RECIPIENTS

2018- SIEGFRIED SELBERHERR
Professor, Vienna University of
Technology, Institute for
Microelectronics, Vienna, Austria

"For pioneering contributions to Technology Computer Aided Design."

2017- GUIDO GROESENEKEN
Professor, Catholic University of
Leuven, and Fellow, IMEC, Leuven,
Belgium

"For contributions to the characterization and understanding of the reliability physics of advanced MOSFET nanodevices."

2016 – AKIRA TORIUMI Professor, The University of Tokyo, Tokyo, Japan "For contributions to CMOS device design from materials engineering to device physics."

2015 - HIROSHI IWAI Professor, Tokyo Institute of Technology, Yokohama, Kangawa, Japan "For contributions to the scaling of CMOS devices."

2014 – MARTIN VAN DEN BRINK Vice President, ASML, Veldhoven, The Netherlands "For designing new lithography tool concepts and bringing these to the market, enabling micrometer to nanometer imaging."

2013 – GIORGIO BACCARANI Full Professor, University of Bologna, Bologna, Italy "For contributions to scaling theory and modeling of metal oxide semiconductor (MOS) devices."

2012 - YAN BORODOVSKY
Intel Senior Fellow, Director of
Advanced Lithography, Intel
Corporation, Hillsboro, OR, USA

"For contributions to developing and implementing innovative lithographic and patterning equipment and processes to enable cost-effective scaling for logic technologies."

AND

SAM SIVAKUMAR
Intel Fellow, Director of
Lithography, Intel Corporation,
Hillsboro, OR, USA

2011 – MASSIMO V. FISCHETTI Professor, University of Massachusetts, Amherst, MA, USA "For contributions to the fundamental understanding of the physics, design and scaling of nanosized electronic devices."

AND

DAVID J. FRANK Research Staff Member, IBM T. J. Watson Research Center,

IEEE CLEDO BRUNETTI AWARD RECIPIENTS

	Yorktown	Heights,	NY,	USA
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AND

STEVEN E. LAUX Research Staff Member, IBM T. J. Watson Research Center, Yorktown Heights, NY, USA

2010 – GHAVAM SHAHIDI
IBM Fellow Director of Silicon Tech
IBM TJ Watson Research Ctr
Yorktown Heights, NY, USA

"For contributions to and leadership in the development of silicon-on-insulator CMOS technology."

- 2009 BURN JENG LIN
 Senior Director of Micropatterning
 Division, TSMC, Ltd. Hsin-Chu,
 Taiwan
- "For contributions to immersion lithography for the manufacture of integrated circuit devices."
- 2008 MICHEL BRUEL
 Deputy Director of CEA-LETI,
 Director of Research, CEA, Cedex,
 France

"For inventing Smart Cut™ layer transfer technology that enabled widespread adoption of SOI for CMOS circuits."

2007 – SANDIP TIWARI
Professor, Electrical and Computer
Engineering, Cornell University
Ithaca, NY

"For pioneering contributions to nanocrystal memories and to quantum effect devices."

2006 – SUSUMU NAMBA Professor, Nagasaki Institute of Applied Science Nagasaki, Japan "For contributions to ion-beam and optical technologies for application to semiconductor devices."

2005 – WILLIAM G. OLDHAM
Professor Emeritus, University of
California, Berkeley
Berkeley, CA

"For pioneering contributions to lithographic engineering and to high-density isolation technology."

2004 – STEPHEN Y. CHOU
Professor, Department of Electrical
Engineering
Princeton University
Princeton, NJ

"For the invention and development of tools for nanoscale patterning, especially nanoimprint lithography, and for the scaling of devices into new physical regimes."

2003 - ANDREW R. NEUREUTHER Professor, EECS, University of California, Berkeley, CA "For pioneering contributions to modeling and simulation of the lithographic materials, processes, and tools used in microelectronics manufacturing."

RECIPIENTS

2002 – MARK LUNDSTROM
SUPRIYO DATTA
Purdue University, West Lafayette,
IN

"For significant contributions to the understanding and innovative simulation of nano-scale electronic devices."

2001 – R. FABIAN W. PEASE Stanford University Stanford, CA "For advancing high resolution patterning technologies, high performance thermal management, and scanning electron microscopy for microelectronics."

2000 - ROBERT E. FONTANA IBM Almaden Research Center San Jose, CA "For contributions to micro fabrication techniques for the manufacture of thin film and giant magnetoresistive heads used in hard disk drives."

1999 - DAVID K. FERRY Arizona State Univ., Tempe, AZ "For fundamental contributions to the theory and development of nanostructured devices."

1998 - ROGER T. HOWE RICHARD S. MULLER University of California, Berkeley, CA "For leadership and pioneering contributions to the field of microelectromechanical systems."

1997 - DIETER P. KERN
GEORGE A. SAI-HALASZ
MATTHEW R. WORDEMAN
IBM Research, Yorktown Heights,
NY

"For the development of sub-0.1 micron MOSFET devices and circuits."

1996 - MITSUMASA KOYANAGI Tohoku Univ Intell Sys Lab Sendai, Japan "For pioneering research and development of the three dimensional stacked capacitor DRAM cell."

1995 - HENRY I. SMITH MIT, Cambridge, MA "For contributions to microfabrication science and technology, notably microlithography."

1994 - EIJI TAKEDA Hitachi Ltd. Tokyo, Japan "For pioneering contributions to the characterization and understanding of hot-carrier effects in MOS devices."

1993 - TAKAFUMI NAMBU
MITSURU IDA
KAMON YOSHIYUKI
SONY Corporation, Tokyo, Japan

"For the development of the WALKMAN, the realization of a totally new concept of miniaturization of consumer electronics."

RECIPIENTS

1992 - DAVID A. THOMPSON IBM Corp. San Jose, CA	"For pioneering work in miniature magnetic devices for data storage, including the invention, design and development of thin-film and magnetoresistive recording heads."
1991 - HIDEO SUNAMI Hitachi, Ltd., Tokyo, Japan	"For contributions in the invention and development of the trench capacitor DRAM cell."
1990 - ELSE KOOI Philips Research Labs. Sunnyvale, CA	"For invention and development of the process for localized oxidation of silicon using a silicon nitride mask, which enabled greatly reduced dimensions in VLSI circuits."
1989 - SHUN-ICHI IWASAKI Tohoku University, Sendai, Japan	"For contributions to the miniaturization of magnetic recording systems."
1988 - IRVING AMES - IBM Corp., NY FRANCOIS M. d'HEURLE RICHARD E. HORSTMANN	"For the invention of electromigration-resistant copper-doped aluminum metallurgy."
1987 - MICHAEL HATZAKIS IBM Corp., Yorktown Heights, NY	"For fundamental contributions to the patterning techniques of submicron electron devices."
1986 - RICHARD M. WHITE Univ of California, Berkeley, CA	"For invention of surface acoustic wave electronic devices for signal processing applications."
1985 - ALEC N. BROERS IBM Corporation Hopewell Junction, NY	"For leadership and pioneering contributions to the technology and applications of electron beams to fine line lithography."
1984 - HARRY W. RUBINSTEIN Sprague Electric Co. Grafton, Wisconsin	"For early key contributions to the development of printed components and conductors on a common insulating substrate."
1983 - ABE OFFNER Perkin-Elmer Corp. Wilton, CT	"For the invention and design of the optics which made possible the projection lithography systems that were key to advancing integrated circuit manufacture."

"For the invention of the one-transistor dynamic random access memory cell and

1982 - ROBERT H. DENNARD

IBM Corp.

RECIPIENTS

1981 - DONALD R. HERRIOTT	"For key contributions to the development
1901 - DONALD K. HERRIOTT	For key contributions to the development
Bell Labs.	of a practical electron beam system for
Murray Hill, NJ	fabrication of integrated circuit masks and
	to other aspects of microlithography."

1980 - MARCIAN E. HOFF, JR. "For the conception and development of the INTEL Corp. microprocessor."

1979 - GEOFFREY W. A. DUMMER

Worcestershire, England

AND

"For contributions to materials development and fabrication techniques for miniature passive electronic components and

PHILIP J. FRANKLIN assemblies."
GSA, Federal Supply Service

1978 - JACK S. KILBY Texas Instrument, Dallas, TX ROBERT N. NOYCE

Intel Corporation, Santa Clara, CA

Washington, DC

Yorktown Heights, NY

"For contributions to miniaturization through inventions and the development of integrated circuits."

for contributions to scaling of MOS devices."