

ACADEMIC TEACHER PROFESSIONAL EXPERIENCE DOCTORAL SCHOOL OF WROCŁAW UNIVERSITY OF SCIENCE AND TECHNOLOGY

1. Basic information

Name, surname:	Sergiusz Patela	
Grade / Title:	dr hab. inż. (PhD habilitation engineer)	
Scientific discipline	automatyka, elektronika, elektrotechnika i technologie kosmiczne / control, electronic, electrical engineering and space technologies	
Faculty:	Faculty of Electronics, Photonics and Microsystems	
Email address:	sergiusz.patela@pwr.edu.pl	
Link to home page and/or research profiles (Google Scholar, ResearchGate, etc.)	https://scholar.google.com/citations?hl=en&user=4l 6RVXkAAAAJ	

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.	Pokryszka, Piotr; Kijaszek, Wojciech; Patela, Sergiusz; Stafiniak, Andrzej P.;	2025
	Wosko, Mateusz M.; Paszkiewicz, Regina, In-situ characterization of GaN	
	material using reflectance spectroscopy, Metrology and Measurement	
	Systems	
2.	Patela, Sergiusz; Niewęgłowski, Krzysztof; Sniadek, Patrycja J.; Laszczyk,	2024
	Karolina; Kost, Victoria C.; Weyers, David; Lettrichova, Ivana; Pudis, Dusan;	
	BOCK, Karineinz; Waiczak, Rataf, integrating 3D printing into higher education	
	Conference of Education Descarab and Inneuration DOL	
	10 21125 /icori 2024 2069	
3	Laniński Marcin: Kozioł Robert: Syty Daweł: Datela Sergiusz: Sienkiewicz	2023
5.	lózef E · Sadowski Wojciech: Kościelska Barbara Tuning of the nlasmon	2025
	resonance location in Au nanostructures coated with a ultrathin film of	
	Al2O3 – Optical measurements and FDTD simulations. Surface Science. DOI:	
	10.1016/J.SUSC.2023.122289	
4.	Zięba, Aneta; Hreczycho, K.; Sikora, Malwina; Chudzyńska, Aleksandra;	2023
	Korzec, Patrycja; Patela, Sergiusz, Multi-axis diffraction gratings, Optical	
	Materials, DOI: 10.1016/j.optmat.2023.113606	
5.	Śliwak, Adam; Jeleń, Mateusz; Patela, Sergiusz, Modelling and analysis of	2022
	fibre microlenses with ray-tracing and finite-difference methods, Opto-	
	Electronics Review, DOI: 10.24425/opelre.2022.140147	
6.	Przybylski, Dariusz; Patela, Sergiusz, Modelling of a two-dimensional	2019
	photonic crystal as an antireflection coating for optoelectronic applications,	
	Opto-Electronics Review, DOI: 10.1016/j.opelre.2019.02.004	
7.	Przybylski, Dariusz; Zając, Dorota; Patela, Sergiusz, Wytwarzanie i badanie	2018
	cienkich warstw dla fotowoltaiki organicznej, Maszyny Elektryczne. Zeszyty	
	Problemowe	



8.	Zakrzewski, Adrian S.; Patela, Sergiusz, Modelling of a two-dimensional	2017
	photonic crystal with line defect for a laser gas sensor application, Opto-	
	Electronics Review, DOI: 10.1016/j.opelre.2017.05.002	
9.	Zakrzewski, Adrian S.; Pięta, Aleksandra; Patela, Sergiusz, Simple method for	2016
	manufacturing and optical characterization of tapered optical fibres, Opto-	
	Electronics Review, DOI: 10.1515/oere-2016-0024	
10.	Zakrzewski, Adrian S.; Patela, Sergiusz, Investigation of the laser acetylene	2017
	sensor based on two-dimensional photonic crystal, Sensors and Actuators.	
	A, Physical, DOI: 10.1016/j.sna.2017.01.019	

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.,	Workpackage leader.
	principal investigator,	
	work package leader, etc.)	
	Project title	Teaching of Advanced Technology through Digital Additive
		Manufacturing, 3D printing and μ -printing
	Sources of funding	Erasmus+ KA220-HED - Cooperation partnerships in higher
		education
	Name of the call	KA220-HED - Cooperation partnerships in higher education 2023
	Implementation period	2023 - 2026
2.	Role in the project (e.g.,	Investigator
	principal investigator,	
	work package leader, etc.)	
	Project title	Fabrication and characterization of selected photonic circuits as
		well as components and circuits embedded in LTCC substrates and
		printed circuit boards
	Sources of funding	Politechnika Wrocławska
	Name of the call	Statutory grant
	Implementation period	2019
3.	Role in the project (e.g.,	Investigator
	principal investigator,	
	work package leader, etc.)	
	Project title	Fabrication and characterization of selected photonic circuits as
		well as components and circuits embedded in LTCC substrates and
		printed circuit boards
	Sources of funding	Politechnika Wrocławska
	Name of the call	Statutory grant
	Implementation period	2018
4.	Role in the project (e.g.,	Investigator
	principal investigator,	
	work package leader, etc.)	
	Project title	Fabrication and characterization of selected photonic circuits as
		well as components and circuits embedded in LTCC substrates and
		printed circuit boards
	Sources of funding	Politechnika Wrocławska
	Name of the call	Statutory grant



Wrocław University of Science and Technology Doctoral School

	Implementation period	2017
5.	Role in the project (e.g., principal investigator, work package leader, etc.)	Investigator
	Project title	Fabrication and characterization of selected photonic circuits as well as components and circuits embedded in LTCC substrates and printed circuit boards
	Sources of funding	Politechnika Wrocławska
	Name of the call	Statutory grant
	Implementation period	2016

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.	Post-doctoral fellow at Laval University in Canada	1985-87
2.	COST scholarship in Aalborg, Denmark	1993
3.	Technical University of Dresden (Herbert Quandt-Stiftung scholarship,	2000-2001
	Germany)	

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.	Advanced Photonics (Lecture)	2022-2025
2.		
3.		

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.	Rafał Dylewicz	Fabrication, measurements and modelling	2007
		of grating couplers integrated with gallium	
		nitride planar waveguides	
2.	Marcin Wielichowski	Photonic switch in heterostructure	2010
		semiconductor with quantum wells	
3.	Szymon Lis	Integrated optoelectronics devices based	2012
		on two-dimensional photonic crystals -	
		methods of fabrication and measurement	
4.	Konrad Ptasiński	Design, modelling and measurements of	2014
		selected devices based on photonic crystals	



5.	Adrian Zakrzewski	Optical sensors based on photonic crystals - design, analysis and fabrication.	2016
6.	Aneta Zięba	Studies of photonic nano- and microstructures produced by focused ion beam technology	2023

7. Prizes and awards

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

No.	Description	Year
1.	Silver and Gold Medal for Long Service	2020, 2024
2.	Award of the Rector of the Wrocław University of Science and Technology	1981 – 2019,
	for scientific and didactic activity	14 times
3.	Minister's Award	1987, 1990
4.	Golden medal of Politechnika Wrocławskiea	1999

8. Other significant achievements

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