Curriculum vitae with a track record

Role in the project Project manager ☐ Project partner ☒

Personal information

First name, Surname:	Vladimir Kalashnikov		
Date of birth:	07/04/1965	Sex:	Male
Nationality:	Belarus		
Researcher unique identifier(s) (ORCID, ResearcherID, etc.):	0000-0002-3435-2333		

Education

Year	Faculty/department - University/institution - Country
1992	Physics and Mathematics (Laser Optics) with the PhD thesis "Mode-locking efficiency of broadband solid-state lasers," Belarussian State University (Minsk, Belarus)
1989	Honours Bachelor in Physics and Mathematics (the qualification of "Physicist-Researcher" in the field of theoretical physics, Belarussian State University, Minsk, Belarus)

Positions - current and previous

(*Academic sector/research institutes/industrial sector/public sector/other)*

since 2022	Department of Physics, Norwegian University of Science and Technology (Norway, PhD Fellow)
2019-2021	Dipartimento di Ingegneria dell'Informazione, Elettronica e Telecomunicazioni, Sapienza Università di Roma (Italy, Marie-Curie Professore)
2016-2019	Institute of Photonics, Vienna University of Technology (Austria, Senior Research Fellow)
2014-2016	Institute of Photonic Technologies, Aston University (Birmingham, UK), Senior Research Marie-Curie Fellow
2001-2014	Institute of Photonics, Vienna University of Technology (Austria, Senior Research Fellow)
1997 –2001	International Laser Centre (Minsk, Belarus, Head of the Laser Optics Laboratory)
1997 –2001	The Belarussian University of Technology (Minsk, Belarus, Docent at the Laser Technology Department)
1996	Institute for Laser- and Plasma Physics (Essen University, Germany, DAAD Fellow
1993-1996	International Laser Centre (Minsk, Belarus, Scientific Secretary)
1992-1993	Institute for Applied Physics Problems (Minsk, Belarus, Senior Researcher at the Laboratory of Semiconductor Physics)
1989-1992	Institute for Applied Physics Problems (Minsk, Belarus, Junior Researcher at the Laboratory of Semiconductor Physics)

Career breaks

Year	Reason
NA	NA

Project management experience

(*Academic sector/research institutes/industrial sector/public sector/other. Please list the most relevant.)*

Year	Project owner - Project - Role - Funder
since 2022	NFR fellow
2019 – 2021	European Union Horizon 2020 research and innovation program under the Marie Skłodowska-Curie Grant No. 713694 (MULTIPLY) “Mastering the spatiotemporal dissipative solitons” (project manager).
2013 – 2018	project “Noise in Optical Comb Sources” (Austrian FWF grant P24916) (principal investigator).
2008 – 2012	project “Nonlinear Dynamics and Noises of the Chirped-Pulse Oscillators: from Visible to Mid-IR Ranges” (Austrian FWF grant P20293) (project manager).
2005 – 2008	project “Generation of IR-Supercontinuum by Solid-State Lasers” (Austrian FWF grant P17973) (principal investigator).
2004 – 2005	project “Hybrid quantum-well semiconductor saturable absorbers for a few optical pulse generation at 1.5 micrometers” funded by the Austrian Science Society (grant MOEL 80) (project manager).
2001-2003	two joined Lisa Meitner fellowship projects “Dynamics of Tunable Femtosecond Pulse Lasers” (Austrian FWF grants M611 and M688) (project manager).

Supervision of students

(Total number of students)

Master's students	Ph.D. students	University/institution - Country
NA	2	Dr. F. Mejid and Dr. D. Krimer (the Belarussian University of Technology).
		I was the faculty advisor of several undergraduate students during my teaching career at the Belarussian State University of Technology (length of teaching experience is five years, position of associate professor). I actively supervised Ph. D. students working in external groups (without a formal status of academic advisor) in Austria, Germany, the UK, and Russia. Also, I was engaged in active collaboration with the external groups (first of all, Munich University, Norway University of Technology, Vienna University, Novosibirsk, and Belarussian State Universities).

Other relevant professional experiences

(E.g. institutional responsibilities, organization of scientific meetings, membership in academic societies, review boards, advisory boards, committees, major research or innovation collaborations, and other commissions of trust in the public or private sector)

Year	Description - Role
NA	I am a member of the Optical Society of America and European Physical Society, and the reviewer of *Optics Express*, *Optics Letters*, *J. Opt. Soc. Am. B*, *Optics Commun.*, *Phys. Rev. A* and *E*, *Appl. Phys. B*, *Journal of Lightwave Technology, Physics D, Optical & Quantum Electronics*, *Nature Communications,* and *Scientific Reports*. I gave invited lectures concerning solitonics, nonlinear dynamics, and chaos at the Universities of Vienna, Munich, Sorbonne, and Crete. I am also the permanent section leader and lecturer at the International Conference on Nonlinear Analysis and Modeling (CHAOS).

Track record

- I am the author and co-author of 405 publications, including 15 chapters in books, 225 articles in refereed journals and e-prints, and 165 presentations at International Conferences.
- *A list* of up to *ten* publications in major national or international peer-reviewed journals, peer-reviewed conference proceedings, peer-reviewed book chapters, and/or monographs:

1. V. L. Kalashnikov, A. Rudenkov, E. Sorokin, and I. T. Sorokina, *Dissipative Soliton Resonance: Adiabatic Theory and Thermodynamics*, J. Nonlinear Math. Phys. 31, 36 (2024).
2. V.L. Kalashnikov, S. Wabnitz, *Stabilization of spatiotemporal dissipative solitons in multimode fiber lasers by external phase modulati*on, Laser Phys. Lett. Vol. 19, 105101 (2022).
3. V.L. Kalashnikov, S. Wabnitz, *A "metaphorical" nonlinear multimode fiber laser approach to weakly-dissipative Bose-Einstein condensates*, EPL, Vol. 133, 34002 (2021).
4. V. L. Kalashnikov, S. Wabnitz, *Distributed Kerr-lens mode locking based on spatiotemporal dissipative solitons in multimode fiber lasers*, Phys. Rev. A, vol. 102, 023508 (2020).
5. V. Kalashnikov, S.V. Sergeyev, G. Jacobsen, S. Popov, *Multi-scale polarisation phenomena*, Nature Light: Science & Applications, Vol. 5, e16011 (2016).
6. V.L. Kalashnikov, *Optics and Chaos: Chaotic, Rogue and Noisy Optical Dissipative Solitons*, in Handbook of Applications of Chaos Theory, Ch. H. Skiadas & Ch. Skiadas (Eds.), pp. 587-626 (ISBN: 978-146-65-9043-4, Chapman and Hall, 2016).
7. J. Brons, V. Pervak, E. Fedulova, D. Bauer, D. Sutter, V. Kalashnikov, A. Apolonskiy, O. Pronin, F. Krausz, *Energy scaling of Kerr-lens mode-locked thin-disk oscillators*, Opt. Lett. vol. 39, 6442-6445 (2014).
8. F. Mangini, M. Ferraro, M. Zitelli, V. Kalashnikov, A. Niang, T. Mansuryan, F. Frezza, A. Tonello, V. Couderc, A.B. Aceves, S. Wabnitz, *Rainbow Archimedean spiral emission from optical fibres*, Scientific Reports, Vol. 11, No. 1, 1-10 (2021).
9. J. Zhang, M. Pötzlberger, Qing Wang, J. Brons, M. Seidel, D. Bauer, D. Sutter, V. Pervak, A. Apolonski, Ka Fai Mak, V. Kalashnikov, Zhiyi Wei, F. Krausz, O Pronin, *Distributed Kerr Lens Mode-Locked Yb:YAG Thin-Disk Oscillator*, Ultrafast Science, Vol. 2022, 9837892 (2022).
10. S.A. Babin, E.V. Podivilov, D.S. Kharenko, A.E. Bednyakova, M.P. Fedoruk, V.L. Kalashnikov, A. Apolonski, *Multicolour nonlinearly bound chirped dissipative solitons*, Nature Communications, Vol. 5, 4653 (2014).

- I lectured and conducted workshops on quantum mechanics, applied mathematics, calculus, laser and nonlinear optics, physical optics, and computer algebras. During my teaching experience, I developed teaching modules concerning applied mathematics (including Maple, Mathematica, Mathcad computer algebras, and MATLAB, C, and FORTRAN workshops). I also developed modules concerning mathematics and theoretical physics (nonlinear dynamics, chaos theory, and stochastic evolution courses).