

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
↑ CBMM	NSF Center for Brains, Minds, and Machines
↑ CIQM	Center for Integrated Quantum Materials
↑ CSNE	NSF Center for Sensorimotor Neural Engineering
↑ E3S	NSF Center for Energy Efficient Electronics Science
↑ GRFP	Graduate Research Fellowship Program
↑ IGERT	NSF The Integrative Graduate Education and Research Traineeship
↑ NEEDS	NSF Nano-engineered Electronic Device Simulation Node
↑ PECASE	Presidential Early Career Awards for Scientists and Engineers
↑ SEES	NSF Science, Engineering, and Education for Sustainability
↑ STC	NSF Science-Technology Center
ONR	Office of Naval Research

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
↑ 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