



Alexander N. Korotkov

Professor

Department of Electrical Engineering
University of California, Riverside
Riverside, CA 92521
Phone: (951) 827-2345
Fax: (951) 827-2425
E-mail: korotkov@ece.ucr.edu
Homepage: ece.ucr.edu/~korotkov/

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Research interests

Quantum computing, quantum measurements, quantum feedback control, nanoelectronics

Publications

136 journal papers, 39 conference proceedings and book chapters

Citation index

Google Scholar: 8,000 citations, 22 papers cited over 100 times, h-index 46
Web of Science: 5,000 citations, h-index 39

Education

Ph.D. in Physics in 1991 from Moscow State University (advisor Prof. K.K. Likharev)
M.S. in Physics (cum laude) in 1986 from Moscow State University

Employment

2000 – present *Professor (2006 – present)*
 Associate Professor (2002 – 2006)
 Assistant Professor (2000 – 2002)
 Dept. of Electrical Engineering, University of California, Riverside, CA

1998 – 2000 *Research Assistant Professor, Research Scientist*
 Dept. of Physics and Astronomy, State University of New York, Stony Brook, NY

1996 – 1998 *Senior Scientist*
 Dept. of Microelectronics, Moscow State University, Moscow, Russia

1993 – 1996 *Research Scientist, Postdoctoral Research Associate*
 Department of Physics, State University of New York at Stony Brook, NY

1989 – 1993 *Senior Scientist, Scientist, Engineer*
 Dept. of Microelectronics, Institute of Nuclear Physics, Moscow State University

1987 – 1989 *Senior Technician (Physicist)*
 Department of Physics, Moscow State University, Moscow, Russia

Visiting positions

June 1998 – Aug. 1998 *Visiting Professor*

Dec. 1997 – March 1998

Dept. de Physique, Université de la Méditerranée (Luminy), Marseille, France

Feb. 1997 – May 1997 *Researcher*

NEC Fundamental Research Laboratories, Tsukuba, Japan

Main research funding

"Continuous quantum state tracking and error correction", ARO/LPS, 2015-2019

"Multi-qubit algorithms in Josephson phase qubits", ARO/IARPA, 2010-2015

"Control of quantum open systems: theory and experiment", ARO MURI, 2011-2016

"Algorithm demonstrations using Josephson qubits", ARO/IARPA, 2008-2010

"High-fidelity Josephson qubits", ARO, 2004-2008

"State purification and decoherence suppression by continuous measurement of a qubit",
ARO, 2001-2004

"Background-charge-insensitive single-electron memory", SRC, 2001-2004

"Digital applications of single-electron tunneling", Samsung Electronics, 1997-1998

Professional memberships

APS, IEEE

Ph.D. students graduated

Qin Zhang (2007), Kyle Keane (2012), Andrey Rodionov (2014),

Eric Mlinar (2017), Mostafa Khezri (2018)

Current Ph.D. students

Vinay Tripathi

Postdocs/researchers

Juan Atalaya (01/2016 – present), Mohammad Bahrami (02/2016 – 07/2016),

Justin Dressel (09/2013 – 08/2015), Eyob Sete (05/2012 – 02/2015),

Andrzej Veitia (12/2012 – 11/2013), Andrei Galiautdinov (09/2010 – 12/2011),

Ricardo Pinto (04/2009 – 04/2010), Abraham Kofman (06/2005 – 06/2008),

Valentin Turin (11/2001 – 01/2003), Rusko Ruskov (10/2001 – 08/2004)