

PI	Institution	Subarea	Title	Country
Ken Caster	Air Force Office of Scientific Research	Organic Materials Chemistry	Organic Materials Chemistry	USA
Zhenan Bao	Stanford University	Electronics	Stretchable Polymer Semiconductors	USA
Michael Durstock	AFRL/RX	Electronics	Enabling Soft Electronics	USA
Bryan Boudouris	Purdue University	Electronics	Manipulating Excited State Energy Flow in Organic Systems using Radical Polymers	USA
Tobin Marks_Antonio Facchetti	Northwestern University	Electronics	Soft Materials for Flexible, Stretchable Hybrid Electronics	USA
Dongho Kim	Yonsei University	Electronics	Magnetic Field Effects on Temporal and Spatial Dynamics of Functional Nanostructures	Korea
Darren Lipomi	University of California, San Diego	Electronics	High-Performance Semiconducting Elastomers	USA
Qibing Pei	University of California, Los Angeles	Electronics	Morphological Control of Conjugated Polymer Blends for Elastic Stretchability	USA
Yang Yang	University of California, Los Angeles	Electronics	The Design, Properties and Future Applications of Perovskite Thin Films with Selective Organic Molecules	USA
Long Chiang	University of Massachusetts, Lowell	Nanoscience	Tunable RF-Responsive Core-Shell Organofullerenyl–Magnetic Hybrid Nanostructures as Multiferroic Nanomaterials	USA
Zhiqun Lin	Georgia Tech	Nanoscience	Multifunctional Organic-Inorganic Nanocomposites with Unprecedented Control Over Dimensions, Compositions and Architectures as well as Tailored Properties	USA
Seng Tan	AFRL/RX	Nanoscience	Aromatic Functionalization and Macromolecular Chemistry	USA
Michael Therien	Duke University	Nanoscience	Hybrid Semiconducting Polymer/Carbon Nanotube Superstructures for Optical, Electro-optic, and Spintronic Applications	USA
Jim Tour	Rice University	Nanoscience	Marriage of Top-Down Lithography to Bottom-Up Chemistry Edge Control in Graphene	USA
Anish Tuteja	University of Michigan	Nanoscience	Boiling Heat Transfer on Surfaces with Extreme Wettabilities	USA
Larry Byrd_James Scofield	AFRL/RQ	Novel Properties	CNT-Based Metal Nanocomposite Materials for Electronics Interface Enhancement	USA
David Carroll	Wake Forest Univ	Novel Properties	Exploring Topological Insulators for Flexible/Conformal Power Harvesters	USA
Joseph Fellner_Larry Scanlon	AFRL/RQ	Novel Properties	High Capacity Cathode Materials Functionalized with Carbon for Lithium Ion Batteries	USA
Bin Hu	University of Tennessee	Novel Properties	Revealing Key Polarization, Spin, and Energy Parameters in Controlling Deeper Photovoltaic Processes in Perovskite Solar Cells By Using Unique Magneto-Optical Measurements (and Lasing)	USA
Cameron Jones	Monash University	Novel Properties	Polymers Incorporating Low-Valent/Low-Coordination Number Main Group Centres	Australia
Julia Kalow	Northwestern University	Novel Properties	(YIP) Photocontrolled Synthesis and Properties of $\pi$ -Conjugated Polymers	USA
Randy Lee	University of Houston	Novel Properties	Optically-Responsive Nanoparticles for Enhanced Solar-to-Fuel Photocatalytic Conversion	USA
Frank Leibfarth	University of North Carolina, Chapel Hill	Novel Properties	(YIP) Regioselective, C-H Xanthylation as a Platform Technology Polyolefin Functionalization	USA
Noa Marom	Carnegie Mellon University	Novel Properties	(Seed) Screening Polycyclic Aromatic Hydrocarbons for Singlet Fission Candidates	USA
Chris Ober	Cornell University	Novel Properties	Polymer-grafted Nanoparticles (PGN) and PGN Arrays with Tailored Canopy Interactions	USA
John Reynolds_Amiee Tomlinson	Georgia Tech_Univ of North Georgia	Novel Properties	High Contrast Electrochromism in Organic Materials_The Computational Design of Oligomers for Use in High Contrast Black Electrochromic Polymers	USA
Jonathan Rudick	SUNY Stony Brook University	Novel Properties	Hierarchical Organization of Three-Component Star-Branched and Dendritic Materials	USA
Thomas Russell_Javid Rzayev	Univ of Massachusetts, Amherst_SUNY Stony Brook University	Novel Properties	Responsive, Adaptive Block Copolymers	USA
Tim Swager	Massachusetts Institute of Technology	Novel Properties	Low Bandgap, Highly Polarizable, and Intrinsically Conductive Polymers	USA
Rich Vaia	AFRL/RX	Novel Properties	Fabrication and Optical Performance of Polymer-Grafted Nanoparticle (PGN) SuperLattices	USA
Luisa Whittaker-Brooks	University of Utah	Novel Properties	(Seed) Manipulating the Thermoelectric and Spin Dynamics of 2D and 3D Inorganic-Organic Hybrid Perovskites	USA
Shannon Yee	Georgia Tech	Novel Properties	(YIP) Turnable Multifunctional Organic Thermal and Thermoelectric Materials	USA
Monica Allen	AFRL/RQ	Photonics	Exotic Core-Shell Nanoparticles and their Assemblies for Plamonic Applications	USA
Jason Azoulay	University of Southern Mississippi	Photonics	Modular Conjugated Polymers for Mid-Infrared Photonic Applications	USA
Castellano, Phil	North Carolina State University	Photonics	Semiconductor Nanocrystals as Triplet Sensitizers	USA
Larry Dalton	University of Washington	Photonics	Optimizing SOH and PSOH Chip-scale Integrated Electronic/Photonic Technology for Multiple Defense Applications by Nano-Engineering New OEO Materials	USA
Christine Isborn	University of California, Merced	Photonics	Improved Prediction of the Optical Properties of Coupled Chromophores for Electro-optics	USA
Darwish, Abdalla	Dillard University	Photonics	Polymer Nanocomposite Luminescent Spectrum Convertors For Photovoltaic Energy Harvesting	USA
Parag Deotare	University of Michigan	Photonics	(YIP) Nanoscale Exciton-Mechanical Systems (NEXMS)	USA
Steve Forrest	University of Michigan	Photonics	Organics at High Energy: Achieving High Performance Under the Most Adverse Conditions	USA
Chris Giebink_Barry Rand	Pennylvania State University_Princeton University	Photonics	Toward Electrically-Pumped Lasing in Organic-Inorganic Hybrid Perovskite Semiconductors	USA
Xiong Gong	University of Akron	Photonics	Solution-Processed Infrared Polymer Photodetectors	USA
Thomas Gray	Case Western Reserve University	Photonics	Gold Organometallics: Game Changers for Optical Power Limiting	USA
Joy Haley	AFRL/RX	Photonics	Novel Solid Nonlinear Materials for Optical Limiting	USA
Jinsong Huang	University of North Carolina, Chapel Hill	Photonics	Grain and Interface Engineering for High Efficiency Hybrid Perovskite Solar Cells	USA
Bernard Kippelen	Georgia Tech	Photonics	High Detectivity Organic Photodetectors with Ultrabroadband Spectral Response	USA
Biwu Ma_Theo Siegrist	Florida State University	Photonics	Structural Dimensionality Control of Organic-Inorganic Metal Halide Hybrids	USA
Seth Marder_Henry Snaith	Georgia Tech_University of Oxford	Photonics	Effects of Redox, Molecular, and Ionic Dopants on the Structure and Electronic Behavior of Haloplumbate Perovskites	USA_UK
Mikhail Noginov	Norfolk State University	Photonics	Control of Chemical Reactions with Hyperbolic Metamaterials	USA
Paras Prasad	SUNY Stony Brook University	Photonics	New Generation Optical Nanotransformers for NIR-to-Visible Image Up-conversion and Friend-Foe Identification	USA
Miha Ravik	University of Ljubljana	Photonics	Nematic Colloidal Tilings as Tunable Soft Metamaterials	Slovenia
Aleks Rebane	Montana State University	Photonics	Femtosecond Laser Induced Maco-Molecular Self-Assembly	USA
Ya-Ping Sun	Clemson University	Photonics	Exploration of Carbon-Based Hybrid Nanoarchitectures as a Unique Platform for Managing Excited State Energies and Processes	USA
Valery Temyanko_Robert Noorwood	TIPD LLC_University of Arizona	Photonics	Transparent High Reflective Index IR Polymers	USA
Zeev Vardeny	University of Utah	Photonics	Transient and Steady-State Magneto-Optical Studies of Low-Bandgap Pi-Conjugated Polymers	USA
He Wang	University of Miami	Photonics	(YIP) Structure-Photophysics-Function Relationship of Perovskite Materials	USA
Ken-Tsung Wong	National Taiwan University	Photonics	Stretching Toward the Near Infrared in Small Molecule Photovoltaics	Taiwan
Shin-Tson Wu	University of Central Florida	Photonics	Submillisecond-response Liquid Crystal Spatial Light Modulators	USA
Xiaodong Xu_Alex Jen	University of Washington	Photonics	Molecular Engineering of Hybrid Perovskites Quantum Wells for Nano-Photonics	USA
Zhibin Yu	Florida State University	Photonics	(YIP) Engineering Organometal Hybrid Pervoskite/Polymer Composites for New Generation Electro-Optics Manufacturing	USA