

# Harold Y. Hwang

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Department of Photon Science, SLAC National Accelerator Laboratory  
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## BACKGROUND

Born August 4, 1970 in Pasadena, California. Married, 3 children.

## RESEARCH INTERESTS

Condensed matter physics and materials science: Correlated electrons and emergent phenomena at artificial interfaces and in confined systems; Atomic scale synthesis of heterostructures of quantum materials; Oxide heterostructures for energy applications; Low-dimensional superconductivity; Novel devices based on interface states.

## EDUCATION

1997          PhD in Physics, Princeton University.  
1993          MS in Electrical Engineering, Massachusetts Institute of Technology.  
1993          BS in Physics, Massachusetts Institute of Technology.  
1993          BS in Electrical Engineering, Massachusetts Institute of Technology.

## POSITIONS

2010-present Professor, Department of Applied Physics, Stanford University, and Department of Photon Science, SLAC National Accelerator Laboratory.  
2020-present Director, SLAC Materials Science Division, and Stanford Institute for Materials and Energy Sciences.  
2011-2020 Deputy Director, Stanford Institute for Materials and Energy Sciences.  
2010-2014 Team Leader, Correlated Electron Research Group, RIKEN, Wako, Japan.  
2009-2010 Professor, Department of Advanced Materials & Department of Applied Physics, University of Tokyo, Kashiwa, Japan.  
2006-2007 Visiting Professor, Institute for Chemical Research, Kyoto University, Kyoto, Japan.  
2005 Lecturer, International Center for Young Scientists, National Institute for Materials Science, Tsukuba, Japan.  
2003-2008 Associate Professor, Department of Advanced Materials & Department of Applied Physics, University of Tokyo, Kashiwa, Japan.  
1996-2003 Member of Technical Staff, Department of Materials Physics Research, Bell Laboratories, Lucent Technologies, Murray Hill, NJ.  
1995-1996 Research Assistant, Department of Materials Physics Research, Bell Laboratories, AT&T/Lucent Technologies, Murray Hill, NJ.

- 1994 Research Assistant, Department of Biological Computation Research, AT&T Bell Laboratories, Murray Hill, NJ.
- 1990-1993 Research Assistant, Department of Solid State and Physics of Materials Research, AT&T Bell Laboratories, Murray Hill, NJ.
- 1987-1989 Research Assistant, Department of Pharmacology, University of Texas Southwestern Medical Center, Dallas, TX.

### **SELECTED HONORS**

- 2014 Europhysics Prize (with Jochen Mannhart and Jean-Marc Triscone).
- 2013 Ho-Am Prize (Science).
- 2011 Fellow, American Physical Society.
- 2008 IBM Japan Science Prize (Physics).
- 2007 TEPCO Foundation Award.
- 2006-2009 Japan Science and Technology Agency Sakigake Fellowship.
- 2005 Materials Research Society Outstanding Young Investigator Award.
- 2004 Mitsubishi Foundation Award.
- 2003-2006 Japan Science and Technology Agency Sakigake Fellowship.

### **SELECTED PROFESSIONAL ACTIVITIES**

- Science Advisory Committee, Institute for Quantum Matter (Johns Hopkins University & Princeton University) (2018-present).
- Chair, Condensed Matter and Materials Physics, Committee of Visitors, DOE Basic Energy Sciences Materials Science and Engineering Division (2018).
- Scientific Review Committee (Key Technologies), Karlsruhe Institute of Technology (2017).
- Member-at-Large, Executive Committee of the APS Division of Condensed Matter Physics (2015-2018).
- Science Advisory Committee, MPI Stuttgart (2011-2019).
- Foreign Associate, Quantum Materials Program, Canadian Institute for Advanced Research (2008-2019).