

MSEE-URA 2023 ATR Poster Session – Day 1
Tuesday, June 13, 2023

POSTER #	CODE	TITLE	PRESENTER
RESEARCH AREA 4			
1A	RA4-FA1_Miloshevsky	Investigation of Femtosecond Laser-Produced Si and Al...	Youssef Abouhussien
2A	RA4-FA2_Garay	Metal and Semiconductor Targets for Laser-Material Interact...	Javier Garay
3A	RA4-FA2_Radousky	The Optical Science Laser	Sophie Parsons
4A	RA4-FA2_Spielman	Observation of Laser Ablation and Shock Generation in Silic...	Tirtha Joshi
5A	RA4-FA2_Harilal	Direct laser impulse– PNNL progress	Matthew Polek
RESEARCH AREA 3 – FOCUS AREA 1			
6A	RA3-FA1_Harilal	Nuclear Fireball Plasma Chemistry – PNNL progress	Matthew Polek
7A	RA3-FA1_Curreli	Implementation of a semi-classical solver for scattering cross...	Stephen Armstrong
8A	RA3-FA1_Curreli	Artificial Neural Networks for Rate Prediction in U-O Plasma...	Steven Marcinko
9A	RA3-FA1_Dreizin	X-ray phase contrast imaging of powders exposed to ESD...	Shomik Mukhopadhyay
10A	RA3-FA1_Glumac	Nuclear Fireball-Related Plasma Sources and Spectroscopy	Austin Butler
11A	RA3-FA1_Levin	Study of particle dispersion in shock-dominated flows using...	Akhil Marayikkottu Vijayan
12A	RA3-FA1_Phillips	Ultraviolet Absorption Spectroscopy of Neutral and Ionized...	John McCauley
13A	RA3-FA1_Phillips	Molecular Absorption Spectroscopy in Laser Induced Plasmas	Ryland Wala
14A	RA3-FA1_Sinha	Spectral Modeling Tool Development to Aid in Understanding...	Michael DeMagistris
RESEARCH AREA 1			
15A	RA1-FA1_Wicks	Uncertainty quantification in shock compression experiments	Zixuan Ye
16A	RA1-FA1_Miloshevsky	Modeling the EOS of Carbon in Extreme Environments	Juniper Savchick
17A	RA1-FA1_Shields	Thermodynamically constrained machine learned Equation of...	Himanshu Sharma
18A	RA1-FA1_Samin	Towards a computational understanding of materials under...	Adib Samin
19A	RA1-FA2_Hurley	Breakage and Flow Fields of Ottawa Sand During Dynamic...	Brett Kuwik
20A	RA1-FA2_Hufnagel	Characterization of Geomaterials Before and During Dynamic...	Kevin Hom
21A	RA1-FA2_Ramesh	Constitutive Modeling of Brittle Rocks and Granular Solids: ...	Aaron Baumgarten
CROSS CUTTING RESEARCH INITIATIVE			
23A	CCRI_Foster	Time Lens Photon Doppler Velocimetry (TL-PDV) for Extreme..	Velat Kilic
24A	CCRI_Patel	Unsupervised Detection of Particles	Deepti Hegde
25A	CCRI_Hufnagel	A XPCI-DGS integrated technique for measuring dynamic...	Liuchi Li
26A	CCRI_Mueller	Automated Characterization of Metal Composite Combustion...	Phil Wang

MSEE-URA 2023 ATR Poster Session – Day 2
Wednesday, June 14, 2023

POSTER #	CODE	TITLE	PRESENTER
RESEARCH AREA 3 – FOCUS AREA 2			
1B	RA3-FA2_Eilers	Reference Measurements for DIMP Decomposition Products...	Natalie Gese
2B	RA3-FA2_Eilers	Thermal decomposition of MPA, a decomposition product of...	Natalie Gese
3B	RA3-FA2_Glumac	Explosive Decomposition of DIMP in Chamber Tests at UIUC	Austin Butler
4B	RA3-FA2_Menon	Experimental & Numerical Studies to Enhance Turbulent...	Achyut Panchal
5B	RA3-FA2_Phillips	Swept-wavelength external cavity quantum cascade lasers for...	Mark Phillips
6B	RA3-FA2_Sinha	Towards Higher-Fidelity Computationally-Tractable Chemistry...	Andrea Zambon
7B	RA3-FA2_Dreizin	Thermal Decomposition of Diisopropyl Methylphosphonate...	Elif Irem Senyurt
8B	RA3-FA2_Dreizin	Fluid properties of CWA surrogates	Mirko Schoenitz
9B	RA3-FA2_Dreizin	Removal of DIMP from heated oxide surfaces with focus on...	Swapnil Das
10B	RA3-FA2_Abdul-Aziz	In situ DRIFTS Study of DIMP Degradation with Doped...	Tu Nguyen
11B	RA3-FA2_Abdul-Aziz	Study of DIMP adsorption/desorption and consumption over...	Bruno Arpini
RESEARCH AREA 2			
12B	RA2-FA2_Zachariah	Decomposition mechanism of metal iodates and combustion...	Yujie Wang
13B	RA2-FA2_Zachariah	Fabrication and Combustion Behavior of Highly Reactive...	Erik Hagen
14B	RA2-FA2_Dreizin	Effect of morphology of B-KNO3 composite powders on their...	Purvam Ghandi
15B	RA2-FA2_Dreizin	Improving performance of ammonium nitrate as an oxidizer...	Purvam Ghandi
16B	RA2-FA2_Dreizin	Reactive Ni-Al composite powders with tunable morphology	Jonathan McNanna
17B	RA2-FA2_Gor	Molecular Dynamics Predictions of Viscosity for Organopho...	Ella Ivanova
18B	RA2-FA2_Groven	Ionic co-crystals for in-situ nanooxide generation	Tristan Kenny
19B	RA2-FA2_Groven	Rheology and Processing of Al:Zr particulates for Reactive...	Trigg Peasley
20B	RA2-FA2_Mangolini	Plasma-enhanced Deposition of a Fluorocarbon Shell on Sili...	Lorenzo Mangolini
21B	RA2-FA2_Wong	Ab Initio Molecular Dynamics Calculations of DIMP and Sarin...	Sohag Biswas
22B	RA2-FA2_Weihs	Ignition and Combustion of Al/Zr composite powders in vari...	Michael Flickinger
23B	RA2-FA2_Weihs	Impact of milling conditions on titania based thermites using...	Amee Polk
24B	RA2-FA2_Weihs	Characterization and Strain-rate Effects of Swaged Aluminum...	Jesse Grant
25B	RA2-FA2_Weihs	Tuning Ignition of Al-B-Ti Composite Ball-Milled Powders...	Megan Bokhoor
CROSS CUTTING RESEARCH INITIATIVE			
26B	CCRI_Foster	Integrated Field Spectroscopy for Hyperspectral Imaging of...	Colin Goodman
27B	CCRI_Hufnagel	First single-bunch x-ray phase-contrast imaging experiments...	Todd Hufnagel
28B	CCRI_Shields	UQ Efforts in CCRI	Dimitris Tsapetis