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**Thomas George
Achyut K. Dutta
M. Saif Islam**
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Contents

ix	<i>Authors</i>
xiii	<i>Conference Committee</i>
xvii	<i>Introduction</i>

HYBRID INTEGRATED QUANTUM PHOTONICS

10639 03	Quantum emitters in 2D materials (Invited Paper) [10639-2]
10639 04	Cavity integrated layered material devices (Invited Paper) [10639-3]
10639 05	Controlling light with quantum dot spin on-a-chip (Invited Paper) [10639-4]

IMAGING WITH SUBWAVELENGTH PIXELS

10639 07	Plasmonic heterodimensional resonance for subwavelength imaging (Invited Paper) [10639-6]
10639 08	Diffractive optics approach towards subwavelength pixels (Invited Paper) [10639-7]
10639 09	Subwavelength imaging challenges in the infrared and THz wavebands (Invited Paper) [10639-8]
10639 0A	Spatial filtering of evanescent waves with rough multilayer hyperbolic metamaterials (Invited Paper) [10639-9]

ORIGAMI AND KIRIGAMI-BASED TECHNOLOGIES

10639 0B	Designing materials and devices to revolutionize and engineer the future of electronics and photonics through computationally led and data-driven approaches (Keynote Paper) [10639-10]
10639 0E	Folding and stretching a thermoelectric generator (Invited Paper) [10639-13]

**MICRO/NANO-STRUCTURES FOR ENHANCING CONTROL OF LIGHT-MATTER INTERACTIONS FOR
ADVANCED MICROSYSTEMS**

10639 OH **Opto-plasmonic devices: controlling light with electrons (Invited Paper)** [10639-16]

FLATLAND PHOTONICS FOR WAVE SHAPING, IMAGING, AND SENSING

10639 OM **Hyperbolic metamaterial-based plasmoelectronic nanodevices for detection and harvesting of infrared radiation (Invited Paper, Rising Researcher Paper)** [10639-21]

10639 OO **Geometric phase and nonlinear photonic metasurfaces (Invited Paper)** [10639-23]

SYNTHESIS, ANALYSIS, AND APPLICATIONS OF 2D MATERIALS

10639 OT **Controlled growth of 2D heterostructures and prevention of TMD oxidation (Invited Paper)** [10639-29]

10639 OU **Hybridized graphene materials (Invited Paper)** [10639-30]

10639 OV **Density-dependent excitonic properties and dynamics in 2D heterostructures consisting of boron nitride and monolayer or few-layer tungsten diselenide (Invited Paper)** [10639-31]

10639 OX **Peptoid-based membrane-mimetic two dimensional nanomaterials (Invited Paper)** [10639-33]

NOVEL HARSH ENVIRONMENT SENSORS FOR ENERGY APPLICATIONS

10639 OY **The role of sensors and controls in transforming the energy landscape (Keynote Paper)** [10639-34]

10639 OZ **Raman spectroscopy of oxygen carrier particles in harsh environments (Invited Paper)** [10639-35]

10639 10 **High temperature monitoring using a novel fiber optic ultrasonic sensing system (Invited Paper)** [10639-36]

10639 12 **Multi-point fiber optic sensors for real-time monitoring of the temperature distribution on transformer cores (Invited Paper)** [10639-38]

REMOTE SENSING TECHNIQUES AND APPLICATIONS

10639 15 **High areal rate longwave-infrared hyperspectral imaging for environmental remote sensing (Invited Paper)** [10639-41]

- 10639 16 **Applications of hyperspectral image analysis for precision agriculture (Invited Paper)** [10639-42]
- 10639 17 **Novel hyperspectral imaging camera for stratospheric platforms (Invited Paper)** [10639-43]
- 10639 18 **Novel interferometric hyperspectral imaging instruments for remote-sensing applications (Invited Paper)** [10639-44]
- 10639 19 **An ultra-compact hyperspectral imaging system for use with an unmanned aerial vehicle with smartphone-sensor technology (Invited Paper)** [10639-45]

WEARABLE, FLEXIBLE DEVICES FOR PERSONALIZED HEALTH AND PERFORMANCE

- 10639 1A **Soldier safety and performance through wearable devices (Keynote Paper)** [10639-46]
- 10639 1B **Emerging wearable technologies for personalized health and performance monitoring (Invited Paper)** [10639-47]
- 10639 1C **A manufacturable smart dressing with oxygen delivery and sensing capability for chronic wound management (Invited Paper)** [10639-48]
- 10639 1E **FHE strategies for cost-effective, comfortable, conformable voltage sensing wristband for worker safety (Invited Paper)** [10639-50]

BRAIN/HUMAN COMPUTER INTERFACE TECHNOLOGY FOR HEALTH APPLICATIONS

- 10639 1G **Brain imaging for neural tissue health assessment (Invited Paper)** [10639-52]
- 10639 1J **Forward-looking engineering concepts for ultrasonic modulation of neural circuit activity in humans (Invited Paper)** [10639-103]

ADVANCED IMAGING: GAIN, POLARIZATION AND METAMATERIALS INTEGRATION II

- 10639 1P **Advanced imaging capabilities by incorporating plasmonics and metamaterials in detectors (Invited Paper)** [10639-60]
- 10639 1Q **Quanta imaging sensors: achieving single-photon counting without avalanche gain (Keynote Paper)** [10639-58]

DEEP LEARNING AND NEUROMORPHIC SENSING/COMPUTING FOR SMALL AUTONOMOUS SYSTEMS

- 10639 1T **Toward a large-scale multimodal event-based dataset for neuromorphic deep learning applications (Invited Paper)** [10639-65]

10639 1U **A sparse coding multi-scale precise-timing machine learning algorithm for neuromorphic event-based sensors (Invited Paper) [10639-66]**

**AUTONOMOUS C4ISR SYSTEMS OF THE FUTURE: AUTONOMOUS DECISION-MAKING APPROACHES:
JOINT SESSION WITH CONFERENCES 10639 AND 10651**

10639 1X **An adaptive hierarchical approach to lidar-based autonomous robotic navigation (Invited Paper) [10639-69]**

10639 1Y **Computational architecture for autonomous decision-making in unmanned aerial vehicles (Invited Paper) [10639-70]**

10639 1Z **Anomaly detection and target prioritization in planetary imagery via the automated global feature analyzer (AGFA): progress towards a driver for autonomous C4ISR missions (Invited Paper) [10639-71]**

QCL AND THZ DETECTION I

10639 20 **Advances in fast tunable laser spectroscopy in the infrared (Keynote Paper) [10639-72]**

10639 22 **Towards 20-watt continuous wave quantum cascade lasers (Invited Paper) [10639-74]**

10639 26 **Advances in standoff surface contaminant detector platform: developmental test results (Invited Paper) [10639-78]**

10639 27 **A system for rapid chemical identification based on infrared signatures (Invited Paper) [10639-79]**

10639 28 **Application of rapidly swept external cavity quantum cascade lasers for open-path and standoff chemical sensing (Invited Paper) [10639-80]**

QCL AND THZ DETECTION II

10639 29 **Plasmonic detectors and sources for THz communication and sensing (Invited Paper) [10639-81]**

10639 2A **Future THz spectroscopic instruments for earth and planetary science (Invited Paper) [10639-83]**

10639 2B **Overcoming the challenges of active THz/MM-wave imaging: an optics perspective (Invited Paper) [10639-84]**

10639 2C **New method of substance detection and identification using the substance emission frequency up-conversion in the THz frequency range (Invited Paper) [10639-85]**

- 10639 2D **Chemical detection using broadband femtosecond optical parametric oscillators in the 6-12-micron spectral fingerprint region (Keynote Paper)** [10639-86]
- 10639 2E **100W-level peak power laser system tunable in the LWIR applied to detection of persistent chemical agents (Invited Paper)** [10639-87]

FREQUENCY COMB: CONCURRENT-JOINT SESSION WITH CONFERENCES 10639 AND 10638

- 10639 2G **Massively parallel sensing of trace molecules and their isotopologues with broadband mid-IR frequency combs produced via optical subharmonic generation (Keynote Paper)** [10639-102]

POSTER SESSION

- 10639 2I **Indium bump deposition for flip-chip micro-array image sensing and display applications** [10639-91]
- 10639 2J **Sensor fusion for 3D+T motion detection and target tracking** [10639-92]
- 10639 2M **Thin-film coating of vibro-fluidized microparticles via R. F. Magnetron sputtering** [10639-95]
- 10639 2N **Room temperature operation of quantum cascade lasers monolithically integrated onto a lattice-mismatched substrate** [10639-98]
- 10639 2O **ZnO nanoflakes-based mediator free flexible biosensors for the selective detection of ethylglucuronide (EtG) and lactate** [10639-99]
- 10639 2P **Liquid sensor based on optical surface plasmon resonance in a dielectric waveguide** [10639-100]
- 10639 2Q **Compact long-wave infrared ring resonator for sensing applications** [10639-101]

Authors

Numbers in the index correspond to the last two digits of the seven-digit citation identifier (CID) article numbering system used in Proceedings of SPIE. The first five digits reflect the volume number. Base 36 numbering is employed for the last two digits and indicates the order of articles within the volume. Numbers start with 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 0A, 0B...0Z, followed by 10-1Z, 20-2Z, etc.

Adams, Wyatt, 0A
Aharonovich, Igor, 03
Ajayi, Obafunso, 0V
Akitegetse, Cleoplace, 2B
Alam, Fahmida, 2O
Albetta, Mohammed Aieash, 0E
Andarawis, Emad, 1E
Arealo, Arpys, 0E
Atashbar, M. Z., 1C
Awanzino, Cédric, 2E
Bah, Mohamed A., 2I
Bar-Kochba, Eyal, 1G
Barron-Jimenez, Rodolfo, 2O
Bell, L. Douglas, 1P
Benosman, Ryad, 1U
Bergeron, Alain, 09, 2B
Bhansali, Shekhar, 2O
Blanchard, Nathalie, 09, 2B
Blodgett, David, 1G
Bourqui, Pascal, 09, 2B
Boyce, Duncan, 1E
Breshike, Christopher J., 27
Briand, Martin, 09, 2B
Brooks, Alexander J.-W., 1X, 1Z
Brumfield, Brian E., 28
Brygo, François, 2E
Buckland, Kerry N., 15
Burns, Zachary, 17
Byerly, Kevin, 12
Campana, G. L., 1C
Cao, Chengyu, 10
Carver, Alexander G., 1P
Chen, Cheng-Po, 1E
Chen, Chun-Long, 0X
Chen, Kevin P., 12
Chen, Pai-Yen, 0M
Chen, S., 0T
Chen, Yueyang, 04
Conchouso, David, 0E
Congedo, Marina B., 1J
Creazzo, Timothy, 2M
Criss, Aaron, 1G
Criss, Tom, 1G
Culbertson, James C., 0U
DeLacy, Brendan G., 2M
Deng, W., 1Q
Desmarais, Brian, 2I
Dianat, Pouya, 0H
Dixon, John, 26
Doucet, Michel, 09, 2B
Douglass, David, 2I
Du, Cong, 10
Duchesne, François, 09, 2B
Dufour, Denis, 09
Dunayevskiy, Ilya, 20
Dupuis, Julia R., 26
Edelberg, Jason, 19
Eilers, Hergen, 0Z
Eisenbach, A., 2N
Emaminejad, Sam, 1B
Fan, Bo, 08
Fang, X. M., 2N
Fastenau, J. M., 2N
Fetters, M., 2N
Figueiredo, Pedro, 22, 2N
Finch, Michael F., 2Q
Fink, Wolfgang, 1X, 1Z
Fisette, Bruno, 09, 2B
Fisher, John, 17
Fossum, E. R., 1Q
Foulds, Ian, 0E
Fryett, Taylor, 04
Fu, S., 0T
Furlong, M. J., 2N
Furstenberg, Robert, 27
Gagnon, Lucie, 09, 2B
Garrett, Benjamin S., 2M
George, Thomas, 16
Ghoshroy, Anindya, 0A
Giblin, Jay, 26
Girard, Marc, 09, 2B
Glumb, Ronald, 18
Go, Rowel, 22, 2N
Godin, K., 0T
Goebel, Kai, 1Y
Grisard, A., 2E
Guerin, Dan, 17
Güney, Durdu Ö., 0A
Guo, Xu, 10
Gutty, F., 2E
Haessig, Germain, 1U
Hagen, Joshua A., 1A
Hajizadegan, Mehdi, 0M
Hall, Jeffrey L., 15
Harper, Jason, 1G
Heimbrodt, Wolfram, 0V
Hennessy, John, 1P
Hensley, Joel, 26

Hitlin, David, 1P
 Hoenk, Michael E., 1P
 Holdredge, Paul, 1E
 Hone, James C., 0V
 Hudak, Nicholas J., 2M
 Hugger, Stefan, 2E
 Hussain, Muhammad M., 0E
 Hwang, Grace M., 1G, 1J
 Inampudi, Sandeep, 08
 Jacob, Michel, 09, 2B
 Jain, V., 1C
 Jalal, Ahmed Hasnain, 2O
 Jewell, April D., 1P
 Jiang, H., 1C
 Johnson, Patrick D., 15
 Jones, Todd J., 1P
 Julian, Jeffrey, 17
 Kang, Kyung Nam, 0T, 0V
 Kara, O., 2D
 Kastek, Mariusz, 2E
 Keairns, Dale, 0Y
 Keim, Eric R., 15
 Kendziora, Christopher A., 27
 Kim, Young Duck, 0V
 King, Kimber, 1B
 Kirtley, John, 0Z
 Krysiak, H., 2N
 Kuhnert, Jan, 0V
 Kunz, J., 2E
 Kusterbeck, Andrew, 27
 Lail, Brian A., 2Q
 Lallier, E., 2E
 Lani, Shane W., 1J
 Lapsley, Michael, 18
 Larat, C., 2E
 Lau, Clare, 1G
 Leclerc, Melanie, 2B
 Leduc, Jean-Pierre, 2J
 Lefebvre, Austen, 1G
 Leichner, Victoria, 0Z
 Le Noc, Loïc, 09
 Leung, Sarah, 1T
 Li, Guixin, 0O
 Li, Ming-Jun, 12
 Li, Shuo, 12
 LiKamWa, Patrick, 2P
 Lippert, Sina, 0V
 Liu, A. W. K., 2N
 Liu, Yuqian, 10
 Loparo, Zachary, 2G
 Lu, Ping, 12
 Lubyshev, D., 2N
 Lyakh, Arkadiy, 22, 2N
 Ma, J., 1Q
 Ma, Tong, 10
 Maddiplata, D., 1C
 Maidment, L., 2D
 Majumdar, Arka, 04
 Manasson, Alexander, 2I
 Mansur, David, 26
 Mantica, Peter, 18
 Marchese, Linda, 09, 2B
 Marinelli, William J., 26
 Martin, Stanton L., 16
 Masoodian, S., 1Q
 Massicote, Martin, 2B
 Maxey, Christopher, 1T
 Mayton, Jeffrey, 1E
 McClish, Mickel, 1P
 McGill, R. Andrew, 27
 Mercier, Luc, 09, 2B
 Mirotznik, Mark S., 2M
 Mirov, Sergey B., 2G
 Mirski, Marek, 1G
 Montazeri, Kiana, 0H
 Montes, Marcos, 19
 Morken, T., 1C
 Morsy, Ahmed, 1P
 Münzhuber, F., 2E
 Muraviev, Andrey V., 2G
 Murdock, Richard C., 1A
 Murley, Sam, 1E
 Nabet, Bahram, 0H
 Narakathu, B. B., 1C
 Nguyen, Viet, 27
 Nikzad, Shouleh, 1P
 Nothwang, William D., 1T
 Ochoa, M., 1C
 Ohodnicki, Paul, 12
 Oliveira, R. H., 1C
 Oscari, M., 1C
 Ofis, Martin, 09, 2B
 Outten, Craig, 2I
 Pala, Nezhil, 2O
 Papillon, D., 2E
 Patel, C. Kumar N., 20
 Peng, Zhaoqiang, 12
 Perkins, F. Keith, 0U
 Peycke, Zane Matthew, 04
 Phillips, Mark C., 28
 Piatkowski, Tadeusz, 2E
 Pilehvar, Sanaz, 1B
 Podolskiy, Viktor A., 08
 Povinelli, Michelle, 1P
 Prieto Rojas, Jhonathan, 0E
 Raab, M., 2E
 Rahimi, R., 1C
 Rahimi-Iman, Arash, 0V
 Rattunde, M., 2E
 Rehman, Mutee Ur, 0E
 Reid, D. T., 2D
 Reinecke, Thomas L., 0U
 Renaud, Dylan, 0V
 Renjifo, Carlos, 1G
 Richardson, Aileen, 0Y
 Robinson, Jeremy T., 0U
 Robinson, Matthew, 2I
 Rodriguez, Carissa, 1G
 Rosenberg, Allan P., 1J
 Rosser, David, 04

Rutkauskas, M., 2D
 Ryou, Albert, 04
 Saad, Katherine M., 15
 Sakhdari, Maryam, 0M
 Sankararaman, Shankar, 1Y
 Saunders Filho, Claudio A. B., 2Q
 Schlueter, John A., 0B
 Schlupf, Joseph, 19
 Schneider, Lorenz Maximilian, 0V
 Scholl, Clara A., 1G
 Schumacher, Joshua, 2I
 Schwarz, M., 2E
 Shamwell, E. Jared, 1T
 Sharkawy, Ahmed, 2M
 Sheehan, Paul E., 0U
 Shur, Michael, 07, 29
 Singh, Devendra, 0E
 Sinha, Raju, 2O
 Snow, Eric S., 0U
 Solntsev, Alexander, 03
 Sood, R., 1C
 Spisser, H el ene, 09, 2B
 Starkey, D., 1Q
 Stoffel, Nancy, 1E
 Suttinger, Matthew, 22, 2N
 Tabbakh, Thamer, 2P
 Tang, Adrian, 2A
 Tarbell, Mark A., 1X, 1Z
 Terroux, Marc, 09, 2B
 Tholl, H. D., 2E
 Toth, Milos, 03
 Tratt, David M., 15
 Tremblay, Bruno, 09, 2B
 Tremblay, Mathieu, 09, 2B
 Troccoli, Mariano, 20
 Trofimov, Vyacheslav A., 2C
 Tyler, William J., 1J
 Umasankar, Yogeswaran, 2O
 Varentsova, Svetlana A., 2C
 Vasilyev, Sergey, 2G
 Vodopyanov, Konstantin L., 2G
 Volquarts, Tamara L., 15
 Waks, Edo, 05
 Wang, X., 0T
 Wang, Xingwei, 10
 Wang, Zihuan, 0H
 White, Briggs M., 0Y
 Whitehead, James, 04
 Wilcox, Christopher C., 19
 Wilhelm, Aaron, 1B
 Wilhelm, Andrew, 1B
 Wilsenack, Frank, 2E
 Wu, Nan, 10
 Yan, Aidong, 12
 Yang, Eui-Hyeok, 0T, 0V
 Yetzbacher, Mike, 19
 Yoon, C. K., 1C
 Zablocki, Mathew, 2M
 Zakharova, Irina G., 2C
 Zhang, Chen, 2I
 Zhou, J., 1C
 Zhou, Jingcheng, 10
 Ziaie, B., 1C
 Zieger, M. A., 1C
 Zou, Ran, 12

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- 1 Hybrid Integrated Quantum Photonics
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- 2 Imaging with Subwavelength Pixels
Durdu O. Guney, Michigan Technological University (United States)
Ertugrul Cubukcu, University of California, San Diego (United States)
- 3 Origami and Kirigami-based Technologies
Jhonthan Prieto Rojas, King Fahd University of Petroleum & Minerals
(Saudi Arabia)
- 4 Micro/Nano-structures for Enhancing Control of Light-matter
Interactions for Advanced Microsystems
M. Saif Islam, University of California, Davis (United States)
- 5 Flathead Photonics for Wave Shaping, Imaging, and Sensing
Junsuk Rho, Pohang University of Science and Technology
(Korea, Republic of)
Yongmin Liu, Northeastern University (United States)
- 6 Synthesis, Analysis, and Applications of 2D Materials
Eui-Hyeok Yang, Stevens Institute of Technology (United States)
- 7 Novel Harsh Environment Sensors for Energy Applications
Michael P. Buric, National Energy Technology Laboratory
(United States)
- 8 Remote Sensing Techniques and Applications
Christopher C. Wilcox, U.S. Naval Research Laboratory (United States)
- 9 Wearable, Flexible Devices for Personalized Health and Performance
Benjamin J. Leever, Air Force Research Laboratory (United States)
Richard Conroy, National Institutes of Health (United States)
- 10 Brain/Human Computer Interface Technology for Health Applications
Grace M. Hwang, Johns Hopkins University Applied Physics
Laboratory, LLC (United States)
- 11 Advanced Imaging: Gain, Polarization, and Metamaterials
Integration I
Shouleh Nikzad, Jet Propulsion Laboratory (United States)
- 12 Advanced Imaging: Gain, Polarization and Metamaterials
Integration II
Shouleh Nikzad, Jet Propulsion Laboratory (United States)

- 13 Deep Learning and Neuromorphic Sensing/Computing for Small Autonomous Systems
Brian Satterfield, Lockheed Martin Corporation (United States)
William D. Nothwang, U.S. Army Research Laboratory (United States)
- 14 Autonomous C4ISR Systems of the Future: Autonomous Decision-Making Approaches: Joint Session with Conferences 10639 and 10651
Wolfgang Fink, The University of Arizona (United States)
Raja Suresh, General Dynamics Mission Systems (United States)
- 15 QCL and THz Detection I
Michael K. Rafailov, University of Alberta (Canada)
- 16 QCL and THz Detection II
Michael K. Rafailov, University of Alberta (Canada)
- 17 Frequency Comb: Concurrent-Joint Session with Conferences 10639 and 10638
Michael K. Rafailov, University of Alberta (Canada)

Introduction

The 2018 Micro- and Nanotechnology (MNT) Sensors, Systems, and Applications X conference within the SPIE Defense and Security Symposium, was held in Orlando, Florida, United States, 15–19 April 2018.

This year marks a special occasion, namely the 10th anniversary of this cutting-edge conference. Once again, thanks to the extraordinary efforts of our session chairs, a total of 17 conference sessions were successfully concluded showcasing the exciting breadth and depth of MNT. Exciting sessions captured exciting emerging trends in: Hybrid Integrated Quantum Photonics; Imaging with Subwavelength Pixels; Origami and Kirigami-based Technologies; Micro/Nano-structures for Enhancing Control of Light-matter Interactions for Advanced Microsystems; Flatland Photonics for Wave Shaping, Imaging, and Sensing; Synthesis, Analysis, and Applications of 2D Materials; Novel Harsh Environment Sensors for Energy; Remote Sensing Techniques and Applications; Wearable, Flexible Devices for Personalized Health and Performance; Brain/Human Computer Interface Technology for Health Applications; Advanced Imaging: Gain, Polarization, and Metamaterials Integration; Deep Learning and Neuromorphic Sensing/Computing for Small Autonomous Systems; Autonomous C4ISR Systems of the Future: Autonomous Decision-Making Approaches; QCL and THz; and Frequency Comb Technologies.

Successful joint sessions were conducted with the Unmanned Systems Technology conference (10640), the Open Architecture/Open Business Model Net-Centric Systems and Defense Transformation conference (10651), the Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE) Sensing conference (10629), and the Ultrafast Bandgap Photonics Conference (10638).

It is our sincere hope that the papers within this proceedings volume will provide you, our reader, not only with a snapshot of the programmatic vision behind investments made in each MNT topic area, but also its current state of scientific and technological development. Enjoy!

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Achyut K. Dutta
M. Saif Islam

