

S. No.	Faculty Name	Title of Paper	DOI	Citation	Paper Published in Journal or Conference Publication
1	Dr. M.S. Mehata	Bright red emission from doubly doped YAG:Pr/Sm nanophosphor and color modulation	10.1016/j.optmat.2020.110106	1	journal
2	Dr. M.S. Mehata	Flavones Fluorescence-Based Dual Response Chemosensor for Metal Ions in Aqueous Media and Fluorescence Recovery	10.1016/j.optmat.2020.110107	13	journal
3	Dr. M.S. Mehata	Modulation of Fluorescence properties of 5-Aminoquinoline by Ag ⁺ in aqueous media via charge transfer	10.1016/j.optmat.2020.110108	10	journal
4	Dr. M.S. Mehata	Colloidal MoS ₂ quantum dots based optical sensor for detection of 2,4,6-TNP explosive in an aqueous medium	10.1016/j.optmat.2020.110109	20	journal
5	Dr. M.S. Mehata	Phase-dependent optical and photocatalytic performance of synthesized titanium dioxide (TiO ₂) nanoparticles	10.1016/j.optmat.2020.110110	53	journal
6	Dr. M.S. Mehata	Steady state and time-resolved fluorescence study of 7,8-benzoquinoline: Reinvestigation of excited state protonation	10.1016/j.optmat.2020.110111	7	journal
7	Dr. M.S. Mehata	Wavefunction Engineering of Type-I/Type-II Excitons of	10.1016/j.optmat.2020.110112	62	journal

		CdSe/CdS Core-Shell Quantum Dots			
8	Dr. M.S. Mehata	Luminescence properties and exciton dynamics of core–multi-shell semiconductor quantum dots leading to QLEDs	10.1016/j.optmat.2020.110113	27	journal
9	Dr. Amrish K. Panwar	Microstructural and optical properties investigation of variable thickness of Tin Telluride thin films	10.1016/j.tsf.2019.137708	8	Journal
10	Dr. Amrish K. Panwar	Synergetic effect of rare-earths doping on the microstructural and electrical properties of Sr and Ca co-doped BaTiO ₃ nanoparticles	10.1016/j.ceramint.2020.01.020	31	Journal
11	Dr. Amrish K. Panwar	Storage technologies for electric vehicles	10.1016/j.jtte.2020.04.004	79	Journal
12	Dr. Amrish K. Panwar	Investigation of Electrochemical, Thermal and Electrical Performance of 3D Lithium-Ion Battery Module in a High - Temperature Environment	10.14710/ijred.9.2.151-157	2	Journal
13	Dr. Amrish K. Panwar	Comparison of Structural, Electrical and Thermoelectric Properties of Vacuum Evaporated SnTe Films of Varied Thickness	10.1166/jnn.2020.17518	2	Journal
14	Dr. Kamal Kishor	Design and Simulation of Broadband Beam Splitter on a Silicon Nitride Platform for Optical Coherence Tomography	https://doi.org/10.1080/01468030.2019.1639001	9	journal
15	Dr. Kamal Kishor	Petal shaped nanoantenna for solar energy harvesting	https://doi.org/10.1088/2040-8986/ab6ae5	4	journal

16	Dr. Mukhtiyar Singh	Enhanced thermoelectric properties of Ta-doped Half-Heusler ZrNiSn	10.1016/j.matpr.2020.01.367	1	Conference
17	Dr. Mukhtiyar Singh	Graphene as charge transport layers in lead free perovskite solar cell	10.1088/2053-1591/ab4b02	9	journal
18	Dr. Mukhtiyar Singh	Investigating the impact of layer properties on the performance of p-graphene/CH ₃ NH ₃ PbI ₃ /n-cSi solar cell using numerical modelling	10.1016/j.spmi.2020.106468	11	journal
19	Dr. Mukhtiyar Singh	Phase dependent selectivity shifting behavior of Cd ₂ SnO ₄ nanoparticles based gas sensor towards volatile organic compounds (VOC) at low operating temperature	10.1016/j.jallcom.2019.153117	9	journal
20	Dr. Bharti Singh	Synthesis, characterization and gas sensing properties of the rhombohedral ilmenite CdSnO ₃ nanoparticles	http://dx.doi.org/10.1016/j.physb.2019.411848	2	Journal
21	Dr. Bharti Singh	Phase dependent selectivity shifting behavior of Cd ₂ SnO ₄ nanoparticles based gas sensor towards volatile organic compounds (VOC) at low operating temperature	http://dx.doi.org/10.1016/j.jallcom.2019.153117	9	Journal
22	Dr. Bharti Singh	Mixed-Phase TiO ₂ Nanotube–Nanorod Hybrid Arrays for Memory-Based Resistive Switching Devices	http://dx.doi.org/10.1021/acsanm.0c01648	6	Journal
23	Dr. Bharti Singh	Fabrication of PVDF-transition metal dichalcogenides based flexible piezoelectric Nanogenerator for energy harvesting applications	http://dx.doi.org/10.1016/j.matpr.2020.02.073	2	Conference

24	Prof. Vinod Singh	Enhanced photoelectrochemical performance of TiO ₂ photoanode decorated with Pd-carbon core shell nanoparticles	https://doi.org/10.1016/j.renene.2018.09.061	13	Journal
25	Prof. Rishu Chaujar	Toward the design of monolithic 23.1% efficient hysteresis and moisture free perovskite/c-Si HJ tandem solar cell: a numerical simulation study	10.1088/1361-6439/ab1512	33	Journal
26	Prof. Rishu Chaujar	Numerical simulations: Toward the design of 18.6% efficient and stable perovskite solar cell using reduced cerium oxide based ETL	https://doi.org/10.1016/j.vacuum.2018.10.033	33	Journal
27	Prof. Rishu Chaujar	Sub-30nm In ₂ O ₅ Sn gate electrode recessed channel MOSFET: A biosensor for early-stage diagnostics	https://doi.org/10.1016/j.vacuum.2019.02.054	18	Journal
28	Prof. Rishu Chaujar	Impact of metal silicide source electrode on polarity gate induced source in junctionless TFET	https://doi.org/10.1007/s00339-019-2900-6	17	Journal
29	Prof. Rishu Chaujar	Sub-20 nm GaAs junctionless FinFET for biosensing application	https://doi.org/10.1016/j.vacuum.2018.12.007	20	Journal
30	Prof. Rishu Chaujar	RF noise modeling of Black Phosphorus Junctionless Trench MOSFET in strong inversion region	https://doi.org/10.1016/j.spmi.2018.10.025	8	Journal
31	Prof. Rishu Chaujar	Analog and RF assessment of sub-20 nm 4H-SiC trench gate MOSFET for high frequency applications	https://doi.org/10.1016/j.aeue.2018.10.035	8	Journal
32	Prof. Rishu Chaujar	GaN Silicon-on-Insulator (SOI) N-Channel FinFET for High-Performance Low Power Applications	10.1109/NMDC47361.2019.9084011	3	Conference

33	Prof. Rishu Chaujar	Carbon Nanotube Recessed Channel (CNT-RC) MOSFET for High Linearity/ULSI Applications	10.1109/TENCON.2019.8929540	2	Conference
34	Prof. Rishu Chaujar	Low-Temperature Reliability of Sub-20nm 4H-SiC Trench MOSFET with Black Phosphorus Gate Material	10.1109/ICSC45622.2019.8938226	1	Conference
35	Prof. Rishu Chaujar	Effect of Temperature on GaAs Junctionless FinFET Using High- κ Dielectric	10.1109/ICECA.2019.8821826	1	Conference
36	Prof. Rishu Chaujar	TCAD analysis of transparent gate thin film transistor (TFT) for high performance applications	https://doi.org/10.1063/1.5120917	0	Conference
37	Prof. Rishu Chaujar	Non-Quasi-Static Small-Signal Modeling of TGRC MOSFET in Parameter Perspective for RF/Microwave Applications	10.1109/MOCAS.2019.8742066	0	Conference
38	Prof. Rishu Chaujar	Numerical Simulations to Understand the Role of DIO Additive in PTB7:PC71BM Solar Cell	10.1109/PVSC40753.2019.8980682	0	Conference
39	Dr. Ajeet Kumar	Fano Resonant Cuboidal Dielectric Nanoantennas	https://doi.org/10.1134/S0030400X19120385	1	Journal
40	Dr. Ajeet Kumar	Numerical exploration of coherent supercontinuum generation in multicomponent GeSe ₂ -As ₂ Se ₃ -PbSe chalcogenide based photonic crystal fiber	https://doi.org/10.1016/j.yofte.2019.102100	12	journal
41	Dr. Ajeet Kumar	Ultra-coherent supercontinuum generation in isopropanol-silica based photonic crystal fiber at 1300 nm and 1600 nm wavelengths	https://doi.org/10.1117/12.2544242	1	conference

42	Dr. Ajeet Kumar	Numerical modeling & analysis of AsSe ₂ -As ₂ S ₅ chalcogenide based step-index optical fiber for nonlinear applications	https://doi.org/10.1016/j.matpr.2020.01.148	3	conference
43	Dr. Ajeet Kumar	A multicomponent GAP-Se chalcogenide composition-based rectangular photonic crystal fiber for coherent supercontinuum generation	https://doi.org/10.1117/12.2535677	0	conference
44	Dr. Ajeet Kumar	Mid-infrared supercontinuum generation in highly nonlinear AsSe ₂ chalcogenide circular photonic crystal fiber	https://doi.org/10.1364/FIO.2019.JTu3A.34	0	conference
45	Dr. Ajeet Kumar	Polarimetric optical sensing using plasmonic nanocrescent dimer based nanoantenna arrays	https://doi.org/10.1364/FIO.2019.JTu4A.80	0	conference
46	Dr. Ajeet Kumar	Design and analysis of microstructured optical fiber for supercontinuum generation	https://doi.org/10.1063/1.5120935	0	conference
47	Dr. M. Jayasimhadri	<u>Conductivity behavior and impedance studies in BaTiO₃-CoFe₂O₄ magnetoelectric composites</u>	https://doi.org/10.1016/j.matchemphys.2019.05.095	25	Journal
48	Dr. M. Jayasimhadri	<u>Color tunable photoluminescence properties in Eu³⁺ doped calcium bismuth vanadate phosphors for luminescent devices</u>	https://doi.org/10.1016/j.ceramint.2019.05.034	27	Journal
49	Dr. M. Jayasimhadri	<u>Synthesis optimization, photoluminescence and thermoluminescence studies of Eu³⁺ doped calcium aluminozincate phosphor</u>	https://doi.org/10.1016/j.jallcom.2019.06.169	19	Journal

50	Dr. M. Jayasimhadri	<u>Color tunability and energy transfer studies of Dy³⁺/Eu³⁺ co-doped calcium aluminozincate phosphor for lighting applications</u>	https://doi.org/10.1016/j.materresbull.2019.04.022	31	Journal
51	Dr. M. Jayasimhadri	<u>White light emitting thermally stable bismuth phosphate phosphor Ca₃Bi(PO₄)₃: Dy³⁺ for solid-state lighting applications</u>	https://doi.org/10.1111/jace.16479	42	Journal
52	Dr. M. Jayasimhadri	<u>Enhancement of luminescent properties in Eu³⁺ doped BaNb₂O₆ nanophosphor synthesized by facile metal citrate gel method</u>	https://doi.org/10.1016/j.optmat.2019.109301	5	Journal
53	Dr. M. Jayasimhadri	<u>Impedance Spectroscopy and Conduction Behavior in CoFe₂O₄-BaTiO₃ Composites</u>	https://doi.org/10.1007/s11664-019-07700-x	5	Journal
54	Dr. M. Jayasimhadri	<u>Tb³⁺ ion induced colour tunability in calcium aluminozincate phosphor for lighting and display devices</u>	https://doi.org/10.1016/j.jallcom.2020.154212	29	Journal
55	Prof. Suresh C. Sharma	Protein functionalized WO ₃ nanorods based impedimetric platform for sensitive and label-free detection of a cardiac biomarker	https://doi:10.1557/jmr.2018.481	12	Journal
56	Prof. Suresh C. Sharma	Modeling the effects of nitrogen doping on the carbon nanofiber growth via catalytic PECVD process	https://doi.org/10.1002/ctpp.201700138	12	Journal
57	Prof. Suresh C. Sharma	Theoretical model for the effect of dust grains on self-filamentation of Gaussian electromagnetic beam in ionized plasma	https://doi.org/10.1002/ctpp.201800058	2	Journal
58	Prof. Suresh C. Sharma	Excitation of Gould-Trivelpiece Mode by Streaming Particles in Dusty Plasma	http://dx.doi.org/10.1017/S0263034619000284		Journal

59	Prof. Suresh C. Sharma	A Non-Local Theory of Current Driven Low Frequency Modes in a Magnetized Strongly Coupled Collisional Dusty Plasma	https://doi: 10.1109/TPS.2019.2906035	2	Journal
60	Prof. Suresh C. Sharma	Numerical simulation and parametric study of carbon deposition during graphene growth in PECVD system	http://dx.doi.org/10.1109/TNANO.2019.2910173	3	Journal
61	Prof. Suresh C. Sharma	Weibel Instability Oscillation in a Dusty Plasma with counter-streaming electrons	https://doi:10.1017/S0263034619000776	4	Journal
62	Prof.Suresh C. Sharma	The effect of dust grains on the Weibel instability in presence of large amplitude electrostatic waves	https://doi.org/10.1063/1.5133756	3	Journal
63	Prof.Suresh C. Sharma	Theoretical Analysis for Transmission of Gaussian and Sine Time Irradiance of Electromagnetic Beam in Collisional Dusty Plasmas	https://doi.org/10.1002/ctpp.201900175	1	Journal
64	Prof. Suresh C. Sharma	Plasma Bubble Evolution in Laser Wakefield Acceleration in Petawatt Regime	https://doi.org/10.1088/1612-202X/ab8fa9	2	Journal
65	Prof. Suresh C. Sharma	Parametric study of plasma characteristics and carbon nanofibers growth in PECVD system: Numerical modeling	https://doi.org/10.1007/s11090-020-10090-2	0	Journal
66	Prof.Suresh C. Sharma	Electron plasma wave excitation by a q-Gaussian laser beam and subsequent electron acceleration	https://doi.org/10.1063/5.0007998	17	Journal
67	Prof.Suresh C. Sharma	Theoretical Model for self trapping of Gaussian electromagnetic beam in dusty plasma	http://doi.org/10.1063/1.5120947	0	Conference

68	Prof.Suresh C. Sharma	Stabilization of plane polarized Alfven waves by anomalous Doppler resonance	http://doi.org/10.1063/1.5120947	0	Conference
69	Dr. Yogita Kalra	A dispersion engineered silica-based photonic crystal fiber for supercontinuum generation in near- infrared wavelength region	https://doi.org/10.1016/j.ijleo.2019.03.107		Journal
70	Dr. Yogita Kalra	Zero-index metamaterial based alldielectric nanoantenna	https://doi.org/10.1063/1.5086234	8	Journal
71	Dr. Yogita Kalra	Computational modeling of tellurite based photonic crystal fiber for infrared supercontinuum generation	https://doi.org/10.1016/j.ijleo.2019.03.106	6	journal
72	Dr. Yogita Kalra	Fano Resonant Cuboidal Dielectric Nanoantennas	https://doi.org/10.1134/S0030400X19120385	1	Journal
73	Dr. Yogita Kalra	Design and analysis of microstructured optical fiber for supercontinuum generation	https://doi.org/10.1063/1.5120935		Conference
74	Dr. Yogita Kalra	Controlling the radiation pattern of a microstrip patch antenna using a checkerboard patterned metasurface	https://doi.org/10.1063/1.5120911		Conference
75	Dr. Yogita Kalra	Design of hexameric flower shaped nanoantenna for energy harvesting	https://doi.org/10.1063/1.5120913		Conference
76	Dr Yogita Kalra	Design of arrow shaped nanoantenna for electric field enhancement	https://doi.org/10.1117/12.2529188		Conference
77	Dr. Yogita Kalra	Mid-Infrared Supercontinuum Generation in Highly Nonlinear AsSe2 Chalcogenide Circular Photonic Crystal Fiber	https://doi.org/10.1364/FIO.2019.JTu3A.34		Conference

78	Dr. Yogita Kalra	A multicomponent GAP-Se chalcogenide composition-based rectangular photonic crystal fiber for coherent supercontinuum generation	https://doi.org/10.1117/12.2535677		Conference
79	Dr. Yogita Kalra	Dielectric Metamaterial based Broadband Reflector in Visible spectrum	https://doi.org/10.1364/FIO.2019.JTu4A.73		Conference
80	Prof. R.K. Sinha	Design and development of a field deployable packaged fiber Bragg grating-based accelerometer	https://doi.org/10.1117/1.OE.58.1.014104	10	Journal
81	Prof. R.K. Sinha	Metasurfaces for magnetic field enhancement			
82	Prof. R.K. Sinha	Quantum dot activated indium gallium nitride on silicon as photoanode for solar hydrogen generation	https://doi.org/10.1038/s42004-018-0105-0	26	Journal
83	Prof. R.K. Sinha	Rapid detection of Escherichia coli using fiber optic surface plasmon resonance immunosensor based on biofunctionalized Molybdenum disulfide (MoS ₂) nanosheets	https://doi.org/10.1016/j.bios.2018.11.006	110	Journal
84	Prof. R.K. Sinha	Label-free detection of Escherichia coli bacteria by cascaded chirped long period gratings immunosensor	https://doi.org/10.1063/1.5036693	29	Journal
85	Prof. R.K. Sinha	Fiber optic Fabry–Perot interferometer sensor: an efficient and fast approach for ammonia gas sensing	https://doi.org/10.1364/JOSAB.36.000684	18	Journal
86	Prof. R.K. Sinha	Negative axicon tip-based fiber optic interferometer cavity sensor for volatile gas sensing	https://doi.org/10.1364/OE.27.007277	26	Journal

87	Prof. R.K. Sinha	Split-arc-based metasurface for refractive index sensing applications	https://doi.org/10.1117/12.2511114	4	Conference
88	Prof. R.K. Sinha	Zero-index metamaterial based all-dielectric nanoantenna	; doi: 10.1063/1.5086234	8	Journal
89	Prof. R.K. Sinha	Tumor blood perfusion-based requirement of nanoparticle dose-loadings for plasmonic photothermal therapy	https://doi.org/10.2217/nnm-2018-0494	7	Journal
90	Prof. R.K. Sinha	Two-dimensional transition metal dichalcogenides assisted biofunctionalized optical fiber SPR biosensor for efficient and rapid detection of bovine serum albumin	https://doi.org/10.1038/s41598-019-43531-w	75	Journal
91	Prof. R.K. Sinha	Design and Fabrication of Reflective Notch Filter Using Modified Thickness Modulated Al ₂ O ₃ – SiO ₂ Multilayer	https://doi.org/10.1364/OIC.2019.ThD.6	5	Conference
92	Prof. R.K. Sinha	Detection and Quantification of Surface Defects in Silicon during Diamond Turning	https://doi.org/10.1364/FREEFORM.2019.JT5A.12		Conference
92	Prof. R.K. Sinha	Fabrication of Modified Double Half Wave Band-Pass Filter Using Alternately Stacked TiO ₂ -SiO ₂ Multilayer	https://doi.org/10.1364/FREEFORM.2019.JT5A.30		Conference
93	Prof. R.K. Sinha	Controlling the radiation pattern of a microstrip patch antenna using a checkerboard patterned metasurface	https://doi.org/10.1063/1.5120911		Conference
95	Prof. R.K. Sinha	Negative axicon tip micro-cavity with a polymer incorporated optical fiber temperature sensor	https://doi.org/10.1364/OSAC.2.002353	4	Journal

96	Prof R.K. Sinha	All-dielectric complementary-asymmetric-arcs metasurface based refractive index sensor	https://doi.org/10.1364/FIO.2019.JW4A.125		Conference
97	Prof. R.K. Sinha	Green synthesized plasmonic nanostructure decorated TiO ₂ nanofibers for photoelectrochemical hydrogen production	https://doi.org/10.1016/j.solener.2019.10.022	12	Journal
98	Dr. Pawan Kumar Tyagi	A critical review of Diamond like Carbon Coating for Wear Resistance Applications	https://doi.org/10.1016/j.ijrmhm.2018.09.006	163	Journal