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Publications

List of Publications

Publications relevant to this thesis

1. **Ramani, U.**, Kumar, H., Singh, B. K. & Pandey, P. C. Study of highly sensitivity metal wires assisted photonic crystal fiber based refractive index sensor. *Opt. Quantum Electron.* **52**, 521 (2020).
2. **Ramani, U.**, Kumar, H., Singh, B. K. & Pandey, P. C. Design of surface plasmon resonance based both side polished photonic crystal fiber for highly efficient refractive index sensor. *Optik (Stuttg)*. **248**, 168062 (2021).
3. **Ramani, U.**, Kumar, H., Kumar, R., Singh, B. K. & Pandey, P. C. Rectangular-Shape Cladding-Based Photonic Crystal Fiber Surface Plasmon Resonance-Based Refractive Index Sensor. *Plasmonics* **18**, 921–929 (2023).
4. **Ramani, U.**, Kumar, H., Kumar, R., Singh, B. K. & Pandey, P. C. Dual-Core photonic crystal fiber based plasmonic sensor for a broad range of refractive index sensing (**Communicated**).

Other Publications

5. Dixit, A., Tiwari, S., **Ramani, U.** & Pandey, P. C. Refractive index sensor based on evanescent field effects in hollow core PCF for detection of analytes over extended E+S+C+L+U communication bands. *Opt. Laser Technol.* **121**, 105779 (2020).
6. Kumar, H., **Ramani, U.**, Singh, B. K. & Pandey, P. C. Investigations on the Highly Sensitive Metal-Coated Broad Range D-Shaped Optical Fiber Refractive Index Sensor. *Plasmonics* **16**, 1963–1971 (2021).
7. Kumar, H., Kumar, R., **Ramani, U.**, Singh, B. K. & Pandey, P. C. Al-doped ZnO based long range optical fibre sensor for efficient low refractive index detection. *Opt. Quantum Electron.* **55**, 608 (2023).
8. Kumar, H., Kumar, R., **Ramani, U.**, Singh B. K. & Pandey P. C. High refractive index sensing highly sensitive and low loss SPR sensor based on hollow-core D-shaped optical fiber (**Communicated**).

Publications

Conferences/Webinar

1. International virtual conference on “ Modern instrumentation and characterization techniques in Applied Sciences (MICTAS-2020)”, organized by MIET Kumaon Haldwani & Department of Chemistry, H.N.B. Govt. P. G. College, Khatima, Uttarakhand in collaboration with USERC DST Dehradun & Department of Chemistry, R.H. Govt. P. G. College, 5th – 6th July 2020, Kashipur, Uttarakhand.
2. Webinar on “Physics of Nanomaterials Synthesis and Characterization with Practical Examples” jointly organized by the Department of Physics and Physics Alumni Association (PAA), 20th June 2020, St. John’s College, Agra.
3. International conference on “Sustainable Materials and Technologies for Bio and Energy Applications, (SMTBEA-2021)” during and attended the lectures “Twin boundary Formation mechanism and refinement of periodically twinned structure in borate crystal”, by Dr. Kensaku maeda (Institute of Materials research, Tohoku University, Japan), and “Application of machine learning to Czochralski growth of Si”, By Dr. Kentaro Kutsukake (RIKEN) Organized by SSN Institutions, 21th May 2021, kalavakkam, Chennai 603110.
4. International conference on “Sustainable Materials and Technologies for Bio and Energy Applications, (SMTBEA-2021)” during and attended the lectures “Biomedical Applications of Nanofibers”, by Dr. P. Gopinath (IIT, Roorkee) and “Advancement in Cancer Therapy through Modulation of Nano-bio Interface”, By Prof. Devika Chithrani (University of Victoria, Canada) Organized by SSN Institutions, 20th May 2021, kalavakkam, Chennai 603110.