Glossary

TECHNICAL ACRONYMS

ADC  Analog-to-Digital Converters
CMOS  Complementary Metal–Oxide–Semiconductor
CNT  Carbon Nanotubes
ECP  Electro-chemical Plating
FET  Field-effect Transistor
HSQ  Hydrogen Silsesquioxane
InFO  Integrated Fan Out
MOSFET  Metal–Oxide–Semiconductor Field-effect Transistor
nTRON  Nanocryotron
RDL  Re-distribution Layers
RIE  Reactive ion etching
SNSPDs  Superconducting nanowire single photon detectors
SS  Subthreshold swing
TMAH  Tetramethylammonium Hydroxide
TREC  Thermally regenerative electrochemical cycle

MIT ACRONYMS & SHORTHAND

BE  Department of Biological Engineering
Biology  Department of Biology
ChemE  Department of Chemical Engineering
CICS  Center for Integrated Circuits and Systems
CMSE  Center for Materials Science and Engineering
IRG  Interdisciplinary Research Group
DMSE  Department of Materials Science & Engineering
EECS  Department of Electrical Engineering & Computer Science
ISN  Institute for Soldier Nanotechnologies
KI  David H. Koch Institute for Integrative Cancer Research
LL  Lincoln Laboratory
MAS  Program in Media Arts & Sciences
MechE  Department of Mechanical Engineering
MEDRC  Medical Electronic Device Realization Center
MIT-CG  MIT/MTL Center for Graphene Devices and 2D Systems
MITEI  MIT Energy Initiative
MIT-GaN  MIT/MTL Gallium Nitride (GaN) Energy Initiative
MISTI  MIT International Science and Technology Initiatives
MIT-SUTD  MIT-Singapore University of Technology and Design Collaboration Office
MIT Skoltech  MIT Skoltech Initiative
MTL  Microsystems Technology Laboratories
NSE  Department of Nuclear Science & Engineering
Physics  Department of Physics
Sloan  Sloan School of Management
SMA  Singapore-MIT Alliance
†SMART  Singapore-MIT Alliance for Research and Technology Center
†SMART-LEES  SMART Low Energy Electronic Systems Center
SUTD-MIT  MIT-Singapore University of Technology and Design Collaboration Office
UROP  Undergraduate Research Opportunities Program

U.S. GOVERNMENT ACRONYMS

AFOSR  U.S. Air Force Office of Scientific Research
†FATE-MURI  Foldable and Adaptive Two-dimensional Electronics Multidisciplinary Research Program of the University Research Initiative
AFRL  U.S. Air Force Research Laboratory
ARL  U.S. Army Research Laboratory
†ARL-CDQI  U.S. Army Research Laboratory Center for Distributed Quantum Information
ARO  Army Research Office
ARPA-E  Advanced Research Projects Agency - Energy (DOE)
DARPA  Defense Advanced Research Projects Agency
†DREaM  Dynamic Range-enhanced Electronics and Materials
DoD  Department of Defense
DoE  Department of Energy
†EFRC  U.S. Department of Energy: Energy Frontier Research Center (Center for excitonics)
DTRA  U.S. DoD Defense Threat Reduction Agency
IARPA  Intelligence Advanced Research Projects Activity
†RAVEN  Rapid Analysis of Various Emerging Nanoelectronics
NASA  National Aeronautics and Space Administration
†GSRP  NASA Graduate Student Researchers Project
NDSEG  National Defense Science and Engineering Graduate Fellowship
NIH  National Institutes of Health
†NCI  National Cancer Institute
NNSA  National Nuclear Security Administration
NRO  National Reconnaissance Office
NSF  National Science Foundation
\textsuperscript{1} CBMM  NSF Center for Brains, Minds, and Machines
\textsuperscript{1} CIQM  Center for Integrated Quantum Materials
\textsuperscript{1} CSNE  NSF Center for Sensorimotor Neural Engineering
\textsuperscript{1} EES  NSF Center for Energy Efficient Electronics Science
\textsuperscript{1} GRFP  Graduate Research Fellowship Program
\textsuperscript{1} IGERT  NSF The Integrative Graduate Education and Research Traineeship
\textsuperscript{1} NEEDS  NSF Nano-engineered Electronic Device Simulation Node
\textsuperscript{1} SEES  NSF Science, Engineering, and Education for Sustainability
\textsuperscript{1} STC  NSF Science-Technology Center
ONR  Office of Naval Research
\textsuperscript{1} PECASE  Presidential Early Career Awards for Scientists and Engineers

\section{OTHER ACRONYMS}

CNRS Paris  Centre National de la Recherche Scientifique
CONACyT  Consejo Nacional de Ciencia y Tecnología (Mexico)
IEEE  Institute of Electrical and Electronics Engineers
IHP Germany  Innovations for High Performance Microelectronics Germany
KIST  Korea Institute of Science and Technology
KFAS  Kuwait Foundation for the Advancement of Sciences
MASDAR  Masdar Institute of Science and Technology
NTU  Nanyang Technological University
NUS  National University of Singapore
NYSCF  The New York Stem Cell Foundation
SRC  Semiconductor Research Corporation
\textsuperscript{1} NEEDS  NSF/SRC Nano-Engineered Electronic Device Simulation Node
SUTD  Singapore University of Technology and Design
TEPCO  Tokyo Electric Power Company
TSMC  Taiwan Semiconductor Manufacturing Company