

4DMDA 2023



Conference Schedule

Day 1

September 7, 2023

Session 1		
Presentation Time (Atlanta Time)	Presentation Title	Presenting Author/s
08:30	Check in for in-person attendees	
09:00	Welcome Message for Conference Opening	
09:10	Keynote 1: The Pioneering Journey of 4D Textiles	Thomas Gries
9:40	Keynote 2: DLP based Multimaterial 3D Printing for Multifunctional 4D Printing	Qi (Kevin) Ge
10:10	Sustainable Robotic Joints 4D Printing Using Reinforcement Learning	Moslem Mohammadi, Ali Zolfagharian
10:30	Meta-Laminar Jamming Actuators by 4D Printing	Mohammadreza L Dezaki, Mahdi Bodaghi
10:50	Designing new Materials for 4D (Micro)printing	Christoph A. Spiegel, Li-Yun Hsu, Philipp Mainik, Eva Blasco
11:10	4D printing of PLA/(PLA-TPU)-Based Metastructure: Examining the Mechanical, Thermal, and Shape Memory Properties	Saiyadali H Ladakhan, Rakshith B Sreesh, Somashekara M Adinarayanappa
11:30	4D printing of Bioinspired Lattice Structure using Stimuli Response Materials: Investigating the effect of Unit Cell and	Somayeh Vatanparast, Alberto Boschetto, Luana Bottini

	Process Parameters on Shape Shifting and Recovery Behavior	
11:50-12:30	COFFEE/LUNCH BREAK	
Presentation Time (Atlanta Time)	Presentation Title	Presenting Author/s
12:30	Keynote 3: Sustainable Morphing Matter	Lining Yao
13:00	4D Vertical Printing (4DZP): Hygro-Responsive Shape-Change Deformations with complex non-planar rest state geometries	Fabio Bianconi, Marco Filippucci, David Correa, Giulia Pelliccia
13:20	Advanced Additive Manufacturing of Programmable Liquid Crystal Elastomer Structures via Melt Electrowriting	Mehrzad Javadzadeh, J del Barrio and C Sánchez-Somolinos
13:40	Additive Manufacturing of Continuous Carbon-Fibre Composites: Mechanical Characterization	Amirhosein Sakhaei
14:00	4D Printing: Probably the easiest way to produce thermoresponsive objects	Dilip Chalissery, Theodor Galambos, Supriya Cheerla, Fabian Ziervogel, Thorsten Pretsch
14:20	Effect of Textile Pre-stretch and Printed Geometry on the Curvature of PLA-Lycra 4D-Textiles	Stefano Pandini, Chiara Pasini, Antonio Fiorentino, Davide Battini, Andrea Avanzini, Ileana Bodini, Simone Pasinetti
14:40	Watertight and Failure Modes of Additive Manufactured Polymeric Material with Different Coats	Pedro H A Costa, C T Duarte, H F M de Queiroz, J.S.S. Neto, D K K Cavalcanti, M D Banea
15:00	4D Printing of Shape Memory Polymer via Extrusion Additive Manufacturing: Effect of various programming	Bijaya Bikram Samal, Anita Jena, Shailendra Kumar Varshney, Cheruvu Siva Kumar
15:20	Keynote 4: Design for Multi-Material 4D Printing	Frederic Demoly

Day 2

September 8, 2023

Presentation Time (Atlanta Time)	Presentation Title	Presenting Authors
09:00	Plenary 1: 4D: Beyond Printing	Skylar Tibbits
09:40	Conical Shells Made by 4D Printing of Composites	Suong Van Hoa, Mahmoud Fereidouni
10:00	4D Printed Low-Weight Foaming Polylactic Acid: Process-Structure-Shape Memory Relationships	Chadurvedi Venkatesan, Qi Xiaoying, Lee Yaw Chuan, Muthu Vignesh Vellayapan, Dennis Neo Wee Keong, Seet Hang Li, Nai Mui Ling Sharon, David Rosen
10:20	Joule Heating of 4D Printed On-Way and Two-Way PLA Grippers Using Nichrome Sheets	Enrico Adriel Soehardjianto, and Marwan Nafea
10:40	3D printing Programmable Liquid Crystal Elastomer Soft Pneumatic Actuators	Wei Liao, Zhongqiang Yang
11:00	Keynote 5: Defects on Components Produced by Additive Manufacturing: Problem or Opportunity?	Ana Paula Piedade
11:30	Keynote 6: Biological Inspiration and Local Materials for 4D Printed Composites	Antoine Le Duigou
12:00-12:40	COFFEE/LUNCH BREAK	
Presentation Time (Atlanta Time)	Presentation Title	Presenting Author
12:40	Plenary 2: 4D Printing Perspectives – Past, Present, Future	Martin Dunn
13:20	Towards Additive Manufacturing of Multi-Material, Superconducting Structures	Fabiano Carvalho de Castro Sene
13:40	Leveraging Metadata Ontology and Equation Expression Trees for 4D Printing Knowledge Extraction	Shengyu Liu, Kyoung-Yun Kim
14:00	Freeform Embedded 4D Printing of Liquid Crystal Elastomers	Luke McDougall, Jeremey Herman, Emily Huntley, Adam Cook, Timothy White, Bryan Kaehr, Devin J Roach

14:20	Design and Evaluation of High-gravitational Fused Deposition Modeling System	Xin Jiang, Ryo Koike
14:40	Multiphoton Lithography of 4D Materials	Bryan Kaehr
15:00	Keynote 7: Advanced 3D/4D Bioprinting and Nanotechnology for Complex Tissue Regeneration	Lijie Grace Zhang
15:30	Conference Wrap Up	

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