Wednesday, November 11 - Government Agency Posters				
Submission Code	**Poster Number**	**Submission Name**	**First Name**	**Last Name**
190926	G1	Effects of Heat Treatment on the Microstructure and Mechanical Performance of Ti6al4v Printed With Laser Powder Bed Fusion	Bernice	Addai
191780	G2	Cfd-Based Investigation of Inner Wall Corrosion Inhibitor Performance in Co_2 Transport Pipelines	Christina	Mensah
193238	G3	Cross-Contamination Effects in Multi-Material Laser Powder Bed Fusion 316l–cucrzr Parts	Michael	Gyan
198191	G4	Failure Modeling and Design Optimization of Type Iv Cfrp Pressure Vessels	Shane	Rodgers
198211	G5	Depth Resolved Photo Oxidation and Skin Core Embrittlement in Uv Aged Bulk Low-Density Polyethylene	matthieu	hallaert
198249	G6	Truncation Resonance Design in Phononic Structures Using Boundary Conditions	Greta	Colford
198255	G7	A Topology-Based Graph Convolutional Framework for Predicting Glass Transition Temperature in Thermoset Shape-Memory Copolym	RANSFORD	OPOKU-AFRIYIE
198261	G8	A Data-Reduction Framework for Interpretable Cislunar Trajectory Analysis and Visualization	Seur Gi	Jo
198265	G9	Layered Physics-Constrained Generative Adversarial Networks for Feasible Design Space Exploration	Sam	Sisk
198310	G10	Experimental and Geochemical Investigation of Class C Fly Ash Dissolution Under Acidic and Alkaline Conditions	Soumiya	Bellali
198316	G11	Osteogenic and Osteoimmunomodulatory Effects of Magnesium-Based Nanocomposites for Bone Regeneration and Fracture Healing	Samantha	Gmitro
198338	G12	Multimodal Edge-Ai Traffic Digital Twin Framework for Intersection Safety and Congestion Analytics	Parker	Abrantes
198351	G13	Visuotactile Robotic Sphygmomanometry via an E-Skin-Instrumented Inflatable End Effector	Chris	Huang
198371	G14	Local Uncertainty Quantification of Tpms Mechanical Properties: Linking Surrogate Model Predictions, Numerical Simulations, and Exp	Nicholas	Choi
198377	G15	Hinderance Interaction for Enhanced Nano Composite Interface	Kamalendu	Paul
198391	G16	Hydrodynamic Real-Time Hybrid Simulation of Monopile Offshore Wind Turbines With Coupled Aero-Hydro-Soil Interaction	Elaine	Liu
198401	G17	Dual Template Directed C-S-H Mineralization Enables Lightweight, Strong, and Ductile Cementitious Composites	Nusrath	Jaha
198404	G18	A Mechanical Model of Adhesive Removal via Particle Simulation	Antonio	Bu Sha
198406	G19	Shear Deformation in Carbon Fiber Reinforced Polymer Adhesively Bonded Joints Under Static and Fatigue Loading Using Digital Image	Emily	Berdis
198407	G20	Additive Manufacturing of Composites Using Recycled Carbon Fibers	Winsten	Lomax
198454	G21	Spatial Focusing of Audible Sound via Metasurface-Enabled Parametric Array Loudspeakers	Jee WOo	Kim
198455	G22	Creating a Digital Twin of an Automated Storage and Retrieval System Toward an Intelligent Factory	Zahra	Sotoudeh
198458	G23	Residual Burst Strength Modeling of Fatigue-Damaged Carbon Fiber Hydrogen Pressure Vessels	Jason	Mack
198540	G24	Data-Free Quantum-Enhanced Topology Optimization Using Variational Quantum Circuits and Neural Ordinary Differential Equations	SAQUIB AHMAD	BHUIYAN
198544	G25	On-Demand Twisting of Carbon Fibers During Additive Manufacturing of Thermoset Composites	Jared	Chapman
198547	G26	Fluid-Induced Transition Waves in Chains of Bistable Buckled Beams	Michael	Bonthron
198555	G27	Mechanical Strength of Quasi-Continuous Carbon Fiber	Andrew	Dusman
198558	G28	In-Situ Microcracking Analysis of Carbon Fiber Reinforced Thermoplastic Under Cryogenic Conditions for Liquid Hydrogen Storage App	Nanami	Whitman
198611	G29	Modeling Charge Dissipation in Granular Dielectric Deposits Formed by Electrosprayed Nanoparticle Aggregates	Srujan	Pandya`
198621	G30	Modulating Task Difficulty Using a Co-Adaptive Algorithm by Maximizing In-the-Moment Motivation, Intention, and Prompt Responsiv	Aine	Grady

198675	G31	Molecular Force Sensors for Visualizing Mechanical Forces in Biomaterials	Robert	Davis
198682	G32	Experimental Investigation Into the Thermomechanical Vibratory Response of Uncooled Rotating Detonation Engine Combustor Liners	Nathaniel	Dudko
198692	G33	Accelerating the Design of Tough Nonperiodic Fiber Networks With Coarse-Grained Molecular Dynamics, Neural-Network Surrogates,	Milad	Masrouri
198699	G34	Hyperbolic Machine Learning for Aerosol Deposition Prediction: A Transferable Surrogate Modeling Framework	Jonas	Swope
198703	G35	High-Resolution Micropatterning of Perovskite Quantum Dot Light-Emitting Devices Using a Dry Lift-Off Process	John Leo	Velpugonda
198708	G36	Mechanics-Electrochemistry Coupling at the Al-Llzo | Li Interface: A First-Principles Thermodynamic Framework	Md Takmil	Sakir
198719	G37	Microstructural and Mechanical Characterization of 316l Stainless Steel Fabricated by Wire Laser Direct Energy Deposition	Caleb	Quantson
198729	G38	Toward Digital Twins of Maize Plants Through Rover-Based 3d Reconstruction and Environmental Sensing	Srikar	Reddy
198765	G39	Self-Supervised Vggt Pose Estimation for Nerf-Based 3d Reconstruction of Field-Condition Maize	Som	Tripathi
198798	G40	Conformal Self-Limiting Electrospray Deposition of Metal Nanoparticle Green Bodies	Tejasvi	Venkat
198801	G41	Whole Body Coordination for Stable Manipulation of Fragile Objects With a Legged Mobile Manipulator in Agriculture	Fahim Shahriar	Talukder
198836	G42	Manufacturing and in Vitro Investigation of Nanobubbles for Use as Targeted Therapeutic Delivery Systems	Margaret	Nanfria
198870	G43	Fluid Dynamics and Control of a Bio-Inspired Vessel Swimming in the Wake of a Flat Plate.	Md Arshadul	Karim
198879	G44	Engineering Waste-Derived Biochar for Carbon-Negative 3d Printable Cementitious Materials Through Bio-Inspired Surface Functionali	Nishad	Ahmed
198920	G45	Shape Memory Kirigami Metamaterials for Reversible Out-of-Plane Morphing	Abraham	Boulter
198934	G46	Evolution and Acoustic Streaming-Mediated Mitigation of Cake Formation in Microfluidic Membrane Filtration	Jaime	Juarez
198935	G47	Topology-Optimized Particle Dampers for Passive Attenuation of Low-Frequency Seismic Surface Waves	Md Rizwan	Ullah
198987	G48	Spatially Guided Mixed-Reality Work Instructions for Assembly Training Using Hololens 2	Rosie	Disit Iglesias
199016	G49	Developing Highly Efficient Soybean Oil-Based Nanofluids for Industrial Machining of Advanced Materials and Mechanistic Cutting For	Anthony	Okafor