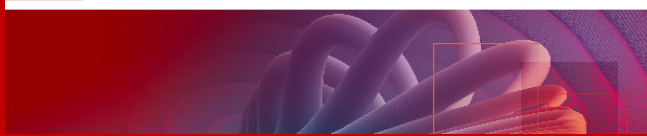




**ASME® 2020 SMASIS**  
The ASME 2020 Conference on Smart Materials,  
Adaptive Structures and Intelligent Systems

CONFERENCE  
Sep 15, 2020  
Online, Virtual



Submission Code	ASME Paper Number	Submitting Author Name	Presenting Author Name	Track	Paper Title
53089	SMASIS-2299	Adriane Moura	Adriane Moura	SYMP 3: Modeling, Simulation and Control of Adaptive Systems	Piezoelectric Nonlinear Energy Sink for Broadband Attenuation of Nonlinear Vibrations
53239	SMASIS-2427	Alexander Pankonien	Alexander Pankonien	SYMP 3: Modeling, Simulation and Control of Adaptive Systems	Deadbands Tell No Tails: X-56A Dynamic Actuation Requirements
53231	SMASIS-2429	Alissa Johnson	Alissa Johnson	SYMP 9: Special Session on Multifunctional Energy Storage Materials and Systems	Perfluorocarbon Emulsions for High Energy Density Synthetic Vascular Systems
53202	SMASIS-2411	Alper Erturk	Ahmed Allam	SYMP 7: Energy Harvesting	Enhanced Sound Energy Harvesting by Leveraging Gradient-Index Phononic Crystals
53218	SMASIS-2413	Alper Erturk	Alper Erturk	SYMP 3: Modeling, Simulation and Control of Adaptive Systems	Elastic Wave Manipulation Using Programmable Piezoelectric Metamaterials
53249	SMASIS-2444	Alper Erturk	Eetu Kohtanen	SYMP 6: Bioinspired Smart Materials and Systems	Characterization of a Multifunctional Bioinspired Piezoelectric Swimmer and Energy Harvester
53085	SMASIS-2290	Amanda Skalitzyk	Amanda Skalitzyk	SYMP 4: Integrated System Design and Implementation	Machine Design for Multiscale Nitinol Annealment Process and End Product Performance Analysis
53112	SMASIS-2298	Amir Ameli	Amir Ameli	SYMP 1: Development and Characterization of Multifunctional Materials	Interfacial Bond Strength of Various Rigid/Soft Multi-Materials Printed via Fused Filament Fabrication Process
53172	SMASIS-2357	Amit Bhayadia	Amin Karami	SYMP 3: Modeling, Simulation and Control of Adaptive Systems	An Optimal Control Method for Generation of Traveling Waves on Morphing Wing Surfaces
53141	SMASIS-2332	Anargyros Karakalas	Anargyros Karakalas	SYMP 4: Integrated System Design and Implementation	Design of Morphing Strips Using SMA Actuators Under Partial Phase Transformation Operation
53159	SMASIS-2388	Andres Arrieta	Juan Osorio	SYMP 4: Integrated System Design and Implementation	Effect of Boundary Conditions on Multistability of Tape Springs
53119	SMASIS-2311	Andrew Harper	Andrew Harper	SYMP 8: Emerging Technologies	Sensor-Data Reconstruction for Helicopter Structural-Health Monitoring Using Deep Learning
53158	SMASIS-2348	Angela Nastevska	Angela Nastevska	SYMP 6: Bioinspired Smart Materials and Systems	Design of Compliant Joints for Large Scale Structures
53201	SMASIS-2395	Anil Erol	Anil Erol	SYMP 4: Integrated System Design and Implementation	Analysis of Multi-Stable Architectures for Morphing Structures
53169	SMASIS-2355	Anthony Olivett	M. Amin Karami	SYMP 6: Bioinspired Smart Materials and Systems	Flow Control and Separation Delay in Morphing Wing Aircraft Using Traveling Wave Actuation
53234	SMASIS-2432	Anthony Smith	Anthony Smith	SYMP 4: Integrated System Design and Implementation	Automotive Grille Shutter Using Passive Shape Memory Alloy Actuation
53191	SMASIS-2383	Antonios Kotsos	Antonios Kotsos	SYMP 5: Structural Health Monitoring	An Internet of Things Approach for Dynamic and Data-Driven Remaining Useful Life Predictions
53135	SMASIS-2327	Atharva Mahabaleshwarakar	Atharva Mahabaleshwarakar	SYMP 8: Emerging Technologies	Kinematic Synthesis of Knitted Shape Memory Alloy Programmable Structures
53095	SMASIS-2281	Austin Downey	Austin Downey	SYMP 5: Structural Health Monitoring	Multi-Model Data Assimilation for Structures
53248	SMASIS-2439	Austin Downey	Austin Downey	SYMP 3: Modeling, Simulation and Control of Adaptive Systems	Real-Time Model Updating Algorithm for Structures Experiencing High-Rate Dynamic Events
53087	SMASIS-2270	Behrouz Haghgouyan	Behrouz Haghgouyan	SYMP 2: Mechanics & Behavior of Active Materials	Fatigue Crack Growth in Shape Memory Alloys Under Mechanical and Actuation Loading
53030	SMASIS-2248	Benedict Theren	Benedict Theren	SYMP 2: Mechanics & Behavior of Active Materials	Investigations Regarding Repeatability of SMAI Strokes of Electrically Activated SMA Wires
53067	SMASIS-2246	Benedict Theren	Benedict Theren	SYMP 5: Structural Health Monitoring	A Method of Crack Monitoring for Electrically Activated SMA Wires Using Thermography
53070	SMASIS-2249	Benedict Theren	Benedict Theren	SYMP 5: Structural Health Monitoring	Resistance-Based Temperature Monitoring Using Machine Learning and Adapted Activation for an SMA Locking System in Aircraft Interiors
53171	SMASIS-2397	Benjamin Saunders	Benjamin Saunders	SYMP 6: Bioinspired Smart Materials and Systems	A Novel Bio-Inspired Pneumatic Valve Adapter for Soft Robotic Vasculature
53012	SMASIS-2206	Bhargh Shah	Bhargh Shah	SYMP 4: Integrated System Design and Implementation	A Piezocomposite Actuated Propeller With an Onboard Power Generator
53212	SMASIS-2402	Bjoern Kiefer	Bjoern Kiefer	SYMP 1: Development and Characterization of Multifunctional Materials	Characterization of Iron-Based Shape Memory Alloys Under Multiaxial Loading Using a Miniaturized Test
53045	SMASIS-2283	Brandon Williams	Brandon Williams	SYMP 5: Structural Health Monitoring	Terfenol-D Carbon Fiber Reinforced Polymer (CFRP) Embedded Sensing for Early Localized Damage Detection
53130	SMASIS-2382	Brent Utter	Brent Utter	SYMP 4: Integrated System Design and Implementation	Design of Archer Fish With a Shape Memory Alloy Actuated Caudal Fin for Ethorbotic Studies
53059	SMASIS-2235	Brittany Newell	Brittany Newell	SYMP 1: Development and Characterization of Multifunctional Materials	Production of 3D Printed Flexible Strain Sensors
53061	SMASIS-2236	Brittany Newell	Cole Maynard	SYMP 5: Structural Health Monitoring	A Computational Study of Strain Sensing via 3D Printed CNF-Modified PLA Strain Gauges
53062	SMASIS-2239	Brittany Newell	David Gonzalez Rodriguez	SYMP 1: Development and Characterization of Multifunctional Materials	3D Printing of Flexible Sensing Actuators
53161	SMASIS-2349	Carlo Greco	Carlo Greco	SYMP 8: Emerging Technologies	Rehabilitation Glove Powered by Twisted and Coiled Artificial Muscles
53113	SMASIS-2301	Carson Squibb	Carson Squibb	SYMP 1: Development and Characterization of Multifunctional Materials	Mechanisms of Stiffening in Polymer-Filled Honeycomb Composites
53139	SMASIS-2322	Charles Weinberg	Charles Weinberg	SYMP 3: Modeling, Simulation and Control of Adaptive Systems	Analytical Model and Experimental Validation of Superelastic Twist Inserted Nitinol Microfilament Yarns
53227	SMASIS-2421	Charles Weinberg	Charles Weinberg	SYMP 8: Emerging Technologies	Experimental Investigation of Nitinol Microfilament Over-Twisted Coiled Yarns
53140	SMASIS-2326	Christopher Cooley	Christopher Cooley	SYMP 2: Mechanics & Behavior of Active Materials	Nonlinear Vibration of Thick Dielectric Membrane Disks With Radial Loads
53036	SMASIS-2293	Christopher Knippenberg	Christopher Knippenberg	SYMP 1: Development and Characterization of Multifunctional Materials	Functional Description for Thick Bistable Carbon Fiber Laminates With Rayleigh-Ritz, Abaqus, and Experiments
53104	SMASIS-2291	Christopher Nelon	Christopher Nelon	SYMP 1: Development and Characterization of Multifunctional Materials	Non-Traditional Shape Variations on Bistable Carbon Fiber Reinforced Polymer Laminates
53133	SMASIS-2328	Cody Gonzalez	Cody Gonzalez	SYMP 6: Bioinspired Smart Materials and Systems	Analytical Modeling of a Segmented Bimorph Lithium Ion Battery Actuator
53022	SMASIS-2210	Cody Wright	Cody Wright	SYMP 4: Integrated System Design and Implementation	Design Optimization of a Piezocomposite Morphing Multi-Element Airfoil
53023	SMASIS-2211	Cody Wright	Cody Wright	SYMP 4: Integrated System Design and Implementation	Modeling and Parametric Analysis of Multilayer Piezocomposite Actuators
53173	SMASIS-2358	Daniel Cole	Daniel Cole	SYMP 8: Emerging Technologies	The Mechanical Behavior of Materials Program at the US Army Research Office
53048	SMASIS-2232	Daniel Maiwald	Daniel Maiwald	SYMP 2: Mechanics & Behavior of Active Materials	Development Approach of Actuators for High Loads Based on Shape Memory Alloys
53103	SMASIS-2359	Darren Hartl	Patrick Walgren	SYMP 4: Integrated System Design and Implementation	Nonlinear Substructure Methods for Analysis and Design of Bending Cylinders Comprised of Hierarchical Lattices
53156	SMASIS-2350	Darren Hartl	Darren Hartl	SYMP 3: Modeling, Simulation and Control of Adaptive Systems	Selection Criteria and Parametric Optimization of Camber Morphing Aircraft
53167	SMASIS-2361	Darren Hartl	Darren Hartl	SYMP 4: Integrated System Design and Implementation	Development and Experimental Demonstration of a Shape Memory Alloy-Based Adaptive Two-Phase Radiator for Space Applications
53168	SMASIS-2362	Darren Hartl	Darren Hartl	SYMP 4: Integrated System Design and Implementation	Design, Fabrication, and Experimental Demonstration of a Shape Memory Alloy-Based Adaptive Flow Modification System
53177	SMASIS-2363	Darren Hartl	Darren Hartl	SYMP 4: Integrated System Design and Implementation	Biomimetic Adaptive Airframe Technology (Baaf) for Rotorcraft Applications
53241	SMASIS-2431	Darren Hartl	Darren Hartl	SYMP 3: Modeling, Simulation and Control of Adaptive Systems	Designing a Morphable Parabolic Reflector Antenna Using Origami-Inspired Discretization and Efficient Global Optimization
53106	SMASIS-2294	David Lattanzi	David Lattanzi	SYMP 5: Structural Health Monitoring	Spatial Statistical Methods for Complexity-Based Point Cloud Analysis
53007	SMASIS-2228	Diego Ricardo Higuera Ruiz	Diego Ricardo Higuera Ruiz	SYMP 2: Mechanics & Behavior of Active Materials	Moisture Driven Actuation in Twisted Polymers Actuators and Moisture Dependence of Thermal and Mechanical Properties Used to Predict Thermal Driven Actuation of Twisted Polymer Actuators

Submission Code	ASME Paper Number	Submitting Author Name	Presenting Author Name	Track	Paper Title
53011	SMASIS-2204	Dominik Scholtes	Dominik Scholtes	SYMP 4: Integrated System Design and Implementation	Design of a Compliant Industrial Gripper Driven by a Bistable Shape Memory Alloy Actuator
53054	SMASIS-2286	Edwin Peraza Hernandez	Derosh George	SYMP 1: Development and Characterization of Multifunctional Materials	Characterization and Design of Programmable Self-Folding Polymer Films
53055	SMASIS-2302	Edwin Peraza Hernandez	Yudong Fang	SYMP 4: Integrated System Design and Implementation	Design of Shape Memory Alloy-Based Adaptive Building Skins for Thermal Regulation
53206	SMASIS-2399	Emily Allen	Emily Allen	SYMP 6: Bioinspired Smart Materials and Systems	Controlling the Rotational DOF of Laminar Jamming Structures With End Clamping Mechanism
53115	SMASIS-2313	Emily Duan	Emily Duan	SYMP 6: Bioinspired Smart Materials and Systems	Comparative Investigation of Pennate vs. Parallel Artificial Muscle Tissue Topologies
53079	SMASIS-2273	Ephraim Zegeye	Cody J. Clarke	SYMP 6: Bioinspired Smart Materials and Systems	An Affordable and Portable Palpable System for Sensing Breast Tissue Abnormalities
53016	SMASIS-2264	Fariha Mir	Fariha Mir	SYMP 1: Development and Characterization of Multifunctional Materials	Performance of a Multifunctional Spiral Shaped Acoustic Metamaterial With Synchronized Low-Frequency Noise Filtering and Energy Harvesting Capability
53136	SMASIS-2331	Fnu Vedant	FNU Vedant	SYMP 3: Modeling, Simulation and Control of Adaptive Systems	Impact of Including Electronics Design on Design of Intelligent Structures: Applications to Multifunctional Structures for Attitude Control (MSAC)
53219	SMASIS-2414	Gary Seidel	Gary Seidel	SYMP 1: Development and Characterization of Multifunctional Materials	Piezoresistive Sensing Abilities of Randomly Dispersed Graphene Nanoplatelet Networks Embedded in an Epoxy Matrix
53229	SMASIS-2420	Henry Koon	Henry Koon	SYMP 8: Emerging Technologies	Preliminary Exploration of Auetic Superelastic Knitted Structures
53013	SMASIS-2205	Hesam Sharghi	Hesam Sharghi	SYMP 7: Energy Harvesting	Analysis of Electromagnetic Oscillatory Weight Vibration Energy Harvester Systems for Wearable Devices
53109	SMASIS-2321	Hongyang Shi	Hongyang Shi	SYMP 1: Development and Characterization of Multifunctional Materials	Highly Stretchable Resistive Strain Sensors Using Multiple Viscous Conductive Materials
53138	SMASIS-2325	Hrshikesh Danawe	Hrshikesh Danawe	SYMP 5: Structural Health Monitoring	Structurally Embedded Gradient Index Lens for Simultaneous Amplification of Guided Waves in Polymer Pipes
53035	SMASIS-2220	Ishan Karnik	Tyler Tallman	SYMP 5: Structural Health Monitoring	The Effect of Fatigue Loading on Electrical Impedance in Open-Hole Carbon Nanofiber-Modified Glass Fiber/Epoxy Composites
53225	SMASIS-2419	Jae-Hung Han	Hyeon-Ho Yang	SYMP 4: Integrated System Design and Implementation	Design of Revolute Joint With Bi-Stability Using Permanent Magnets
53253	SMASIS-2449	James Gilbert	James Gilbert	SYMP 3: Modeling, Simulation and Control of Adaptive Systems	Ultrasonic Additive Manufacturing of a Triboelectric Composite
53120	SMASIS-2306	James Scheppegrell	James Scheppegrell	SYMP 5: Structural Health Monitoring	Optimization of Rapid State Estimation in Structures Subjected to High-Rate Boundary Change
53200	SMASIS-2392	Janav Udani	Janav Udani	SYMP 4: Integrated System Design and Implementation	Programmable Metamaterials Featuring Shape and Stiffness Adaptability Based on Local Bistability
53116	SMASIS-2330	Jeong Yong Kim	Jeong Yong Kim	SYMP 6: Bioinspired Smart Materials and Systems	Development and Demonstration of an Orderly Recruitment Valve for Fluidic Artificial Muscles
53021	SMASIS-2224	Johannes Prechtl	Paul Motzki	SYMP 3: Modeling, Simulation and Control of Adaptive Systems	Self Sensing Control of Antagonistic SMA Actuators Based on Resistance-Displacement Hysteresis Compensation
53118	SMASIS-2304	Johannes Riemenschneider	Riemenschneider Johannes	SYMP 4: Integrated System Design and Implementation	Structural Design of a Shock Control Bump for a Natural Laminar Flow Aircraft Wing
53184	SMASIS-2433	Johannes Riemenschneider	Johannes Riemenschneider	SYMP 4: Integrated System Design and Implementation	Active and Passive Methods for Load Alleviation in Wind Turbines
53226	SMASIS-2424	Jonathan Kordell	Jonathan Kordell	SYMP 5: Structural Health Monitoring	A Fiber Optic Conjugate-Stress Sensor for Prognostic Health Monitoring of Fatigue
53192	SMASIS-2385	Jonathan Luntz	Adeline Wihardja	SYMP 4: Integrated System Design and Implementation	Posable Tensegrity-Constrained Inflatable Kinematic Graphical Analysis
53195	SMASIS-2386	Jonathan Luntz	Koray Benli	SYMP 4: Integrated System Design and Implementation	Moldable Rigidizing Textile Performance Design, Characterization, and Modeling
53064	SMASIS-2240	Jose Garcia	Jose Garcia-Bravo	SYMP 3: Modeling, Simulation and Control of Adaptive Systems	Simulation and Validation of Fully 3D Printed Soft Actuators
53066	SMASIS-2245	Jose Garcia	Jose Garcia	SYMP 4: Integrated System Design and Implementation	The Effects of Additive Manufacturing and Electric Poling Techniques on PVDF Thin Films: Towards 3D Printed Functional Materials
53187	SMASIS-2378	Joshua Maraj	Joshua J. Maraj	SYMP 6: Bioinspired Smart Materials and Systems	Biomolecular Synapses for Adaptive Filtering in Physical Neuromorphic Networks
53157	SMASIS-2352	Joyce El-Beyrouthy	Joyce El Beyrouthy	SYMP 6: Bioinspired Smart Materials and Systems	Continuous and Rapid Measurement of Membrane Potential Through Intramembrane Field Compensation
53069	SMASIS-2250	Julio Hernandez	Julio Hernandez	SYMP 1: Development and Characterization of Multifunctional Materials	The Piezoresistive Response of CNF/Epoxy to One-Dimensional Strain Wave Excitation via Remote Loading
53236	SMASIS-2446	Junrui Liang	Xin Li	SYMP 7: Energy Harvesting	System Design and Implementation of a Transient-Motion-Powered IoT Sensor Node
53047	SMASIS-2241	Kazuko Fuchi	Kazuko Fuchi	SYMP 8: Emerging Technologies	Investigation of Analysis and Gradient-Based Design Optimization Using Neural Networks
53065	SMASIS-2242	Kenny Pagel	Kenny Pagel	SYMP 4: Integrated System Design and Implementation	Development of a Shape Memory Alloy Actuator for a Micromechanical Sterilization Cycle Counter
53243	SMASIS-2435	Kevin Billon	Kevin Billon	SYMP 2: Mechanics & Behavior of Active Materials	Numerical Optimization of Liner Impedance in Acoustic Duct
53256	SMASIS-2452	Latha Nataraj	Latha Nataraj	SYMP 2: Mechanics & Behavior of Active Materials	Phase Transition-Enabled Shape Adaptation for Aerial Platforms
53068	SMASIS-2267	Li Ai	Li Ai	SYMP 5: Structural Health Monitoring	Deep Learning Source Localization of Impact on Thermoplastic Control Surface
53176	SMASIS-2366	Libo Wu	Libo Wu	SYMP 8: Emerging Technologies	True Presence Detection via Passive Infrared Sensor Network Using Liquid Crystal Infrared Shutters
53162	SMASIS-2351	Lihua Tang	Lihua Tang	SYMP 3: Modeling, Simulation and Control of Adaptive Systems	Band Gap Formation in Metamaterial Beam With Torsional Local Resonators for Vibration Suppression
53224	SMASIS-2418	Lihua Tang	Lihua Tang	SYMP 7: Energy Harvesting	A Lumped Parameter Approach for Analysing a Metamaterial Beam Based Piezoelectric Energy Harvester Around Fundamental Resonance
53029	SMASIS-2280	Lukas Zimmer	Lukas Zimmer	SYMP 4: Integrated System Design and Implementation	Adaptive Material Handling System Based on Shape Memory Alloy Actuators
53154	SMASIS-2342	Maja Anachkova	Jovana Jovanova	SYMP 6: Bioinspired Smart Materials and Systems	Design and Analysis of a Modular VTOL Drone With Bat-Inspired Wings
53077	SMASIS-2256	Martin Pohl	Martin Pohl	SYMP 4: Integrated System Design and Implementation	Design and Experimental Investigation of a Flexible Trailing Edge for Wind Energy Turbine Blades
53128	SMASIS-2310	Martin Radestock	Martin Radestock	SYMP 3: Modeling, Simulation and Control of Adaptive Systems	Experimental Study of Flexible Skin Designs Between a Moving Wing Segment and a Fixed Wing Part on a Full Scale Demonstrator
53223	SMASIS-2437	Masoud Zarepoor	Masoud Zarepoor	SYMP 4: Integrated System Design and Implementation	Fabrication and Testing of a Soft Shape Memory Alloy Actuator With an Integrated Liquid Metal Sensor
53216	SMASIS-2409	Matthew Backfish	Matthew Backfish	SYMP 2: Mechanics & Behavior of Active Materials	Nitinol as a Drive Mechanism in Drug Delivery Devices
53008	SMASIS-2215	Matthew Snyder	Andrew Ehler	SYMP 4: Integrated System Design and Implementation	Design and Test of an Articulation Mechanism for a Morphing Missile Nosecone
53245	SMASIS-2436	Matthias Perez	Matthias Perez	SYMP 2: Mechanics & Behavior of Active Materials	Design and Optimization of Piezoelectric Actuators for Aeroacoustic Noises Control in a Turbofan
53208	SMASIS-2412	Michael Kuntz	Michael Kuntz	SYMP 2: Mechanics & Behavior of Active Materials	Functionally Graded High Temperature Shape Memory Alloy Miniature Actuators
53147	SMASIS-2339	Micheal Bass	Micheal Bass	SYMP 2: Mechanics & Behavior of Active Materials	Shape Memory Alloy Driven Actuation Concepts for Morphing Low-Boom Supersonic Aircraft Configurations
53091	SMASIS-2347	Michelle Makhoul-Mansour	Michelle Makhoul-Mansour	SYMP 6: Bioinspired Smart Materials and Systems	Adaptive Bioinspired Synthetic Tissues
53080	SMASIS-2266	Midhan Siwakoti	Midhan Siwakoti	SYMP 2: Mechanics & Behavior of Active Materials	Localized Joule Heating for Self-Folding of Shape Memory Polymer Origami
53246	SMASIS-2438	Mohammad Alshaikh Ali	Mohammad Alshaikh Ali	SYMP 5: Structural Health Monitoring	An Impact-Based Experimental Setup for Evaluation of Rapid Electromechanical Impedance-Based Structural Health Monitoring
53024	SMASIS-2212	Mohammad Katibeh	Mohammad Katibeh	SYMP 4: Integrated System Design and Implementation	Parametric Analysis of Structural and Aerodynamic Properties of a Solid-State Ornithopter
53131	SMASIS-2316	Mohammad Mousavi	Mohammad Mousavi	SYMP 7: Energy Harvesting	Bi-Stable Triboelectric Generators and Autonomous Shock Sensing
53179	SMASIS-2381	Myungwon Hwang	Myungwon Hwang	SYMP 7: Energy Harvesting	Discreteness Effect in Bistable Lattices to Enhance Energy Harvesting Potential
53255	SMASIS-2451	Nabid Aunjum Hossain	Nabid Aunjum Hossain	SYMP 7: Energy Harvesting	Characterization of a Packaged Triboelectric Harvester Under Simulated Gait Loading for Load Sensing in Total Knee Replacement
53163	SMASIS-2371	Nakash Nazeer	Nakash Nazeer	SYMP 4: Integrated System Design and Implementation	Multi-Modal Fibre Optic Shape Sensing for the Smart-X Morphing Wing Demonstrator
53126	SMASIS-2319	Nathan Ley	Nathan Ley	SYMP 2: Mechanics & Behavior of Active Materials	Shape Memory and Mechanical Properties of Pre-Aged Thermo-Mechanically Processed High HF Containing Nitihf

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53125	SMASIS-2312	Nathan Salowitz	Nathan Salowitz	SYMP 5: Structural Health Monitoring	Effects of D15 Mode Pzt Transducer Location on Mode Selectivity of Lamb Waves
53210	SMASIS-2404	Nicolas Michaelis	Nicolas Michaelis	SYMP 2: Mechanics & Behavior of Active Materials	Investigation of Elastocaloric Air Cooling Potential Based on Superelastic SMA Wire Bundles
53175	SMASIS-2360	Nikta Amiri	Nikta Amiri	SYMP 6: Bioinspired Smart Materials and Systems	Finite Element Modeling and Parametric Study of Piezoelectric Dental Retainers
53111	SMASIS-2344	Oleg Testoni	Oleg Testoni	SYMP 1: Development and Characterization of Multifunctional Materials	Mechanical Characterisation of a Novel Concept of Adaptive Electrostatic Friction Damper
53198	SMASIS-2390	Paris Von Lockette	Denise Widdowson	SYMP 2: Mechanics & Behavior of Active Materials	A Computational Framework for Predicting Properties From Multifield Processing Conditions in Polymer Matrix Composites
53160	SMASIS-2375	Parth Kotak	Parth Kotak	SYMP 6: Bioinspired Smart Materials and Systems	Boundary Layer Transition Induced by Bio-Inspired Twisted Spiral Artificial Muscles
53046	SMASIS-2225	Patrick Musgrave	Patrick Musgrave	SYMP 3: Modeling, Simulation and Control of Adaptive Systems	Procedure for Tailoring Steady-State Traveling Waves for Underwater Propulsion and Solid-State Motion
53181	SMASIS-2372	Paul Gilmore	Paul Gilmore	SYMP 4: Integrated System Design and Implementation	Characterization and Development of Lightweight Piezoelectric Pump
53014	SMASIS-2284	Rachael Granberry	Rachael Granberry	SYMP 8: Emerging Technologies	Design and Experimental Investigation of Mechanical Actuator Fabrics Composed of Torque-Unbalanced Sma Yarns
53238	SMASIS-2426	Rachael Granberry	Rachael Granberry	SYMP 4: Integrated System Design and Implementation	Preliminary Investigation of the Design of a Mechanically Antagonistic, Actuating Countermeasure Garment for Astronauts Post-Spaceflight
53174	SMASIS-2365	Rizwana Akter	Rizwana Akter	SYMP 3: Modeling, Simulation and Control of Adaptive Systems	Fabrication of a 3D Bistable Composite
53026	SMASIS-2255	Robin Roj	Ralf Theiß	SYMP 4: Integrated System Design and Implementation	Development of Shape Memory-Based Elastic-Adaptive Damping Elements for Sport and Rehabilitation Equipment
53078	SMASIS-2257	Robin Roj	Ralf Theiß	SYMP 4: Integrated System Design and Implementation	Process Optimization of Local Annealing of Shape Memory Alloy Wires for Plagiarism Detection
53081	SMASIS-2260	Robin Roj	Ralf Theiß	SYMP 4: Integrated System Design and Implementation	Data Analytics Supported Quality Control of Serial-Produced SMA-Actuators for Space Applications
53137	SMASIS-2320	Rocco Vertechy	Rocco Vertechy	SYMP 3: Modeling, Simulation and Control of Adaptive Systems	Additively Manufactured Continuous Fibre-Reinforced Thermoplastics for Mechanisms Subjected to Predominant Inertial Load: A Case Study
53028	SMASIS-2214	Rouven Britz	Rouven Britz	SYMP 2: Mechanics & Behavior of Active Materials	Decoupled Antagonistic SMA Actuator for Valve Applications
53020	SMASIS-2231	Rupal Srivastava	Rupal Srivastava	SYMP 3: Modeling, Simulation and Control of Adaptive Systems	Vibration Response Studies of Bi-Morph SMA Hybrid Composite Using 3D Laser Doppler Vibrometer
53082	SMASIS-2265	Russell Mailen	Russell Mailen	SYMP 8: Emerging Technologies	Investigation of Reconfigurable Cylindrical Shells With Multiple Stable States
53075	SMASIS-2258	Ryan Long	Ryan Long	SYMP 1: Development and Characterization of Multifunctional Materials	Fabrication of Tessellated Structures via Simultaneous Self-Folding
53049	SMASIS-2287	Rytis Mitkus	Rytis Mitkus	SYMP 4: Integrated System Design and Implementation	Investigation and Attempt to 3D Print Piezoelectric 0-3 Composites Made of Photopolymer Resins and PZT
53005	SMASIS-2202	Sean Carey	Sean Carey	SYMP 1: Development and Characterization of Multifunctional Materials	Reconfigurable Multi-Stable Helical Lattice
53251	SMASIS-2447	Simge Uzun	Simge Uzun	SYMP 9: Special Session on Multifunctional Energy Storage Materials and Systems	Mxene Liquid Crystals and Fibers
53153	SMASIS-2341	Simona Domazetovska	Jovana Jovanova	SYMP 6: Bioinspired Smart Materials and Systems	Environmentally Friendly Bio-Inspired Turtle Robot
53247	SMASIS-2440	Soobum Lee	Christopher Mullen	SYMP 7: Energy Harvesting	Design Optimization of an Inductive Power Transfer System
53170	SMASIS-2354	Subhadeep Koner	Subhadeep Koner	SYMP 6: Bioinspired Smart Materials and Systems	Shaping Action Potentials and Activity-Dependent Plasticity in Bio-Molecular Neurons
53185	SMASIS-2376	Subhadeep Koner	Subhadeep Koner	SYMP 6: Bioinspired Smart Materials and Systems	Synapse-Inspired, Memristive Polymeric Devices Based on PvdF and Ionic Liquid
53076	SMASIS-2261	Susanne-Marie Kirsch	Susanne-Marie Kirsch	SYMP 2: Mechanics & Behavior of Active Materials	SMA Antagonistic-Micro-Wire Bundle: First Measurement Results
53083	SMASIS-2262	Susanne-Marie Kirsch	Felix Welsch	SYMP 3: Modeling, Simulation and Control of Adaptive Systems	System Simulation of an Elastocaloric Heating and Cooling Device Based on SMA
53034	SMASIS-2219	Suyi Li	Suyi Li	SYMP 8: Emerging Technologies	Pneumatic Extension Actuators With Kirigami Skins
53050	SMASIS-2227	Talal Salem	Talal Salem	SYMP 1: Development and Characterization of Multifunctional Materials	Tunable Postbuckling Systems of Bi-Walled Nonuniform Beams
53196	SMASIS-2403	Tanay Topac	Tanay Topac	SYMP 1: Development and Characterization of Multifunctional Materials	Target Specific Design of Large Area Stretchable Electronics
53151	SMASIS-2367	Tigran Mkhoyan	Tigran Mkhoyan	SYMP 4: Integrated System Design and Implementation	Design and Real-Time Implementation of a Vision-Based Adaptive Model-Free Morphing Wing Motion Control Method
53165	SMASIS-2370	Tigran Mkhoyan	Tigran Mkhoyan	SYMP 4: Integrated System Design and Implementation	Design of a Smart Morphing Wing Using Integrated and Distributed Trailing Edge Camber Morphing
53166	SMASIS-2369	Tigran Mkhoyan	Tigran Mkhoyan	SYMP 4: Integrated System Design and Implementation	Integration of Active Morphing Technology With Smart Morphing Wing Concept for Simultaneous In-Flight Performance Optimisation, Load Alleviation and Flight Dynamic Control
53060	SMASIS-2238	Tom Gorgens	Paul Motzki	SYMP 2: Mechanics & Behavior of Active Materials	High Voltage AC Control of SMA Wires
53215	SMASIS-2407	Uwe Marschner	Uwe Marschner	SYMP 3: Modeling, Simulation and Control of Adaptive Systems	Combined Finite Element Method (FEM) and Network Simulation of a Nonlinear Electromagnetic Energy Harvester
53217	SMASIS-2408	Uwe Marschner	Uwe Marschner	SYMP 3: Modeling, Simulation and Control of Adaptive Systems	Prediction of the Behavior of Dynamically Actuated DE Roll-Actuators Using Equivalent Circuits
53155	SMASIS-2343	Vasko Changoski	Jovana Jovanova	SYMP 6: Bioinspired Smart Materials and Systems	Autonomous Multifunctional Vehicle With Integrated Bio-Inspired SMA Actuated Grasper
53180	SMASIS-2368	Vincent Stuber	Vincent Stuber	SYMP 4: Integrated System Design and Implementation	Boundary Layer State Detection Using Piezoelectric Sensors
53122	SMASIS-2307	Wei-Hsin Liao	Gaoyu Liu	SYMP 4: Integrated System Design and Implementation	Magnetorheological Damper With Micro-Grooves: Design and Experiment Study on Mechanical-Electric Characteristics of a CantileverBeam of a Composite PZT Patch
53037	SMASIS-2221	Xiaomin Xue	Xiaomin Xue	SYMP 7: Energy Harvesting	On the Effects of Electrical Conductivity on the Triboelectric Behavior of a PDMS-Based Composite Material
53097	SMASIS-2300	Xiaoyue Zhao	Xiaoyue Zhao	SYMP 7: Energy Harvesting	Optimization of a Bioinspired Piezocomposite Peristaltic Pump Based on an Electromechanical Model
53017	SMASIS-2207	Xin Shan	Xin Shan	SYMP 4: Integrated System Design and Implementation	A Lumped Parameter Electro-Mechanical-Fluid Coupling Model for an Oscillating Beam in a Fluid
53018	SMASIS-2208	Xin Shan	Xin Shan	SYMP 4: Integrated System Design and Implementation	Ultra-High Current Mechanical Energy Harvester Based on Lithium Cobalt Oxide
53235	SMASIS-2428	Xiujun Yue	Xiujun Yue	SYMP 7: Energy Harvesting	Modular Design of an SMA Driven Continuum Robot
53027	SMASIS-2213	Yannik Goergen	Yannik Goergen	SYMP 4: Integrated System Design and Implementation	Feasibility Study of Reinforcement Learning Control for Magnetorheological Elastomer Based Tunable Vibration Absorber System
53244	SMASIS-2434	Young-Keun Kim	Young-Keun Kim	SYMP 4: Integrated System Design and Implementation	Noncontact/Remote Material Characterization Using Ultrasonic Guided Wave Methods
53101	SMASIS-2288	Zhaoyun Ma	Lingyu Yu	SYMP 5: Structural Health Monitoring	Harnessing Kinetic Energy From Human Motions With a High-Efficiency Wearable Electromagnetic Energy Harvester
53041	SMASIS-2222	Zhongjie Li	Zhongjie Li	SYMP 7: Energy Harvesting	