

Curriculum vitae

Ludvík Smrčka

Born: February 9, 1941, Prague, Czech Republic

Degrees:

1963 Ing. (MSc.)	from Faculty of Technical and Nuclear Physics, Technical University, Prague, Czechoslovakia
1970 CSc. (PhD.)	from Czechoslovak Academy of Sciences, Prague, Czechoslovakia
1991 DrSc. (DSc.)	from Czechoslovak Academy of Sciences, Prague, Czechoslovakia

Employment:

October 1964 - September 1967	PhD. Student Institute of Solid State Physics CSAS
October 1967 - May 1970	Research Associate Institute of Solid State Physics CSAS
June 1970 - September 1984	Scientist Institute of Solid State Physics CSAS
October 1984 - present	Senior Scientist Institute of Physics ASCR
1989 - 2007	Head of the Department of Physics of Surfaces and Interfaces

Grants:

1991 – 1993	Internal grant of ASCR No. 11059 <i>Magnetotransport in lateral superlattices</i>
1992 – 1994	Educational grant of the Ministry of Education CR No. V091 <i>Center of material Research and Education</i>
1994 – 1996	Internal grant of ASCR No. A110414 <i>Theory of electronic spectra in quantum wells and heterostructures subjected to magnetic fields</i>
1996 – 1998	Grant of GACR No. 202/96/0036 <i>Magnetotransport in Si(100) MOSFET's with two occupied subbands at temperatures below 4.2 K</i>
1999 – 2001	Grant of the Ministry of Education Barrande 99011 <i>Magnetotransport in semiconductor structures</i>
2001 – 2003	Grant of GACR No. 202/01/0754 <i>Magnetotransport in bilayer semiconductor structures</i>

- 2003 – 2004 Grant of the Ministry of Education Barrande 2003-13
Superlattices and quantum wells in tilted magnetic fields
- 2004 – 2006 Internal grant of ASCR No. IAA10104
Magnetotransport in nanoscale (short-period) semiconductor superlattices
- 2006 – Grant of GACR No. 202/06/0025
Structure and magnetic properties of epitaxial GaMnAs thin layers (co-applicant)
- 2006 – 2010 Grant AVCR No. KAN400100652
Structures for spintronics and quantum phenomena created by electron beam lithography

Grenoble High Magnetic Field Laboratory projects:

- 1996 SE1496 *New series of Shubnikov de Haas oscillations in Si(100) inversion layers*
- 1997 SE2097 *Fermi contours of the 2DEG at GaAs/AlGaAs asymmetric double quantum wells subject to in plane magnetic fields*
- 1998 SE0398 *SdH oscillations and magnetophonon effect of 2DEG in GaAs/AlGaAs asymmetric double quantum wells subject to tilted magnetic fields II*
- 1999 SE4199 *Electron transport in GaAs/AlGaAs asymmetric double quantum wells*
- 2000 SE0300 *Magnetotransport in Si(100) MOSFET's with two occupied subbands*
SE4200 *Electron transport in gated GaAs/AlGaAs heterostructures*
- 2001 SE0201 *Electron transport in gated GaAs/AlGaAs heterostructures II*
SE3101C *Back gate controlled electron transport in GaAs/AlGaAs double quantum wells*
- 2002 SE0502C *Gate controlled subband in GaAs/AlGaAs double quantum wells*
SE4202 *Magnetoresistance of InGaAs/InP superlattices in tilted magnetic fields*
- 2003 SE1903C *Magnetoresistance of semiconductor superlattices in tilted magnetic fields II*
- 2003 SE3403 *Gate controlled subband occupancy in GaAs/AlGaAs double quantum wells*
- 2003 SE3403 *Gate controlled subband occupancy in GaAs/AlGaAs double quantum wells*
- 2004 SE1004 *Fine structure of Landau subbands in GaAs/AlGaAs three-dimensional superlattices subject to tilted magnetic fields*
- 2004 SE3804 *3D GaAs/AlGaAs superlattices with closed Fermi surfaces: tilted-magnetic-field-induced 3D to 2D transitions*
- 2005 SE0305 *3D GaAs/AlGaAs superlattices with illumination-controlled electron concentration: tilted-magnetic-field-induced 3D to 2D transitions*
- 2005 SE3005 *Illumination-induced changes of the Fermi surface topology in three-dimensional GaAs/AlGaAs superlattices*
- 2006 SE0106 *Illumination-induced changes of the Fermi surface topology in three-dimensional GaAs/AlGaAs superlattices II*
- 2006 SE2406 *Magnetoresistance anisotropy of thin (GaMn)As layers and its temperature dependence*
- 2007 SE0607 *Magnetoresistance anisotropy of thin (GaMn)As layers and its temperature dependence II*
- 2007 SE3607 *On the metallic conduction of GaMnAs and the transition to the insulating regime*

- 2008 SE0508 *In-plane magnetic-field-induced changes in the electronic structure of graphite*
- 2009 SC2009 *Low temperature de Haas-van Alphen oscillations in HOPG and natural graphite*
- 2012 GSC34-112 *Influence of hydrogen intercalation on magnetotransport in graphene on SiC*

Honors:

Czechoslovak state prize for physics, 1986

Professional societies and committees membership:

Society of Czechoslovak Mathematicians and Physicists

International Advisory Board of Czechoslovak Journal of Physics (1983 – 1990)

Subcommittee 202, Grant Agency of the Czech Republic, (1997 – 2004)

Committee 202, Grant Agency of the Czech Republic, (2001 – 2004)

Organizing Committee and the Guest Editor of Physica E for EP2DS-14 Conference in Prague, 2001

Review Panel for the EUROCORES programme FoNE, 2005-2010

Referee for the Physical Review journals and Reviews of Modern Physics

Referee of the National Science Foundation Proposals