Short Bio-data

Name: Dr. Soma Dutta

Designation: Chief Scientist

Division: Materials Science

Area of Expertise: Dielectrics and Piezoelectrics, Multifunctional materials, Thin Films and Nanostructures, Sensors and actuators

Specialisation: Experimental Condensed Matter Physics

Subject area willing to guide the student: Physics, Materials Science/Engineering, Nanotechnology, Chemistry

Publication: Published 80 papers in peer reviewed Journal (Research Gate link https://www.researchgate.net/profile/Soma-Dutta-2

Recent Publications:

1. Anina Anju Balaraman, Jayakrishnan, Ampattu Ravikumar, Antony Jeyaseelan A, **Soma Dutta** “Improved energy storage properties through multilayer stacking of relaxor ferroelectric and anti-ferroelectric thin films” Physica Scripta (2024)

2. Jayakrishnan, Ampattu Ravikumar, Anina Anju Balaraman, Surya Kiran P. Nair, **Soma Dutta**, and José PB Silva. "Recent Development of Lead-free Relaxor Ferroelectric and Antiferroelectric Thin Films as Energy Storage Dielectric Capacitors." Journal of the European Ceramic Society (2024).

3. Jeyaseelan, A. Antony, Anina Anju Balaraman, and **Soma Dutta**. "Enhanced piezoelectric properties in europium-doped lead lanthanum zirconate titanate thin films." Thin Solid Films 790 (2024): 140214.

4. Anina Anju Balaraman, Ampattu R. Jayakrishnan, Antony Jeyaseelan A, Balaram Sahoo, and **Soma Dutta**. "Investigation on Multifunctional Properties of (Pb0. 92La0. 08)(Zr0. 55Ti0. 45) O3 Relaxor Ferroelectric Thin Film for Energy-Harvesting and Storage Applications." Energy Technology 12, no. 2 (2024): 2300685.