

**: FACULTY DETAILED RESEARCH DATA:**

**Name of the Faculty:** Dr. Shilpa Maity

**Designation:** Assistant Professor

**Department:** Physics

**School:** Basic Science

**Research Area:** Study of the nanostructured thermoelectric materials (both inorganic and organic), Nanocomposites, Structural and Electrical parameters.

**Details of research portfolio of faculty:**

**A. Researcher's ID details:**

**Google Scholar ID:** wC40UqQAAAAJ

**Orchid ID:** 0000-0003-3852-7417

**Scopus ID:** 57194465407

**Vidwan ID:** 584359

**B. Publication details:**

**1. Conference proceedings/ Conference paper:**

Sl. No.	Name of the Conference	Title of the paper	Month & Year of Publication	Author(s) Name	National/ International	doi number (if any)	ISSN/ISBN no.
1	61 <sup>st</sup> DAE Solid State Physics Symposium	Enhanced thermoelectric performance of template based nanostructured polyaniline	May 2017	Shilpa Maity, Subhra Rakshit, Sukhen Das, Krishanu Chatterjee	International	10.1063/1.4980677	0094243X, 15517616

2.	2019 International Conference on Computer, Electrical & Communication Engineering (ICCECE)	Semiconductor to metallic transition of Bismuth Telluride with incorporation of Graphene- Its enhanced thermoelectric properties	February 2020	Sajal Biswas; <b>Shilpa Maity</b> ; Krishanu Chatterjee	International	10.1109/ICCECE44727.2019.9001902.	978-1-7281-0697-7
----	--	--	---------------	---	---------------	-----------------------------------	-------------------

## 2. Publications in SCI/Scopus indexed Journals:

Sl. No	Name of the Journal (mention SCI/scopus)	Title of the paper	Month & Year of Publication	Author(s) Name (Highlight the corresponding and 1 <sup>st</sup> author in every article)	doi number	Issue No. & Volume No.	Page no.	ISSN of the journal
1.	Chemistry Select (SCI)	Enhancement of Thermoelectric Performance in Oligomeric PEDOT-SWCNT Nanocomposite via Band Gap Tuning	August 2018	<b>Shilpa Maity</b> , Nayim Sepay, Chiranjit Kulsi, Arpan Kool, Sukhen Das, Dipali Banerjee, Krishanu Chatterjee*	10.1002/slt.201801384	Issue- 31 Vol- 3	8992-8997	2365-6549
2.	Materials Research Express (SCI)	Dependence of thermoelectric power and electrical conductivity on structural order of PEDOT-Tos-graphene nanocomposite via charge carrier mobility	September 2019	<b>Shilpa Maity</b> , Chiranjit Kulsi, Shiladitya Banerjee, Sukhen Das, Krishanu Chatterjee*	10.1088/2053-1591/ab3e7c	Issue- 10 Vol- 6	105095	2053-1591

3.	Inorganic Chemistry (SCI)	Gd(III)-Doped Boehmite Nanoparticle: An Emergent Material for the Fluorescent Sensing of Cr(VI) in Wastewater and Live Cells	June 2019	Shubham Roy, Kunal Pal, Souravi Bardhan, <b>Shilpa Maity</b> , Dipak Kr. Chanda, Saheli Ghosh, Parimal Karmakar, and Sukhen Das*	10.1021/acs.inorgchem.9b00425	Issue-13 Vol-58	8369–8378	0020-1669
4.	Polymers for Advanced Technologies (SCI)	Poly(3,4 ethylenedioxythiophene)-tosylate—Its synthesis, properties and various applications	April 2021	<b>Shilpa Maity</b> , Salini Datta, Megha Mishra, Shiladitya Banerjee, Sukhen Das, Krishanu Chatterjee*	10.1002/pat.5193	Issue-4 Vol-32	1409-1427	1042-7147
5.	Smart Materials and Structures (SCI)	Polymer chalcogenides—new smart materials for thermoelectric applications,	June 2022	<b>Shilpa Maity</b> , Umme Karnij Salma Parvin, Sukhen Das and Krishanu Chatterjee	10.1088/1361-665X/ac7595	Issue-7 Vol-31	073001	0964-1726
6.	Chemnanomat (SCI)	Improved thermoelectric properties of selenium functionalized pedot.	April 2024	<b>Shilpa Maity</b> , Aniket Mondal, Sukhen Das, Krishanu Chatterjee*	10.1002/cnma.202400015	Issue-7 Vol-10	e202400015	2199-692X

#### 7. Book chapter:

Sl. No.	Title of the book	Publishers	Author(s) Name (Highlight the corresponding and 1 <sup>st</sup> author in every article)	Year	ISBN No.	doi no. (if applicable)
1.	Dye Sensitized Solar Cell Based On PEDOT-TOS Counter Electrode		MD Alif Bakas, Krishanu Chatterjee, <b>Shilpa Maity</b>			
2.	“An Extensive Study of Photo thermoelectric		Sudip Sarkar, Krishanu Chatterjee, <b>Shilpa Maity</b>			

	materials For Device Applications	AkiNik Publications		2024	978-93-6135-429-8	10.22271/ed.book.2938
3.	Synthesis and Thermoelectric Characterization of Pedot-Tos/Tin Selenide Nanocomposite		Swagata Majumder, Krishanu Chatterjee, <b>Shilpa Maity</b>			
4.	Enhanced Thermoelectric Properties of pTSA doped PEDOT/Bismuth Nanocomposite		Subhra Raksit, Krishanu Chatterjee, <b>Shilpa Maity</b>			
5.	Thermoelectric Propertise of Zinc-Incorporated Reduced Graphene Oxide-polyaniline composite		<b>Shilpa Maity</b> , Krishanu Chatterjee			

**4. Text/Reference book published from reputed national/international publishers:**

Sl. No.	Title of the Text/Reference book	Publishers	Author(s) Name (Highlight the corresponding and 1 <sup>st</sup> author in every article)	Year	ISBN No.	doi no. (if applicable)

**5. Project granted:**

Sl. No	Sponsoring Agency	Name of the project	Duration		Amount in Lakhs	PI/ CO-PI
			Starting Month & Year	Ending month & Year		
1.	DST, India	DST Women Scientist Scheme A	December 2020	December 2023	19,58,947	PI

**6. Consultancy Project Grant:**

Sl No.	Project title	Funding Agency	Duration	Completed (yes/no)	Sanctioned amount (in Rs.)	PI and CO-PI (if any)

**7. Patent/IPR granted:**

Sl. No.	Name of the patent	Name of the applicant	Name of the inventor	Date of File	Date of Publication	Whether Granted (yes/no); If yes, Date of Grant	Application No.