

**XLVII OSI OPTOIn-2024  
23-25 October 2024**

<b>Sub-Theme</b>	<b>Paper ID</b>	<b>Manuscript title</b>	<b>Category</b>
Fiber Optics Devices & Instrumentation (FOI)	FOI_03	Mode Filtering by Chemically Etched SNS Fiber Cascade	Oral Presentation
	FOI_04	Gain modeling for amplification of orbital angular momentum modes in L band using C band pump	Oral Presentation
	FOI_08	Annealing-induced sharp resonance selection in fiber-optic plasmonic sensors	Oral Presentation
	FOI_09	A Matrix Method Algorithm for Analysing Arbitrary Index Profile Waveguides and Fibers in Finite	Oral Presentation
	FOI_10	Gold nanoparticles assisted broadband random lasing from hollow polymer optical fiber	Oral Presentation
	FOI_14	Real-time vibration monitoring of Metro-rail viaduct using Fiber Bragg Grating Accelerometers	Oral Presentation
Artificial Intelligence and Machine Learning in Optical Instrumentation (AML)	AML_07	Binary phase apodization neutralizes optical aberration for advancing the digital holographic display	Oral Presentation
	AML_09	Assimilation of light scattering with Machine learning to classify Polystyrene microspheres and Black turmeric particles	Oral Presentation
	AML_10	An application of Hyperspectral imaging in prediction of coal quality parameters	Oral Presentation
Optical Design, Fabrication & Metrology (ODF)	ODF_01	Pushing the Limits of Deflectometry: Achieving Interferometric Accuracy in Large Optics Testing	Oral Presentation
	ODF_03	Performance Evaluation of Astronomical Images Using Noise Characterization	Oral Presentation
	ODF_04	Optical Design of Telecentric Eyepiece for Optically Fused Imagers	Oral Presentation
	ODF_10	Miniaturized Wide Field of View MWIR Optics for Missile Coordinate Determination	Oral Presentation
	ODF_12	Light-based experimental method to estimate the large groove depth of 1D sub-wavelength polymeric phase gratings	Oral Presentation
	ODF_24	Comparative study on the performance of a VNIR lens assembly with spherical and aspherical design	Oral Presentation
Optical Interferometry & Holography (HOL)	HOL_02	Diffraction Common-path Digital Holographic Microscopy with Controllable Beam Parameters	Oral Presentation
	HOL_07	Generalized Non-Paraxial Approximation-based Numerical Reconstruction Algorithm for Digital In-line Holography	Oral Presentation
	HOL_09	Generation of light fields with high-order composite vortices	Oral Presentation
	HOL_12	Parallel Phase-shifting Digital Holography and Image Processing for Voice Security	Oral Presentation
	HOL_16	Synthesizing coherence with GS Algorithm	Oral Presentation
	HOL_19	Optical Image Encryption Using a Devil's Fractional Vortex Fresnel Lens Phase Mask and Linear Canonical Transform	Oral Presentation
Augmented Reality, Virtual Reality and 3-Dimensional Display (ARVR)	ARVR_01	Holographic waveguide-based AR display system for emotion & gaze detection in mental health conditions	Oral Presentation
	ARVR_02	Design and Realization of VR based Head Level Display for increased situational awareness	Oral Presentation

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Sub-Theme	Paper ID	Manuscript title	Category
Optical Sensors (OS)	OS_03	Broadband Laser-Based Photoacoustic and Quartz-Enhanced Photoacoustic Spectroscopy Techniques for Measuring Ammonia and Hydrogen Sulfide	Oral Presentation
	OS_06	Design and Simulation of Resonant Photoacoustic Gas cell for Trace Gas Sensing	Oral Presentation
	OS_07	Development-and-characterization-of-a-methane-gas-sensor-based-on-Quartz-Enhanced-Photoacoustic-Spectroscopy	Oral Presentation
	OS_11	Fiber Optic Self-referenced SPR-based Refractive Index Sensor in Visible Range	Oral Presentation
	OS_15	Theoretical Modeling of Quasi-Bound States in the Continuum (Q-BICs) in the Visible Range in an All-dielectric Metagrating for Temperature Sensing	Oral Presentation
	OS_22	Cavity-Based Ultrasensitive Wearable System for Health Monitoring	Oral Presentation
	OS_28	Optical Attributes and Temperature Sensing Capabilities of Carbon Nano-Particles Extracted from Rice	Oral Presentation
Quantum Optical Technologies (QOT)	QOT_01	Bell-State-Measurement-on-Polarization-Entangled-Photons	Oral Presentation
	QOT_02	Experimental investigation of spatial correlation and entanglement in partially spatially coherent qubits	Oral Presentation
	QOT_05	Continuous variable entanglement using optomechanics	Oral Presentation
	QOT_13	Study of nonlinear effect in presence of quadratic coupling in cavity optomechanics	Oral Presentation
Biophotonics & Medical Optics (BMO)	BMO_02	Development of wide-field, high-speed optical coherence elastography system for biomechanical feature detection	Oral Presentation
	BMO_05	Liquid Silicone Encapsulated Fiber Bragg Grating Arrays for Dental Strain Profiling	Oral Presentation
	BMO_06	Optogenetic Control of Human Heart with Light-gated Potassium Channel rhodopsin	Oral Presentation

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Sub-Theme	Paper ID	Manuscript title	Category
Nanophotonics, Plasmonics & Metamaterial (NPM)	NPM_07	Characterizing Topological Bound States in Continuum	Oral Presentation
	NPM_08	Characterizing SPAD arrays for spectrally resolved photon correlation measurements	Oral Presentation
	NPM_11	Effect of Solvents in the Structural and Optical Properties of Ag and Au nanoparticles synthesized using Pulsed Laser Ablation	Oral Presentation
	NPM_12	Enhanced efficiency of thin-film silicon solar cells with star-shaped Nano-rod	Oral Presentation
	NPM_15	High-Extinction Ratio Nanophotonic Resistive Switch with Double-Slot Design	Oral Presentation
	NPM_18	Modifying the spontaneous emission of NV centres coupled with randomly distributed silicon pyramids	Oral Presentation
	NPM_19	Multifractal Pattern based on-chip spectrometer	Oral Presentation
	NPM_28	Mie Scattering controlled Dielectric Nano Antenna for Enhanced Single Photon Emission	Oral Presentation
	NPM_36	Tunable Photonic Spin Hall effect in PT-symmetric 1D structure with Liquid Crystal as a Defect Layer	Oral Presentation
	NPM_39	Compact u-bent optical fiber sensing platform using gold triangular nanoprism	Oral Presentation
	NPM_41	3D METAMATERIAL LENS	Oral Presentation
	NPM_42	Near-Field Microscopy of High-Index Topological Insulator and Chalcogenide Meta-Atoms	Oral Presentation
Lasers and Nonlinear Optics (LNO)	LNO_03	Collision dynamics in two soliton interactions from the effects of Raman scattering in highly nonlinear fibers	Oral Presentation
	LNO_04	Design of wavelength-tunable NPR-based Ultra-fast Thulium-Doped all-fiber MOPA	Oral Presentation
	LNO_05	Dual stage amplification of Tunable, NAbLM based PM Double-Clad Yb-doped Ultrafast Fiber laser	Oral Presentation
	LNO_07	Electrically Controlled Tunable Frequency Generation in Silicon Nitride Waveguides	Oral Presentation
	LNO_19	Solid-State Polymer-based One and Two-Dimensional Tunable Random Lasers in Visible Spectrum	Oral Presentation
	LNO_20	Synthetic electric and magnetic fields led spatial beam structuring in third-order nonlinear optics	Oral Presentation
	LNO_23	Wideband Cherenkov radiation in Graded-index multimode fiber by femtosecond super-Gaussian pulses	Oral Presentation
	LNO_29	A comparative study of inverted pin and Laguerre Gauss optical vortex beams through atmospheric turbulence	Oral Presentation
	LNO_30	Carbon-Quantum-Dots: Tailoring-Synthesis-for Superior-Nonlinear-Optical-Response	Oral Presentation
	LNO_32	Focused optical vortices with a large depth-of-focus	Oral Presentation
	LNO_36	Two Photon Absorption Induced Optical Filtering Ability of Zr <sup>4+</sup> doped YPO <sub>4</sub> :La Nanostructures	Oral Presentation
LNO_40	Thermally and Electronic -Kerr induced cubic nonlinearities in novel Schiff base system for photonic applications	Oral Presentation	

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<b>Sub-Theme</b>	<b>Paper ID</b>	<b>Manuscript title</b>	<b>Category</b>
Microscopy and Imaging Technologies (MIT)	MIT_06	Effect of Partially Polarized Beam on Optical Cryptography	Oral Presentation
	MIT_08	High-Resolution Optical Sectioning of Multi-layered Sample Using Visible Light Optical Coherence Tomography	Oral Presentation
	MIT_13	Towards neurodegenerative disease detection with surface plasmon microscopy	Oral Presentation
	MIT_16	Assessment of Birefringence Characteristics of GallusGallus Domesticus Skin and Tendon in Near Infra-Red Wavelength Range	Oral Presentation
	MIT_17	Implementation and Performance Evaluation of an Auto Focusing System For Thermal Imaging Camera on Zynq Platform	Oral Presentation
Diffractive, Freeform Adaptive, Integrated Optics and Silicon Photonics (DFA)	DFA_04	Generation of Fractional Coherence Vortices	Oral Presentation
	DFA_05	Laser fabrication of diffractive optical elements for Bessel beam array generation	Oral Presentation
	DFA_06	Multiplex-wavefront Sensing using Grating Array based Wavefront Sensor	Oral Presentation
	DFA_09	Cavity coupled high-Q resonance Topological Ring Resonator in Microwave regime	Oral Presentation
Photonics for 6G & THz Technologies (P6G)	P6G_04	Terahertz Birefringence and Optical Properties of Sodium Mesitylene Sulphonate Crystal	Oral Presentation
	P6G_05	Terahertz dynamics in the high TC multiferroic CuO	Oral Presentation
	P6G_08	Magnetically controlled Multi-resonances in Near-field Coupled Metasurfaces	Oral Presentation
Optoelectronics and Micro opto-mechanical Devices (OMD)	OMD_03	Optoelectronic and Micro-opto-mechanical Devices_MgO-rGO Hybrid Nanocomposites for Display application	Oral Presentation
Optical Coating Technologies (OCT)	OCT_01	Design and development of index independent high efficiency dual wavelength anti-reflection coating for 1064nm Nd: YAG and 1571nm Eye -safe laser	Oral Presentation
	OCT_02	Laser-Driven Multiple Phosphor-Converted Sunlike Full Spectrum White Light Source for Solid-State Lighting	Oral Presentation
	OCT_03	Tailoring band-selective emission with epsilon-near-zero media	Oral Presentation
Optics for Space, Defence, and Aerospace Applications (SDA)	SDA_01	Studies on the Effect of Nanosecond Pulse Laser Irradiation on the Optical Sensor	Oral Presentation
	SDA_02	Propagation Dynamics of Stable Structured Optical Beams	Oral Presentation
	SDA_03	Optical Phase Image Encryption Using 2d Non-Separable Linear Canonical Transform and Laguerre Gaussian Beam Speckles	Oral Presentation
	SDA_04	Design and Development of Shack-Hartmann Wavefront Sensor for Metrology of Muzzle Reference Mirror of Tank	Oral Presentation
	SDA_05	Spectral characterization of a convex multi-blazed grating operating in Short Wave Infra-Red (SWIR) region using Offner configuration	Oral Presentation

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<b>Fiber Optics Devices &amp; Instrumentation (FOI)</b>	FOI_01	Selective Detection of Food-adulterant Using Photonic Crystal Fiber based Interferometer	Poster Presentation
	FOI_02	OAM Mode Focusing with Ring Core Fiber and Graded Index Multimode Fiber for Optical Tweezers	Poster Presentation
	FOI_06	Coupling Dynamics in PT-Symmetric Fiber Grating	Poster Presentation
	FOI_11	Effect of Core Material on the Coupling Efficiency between Core and Plasmonic Modes	Poster Presentation
	FOI_12	Frequency Modulated Continuous Wave LiDAR for Ranging and Velocimetry Applications for Future ISRO Missions	Poster Presentation
	FOI_13	STUDY OF OPTICAL FIBER COMMUNICATION FOR IMPROVED PERFORMANCE: SOLITON PROPAGATION IN OPTICAL FIBER COMMUNICATION	Poster Presentation
<b>Artificial Intelligence and Machine Learning in Optical Instrumentation (AML)</b>	AML_01	Speckle-based Orbital Angular Momentum Beams Recognition in Temporal Domain	Poster Presentation
	AML_02	Laser based solid state lighting by Intensity Optimization of Multi Color Lasers to Generate Perfect White Light	Poster Presentation
	AML_03	Water Quality Analysis using MWIR Hyperspectral Images	Poster Presentation
	AML_04	Effect of the Atmospheric Turbulence in the Propagation of the Coherent Combined Beam and Phase Synchronization using Deep-Learning Optimizers	Poster Presentation
	AML_05	Deep learning assisted removal of double images in single mirror schlieren imaging system	Poster Presentation
	AML_06	Transfer Learning in Hybrid Classical-Quantum Variational Classifier to Predict Covid-19 Using Chest CT Scan Images	Poster Presentation
	AML_08	AI-Enhanced Recognition of OAM Speckle from Near field to Far field in Micro to Nano Regimes	Poster Presentation
	AML_11	STUDY OF THE ROGUE WAVE GENERATION IN NONLINEAR OPTICAL MEDIA USING PHYSICS INFORMED NEURAL NETWORKS	Poster Presentation

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<b>Optical Design, Fabrication &amp; Metrology (ODF)</b>	ODF_02	Photoluminescence study of combustion synthesized ZrO <sub>2</sub> doped Sm <sup>3+</sup> for LED applications	Poster Presentation
	ODF_05	Optical Design Feasibility Study for 6.2m Multi-Observational Class Large Segmented Telescope	Poster Presentation
	ODF_06	Optical Design of a Fast Transmission Sphere for Large Diameter Convex Surface Measurements in Fizeau Interferometry	Poster Presentation
	ODF_07	Objective evaluation of wavefront aberrations in pseudophakia with bifocal refractive multifocal intraocular lenses	Poster Presentation
	ODF_08	Numerical modeling of Highly Sensitive Surface Plasmon Sensor using Silicon and Platinum Diselenide Stacks	Poster Presentation
	ODF_09	Modelling and Simulation of Spectroscopic Reflectance-based Multilayer Thickness Measurement System	Poster Presentation
	ODF_11	Low-loss and Large Bandwidth Hollow Core Fibers for Transmission in the Telecom Wavelength Window	Poster Presentation
	ODF_13	Fast evaluation of multi-layer Shack-Hartmann wavefront sensors with low Fresnel number lenslets	Poster Presentation
	ODF_14	Effect of Segmentation in Window on Optical Performance	Poster Presentation
	ODF_15	Diamond-Turning-Of-Additively-Manufactured-AISI10Mg	Poster Presentation
	ODF_16	Optical Design of a Continuous 20X Zoom Thermal Drone Camera System under Paraxial Approximation	Poster Presentation
	ODF_17	A Continuous 20X Optical Zoom Lens Design under Paraxial Approximation for UAV Camera	Poster Presentation
	ODF_18	Manufacturing of Advanced Optical Elements for Strategic Applications	Poster Presentation
	ODF_19	2D Photonic Crystal Optical Waveguide Using Lithium Niobate for Elastic Optical Network	Poster Presentation
	ODF_20	Reduction of ghost image using wedge angle optimization in display system	Poster Presentation
	ODF_22	Optical Design of Long-Wave Infrared (LWIR) Scan System using Risley Prism	Poster Presentation
	ODF_23	Characterization of different optical domes for electro-optics surveillance	Poster Presentation
	ODF_25	Design of a broadband Polarization Beam Splitter based on thin film optical interference	Poster Presentation
	ODF_27	Structural, Optical and Dielectric Properties of Chromium Oxide nanoparticle prepared via sol-gel method	Poster Presentation
ODF_28	Optical Design of 10X Continuous Zoom Lens in Long Wavelength Infrared Band for Cooled Detector	Poster Presentation	
ODF_29	Innovative Optical Design of a 12D Aspheric Lens for Enhanced Vision in Individuals with Low Vision	Poster Presentation	

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<b>Optical Interferometry &amp; Holography (HOL)</b>	HOL_01	Role of Quantitative Phase Imaging in Enhancing Ambient Pollen Detection and Analysis	Poster Presentation
	HOL_03	Deep Learning based phase extraction in digital holographic interferometry	Poster Presentation
	HOL_04	Design and Development of Holographic Display Screens Using Holographic Printing Technique	Poster Presentation
	HOL_05	Digital Holography through Turbid Medium Using Edge Point Referencing	Poster Presentation
	HOL_06	Finding the complete Stokes Parameters using a linear polarisation camera	Poster Presentation
	HOL_08	Generation of a vectorial structured light beam by multiplexing polarization hologram using azo-carbazole polymer film	Poster Presentation
	HOL_10	Generation of Coherence Vortices by Intensity Modulation of a Spatially Incoherent Source	Poster Presentation
	HOL_11	Numerical Reconstruction Algorithm based on Fractional Fourier Transform and Particle Swarm Optimization in Non-Telecentric Digital Holographic Microscopy	Poster Presentation
	HOL_13	Partially spatially coherent light-based quantitative differential interference contrast microscope	Poster Presentation
	HOL_14	Reference Height Calibration in Fourier Transform Speckle Profilometry Using Tilted Interference	Poster Presentation
	HOL_15	Study of photopolymer film using high-speed digital holography	Poster Presentation
	HOL_17	Understanding orthogonal projection via null interference	Poster Presentation
	HOL_18	Vectorial Holography with Randomness	Poster Presentation
	HOL_20	Fractional topological charge measurement of optical vortex beam using hybrid joint transform correlator	Poster Presentation
	HOL_21	Color image encryption using modified Gerchberg-Saxton algorithm and three-step phase-shifting digital holography	Poster Presentation
	HOL_23	Dynamic sample phase imaging using transport of intensity equation with a single-shot geometry	Poster Presentation
	HOL_24	Nanomechanical capillary wave based optofluidic viscometry	Poster Presentation
HOL_25	Chromaticity-Integrated Principal Component Analysis for film thickness measurement using Spectrally Resolved White Light Interferometry	Poster Presentation	
<b>Augmented Reality, Virtual Reality and 3-Dimensional Display (ARVR)</b>	ARVR_03	Design and simulation of enlarged Field of View Single Curved Combiner based Head Up Display for armed aircraft	Poster Presentation
	ARVR_04	Design of a freeform light guide for near-eye Augmented reality display	Poster Presentation
	ARVR_05	Holographic waveguide for compact automotive head-up display	Poster Presentation

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<b>Optical Sensors (OS)</b>	OS_01	Ultrastable laser interferometry and optical fibers for the detection of seismic activities in the Indian sub-continent and the Andaman subduction zone	Poster Presentation
	OS_02	Aero-engine Thrust Measurement with Custom Dual FBG Strain Sensor Design	Poster Presentation
	OS_04	Broadband Quartz Enhanced Photoacoustic Spectroscopy based on Fabry-Perot Laser for Hydrogen Sulphide Gas Monitoring	Poster Presentation
	OS_05	Cellulose-acetate-based-photopolymer-film-for-the-detection-of-acetone-vapors	Poster Presentation
	OS_09	Optical fiber-based fluoride detection in drinking water	Poster Presentation
	OS_10	Nitric-oxide-and-methane-measurements-in-vehicle-exhaust-using-mid-infrared-quantum-cascade-laser-based-1f WMS	Poster Presentation
	OS_12	Optimizing Formalin Detection with Square-Core Photonic Crystal Fiber A COMSOL Multiphysics Approach	Poster Presentation
	OS_13	Photonic-crystal-fiber-for-detecting-calcium-carbonate-in-different-concentrations	Poster Presentation
	OS_14	Sculpting Spatially Uniform and Bendable Silver Nanostructures for Urea Detection via SERS	Poster Presentation
	OS_16	Spectroscopic-detection-of-Nitrogen-in-soil-samples	Poster Presentation
	OS_17	Thickness-measurement-using-digital-speckle-correlation-technique	Poster Presentation
	OS_18	Thickness-measurement-using-digital-speckle-Shearography-technique	Poster Presentation
	OS_19	Synthesis of Cu-Ag Nanoparticles and its application as Plasmonic sensor	Poster Presentation
	OS_20	Design and study of a photonic crystal fiber biosensor with a circular lattice for the detection of bacteria in newborns	Poster Presentation
	OS_21	Highly Sensitive Two-Dimensional Photonic Crystal based emperature Sensor	Poster Presentation
	OS_23	Characterization of spectral dependence of radiometers and correction for calibration and measurement of other test sources	Poster Presentation
	OS_24	Laser speckle-based sensor for sub-micrometer deformation measurements	Poster Presentation
	OS_25	A Surface Plasmon Resonance Biosensor Utilizing an Ag-Ni Bimetallic Layer for SARS-CoV-2 Detection	Poster Presentation
	OS_27	Engineering shape-anisotropy in silver nanoparticles for surface enhanced Raman Spectroscopy	Poster Presentation
	OS_29	1-D templated nanosculptured flexible SERS substrates with ultra-high enhancement factor	Poster Presentation
OS_30	Synthesis and characterization of Ruthenium-Silica complex by hydrothermal method: a promising materia	Poster Presentation	



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<b>Quantum Optical Technologies (QOT)</b>	QOT_03	A-versatile-8-Channel-Coincidence-Counting-System-for-Quantum-Optics-Experiments	Poster Presentation
	QOT_04	Complete automation of Entangled Photon Source based experiments	Poster Presentation
	QOT_06	High-Bandwidth-Balanced-Homodyne-Detector-development-with-complete-quantum-state-reconstruction-algorithm	Poster Presentation
	QOT_07	Numerical-simulations-of-segmented-blade-ion-trap-architecture	Poster Presentation
	QOT_08	Optical-atomic-clock-beyond-standard-quantum-limit-at-room temperature	Poster Presentation
	QOT_09	Quantum-Information-Processing-with-Photons-Circuit-Model	Poster Presentation
	QOT_10	Room-temperature-single-photon-emitters-in-hexagonal-boron-nitride	Poster Presentation
	QOT_11	Transfer of composite vortex beam to down-converted photons via four-wave mixing in an atomic vapor	Poster Presentation
	QOT_12	Polarization Properties of Nitrogen-Vacancy Centers in Diamonds	Poster Presentation
	QOT_14	Nitrogen-vacancy center in diamond for magnetic field sensing	Poster Presentation
<b>Biophotonics &amp; Medical Optics (BMO)</b>	BMO_01	Construction-of-Light-Sheet-Fluorescence-Microscope (LSFM) for-Biophotonic-Imaging-Applications	Poster Presentation
	BMO_03	Highly Sensitive Four Layer Mach-Zehnder Interferometer Biosensor for Sensing Blood Glucose	Poster Presentation
	BMO_04	Identification of Metastatic Fluorescent Node during Axillary Dissection	Poster Presentation
	BMO_07	Hyperspectral quantitative phase microscopy of biological cells: decoupling of refractive index and thickness	Poster Presentation

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<b>Nanophotonics, Plasmonics &amp; Metamaterial (NPM)</b>	NPM_01	Trace-level Detection of Microplastics in Water Using Surface Enhanced Raman Spectroscopy	Poster Presentation
	NPM_02	A Dual Mode Cost-Effective Flexible 1D-Metasurface Absorber in the Infrared Region	Poster Presentation
	NPM_03	Advanced Wavefront Engineering Via Polarization-Sensitive All-Dielectric Chiral Metasurface	Poster Presentation
	NPM_04	An ultra-high figure of merit in plasmonic sensor using Dielectric-Metal-Dielectric configuration: A numerical approach	Poster Presentation
	NPM_05	Bi-Periodic Photonic Crystal Design for Efficient TM Pass Polarization in Visible Region	Poster Presentation
	NPM_06	Bound States in Continuum in Pyramidal Periodic Waveguide Grating	Poster Presentation
	NPM_09	Concentration Dependent Thermal Diffusivity of Ethylene Glycol based TiN Nanofluid using the Dual beam Thermal Lens Technique	Poster Presentation
	NPM_10	Diamond lattice photonic crystal-based pressure sensor	Poster Presentation
	NPM_13	Exploring the dependence of thermo-optical properties of cobalt ferrite nanoparticles on different PVA-water solvent concentrations	Poster Presentation
	NPM_14	Extraordinary Optical Transmission through subwavelength holes in Hyperbolic Metamaterials	Poster Presentation
	NPM_16	Highly Sensitive SPR Refractive Index Sensor with MO/MoS <sub>2</sub> /Graphene based Ag/Au grating on D-shaped Optical Fiber	Poster Presentation
	NPM_17	Investigating photoluminescence and decay kinetics of Rhodamine 6G in the vicinity of Ag nanocomposites	Poster Presentation
	NPM_20	Occurrence of Topological Edge States in One Dimensional Photonic Crystal Hetero-structure	Poster Presentation
	NPM_22	Optics of finite self-assembled disordered sphere arrays	Poster Presentation
	NPM_23	Optimized 1D and 2D Plasmonic Metagratings to Detect Micromolar Levels of Viral Load in Solutions	Poster Presentation
	NPM_24	PMMA Flexible Fibers with Femtosecond Laser Ablated Nanoparticles as SERS Substrate for Sensing Dye Molecules	Poster Presentation
	NPM_25	Pumping Spaser with Chirp Gaussian Pulse	Poster Presentation
	NPM_26	Scattering through core-shell nanoparticle under spherical aberration	Poster Presentation
	NPM_27	SERS as a Direct Tool for Plasmon Driven Reactions: Impact of UV Irradiation on p-MA Dimerization in a Nanoplasmonic Cavity	Poster Presentation
	NPM_29	Simulating multichannel photon correlation measurements	Poster Presentation
	NPM_30	Simulation study on the Impact of Purcell Factor for short pulse generation in Nano lasers	Poster Presentation
	NPM_31	Speckle Correlations in Scattering Birefringent films	Poster Presentation
	NPM_32	Study on Dispersion Engineered Silicon Nanowire for Supercontinuum Generation	Poster Presentation
NPM_33	Symmetry-protected Bound States in Continuum in Terahertz Metasurfaces	Poster Presentation	
NPM_35	Tunable Guided Mode Resonance in Dielectric Metasurface Loaded with Liquid Crystal	Poster Presentation	
NPM_37	Unidirectional Reflectionlessness in Non-Hermitian Metasurfaces	Poster Presentation	
NPM_38	Waveguide enhanced fluorescence spectroscopy for detection of bacteria	Poster Presentation	
NPM_40	Design and Analysis of Tapered Multilayer Metamaterial Absorber	Poster Presentation	
NPM_43	AI-Egen-ACQphore FRET pair for enhanced fluorescence applications	Poster Presentation	

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Sub-Theme	Paper ID	Manuscript title	Category
<b>Lasers and Nonlinear Optics (LNO)</b>	LNO_01	Thermo-optical properties of magnetic functionalized reduced graphene oxide nanoscrolls	Poster Presentation
	LNO_02	Aggregation Induced Emission Property of Tetraphenylethene for Optical limiting application	Poster Presentation
	LNO_06	Dynamics of bright and dark similaritons in non-Kerr media: Applications to Nonlinear Optical amplifiers	Poster Presentation
	LNO_08	Frequency double diode laser system at 493nm for Barium ion spectroscopy	Poster Presentation
	LNO_09	Generation of High-Power Multiple Discrete Vortices	Poster Presentation
	LNO_10	Hybrid Pumping in Ytterbium-Doped Monolithic High Power FiberLaser Using Non-Wavelength-Stabilized Pump Diodes	Poster Presentation
	LNO_11	Impact of Inhomogenous Diffraction effects on Beam Dynamics in Strongly Nonlocal Nonlinear Optical Media	Poster Presentation
	LNO_12	Noise Measurement in Second Harmonic Generation with Quasi-Phase-Matching Device for Electric Poling Quality Evaluation	Poster Presentation
	LNO_13	Nonlinear optical properties of KNiF3 Perovskite for Optical limiting Application	Poster Presentation
	LNO_14	Optical Limiting Properties of Scandium Doped Zinc Oxide Thin Films	Poster Presentation
	LNO_15	Perfect Vortex Beam for Optical Communication	Poster Presentation
	LNO_16	Photonic Assisted Frequency Doubling and Tripling Waveform Generation by Four Wave Mixing in Electro Absorption Modulator	Poster Presentation
	LNO_17	Propagation and Interaction of Airy-Gaussian Beams in Nonlinear Media	Poster Presentation
	LNO_18	Self-steepening nature and nonlinearity management of optical solitons with the influence of generalized external potentials	Poster Presentation
	LNO_21	Thermal Effect of a Passive Filter in a Two-stage Tm-doped Fiber Amplifier	Poster Presentation
	LNO_22	Thermo-Optic analysis and determination of nonlinear refractive index of Rh590	Poster Presentation
	LNO_24	20 nm Tunable, All-fiber, polarization-maintained, Mode-locked Yb-doped fiber Laser	Poster Presentation
	LNO_25	Second Harmonic Generation in a topologically nontrivial chiral single crystal PtAl	Poster Presentation
	LNO_26	Defect induced phase transition and Optical limiting properties of Ce <sup>3+</sup> doped NaYF <sub>4</sub> nanoparticles by simple coprecipitation route	Poster Presentation
	LNO_27	Multi-twist Möbius Strip and Twisted Ribbons in Two-beam Superposition	Poster Presentation
	LNO_28	Spectral Vector Beams – Generation and Characteristics	Poster Presentation
	LNO_31	Dynamical evolution of space-time non-separable ultrashort vortex with power exponential spectrum in dispersive and nonlinear media	Poster Presentation
	LNO_33	nonlinear-optical-properties-of D- $\pi$ -A conjugates: tuning-through-alkyl-chain-variation	Poster Presentation
LNO_34	Robustness of Synchronization in All Regimes of Incoherent Optical Feedback of a Semiconductor Diode Laser	Poster Presentation	
LNO_35	Theoretical Study of Thermal effects on the Performance of Current-Injected Micro disk Lasers	Poster Presentation	
LNO_37	Synthesis, spectroscopic, and third-order nonlinear optical studies of Schiff-base molecule for NLO applications	Poster Presentation	
LNO_38	Experimental Study of Passive Q-switched Diode Pumped Er:glass Laser Transmitter	Poster Presentation	
LNO_39	Magnonic Bistability and Exceptional Point Dynamics in Kerr Ring Resonator Systems	Poster Presentation	
LNO_41	Trapping Force Reversal in Hollow-core Particles Under Femtosecond Pulsed Excitation	Poster Presentation	

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Sub-Theme	Paper ID	Manuscript title	Category
<b>Microscopy and Imaging Technologies (MIT)</b>	MIT_01	Fourier Ptychography Microscopy Using SLM-Based Programmable Beam Illumination	Poster Presentation
	MIT_02	A portable smartphone-based background-oriented schlieren imaging platform for density fields visualization	Poster Presentation
	MIT_03	Application of Digital Laser Speckle Image Correlation (DiLSIC) for Studying Thermal Behaviour in a Wire	Poster Presentation
	MIT_04	Comparative Analysis of Deconvolution Algorithms for Various Roughness Levels in Imaging through Random Media	Poster Presentation
	MIT_05	Contouring of a metallic surface using digital holographic microscope	Poster Presentation
	MIT_07	Fourier telescope approach with spatial averaging	Poster Presentation
	MIT_09	Holographic Tomography using Single Phase Structured Illumination	Poster Presentation
	MIT_10	Information Capacity of Computational Imaging System	Poster Presentation
	MIT_11	Optical aberrations in remote focusing microscopy system	Poster Presentation
	MIT_12	Shadow Artifacts in Light-Sheet Imaging	Poster Presentation
	MIT_14	Twin-stagnation-free Single-shot Fourier Phase Retrieval using Vortex Phase Illumination	Poster Presentation
<b>Diffraction, Freeform Adaptive, Integrated Optics and Silicon Photonics (DFA)</b>	MIT_15	Construction of Optical Tweezers, Modelling and Measurement of optical force	Poster Presentation
	MIT_18	Optically Stimulated Luminescence Data Analysis of Alluvial Sediments in Gorakhpur, Uttar Pradesh	Poster Presentation
	DFA_01	Design of Silicon Photonic based Add-Drop Filter using Micro-Ring Resonator	Poster Presentation
	DFA_02	Development of an Experimental Arrangement to Study the Impact of Atmospheric Turbulence on User-Defined Beams	Poster Presentation
	DFA_03	Double focus property of tightly focused cylindrical vector beams	Poster Presentation
	DFA_07	SU(2) gadget for polarization transformation on higher-order Poincare sphere	Poster Presentation
<b>Photonics for 6G &amp; THz Technologies (P6G)</b>	DFA_08	Tunable Orbital Angular Momentum Generation from Gaussian Beam	Poster Presentation
	DFA_10	Evanescence Field Based Sensor Design Using SOI Slot Waveguide for Brain Cancer Detection	Poster Presentation
	P6G_01	Deciphering Molecular Profiles of Amlodipine and Telmisartan Bilayer Tablet Using Terahertz Time Domain Spectroscopy	Poster Presentation
	P6G_02	Design of Metasurface THz Absorber for Refractive Index Sensing	Poster Presentation
<b>Optoelectronics and Micro opto-mechanical Devices (OMD)</b>	P6G_03	Electro-thermal performance analysis of a waveguide integrated phase change material based THz photonic switch	Poster Presentation
	P6G_06	Ultrafast Carrier Relaxation in a Higher-Fold Weyl Fermionic System PtAl	Poster Presentation
<b>Optoelectronics and Micro opto-mechanical Devices (OMD)</b>	OMD_01	Impact of ambience on the structural and optical properties of titanium doped indium tin oxide thin film deposited using pulsed laser deposition	Poster Presentation
	OMD_02	Optical thermometry and Color tunability applications of Dy <sup>3+</sup> , Er <sup>3+</sup> co-doped SrMoO <sub>4</sub> phosphors	Poster Presentation

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<b>Sub-Theme</b>	<b>Paper ID</b>	<b>Manuscript title</b>	<b>Category</b>
<b>Optical Coating Technologies (OCT)</b>	OCT_04	Directional Emission Control Using Polar Dielectrics as Epsilon-near-zero Material	Poster Presentation
	OCT_05	Optical Properties of Synthesized Polypyrrole /MWCNT Nanocomposites and Application in Acetone Gas Sensing	Poster Presentation
	OCT_06	Prospects and Analysis of Optically Transparent Antenna for S Band Application	Poster Presentation
	OCT_07	Reflectivity Study on Thin Nanoporous Gold Films	Poster Presentation
	OCT_08	Characterization of Ta2O5 thin films fabricated by electron beam deposition	Poster Presentation
	OCT_09	Optical Properties and Corrosion Behavior of Electron Beam Evaporated High-Performance HfO2 Thin Films	Poster Presentation
<b>Optics for Space, Defence, and Aerospace Applications (SDA)</b>	SDA_06	Holographic waveguide based head mounted display with color coded alerts	Poster Presentation
	SDA_07	An Asymmetric Optical Cryptosystem Using C-Point Polarization Singularity Speckles and Equal Modulus Decomposition	Poster Presentation
	SDA_08	Optical design of a CUBESAT based fine-guidance sensor for attitude determination with sub-arcsecond precision	Poster Presentation
	SDA_09	Quantum lidar	Poster Presentation
	SDA_10	Experimental realization of underwater communication using vortex beam	Poster Presentation
	SDA_11	Study on Laser Beam Wander for FSO Communication	Poster Presentation
	SDA_12	Target tracking through a modified hybrid digital-optical correlator	Poster Presentation
	SDA_13	Transceiver-Electronic-Circuit-design-for-Optical-Wireless Communication-(OWC)-system-for-Tactical-Defence-Applications	Poster Presentation
	SDA_14	Turbulence Impacted Beam Cleanup with Two Wave Mixing in Photorefractive Crystal	Poster Presentation
	SDA_15	Enhanced backscattering effect of Gaussian and Bessel-Gaussian beams passing through a dynamic Kolmogorov kind of turbulence	Poster Presentation
	SDA_16	Characterization of Convex Single Blazed grating for a compact Visible and Near Infra-Red Hyperspectral Imaging System	Poster Presentation
	SDA_17	Environmental testing in terms of Square Wave Response and Band-to-Band Registration of a multispectral payload dedicated for oceanographic applications	Poster Presentation
	SDA_18	Distortion-invariant Object Recognition in Complex Background using Edge-extracted Fringe-adjusted Hybrid Correlator	Poster Presentation
	SDA_19	Novel Method for Temperature estimation of Fixed Wing Fighter Aircraft measured at Thermal Imaging Sensor through an Optical Chain over varying ranges.	Poster Presentation
SDA_20	Reliability Analysis of Opto-Mechanical Aircraft Crash Detection Device	Poster Presentation	