



ACADEMIC TEACHER PROFESSIONAL EXPERIENCE

DOCTORAL SCHOOL OF WROCLAW UNIVERSITY OF SCIENCE AND TECHNOLOGY

1. Basic information

Name, surname:	Paulina Płochocka
Grade / Title:	Doktor Profesor
Scientific discipline	nauki fizyczne / physical sciences
Faculty:	W11 Wydział Podstawowych Problemów Techniki / Faculty of Fundamental Problems of Technology
Email address:	Paulina.plochocka@pwr.edu.pl
Link to home page and/or research profiles (Google Scholar, ResearchGate, etc.)	https://scholar.google.pl/citations?user=4ono85UAAAAJ&hl=en&oi=ao

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.	Katarzyna Posmyk, Mateusz Dyksik, Alessandro Surrente, Duncan K Maude, Natalia Zawadzka, Adam Babiński, Maciej R Molas, Watcharaphol Paritmongkol, Mirosław Mączka, William A Tisdale, Paulina Płochocka, Michał Baranowski <i>Exciton Fine Structure in 2D Perovskites: The Out-of-Plane Excitonic State</i> <i>Advanced Optical Materials</i> , 2300877	2023
2.	Katarzyna Posmyk, Natalia Zawadzka, Mateusz Dyksik, Alessandro Surrente, Duncan K Maude, Tomasz Kazimierzczuk, Adam Babiński, Maciej R Molas, Watcharaphol Paritmongkol, Mirosław Mączka, William A Tisdale, Paulina Płochocka, Michał Baranowski <i>Quantification of exciton fine structure splitting in a two-dimensional perovskite compound</i> <i>The Journal of Physical Chemistry Letters</i> 13 (20), 4463-4469	2022
3.	M Dyksik, H Duim, DK Maude, M Baranowski, MA Loi, P Plochocka <i>Brightening of dark excitons in 2D perovskites</i> <i>Science advances</i> 7 (46), eabk0904	2021
4.	Mateusz Dyksik, Herman Duim, Xiangzhou Zhu, Zhuo Yang, Masaki Gen, Yoshimitsu Kohama, Sampson Adjokatse, Duncan K Maude, Maria Antonietta Loi, David A Egger, Michal Baranowski, Paulina Plochocka <i>Broad tunability of carrier effective masses in two-dimensional halide perovskites</i> <i>ACS Energy Letters</i> 5 (11), 3609-3616	2020
5.	Michał Baranowski, Krzysztof Galkowski, Alessandro Surrente, Joanna Urban, Łukasz Kłopotowski, Sebastian Maćkowski, Duncan Kennedy Maude, Rim Ben Aich, Kais Boujdaria, Maria Chamarro, Christophe Testelin, Pabitra K Nayak, Markus Dollmann, Henry James Snaith, Robin John Nicholas, Paulina Płochocka	2019



	<i>Giant Fine Structure Splitting of the Bright Exciton in a Bulk MAPbBr₃ Single Crystal</i> Nano Letters 19 (10), 7054-7061	
6.	Nan Zhang, Alessandro Surrente, Michał Baranowski, Duncan K Maude, Patricia Gant, Andres Castellanos-Gomez, Paulina Plochocka <i>Moiré Intralayer Excitons in a MoSe₂/MoS₂ Heterostructure</i> Nano letters 18 (12), 7651-7657	2018
7.	Zhuo Yang, Alessandro Surrente, Krzysztof Galkowski, Atsuhiko Miyata, Oliver Portugall, RJ Sutton, AA Haghighirad, HJ Snaith, DK Maude, P Plochocka, RJ Nicholas <i>Impact of the halide cage on the electronic properties of fully inorganic cesium lead halide perovskites</i> ACS Energy letters 2 (7), 1621-1627	2017
8.	Krzysztof Galkowski, Anatolie Mitioglu, Atsuhiko Miyata, Paulina Plochocka, Oliver Portugall, Giles E Eperon, Jacob Tse-Wei Wang, Thomas Stergiopoulos, Samuel D Stranks, Henry J Snaith, Robin J Nicholas <i>Determination of the exciton binding energy and effective masses for methylammonium and formamidinium lead tri-halide perovskite semiconductors</i> Energy & Environmental Science 9 (3), 962-970	2016
9.	Atsuhiko Miyata, Anatolie Mitioglu, Paulina Plochocka, Oliver Portugall, Jacob Tse-Wei Wang, Samuel D Stranks, Henry J Snaith, Robin J Nicholas <i>Direct measurement of the exciton binding energy and effective masses for charge carriers in organic-inorganic tri-halide perovskites</i> Nature Physics 11 (7), 582	2015
10.	Michał Baranowski, Alessandro Surrente, L Kłopotowski, Joanna M Urban, Nan Zhang, Duncan K Maude, Kamil Wiwatowski, Sebastian Mackowski, Yen-Cheng Kung, Dumitru Dumcenco, Andras Kis, Paulina Plochocka <i>Probing the Interlayer Exciton Physics in a MoS₂/MoSe₂/MoS₂ van der Waals Heterostructure</i> Nano letters 17 (10), 6360-6365	2017

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	Soft perovskites - new paradigm of semiconductors engineering
	Sources of funding	National Science Center
	Name of the call	Maestro - 12
	Implementation period	2021-2016
2.	Role in the project (e.g., principal investigator, work package leader, etc.)	Principal Investigator
	Project title	Excitons, phonons and polarons in semiconducting perovskites and their derivatives
	Sources of funding	National Science Center
	Name of the call	OPUS-17



	Implementation period	2020-2024
3.	Role in the project (e.g., principal investigator, work package leader, etc.)	Principal Investigator
	Project title	Towards deterministic control of van der Waals heterostructures properties
	Sources of funding	National Science Center
	Name of the call	Preludium Bis 1
	Implementation period	2020-2024
4.	Role in the project (e.g., principal investigator, work package leader, etc.)	
	Project title	
	Sources of funding	
	Name of the call	
	Implementation period	
5.	Role in the project (e.g., principal investigator, work package leader, etc.)	
	Project title	
	Sources of funding	
	Name of the call	
	Implementation period	

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.	Directeur de recherche deuxième class, Laboratoire National des Champs Magnétiques Intenses, Toulouse, France	2018-now
2.	Marie-Curie fellowship, Laboratoire National des Champs Magnétiques Intenses, Grenoble, France	2009-2011
3.	Postdoctoral fellowship, Weizmann Institute of Science, Israel	2004-2006

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.	22nd International Winterschool on New Developments in Solid State Physics - Mauterndorf, Austria	2023
2.	Recent research trends in physical sciences	2021 - 2023
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.	Krzysztof Gałkowski	Propriétés magnéto-optiques et microscopiques de perovskites organique-halogénure de plomb	2017
2.	Zhuo Yang	Investigation of the excitonic properties of hybrid and fully inorganic perovskite using magneto-spectroscopy	2018
3.	Anatolie Mitioğlu	Probing the electronic properties of bulk and monolayer crystals of tungsten dichalcogenides using magneto-spectroscopy	2015
4.	Nan Zhang	Electronic properties of MoS ₂ /MoSe ₂ van der Waals heterostructures	2021
5.	Joanna Urban	Optical and vibrational properties of anisotropic layered materials	2019

7. Prizes and awards

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

No.	Description	Year
1.		
2.		
3.		

8. Other significant achievements

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

- Regular referee for Nature journals, Scientific Reports, Nano Letters, ACS Nano, Physical Review Letters, Physical Review B, Nanoscale, 2D Materials, New Journal of Chemistry.
- Member of the editorial board for the Nature journal “npj 2D materials”
- External referee for National Science Center (Poland), Dutch Foundation for Fundamental Research on Matter (The Netherlands) and ANR (France)
- Expert for the Physics Panel in the European Commission, for Marie Curie Individual Fellowship Horizon 2020
- Member of the scientific committee of the Federation de Physique in Toulouse Member of the scientific committee of the GDR HPERO