National Seminar on “New Trends in Nanotechnology and Applications”** held at **Atma Ram Sanatan Dharma College, University of Delhi, Delhi, India** from **September 27-28, 2018.** 39. “Multiferroic BFO/BTO multilayer structures based Magnetic field sensor”, **Savita Sharma**, Ayushi Paliwal, Monika Tomar, Vinay Gupta, presented at International conference on **Magnetic Materials and Applications (ICMAGMA-2018)**, held at **NISER Bhubaneswar, India** from **9th -13th December 2018**. 40. “Food adulteration and recent techniques to detect ”, Neha ahlawat, Raksha tewari, Manu chaudhary, Ritika jain, Ayushi dhyani, Ishika bhullar, Monika bassi, Savita sharma, Sudha gulati, presented **at JIIT Student Conference On Optics And Photonics held at Jaypee Institute Of Information Technology** , Noida from 2nd-3rd November, 2018. 41. “Modern techniques to detect food adulteration”, Neha ahlawat, Raksha tewari, Ritika jain, Monika bassi, Sudha gulati, Savita sharma, presented at **Astrodroid, Physcom society fest of Kalindi college held at Kalindi college**, University Of Delhi. 42. “Growth of BFO/BTO multilayer thin film structures for energy storage applications”**, Savita Sharma**, Monika Tomar and Vinay Gupta, presented at **“INTERNATIONAL CONFERENCE ON PHYSICS, SOCIETY AND TECHNOLOGY (ICPST-2019)”** organized by **Deshbandhu College, University of Delhi, Delhi, India** from **January 17-19, 2019.** 43. “SPR based Optical Sensor for the Detection of Adulteration in Milk”, Sudha Gulati, Monika Bassi, **Savita Sharma**, Neha Ahlawat, Ayushi Dhyani, Raksha Tewari, Manu Chaudhary, Ritika Jain, Ishika Bhullar, Ayushi Paliwal, Monika Tomar, Vinay Gupta presented at **International Conference On Physics, Society And Technology-2019** organized by **Deshbandhu College, University of Delhi, Delhi, India** held at **Conference Centre, University Of Delhi** from 17th-19th January,2019. 44. Participated in the **National Science Day Programme** organized by the **Inter-University Accelerator Centre, Delhi, India** on **28th February 2019.** 45. “Bismuth Ferrite (BFO) thin films for multifunctional energy devices”, Shiva Lamichhane, **Savita Sharma**, Monika Tomar, Ashok Kumar and Vinay Gupta presented at **National Conference on Smart Energy Resources and Sustainable Engineering** organized by **Swami Shraddhanand College**, University of Delhi, Delhi, India from 28th - 29th March, 2019. 46. “Optimization of BFO thin films for energy harvesting and energy storage properties”, Shiva Lamichhane, **Savita Sharma,** Monika Tomar and Vinay Gupta presented at **National Conference on Recent Trends and Advancements in Chemical Sciences** organized by **Department of Chemistry and Bhaskaracharya College of Applied Sciences, University of Delhi, Delhi, India** from 29th -31st March, 2019. 47. “Non-Volatile Resisitive Switching in WO3 Thin Films”, Shiva Lamichhane, **Savita Sharma,** Monika Tomar and Vinay Gupta presented at **National Conference on Physics and Chemistry of Materials** organized by **Maharaja Agrasen Institute of Technology, Delhi, India** from 22nd -23rd April,2019. 48. “Urea detection in Milk Using Surface Plasmon Resonance”, **Savita Sharma,** Monika Bassi,Sudha Gulati, Neha Ahlawat, Ayushi Dhyani, Raksha Tewari, Manu Chaudhary, Ritika Jain, Ishika Bhullar, Ayushi Paliwal, Monika Tomar, Vinay Gupta presented at **National Conference on Physics and Chemistry of Materials** organized by **Maharaja Agrasen Institute of Technology, Delhi, India** from 22nd -23rd April,2019. 49. “Detection of Adulteration in Milk Using SPR based Optical sensor”, **Savita Sharma,** Sudha Gulati, Monika Bassi,Neha Ahlawat, Ayushi Dhyani, Raksha Tewari, Manu Chaudhary, Ritika Jain, Ishika Bhullar, Ayushi Paliwal, Monika Tomar, Vinay Gupta presented at **National Conference on Advanced Materials: Theory and Applications** organized by **Hansraj College, University of Delhi, Delhi, India** from 26th- 28th Sept 2019. 50. “Laser fluence controlled Resistive Switching in Bismuth Ferrite thin films,” Shiva Lamichhane, **Savita Sharma**, Monika Tomar and Vinay Gupta presented at “ National Conference on Advanced Materials: Theory and Applications NCAMTA – 2019” held at Department of Physics and Electronics, HansRaj College, University Of Delhi, New Delhi, India, September 26-28, 2019. 51. “Non-Volatile Resistive Switching In WO3 Thin Films.” Shiva Lamichhane, **Savita Sharma**, Monika Tomar and Vinay Gupta presented at “3 rd International Conference on condensed Matter and Applied Physics.” held at Department Of Physics, Govt. Engineering College, Bikaner, India, 14-15 October, 2019. 52. “Determination of Optical and Dielectric parameters for single to multiple interfaces using Fresnel’s equations” Rachana Kumar, Seema Gupta, **Savita Sharma**, Nivedita, Mrinal, Natasha, Divya in “National Conference on Advanced Materials: theory and Applications (NCAMTA)” held on September 26-28, 2019 at Published in Abstract Hansraj College, University of Delhi.Book pp 42, NCAMTA-2019. 53. **Participated in National Seminar** on “Nuclear, Particle and Accelerator Physics” jointly organized by Department of Physics, Kalindi College and The National Academy of Sciences (NASI) Delhi Chapter on 6th November, 2019. 54. International webinar on "Importance of Cyber security in the world of Pandemics and Social Media" organized by Kamala Nehru College on May 6, 2020 at 11:00 A.M 55. International webinar on "Strengthening the immune system through Naturopathy" organized by the Department of Botany in collaboration with IQAC, Hansraj College on May 6, 2020 from 3:00-4:00 PM. 56. Webinar on "Covid-19: Managing Uncertainties" organized by ARSD College held on April 30th, 2020. 57. वेबिनार "हिंदी : अपार सम्भावनाओं का क्षेत्र" organized by Janki Devi Memorial College, Sir Ganga Ram Hospital Marg, Old Rajinder Nagar, Rajinder Nagar, New Delhi, Delhi 110060, India on May 2, 2020 10:30am - 12:30pm. 58. National Webinar on “Higher Education in India after COVID-19” organized by ARSD College held on May 7th, 2020. 59. Webinar on ‘Integrating GIS with Geography’ organized by Geography department, Kalindi College held on 1st-2nd May, 2020. 60. Webinar on "Material Science, Technology & Society" MTMS 2020 organized by School of Physical Sciences, JNU, New Delhi on 8th-9th May 2020 61. Participated in “National Level Quiz Competition on COVID - 19” organized by IQAC of Vanita Vishram Women’s College of Commerce, Surat on 4th May 2020 to spread awareness about Corona. 62. "Webinar 12- "Corona Pandemic and Economic Challenges in India" by Dr. Jaswinder Singh" organized by Guru Angad Dev Teaching Learning Centre (GAD-TLC) of MHRD under PMMMNMTT scheme on 4th May 2020. 63. Webinar on "Search, Research and Publication Ethics" at 11.00 am - 12.30 pm By Prof. Ramesh C Gaur organized by Kalindi College Library held on 4th May, 2020. 64. Webinar series on “Quality Assurance in Higher Education: Practices and Issues”, being organised under the aegis of the UGC Paramarsh scheme in collaboration with IQAC, Hansraj College from May 4 - May 8, 2020 from 4:00 PM onwards. | | | | | | | | | | | |
| **Awards & Distinctions** | | | | | | | | | | | |
| 1. Best ORAL Award for presenting Enhanced Photovoltaic response in metal nanocluster loaded multiferroic BFO thin film” at **“International symposium on functional materials ISFM-2018”** held at **Hotel Shivalik View, Chandigarh, INDIA** from **April 13-15, 2018.** 2. Received International Travel Grant from Department of Science & Technology (DST) for attending International conference in Italy in September 2014. 3. Qualified GRADUATE APTITUDE TEST IN ENGINEERING (GATE), jointly conducted by six Indian Institute of Technology(s) and Indian Institute of Science on behalf of Ministry of Human Resource and Development, Government of India, in the year 2012 in Physics. 4. Qualified CTET, conducted by C.B.S.E., in the year 2012. 5. Awarded for meritorious academic performance, Kalindi College, University of Delhi, 2007 6. Merit Scholarship for distinction in all subjects in AISSE, DAV Public School, Rohini, Delhi, 2002 7. Merit Scholarship for distinction in Sanskrit in AISSE, Sanskrit Kala Academy, 2002. 8. 1st prize at State level and 2nd at National level for Republic Day Parade, Govt. of India, 2001. 9. Won 1st prize in Collage Making competition during fest Lehrein'2006. | | | | | | | | | | | |
| **Public Service/ University Service/ Consulting Activity** | | | | | | | | | | | |
| 1. **Workshops attended for Curriculum development** 2. **Resource person for the development of e-content for different papers of M.Sc. Physics and Material Science, for preparing different quadrants of various modules, under e-PG Pathshala mission of MHRD by the UGC under the supervision of Prof. Vinay Gupta (Project Coordinator).** 3. Member, **Sample/Model Question paper committee of Thermal Physics paper of Physics Hons. Paper IInd Year**, University of Delhi. 4. Attended **“Orientation Programme for Physics Course of IV Semester” held on Feb 22, 2017 at Department of Physics, University of Delhi.** 5. Faculty Volunteer, Organizing committee at **94th Annual Convocation,** **University of Delhi** **held on November, 2017, 2018 & 2019.** 6. Member, **Moderation committee of CBCS syllabus of group VII Physics Hons. Papers**, University of Delhi. 7. **Resource person for the teaching Solid State Physics paper in Summer M.Sc. Entrance Coaching** classes organized by Department of Physics & Astrophysics, University of Delhi. 8. **Organized Field visit to Electronic Materials and Devices Laboratory,** Department of Physics & Astrophysics for students of B.Sc. (H) Physics & B.Sc. Physical Science IIIrd Year Kalindi College. 9. Attended, 4-Days “**Workshop for the of Semester-VI” held on 31st Jan-5th Feb. 2018** at Department of Physics & Astrophysics, University of Delhi. 10. Attended **Vigyan Samagam-First mega-science exhibition** in India at National Science Centre on 21st January 2019 along with B.Sc. (H) Physics IIIrd & IInd year students. 11. **Evaluation of answer scripts** 12. **External examiner for practical examination B.Sc. (H) Physics - December 2017-2019** | | | | | | | | | | | |
| **Professional Societies Memberships** | | | | | | | | | | | |
| 1. Lifetime Membership of **Indian Physics Association (IPA).** 2. Lifetime Membership of **Indian Association of Physics Teachers (IAPT).** 3. Lifetime Membership of **Nano & Molecular Society (NMS), INDIA.** 4. Lifetime Membership of **VIBHA & SHAKTI VIBHA Delhi.** 5. Membership of **Materials Research Society (MRS), USA.** | | | | | | | | | | | |
| **Research grants, projects completed and ongoing during last year:**  **Projects (Major Grants / Collaborations)** | | | | | | | | | | | |
| * Project completed entitled “Investigation of Adulteration in Milk using Surface Plasmon Resonance” Principal investigators – **Dr. Savita Sharma**, Dr. Sudha Gulati, Dr. Monika Bassi funded by Kalindi College, University of Delhi- 2018-19. * Project completed entitled “Study of Electrical behavior of Metal Semiconductor Contacts for UV Photodetectors”. Principal investigators – **Dr. Savita Sharma** and Dr. Sudha Gulati, Academic advisor – Dr. Monika Bassi – 2019-2020. * **Principal Investigator** in ongoing Innovation Research Project, Kalindi College entitled “Solar Energy Harvesting using Ferroelectric thin films”. Principal investigators - **Dr. Savita Sharma** andDr. Sudha Gulati, 2021-2022. * Project completed entitled “To elucidate Fresnel’s equations for reflection of electromagnetic waves at an interface between dielectric media and to correlate the reflection and transmission coefficients of lossless and lossy material for implication in energy conservation and its potential applications” Principal investigators – **Dr. Savita Sharma**, Dr. Rachna Kumar, Dr. Seema Gupta funded by Kalindi College, University of Delhi-2018-19. * B.Sc. Project - “To study the properties of amorphous and crystalline materials using thin films deposition by sputtering methods”, Department of Physics and Astrophysics, University of Delhi, 2007. * M.Sc. Project - “Infrared door monitor system and automatic room light controller”, Department of Physics and Astrophysics, University of Delhi, 2010 | | | | | | | | | | | |
| **Other Details** | | | | | | | | | | | |
| ***COMPUTER PROFICIENCY***   * C/C++language, Pascal language * Operating MS Office and working on Linux * PYTHON, MATLAB, SCILAB, BRUKER TOPAS 3, Origin Pro 8, FullProf, Powder X   **MOOCs completed with e-certification**   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | S.No. | Details of MOOC | Subject | Certification providing agency | Date of certification | Level  (UG/PG/Other) | E-certification no. | | 1. | SWAYAM-12 Week Course | Experimental Physics II | NPTEL | JULY 2020 | UG/PG | NPTEL20PH04S41360124 | | 2. | SWAYAM-12 Week Course | Experimental Physics III | NPTEL | JULY 2020 | UG/PG | NPTEL20PH09S61360089 |   **Administrative responsibilities such as Head, Chairperson/ Dean/ Director/coordinator, Warden etc.**   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | S.No. | Nature of Activity | Designation | Institution/Department | Period | | | From | To | | 1. | Criteria II Committee (NAAC) | Member | Kalindi College | 2017 | Till Date | | 2. | Management Information Software (MIS) Committee | Member & Departmental Representative | Kalindi College | 2021 | \_\_ | | 3. | E-Content Development | Co-Convener | Kalindi College | 2021 | -- | | 4. | Entrepreneur Cell | Member | Kalindi College | 2019 | 2021 | | 5. | Alumni Committee | President | Kalindi College | 2017 | Till Date | | 6. | Rangoli Cultural Club | Member | Kalindi College | 2017 | 2021 | | 7. | Repository Committee | Member | Kalindi College | 2018 | 2021 | | 8. | Mehandi Club | Member | Kalindi College | 2021 | Till Date | | 9. | Departmental Website Committee | Member | Kalindi College/ Physics | 15/9/2020 | Till Date | | 10. | Departmental Student Progression Committee | Member | Kalindi College/ Physics | 15/9/2020 | Till Date | | 11. | Sample/Model Question paper committee of Thermal Physics paper of Physics Hons. Paper IInd Year, University of Delhi. | Member | University of Delhi | 2019 | Till Date | | 12. | Moderation committee of CBCS syllabus of group VII Physics Hons. Papers,  University of Delhi. | Member | University of Delhi | 2019 | Till Date |   **Future Plans**  **I envision my professional growth in future along three parameters. Firstly, I wish to continue putting my best efforts into teaching. I will encourage my students to get actively involved in research and other academic as well as professional opportunities and programs.**  **Second, with the broader aim of enhancing student learning and the prestige of Physics department, I will continue developing more e-content for Physics learners across the country. I wish to actively participate in and organize different activities such as conferences, public seminars and Short-Term Training Programs (STTP).**  **Finally, I plan to continue producing internationally competitive and interdisciplinary research that allows me to not only grow individually, but that allows me to be a part of a community of scholars that bring greater recognition to our intellectual home, Delhi University.** | | | | | | | | | | | |