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**NATALIYA POPOVYCH**

Nataliya Popovych was born on February, 24th, 1972 in Velykyj Bereznyj, Transcarpathia, Ukraine. In 1989 I graduated from the secondary school of Velykyj Bereznyj with a Gold Medal for excellent studying and entered the Physical Faculty at Uzhhorod State University. I graduated from the Solid State Electronics Department with the honours degree at 1994 and became a post-graduate student at this department. Under the guidance of Prof. Dovgoshej M. I. I investigated obtaining processes and optical properties of semiconductor thin films. On April 14th, 2000 in Yu. Fed’kovych Chernivtsi National University (Ukraine) I uphold a dissertation which run under the headline “Formation processes and the main optical properties of zinc thiogallate thin films” and got a PhD degree in physic-mathematical sciences.

Since December, 1st, 1997 I had worked as a junior researcher and in May, 1999 I was moved into the position of researcher at the laboratory of the investigation of thin films technology and properties in Uzhhorod University. Since 2003 I had worked as a senior researcher at Institute of Solid State Physics and Chemistry in Uzhhorod State University.

Since September, 1st, 2008 I was engaged into the scientifically-pedagogical activity on the position of a docent at the Solid State Electronics Department.

After the uploading PhD dissertation I went on in investigation of electrical and photoelectrical phenomena in crystalline and non-crystalline thin films. In the field of physics of the semiconductors the main new results were received. For the first time there was investigated the influence of preparation methods of amorphous and crystalline semiconductor thin films on the structure and physical properties. It was established that the structure and properties of amorphous films depend on the rate of evaporation and substrate temperature. Charge transition phenomena in heterostructures crystalline Si – metal – amorphous was investigated too. Elastic constants for chalcogenide glasses in structural correlation range were measured. Currently I investigate the influence of the laser illumination and thermal annealing on structure of chalcogenide surface nanolayers by XPS and SRPES methods.

I am a co-author of more than 40 printed research articles and schoolbooks, and I was the participant in more than 30 international conferences.

# Curriculum Vitae (10/03/2016)

**Personal data:**

Name: Natalya Popovych

Born: 24th February 1972 in Transcarpathia, Ukraine

Marital status: Married

Nationality: Ukrainian

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Voloshyna str., 54, Uzhhorod 88000, Ukraine,

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**Education and qualifications:**

April, 2000 PhD in Physics of Solid State, Yu. Fed’kovych Chernivtsi National University, Chernivtsi, Ukraine

Thesis: "Formation processes and the main optical properties of zinc tiohallate thin films"

Supervisor: Prof. Nikolaj Dovgoshey

June, 1994 Master degree in Physics, physicist, teacher,

Uzhhorod State University.

June, 1989 Secondary School of Velykyj Bereznyj, Transcarpathia.

**Work experience:**

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| September 2014 - currently | Docent of Solid State Electronics Department, Uzhhorod National University |
| July 2003 – September 2014 | Senior Researcher, Institute of Solid State Physics and Chemistry, Uzhhorod National University |
| May 1999 – July 2003 | Researcher, Institute for Solid State Physics and Chemistry, Uzhhorod State University |
| November 1997 – May 1999 | junior researcher, Institute of Solid State Physics and Chemistry, Uzhhorod State University |
| November 1994 – October. 1997 | Post-graduate course (physics of solid state), Uzhhorod State University, Solid State Electronics Department:   * Structure and properties of semiconductor materials * Preparation methods of amorphous and crystalline semiconductor thin films * Optical properties of amorphous and crystalline thin films * Laser resistance of the Zn(Cd)Ga2S(Se)4 thin layers |
| September 1989 – June 1994 | Graduate school, Uzhhorod State University, Physical Faculty |

**Additional skills:**

Languages: Ukrainian (mother tongue)

English (good)

Slovak (good)

Russian (fluently)

IT: Familiar with Windows, LINUX/UNIX systems, MS Office.

Origin, MathLab, Corel-Draw, Adobe Photoshop, etc.

**Honors/awards:**

* High school, Master Diploma with honours.
* Secondary school, Gold Medal for peculiar successes in study.

**Scientific Publications (**more than 40 printed research works and schoolbooks):

1. [O. Kondrat](http://scitation.aip.org/search?value1=O.+Kondrat&option1=author&option912=resultCategory&value912=ResearchPublicationContent), [R. Holomb](http://scitation.aip.org/search?value1=R.+Holomb&option1=author&option912=resultCategory&value912=ResearchPublicationContent), [N. Popovich](http://scitation.aip.org/search?value1=N.+Popovich&option1=author&option912=resultCategory&value912=ResearchPublicationContent), [V. Mitsa](http://scitation.aip.org/search?value1=V.+Mitsa&option1=author&option912=resultCategory&value912=ResearchPublicationContent), [M. Veres](http://scitation.aip.org/search?value1=M.+Veres&option1=author&option912=resultCategory&value912=ResearchPublicationContent), [A. Csik](http://scitation.aip.org/search?value1=A.+Csik&option1=author&option912=resultCategory&value912=ResearchPublicationContent), [A. Feher](http://scitation.aip.org/search?value1=A.+Feher&option1=author&option912=resultCategory&value912=ResearchPublicationContent), [N. Tsud](http://scitation.aip.org/search?value1=N.+Tsud&option1=author&option912=resultCategory&value912=ResearchPublicationContent), [M. Vondráček](http://scitation.aip.org/search?value1=M.+Vondr%c3%a1%c4%8dek&option1=author&option912=resultCategory&value912=ResearchPublicationContent), [V. Matolín](http://scitation.aip.org/search?value1=V.+Matol%c3%adn&option1=author&option912=resultCategory&value912=ResearchPublicationContent) and [K. C. Prince](http://scitation.aip.org/search?value1=K.+C.+Prince&option1=author&option912=resultCategory&value912=ResearchPublicationContent), In situ investigations of laser and thermally modified As2S3 nanolayers: Synchrotron radiation photoelectron spectroscopy and density functional theory calculations *J. Appl. Phys.* **118** (2015) 225307.
2. O. Kondrat, R. Holomb, N. Popovich, V. Mitsa, M. Veres, A. Csik, N. Tsud, V. Matolín and K.C. Prince, Local surface structure and structural properties of As-Se nanolayers studied by synchrotron radiation photoelectron spectroscopy and DFT calculations *J. Non-Cryst. Sol*. **410C** (2015) 180-185.
3. [Vladimir Mitsa](http://www.sciencedirect.com/science/article/pii/S0022309313006492), [Roman Holomb](http://www.sciencedirect.com/science/article/pii/S0022309313006492), [Oleksandr Kondrat](http://www.sciencedirect.com/science/article/pii/S0022309313006492), [Nataliya Popovych](http://www.sciencedirect.com/science/article/pii/S0022309313006492), [Nataliya Tsud](http://www.sciencedirect.com/science/article/pii/S0022309313006492), [Vladimír Matolín](http://www.sciencedirect.com/science/article/pii/S0022309313006492), [Kevin C. Prince](http://www.sciencedirect.com/science/article/pii/S0022309313006492), [Gabor Lovas](http://www.sciencedirect.com/science/article/pii/S0022309313006492), [Stepan Petretskiy](http://www.sciencedirect.com/science/article/pii/S0022309313006492), [Sára Tóth](http://www.sciencedirect.com/science/article/pii/S0022309313006492), Synchrotron XPS studies of illuminated and annealed flash evaporated a-Ge2S3 films *J. Non-Cryst. Sol*. **401** (2014) 258-262.
4. Kondrat O, Popovich N, Holomb R, Mitsa V, Lyamayev V, Tsud N, Cháb V, Matolín V, Prince K.C Laser induced changes of As50Se50 nanolayers studied by synchrotron radiation photoelectron spectroscopy *Thin Solid Films* **520** (2012*)* 7224-7229.
5. Kondrat O, Popovich N, Holomb R, Mitsa V, Lyamayev V, Tsud N, Cháb V, Matolín V, Prince K.C. Synchrotron radiation photoelectron spectroscopy studies of self-organization in As40Se60 nanolayers stored under ambient conditions and after laser irradiation *J. Non-Cryst. Sol*. **358** (2012) 2910-2916.