

Curriculum Vitae of Dr. Evgeni Kaidashev

Surname : Kaidashev

First : Evgeni

Patronimic: Michailovich

Date and place of birth : 22 May 1953, Samara, Russia ,married, 2 Children

Nationality : Russian

Address: Southern Federal University, Institute for Mathematics, Mechanics, and Computer Science in the name of I.I. Vorovich, Stachki 200/1,b.1, 344090 Rostov-on-Don, Russian Federation

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Education : 1970-1978- student of the Rostov State University physical faculty

1990-1994- post-graduate of the Moskow Institute of Radioengineering and Electronics of Russian Academy of Science (IRE RAS, Moskow)

1995 – Ph. D.”Epitaxial High – T_c $YBa_2Cu_3O_{7-x}$ films. Preparation and application” (chief Dr.Roald N. Sheftal), Moscow, IRE RAS

Career /Emploument : 1978 – in staff of the Mechanics and Applied Mathematics Institute of Rostov-on-Don University as junior Researcher

1982-2005- in staff of the Mechanics and Applied Mathematics Research Institute of Rostov-on-Don University as senior Research

2005-2017-Professor Assistent , Faculty of Physics, Department of Nanotechnology, Southern Federal University,

2001-2017- Head Nanomaterials Laboratory, Institute for Mathematics, Mechanics, and Computer Science in the name of I.I. Vorovich

Specialization : Pulsed laser deposition thin films and nanowire

Awards,Fellowship : 1. Sloan Foundation Grant awarded by the American Physical Society (1993)

2.Member of New York Academy of Science (1996)

Visiting Positions :

1.09.2000 -30.11.2000 - Senjor Researcher , PLD Laboratory (Head Dr.M.Lorenz),Institut fuer Experimentelle Physik II, University of Leipzig,Germany

1.09.2001 -30.11.2001 - Senjor Researcher , PLD Laboratory,Institut fuer Experimentelle Physik II, University of Leipzig,Germany

1.04.2002 -31.12.2003 - Senjor Researcher , PLD Laboratory,Institut fuer Experimentelle Physik II, University of Leipzig,Germany

1.09.2002 -31.10.2004- Senjor Researcher , PLD Laboratory,Institut fuer Experimentelle Physik II, University of Leipzig,Germany

1.08.2005 -30.10.2005 - Senjor Researcher , PLD Laboratory,Institut fuer Experimentelle Physik II, University of Leipzig,Germany

1.08.2006 -30.10.2006 - Senior Researcher ,PLD Laboratory,Institut fuer Experimentelle Physik II, University of Leipzig,Germany
15.06.2007 -15.08.2007 -Senior Researcher ,PLD Laboratory,Institut fuer Experimentelle Physik II, University of Leipzig,Germany

Publications : is autor or co-autor of 160 publications.

Research ID: H-7421-2016(Web of Science). Research ID: 6701357740 (Scopus).

My current research interest:

Pulsed laser deposition thin films ZnO based thin films and nanowire.

List of selected publications

1. Kaidashev E. M., Lorenz M., Wenckstern H., Benndorf G., Rahm A., Semmelhack H.-C., Han K.-H., Hochmuth H., Bundesmann C., Riede V., Grundmann M., High electron mobility of epitaxial ZnO thin films on c-plane sapphire grown by multi-step pulsed laser deposition, Appl. Phys. Lett. 82 No. 22 (2003) 3901-3.
2. Lorenz M., Kaidashev E. M., Wenckstern H., Riede V., Bundesmann C., Spemann D., Benndorf G., Hochmuth H., Rahm A., Semmelhack H.-C., Grundmann M. Optical and electrical properties of epitaxial (Mg, Cd)_xZn_{1-x}O, ZnO, and ZnO:(Ga, Al) thin films on c-plane sapphire grown by pulsed laser deposition // Solid State Electronics.- 2003.-47.-p. 2205-2208
3. Lorenz M., Lenzner J., Kaidashev E.M., Hochmuth H., Grundmann M. Cathodoluminescence of selected single ZnO nanowires on sapphire//Annalen der Physik.-13.-No.1.-2004.-p.39-42.
4. Nobis T., Kaidashev E.M., Rahm A., Lorenz M., Lenzner J., Grundmann M. Spatially Inhomogeneous Impurity Distribution in ZnO Micropillars // NanoLetters.- 2004.-N. 4.- p. 797 – 800
5. Nobis T., Kaidashev E.M., Rahm A., Lorenz M., Grundmann M. Whispering gallery modes in nano-sized dielectric resonators with hexagonal cross section//Phys. Rev. Lett.- 2004.-v.93.-N.10.-p.1039031-1039034.
6. M. Lorenz, E. M. Kaidashev, A. Rahm, Th. Nobis, J. Lenzner, G. Wagner, D. Spemann, H. Hochmuth, and M. Grundmann Mg_x Zn_{1-x}O (x<0.2) nanowire arrays on sapphire grown by high-pressure pulsed laser deposition//Appl.Phys.Lett.2005.v. 86.p 143113-143115
7. A. Rahm, E.M. Kaidashev, H. Schmidt, M. Diaconu, A. Pöppel, R. Böttcher, Ch. Meinecke, T. Butz, M. Lorenz and M. Grundmann, Growth and Characterization of Mn- and Co-Doped ZnO Nanowires, Microchimica Acta, 2006, p.1436-5073
8. Czekalla, J. Guinard, C. Hanisch, B. Q. Cao, E. M. Kaidashev, N. Boukos, A. Travlos, J. Renard, B. Gayral, D. Le. Si. Dang, M. Lorenz and M. Grundmann Spatial fluctuations of optical emission from single ZnO/MgZnO nanowire quantum wells // Nanotechnology 19 (2008) 115202
9. R. Schmidt-Grund, B. Rheinlaender, E. M. Kaidashev, M. Lorenz, M. Grundmann, D. Fritsch, M. M. Schubert, H. Schmidt, C. M. Herzinger Vacuum Ultraviolet Dielectric Function and Band Structure of ZnO //Journal of the Korean Physical Society, Vol. 53, No. 1, July 2008, pp. 88-93
10. V.E. Kaydashev, E.M. Kaidashev, M. Peres, T. Monteiro, M.R. Correia, N.A. Sobolev, L.C. Alves, N. Franco, and E. Alves, Structural and optical properties of Zn_{0,9}Mn_{0,1}O/ZnO core-shell nanowires and Zn_{0,9}Mn_{0,1}O nanorods designed by pulsed laser deposition// J.Appl. Phys. 106, 093501 (2009)
11. O.E. Polozhentsev, V.L. Mazalova, V.E. Kaidashev, E.M. Kaidashev, Ya. Zubavichus, A.V. Soldatov, ZnO:Mn nanorods and ZnO/ZnO:Mn core/shell structures: Synthesis and local atomic structure.//Journal of Physics: Conference Series.2009. v.190 .p. 012138-012141
12. Amélia O. Ankiewicz, Wolfgang Gehlhoff, Joana S. Martins, Ângela S. Pereira, Sérgio Pereira, Axel Hoffmann, Evgeni M. Kaidashev, Andreas Rahm, Michael Lorenz, Marius

- Grundmann, Maria C. Carmo, Tito Trindade, and Nikolai A. Sobolev, Magnetic and structural properties of transition metal doped zinc-oxide nanostructures // Phys. Status Solidi B. 2009. B 246, No. 4, p.766–770
13. M. Lorenz, A. Rahm, B. Cao, J. Zuniga-Perez, E.M. Kaidashev, N. Zakharov, G. Wagner, Th. Nobis, Ch. Czekalla, G. Zimmermann, M. Grundmann // Self-organized growth of ZnO-based nano- and microstructures // Phys. Status Solidi B. 2010. v.247. p.1265
14. Ishioka K., Petek H., Kaydashev V.E., Kaidashev E. M., Misochko O. V. Coherent optical phonons of ZnO under near resonant photoexcitation // J. Phys.: Condens. Matter. 2010. v. 22. p. 465803
15. Guda. A.A., Smolentsev N., Verbeeck J., Kaidashev E.M., Zubavichus Y., Kravtsova A.N., Polozhentsev O.E., Soldatov A.V. X-ray and electron spectroscopy investigation of the core-shell nanowires of ZnO:Mn // Solid State Communications. 2011. v. 151. p. 1314–1317
16. A. A. Guda, N. Smolentsev, M. Rovezzi, E. M. Kaidashev, V. E. Kaydashev, A. N. Kravtsova, V. L. Mazalova, A. P. Chaynikov, E. Weschke, P. Glatzel and A. V. Soldatov, Spin-polarized electronic structure of the core-shell ZnO/ZnO:Mn nanowires probed by X-ray absorption and emission spectroscopy // J. Anal. At. Spectrom., 2013, 28, 1629-1637.
17. Pushkariov, V.I., Nikolaev, A.L., Kaidashev, E.M. Synthesis and characterization of ZnO nanorods obtained by catalyst-free thermal technique // Journal of Physics: Conference Series. 2014. V. 541, Issue 1, 012031
18. Puzikov, A.S., Lyanguzov, N.V., Kaidashev, E.M. Pulsed laser deposition and investigation of antimony-doped ZnO films // Journal of Physics: Conference Series. 2014. V. 541, Issue 1, 012004
19. Photoelectric properties of MSM structure based on ZnO nanorods, received by thermal evaporation and carbothermal synthesis // Journal of Physics: Conference Series. 2014. V. 541, Issue 1, 012038
20. G. Y. Karapetyan, V. E. Kaydashev, T. A. Minasyan, D. A. Zhilin, K. G. Abdulvakhidov and E. M. Kaidashev, Use of multiple acoustic reflections to enhance SAW UV photo-detector sensitivity, Smart Materials and Structures, 2017, v.26, p.035029

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