

Publications (Journal/Conference/Magazine)

- *Microwave irradiation-assisted deposition of Ga₂O₃ on III-nitrides for deep-UV opto-electronics*, Piyush Jaiswal et. al, Applied Physics Letters (2018), 112, 2, 021105. DOI: [10.1063/1.5010683](https://doi.org/10.1063/1.5010683)
- *Deposition of Wide-Band-Gap Ga₂O₃ on III-nitrides for Visible-Blind Deep-UV Optoelectronics by Microwave Irradiation-Assisted Process*, Piyush Jaiswal et. al, 2017 MRS Fall Meeting, Boston, USA - Nov 26 - Dec 1, 2017 (oral), <https://mrsfall.zerista.com/event/member/431471>
- *Metalorganic chemical vapour deposition of thin films of (Ga_{1-x}Al_x)₂O₃ using substituted acetylacetonate precursors, (Ga_{1-x}Al_x)(acac)₃*, Piyush Jaiswal, S.A. Shivashankar –IWGO 2017, Parma (Italy) – September 12-15, 2017 (oral), <http://www.iwgo2017.unipr.it/wp-content/uploads/2017/08/Technical-Programme.pdf>
- *Sub-200°C microwave-assisted deposition of β-Ga₂O₃ thin films on sapphire*, Piyush Jaiswal, D. Azam, U. Ul Muazzam, R. Muralidharan, S.A. Shivashankar, and D.N. Nath - IWGO 2017, Parma (Italy) – September 12-15, 2017 (poster), <http://www.iwgo2017.unipr.it/wp-content/uploads/2017/08/Technical-Programme.pdf>
- *Effect of substrates and surfactants over the evolution of crystallographic texture of nanostructured ZnO thin films deposited through microwave irradiation*, Brahma, Sanjaya; Jaiswal, P.; Suresh, K. S.; Lo, Kuang-Yao; Suwas, Satyam; Shivashankar, S. A., Thin Solid Films (2015), 593, 81-90. DOI: [10.1016/j.tsf.2015.09.005](https://doi.org/10.1016/j.tsf.2015.09.005)
- *Modification of metal-InGaAs Schottky barrier behaviour by atomic layer deposition of ultra-thin Al₂O₃ interlayers*, Chauhan, Lalit; Gupta, Suman; Jaiswal, Piyush; Bhat, Navakanta; Shivashankar, S. A.; Hughes, G., Thin Solid Films (2015), 589, 264-267. DOI: [10.1016/j.tsf.2015.05.046](https://doi.org/10.1016/j.tsf.2015.05.046)
- *A composition-dependent "re-entrant" crystallographic phase transition in the substitutional metal acetylacetonate complex (Cr_{1-x}Ga_x)(acac)₃*, Srinidhi Raghavan, M.; Jaiswal, Piyush; Sundaram, Nalini G.; Shivashankar, S. A., Polyhedron (2014), 70, 188-193. DOI: [10.1016/j.poly.2013.12.036](https://doi.org/10.1016/j.poly.2013.12.036)
- *Comparison of CVD and MOCVD-grown Al₂O₃ coatings in the performance of cemented carbide cutting tool inserts*, Piyush Jaiswal et. al., MRS Online Proceedings Library (2011), 1298. DOI: [10.1557/opl.2011.495](https://doi.org/10.1557/opl.2011.495)
- *Near white light emission from ZnO nanostructures*, Brahma, Sanjaya; Jaiswal, P.; Nanda, K. K.; Kukreja, L. M.; Shivashankar, S. A., MRS Online Proceedings Library (2011), 1303. DOI: [10.1557/opl.2011.401](https://doi.org/10.1557/opl.2011.401)
- *Ellipsometric study of Atomic Layer Deposited TiO₂ thin films*, Piyush Jaiswal et. al., AIP Conference Proceedings (2009), 1147, 396-401. DOI: [10.1063/1.3183463](https://doi.org/10.1063/1.3183463)
- *Microwave deposition of gallium oxide on III-nitride on silicon substrate (Semiconductor Today – 7th Feb, 2018, by Mike Cook)*, http://www.semiconductor-today.com/news_items/2018/feb/indian-institute_070218.shtml
- *Al₂O₃-C Composite Coatings On TiN/WC Cutting Tool From MOCVD: Theoretical Modeling and Experimental Observations*, Sukanya Dhar, P. Jaiswal, and S. A. Shivashankar, Proc. FIME-2010 International Conference, NITK (Suratkal), May 2010.