

List of Publications

Journals

| Sl No. | Year of Publication | TITLE | Journal Name | ISSN/ ISBN | Published By |
|--------|---------------------|---|--|--|----------------------|
| 1. | 2024 | Minimum measurable length inspired thermodynamic characteristics of the Schwarzschild black hole surrounded by the cloud of strings and quintessence (Brahmi Das , Himangshu Barman and Anisur Rahaman) | <i>Physics of the Dark Universe</i> , 46 (2024) 101661 DOI: 10.1016/j.dark.2024.101661 Impact Factor: 5.0 | 2212-6864 | ELSEVIER |
| 2. | 2024 | Enhanced Photocatalytic Performance of rGO Modulated β -Ga ₂ O ₃ for Wastewater Treatment. (Brahmi Das , Nirmalya S. Das, Kalyan K. Chattopadhyay) | <i>Macromolecular Symposia</i> , 413(1) (2024) 2200222 DOI:10.1002/masy.202200222 Cite score: 1.5 | 1521-3900 (Web) 1022-1360 (Print) | WILEY Online Library |
| 3. | 2023 | Morphology Tuned Ga ₂ O ₃ Nanostructures for Visible Light-Assisted Dye-Sensitized Photocatalytic Water Remediation. Brahmi Das , Nirmalya S Das, Biswajit Das, Ratna Sarkar, Subrata Sarkar, Kalyan Kumar Chattopadhyay) | <i>Materials Today Communications</i> , 35 (2023)105849. DOI: 10.1016/j.mtcomm.2023.105849 Impact Factor: 3.7 | 2352-4928 | ELSEVIER |
| 4. | 2023 | Morphology tuned electrochemical properties of CuBO ₂ nanostructures. (Pulok Das, NirmalyaSankar Das, Kausik Sardar, Brahmi Das , Ashadul Adalder, Kalyan Kumar Chattopadhyay) | <i>Materials Chemistry and Physics</i> ,301 (2023) 127642. DOI: 10.1016/j.matchemphys.2023.127642 Impact Factor: 4.3 | 0254-0584 | ELSEVIER |
| 5. | 2022 | Hydrothermal synthesis of GO wrapped BiOCl nanosheet and its application in visible light assisted catalytic degradation of Rhodamine B dye. (Ratna Sarkar, Dimitra Das, KausikChanda, Brahmi Das , Subrata Sarkar, Kalyan Kumar | <i>Materials Chemistry and Physics</i> , 279 (2022) 125796. DOI: 10.1016/j.matchemphys.2022.125796 Impact Factor: 4.3 | 0254-0584 | ELSEVIER |

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| | | Chattopadhyay) | | | |
| 6. | 2022 | Enhanced field emission properties of rGO wrapped Ga ₂ O ₃ micro/nanobricks: Experimental investigation with theoretical validation. (Brahmi Das , Biswajit Das, Nirmayla Sankar Das, Suvra Pal, Bikram Kumar Das, Ratna Sarkar, Rimpa Khan, Subrata Sarkar, Kalyan Kumar Chattopadhyay) | <i>Journal of Alloys and Compounds</i> , 902 (2022) 163726. DOI:10.1016/j.jallcom.2022.163726 Impact Factor: 5.8 | 0925-8388 | ELSEVIER |
| 7. | 2021 | Calcination temperature dependent dielectric properties of nanocrystalline BaSnO ₃ . (Suvra Pal, Nirmalya Sankar Das, Brahmi Das , Subhadipta Mukhopadhyay, Kalyan Kumar Chattopadhyay) | <i>ECS Journal of solid state science and technology</i> , 10(7) (2021) 071018. DOI: 10.1149/2162-8777/ac147e Impact Factor: 1.8 | 2162-8769 (Print), 2162-8777 (Web) | ECS by IOP Publishing Limited |
| 8. | 2021 | Hierarchical nickel sulphide microstructures for controlled water disinfection and cold cathode emission. (Rimpa Khan, Nirmalya Sankar Das, Biswajit Das, Brahmi Das , Kalyan Kumar Chattopadhyay) | <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 412 (2021) 113212. DOI: 10.1016/j.jphotochem.2021.113212 Impact Factor: 4.1 | 1010-6030 | ELSEVIER |
| 9. | 2020 | V doped BaSnO ₃ nanocubes as a field emitting material: Experimental and theoretical investigation. (Suvra Pal, Nirmalya Sankar Das, Brahmi Das , Bikram Kumar Das, Subhadipta Mukhopadhyay and Kalyan Kumar Chattopadhyay) | <i>Applied Surface Science</i> , 530 (2020) 147102 DOI:10.1016/j.apsusc.2020.147102 Impact Factor: 6.3 | 0169-4332 | ELSEVIER |
| 10. | 2020 | Novel Ag ₂ O-Ga ₂ O ₃ type II p-n heterojunction as an efficient water cleanser for green cleaning technology. (Brahmi Das , Biswajit Das, Suvra Pal, Nirmalya Sankar Das, Bikram Kumar Das, Subrata Sarkar and Kalyan Kumar Chattopadhyay) | <i>Applied Surface Science</i> , 515 (2020) 145958 DOI:10.1016/j.apsusc.2020.145958 Impact Factor: 6.3 | 0169-4332 | ELSEVIER |

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| 11. | 2020 | Facile Preparation of Porous Ga ₂ O ₃ Nano/microbars for Highly Efficient Photocatalytic Degradation. (Brahmi Das , Biswajit Das, Suvra Pal, Ratna Sarkar, Nirmalya Sankar Das, Subrata Sarkar and Kalyan Kumar Chattopadhyay) | <i>AIP Conference Proceedings, 2220 (2020) 020013</i> DOI:10.1063/5.0002714 Cite score: 0.7 | 978-0-7354-1976-6 | AIP Publishing |
| 12. | 2020 | Efficient Photocatalytic Activity of Bismuth Oxyhalides with preferentially oriented (210) facets under Visible light. (Ratna Sarkar, Dimitra Das, Brahmi Das , Subrata Sarkar and Kalyan K. Chattopadhyay) | <i>AIP Conference Proceedings, 2220 (2020) 020030</i> DOI:10.1063/5.0002715 Cite score: 0.7 | 978-0-7354-1976-6 | AIP Publishing |
| 13. | 2020 | BaSnO ₃ nanoparticles as blue emitting phosphor and efficient photocatalyst. (Suvra Pal, NirmalyaSankar Das, Brahmi Das , Biswajit Das, SubhadiptaMukhopadhyay and Kalyan Kumar Chattopadhyay) | <i>AIP Conference Proceedings, 2220 (2020) 020014</i> DOI:10.1063/5.0002717 Cite score: 0.7 | 978-0-7354-1976-6 | AIP Publishing |
| 14. | 2019 | Tailored MesoporousNanocrystalline Ga ₂ O ₃ for Dye-Selective Photocatalytic Degradation. (Brahmi Das , Biswajit Das, NirmalyaSankar Das, Subrata Sarkar and Kalyan Kumar Chattopadhyay) | <i>Microporous and Mesoporous Materials, 288 (2019) 109600</i> DOI:10.1016/j.micro meso.2019.109600 Impact Factor: 4.8 | 1387-1811 | ELSEVIER |

Book Chapters:

| Sl No | Year of Publication | TITLE | Journal Name | ISSN/ ISBN | Published By |
|-------|---------------------|--|--|-------------------------|----------------------|
| 1. | 2021 | Morphological tuning of low dimensional β-Ga ₂ O ₃ for enhanced photocatalytic performance (Brahmi Das , Nirmalya | Basic and Applied Sciences into next frontiers | ISBN: 978-81-948993-0-3 | New Delhi Publishers |

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| | | Sankar Das, Biswajit Das, Ratna Sarkar, Suvra Pal, Subrata Sarkar and Kalyan Kumar Chattopadhyay) | | | |
| 2. | 2021 | Structural Tuning of BiOCl nano-crystals: PVP modulated visible light stimulated photocatalytic dye degradation (Ratna Sarkar, Dimitra Das, Brahmi Das , Subrata Sarkar and Kalyan Kumar Chattopadhyay) | Emerging Trends and New Horizons in Applied Sciences | ISBN: 978-81-940943-5-7 | New Delhi Publishers |