

3rd International Workshop on High Entropy Materials (IWHEM 2020)
7-8 March, 2020

Department of Materials Science and Engineering
Indian Institute of Technology Kanpur

List of Poster Presentation

Poster Session A: Poster no. 01-36 (7th March, 2020)

Poster	Presenter	Title
P-01	Vikas Shivam	<i>Microstructural evolution and phase stability of mechanically alloyed AlCrFeCoNiZn high-entropy alloy</i>
P-02	Varalakshmi Somarouthu	<i>Nanocrystalline non-equiatomic Al based high entropy alloy processed through cryomilling</i>
P-03	G Surya Prakash Goud	<i>A novel low density equiatomic MgAlSiCrFe and MgAlSiCrFeNi high entropy alloy through spark plasma sintering.</i>
P-04	Yagnesh Shadangi	<i>A novel AlCuFeMnMg low-density high entropy alloy processed by mechanical alloying and spark plasma sintering</i>
P-05	Harsh Jain	<i>Phase Evolution, Microstructure and Mechanical Properties of non-equiatomic Fe-Mn-Ni-Ti-Al-Si-C High Entropy Alloy</i>
P-06	Angshuman Gupta	<i>Synthesis and Thermal Stability of Equimolar Eutectic Alumina-Rare Earth Oxide Glasses</i>
P-07	Harshad U. Gandhe	<i>Synthesis and phase evolution of perovskite multicomponent equimolar oxide ceramics with up to ten components</i>
P-08	Priyatosh Pradhan	<i>Synthesis and Characterization of Equiatomic CrMnFeCoMo High Entropy Alloy by mechanical alloying</i>
P-09	S.Arul Karthick	<i>Machine Learning Approach for the Exploration of Al-Co-Cu-Fe-Mo-Cr-Ni Components Systems</i>
P-10	Vivek Kumar Pandey	<i>Characterization and phase stability study of the TiVMoZrW refractory high entropy alloy</i>
P-11	B. Chanda	<i>Evolution of eutectic microstructure in CoCrFeNiTax (0.2 <math>x</math> <math><0.5</math>) high entropy alloys</i>
P-12	Sandeep Jaina	<i>Effect of Si addition on microstructure Evolution and wear behaviour of Co-free Al-Ni-Cr-Fe-Si High Entropy alloys</i>
P-13	Sheetal Kumar Dewangan	<i>Phase Field Modeling for the sintering of AlCrFeMnNiW_x (X=0.05,0.1,0.5) High Entropy Alloys</i>
P-14	G. Anand	<i>Predictive framework for phase stability studies of multicomponent materials</i>
P-15	Rahul Ravi	<i>Wear behavior and microstructural evolution of carbon added CoCrFeMnNi high entropy alloy fabricated by mechanical alloying and spark plasma sintering</i>
P-16	S.S. Mishra	<i>Investigation on formation and stability of Laves Phase in Multi Component High-Entropy Alloys</i>
P-17	B Kranthi Kumar	<i>Characterization and Mechanical Properties of</i>

		<i>Refractory High Entropy Alloys: A Brief Review</i>
P-18	Shanker Kumar	<i>Structural Characterization of MoNbTaTiW High Entropy Alloys</i>
P-19	Raghavendra Kulkarni	<i>Effect of synthesis route on the microstructure and magnetic properties of AlNiCo (CuFe) High entropy alloy</i>
P-20	Deekshith G. Kalali	<i>Synthesis and characterization of non-equiatomic FeMnNiCoCr and FeMnCoCr high-entropy alloys</i>
P-21	V. Madhu Babu	<i>Microstructure evolution and mechanical properties of equiatomic AlCrFeMoNbNi high-entropy alloy</i>
P-22	Rohan Onattu	<i>High Entropy Alloy: State of the Art and Future Prospective</i>
P-23	Rajesh K. Mishra	<i>Effect of sequential addition of alloying elements on structural and magnetic properties of FeCoNi-based high entropy Alloys</i>
P-24	Anjali Kanchi	<i>Microstructural study of Medium Entropy Refractory Multi Component Alloy</i>
P-25	Sarvesh Kumar	<i>On the development of γ coarsening resistant Co-Ni-Fe-Cr-Al fcc-based high entropy alloys</i>
P-26	Viney Dixit	<i>Hydride phase investigation of Ti-V-Cr alloy by using In-Situ Neutron Diffraction</i>
P-27	Janhavika Sonar	<i>Synthesis and characterisation of spinel based high entropy oxides</i>
P-28	Saikumaran A	<i>Microstructure and phase analysis of novel Equiatomic CrFeMoNbV alloys</i>
P-29	Gyan Shankar	<i>A Myth of Strain path on the Strength - Ductility Paradox in CoCuFeMnNi High Entropy Alloy</i>
P-30	Reliance Jaina	<i>Artificial Neural Network Approach to Predict hardness of FeCoNiCrMnVNb Eutectic High Entropy Alloys</i>
P-31	Piyush Kumara	<i>Deformation processing maps of FeCoNiCrAlTi High Entropy Super Alloy</i>
P-32	U. Sunkari	<i>Microstructural control and tailoring properties of brittle intermetallic containing CoCrFeNi₂.1Nbx high entropy alloys</i>
P-33	Sahil Rohila	<i>Effect of Pressure on Microstructure and Mechanical Properties of AlCoCrFeNi HEA during Sintering</i>
P-34	Divya Sri Bandla	<i>Creep behavior of Ni-based concentrated solid solution alloys</i>
P-35	Ranga Teja Pidathala	<i>Mechanical behaviour of AlFeCuMgSi light weight high entropy alloys under uniaxial tension and compression using atomistic simulations</i>
P-36	Rahul M R	<i>Accelerated design of Eutectic High Entropy Alloys by integrating experimental and computer simulations</i>

Poster Session B: Poster no. 37-77 (8th March, 2020)

P-37	Jitesh Kumar	<i>Probing solid solution strengthening effect of Al and Si addition in equiatomic CoCrFeMnN High entropy alloy</i>
P-38	Fateh Bahadur	<i>Low Cycle Fatigue Behaviour of single phase CoCuFeMnNi High Entropy Alloy</i>
P-39	Saumya	<i>Microstructural & textural investigation of underlying strengthening mechanisms in single phase quinary CoCuFeMnNi and subset alloys</i>
P-40	Lavanya Raman	<i>Deformation behaviour of CrMoNbTiW refractory high entropy alloy synthesized through powder metallurgy and casting route</i>
P-41	Rahul John	<i>Tailoring Microstructure of AlCoCrFeNi_{2.1} High Entropy Alloy via Thermo Mechanical Processing</i>
P-42	G Dan Sathiaraj	<i>Effect of laser shot peening on the microstructure and mechanical properties of CrMnFeCoNi high-entropy alloy</i>
P-43	Reshma Sonkusare	<i>High Pressure Torsion of CoCuFeMnNi High Entropy Alloy</i>
P-44	Ritukesh Sharma	<i>Microstructure and corrosion property of annealed Al-Fe based high entropy alloy</i>
P-45	Girish Khanna	<i>Mechanical and magnetic behaviour of multicomponent Fe-Co-Ni-Ti-Cu multiphase high entropy alloy</i>
P-46	Roopam Jain	<i>Understanding the rate controlling mechanisms of TRIP dual phase Fe₅₀Mn₃₀Co₁₀Cr₁₀ high entropy alloy</i>
P-47	Prince Sharma	<i>High temperature oxidation behavior of AlCrCoFeNi high entropy alloy coatings on nickel-based superalloys</i>
P-48	Gurram Pooja Srinivas	<i>Corrosion Studies Of Non-Equiatomic Fe₅₀Mn₃₀Co₁₀Cr₁₀ High Entropy Alloy</i>
P-49	K Nanda Kishore	<i>Development and mechanical properties of CoCrFeNiW-based multi-phase high-entropy alloy</i>
P-50	Ameey Anupam	<i>High Temperature Oxidation Behaviour of Selected Al-Cr based High-Entropy Alloys</i>
P-51	Mahesh S Jadhav	<i>Thermal stability of FeCoCrNi₂Al High Entropy Alloy</i>
P-52	Priyanka Sahu	<i>Influence of disc angular velocity (ω) on the thermodynamic, structural and magnetic properties of mechanically alloyed Fe-Co-Ni medium entropy alloys</i>
P-53	P. Arivazhagan	<i>Structural and Functional Properties of Multicomponent, High Entropy Spinel Ferrites</i>
P-54	Rohit R. Shahi	<i>Magnetic High Entropy Alloys</i>
P-55	Karthick Gothandapani	<i>Synthesis and characterisation of nanocrystalline high entropy pyrochlore for ODS application</i>
P-56	N. Sreenivasulu	<i>Nanocrystalline High Entropy Spinel Oxide: Synthesis and Characterization</i>
P-57	Kushal Singh	<i>Structural and Electrical Properties of Zr_xCe_{1-x}O_{2-δ} (x = 0.2 - 0.8) Ceramics</i>
P-58	Amal Mohan	<i>Formulation of Spinel-Type High Entropy Oxide by Solution Combustion Technique</i>

P-59	Annu Sharma	<i>Novel medium and high entropy perovskite oxides prepared by reverse co-precipitation</i>
P-60	Rahul Mitra	<i>Synthesis of High Entropy Diborides from Elementary Oxides via Boro-Carbothermal Route Using Reactive Spark Plasma Sintering</i>
P-61	Ashwani Kumar	<i>Processing and characterization of oxide dispersion strengthened CoFeMnNiV high-entropy alloy</i>
P-62	Anandkumar Mariappan	<i>Scalable chemical co-precipitation synthesis of multi-component equiatomic $Gd_{0.2}La_{0.2}Y_{0.2}Hf_{0.2}Zr_{0.2}O_2$ and $Gd_{0.2}La_{0.2}Ce_{0.2}Hf_{0.2}Zr_{0.2}O_2$ oxide nanoparticles</i>
P-63	Ritwik Banerjee	<i>SrTiO₃ based high entropy perovskite: a potential thermoelectric material having ultra-low thermal conductivity</i>
P-64	Disna Sahane K S	<i>Investigation on FeCoCrNiMnx (x = 0.1, 0.5, 1) High Entropy Alloys as Interconnect in Solid Oxide Fuel Cell</i>
P-65	Vivek Verma	<i>Experimental Determination of Quaternary and Quinary Interdiffusion Coefficients in Fe-Ni-Co-Cr-Mn System</i>
P-66	G. Mohan Muralikrishna	<i>Tracer diffusion in ordered pseudo-binary multi component aluminides</i>
P-67	Biswarupa Samantaray	<i>Experimental Determination of Quaternary Isotherm in Multiphase Region of Fe-Ni-Co-Cu by Diffusion Couple Technique</i>
P-68	Susanta Kumar Nayak	<i>Experimental Determination of Diffusion Kinetics in Multicomponent System</i>
P-69	Kushagra Gupta	<i>Design of Cobalt Base Nano-Lamellar Eutectic High Entropy Alloy (AlCrFeNiCo1.9) for High-Temperature Applications</i>
P-70	Yogesh Prabhu	<i>Identification of High Entropy Glass Forming Composition in Zr-Cu-Co-Al-Ti System</i>
P-71	K.S.N Satish Idury	<i>Crystallization in Zr-Ti-Cu-Ni-Al High Entropy Metallic Glass: Atomic cluster bond energy approach</i>
P-72	Anurag Bajpai	<i>A New Perspective to Thermodynamical Design of High Entropy Bulk Metallic Glasses (HE-BMGs)</i>
P-73	B. Bharath Kumar	<i>Effect of Sputtering Gas Pressure on the Growth, Morphology and Mechanical Properties of NbMoTaW Thin Films Prepared by DC Magnetron Sputtering</i>
P-74	Sufyan M. Shaikh	<i>CALPHAD and Rule-of-Mixtures: A comparative study for Refractory High Entropy Alloys</i>
P-75	Vinay B U	<i>Electrochemical impedance spectroscopy behavior of Co-Cr-Cu-Fe-Ti high entropy alloy</i>
P-76	Akanksha Dwivedi	<i>A Recipe for the Comparison of X-Ray Diffraction Intensities Across Alloys of a System in Multicomponent Alloys</i>
P-77	Subhendu Naskar	<i>CoCrFeNiMn HEA-Carbon Fibers Composites</i>