

**Arkadyuti Sikdar**

**M4NST21005**

**Nanotechnology and Science**

**MTech.**

**Jadavpur University**

**Gender: Male**

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**DOB: 10-11-1**

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Examination	University	Institute	Year	%
Post-Graduation (MTech.)	Jadavpur University	Jadavpur University	2021	78.33
Post-Graduation (MSc.) (MSc. Specialization: Electronic Science)	WBSU	Acharya Prafulla Chandra College	2018	77.25
Under-Graduation (Physics)	WBSU	Barasat Govt. College	2016	60.75
10+2	WBSCHSE	Prafullanagar Vidyamandir	2013	79.6
Matriculation	West Bengal Board	Prafullanagar Vidyamandir	2011	78.62

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### **Certification Course:**

- Currently pursuing an **Advanced Certificate Program in Full Stack Software Development** from **Great-Learning** in association with eict IIT Roorkee.

The following link is for the academic portfolio:

<https://portfolio.mygreatlearning.com/arkadyuti-sikdar>

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### **SCHOLASTIC ACHIEVEMENTS:**

- Qualified for **GATE in Electronics and Communication Engineering (EC)** by acquiring a 438 GATE Score in **GATE 2019 (EC)** and secured a rank of 7983 out of 104782 in 2019.
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### **TECHNICAL SKILLS:**

- **Tools:** MATLA, Adobe Photoshop, Eclipse, IntelliJ, VSCode.
  - **Programming Languages:** C, MATLAB, JAVA, MySql, Spring-Framework.
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### **KEY COURSE PROJECTS:**

- **Study of the Effect of Dielectric on the Transfer Characteristic of Double Gate MOSFET ( MSc.):**
- **Guide:** Dr Subhro Ghosal and Arpan Deyasi

Design a Double gate MOSFET using Silvaco TCAD and then by changing the values i.e. dielectric material used in the device, observing the effect on the transfer characteristic of the device by plotting different graphs of Gate Voltage Vs Drain current, Trans-conductance, and threshold Voltage.

Repeating the same simulation for different channel lengths.

- **Sol-Gel Auto-Combustion Synthesis of Ba Hexaferrite Ceramic (MTech.):**
- Guide: Dr Devatyoti Mukherjee and Dr Chandan Kumar Ghosh.

This investigation dealt with the synthesis of barium hexaferrite ( $\text{BaFe}_{12}\text{O}_{19}$ ) ceramic powders through the Sol-Gel Auto-Combustion route.

The effect of preparation through the auto-combustion process on the structural and magnetic properties of produced ferrite powders will be studied.

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### **Published Work:**

- **A study of the Effect of Composite Dielectric on the Switching Characteristics of Junction-less Transistor:**  
**Published in ICEECC 2019**  
**Guide:** Dr Subhro Ghosal.

I have designed a Junction-less transistor using Silvaco TCAD.

In this model, we have studied the relative sensitivity of the transient parameter namely the Ion/Ioff ratio and gate capacitance has been calculated to the variation in several structural parameters like channel width and doping conc. Of the channel.

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### **HOBBIES:**

- Photography, Cooking, Coding.
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### **Personal Details:**

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