

Curriculum Vitae

Prof. Alexander A. Golubov

Born February 1, 1960
Citizen of the Netherlands

Private address

Lupineweg 26
7531AV Enschede
Netherlands
a.golubov@utwente.nl

Education

1977-1983: Studies in Physics at the Moscow Technical University for Metals and Alloys,
Faculty of physics and chemistry, Moscow, USSR.

1983: Master degree with excellence from the Faculty of Physics and Chemistry, Department of theoretical
physics headed by Prof. A. A. Abrikosov.

1983-1987: Postgraduate school at the Institute of Solid State Physics, Russian Academy of Sciences,
Chernogolovka, Moscow District, Russia.

Nov.1987: PhD degree in solid state physics, Chernogolovka, Russia, supervisor Prof. D.E.Khmelnitskii.

June 1997: Second doctoral degree (Habilitation), Chernogolovka, Russia.

Employment

1987 - 1997: Research associate, senior research associate, Institute of Solid State Physics, Russian
Academy of Sciences, Chernogolovka, Russia

1998- 2005: Senior research associate, Faculty of Science and Technology, University of Twente, The
Netherlands

2006- present: Professor, Faculty of Science and Technology, University of Twente, The Netherlands

Work in other institutions

1990 - 1991: Postdoc, Department of Physics, RWTH Aachen, Germany

1993 - 1994: Guest scientist, Department of Applied Physics, University of Twente, The Netherlands

1995 - 1996: Guest scientist, Kernforschungszentrum Juelich (KFA), Germany

Expertise and working experience

1. Theoretical condensed matter physics, in particular transport properties of superconductors,
proximity and Josephson effect.
2. Physics of electronic and magnetic devices.
3. Teaching postgraduate courses in solid state physics.
4. Guided over 10 post-graduate students during 1996-2019

Scientific output

More than 360 publications in refereed journals. More than 11 500 citations, h-index 51 (Web of Science), over 80 invited talks at international conferences

Memberships in program and organizational committees of international conferences

Member of organizational committee of the Lorentz Center workshops “Quantum Effects in Arrays of Nanocrystals” and “Physics of Nanoscale Superconducting Heterostructures”, Leiden, Netherlands, April & July 2007

Member of program committee of Workshop “Superconductivity and Magnetism: Hybrid Proximity Nanostructures and Intrinsic Phenomena”, Paestum, Italy, September 2010.

Member of program committee of International Conference “Superconducting Nanohybrids 2012”, San Sebastian, Spain, September 2012.

Member of organizational committee of MTI and ITS Fall Workshop “Coherent Hybrid Structures on the Mesoscale“, Chicago, USA, October 2013.

Organizer of International Conference and School “Superconducting hybrid nanostructures: physics and application”, Moscow Institute of Physics and Technology, Russia, Sept. 2016.

Organizer of International Conference and School “Superconducting hybrid nanostructures: physics and application”, Moscow, Russia, Sept. 2016 and at Listvjanka (Baikal lake), July 2017.

Member of International Advisory Committee for the Japanese Grant-in Aid for Scientific Research on Innovative Areas from MEXT (Ministry of Education, Culture, Sports, Science and Technology of Japan) “Topological Quantum Phenomena in Condensed Matter Physics” (2010-2015) and “Topological Materials Science” (2016-2020)

Distinctions and awards

Winner of Megagrant from Russian government (2014-2018)
“Topological quantum phenomena in superconducting structures”

Outstanding referee APS Journals (2014) and Europhysics Letters (2015)

Board member of the journal “Superconducting Science and Technology”

Regular referee in journals of American Physical Society (PRB, PRL, APL), and in journals of the Nature group

5 representative publications

N. Poccia, T.I. Baturina, F. Coneri, C.G. Molenaar, X.R. Wang, G. Bianconi, A. Brinkman, H. Hilgenkamp, A.A. Golubov, and Valerii M. Vinokur, ‘Critical behavior at a dynamic vortex insulator-to-metal transition’, Science 349, 1203 (2015)

DOI: 10.1126/science.1260507

ImpactFactor: 41.058

A.A. Golubov and M.Yu.Kupriyanov, “Controlling magnetism”, Nature Materials 16, 156 (2017)
DOI: 10.1038/nmat4847
ImpactFactor: 39.235

V.S. Stolyarov, T. Cren, C. Brun, I.A. Golovchanskiy, O.A. Skryabuna, D.I. Kasatonov, M.M. Khapaev, A.A. Golubov, D. Roditchev, “Expansion of a superconducting vortex core into a diffusive metal”, Nature Communications 9, 2277 (2018)
DOI: 10.1038/s41467-018-04582-1
ImpactFactor: 12.353

C. Li, J. C. de Boer, B. de Ronde, S. V. Ramankutty, E. van Heumen, Y. Huang, Anne de Visser, Alexander A. Golubov, Mark S. Golden, Alexander Brinkman, “ 4π -periodic Andreev bound states in a Dirac semimetal“, Nature Materials 17, 875 (2018)
DOI: 10.1038/s41563-018-0158-6
ImpactFactor: 39.235

P. Schüffelgen, D. Rosenbach, C. Li, T. W. Schmitt, G. Mussler, E. Berenschot, N. Tas, A. A. Golubov, A. Brinkman, Th. Schäpers and D. Grützmacher, ‘Selective area growth and stencil lithography for in situ fabricated quantum devices’, Nature Nanotechnology 14, 82 (2019)
DOI: 10.1038/s41565-019-0506-y
ImpactFactor: 37,49