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LIST OF PUBLICATIONS

International Refereed Journals

Based on Thesis

1. **Maurya Sandeep Pradeepkumar**, Avnish Singh Pal, Ankit Singh, Joysurya Basu & Mohammad Imteyaz Ahmad, “Phase separation in wurtzite $\text{CuIn}_x\text{Ga}_{1-x}\text{S}_2$ nanoparticles”, J. Mater. Sci., 55(2020), 11841–11855.
2. **Maurya Sandeep Pradeepkumar**, HV Singh, S Kumar, Joysurya Basu, Mohammad Imteyaz Ahmad, “Low Thermal Budget Processing of CdS Thin Films”, Mater. Lett. 280(2020), 128560.
3. **Maurya Sandeep Pradeepkumar**, A Singh, J Basu, Md. Imteyaz Ahmad, “Nucleation and growth mechanism of wurtzite copper indium disulfide nanoparticles during solution processing” Ceram. Int. 47 (2021), 32086-32096.
4. **Maurya Sandeep Pradeepkumar**, Joysurya Basu & Md Imteyaz Ahmad, “Phase transformation and grain growth in wurtzite CIS films deposited by spray pyrolysis”, Ceram. Int., 48 (2022), 35633-35641.
5. **Maurya Sandeep Pradeepkumar**, Joysurya Basu, Md Imteyaz Ahmad, “ CuInS_2 thin-film solar cell on utilizing phase transformation assisted grain growth (wurtzite to chalcopyrite) by spray pyrolysis”. **(to be communicated)**

Collaborative Publications

1. Sanjay Kumar, **Maurya Sandeep Pradeepkumar**, Akansha Dwivedi, Mohammad Imteyaz Ahmad, “Ba_{0.7}Sr_{0.3}TiO₃-Cu Composite for Electronic Packaging” J. Mater. Sci. Mater. Electron., 30(2019) 1–7.
2. **Maurya Sandeep Pradeepkumar**, KP Sibin, MA Hasan, Arjun Dey, AK Mukhopadhyay, “Nanoindentation based fracture studies of ITO coating”, Ceram. Int. 47 (2021), 14717-14722.
3. A Singh, **Maurya Sandeep Pradeepkumar**, DK Jarwal, S Jit, S Bysakh, Mohammad Imteyaz Ahmad, Joysurya Basu, “Homogeneous and polymorphic transformations to ordered intermetallics in nanostructured Au–Cu multilayer thin films” J Mater Sci., 56 (2021), 16113-16133.
4. Uttam Sharma, Jogendra Singh Rana, Chandan Kumar, **Maurya Sandeep Pradeepkumar**, Md. Imteyaz Ahmad, Satyabrata Jit, Santanu Das “Visible Light Detection Property of Seamless Two-Dimensional MoS₂–based Metal-Semiconductor-Metal Photodiodes Fabricated on Silicon Substrates” **Mat Sci Semicon Proc.**, 2022 (Under review)

International Conference Presentations

Based on Thesis

1. **Maurya Sandeep Pradeepkumar**, Joysurya Basu, Mohammad Imteyaz Ahmad, “Chalcopyrite CIGS absorber layer phase transformation assisted grain growth”, 81st annual session of Indian ceramic society and international conference on expanding horizons of technological applications of ceramic and glass College of Engineering Pune, December 14-16, 2017, Pune, India, pp.105 in the book of abstract.

2. **Maurya Sandeep Pradeepkumar**, Joysurya Basu, Mohammad Imteyaz Ahmad, “Wurtzite $\text{CuIn}_x\text{Ga}_{1-x}\text{S}_2$ ($X=0, 0.7, 1$) Nanoparticles by Hydrazine-Free Solution Method”, Materials & Technologies for Energy Conversion and Storage (M-TECS 2018) September 26-29, 2018, Mumbai, India (pp. 193 in the book of abstract).
3. **Maurya Sandeep Pradeepkumar**, Anurag Kumar, Ankit Singh, Avnish Singh, Joysurya Basu, Mohammad Imteyaz Ahmad, “Synthesis and structural characterization of wurtzite $\text{CuIn}_x\text{Ga}_{1-x}\text{S}_2$ Nanoparticles”, Poster presentation, 10th International Conference on Materials for Advanced Technologies (ICMAT2019) 23 - 28 June 2019 | Marina Bay Sands, Singapore. **(Won Poster Prize)**
4. **Maurya Sandeep Pradeepkumar**, Joysurya Basu, Mohammad Imteyaz Ahmad, “Phase Evolution and Grain Growth During Selenization of Spray Deposited CuInS_2 Film for solar cell application”, Oral presentation, International Conference on Advanced Material for Better Tomorrow (AMBT)-2021, 13- 17 July 2021, IIT(BHU), Varanasi, India.

Collaborative Publications

1. Anurag Kumar, **Maurya Sandeep Pradeepkumar**, Sooraj Kumar, Asim Aftab, Mohammad Imteyaz Ahmad, “Highly Conductive Aluminium Doped Zinc Oxide Thin Film by Solution Processing Route”, Oral presentation, 10th International Conference on Materials for Advanced Technologies (ICMAT2019) 23 - 28 June 2019 | Marina Bay Sands, Singapore.

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