

Special Session of the DFG Priority Program SPP2206 'KOMMMA'

Actuator 2021, Online Conference

Friday, February 19

Time (CET)	Title and Authors
17:00 – 17:10	A Consistent View on Cooperative Multistage Electrostatic Actuation Martin Hoffmann and Peter Conrad Microsystems Technology, Ruhr-University Bochum, Germany
17:10 – 17:20	Bi-stable Shape Memory NiTi-X / SU-8 Polymer Composites with a Tunable Glass Transition Temperature Duygu Dengiz, Sabrina Curtis, Prasanth Velvaluri, Lars Bumke, Justin Jetter, and Eckhard Quandt Institute of Materials Science, Kiel University, Germany
17:20 – 17:30	Development of Co-Integrated Shape Memory Actuators for Silicon Micro- and Nanomechanics Zixiong Li ¹ , Gowtham Arivanandhan ¹ , Sanaz Rastjoo ¹ , Randy Fechner ¹ , Lars Bumke ² , Eckhard Quandt ² and Manfred Kohl ¹ ¹ Institute of Microstructure Technology, Karlsruhe Institute of Technology, Germany ² Institute of Materials Science, Kiel University, Germany
17:30 – 17:40	Design Concepts of Multistage Multistable Cooperative Electrostatic Actuation System with Scalable Stroke and Large Force Capability Hussam Kloub and Ulrich Mescheder Mechanical and Medical Engineering, Furtwangen University, Germany
17:40 – 17:50	Design and characterization of polymeric domes as biasing elements for dielectric elastomer membrane actuators Julian Neu ¹ , Sipontina Croce ¹ , Jonas Hubertus ² , Gianluca Rizzello ¹ , Günter Schultes ² , and Stefan Seelecke ^{1,3} ¹ Intelligent Material Systems Lab, Department of Systems Engineering, Saarland University, Saarbruecken, Germany ² Department of Sensors and Thin Films, University of Applied Sciences of Saarland, Saarbruecken, Germany ³ Center for Mechatronics and Automation Technologies (ZeMA) gGmbH, Saarbruecken, Germany
17:50 – 18:00	Modeling and simulation of compliant biasing systems for dielectric elastomer membranes based on polymeric domes Sipontina Croce ¹ , Julian Neu ¹ , Jonas Hubertus ² , Gianluca Rizzello ¹ , Günter Schultes ² , and Stefan Seelecke ^{1,3} ¹ Intelligent Material Systems Lab, Department of Systems Engineering, Saarland University, Saarbruecken, Germany ² Department of Sensors and Thin Films, University of Applied Sciences of Saarland, Saarbruecken, Germany ³ Center for Mechatronics and Automation Technologies (ZeMA) gGmbH, Saarbruecken, Germany
18:00 – 18:10	Simulation of Static Pull-in Instability of Hybrid Levitation Microactuators Kirill Poletkin Institute of Microstructure Technology, Karlsruhe Institute of Technology, Germany