

IEEE LOTFI A. ZADEH AWARD FOR EMERGING TECHNOLOGIES

RECIPIENTS

Formerly the [IEEE Daniel E. Noble Award for Emerging Technologies](#)

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| 2024 – ANDRAS KIS Professor, Laboratory of Nanoscale Electronics and Structures, EPFL, Lausanne, Switzerland | “For pioneering work and breakthroughs on 2D materials and electronic devices.” |
| 2023 – NO AWARD | |
| 2022 – NO AWARD | |
| 2021 – NO AWARD | |
| 2020 – MIRO MICOVIC Engineering Fellow, Raytheon, Tucson, Arizona, USA | “For leadership in millimeter-wave Gallium Nitride (GaN) transistor and technology development.” |
| 2019 – THOMAS KENNY Professor, Department of Mechanical Engineering, Stanford University, Stanford, California, USA | “For the development and widespread commercialization of MEMS resonators for timing applications.” |
| 2018 – RAJIV V. JOSHI Research Staff Member, IBM T. J. Watson Research Center, Yorktown Heights, New York, USA | “For contributions to predictive failure analytics, VLSI memory design, and technology.” |
| 2017 – MIGUEL A. L. NICOLELIS Professor, Duke University School of Medicine, Durham, North Carolina, USA | “For seminal contributions to brain-machine interfaces.” |
| 2016 – MARK G. ALLEN Alfred Fitler Moore Professor, Department of Electrical and Systems Engineering, Singh Center for Nanotechnology, University of Pennsylvania, Philadelphia, Philadelphia, USA | “For contributions to research and development, clinical translation, and commercialization of biomedical microsystems.” |
| 2015 – KHALIL NAJAFI Schlumberger Professor and Chair, Electrical Engineering and Computer Science, The University of Michigan, Ann Arbor, Michigan, USA | “For leadership in micro-electro-mechanical systems (MEMS), technologies, and devices and for seminal contributions to inertial devices and hermetic wafer-level packaging.” |

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- 2014 – GABRIEL M. REBEIZ
Professor, University of California,
San Diego, La Jolla, CA, USA
“For pioneering contributions enabling commercialization of RF MEMS technology and tunable micro- and millimeter-wave systems.”
- 2013 – JAN P. ALLEBACH
Hewlett-Packard Distinguished
Professor of Electrical and Computer
Engineering, Purdue University,
West Lafayette, IN, USA
“For the development of the Tone-Dependent Error Diffusion algorithm used widely in inkjet and laser printers.”
- 2012 – SUBRAMANIAN S. IYER
Distinguished Engineer & Chief
Technologist, Semiconductor
Research & Development Center,
IBM Systems & Technology Group
Hopewell Junction, NY, USA
“For the development and implementation of embedded DRAM technologies.”
- 2011 – MARK L. BURGNER
Vice President of Advanced
Research, Peregrine Semiconductor,
San Diego, CA, USA
“For basic research and development of silicon on sapphire technology culminating in high-yield, commercially viable integrated circuits.”
- AND RONALD E. REEDY
CTO and Chief of Staff, Peregrine
Semiconductor,
San Diego, CA, USA
- 2010 – SHINICHI ABE
Gen Mgr., Hybrid Vehicle Mgmt
System Development Division,
Toyota Corp.
Aichi, Japan
“For pioneering contributions to the development and market penetration of hybrid electric vehicles (HEVs) through the establishment of innovative architectures and control technologies.”
- AND SHOICHI SASAKI
Professor, Keio University
Yokohama, Japan
- AND TAKEHISA YAEGASHI
President (Consultant)
Cordia Corporation
Shizuoka, Japan
- 2009 – LARRY F. WEBER
President, Society for Information
Display (SID),
San Jose, CA, USA
“For pioneering contributions to Plasma Display Technology and its commercialization.”

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- 2008 – JAMES M. DAUGHTON
Founder, President/CEO/CTO, NVE Corporation,
Eden Prairie, MN, USA
- AND
- STUART PARKIN
IBM Fellow, IBM Almaden Research Center; Director, IBM-Stanford Spintronic Science and Applications Center (SpinAps),
San Jose, CA, USA
- AND
- SAIED TEHRANI
MRAM Technology Director,
Freescale Semiconductor,
Chandler, AZ, USA
- 2007 – STEPHEN R. FORREST
Dept of Electrical Engineering,
Princeton University,
Princeton, NJ, USA
- AND
- RICHARD H. FRIEND
Department of Physics, Cambridge University,
Cambridge, UK
- AND
- CHING TANG
University of Rochester,
Rochester, NY, USA
- 2006 – CARLOS A. PAZ DE ARAUJO
Full Professor of Electrical and Computer Engineering, University of Colorado,
Colorado Springs, CO, USA
- 2005 – DAVID LOUIS HARAME
Director of Enablement for Semiconductor Research and Development Center, IBM Fellow,
IBM
Essex Junction, VT, USA
- 2004 – LARRY J. HORNBECK
Texas Instruments Fellow
Texas Instruments,
Plano, TX, USA
- “For fundamental contributions to the development of magneto-resistive devices for non-volatile, high density, random access memory.”
- “For pioneering contributions to the development of organic light emitting diodes (OLEDs)”
- “For fundamental contributions and commercialization in the field of Ferroelectric Random Access Memory (FeRAM).”
- “For the development of manufacturable Silicon Germanium, HBT Bipolar and BiCMOS technologies.”
- “For his pioneering work and sustained development of the Digital Micromirror Device, used in projection displays.”

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| 2003 – KENICHI IGA Executive Director, Japan Society for the Promotion of Science, Tokyo, Japan | "For pioneering developments of surface emitting semiconductor lasers and arrays." |
| 2002 – MASATAKA NAKAZAWA Tohoku University Miyagi-Ken, Japan | "For pioneering development of 1.48 μm InGaAsP laser-diode pumping of erbium- doped fiber amplifiers (EDFA)." |
| 2001 – KATSUTOSHI IZUMI Osaka Prefecture University Osaka, JAPAN | "For pioneering development of Separation by Implanted Oxygen (SIMOX) technology." |