

**List of Publications:**

1. **Singh S**, Kumar A, Pandey SK, Singh DK, Kumar V, Verma MK, Gupta A, Tiwary D, Mandal K. 2021 Mar 30. Facile synthesis of efficient heterogeneous photocatalytic and highly dielectric  $\text{Bi}_4\text{BaTi}_4\text{O}_{15}$  ceramic with remarkable applicability in the degradation of rhodamine B dye. *Materials Technology*.:1–18. doi:10.1080/10667857.2021.1903137.
2. **Shruti Singh**, Atendra Kumar, Manish Kumar Verma, Vinod Kumar, Suresh pandey, N.B. Singh, K.D. Mandal, Synthesis of  $\text{Bi}_4\text{Ti}_3\text{O}_{12}$ - $\text{BaTiO}_3$  nanocomposite, manifesting high dielectric and unique magnetic nature applicable in heterogeneous photocatalytic activity for degradation of Rhodamine B dye, *Materials Technology*, 2020, <https://doi.org/10.1080/10667857.2020.1774228>.
3. A. Kumar, M.K. Verma, **S. Singh**, T. Das, L. Singh and K.D. Mandal, Electrical, Magnetic and dielectric properties of cobalt doped barium hexaferrite  $\text{BaFe}_{12-x}\text{Co}_x\text{O}_{19}$  ( $x=0.0, 0.05, 0.1$ , and  $0.2$ ) ceramic prepared via Chemical route, *Journal of Electronic Materials*, <https://doi.org/10.1007/s11664-020-08364-8>
4. A. Kumar, S.S. Yadava, L. Singh, V. Kumar, M.K. Verma, **S. Singh**, K.D. Mandal, Dielectric and electrical properties of zinc doped titanium oxide ( $\text{TiO}_2$ ) synthesized by semi-wet route, *Proceeding Volume 10979, Energy Harvesting and Storage: Materials, devices, and Applications IX;10970I* (2019) <https://doi.org/10.1117/12.2518203>
5. Vinod Kumar, Santosh Pandey, Manish Kumar Verma, **Shruti Singh**, Vishnu Shankar Rai, Dinesh Prajapati, N.B. Singh, Champa Lal Prajapat, Asnit Gangwar, K.D. Mandal Study of dielectric and magnetic properties of  $\text{CaCu}_3\text{Ti}_{4-x}\text{Mn}_x\text{O}_{12}$  ( $X=0$  and  $0.1$ ) ceramic synthesized through semi-wet route. *J Aust Ceram Soc* **58**, 637–644 (2022). <https://doi.org/10.1007/s41779-022-00724-3>

6. Vinod Kumar, Atendra Kumar, Manish Kumar Verma, **Shruti Singh**, Santosh Pandey, Laxman Singh, N.B. Singh, K.D. Mandal, Observation of unusual Griffith's phase behavior in quadruple perovskite oxide  $\text{CaCu}_3\text{Mn}_4\text{O}_{12}$ (CCMO) synthesized through chemical route, *Arabian Journal of Chemistry*, 13, 2020, 4895-4903.
7. Vinod Kumar, Atendra Kumar, Manish Kumar Verma, **Shruti Singh**, Santosh Pandey, Vishnu Shankar Rai, Dinesh Prajapati, Tapas Das, N.B. Singh, K.D. Mandal, Investigation of dielectric and electrochemical behavior of  $\text{CaCu}_{3-x}\text{Mn}_x\text{Ti}_4\text{O}_{12}$  ( $x = 0, 1$ ) ceramic synthesized through semi-wet route, *Materials Chemistry and Physics* 245, 2020, 122804.
8. Vinod Kumar, Santosh Pandey, **Shruti Singh**, Manish Kumar Verma, Atendra Kumar, N. B. Singh, K. D. Mandal, Studies of microstructure and dielectric properties of  $\text{CaCu}_3\text{Mn}_4\text{O}_{12}$  complex perovskite oxide synthesized by chemical route, *Journal of the Australian Ceramic Society* <https://doi.org/10.1007/s41779-020-00469-x>
9. Vinod Kumar , Santosh Pandey , Atendra Kumar , Manish Kumar Verma, **Shruti Singh**, Vishnu Shankar Rai , Dinesh Prajapati , Tapas Das , Ankur Sharma , Champa Lal Prajapat , Asnit Gangwar , K.D. Mandal Investigation of dielectric, magnetic and impedance spectroscopic properties of  $\text{CaCu}_{3-x}\text{Mn}_x\text{Ti}_{4-x}\text{Mn}_x\text{O}_{12}$  ( $x = 0.10$ ) nano-ceramic synthesized through semi-wet route *Journal of Materials Research and Technology* DOI: 10.1016/j.jmrt.2020.09.032
10. Manish Kumar Verma, Atendra Kumar, Laxman Singh, Ravi Kumar Sonwani, Tapas Das, **Shruti Singh**, Vinod Kumar, Narsingh Bhadur Singh, Kamdeo Mandal,  $\text{Bi}_{25}\text{FeO}_{40}$  polycrystalline ceramic as highly efficient photocatalyst synthesised via economical chemical route, *Materials Technology*, 35, 2020, 1-11.

11. Manish Kumar Verma, Atendra Kumar, Tapas Das, Vinod Kumar, **Shruti Singh**, Vishnu Shankar Rai, Dinesh Prajapati, Ravi Kumar Sonwani, Kedar Shahoo, Kamdeo Mandal, BiFeO<sub>3</sub> perovskite as an efficient photocatalyst synthesized by soft chemical route, Materials Technology, 2020.
12. Prajapati D, Rai VS, Pandey S, Kumar V, Verma MK, Kumar A, **Singh S**, Sahoo K, Mandal KD. 2021. Studies of microstructural, dielectric, and impedance spectroscopic properties of Bi<sub>0.617</sub>Y<sub>0.05</sub>Cu<sub>3</sub>Ti<sub>4</sub>O<sub>12</sub> ceramic synthesized through semi-wet route. J Mater Sci: Mater Electron. 32(22):26371–26383. doi:10.1007/s10854-021-07005-y
13. Rai VS, Pandey S, Kumar V, Verma MK, Kumar A, **Singh S**, Prajapati D, Mandal ProfKD. 2020. Investigation of Microstructure and Dielectric Behavior of Bi<sub>2/3</sub>Cu<sub>3-x</sub>Mg<sub>x</sub>Ti<sub>4</sub>O<sub>12</sub>(x=0, 0.05, 0.1 and 0.2) Ceramics Synthesized by Semi-Wet Route. In Review. [accessed 2022 Jun 21]. <https://www.researchsquare.com/article/rs-64822/v1>
14. Rai VS, Pandey S, Kumar V, Verma MK, Kumar A, **Singh S**, Prajapati D, Mandal KD. 2021. Investigation of microstructure and dielectric behavior of Bi<sub>2/3</sub>Cu<sub>3-x</sub>Mg<sub>x</sub>Ti<sub>4</sub>O<sub>12</sub> (x = 0, 0.05, 0.1 and 0.2) ceramics synthesized by semi-wet route. J Mater Sci: Mater Electron. 32(6):7671–7680. doi:10.1007/s10854-021-05483-8
15. Effect of processing on morphology of hydroxyapatites: Bioactive glasses and crystalline composites Joel McAdams, Eric Bowman, Brian Cullum, Bradley Arnold, Lisa Kelly, Fow Sen Choa, and N. B. Singh University of Maryland, Baltimore County, 100 Hilltop Circle, Baltimore 21250 Ching Hua Su EM31, NASA Marshall Space Flight Center, Huntsville, AL 35812 K.D. Mandal and **Shruti Singh** Indian Institute of Technology, Banaras Hindu University, Varanasi (UP) India.

16. Dielectric and electrical properties of zinc doped titanium oxide (TiO<sub>2</sub>) synthesized by semi-wet route Atendra Kumar, Shiva Sundar Yadava, Laxman Singh, Vinod Kumar, Manish Kumar Verma, **Shruti Singh**, K. Mandal.