**Curriculum vitæ**

|  |  |  |
| --- | --- | --- |
| *First name and surname:* | Vasyl Kuryliuk |  |
| *Date of Birth:* | 23 July 1982 |
| *Address:* | 64/13, Volodymyrska Street, 01601 Kyiv, Ukraine |
| *Phone:* | +380987117118 |
| *Civil status:* | Married |
| *E-mail:* | [kuryluk@knu.ua](mailto:kuryluk@knu.ua) |
| *Scopus ID:* | 26647533300 |

|  |  |
| --- | --- |
| Status: | |
|  |  |
| *Position:* | Head of Department |
| *Establishment:* | Department of Metal Physics, Faculty of Physics, Taras Shevchenko National University of Kyiv |
| *Phone:* | +380445213312 |
| *E-mail:* | [dekanat203@gmail.com](mailto:dekanat203@gmail.com) |

|  |  |
| --- | --- |
| Education: | |
|  |  |
| *2005 – 2008* | PhD-student, Solid State Physics, Taras Shevchenko National University of Kyiv, Kyiv (Ukraine) |
| *1999–2005* | MSc in Physical Science, Taras Shevchenko National University of Kyiv, Kyiv (Ukraine) |

|  |  |
| --- | --- |
| Professional experiences: | |
|  |  |
| *04.2021 – current* | Head of the Department of Metal Physics, Faculty of Physics, Taras Shevchenko National University of Kyiv |
| *12.2013 – 04.2021* | Associate Professor at the Metal Physics Department, Faculty of Physics, Taras Shevchenko National University of Kyiv |
| *09.2008 –12.2013* | Assistant Professor at the Metal Physics Department, Faculty of Physics, Taras Shevchenko National University of Kyiv |

|  |  |
| --- | --- |
| Research Skills: | |
|  |  |
| *Modeling:* | Analytic, semi-analytic approaches |
| *Simulation:* | Molecular Dynamics (LAMMPS), Anharmonic Lattice Dynamics (kALDo), FEM (FlexPDE), Maple, C/C++, Fortran |
| *Experimental competencies:* | Photovoltage decay techniques, 3-omega techniques |
| *Languages:* | Ukrainian, Russian, English |

|  |  |
| --- | --- |
| Participation in scientific projects: | |
|  |  |
| **National Research Foundation of Ukraine**, (2020 – 2023). Competition "Leading and Young Scientists Research Support" 2020. Computer design, synthesis and heat transfer properties of silicon nanostructures for energy efficient applications (**project leader**).  **Ministry of Education and Science of Ukraine**, (2016 – 2018). Competition of Projects of Scientific Works of Young Scientists 2016. Features of the stress state of SiGe quantum dots in the crystalline and amorphous matrices (**project leader**).  **Ministry of Education and Science of Ukraine**, (2015). Competition of Projects of Scientific Works of Young Scientists 2015. Analysis of mechanical stress in semiconductor nanostructures for the photo- and thermovoltaic applications (**project leader**).  **Ukrainian Foundation for Basic Research**, (2012). Grants of the President of Ukraine to Support Scientific Research of Young Scientists 2012. Engineering of mechanical stress in semiconductor heterostructures as a basis for the latest architecture of nanodevices (**project leader**). | |

|  |  |
| --- | --- |
| Academics awards: | |
|  |  |
| *2016* | Scholarship of Cabinet of Ministers of Ukraine for young scientists |
| *2013* | Awarded by the Taras Shevchenko Prize and Medal of Taras Shevchenko National University of Kyiv |

Publication summary (total)

32 articles in international journals (Scientific Reports, PRB, JAP,PCCP);

15 articles in national (Ukrainian) journals;

14 articles in proceedings;

34 abstracts in conferences and seminars.

|  |  |
| --- | --- |
| Selected Publications: | |
|  |  |
| 1. **V. Kuryliuk**, O. Tyvonovych, S. Semchuk. Impact of Ge clustering on the thermal conductivity of SiGe nanowires: atomistic simulation study. Phys. Chem. Chem. Phys., 2023. Vol.25. P. 6263 (7p.). (**Q1**, **IF -3.945**) 2. **V.V. Kuryliuk,** S.S. Semchuk, K.V. Dubyk, R.M. Chornyi Structural features and thermal stability of hollow-core Si nanowires: A molecular dynamics study. Nano-Structures and Nano-Objects, 2022. V. 29. P. 100822 (8p.). (**Q1**) 3. A. Nadtochiy, **V. Kuryliuk**, V. Strelchuk, O. Korotchenkov, P.-W. Li and S.-W. Lee Enhancing the Seebeck effect in Ge/Si through the combination of interfacial design features. Scientific Reports, 2019. V.9. P. 16335 (11 p.). (**Q1**, **IF -4.525**) 4. **V. Kuryliuk**, O. Nepochatyi, P. Chantrenne, D.Lacroix, and M. Isaiev Thermal conductivity of strained silicon: Molecular dynamics insight and kinetic theory approach. Journal of Applied Physics, 2019. V.126. P. 055109 (13 p.). (**Q2**, **IF -2.328**) 5. B. Gorelov, A. Gorb, A. Nadtochiy, D. Starokadomsky, **V. Kuryliuk**, N. Sigareva, S. Shulga, V. Ogenko, O. Korotchenkov, O. Polovina. Epoxy filled with bare and oxidized multi-layered graphene nanoplatelets: a comparative study of filler loading impact on thermal properties. Journal of Materials Science, 2019. V. 54. P. 9247 – 9266. **(Q1, IF - 2.993)** | |