# **Congratulations!**

# **2019 MRS FELLOWS**

#### Honoring MRS Members who are notable for their distinguished research accomplishments and outstanding contributions to the advancement of materials research worldwide.

The vitality, diversity and opportunity of materials research are all epitomized in this group of new Fellows, whose remarkable accomplishments are highlighted by their brief citations. We are confident that the examples of excellence, enterprise and dedication displayed by this steadily growing community of MRS Fellows will serve to encourage and inspire all materials researchers, at all levels, and will also support and enhance the prestige and recognition of materials research in serving the broader community worldwide.

#### Michael Chabinyc

#### University of California, Santa Barbara

For contributions to the fundamental science of the structure and electronic properties of organic semiconductors and the translation of these relationships to functional devices.

# 📥 Sheng Dai

Oak Ridge National Laboratory and The University of Tennessee, Knoxville For significant and sustained contributions in pioneering and developing novel synthetic methods for functional carbon materials for energy applications.

# 📥 Jesús A. del Alamo

#### Massachusetts Institute of Technology

For extraordinary contributions to the physics, design, process technology and reliability of III–V compound semiconductor transistors, and for his sustained commitment to knowledge dissemination among students and researchers.

# Mary E. Galvin

University of Notre Dame

For foundational research that clarifies the role of molecular architecture on the properties and performance of electroactive polymeric materials, and for her exceptional service to the materials science community.

# Peter F. Green

#### National Renewable Energy Laboratory

For research leading to the understanding of the influence of polymer dynamics and confinement on thin-film structures and their corresponding properties, and for outstanding leadership in the materials science community.



#### . Texas A&M University

For exceptional contributions to thin-film materials and fabrication processes for microelectronics as well as leadership in the materials science community.



#### **Javier Llorca**

IMDEA Materials Institute and Universidad Politécnica de Madrid For contributions to the development and industrial implementation of multiscale modeling strategies in structural materials, and for his leadership as Founder and Director of the IMDEA Materials Institute.

# 💊 Steven G. Louie

### University of California, Berkeley

For seminal contributions to materials theory as well as to the discovery and understanding of fundamental phenomena in solids and nanostructures.



For outstanding research on and the application and commercialization of multifunctional nanostructured defect-engineered oxides, as well as advancing graduate and undergraduate education in materials engineering and nanotechnology.

#### Natalie Stingelin-Stutzmann Georgia Institute of Technology

For pivotal contributions to the application of classical polymer science tools for the efficient design and processing of organic electronic and photonic materials and devices.

#### Haiyan Wang Purdue University

For innovative research on multifunctional ceramic nanocomposites, superconductors, solid oxide fuel cells and *in situ* TEM, and for inspired materials science education and leadership.



#### University of California, Los Angeles

For pioneering nanoscience advances, testing the ultimate limits of miniaturization of functional materials, developing ultrahigh resolution microscopes that simultaneously measure structure, spectra and function, and adding chemical dimensions to nanolithography.

# 🔺 Matthias Wuttig

RWTH Aachen University

For path-breaking contributions to the advancement of phase-change materials, including unraveling their unique bonding mechanism, unconventional transport properties and unusual kinetics.

# Miguel José Yacaman

The University of Texas at San Antonio For pioneering contributions to materials research in the fields of nanotechnology, catalysis, electron microscopy and physics of materials, and for his leadership in engaging the scientific community.



# University of Nebraska–Lincoln

For groundbreaking work on low-dimensional ice and clathrate gas hydrates, structures of ligand-covered gold clusters, catalysis with surface-supported gold and metal clusters and computational design of low-dimensional materials.



#### Brookhaven National Laboratory

For distinguished contributions to the field of materials characterization by developing electron microscopy instrumentation and techniques to understand atomic, electronic and spin structures and the physical behavior of functional materials.

# 🖌 Yuntian Zhu

#### North Carolina State University

For seminal work on the fundamental physics, processing and properties of heterostructured and nanostructured materials.

#### Ji-Cheng (JC) Zhao The Ohio State University

For pioneering research on high-throughput measurement in the field of structural materials through the invention and application of the diffusion-multiple approach and co-invention of ultrafast laser materials-property microscopy tools.

For more information please visit mrs.org/mrsfellows

