

Curriculum Vitae

1. Personal Data

Name: Vladimir Dyakonov, Prof. Dr.

Address: Chair of Experimental Physics 6, Physikalisches Institut, Julius Maximilian Universität Würzburg (JMU), Würzburg, Germany

Position: Full Professor (C4)

Identifiers: 0000-0001-8725-9573
WoS ResearcherID: F-6862-2013
<https://scholar.google.de/citations?user=p5lebk0AAAAJ&hl=en>

2. University Education

1986 Diploma in Physics, University of Leningrad, USSR

3. Academic Degrees

2001 Habilitation in Experimental Physics, Universität Oldenburg, Germany
1996 PhD in Physics, A.F. Ioffe-Institute, St. Petersburg, Russia

4. Academic Career

since 2004 Full Professor, Chair of Experimental Physics 6, JMU
1998-2004 Postdoc and Group Leader, University of Oldenburg, Germany
1997-1998 Lise-Meitner Postdoctoral Fellow, University of Linz, Austria
1996-1997 Postdoctoral Researcher, University of Antwerp, Belgium
1990-1995 Research Assistant, University of Bayreuth, Germany
1987-1990 Junior Researcher, A.F. Ioffe-Institute, Leningrad, USSR

5. Service to the Community

Committee memberships

2021-2025 Member of the Faculty Council (Fakultätsrat), Faculty of Physics and Astronomy, JMU
since 2021 Scientific Advisor, Centre for Applied Energy Research e.V. (CAE), Germany
2018-2019 Managing Director, Institute of Physics, JMU
2013-2015 Dean of the Faculty of Physics and Astronomy, JMU
2012-2020 Board of Trustees, SKZ-German Plastics Center, Würzburg
2010-2011 Spokesman, German Renewable Energy Research Association (FVEE)
2008-2013 Chairman of the Board, ZAE Bayern
2007-2009 Vice-Dean of the Faculty of Physics and Astronomy, JMU
2006-2020 Board of Directors, German Renewable Energy Research Association (FVEE)
2005-2020 Scientific Director, Bavarian Centre of Applied Energy Research (ZAE Bayern), Germany

Reviewing activities

Funding Agencies: ERC; DFG; AvH; DAAD; Carl-Zeiss-Stiftung; SNF, ANR; DoE; NWO; FWF; BSF, ERA-NET; Journals: SpringerNature, AAAS, APS, Wiley-VCH, ACS etc.

Current research projects (since 2023)

Korea-Germany Joint Research Project "Perovskite for Near-Infrared Emitters and LEDs through understanding defects and charge carrier dynamics" (Project-ID 551362701), PI
ERC Advanced Grant "BoNi-SENS" (Project-ID 101055454), Grantee
MQV project "IQ-Sense - Integrated Spin Systems for Quantum Sensors", Coordinator, PI
DFG Würzburg-Dresden Cluster of Excellence on Complexity, Topology and Dynamics in Quantum Matter—ctd.qmat (EXC 2147, Project-ID 39085490), PI
DFG "Perovskite semiconductors: From fundamental properties to devices" (SPP2196),

6. Areas of Research

Optical, electrical and spin-resonance spectroscopy of semiconductors
Spin-defects, quantum sensing, spin-photon interface
Spin-dependent processes in photovoltaic and LED materials (perovskites, organics)

7. Ten Selected Pubs (Total: 234 (WoS), H-Index: 76 (WoS), 91 (Google Scholar), Avg.Ct./Paper 74.4)

- A. Gottscholl, M. Wagenhöfer, V. Baianov, E. Eisermann, V. Dyakonov, A. Sperlich
Semiconductor room-temperature maser
Nat. Commun. 17, 7267 (2026)
- P. Konrad, M. Kianinia, L. Spencer, A. Sperlich, L. Hein, S. Steinicke, I. Aharonovich, V. Dyakonov
Intermediate excited state relaxation dynamics of boron vacancy spin defects in hexagonal boron nitride
Science Adv. 12, eaea0109 (2026)
- Y. Ding, B. Ding, P. Shi, J. Romano-deGea, Y. Li, R. C Turnell-Ritson, O. A. Syzgantseva, I. Yavuz, M. Xia, R. Yu, M. A. Syzgantseva, J.-N. Audinot, X. Miao, X. Liao, J. Li, P. Dörflinger, V. Dyakonov, C. Liu, Y. Yang, L. Tao, K. G Brooks, A. Slonopas, J. Pan, L. Zhang, Q. An, Y. Rong, J. Peng, L. Ding, E. Shi, L. Mai, S. Dai, K. Zhao, J. Sheng, R. Wang, P. J. Dyson, M. K. Nazeeruddin
Cation reactivity inhibits perovskite degradation in efficient and stable solar modules
Science 386, 531-538 (2024)
- S. Gorgon, K. Lv, J. Grüne, B.H. Drummond, W.K. Myers, G. Londi, G. Ricci, D. Valverde, C. Tonnelé, P. Murto, A.S. Romanov, D. Casanova, V. Dyakonov, A. Sperlich, D. Beljonne, Y. Olivier, F. Li, R.H. Friend, E.W. Evans
Reversible spin-optical interface in luminescent organic radicals
Nature 620, 538–544 (2023)
- E. Kirstein, D. R. Yakovlev, M. M. Glazov, E. A. Zhukov, D. Kudlacik, I. V. Kalitukha, V. F. Sapega, G. S. Dimitriev, M. A. Semina, M. O. Nestoklon, E. L. Ivchenko, N. E. Kopteva, D. N. Dirin, O. Nazarenko, M. V. Kovalenko, A. Baumann, J. Höcker, V. Dyakonov, M. Bayer
The Landé factors of electrons and holes in lead halide perovskites: universal dependence on the band gap
Nat. Commun. 13, 3062 (2022)
- A. Gottscholl, M. Diez, V. Soltamov, C. Kasper, D. Krauß, A. Sperlich, M. Kianinia, C. Bradac, I. Aharonovich, V. Dyakonov
Spin defects in hBN as promising temperature, pressure and magnetic field quantum sensors
Nat. Commun. 12, 4480 (2021)
- A. Gottscholl, M. Diez, V. Soltamov, C. Kasper, A. Sperlich, M. Kianinia, C. Bradac, I. Aharonovich, V. Dyakonov
Room temperature coherent control of spin defects in hexagonal boron nitride
Science Adv. 7, eabf3630 (2021)
- A. Gottscholl, M. Kianinia, V. Soltamov, C. Bradac, Ch. Kasper, K. Krambrock, A. Sperlich, M. Toth, I. Aharonovich, V. Dyakonov
Room Temperature Initialisation and Readout of Intrinsic Spin Defects in a Van der Waals Crystal
Nat. Mater. 19, 540 (2020)
- V. A. Soltamov, C. Kasper, A. V. Poshakinskiy, A. N. Anisimov, E. N. Mokhov, A. Sperlich, S. A. Tarasenko, P. G. Baranov, G. V. Astakhov, V. Dyakonov
Excitation and coherent control of spin qubit modes in silicon carbide at room temperature
Nat. Commun. 10, 1678 (2019)
- H. Kraus, V. A. Soltamov, D. Riedel, S. Väh, F. Fuchs, A. Sperlich, P. G. Baranov, V. Dyakonov, G. V. Astakhov
Room temperature quantum microwave emitters based on spin defects in silicon carbide
Nat. Phys. 10, 157 (2014).