

IEEE DANIEL E. NOBLE AWARD FOR EMERGING TECHNOLOGIES

RECIPIENTS

Formerly the [IEEE Morris N. Liebmann Memorial 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."

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."

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- 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.”
- 2008 – JAMES M. DAUGHTON
Founder, President/CEO/CTO, NVE
Corporation,
Eden Prairie, MN, USA
- “For fundamental contributions to the
development of magneto-resistive devices
for non-volatile, high density, random
access memory.”
- AND STUART PARKIN
IBM Fellow, IBM Almaden Research
Center; Director, IBM-Stanford
Spintronic Science and Applications
Center (SpinAps),

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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

“For pioneering contributions to the development of organic light emitting diodes (OLEDs)”

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

“For fundamental contributions and commercialization in the field of Ferroelectric Random Access Memory (FeRAM).”

2005 – DAVID LOUIS HARAME
Director of Enablement for
Semiconductor Research and
Development Center, IBM Fellow,
IBM
Essex Junction, VT, USA

“For the development of manufacturable Silicon Germanium, HBT Bipolar and BiCMOS technologies.”

2004 – LARRY J. HORNBECK
Texas Instruments Fellow
Texas Instruments,
Plano, TX, USA

“For his pioneering work and sustained development of the Digital Micromirror Device, used in projection displays.”

2003 - KENICHI IGA
Executive Director, Japan Society for
the Promotion of Science,
Tokyo, Japan

“For pioneering developments of surface emitting semiconductor lasers and arrays.”

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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."