

Material Science Poster Presentation - EMSI 2018 (Venue : Central Hall)

Sl.no	Poster Code	Presenting Author	Title
Date: 18th July, 2018 (13:00 - 15:00 Hrs)			
1	MS PO-01	Abhijit Roy	Synthesis of Metal Nanoparticles Decorated Silicon Nanowire-Silicon Pyramid Structure and Their Applications
2	MS PO-02	Abhishek Sasmal	Retarded Nucleation of Ferroelectric Domains through incorporation of SmFeO ₃ Filler into Poly(vinylidene fluoride) (PVDF) Matrix
3	MS PO-03	Abinash Sahu	Mineral Chemistry of Chrome Bearing Spinel from Ultramafic Rocks of Babina Greenstone Belt, Bundelkhand Craton, Central India
4	MS PO-04	Ahmed Aliyu	Microstructure and Corrosion Behaviour of High Entropy Alloy-Graphene Oxide Composite Coatings
5	MS PO-05	Aiswarya Samal	First Principle Study of Electronic Structure Modulation of Nickel-Graphene Interface by External Applied Electric Field
6	MS PO-06	Akash Sharma	Effect of growth time on the physical properties of the hydrothermally grown ZnO nanorods
7	MS PO-07	Alapan Dutta	Effect of growth time on the physical properties of the hydrothermally grown ZnO nanorods
8	MS PO-08	Alphy George	Electron microscopy of advanced engineering materials
9	MS PO-09	Aman Gupta	Microstructural developments in $\alpha+\beta$ titanium alloy
10	MS PO-10	Aman Kumar Lal Das	Electron microscopic studies of Heusler based quinary high-entropy alloy
11	MS PO-11	Ambuj Mishra	Installation of high-resolution scanning TEM and specimen preparation facilities at IUAC
12	MS PO-12	Anandalal Gayen	Study of microstructure, optical and electrical properties of novel NiO-CrO mixed oxide Nano composite synthesized using co-precipitation method.
13	MS PO-13	Ananta Narayan Behera	Evolution of dynamic recrystallization microstructure of Nb-1Zr-0.1C alloy with strain
14	MS PO-14	Ankit Singh	Electron Microscopy of Compositionally Graded LiNiO ₂ -LiMnO _x Thin Film on (111) Nb SrTiO ₃
15	MS PO-15	Anoop Kumar Kushwaha	Atomic level Investigation of Superior Performance of Fluorinated Carbonates as an Electrolyte in Li-ion Battery
16	MS PO-16	Antika Das	Enhanced photoluminescence properties of low dimensional Eu ³⁺ activated Y ₄ Al ₂ O ₉ for solid state lighting application
17	MS PO-17	Anup Kumar Khare	Study on Synthesis of NiTi SMA by Milling and Sintering of elemental Powders through powder Metallurgy Route.
18	MS PO-18	Arimita Chakrabarty	Fluid induced origin of myrmekite in a porphyritic granitoid from parts of the Makrohar Granulite Belt of Central India
19	MS PO-19	Arvind A	Electron Microscopy: A Versatile Tool to Observe Radiation Damage in Glasses
20	MS PO-20	Arya	Structural studies of Y-Ti-O complex oxide synthesized by mechanical milling
21	MS PO-21	Ashis Kumar Manna	Co-electrodeposition of Zn(Cu)O hybrid nanostructures for non-enzymatic glucose sensors and enhanced photoabsorbance.
22	MS PO-22	Ashok Kumar Mishra	Microstructure Variation of Nb Doped CCTO Film Prepared by Modified Sol-Gel Route
23	MS PO-23	Ashok Kumar Mishra	Ceramographic Analysis of L _{0.5} B _{0.5} TiO ₃ Ceramics Sintered at Different Temperatures
24	MS PO-24	Ashwani Kumar Singh	Lightweight reduced graphene oxide-Fe ₃ O ₄ nanoparticle composite in the quest for an excellent electromagnetic interference shielding material

25	MS PO-25	Avinna Mishra	Comparing microstructure and thermoelectric performance of Ca ₃ Co ₄ O ₉ using Solid state and sol gel synthesis routes
26	MS PO-26	Babli Debnath	Synthesis of PVP capped Silver nanocrystals for the degradation and sensing of highly toxic Monocrotophos pesticide
27	MS PO-27	Bhabatosh Biswas	Modified fly ash dispersed natural fibres reinforced unsaturated polyester: synthesis and characterization.
28	MS PO-28	Bhamiti Sharma	Study of growth and microstructure of nanorods of novel hexagonal form of Silver
29	MS PO-29	Bhusankar Talluri	Synthesis and characterization of digestively ripened, ultra-small (r<2 nm) copper oxide quantum dots
30	MS PO-30	Bibhu Prasad Sahoo	Exploring the Effect of Ionic Liquid on the Dispersion and Dielectric Characteristics of Carbon nanotubes Filled Ethylene Acrylic Elastomer Nanocomposites
31	MS PO-31	Bibhu Prasad Sahu	Study of crystallization behavior and structural relaxation of amorphous Ni-Zr thin films by in-situ heating in TEM
32	MS PO-32	Chayon Mondal	Synthesis and characterization of novel vanadium-based alloys
33	MS PO-33	Chitrarasu K	Effect of sintering temperature on the grain size of La ₂ Zr ₂ O ₇ pyrochlore for nuclear waste immobilization
34	MS PO-34	Debadarshini Samantaray	Designing Radial and Axial Heterostructure Te/Telluride Nanowires
35	MS PO-35	Debadarshini Samantaray	Ultrathin Single crystalline Pt nanowire and its alloys
36	MS PO-36	Debashis Panda	Annealing Effects in Structural and Electro-Optical Properties of Co Doped ZnO RRAM
37	MS PO-37	Debashis Panda	Top Electrode Thickness Dependent on Switching Characteristics of ZnO ₂ /ZnO Bilayer Transparent Resistive Random Access Memory Devices
38	MS PO-38	Debashis Panda	Evolution of Conducting Filament in TiO _x Memristor using Conducting Atomic Force Microscopy
39	MS PO-39	Deepak Kumar Kashyap	Enhancement of mechanical /conductive properties of carbon nanocomposites through multi-wall carbon nanotubes
40	MS PO-40	Deepali Parag Butala	SYNTHESIS, CHARACTERISATION AND APPLICATIONS OF ZINC OXIDE NANOPARTICLES AND ZnO -POLYMER NANOCOMPOSITE.
41	MS PO-41	Dhiraj	Highly Cryatlline Zinc Silicate Nanowires for Optical and Piezoelectric Nanogenerators Application
42	MS PO-42	Diganta Rabha	A 510X optical microscope design using smartphone
43	MS PO-43	Dilruba Hasina	Ion-beam mediated defect engineering in TiO ₂ thin film for neuromorphic computing
44	MS PO-44	Dipanwita Chatterjee	Orientation Selection during Heterogeneous Nucleation on Amorphous Substrates: Implications for Catalysis
45	MS PO-45	Divya Gupta	Surface-structuring in Si(111) by argon ion sputtering
46	MS PO-46	Geeta Kumari	Microstructural evolution with varying solutionizing temperature in Allvac 718plus
47	MS PO-47	Girish Kashianth Deokar	Green synthesis of single crystalline gold nanoplates: Unveiling an unexpected potential of beetroot waste a mechanistic study
48	MS PO-48	Gourab Bhattacharjee	Transmission Electron Microscopy of Rattle Type Au@Ag Core-Shell Nanoparticles
49	MS PO-49	Haaris Ahsan Safdari	Structural and mechanistic insights into polymyxin resistance protein: ArnA
50	MS PO-50	Himadri Tanaya Das	Li-ion Capacitor of LiMnO ₂ @Graphene from the Exhaust Electronic Waste
51	MS PO-51	Hiranmayee Vadlamani	Microstructure of nc-UO ₂ powders derived from different sintering methods
52	MS PO-52	Ipsita China	Morphological analysis of β -crystallinity enhancement of Poly(vinylidene fluoride-co-hexafluoropropene) by incorporation of Zinc Ferrite nanorod and its effect on piezo-throughput enhancement
53	MS PO-53	Jaba Saha	Effect of ZnO nanoparticle on FRET

54	MS PO-54	Jagnaseni Pradhan	Inter-diffusion study of gold in copper through graphene
55	MS PO-55	Jasaswini Tripathy	Fabrication and characterization of hybrid nanocomposite films with antibacterial applications
56	MS PO-56	Jasaswini Tripathy	Fabrication of responsive microcapsules for anticancer drug delivery
57	MS PO-57	Jegadeesan	Formation of faceted krypton bubble in ThO ₂
58	MS PO-58	Joyeeta Mukherjee	Effect of microscopic nature of nano materials on sorption isotherm parameters of nano porous magnetite and surface coated magnetites for sorption study of Sr (II) in aqueous medium
59	MS PO-59	Kajal Kumar Dey	BiVO ₄ Multiwalled Tubules for Solar Water Splitting
60	MS PO-60	Kamal Kumar Meena	Synthesis of Tellurium Nanowires (Te-NWs) and Decorated with SnO ₂ Nanoparticles for Electronics Application
61	MS PO-61	Karamjyoti Panigrahi	Binder Free, Flexible Supercapacitor Electrode Based On V ₂ O ₅ Nanosheets Array
62	MS PO-62	Kesava Rao	Studying the Behaviour of High Work Function Metal Layers on n-GaN Schottky Devices when irradiated with Swift 45 MeV Li ³⁺
63	MS PO-63	Ketan Balaji Ganne	Electron Microscopic Investigations of Al-Fe Intermediate Phases Evolved during Mechanical Alloying
64	MS PO-64	Koushik J	Nanoscale Zinc Stannate for Gas Phase Catalysis
65	MS PO-65	M Sivakumar	Microstructural characterization of high energy ball milled 617 ODS super alloy powders
66	MS PO-66	Madhupriya Samanta	One step facile synthesis of Copper Phthalocyanine nanowires: a potential candidate for positive electrode in supercapacitor application
67	MS PO-67	Mahesh Saini	Plasmonic anisotropy of self-organized gold nanoparticles on nanofaceted silicon surfaces
68	MS PO-68	Mainak Sen	Low cycle fatigue behaviour and micromechanics of a beta titanium alloy Ti-5Al-5Mo-5V-3Cr
69	MS PO-69	Manish Kumar Singh	Direct structure imaging of intermetallic Cu ₃ Au nanoparticles
70	MS PO-70	Manjima Bhattacharya	Deformation Mechanisms of Alumina from Nano to Macro Scale of Contact
71	MS PO-71	Manmath Kumar Dash	Consolidation characteristics of 18Cr-ODS Ferritic Steel by Spark Plasma Sintering
72	MS PO-72	Meghabarna Gayen	Electron microscopy of ultrathin trimetallic AuPdPt and AuPdAg alloy nanowires
73	MS PO-73	Mihir Ranjan Sahoo	Coupled carbon nanotubes as catalysts for hydrogen evolution reaction: A first principles study.
74	MS PO-74	Mississippi Missouri Bhunia	Low-dimensional systems (Nanoscale, Nanostructured Materials, 2D layered systems, etc.)
75	MS PO-75	Monalisa Mandal	The effect of prior cold rolling on the microstructure, micro-texture, and mechanical properties of mushy state rolled Al alloy matrix in-situ composite
76	MS PO-76	Moumita Mukherjee	Investigation of ORR performances on graphene/Phthalocyanine nanocomposite in neutral medium
77	MS PO-77	Mrutyunjaya Nayak	Ceramographic Analysis of L0.5B0.5TiO ₃ Ceramics Sintered at Different Temperatures
78	MS PO-78	Mukaddar Sk	Growth of sputtered MoO ₃ thin films on chemically textured-InP : Hole-blocking and anti-reflection properties
79	MS PO-79	Nandini Singh	Synthesis and Characterization of low-density AlCrFeMgSi High Entropy Alloy by Mechanical Alloying
80	MS PO-80	Nidhi Sharma	Microstructural and Tribological Characterization of Graphene and Carbon-Nanotubes reinforced Ceramic Nanocomposites
Date: 19th July, 2018 (13:00 - 15:00 Hrs)			
81	MS PO-81	Nimitha K Vijay	Formation of Pine-Cone Like Microstructure of ZnO thin films obtained from Sol-Gel Spin-Coating Method.
82	MS PO-82	Nitin T Kumbhar	Development of a wasteform for fast reactors: An SEM-EDX study
83	MS PO-83	Nivedita Lahiri	Origin of Ti-zoning in garnet in a calc-silicate granulite from parts of Eastern Ghats Province, India

84	MS PO-84	Noopur Jain	A TEM study on Na-intercalated Nanotubular Titania: Aspects of Synthesis and Microstructure
85	MS PO-85	Noopur Jain	A Study on the Structure and Microstructure of Nanotubular Titania
86	MS PO-86	Noopur Jain	One-dimensional Pt-MnO ₂ Hybrid for CO-Oxidation: Insights into Microstructural and Electronic Aspects
87	MS PO-87	Paramita Maiti	Nanostructural Phase Transformation from β -MoO ₃ to Mo under UHV – MBE Conditions
88	MS PO-88	Pavithra B	Synthesis of metal oxide free-standing films by aggregation of nanoparticles at the air-water interface
89	MS PO-89	Pavithra B	Simple liquid phase exfoliation of Molybdenum oxide (MoO ₃) rods to nanosheets and nanotubes
90	MS PO-90	Pavithra B	Thermal Stability of Ultrathin Metal/Alloy Nanowires
91	MS PO-91	Payel Maiti	Electron Microscopic Evidence of Nanoscale Plasticity in Brittle and Tough Ceramics
92	MS PO-92	Piu Rajak	A new approach to reduce the influence of supporting amorphous carbon film thickness on measured strain variation within a nanoparticle
93	MS PO-93	Pradip Sekhar Das	Electron Microscopy of Designed Mg(OH) ₂ Nanoplatelet Assembly for Superb Cu(II) Adsorption Efficacy
94	MS PO-94	Praveen Tanwar	Comparative study of morphological, topological and thermoelectric properties of SnTe thin films
95	MS PO-95	Priyadarshini Ghosh	Graphene as Ultrathin Conductive Encapsulant for Thermoelectric Nanomaterials
96	MS PO-96	Promita Howli	Hierarchical Structures of Co ₃ O ₄ Nanowires Composite with Reduced Graphene Oxide: Characterisation and Supercapacitor Application
97	MS PO-97	Pronoy Nandi	Structural evolution of CH ₃ NH ₃ PbI ₃ indicate efficiency enhancement
98	MS PO-98	Raghavendra K G	Microstructural evolution in Spark Plasma Sintered 9Cr - ZrO ₂ dispersion strengthened steel with prolonged high temperature exposure
99	MS PO-99	Rahul Bhattacharya	A comparative microstructural study of nanocrystalline Al _x CoCrFeNi (x=0,0.3,0.6,1 mole) high entropy alloys synthesized by mechanical alloying and spark plasma sintering vis-a-vis arc melted alloys of same composition.
100	MS PO-100	Rajeev K	Morphology Controlled Synthesis of SnSe ₂ and Site-Specific Nucleation of Metal Nanoparticles
101	MS PO-101	Rakesh Kumar Sahu	Synthesis of multi walled carbon nanotubes by arc plasma discharge method
102	MS PO-102	Ranveer Singh	Effect of annealing temperature and time on the microstructure, optical, and electrical properties of polycrystalline CdTe
103	MS PO-103	Ranveer Singh	Influence of grain size on local work function and optoelectronic properties of n-ZTO / p-Si heterostructures
104	MS PO-104	Ravuri Syamsai	Synthesis and investigation of 2D-Molybdenum carbide MXene sheets for electrochemical energy storage
105	MS PO-105	Rekha Mahendrakar	Microstructure and Corrosion Behaviour of Electrodeposited SnNi-Graphene Oxide Composite Coating
106	MS PO-106	Rituparna Chatterjee	Blue emitting BaAl ₂ O ₄ : Ce ³⁺ nanophosphors with high color purity and brightness for white light LEDs
107	MS PO-107	Sahaya Dennish Babu	SIMPLE SYNTHESIS AND CHARACTERIZATION OF CESIUM LEAD HALIDE PEROVSKITES FOR OPTOELECTRONIC APPLICATIONS
108	MS PO-108	Saikumaran A	Theoretical and experimental study of Structural Characteristics in Equiatomic CrFeMoV Alloy
109	MS PO-109	Saloni Sharma	Electron Microscopic Characterization of Solution Blended PVDF- SWCNT Nanocomposite
110	MS PO-110	Sandipan Mallik	Impact of Pore Structure on the Mechanical Properties of Different Forms of Alumina
111	MS PO-111	Saswat Mohapatra	Cost-effective fabrication of two-dimensional nanostructure arrays using sequential nanoimprint lithography
112	MS PO-112	Satyajit Ratha	Layered Transition Metal Chalcogenide-Reduced Graphene Oxide Hybrids for Enhanced Electrochemical Energy Storage
113	MS PO-113	Satyam Choudhury	Elucidation of Structure & Defects in Bi-Cr-O System through Transmission Electron Microscopy

114	MS PO-114	Shaban Khan	Microstructural Stability of Alloy 693 at Elevated Temperatures
115	MS PO-115	Shewli Pratihari	Controlled Hydrothermal Synthesis of High Aspect Ratio Zinc Oxide Nanorods for Energy Harvesting Application
116	MS PO-116	Shidhart Sankar Ram	Application of nuclear microscopy (micro-PIXE) for characterization atmospheric dust particles deposited on roadside vegetation canopies.
117	MS PO-117	Shivank Shukla	First-principles calculations and quantitative imaging of vanadium-oxygen solid solution
118	MS PO-118	Shrabani Ghosh	Synthesis and Characterizations of COOH Functionalized CNT-Zn rich Cadmium Zinc Sulfide Composite
119	MS PO-119	Shreya Mukherjee	Effect of long term aging on HTLCF behaviour and deformation mechanisms of Ni-based superalloy
120	MS PO-120	Shwetha Shetty	Surface oxygen vacancies in SrTiO ₃ nanocubes: Mapping of Ti ²⁺ states by STEM-EELS
121	MS PO-121	Shwetha Shetty	Composition and segregation effects in bimetallic alloy nanowires: Insights from electron microscopy
122	MS PO-122	Sirina Roy Choudhury	On the formation of clinopyroxene-ilmenite symplectites from a suite of calc silicate rocks from the Chotanagpur Granite Gneissic Complex (CGGC), east Indian shield
123	MS PO-123	Smith Sagar Satapathy	Synthesis of Surface modified Gold catalyst towards nitro derivative reduction
124	MS PO-124	Soumya Ranjan Patra	Bio-Inspired nano-hybrid Smart Functional Materials: Seeded CdSe/CdS QDs nanoparticles-mixed Mimosa Pudica composite thin film
125	MS PO-125	Sourav Ganguly	Correlation of microstructure with the creep behavior of AZ91-Ca-Sb Mg alloy reinforced with SiC nanoparticles
126	MS PO-126	Sruthi Mohan	Effect of Zr and Al Addition on Nanocluster Formation in Oxide Dispersion Strengthened Steel – ab initio simulation and experimental studies
127	MS PO-127	Sumit Majumder	Flower-like MoS ₂ for next generation high performance energy storage device applications
128	MS PO-128	Sumit Majumder	Multifunctional RGO Wrapped Circular 2D Au Nanoplatelets: Giant Enhanced Photoluminescence, Excellent SERS, Visible-Light Assisted Photocatalytic Water Splitting and Electrochemical Non-Enzymatic Biosensor
129	MS PO-129	Thirupathi Gadipelly	Microwave-hydrothermal synthesis and structural investigation of nanostructured Y ₂ O ₃ dispersoid for oxide dispersion strengthened steels
130	MS PO-130	Urbashi Sarkar	Identification of larger benthic foraminifera: SEM study
131	MS PO-131	Vaishnavi Krupa B R	Effect of Titanium addition to Ytria nanopowders during high energy ball milling
132	MS PO-132	Vijaya Babu K	Structural properties of cobalt substituted nano-crystalline nickel ferrite
133	MS PO-133	Vikas Shivam	Phase and microstructural evolution of mechanically alloyed AlCoCrFeNiMn high entropy alloy
134	MS PO-134	Vishal Singh	Understanding localized deformation in ion-irradiated Zr using Experimental and simulation techniques
135	MS PO-135	Yagnesh Shadangi	Electron microscopy of Sn reinforced Al-Cu-Fe quasicrystalline matrix nanocomposite by mechanical milling
136	MS PO-136	Ahin Roy	Engineering Electronic Structure in Ultrathin Te Nanowires Using Adsorption
137	MS PO-137	Ahin Roy	Electrochemical Glucose Sensing with Ultrathin Au Nanowires on Graphitic Support
138	MS PO-138	Ahin Roy	Phase and Morphology Engineering of Electrochromic WO ₃
139	MS PO-139	Ajay Kumar Perumal	Nanostructured perovskites enable highly efficient light emitting devices
140	MS PO-140	Arijit Mitra	Electrical, Mechanical and Thermal Properties of Aluminium-Reduced Graphene Oxide Composites
141	MS PO-141	Ajeet Kumar Srivastav	Oriented attachment growth of α -Fe ₂ O ₃ nanoparticles
142	MS PO-142	Avanendra Singh	EELS Investigation of the Work Function Reduction in Au decorated ZnO Nanotapers
143	MS PO-143	Avnish Singh Pal	Microstructural Evolution of chessboard like nanodomains in Mn- doped CoFe ₂ O ₄ spinel and NdLiTiO ₃ based perovskite systems for nanoelectronic device applications

144	MS PO-144	Bhavesh Kumar Dadhich	Hollow silver nanostructures: The role of capping agents in tailoring the shape, structure and plasmonic properties
145	MS PO-145	Jayaraj V V	Microstructural and Microchemical investigations on SS 304L clad material of Ferroboron capsule irradiated in FBTR
146	MS PO-146	Mohsin Hasan	Nano Mechanical properties of Chromium Carbide based Coatings: A microstructural perspective
147	MS PO-147	Mrinmoy Garai	Crystallization and Microstructure of Sm ³⁺ and Gd ³⁺ Doped K-Mg-Al-Si-O-F Glass-ceramics
148	MS PO-148	Ms. Pratisha Gangwar	Investigation of Thermoelectric Performance of MoS ₂ Nanostructure Along with its Secondary Phase
149	MS PO-149	Nasrin Banu	Amorphisation and recrystallization in Si substrate upon ion irradiation at room temperature
150	MS PO-150	P Madhusudhanachary	Effect of Aspergillus sp., fungus on small intestine W NIN Rat (Rattus navigatus)–An Electron Microscope study
151	MS PO-151	Pradyumna	Evolution of YFeO ₃ phase in Fe-15wt%Y ₂ O ₃ model ODS alloy
152	MS PO-152	Puspendu Guha	P-type β -MoO ₂ nanostructures on n-Si by hydrogenation process: synthesis and application towards self-biased UV-visible photodetection
153	MS PO-153	Ranjita Ghosh Moulick	Covalent attachment of labeled streptavidin to a Graphene oxide-Fe ₃ O ₄ nanocomposite
154	MS PO-154	Ravi K Bommali	Near-surface incorporation of Silver ions in silicon oxide/nitride dielectrics for tunable plasmonic properties
155	MS PO-155	Simi Debnath	Study of the elastic and optical properties of synthesized zinc doped manganese Spinel ferrite (Mn-Zn Fe ₂ O ₄) by Chemical Co-precipitation Method
156	MS PO-156	Sinduja M	Growth of the Bi ₂ Te ₃ nanorods by surfactant assisted hydrothermal method
157	MS PO-157	Sudhir Ramesh Nikwade	Solidification cracking of Incoloy 800 alloy
158	MS PO-158	Sunil Kumar Pradhan	Observation of high external quantum efficiency of photo-transistors based on single crystalline organic nano particle fabricated by e-beam lithography and nano manipulator
159	MS PO-159	Swagatika Kamila	2D Layered Vanadium Sulphide and Reduced Graphene Oxide Hybrids for Energy Storage Application
160	MS PO-160	Tapan K Das	Quantum Dots Sensitized Whisperonic Solar Cells
161	MS PO-161	Umananda Bhatta	Fabrication and characterization of ZnO/TiO ₂ thin films on Si(100) substrates
162	MS PO-162	Salma Khatun	Dirac States of Topological Insulators at the 2D-Limit through Scanning Tunneling Spectroscopy