



ACADEMIC TEACHER PROFESSIONAL EXPERIENCE

DOCTORAL SCHOOL OF WROCLAW UNIVERSITY OF SCIENCE AND TECHNOLOGY

1. Basic information

Name, surname:	Leszek Bryja
Grade / Title:	Dr hab., prof. uczelni
Scientific discipline	nauki fizyczne/ physical sciences
Faculty:	W11 Wydział Podstawowych Problemów Techniki / Faculty of Fundamental Problems of Technology
Email address:	Leszek.Bryja@pwr.edu.pl

2. Publication record

Up to 10 most important papers published over the period of previous 10 years.

No.	Description (authors, publication title, journal / conference, DOI)	Publication year
1.	J. Jadcak, J Andrzejewski, J Debus, C. H. Ho, L Bryja , <i>Resonant exciton scattering reveals Raman forbidden phonon modes in layered GeS</i> , The Journal of Physical Chemistry Letters 14, 3986 (2023) .	2023
2.	P. Kapuściński, J. Dzian, A. O. Slobodeniuk, C. Rodríguez-Fernández, J. Jadcak, L Bryja , C Faugeras, DM Basko, M Potemski, <i>Exchange-split multiple Rydberg series of excitons in anisotropic quasi two-dimensional ReS₂</i> , 2D Materials 9, 045005 (2022) .	2022
3.	J. Jadcak , M. Glazov, J. Kutrowska-Girzycka, J.J. Schindler, J. Debus, K. Watanabe, T. Taniguchi, Y-S. Huang, M. Bayer, L. Bryja , <i>Upconversion of Light into Bright Intravalley Excitons via Dark Intervalley Excitons in hBN-Encapsulated WSe₂ Monolayers</i> , ACS Nano15 (2021) .	2021
4.	J. Jadcak , J. Kutrowska-Girzycka, J.J. Schindler, J. Debus, K. Watanabe, T. Taniguchi, Y-S. Huang, L. Bryja , <i>Investigations of Electron-Electron and Interlayer Electron-Phonon Coupling in van der Waals hBN/WSe₂/hBN Heterostructures by Photoluminescence Excitation Experiments</i> , Materials 14 (2021) .	2021
5.	J. Jadcak , J. Kutrowska-Girzycka, M. Bieniek, P. Kazimierczuk, P. Kossacki, J.J. Schindler, J. Debus, K. Watanabe, T. Taniguchi, Y-S. Huang, A. Wójs, P. Hawrylak, L. Bryja , <i>Probing negatively charged and neutral excitons in MoS₂/hBN and hBN/MoS₂/hBN van der Waals heterostructures</i> , Nanotechnology 28 (2021) .	2021
6.	J. Jadcak, L. Bryja , J. Kutrowska-Girzycka, P. Kapuściński, M. Bieniek, Y.S. Huang, P. Hawrylak, <i>Room temperature multi-phonon upconversion photoluminescence in monolayer semiconductor WS₂</i> , Nature Communications 10 (1) (2019) .	2019
7.	J. Jadcak , J. Kutrowska-Girzycka, T. Smoleński, P. Kossacki, Y. S. Huang, and L. Bryja , <i>Exciton binding energy and hydrogenic Rydberg series in layered ReS₂</i> , Scientific Reports 9, 1578 (2019) .	2019



8.	J. Kutrowska-Girzycka, J. Jadczyk, L. Bryja , <i>The study of dispersive 'b'-mode in monolayer MoS₂ in temperature dependent resonant Raman scattering experiments</i> , Solid State Communications, Volume 275, July 2018, Pages 25-28.	2018
9.	J. Jadczyk, J. Kutrowska-Girzycka, P. Kapuściński, Y.-S. Huang, A. Wójs, L. Bryja , <i>Probing of free and localized excitons and trions in atomically thin WSe₂, WS₂, MoSe₂ and MoS₂ in photoluminescence and reflectivity experiments</i> , Nanotechnology, Volume 28, 395702 (2017).	2017
10.	L. Bryja , J. Jadczyk, K. Ryczko, M. Kubisa, J. Misiewicz, A. Wójs, F. Liu, D. R. Yakovlev, M. Bayer, C. A. Nicoll, I. Farrer, and D. A. Ritchie, <i>Thermal dissociation of free and acceptor-bound positive trions from magnetophotoluminescence studies of high quality GaAs/A_xGa_{1-x}As quantum wells</i> , Physical Review. B 93, 165303 (2016).	2016

3. Projects and grants

List of the most important 5 projects/grants with basic description including: title, source(s) of funding, name of the call, role in the project (e.g., principal investigator).

1.	Role in the project (e.g., principal investigator, work package leader, etc.)	Principal investigator
	Project title	<i>Badania własności optycznych i elektronicznych heterostruktur van der Waalsa monochalkogenków metali przejściowych IV grupy</i>
	Sources of funding	NCN
	Name of the call	OPUS-19
	Implementation period	2020-2024
2.	Role in the project (e.g., principal investigator, work package leader, etc.)	Principal investigator
	Project title	<i>Badania optyczne dwuwymiarowych kryształów półprzewodzących chalkogenków metali przejściowych pod kątem zastosowań w spintronice - OSTMED</i>
	Sources of funding	NcBiR
	Name of the call	2 nd Polish-Taiwan joint project
	Implementation period	2015-2018
3.	Role in the project (e.g., principal investigator, work package leader, etc.)	Principal investigator
	Project title	<i>Badania magneto-optyczne dynamiki kompleksów ekscytonowych w dwuwymiarowych kryształach chalogenków metali przejściowych</i>
	Sources of funding	NCN
	Name of the call	OPUS-5
	Implementation period	2014-2018
4.	Role in the project (e.g., principal investigator, work package leader, etc.)	Principal investigator



	Project title	Badanie magneto-optyczne własności dynamicznych elektronowych cieczy kwantowych ze spinem
	Sources of funding	Polish MNiSzW
	Name of the call	No N202-179538
	Implementation period	2010-2012
5.	Role in the project (e.g., principal investigator, work package leader, etc.)	Principal investigator
	Project title	<i>Magneto-optical studies of many body spin-charge effects in two dimensional gases and quantum liq</i>
	Sources of funding	Polish MNiSzW
	Name of the call	<i>N202-104-31-0771</i>
	Implementation period	2006-2008

4. International experience

Brief description of international cooperation and experience (e.g., research stays, cooperation with foreign entities, coordination or participation in international projects or programmes, keynote speeches and presentations delivered at renowned international conferences, visiting professor stays, invited lectures).

No.	Description	Year(s)
1.	Several stays in Laboratoire National des Champs Magnétiques Intenses (LNCMI), Le Centre national de la recherche scientifique (CNRS), Grenoble	2002-2012
2.	Several stays in Experimentelle Physik 2, Technische Universität Dortmund, D-44221 Dortmund, Germany	2004-2016
3.	Several stays in Technische Physik, Universität Würzburg.	2000-2003

5. Experience in teaching doctoral students

Brief description of experience in teaching doctoral students (e.g., courses in doctoral schools and PhD studies, summer/winter schools for doctoral students, tutorials, trainings, etc.).

No.	Description	Year(s)
1.	Reporting seminar of physical sciences	2021-2023

6. List of supervised doctoral students

List of all supervised doctoral students that defended the PhD including: name of the student, dissertation title, year of awarding PhD.

No.	Name, surname	Dissertation title	Year of awarding PhD
1.	Joanna Jadczyk	Badania magnetoptyczne dodatnio naładowanych ekscytonów w dwuwymiarowych strukturach półprzewodnikowych	2012
2.	Joanna Kutrowska-Girzycka	<i>Własności optyczne i dynamika sieci dwuwymiarowych kryształów chalcogenków metali przejściowych</i>	2020



3.	Piotr Kapuściński	<i>Fine structure and Rydberg series of excitons in transition metal dichalcogenides</i>	2021
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7. Prizes and awards

The most important national and international prizes and awards related to research, development and teaching activities.

No.	Description	Year
1.	Medal KEN	2020
2	Złoty Medal za Długoletnią Służbę przyznany przez Prezydenta Rzeczypospolitej	2015

8. Other significant achievements

Information on other significant achievements related to research, development and teaching activities.

Chairman of 6th Polish Conference "Graphene and other 2D materials, Wrocław 13-15 September 2021

Member Program Committee of 10 scientific conferences