

# 2024 AMIC Annual Meeting Poster Sessions

THURSDAY, MARCH 14

3:30 - 4:15 PM

Poster Number	Group	Poster Title and Authors
1	MRSEC Seed	<b>High-Voltage (&gt;1.2 kV) AlGaIn/GaN Monolithic Bidirectional HEMTs With Low On-Resistance</b> <i>Md Tahmidul Alam, Jiahao Chen, Ruixin Bai, Shubhra S. Pasayat, Chirag Gupta</i> <i>Presented by Md Tahmidul Alam</i>
2	MRSEC IRG1	<b>Predicting the Effective Properties of Polycrystalline Materials Using Graph Neural Network</b> <i>Minyi Dai, Mehmet F Demirel, Xuanhan Liu, Yingyu Liang, Jia-Mian Hu</i> <i>Presented by Minyi Dai</i>
3	MRSEC IRG 2	<b>First-principles Calculations of Magnetic Properties in Two-dimensional Materials</b> <i>Wuzhang Fang</i> <i>Presented by Wuzhang Fang</i>
4	MRSEC IRG 2	<b>Epitaxy, Exfoliation, and Strain Induced Magnetism and Superconductivity in GdAuGe Membranes</b> <i>Zach Laduca, Tamalika Samanta</i> <i>Presented by Zach Laduca and Tamalika Samanta</i>
5	MRSEC IRG 2	<b>Atomic Sliding Transition Detected by Nanomechanical Resonator</b> <i>Yulu Mao</i> <i>Presented by Yulu Mao</i>
6	Mawst Lab	<b>Selected Area Growth of High Density III-V/N Quantum Dots by Diblock Copolymer Lithography and Metalorganic Vapor Phase Epitaxy</b> <i>N. Pokharel, C. Liu, M.A.B.Ponce, J.D. Kirch, S. Xu, A. Kvit, P. Gopalan, L.J. Mawst</i> <i>Presented by Nikhil Pokharel</i>
7	MRSEC IRG1	<b>Surfactant Detection Using Surface-immobilized Liquid Crystal Droplets with Machine Learning</b> <i>Amy Qin, Fengrui Wang, Claribel Acevedo-Vélez, Reid Van Lehn, David Lynn, Victor Zavala</i> <i>Presented by Amy Qin</i>
8	Franck Lab	<b>Development of a Carbon Nanotubes (CNT) – Polydimethylsiloxane (PDMS) Micro-Newton Force Sensor for Rate-Dependent Hydrogel Characterization</b> <i>Sinan Candan, Vanessa Barton, Joseph Andrews, Jacob Notbohm, Christian Franck</i> <i>Presented by Sinan Candan</i>

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9	Min Lab	<p><b>Real-time Monitoring of Manufacturing Machines and Human-centric Assembly Operations</b></p> <p><i>Vignesh Selvaraj, Monami Bhuyan, Sangkee Min</i></p> <p><i>Presented by Vignesh Selvaraj</i></p>
10	Li Lab	<p><b>Molecular Dynamics Simulations to Investigate the Antibiotic Potential of Anisotropic Nanoparticles</b></p> <p><i>Presented by Danh Thanh Nguyen</i></p>
11	Choy Lab	<p><b>Innovations in the Wettability and Characterization of Fluorinated Diamond-Like Carbon Coatings</b></p> <p><i>Yuhan Tong, Maryam Zahedian, Aiping Zeng, Patrick J. Heaney, Ricardo Vidrio, Mike Efremov, Jennifer T. Choy</i></p> <p><i>Presented by Yuhan Tong</i></p>
12	MRSEC IRG 2	<p><b>Terahertz Sensing Based on Layered Topological Semimetal</b></p> <p><i>Tairan Xi, Haotian Jiang, Yuchen Gu, Yulu Mao, Carter Fox, Yangchen He, Daniel Rhodes, Daniel van der Weide, Ying Wang, Jun Xiao</i></p> <p><i>Presented by Tairan Xi</i></p>
13	Chen Lab	<p><b>In-situ Monitoring of Additive Manufacturing Processes</b></p> <p><i>Jiandong Yuan, Junye Huang, Ali Nabaa, Matthias Beuting, Lianyi Chen</i></p> <p><i>Presented by Jiandong Yuan</i></p>
14	Civil MARC	<p><b>Evaluation of the Rheological Properties and Molecular Weight Distributions of Asphalt Binder under Multiple Aging and Rejuvenation Cycles</b></p> <p><i>Rui Wang, Ruihua Zhang, Hussain Bahia</i></p> <p><i>Presented by Runhua Zhang</i></p>
15	Li Lab	<p><b>Benchmarking Study of Deep Generative Machine Learning Models for Inverse Polymer Design</b></p> <p><i>Lei Tao, Vikas Varshney, Ying Li</i></p> <p><i>Presented by Tianle Yue</i></p>