डॉ. अंजनी कुमार तिवारी
सहायक प्राध्यापक
Dr. Anjani Kumar Tiwari
Assistant Professor

भारतीय प्रौद्योगिकी संस्थान रूड़की
भौतिकी विभाग
रूड़की - 247667, उत्तराखण्ड, भारत
INDIAN INSTITUTE OF TECHNOLOGY ROORKEE
DEPARTMENT OF PHYSICS
ROORKEE - 247667, UTTARAKHAND, INDIA
Phone: +91-1332-285772(O), Fax: +91-1332-275360
Email: anjani@ph.iitr.ac.in
Website: https://www.iitr.ac.in/~PH/Anjani_Kumar_Tiwari

Academic qualification:

- ***Doctor of Philosophy***: Tata Institute of Fundamental Research, Mumbai, India (July 2008 - January 2014)
- ***Master of Science***: Department of Physics, C.C.S. University Meerut (2007) (I^{st} division)
- ***Bachelor of Science***: (PCM Group), N.A.S. College Meerut (2005) (I^{st} division)
- ***Intermediate***: K.K. Jain Inter College Khatauli, U.P. Board (2002) (I^{st} division)
- ***High School***: H.K. Inter College Sakhoti, U.P. Board (2000) (I^{st} division)

Work experience:

- July 2022 - Present: Joint Faculty, Centre for Photonics and Quantum Communication Technology, Indian Institute of Technology Roorkee, India.
- April 2021 - Present: Assistant Professor, Department of Physics, Indian Institute of Technology Roorkee, India.
- May 2017 - April 2021: DST INSPIRE Faculty Fellow, Indian Institute of Technology Kanpur, India.
- May 2016 - April 2017: Senior Project Scientist, Indian Institute of Technology Kanpur, India.
- March 2014 - February 2016: Postdoctoral Research Fellow, European Laboratory for Non-Linear Spectroscopy (LENS), Italy.

Fellowships and awards:

- **Featured in top 5 faculty for Excellence in Teaching Award in the UG category of 80+ students**, IIT Roorkee (2025).
- **Featured in top 5 faculty for Excellence in Teaching Award in UG category (30+ students) instructed by Young Faculty**, IIT Roorkee (2025).
- **Outstanding performance in the Faculty Performance Appraisal Report** of the academic session 2023-24, IIT Roorkee.
- **Featured in top 5 faculty for Outstanding Teaching in the UG category of 80+ students**, IIT Roorkee, 2024.
- **INSA Medal for Young Scientists** 2019.
- **Excellence in Oral Presentation** award at Photonics 2018.
- **INSPIRE Faculty Award** from Department of Science & Technology, India (July 2016).
- **1st Prize by OSA** for Best Student Paper Award at Photonics 2012.
- **Best Poster Presentation Award** by the Indian Laser Association at National Laser Symposium NLS-20 (2012).
- **TIFR Scholarship 2008:** Selected by the test and interview to receive research scholarship to attend graduate school at TIFR.
- **CSIR-NET-June 2007** and **UGC-NET-December 2007** Selected for junior research fellowship.
- **GATE-2006** and **GATE-2007** Qualified.
- **Secured 3rd** position in graduation at college (2005).

Short term visits:

- Visited TIFR from 21 May to 05 June 2019.

Research interests:

- Parity-Time Symmetric optical systems, Quantum optics, Photonic crystals, Topological photonics, metamaterial absorber, plasmonics and mesoscopic phenomena like Anderson localization.
- Light amplification in disordered amplifying structures, lasing in liquid crystal elastic materials and nanostructured thin film metamaterials.
- Study of light interaction with microstructures using analysis tools like Transfer Matrix method, Finite Difference Time Domain method, Monte Carlo simulation, and COMSOL, etc.
- Near field studies of passive and active nanostructured materials using Near Field Scanning Optical Microscope.

Research projects:

- **Experimental investigations of Transport and Modal Properties in non-Hermitian coupled Photonic Systems**, Scheme for Transformational and Advanced Research in Sciences, Ministry of Human Resource Development (MHRD), 2023-2026, 49.5 lakh, (sole PI).
- **Liquid crystal elastomer-based opto-mechanical control of photonic resonators**, Start-up Research Grant, Science and Engineering Research Board (SERB), 2022-2024, 30 lakh, (sole PI).
- **Optical properties of light-driven smart microstructures**, Faculty Initiation Grant, IIT Roorkee, 2022-2024, 20 lakh, (sole PI).
- **Light amplification and lasing in plasmonic nanostructured thin film metamaterials**, DST Inspire Faculty Award, Department of Science and Technology, 2017-2022, 35 lakh, (sole PI).

Teaching engagements:

- Physics-1 (PHI-101), Autumn 2026-27, BTech 1st year, IIT Roorkee.
- Quantum Electronics and Devices (PHC-308), Spring 2025-26, BTech 3rd year, IIT Roorkee.
- Thermal and Statistical Physics (PHC-203), Autumn 2025-26, BTech 2nd year, IIT Roorkee (Student feedback 4.72/5).
- Applied Optics (PHC-214), Spring 2024-25, BTech 2nd year, IIT Roorkee (Student feedback 4.08/5).
- Mechanics, Autumn 2024-25 and Autumn 2025-26, NPTEL Online Certification Courses.
- Thermal and Statistical Physics (PHC-203), Autumn 2024-25, BTech 2nd year, IIT Roorkee (Student feedback 4.05/5).
- Applied Optics (PHN-212), Spring 2023-24, BTech 2nd year, IIT Roorkee (Student feedback 4.59/5).
- A Primer in Quantum Technology (IPQ-301), 07 Lectures were given in Spring 2023-24, BTech 3rd year, IIT Roorkee.
- Physics-1 (PHI-101), Autumn 2023-24, BTech 1st year, IIT Roorkee (Student feedback 4.21/5).
- Electromagnetic Theory (PHN-008), Spring 2022-23, BTech 1st year, IIT Roorkee (Student feedback 4.52/5).
- Mechanics (PHN-001), Autumn 2022-23, BTech 1st year, IIT Roorkee (Student feedback 4.53/5).
- Electromagnetic Theory (PHN-008), Spring 2021-22, BTech 1st year, IIT Roorkee (Student feedback 4.32/5).
- Mechanics (PHN-001), Autumn 2021-22, BTech 1st year, IIT Roorkee (Student feedback 4.62/5).
- Applied Optics lab (PH-212), Spring 2023-24 & Spring 2024-25 BTech 2nd year, IIT Roorkee.
- Physics Lab–V (PHC-318), Spring 2025-26, IIT Roorkee.
- Physics Lab–II (P PHC-207, Digital Electronics and Thermal Physics), Autumn 2024-25 & Autumn 2025-26, BTech 2nd year, IIT Roorkee.
- Laboratory Work (PH-502), Spring-2022-23, MSc Physics 1st year, IIT Roorkee.
- Physics Laboratory (PH-106), Spring 2021-22, B. Tech 1st year, IIT Roorkee.
- Laboratory Work in Photonics (PHN-711), Autumn 2021-22, & Autumn 2022-23, MTech Photonics 1st year, IIT Roorkee.
- UG Lab (PHY 101L), 2nd Semester, 2018-19, & 2019-20 IIT Kanpur.
- Optics Lab (PHY 224L), 1st Semester, 2018-19 IIT Kanpur.

Administrative positions:

- Member, Centre Faculty Search Committee, Centre for Photonics and Quantum Communication Technology, IIT Roorkee (16 Feb 2026 - 15 Feb 2028)
- Warden, Rajendra Bhawan, IIT Roorkee (01 Jan 2026 - 31 Dec 2026)
- Member, SRIC Committee, Center for Photonics and Quantum Communication Technology, IIT Roorkee (06 Oct 2025 - 30 Jun 2027)
- Member, Departmental Academic Programme Committee, Department of Physics, IIT Roorkee (15 July 2025 - 14 July 2027)
- Member, Departmental Anti-Ragging Squads, Department of Physics, IIT Roorkee (18 July 2025 - 17 July 2026)
- Member, Departmental Administrative Committee, Department of Physics, IIT Roorkee (20 June 2025 - 19 June 2027)
- Member, Center Purchase Committee, Center for Photonics and Quantum Communication Technology, IIT Roorkee (21 Jan 2025 - 20 Jan 2026)
- Member, Advisory Committee of the International Relations, Center for Photonics and Quantum Communication Technology, IIT Roorkee (05 March 2024 - 04 March 2026)
- Convener, Department Faculty Search Committee, Department of Physics, IIT Roorkee (22 Jan 2024 - 31 Dec 2025)
- Member, Department Purchase Committee, Department of Physics, IIT Roorkee (01 Aug 2022 - 31 Jul 2023 and 17 Nov 2025 - 16 Nov. 2026)
- Coordinator, PhD and MTech Attendance, Department of Physics, IIT Roorkee (26 Sept 2023 - 25 Sept 2025)
- PhD Selection Committee Chair (Photonics Group), Department of Physics, IIT Roorkee (Spring 2022 - 23, Autumn 2023 - 24, Autumn 2024 - 25)
- Coordinator, B.Tech. in Engineering Physics-2022 batch, Department of Physics, IIT Roorkee (01 Aug 2022 - 31 Jul 2026)
- Member, Departmental Research Committee, Department of Physics, IIT Roorkee (10 Nov 2022 - 31 Oct 2024)
- Center's Research Committee Member, Center for Photonics and Quantum Communication Technology, IIT Roorkee (16 Sept 2022 - 15 Sept 2024)
- Professor-in-charge, Laser Physics laboratory in Department of Physics, IIT Roorkee (27 July 2022 - Present)
- Treasurer, Indian Physics Association, Roorkee Chapter (26 May 2022 - Present)
- Department Web Management Committee Member, Department of Physics, IIT Roorkee (13 Jul 2021 - 30 Jun 2022)

Scientific reviewer:

- **Nature Research:** Nature Communications.
- **Optica:** Optics Letters, Optics Express.
- **Springer:** Applied Physics B: Lasers and Optics, Journal of Optics.
- **IOP Science:** Journal of Optics, Journal of Physics Communications.
- **Taylor & Francis:** Journal of Modern Optics.
- **World Scientific:** International journal of Modern Physics B.
- **American Institute of Physics:** Journal of Applied Physics.
- Various National and International conference proceedings and research proposals.

Member societies:

- OPTICA (2011 to 2022).
- Optics Society of India (Life Member).
- Indian Laser Association (Life Member).
- Indian Physics Association (Life Member).

Book chapters:

[1] Nikita Choudhary, Anjani Kumar Tiwari, and Nitish Kumar Gupta, "Active Tunability in Resonant Metamaterials Using Phase Transitions," Handbook of Metamaterial Antennas, Measurement and Characterizations, **Singapore: Springer Nature Singapore**, 1-29 (2025).

List of articles in refereed journals:

[1] Jyoti Mandal, Nitish Kumar Gupta, and Anjani Kumar Tiwari, "Polarization- and angle-dependent topological interface states in one-dimensional photonic crystal heterostructures containing birefringent materials," **Journal of the Optical Society of America B**, (Accepted 2026).

[2] Nikita Choudhary, Diksha Sharma, Jyoti Mandal, and Anjani Kumar Tiwari, "Light-driven inching random laser," **Optics Letters**, Vol. 51, No. 4, pp. 1041-1044 (2026).

[3] Diksha Sharma, Jyoti Mandal, and Anjani Kumar Tiwari, "Quasi-Bound State in Continuum Assisted Lasing in One-Dimensional Blazed Grating," **Optics Communications**, Vol. 606, pp. 132877 (2026).

[4] Nikita Choudhary, Deependra Singh Gaur, Diksha Sharma, Anjani Kumar Tiwari, and Nitish Kumar Gupta, "Controlled Angular Correlations and Polarization Speckle in Scattering Birefringent Films," **Scientific Reports**, Vol. 15, pp. 35779 (2025).

[5] Nikita Choudhary, and Anjani Kumar Tiwari, "Numerical investigation of wide-angle switchable and tunable refractive index-based metamaterial absorber," **Pramana-Journal of Physics**, Vol. 98, no. 97 (2024).

[6] Nitish Kumar Gupta, Sapireddy Srinivasu, Mukesh Kumar, Anjani Kumar Tiwari, Sudipta Sarkar Pal, Harshawardhan Wanare, and S. Anantha Ramakrishna, "Realization of Jackiw-Rebbi Zero-Energy Modes at Photonic Crystal Domain Walls: Emergence of Polarization-Indiscriminate Surface States," **Applied Physics Letters**, Vol. 124, pp. 091104 (2024).

[7] Nitish Kumar Gupta, Sapireddy Srinivasu, Mukesh Kumar, Anjani Kumar Tiwari, Sudipta Sarkar Pal, Harshawardhan Wanare and S. Anantha Ramakrishna, "Direct Determination of Photonic Stopband Topological Character: A Framework based on Dispersion Measurements," **Advanced Photonics Research**, pp. 2300155, (2024).

[8] Nitish Kumar Gupta, Pradeep Chakravarthy, Mukesh Kumar, Anjani Kumar Tiwari, Sudipta Sarkar Pal, Kumar Vaibhav Srivastava, Harshawardhan Wanare, and S. Anantha Ramakrishna, "Complementary quarter-wave retardance device for generating one or more polarization states," **Indian patent**, Application Number 202311056800, (2023).

[9] Nitish Kumar Gupta, Aditi Chopra, Mukesh Kumar, Anjani Kumar Tiwari, Sudipta Sarkar Pal, Harshawardhan Wanare and S. Anantha Ramakrishna, "Surface State Engineering Using Bulk-Band Geometric Phases: Band Inversion and its Observable Implications in One-Dimensional Photonic Crystals" **Indian Journal of Pure and Applied Physics**: Special issue on "Recent Trends in Nanophotonics" Vol. 61, no. 7, pp. 560-567 (2023).

[10] Nitish Kumar Gupta, Mukush Kumar, Anjani Kumar Tiwari, Sudipta Sarkar Pal, Harshawardhan Wanare, and S. Anantha Ramakrishna, "Spectroscopic Ellipsometry-based Investigations into the Scattering Characteristics of Topologically Distinct Photonic Stopbands," **Applied Physics Letters**, Vol. 121, Issue 26, pp. 261103 (2022).
Chosen as a Featured Article in APL

[11] Nitish Kumar Gupta, Sapireddy Srinivasu, Anjani Kumar Tiwari, Harshawardhan Wanare and S. Anantha Ramakrishna, "Realizing Quasi-monochromatic Switchable Thermal Emission from Electro-Optically induced Topological Phase Transitions," **Scientific Reports**, Vol.12, pp. 7400 (2022).

[12] Nitish Kumar Gupta, Anjani Kumar Tiwari, Harshawardhan Wanare and S. Anantha Ramakrishna, "Near singular-phase optical biosensing with strongly coupled modes of a plasmonic-photonic trimer," **Journal of Optics**, Vol. 23, no. 6, pp. 065003 (2021).

[13] Rajesh Kumar, Anjani Kumar Tiwari, and S. Anantha Ramakrishna, "Surface plasmon coupling for selectively enhanced random lasing in periodically patterned silver columnar thin film metamaterials," **Applied Physics Letters**, Vol. 116, Issue 24, pp. 241902 (2020).

[14] Alice Boschetti, Andrea Taschin, Paolo Bartolini, Anjani Kumar Tiwari, Lorenzo Pattelli, Renato Torre, and Diederik Wiersma, "Spectral super-resolution spectroscopy using a random laser," **Nature Photonics**, Vol. 14, Issue 3, pp. 177-182 (2020).
Earned the March 2020 cover of Nature Photonics.

[15] Saleem Shaik, Anjani Kumar Tiwari, and S. Anantha Ramakrishna, "Refractive index sensor based on goldcoated nanoporous anodic alumina membranes to discriminate alcohol mixtures," **Pramana-Journal of Physics**, Vol. 93, Issue 2, pp. 30 (2019).

[16] Anjani Kumar Tiwari, Lorenzo Pattelli, Renato Torre and Diederik S. Wiersma, "Remote control of liquid crystal elastomer random laser using external stimuli," **Applied Physics Letters**, Vol. 113, Issue 1, pp. 013701 (2018).
Chosen as a Featured Article in APL and also appeared in the Scilight which highlights the most interesting research published in AIP journals.

[17] Anjani Kumar Tiwari, Saleem Shaik and S. Anantha Ramakrishna, "Lasing in dye-infiltrated nanoporous anodic alumina membranes," **Applied Physics B**, Vol. 124, Issue 7, pp. 127 (2018).

[18] Anjani Kumar Tiwari, Ismail Mekaaoui-Alaoui, Sriram Guddala, and S. Anantha Ramakrishna, "Enhanced visualization of latent fingermarks on rough aluminum surfaces using sequential Au and Zn/ ZnS/ ZnO depositions," **Journal of Forensic Sciences**, Vol. 63, Issue 4, pp. 1275-1281 (2017).

[19] Anjani Kumar Tiwari, K. Shadak Alee, Ravitej Uppu, and Sushil Mujumdar, "Single-mode, quasi-stable coherent random lasing in an amplifying periodic-on-average random system," **Applied Physics Letters**, Vol. 104, Issue 13, pp. 131112 (2014).

[20] Anjani Kumar Tiwari and Sushil Mujumdar, "Random lasing over gap states from a quasi-one-dimensional amplifying periodic-on-average random superlattice," **Physical Review Letters**, Vol. 111, Issue 23, 233903 (2013).

[21] Anjani Kumar Tiwari, Ravitej Uppu, and Sushil Mujumdar, "Experimental demonstration of small-angle bending in an active direct-coupled chain of spherical microcavities," **Applied Physics Letters**, Vol. 103, Issue 17, pp. 171108 (2013).

[22] Rajesh V. Nair, Anjani Kumar Tiwari, Sushil Mujumdar, B. N. Jagatap, "Inhibition and enhancement of spontaneous emission using photonic band gap structures," **Advanced Materials Letters**, Vol. 4, Issue 6, pp. 497-501 (2013).

[23] Anjani Kumar Tiwari, Ravitej Uppu, Sushil Mujumdar, "Frequency behavior of coherent random lasing in diffusive resonant media," **Photonics and Nanostructures - Fundamentals and Applications**, Vol. 10, Issue 4, pp. 416-422 (2012).

[24] Anjani Kumar Tiwari, Balu Chandra, Ravitej Uppu, and Sushil Mujumdar, "Collective lasing from a linear array of dielectric microspheres with gain," **Optics Express**, Vol. 20, Issue 6, pp. 6598-6603 (2012).

[25] Anjani Kumar Tiwari, Ravitej Uppu, and Sushil Mujumdar, "Aerosol-based coherent random laser," **Optics Letters**, Vol. 37, Issue 6, pp. 1053-1055 (2012).

[26] Ravitej Uppu, Anjani Kumar Tiwari, and Sushil Mujumdar, "Identification of statistical regimes and crossovers in coherent random laser emission," **Optics Letters**, Vol. 7, Issue 4, pp. 662-664 (2012).

[27] Rajesh V. Nair, Anjani Kumar Tiwari, Sushil Mujumdar, and B. N. Jagatap, "Photonic-band-edge-induced lasing in self-assembled dye-activated photonic crystals," **Physical Review A**, Vol. 85, Issue 2, 023844 (2012).
Appeared in Optics and Photonics news (May 2012).
Highlighted in Nature India (March 2012).

International conference proceedings:

[1] Prahlad Madhavan Veervalli, Saksham Aryan, Ardra Muriyankandathil, Anjani Kumar Tiwari, and Nitish Kumar Gupta, "Variational Quantum Eigensolver Benchmarking of the Su-Schrieffer-Heeger Model: Ansatz-Conditional Bulk-Spectrum Resolution," International Conference on Emerging Techniques in Computational Intelligence (ICETCI), Mahindra University, Hyderabad (Submitted 2026).

[2] Nikita Choudhary, Diksha Sharma, Jyoti Mandal, and Anjani Kumar Tiwari, "Remotely controlled inching millibot integrated with an optical source," Liquid Crystals Optics and Photonic Devices II, SPIE Photonics Europe, Strasbourg, France (13 - 16 April, 2026).

[3] Diksha Sharma, Jyoti Mandal, and Anjani Kumar Tiwari, "Quasi-bound state in continuum induced lasing in a blazed grating," JSAP Spring Meeting, Tokyo, Japan (15 - 18 March, 2026).

[4] Nitish Kumar Gupta, and Anjani Kumar Tiwari, "Experimental Markers for Photonic Stopband Topological Character Identification: Polarization-Discriminated Dispersion and Its Applications," **DOI: 10.1109/PIERS-Spring66516.2025.11276413**, Photonics & Electromagnetics Research Symposium-Spring (PIERS), Abu Dhabi (04-08 May, 2025).

[5] Diksha Sharma, Nitish Kumar Gupta, and Anjani Kumar Tiwari, "Gain-Loss Engineering and Study of Modal Interactions in Plasmonic-Photonic Heterostructures," 16th edition of International Conference on Fiber Optics and Photonics, IIT Kharagpur (12-15 December, 2024).

[6] Nikita Choudhary, Diksha Sharma, Saikat Maity, Deependra Singh Gaur, Nitish Kumar Gupta, and Anjani Kumar Tiwari, "Polarization-Resolved Speckle Correlations in Scattering Birefringent Films," **DOI: 10.1109/MAPCON61407.2024.10923571**, IEEE Microwaves, Antennas, and Propagation Conference (MAPCON), Hyderabad International Convention Centre, (09–13 December, 2024).

[7] Nikita Choudhary, Deependra Singh Gaur, and Anjani Kumar Tiwari, "Grating Embedded Metal-based Self-reference Sensor," 71th JSAP Spring Meeting, Tokyo, Japan (Contributory Talk) (22-25 March, 2024).

[8] Nikita Choudhary, and Anjani Kumar Tiwari, "Numerical Investigation of Dual-Band Metamaterial Absorber," **DOI: 10.1007/978-981-97-4760-3-9**, Photonics 2023, IISc Bangalore (Contributory Talk) (05 - 08 July 2023).

[9] Nitish Kumar Gupta, Anjani Kumar Tiwari, Harshawardhan Wanare, and S. Anantha Ramakrishna, "Polarization speckle generation & control of angular memory effect in optically anisotropic media," **ISBN: 978-1-957171-05-0, Paper JW3B-89**, CLEO, San Jose, California, USA (15 - 20 May 2022).

[10] N. K. Gupta, H. Wanare, A. Chopra, M. Kumar, S. S. Pal, Anjani Kumar Tiwari, and S. A. Ramakrishna, "Topological Surface State by Hierarchical Concatenation of Photonic Stopbands," **DOI: 10.1109/WRAP54064.2022.9758314**, IEEE WRAP 2022, IIT Mumbai (Contributory Talk) (04 - 06 March 2022).

[11] Anjani Kumar Tiwari, Vivek Kumar Singh, and S. Anantha Ramakrishna, "Light-driven graphene-based multifunctional actuator," **ISBN: 978-1-943580-91-0, Paper SW2F.5**, CLEO, San Jose, California, USA (Contributory Talk) (09 - 14 May 2021).

[12] Anjani Kumar Tiwari, Rajesh Kumar, and S. Anantha Ramakrishna, "Surface plasmon resonance mediated random lasing in thin film metamaterials," **ISSN: 978-1-943580-84-2**, OSA Laser Congress, Washington, D.C. United States (13 - 16 Oct. 2020).

[13] Nitish Kumar Gupta, Anjani Kumar Tiwari, Harshawardhan Wanare, and S. Anantha Ramakrishna, "Unidirectional narrowband perfect absorption in quasi-random structures - interplay of gap states and Tamm plasmon modes," **DOI: 10.1109/IPC47351.2020.9252319**, IEEE Photonics Conference, Vancouver, Canada (Contributory Talk) (28 Sept. - 01 Oct. 2020).

[14] Anjani Kumar Tiwari, Rabisankar Samanta, S. Ajmal, and Sushil Mujumdar, "Random lasing from amplifying electrostatic spray of charged microjets," **DOI: 10.1109/WRAP47485.2019.9013680**, IEEE WRAP 2019, IIT Guwahati (13 - 14 Dec. 2019).

[15] Rajesh Kumar, Anjani Kumar Tiwari, and S. Anantha Ramakrishna, "Lasing based on periodically patterned anisotropic thin film metamaterial," **DOI: 10.1109/WRAP47485.2019.9013730**, IEEE WRAP 2019, IIT Guwahati (13 - 14 Dec. 2019).

[16] Saleem Shaik, Anjani Kumar Tiwari and S. Anantha Ramakrishna, "Enhanced lasing in metal-insulator-metal waveguide slab based on gold coated nanoporous anodic alumina membrane," **DOI: 10.1109/WRAP47485.2019.9013949**, IEEE WRAP 2019, IIT Guwahati (13 - 14 Dec. 2019).

[17] Anjani Kumar Tiwari, Deepak Biswal, and S. Anantha Ramakrishna, "Tunable metamaterial absorber based on liquid crystal elastomer," **Proceedings of Photonics-2018, ISBN: 978-93-88653-41-1**, International Conference on Fiber Optics and Photonics, IIT Delhi (Contributory talk) (12 - 15 Dec. 2018).
Won the Excellence in Oral Presentation award at Photonics 2018.

[18] Saleem Shaik, Anjani Kumar Tiwari, and S. Anantha Ramakrishna, "Nanoporous alumina as an optofluidic alcohol sensor," **Proceedings of Photonics-2018, ISBN: 978-93-88653-41-1**, International Conference on Fiber Optics and Photonics, IIT Delhi (12 - 15 Dec. 2018).

[19] Anjani Kumar Tiwari, Saleem Shaik, and S. Anantha Ramakrishna, "Coherent emission in optically transparent nanoporous anodic alumina films," **DOI: 10.1109/WRAP.2017.8468586**, IEEE WRAP 2017, Mahindra École Centrale, Hyderabad, India (18 - 19 Dec. 2017).

[20] Anjani Kumar Tiwari, Lorenzo Pattelli, Renato Torre, and Diederik Wiersma, "Remote control of liquid crystal elastomer random laser," **DOI: 10.1109/WRAP.2017.8468557**, IEEE WRAP 2017, Mahindra École Centrale, Hyderabad, India (18 - 19 Dec. 2017).

[21] Anjani Kumar Tiwari, "Resolving the otherwise unresolved Fabry-Perot modes via random intensity fluctuations," International Workshop on Complex Photonics, TIFR, Mumbai, India (Invited Talk) (22 - 24 January 2017).

[22] Sushil Mujumdar, Anjani Kumar Tiwari, K. Shadak Alee and Ravitej Uppu, "Amplifying periodic-on-average random systems: Route to Anderson-localization random lasers," **ISBN: 978-1-55752-882-7**, International Conference on Fiber Optics and Photonics, IIT Kharagpur, Paper M3D.2 (13 - 16 Dec. 2014).

[23] Sushil Mujumdar and Anjani Kumar Tiwari, "Collective resonances and lasing induced by photon localization in aperiodically arranged microresonators," **MRS Spring Meeting**, San Francisco, California, USA (21 - 25 April 2014).

[24] Anjani Kumar Tiwari and Sushil Mujumdar, "Photon-localization induced random lasing from an amplifying periodic-on-average random system," **ISBN: 978-1-4799-0594-2**, CLEO/Europe, Munich, Germany (12 - 16 May 2013).

[25] Anjani Kumar Tiwari, Girish Kulkarni and Sushil Mujumdar, "Resonant multilayers for frequency control of photon localization random lasers," **Nanometa-2013**, 4th International Topical meeting on Nanophotonics and Metamaterials.

[26] Anjani Kumar Tiwari, Ravitej Uppu and Sushil Mujumdar, "Lasing from quasi-one-dimensional random lattice of multiple resonators," **International Conference on Fiber Optics and Photonics**, IIT Madras, Paper TPo. 14.
Won the first prize for the Best Student Paper Award by OSA.

[27] Rajesh V. Nair, Anjani Kumar Tiwari, Sushil Mujumdar and B. N. Jagatap, "Signature of Band-Edge-Induced Lasing Observed in Self-assembled Photonic Crystals," **International Conference on Fiber Optics and Photonics**, IIT Madras, Paper W1A.3.

[28] Ravitej Uppu, Anjani Kumar Tiwari and Sushil Mujumdar, "Coherent random lasing in diffusive resonant media," **AIP Conf. Proc., 1398**, 103-105 (2011).

[29] Anjani Kumar Tiwari, Balu Chandra, Ravitej Uppu and Sushil Mujumdar, "Coherent Emission from a Disordered Array of Amplifying Scatterers," **3rd International Conference on Current Developments in Atomic, Molecular, Optical and Nano Physics**, University of Delhi, India (14 - 16 Dec. 2011).

National conference proceedings:

[1] Anjani Kumar Tiwari, "Liquid Crystal Elastomer-Based Smart Microstructures," **International Conference on Photonics and Emerging Materials for Futuristic Technology (PEMFT-2025)** (Invited talk), CCS University Meerut (13 - 15 Nov. 2025).

[2] Nikita Choudhary, Diksha Sharma, Saikat Maity, Deependra Singh Gaur, Nitish Kumar Gupta, and Anjani Kumar Tiwari,"Speckle Correlations in Scattering Birefringent films," XLVII Symposium of OSI: **International Conference on Advances in Optics and Photonics Instrumentation (OPTOIn-2024)**, CSIR-CSIO Chandigarh (23 - 25 October 2024).

[3] Nikita Choudhary, Mukul Jaiswal, and Anjani Kumar Tiwari, "Numerical simulation of refractive index-based tunable metamaterial absorber," XLV Symposium of OSI: **Conference on Optics, Photonics & Quantum Optics (COPaQ)**, IIT Roorkee (10 - 13 Nov. 2022).

[4] Mukul Jaiswal, Nikita Choudhary, and Anjani Kumar Tiwari, "Broadband metamaterial absorber based on TiN hollow cylinders," XLV Symposium of OSI: **Conference on Optics, Photonics & Quantum Optics (COPaQ)**, IIT Roorkee (10 - 13 Nov. 2022).

[5] Nitish Kumar Gupta, Mukesh Kumar, Anjani Kumar Tiwari, Sudipta Sarkar Pal, Harshawardhan Wanare, and S. Anantha Ramakrishna, "Experimental Determination of Topological Order in Photonic Stopbands," XLV Symposium of OSI: **Conference on Optics, Photonics & Quantum Optics (COPaQ)**, IIT Roorkee (10 - 13 Nov. 2022).

[6] Nitish Kumar Gupta, Anjani Kumar Tiwari, Harshawardhan Wanare, and S. Anantha Ramakrishna, "Ultra-narrowband asymmetric perfect absorption in quasi-random planar structures," **Student Conference on Photonic and Quantum Technology (SCPQT)**, NISER Bhubaneswar (24 - 26 Feb. 2021).
Nitish won the Best Poster Presentation Award for this work.

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