

National Conference on Frontier Modern Physics (NCFMP2020)

LIST OF ACCEPTED ABSTRACTS FOR CONTRIBUTORY ORAL PAPERS

Sl. No.	Title of the Abstract	Author	Mode of Presentation	Paper Id
1	HYPOTHETICAL ROLE OF LARGE NUCLEAR GRAVITY IN UNDERSTANDING THE SIGNIFICANCE AND APPLICATIONS OF THE STRONG COUPLING CONSTANT		ORAL	0-1
2	EXCHANGE BIAS IN NANOCRYSTALLINE COCR ₂ O ₄ @SIO ₂	DEBAJYOTI DE, SUCHANDRA GOSWAMI AND MANASHI CHAKRABORTY	ORAL	0-2
3	STUDY ON THE ROLE OF OXYGEN CONTAINING SPECIES TOWARDS PERFORMANCE EVALUATION OF PLANAR ANODE SUPPORTED SOFC	MADHUMITA MUKHOPADHYAY, JAYANTA MUKHOPADHYAY AND A. DAS SHARMA	ORAL	0-3
5	EFFECTS OF VARIABLE IRON DOPING IN GRAPHENE NANO-SHEETS: FIRST PRINCIPLE STUDY	SWARNAVA BISWAS, MOUMITA MUKHERJEE	ORAL	0-5
6	SERS STUDY OF 4, 5-DICIANOIMIDAZOLE MOLECULE ON SPHERICAL AU NANOPARTICLES: THEORETICAL MODELING USING DFT	SUBHENDU CHANDRA	ORAL	0-6
7	A MULTIFUNCTIONAL CARBON FILAMENT FIBER POWDER POLYVINYL ALCOHOL (PVA) COMPOSITE FOR FUEL CELL AND BIOMEDICAL APPLICATIONS	ARPITA ROY	ORAL	0-7
8	ELECTROMAGNETICALLY INDUCED TRANSPARENCY IN Y-	KALAN MAL, KHAIRUL ISLAM,	ORAL	0-8

	TYPE ATOMIC SYSTEM	SUMAN MONDAL, DIPANKAR BHATTACHARYYA AND AMITAVA BANDYOPADHYAY		
9	EFFECT OF EXTRA DECAY PATH IN THE FORMATION OF ELECTROMAGNETICALLY INDUCED TRANSPARENCY AND ELECTROMAGNETICALLY INDUCED ABSORPTION FOR CASCADE TYPE SYSTEM	SUMAN MONDAL, <u>GALIB</u> <u>ISLAM</u> , KALAN MAL, SUDIP GARAI AND AMITAVA BANDYOPADHYAY	ORAL	0-9
10	FRACTAL LATTICE AS AN EFFICIENT FUNCTIONAL ELEMENT FOR THERMOELECTRICITY	SUVENDU CHAKRABORTY, AND SANTANU K. MAITI	ORAL	0-10
11	STUDY OF JET PROPERTIES IN PHOTON TAGGED JETS IN PROTON-PROTON AND HEAVY-ION COLLISIONS AT THE LHC ENERGIES WITH JEWEL	RATHIJIT BISWAS	ORAL	0-11
12	HIGH FIGURE OF MERIT IN AN AC DRIVEN GRAPHENE NANORIBBON	SUDIN GANGULY AND SANTANU K. MAITI	ORAL	0-12
13	A THEORETICAL INVESTIGATION ON TETRA QUARK STATES IN THE CONTEXT OF COMPOSITE FERMION MODEL OF DIQUARK	S.PAL, R. GHOSH, A. BHATTACHARYA AND B. CHAKRABARTI	ORAL	0-13
14	SYNTHESIS OF AL-DOPED ZINC OXIDE NANO PARTICLE TCO MATERIAL BY SIMPLE SOL-GEL METHOD	DHANANJOY ROY, MEGHASREE BASU AND SOURAV PAUL	ORAL	0-14
15	VERTICAL STRUCTURE OF AN ACCRETION DISK	SANGITA CHATTERJEE, SOUMEN MONDAL, PRASAD BASU	ORAL	0-15
16	THERMAL CONDUCTIVITY AND SPECIFIC HEAT SIMULATION OF AQUEOUS GRAPHENE NANOFLUIDS USING EQUILIBRIUM MOLECULAR DYNAMICS (EMD)	SAKTI PADA SHIT, N. K. GHOSH, AND SUDIPTA PAL	ORAL	0-16
17	MILLIMETER-WAVELENGTH STUDY OF GALACTIC MICRO- QUASAR CYGNUS X-1 USING ATACAMA LARGE MILLIMETER ARRAY (ALMA)	ARIJIT MANNA, SABYASACHI PAL AND SEKHAR SINHA	ORAL	0-17
18	LOW TEMPERATURE STRUCTURAL AND	S. MAHAKAL, DIPTASIKHA	ORAL	0-18

	THERMOELECTRIC PROPERTIES OF BI2TE3-SB2TE3 MIXED CRYSTAL	DAS, A. DAS, ARITRA BANERJEE, S. BANDYOPADHYAY, S. CHATTERJEE AND K. MALIK		
19	ELECTROMAGNETIC SIGNATURES IN THE IONOSPHERE OBSERVED THROUGH LOW ALTITUDE DEMETER SATELLITE	SHOURABH BHATTACHARYAA	ORAL	0-19
20	SUBTHRESHOLD CURRENT COMPUTATION IN P- HETEROSTRUCTURE MOSFET	ARPAN DEYASI, SWARNAV MUKHOPADHYAY	ORAL	0-20
21	SKYRMIONS IN HIGH TC SUPERCONDUCTORS AND ANTIFERROMAGNETIC CORRELATION	S. DHAR	ORAL	0-23
22	INVESTIGATION OF APPLICABILITY OF PLASTIC SCINTILLATION DETECTOR FOR IMAGING	S. CHATTERJEEA, A. PAUL, S. ROY, A. SEN, S. BISWAS, S. DAS	ORAL	0-24
23	GROUND STATE MAGNETIC PROPERTIES OF HO15SI9C COMPOUND	<u>K. PANDA,</u> A. BHATTACHARYYA	ORAL	0-25
24	SOLUTE TRANSPORT ALONG GROUNDWATER FLOW IN TWO-DIMENSIONAL FINITE GEOLOGICAL FORMATION UNDER SORPTION ISOTHERM	RAKESH KUMAR SINGH, NAV KUMAR MAHATO, AND MRITUNJAY KUMAR SINGH	ORAL	0-26
25	PHOTON DETECTION IN HEAVY-ION EXPERIMENTS	A. MODAK, P. DAS, D. BANERJEE, MOHD. A. BHAT, S. K. PRASAD, S. DAS	ORAL	0-27
26	DESIGN OF A CIRCULAR-SLOT MULTIBAND UWB ANTENNA WITH NON-PERIODIC DGS FOR WLAN/WIMAX APPLICATIONS	SUNIL THAKUR, NAVDEEP SINGH	ORAL	0-28
27	VARIATION OF SECONDARY COSMIC RAY FLUX DURING LUNAR ECLIPSE	S. ROY, S. CHATTERJEE, S. CHAKRABORTY, S. BISWAS, S. DAS, S. K. GHOSH, S. RAHA	ORAL	0-29
28	PULSE HEIGHT DISTRIBUTION OF COSMIC RAY MUONS USING PLASTIC SCINTILLATION DETECTOR	D. SAHA, A. SEN, S. CHATTERJEE, S. ROY, S. BISWAS AND S. DAS	ORAL	0-30

29	ATOMISTIC SIMULATIONS OF DEFECT-DEFECT INTERACTIONS IN MG-AL ALLOYS	AMITAVA MOITRA	ORAL	0-31
30	ATOM LOCALIZATION IN CASCADE TYPE SYSTEM	KALAN MAL, SUMAN MONDAL, DIPANKAR BHATTACHARYYA, GALIB ISLAM AND AMITAVA BANDYOPADHYAY	ORAL	0-32
31	CHECKERBOARD SUPERSOLIDITIY VIA SAME SUBLATTICE HOPPING OF HARDCORE BOSONS IN A SQUARE LATTICE	SATYAKI KAR	ORAL	0-33
32	AN EXPLORATORY COMPARATIVE STUDY OF FABRICATED SILICA – ALUMINIUM METAL MATRIX COMPOSITES WITH CASTED ALUMINIUM-SILICON ALLOYS	SOUMYAJIT ROY	ORAL	0-34

LIST OF ACCEPTED ABSTRACTS FOR CONTRIBUTORY POSTER PAPERS

Sl. No.	Title of the Abstract	Author	Mode of	Paper Id
			Presentation	
34	CURRENT – VOLTAGE CHARACTERISTICS OF PLD GROWN	FAIZAL MIRZA	POSTER	P-1
	MANGANITE BASED THIN FILM DEVICES	I AILAL WIILLA		
35	UNDERSTANDING NUCLEAR STABILITY AND BINDING		POSTER	P-2
	ENERGY WITH UP AND DOWN QUARKS VIA THE PRODUCT	U.V.S. SESHAVATHARAM		
	OF STRONG AND ELECTROMAGNETIC COUPLING			
	CONSTANTS			
36	SPIN SELECTIVE TRANSMISSION THROUGH A DRIVEN	MANIK SARKAR, MOUMITA	POSTER	P-3
	QUANTUM SYSTEM	DEY, SANTANU K. MAITI		

37	INTEGER QUANTUM HALL EFFECT IN A 2D LATTICE SUBJECTED TO LIGHT IRRADIATION	SUKRITI SARKAR, MOUMITA DEY, SANTANU K. MAITI,	POSTER	P-4
38	SPIN DEPENDENT TRANSPORT THROUGH A SPIN-ORBIT COUPLED SYSTEM WITH AAH MODULATION	ABHRA MUKHERJEE, MOUMITA DEY, SANTANU K. MAITI,	POSTER	P-5
39	SPECTRAL FEATURES OF ONE-DIMENSIONAL PHONONIC QUASICRYSTAL	ANUPAM SAHA, MOUMITA DEY, SANTANU K. MAITI	POSTER	P-6
40	ATOM LOCALIZATION IN CASCADE TYPE SYSTEM	KALAN MAL, SUMAN MONDAL, DIPANKAR BHATTACHARYYA, GALIB ISLAM AND AMITAVA BANDYOPADHYAY	POSTER	P-7
41	EFFECTS OF TEMPERATURE AND DEPOSITION RATE ON SURFACE MORPHOLOGY OF THIN AL METAL FILMS ON GLASS SUBSTRATE: APPLICATION IN SOLAR CELL	SOHAM DAS, SWARUP NEOGI AND MOUMITA MUKHERJEE	POSTER	P-8
42	ENTROPY BASED ANALYSIS OF GENETIC INFORMATION	<u>PARAMITA SAHA</u> , BIMAL KUMAR SARKAR	POSTER	P-9
43	ON SOME PROPERTIES OF MESONIC FORM FACTORS	R.SAHA AND A.BHATTACHARYA	POSTER	P-10
44	SIMPLE, EFFICIENT AND ECONOMICALLY VIABLE TECHNIQUE FOR TEMPERATURE DEPENDENT THERMOPOWER DATA ACQUISITION OF THERMOELECTRIC MATERIALS	A. JANA, D. DAS, ARITRA BANERJEE AND K. MALIK	POSTER	P-11
45	NOISE SEPARATION FROM FREE STREAMING MINI-CBM EXPERIMENT DATA	SHREYA ROY, VIKAS SINGHAL	POSTER	P-12
46	CHECKERBOARD SUPERSOLIDITIY VIA SAME SUBLATTICE HOPPING OF HARDCORE BOSONS IN A SQUARE LATTICE	SATYAKI KAR	POSTER	P-13
47	MISCELLANEOUS RADIO SOURCES FROM LOTSS DR 1	TAPAN K. SASMAL AND SOUMEN BERA	POSTER	P-14
48	MILIMETER OBSERVATION OF A BLACKHOLE CANDIDATE GRS 1915+105	SEKHAR SINHA, SABYASACHI PAL AND ARIJIT MANNA	POSTER	P-15

49	CORRELATION BETWEEN DEFECT AND MAGNETISM OF LOW ENERGY 800 KEV AR4+ IRRADIATED ZNO THIN FILMS	SWARUP KUMAR NEOGI	POSTER	P-16
50	STUDY OF RECTANGULAR SOLID-CORE PHOTONIC CRYSTAL FIBER AS TEMPERATURE SENSOR	PAPIYA DHARA, AND VINOD K. SINGH	POSTER	P-17
51	SINGLET FISSION: H2 MOLECULE	BASIR AHAMED KHAN	POSTER	P-18
52	MRG: THE MISCELLANEOUS RADIO GALAXIES FROM THE FIRST SURVEY	SOUMEN BERA, SABYASACHI PAL, TAPAN K. SASMAL, DUSMANTA PATRA, SOUMEN MONDAL	POSTER	P-19
53	DETECTION OF HEAD-TAIL GALAXIES FROM LOFAR SURVEY	TAPAN K. SASMAL , SOUMEN BERA ,SABYASACHI PAL AND SOUMEN MONDAL	POSTER	P-20
54	STUDY OF PHOTOVOLTAIC SYSTEM AND MPPT ALGORITHM USING MATLAB	AMUL KUMAR SRIVASTAV	POSTER	P-21
55	2D POLAR CO-ORDINATE REPRESENTATION OF AMINO ACID SEQUENCES	TATHAGATA DEY	POSTER	P-22
56	EFFECT OF REDUCTION IN PARTICLE SIZE AND INTERPARTICLE INTERACTION ON MAGNETIC PROPERTIES OF COCR204	SUCHANDRA GOSWAMI	POSTER	P-23
57	AN INVESTIGATION TO STUDY THE EFFECTS OF CYCLICAMP TO CAMP RECEPTOR PROTEIN FROM MYCOBACTERIUM TUBERCULOSIS BY COMPUTATIONAL APPROACH	SWARNAV BHAKTA AND ABINIT SAHA	POSTER	P-24
58	ATTEMPTING TO SOLVE A THREE-BODY SYSTEM THROUGH EXPERIMENTAL APPROACH.	RUCHISMITA CHAKRABORTY, SAYAN JANA, DR. SABUJ GHOSH	POSTER	P-25
59	DELINEATING URBAN FRINGE BY ROUGH-SET THEORETIC APPROACH: A CASE STUDY ON BARASAT MUNICIPALITY, INDIA	KASTURI MUKHERJEEA	POSTER	P-26