



nanomaterials, and presents a unique route toward utilization of nanowire arrays for printable sensor circuitry.

The integration of high mobility materials on Si can be challenging due to large-lattice mismatch, and Javey has confronted this challenge by developing an approach he has termed the X-on-insulator (XOI),

which has allowed for some of the highest mobilities on Si substrates.

Javey is a faculty member in the Department of Electrical Engineering and Computer Sciences at the University of California–Berkeley. He earned his PhD degree in physical chemistry from Stanford University. He received the *Nano*

*Letters* Young Investigator Lectureship, UC Berkeley Electrical Engineering Outstanding Teaching Award, APEC Science Prize for Innovation, Research, and Education, Netexplorateur of the Year Award, IEEE Nanotechnology Early Career Award, and he was a Blavatnik National Award for Young Scientists Finalist.



## Hongyou Fan to present Kavli Lecture at 2015 MRS Spring Meeting

**H**ongyou Fan, research professor in the Department of Chemical and Nuclear Engineering at The University of New Mexico, and a principal member of the Technical Staff at Sandia National Laboratories, has been selected for the Fred Kavli Distinguished Lectureship in Nanoscience. He will give his presentation at the 2015 MRS Spring Meeting in San Francisco.

Precise control of structural parameters through nanoscale engineering

to improve optical and electronic properties of functional nanomaterials remains an outstanding challenge. Previous work has been conducted largely at ambient pressure and relies on specific chemical or physical interactions such as van der Waals interactions, dipole-dipole interactions, chemical reactions, and ligand-receptor interactions. In his presentation, Fan will introduce a stress-induced fabrication method that uses mechanical compressive force applied to nanoparticles to

induce structural phase transition and to consolidate new nanomaterials with precisely controlled structures and tunable properties.

He received a BS degree from the Department of Chemistry at Jilin University, a MS degree from the Chinese Academy of Sciences in the field of polymer chemistry and physics, and a PhD degree from The University of New Mexico in the field of nanoporous materials and composites.

Fan and his research programs have been recognized by multiple awards, including the Sandia National Labs Laboratory Directed Research and Development (LDRD) Award for Excellence in 2007, the *R&D Magazine* R&D 100 Award for technically significant products in 2007 and 2010, the Federal Laboratory Consortium (FLC) Outstanding Technology Development Award in 2008 and 2013, a University of New Mexico Outstanding Faculty Mentor Award in 2005, and the Asian American Engineer of the Year Award in 2012.

### ICSI-9 to be held May 17–22 in Canada

<http://www.icsi-epi.com>

**T**he 9th International Conference on Silicon Epitaxy and Heterostructures (ICSI-9) will be held May 17–22, 2015, in Montreal, Canada. The conference provides a platform for scientists and engineers from both academia and industry to discuss the latest developments in physics; device technologies; and instrumentation of Si-based epitaxy, heterostructures, nanostructures, and quantum systems. It will also cover recent progress in the heterointegration of III–V

semiconductors and two-dimensional materials on group IV platforms.

The organizing committee is comprised of Oussama Moutanabbir (École Polytechnique de Montréal, Canada); Matthias Bauer (Applied Materials, USA); Minjoo Larry Lee (Yale University, USA); Armando Rastelli (Johannes Kepler University, Austria); and Patrick Desjardins (École Polytechnique de Montréal, Canada).

There are three plenary lecturers: Hiroshi Amano (Nagoya University,

Japan), who is the 2014 Nobel Prize in Physics Laureate; Eugene A. Fitzgerald (Massachusetts Institute of Technology, USA); and Richard Martel (Université de Montréal, Canada).

The manuscript submission deadline is March 18, and the conference proceedings will be published in a special issue of *Thin Solid Films*. More information can be accessed from the meeting website at <http://www.icsi-epi.com> or email [icsi-9@polymtl.ca](mailto:icsi-9@polymtl.ca). □