

Publications:

International:

1. E. Kar, S. Maity **S.Sen*** Agricultural Waste Rice Husk/Poly (Vinylidene Fluoride) Composite: A Wearable Triboelectric Energy Harvester for Real-Time Smart IoT Applications, **Advanced Composites and Hybrid Materials**, 2024, 7 (3), Art No. 87. (IF: 20.1)
2. S.Maity , E.Kar and **S.Sen***,Post-Transition Metal Dichalcogenide SnS₂ Nanoflower/PVDF Composite: A Smart Wearable SelfPowered Mechanosensor, **ACS Applied Materials & Interfaces**, 2024, 16 (49), 68294–68305. (IF: 8.3)
3. A. Sasmal, P.Maity, A. Arockiarajan and **S,Sen***, Polarity Assessment of Hydroxide Mediated P(VDF-TrFE) Composites for Piezoelectric Energy Harvesting and Self-Powered Mechanosensing, **Sustainable Energy & Fuels**, 2024, 8 (22), 5225-5240. (IF: 5)
4. P. Bera, S.Sen. S.Kundu, **S.Sen***, Enhanced Performance Based on the Synergistic Effect of Three-Phase Nanocomposite-rGO-ZnO Nanowires Embedded in the PVDF Matrix as a Power Source for Low-Powered Portable Electronic Devices, **ACS Applied Energy Materials**, 2024, 7, 24, 11834-11851 (I.F: 5.5)
5. A. Sasmal A, P. Maiti, S. Maity , **S.Sen*** and A. Arockiarajan , Direct and Converse Piezoelectricity of Thickness Tuned BCZT Ceramics: Toward Efficient Bilayered Magnetolectric Devices, **Physica Scripta A**, 2024, 99 (6), Art No. 065538. (IF: 2.9)
6. A. Sasmal, **S. Sen**, J.A. Chelvane, and A. Arockiarajan. “PVDF based flexible magnetolectric composites for capacitive energy storage, hybrid mechanical energy harvesting and self-powered magnetic field detection.” **Polymer**, 2023, 281, 126141. (I.F-3.0)
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8. S. Maity, A. Sasmal, E. Kar, and **S. Sen***, “Morphotropic Phase Boundary-Assisted Lead-Free BaTiO₃/PDMS Composite-Based Hybrid Energy Harvester: A Portable

Power Source for Wireless Power Transmission.” **ACS Applied Energy Materials**, 2023, 6 (13), 7052-7064 (I.F-6.4)

9. S .Maity, A.Sasmal , E Kar and **S Sen*** , Morphotropic Phase Boundary-Assisted Lead-Free BaTiO₃/PDMS Composite-Based Hybrid Energy Harvester: A Portable Power Source for Wireless Power Transmission,**Chemical Engineering Journal**, 2023,474,145959 (IF : 16.7)
10. A.Sasmal , S Maity, P Maiti, A Arockiarajan, S Sen* Nano to micrometer range particle size effect on the electrical and piezoelectric energy harvesting performances of hydroxide mediated crosslinked PVDF composites, **Chemical Engineering Journal**, 2023, 468, Art No. 143794. (IF : 16.7)
11. E. Kar, P. Ghosh, S. Pratihar, M. Tavakoli, **S. Sen***, Nature Driven BioCompatible Epidermal Electronic Skin for Real-Time Wireless Monitoring of Human Physiological Signals, **ACS Applied Materials and Interfaces**, 15 (16), 19785-20582 (2023)(I.F-10.38)
12. Sudipta Ghosh, S.Mishra, **S.Sen**, C.K Ghosh, D.Bhattacharya, Large room temperature magnetodielectric effect in polyvinylidene-trifluoroethylene/ LaSrMnO₃ (0-3) nanocomposite films, **Journal of Physics and Chemistry of Solids**,179 (2023) 111418 (I.F-4.4).
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17. S. Pratihar, E. Kar, **S. Sen***, Aluminum impregnated zinc oxide engineered poly(vinylidene fluoride hexafluoropropylene)-based flexible nanocomposite for efficient harvesting of mechanical energy. **International J Energy Res**. 2022; 46(15): 23839- 23856. doi:10.1002/er.8682(IF: 5.16)

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23. S. Maity, A. Sasmal, **S. Sen***, Comprehensive characterization of Ba_{1-x}Sr_xTiO₃: Correlation between structural and multifunctional properties, **Journal of Alloys and Compounds**, 884 (2021) 161072. (**I.F. – 5.3**)
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