

### **SCI Journals:**

1. Ajitesh Kar, Soumya Sarkar, Manjima Bhattacharya, Anoop Mukhopadhyay and Probal Das, Impact Energy Absorption Analysis of Spark Plasma Sintered Al<sub>2</sub>O<sub>3</sub> Reinforced Bulk Multiwalled Carbon Nanotube Compacts Using Nanoindentation, *International Journal of Applied Ceramic Technology* 13(6) (2016) 987–996.
2. Ajitesh Kar, Kusumita Kundu, Himadri Chattopadhyay, Rajat Banerjee, White light emission of wide-bandgap silicon carbide: A review, *Journal of the American Ceramic Society* 105(5) (2022) 3100–3115.
3. Soma Hansda, Dipika Sarkar, Sukanya Kundu, Ajitesh Kar, Subhankar Bera, Sanjiban Das, Dipayan Sanyal, Milan K. Naskar, Structural and optical properties of silicon oxycarbide thin films using silane based precursors via sol-gel process, *Thin Solid Films* 791 (2024) 140226.
4. Ajitesh Kar, Kusumita Kundu, Suresh Kumar, Rajat Banerjee, Himadri Chattopadhyay, Synthesis of silicon carbide thin film as a source for white light emission, *Optical Materials* 155 (2024) 115795.
5. Ajitesh Kar, Rajat Banerjee, Himadri Chattopadhyay, Nanomechanical properties of polymer derived silicon oxycarbide thin films, *Journal of the European Ceramic Society* 46 (2026) 118058.
6. Dinabandhu Manna, Kusumita Kundu, Arpan Dutta, Biswajit Bera, Ajitesh Kar, Manasi Mukhopadhyay, Congo red dye removal using highly porous sulfuric acid activated papaya petiole biochar: Experimental, characterization, optimization and isotherm study, *Next Mater.* 12 (2026) 102074.

### **Book Chapter:**

1. Ajitesh Kar, Himadri Chattopadhyay, Rajat Banerjee, Health and safety issues in ceramic manufacturing processes, *Encyclopedia on Comprehensive Materials Processing*, Elsevier, 2e, (2023).

### **Publications: In Conference Proceedings: 14**

#### **Conference Proceedings:**

1. Ajitesh Kar, Soumya Sarkar, Manjima Bhattacharya, Anoop Kr. Mukhopadhyay and Probal Kr. Das, Extremely elastic spark plasma sintered bulk MWCNT structure as impact energy absorber, *International Conference on 'Alumina and Other Functional Ceramics (AOFC-2015)'* 13<sup>th</sup> March 2015.

2. Dipayan Sanyal, Ajitesh Kar and Subhankar Bera, A Novel Process Chain for Near Net Shape Manufacturing of Precision Glass Optics, Young India International Science Meet of IISF, Dec 5-7, 2015, New Delhi, India.
3. Bidhan Das, Ajitesh Kar, Motilal Ram and Rajat Banerjee, Slip Chemistry and Rheology of Silicon Powder for RBSN Component, International conference on Advances in Engineering and Technology, April 4-5, 2016, GCECT, Kolkata.
4. Nilanjana Roy, Ajitesh Kar, Tarun Kayal and Dipayan Sanyal, Some Studies on Synthesis and Characterisation of Reaction Bonded Silicon Nitride, International conference on Advances in Engineering and Technology, April 4-5, 2016, GCECT, Kolkata.
5. Ajitesh Kar and Dipayan Sanyal, Silicon Nitride: Synthesis & Properties as Electromagnetic Protective Window, Internal Seminar on FTT Projects in Hindi, 27th July, 2017, CSIR-CGCRI, Kolkata.
6. Ajitesh Kar and Dipayan Sanyal, Ceramics for Strategic Applications, 75 Azadi Ka Amrit Mohatsav, i-Connect, 4M Theme 24th June, 2022.
7. Milan Kanti Naskar, Soma Hansda, Dipika Sarkar, Bishal Kumar Keshari, Ajitesh Kar, Subhankar Bera, Sanjiban Das and Dipayan Sanyal, Processing and Properties of Advanced Oxycarbide Glass for Functional Application, August 23-25, 2022, International Conference on Advances in Glass & Glass-ceramics (ICAGGC-2022), CSIR-CGCRI, Kolkata.
8. Ajitesh Kar, Himadri Chattopadhyay, and Rajat Banerjee, Energy Savings Using LEDs: An Indian Perspective, December 11-13, 2022, 4th International Conference on Energy and Power (ICEP2022), Military Institute of Science & Technology, Dhaka, Bangladesh.
9. Ajitesh Kar, Kusumita Kundu, Dipika Sarkar, Soupitak Pal, Suresh Kumar, Rajat Banerjee, Himadri Chattopadhyay, Development of Silicon Carbide Thin Film for White Light Emission, 2nd International Conference on Mechanical Engineering (INCOM-2024), Department of Mechanical Engineering, Jadavpur University, Kolkata, January 5-6, 2024.
10. Debjani Niyogi, Sanjiban Das, Subhankar Bera, Srikrishna Manna, Ajitesh Kar, Soupitak Pal, Scalable Processing of 2D-Mxene and Quantification of Its Surface Termination, National Seminar on Industrial Ceramics: Challenges, Opportunities and Sustainability (ICCOS), Golden Jubilee Celebration of Indian Institute of Ceramics, CSIR- Central Glass and Ceramic Research Institute, Kolkata, June 13-14, 2024.
11. Ajitesh Kar, Soupitak Pal, Suresh Kumar, Pranab Pal, Rajat Banerjee, Himadri Chattopadhyay, Indentation Size Effect in Amorphous SiOC Films Deposited using Chemical Vapour Deposition Method, XXVII International Congress on Glass on January 20-24, 2025 at Kolkata, India.
12. Ajitesh Kar, Understanding Ceramic Fatigue Failure Causes, Mechanisms, and Prevention, Value Added Course- Numerical Analysis of Fatigue Failure in Mechanical Components, Department of Mechanical Engineering, ARKA JAIN University, Jharkhand, 14<sup>th</sup> May-2<sup>nd</sup> June, 2025.
13. Ajitesh Kar, Soma Hansda, Shirshendu Chakraborty, Non-oxide Ceramics for Strategic Sectors, Ceramics and Glass Technology in the Modern Era: Challenges, Opportunities, and Sustainability (CGTME-2025), Golden Jubilee Concluding Ceremony of Indian Institute of Ceramics, CSIR- Central Glass and Ceramic Research Institute, Kolkata, August 8-9, 2025.

14. Ajitesh Kar, Suresh Kumar, Rajat Banerjee, Himadri Chattopadhyay, Nanomechanical behaviour of polymer derived silicon oxycarbide thin films, 3rd International Conference on Mechanical Engineering (INCOM-2026), Department of Mechanical Engineering, Jadavpur University, Kolkata, January 8-10, 2026.