

CURRICULUM VITAE

Personal data

Name Markku Sopanen
Born May 11, 1964, Helsinki, Finland

Education

Master of Science (Tech.), Helsinki University of Technology (TKK), 1991.
Study programme: engineering physics.
Doctor of Science (Tech.), TKK, 1997. Thesis: *Self-organized Growth and Optical Spectroscopy of Semiconductor Nanostructures*.
Docent in physics, TKK, Optoelectronics Laboratory, Nov 2002 – Mar 2009.

Positions

Helsinki University of Technology (TKK), Laboratory of Physics
Research and teaching assistant, Jan 1988 – Dec 1990
TKK, Optoelectronics Laboratory
Researcher, Apr 1991 – Jul 1992
Assistant post/Researcher, Aug 1992 – Dec 1997
Lecturing researcher, Jan 1998 – Aug 2006
Professor in nanotechnology (acting), Oct 2003 – Sep 2004
Academy of Finland
Postdoctoral researcher, Aug 1998 – Jul 2000
Academy fellow, Oct 2000 – Jul 2001
University of California San Diego, Department of Electrical and Computer Engineering
Associate visiting scientist, Jan 1999 – Aug 1999
TKK (from 2010 Aalto University), Department of Micro- and Nanosciences
Lecturing researcher, Sep 2006 – Feb 2009
Professor (fixed term), Mar 2009 – Feb 2014
Senior university lecturer, Mar 2014 – Sep 2014
Associate Professor (tenured), Oct 2014 –

Thesis supervision

Doctoral degree (supervisor), 11 theses, 2006 – 2014.
Master's degree (supervisor/instructor), 24 theses, 1994 – 2014.

Expert and reviewer tasks

Evaluator for EU FET-OPEN, 2010 – 2012.
Pre-examiner, 4 doctoral theses, 2003 – 2014.
Opponent, 1 doctoral thesis, 2014.

Positions of trust

Finnish representative in COST MP1302 "Nanospectroscopy", 2014 – 2016.

Finnish representative in COST MP0805 "Novel Gain Materials and Devices Based on III-V-N Compounds", 2009 – 2013.

Experience of leadership

Leader of optoelectronics group, TKK/Aalto University, since 2003.

Head of Optoelectronics Laboratory, TKK, Oct 2003 – Sep 2004.

Director of international *Master's Programme in Micro- and Nanotechnology*, TKK, Oct 2003 – Sep 2006.

Director of international *Master's Programme in Micro- and Nanotechnology*, Aalto University, May 2011 –.

Acquired external funding

Academy of Finland, 1 070 000 EUR, 2002 – 2014.

TEKES, 1 570 000 EUR, 2007 – 2012.

Publications – ISI 15.12.2014

ISI	160
N:o of citations	1684
H-Index	17

Most important publications

- I. H. Lipsanen, M. Sopanen and J. Ahopelto, Luminescence from excited states in strain-induced InGaAs quantum dots, *Physical Review B* 51 (1995) R13868–13871. Cited: 165.
- II. M. Sopanen, H. P. Xin, and C.W. Tu, Self-assembled GaInNAs quantum dots for 1.3 and 1.55 μm emission on GaAs, *Applied Physics Letters* 76 (2000) 994–996. Cited: 158.
- III. S. Grosse, J. Sandmann, G. von Plessen, J. Feldmann, H. Lipsanen, M. Sopanen, J. Tulkki and J. Ahopelto, Carrier relaxation dynamics in quantum dots: scattering mechanisms and state filling, *Physical Review B* 55 (1997) 4473–4476. Cited: 99.
- IV. J. Sormunen, J. Riihonen, M. Mattila, J. Tiilikainen, M. Sopanen, and H. Lipsanen, Transformation of self-assembled InAs/InP quantum dots into quantum rings without capping, *Nano Letters* 5 (2005) 1541–1543. Quantum ring fabrication method.
- V. A. R. Lingley, M. Ali, Y. Liao, R. Mirjalili, M. Klöner, M. Sopanen, S. Suihkonen, T. Shen, B. P. Otis, H. Lipsanen and B. A. Parviz, A single-pixel wireless contact lens display, *J. Micromech. Microeng.* 21 (2011) 125014. More than 300 news appearances, incl. BBC.
- VI. V. Dhaka, T. Haggren, H. Jussila, H. Jiang, E. Kauppinen, T. Huhtio, M. Sopanen, and H. Lipsanen, High Quality GaAs Nanowires Grown on Glass Substrates, *Nano Letters* 12 (2012) 1912-1918. Nanowires on glass –method.