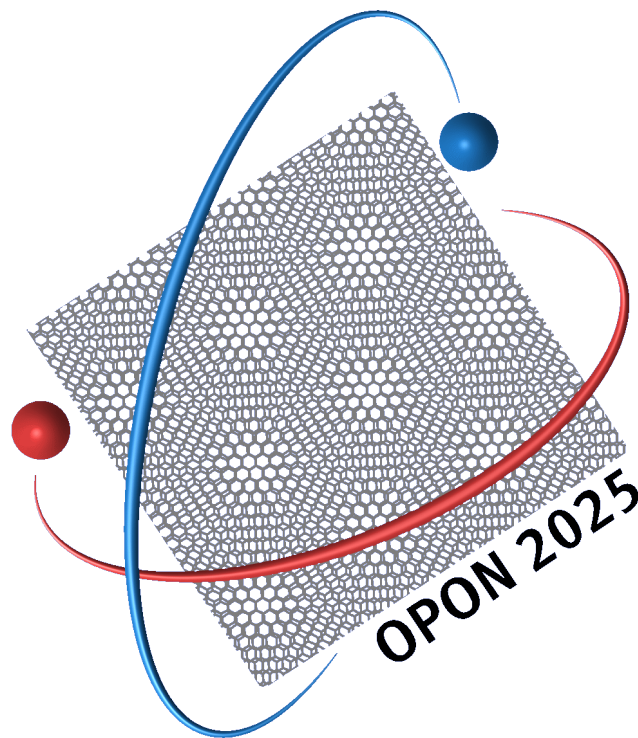


# 8<sup>th</sup> International Workshop on the Optical Properties of Nanostructures

Münster, 12-14 February 2025



Program

UNTERSTÜTZT VON / SUPPORTED BY



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# Schedule OPON 2025

Wednesday  
12 February

Thursday  
13 February

Friday  
14 February

09:00	Registration		
	Opening		
	Heindel	Koulas-Simos	Wurstbauer
	Słowik	Deilmann	Pacuski
10:00	Hagen	Nysten	Jung
		Pruszyńska-Karbownik	Niehues
	Coffee Break	Coffee Break	Coffee Break
11:00	Herink	Bieniek	D'Amico
	Baranowski	Kasprzak	Wiercinski
12:00	Steeger	Mittenzwey	Kopteva
	Bhattacharjee	Heckötter	Closing
13:00	Lunch	Lunch	Lunch
14:00	Warburton	Aßmann	
	Gawęłczyk	Knorr	
15:00	Mudi	Śmiertka	
	Bogaczewicz	Kazimierczuk	
	Coffee Break	Coffee Break	
16:00	Poster	Musiał	
		Semenova	
17:00		Groll	
		Żuberek	
18:00			
19:00			
20:00			

## Conference Program

Wednesday, 12 February 2025

08:45 – 09:00 Registration

09:00 – 09:15 Opening session

**Session We A: Quantum light sources**

Chair:

09:15 – 09:45 We A-1 (invited)

**T. Heindel***Institute for Solid State Physics, Technische Universität Berlin, Germany*

Advances in quantum light generation for quantum networking

09:45 – 10:15 We A-2 (invited)

A. Ghosh<sup>1</sup>, M. Kosik<sup>1</sup>, M. Pelc<sup>1</sup>, M. M. Müller<sup>2</sup>, D. Dams<sup>2</sup>, C. Rockstuhl<sup>2</sup>, A. Babaze<sup>3</sup>, A. Ayuela<sup>4</sup>, G. W. Bryant<sup>5</sup> and **K. Słowik**<sup>1</sup>*<sup>1</sup>Institute of Physics, Nicolaus Copernicus University in Toruń, Poland, <sup>2</sup>Institute of Theoretical Solid State Physics, Karlsruhe Institute of Technology, Germany, <sup>3</sup>Institute of University of the Basque Country, Leioa, Spain, <sup>4</sup>Centro de Fisica de Materiales and Donostia International Physics Center, San Sebastian, Spain, <sup>5</sup>Joint Quantum Institute, University of Maryland and National Institute of Standards and Technology, MD, USA*

Quantum Nanophotonics with Low-Dimensional Structures: Interfacing Quantum Optics and Material Science

10:15 – 10:30 We A-3

**P. C. A. Hagen**<sup>1</sup>, J. Y. Yan<sup>2</sup>, M. Cygorek<sup>3</sup>, D. E. Reiter<sup>3</sup>, F. Liu<sup>2</sup> and V. M. Axt<sup>1</sup>*<sup>1</sup>Theoretische Physik III, University Bayreuth, Germany, <sup>2</sup>State Key Laboratory of Extreme Photonics and Instrumentation, College of Information Science and Electronic Engineering, Zhejiang University, China, <sup>3</sup>Condensed Matter Theory, TU Dortmund, Germany*

Dichromatic Two-Photon Excitation with Large Frequency Difference

10:30 – 11:00 Coffee Break

**Session We B: Optical spectroscopy**

Chair:

11:00 – 11:30 We B-1 (invited)

**G. Herink***Ultrafast Dynamics – Experimental Physics VIII, University of Bayreuth, Germany*

Insights from strong-field multi-color interactions: Lightwave microscopy and multi-exciton manipulation at Terahertz frequencies

11:30 – 12:00 We B-2 (invited)

**M. Baranowski**<sup>1</sup>, J. J. P. Thompson<sup>2,3</sup>, M. Dyksik<sup>1</sup>, A. Nowok<sup>1,5</sup>, K. Galkowski<sup>1</sup>, M. A. Loi<sup>5</sup>, M. Zacharias<sup>6</sup>, G. Volonakis<sup>7</sup>, S. D. Stranks<sup>8</sup>, J. Even<sup>6</sup>, M. Maczka<sup>9</sup>, R. Nicholas<sup>10</sup>, E. Malic<sup>2</sup> and P. Płochocka<sup>4</sup><sup>1</sup>Wroclaw University of Science and Technology, Wroclaw, Poland, <sup>2</sup>Department of Physics, Philipps-Universität Marburg, Germany, <sup>3</sup>Department of Materials Science and Metallurgy, University of Cambridge, UK, <sup>4</sup>Laboratoire National des Champs Magnetiques Intenses, Toulouse, France, <sup>5</sup>Zernike Institute for Advanced Materials, University of Groningen, Netherlands, <sup>6</sup>Univ. Rennes, INSA Rennes, CNRS, Institut FOTON - UMR 6082, Rennes, France, <sup>7</sup>Univ Rennes, ENSCR, INSA Rennes, CNRS, ISCR - UMR 6226, Rennes, France, <sup>8</sup>Cavendish Laboratory, University of Cambridge, Cambridge, UK, <sup>9</sup>Institute of Low Temperature and Structure Research, Wroclaw, Poland, <sup>10</sup>Department of Physics, Clarendon Laboratory, University of Oxford, UK

Exciton-phonon coupling: Unraveling the Driving Force Behind Metal-Halide Perovskite Optical Response

12:00 – 12:15 We B-3

**P. Steeger**<sup>1</sup>, M. Adnan<sup>1</sup>, T. Deilmann<sup>2</sup>, X. Li<sup>3</sup>, S. Müller<sup>4</sup>, K. Skrzynska<sup>5</sup>, M. Hanfland<sup>4</sup>, E. Kolesnikov<sup>3</sup>, J. Kösters<sup>6</sup>, T. Block<sup>6</sup>, R. Schmidt<sup>1</sup>, I. Kuppenko<sup>3</sup>, C. Sanchez-Valle<sup>3</sup>, G. Prakash<sup>7</sup>, S. Michaelis de Vasconcellos<sup>1</sup> and R. Bratschitsch<sup>1</sup><sup>1</sup>Institute of Physics and Center for Nanotechnology, University of Münster, Germany, <sup>2</sup>Institute of Solid State Theory, University of Münster, Germany, <sup>3</sup>Institute of Mineralogy, University of Münster, Germany, <sup>4</sup>European Synchrotron Radiation Facility, Grenoble, France, <sup>5</sup>Faculty of Natural Sciences, Institute of Earth Sciences, University of Silesia, Sosnowiec, Poland, <sup>6</sup>Institut für Anorganische und Analytische Chemie, University of Münster, Germany, <sup>7</sup>Nanophotonics Lab, Department of Physics, Indian Institute of Technology Delhi, New Delhi, India

Band gap hysteresis of a two-dimensional inorganic-organic hybrid perovskite under high pressure

12:15 – 12:30 We B-4

**P. Bhattacharjee** and H. J. Krenner*Physics Institute, University of Münster, Germany*

Acousto-optoelectric effect in organic-inorganic semiconductor systems

12:30 – 14:00 Lunch

**Session We C: Quantum dots**

Chair:

14:00 – 14:30 We C-1 (invited)

**R. J. Warburton**

*Department of Physics, University of Basel, Switzerland*

A semiconductor quantum dot in an open microcavity

14:30 – 15:00 We C-2 (invited)

**M. Gawęłczyk**

*Institute of Theoretical Physics, Wrocław University of Science and Technology, Poland*

Spin physics in droplet-etched GaAs quantum dots

15:00 – 15:15 We C-3

**P. Mudi**<sup>1</sup>, A. Barua<sup>1</sup>, K. Gaur<sup>1</sup>, S. Wijitpatima<sup>1</sup>, S. Tripathi<sup>1</sup>, J. Ritzmann<sup>2</sup>, A. D. Wieck<sup>2</sup>, S. Rodt<sup>1</sup>, A. Ludwig<sup>2</sup> and S. Reitzenstein<sup>1</sup>

<sup>1</sup>*Institut für Festkörperphysik, Technische Universität Berlin, Germany,* <sup>2</sup>*Lehrstuhl für Angewandte Festkörperphysik, Ruhr-Universität Bochum, Germany*

Suppressing Charge Noise in GaAs Droplet-Etched Quantum Dots through External Electric Field Control in Voltage-Tunable Circular Bragg Gratings

15:15 – 15:30 We C-4

**R. A. Bogaczewicz** and P. Machnikowski

*Institute of Theoretical Physics, Wrocław University of Science and Technology, Poland*

Precision of the acoustic control of single photon scattering with semiconductor quantum dots

15:30 – 16:00 Coffee Break

**Session We P: Posters**

16:00 – 18:00 **Poster Session**

**Thursday, 13 February 2025**

**Session Th A: Transition metal dichalcogenides**

Chair:

09:00 – 09:30 Th A-1 (invited)

**A. Koulas-Simos**<sup>1</sup>, C. C. Palekar<sup>1</sup>, K. Gaur<sup>1</sup>, I. Limame<sup>1</sup>, C.-W. Shih<sup>1</sup>, B. L. T. Rosa<sup>1</sup>, C.-Z. Ning<sup>2</sup> and S. Reitzenstein<sup>1</sup>

<sup>1</sup>*Institute of Solid State Physics, Technical University of Berlin, Germany,* <sup>2</sup>*College of Integrated Circuits and Optoelectronic Chips, Shenzhen Technology University, China*

High- $\beta$  monolayer-based lasers with spontaneously formed photonic-defect microcavities

09:30 – 10:00 Th A-2 (invited)

**T. Deilmann**

*Institute of Solid State Theory, University of Münster, Germany*

Optical properties of interlayer excitons in electric and magnetic fields

10:00 – 10:15 Th A-3

**E. D. S. Nysten**, F. M. Ehring, M. Weiß, B. Mayer, U. Wurstbauer and H. J. Krenner  
*Institute of Physics, University of Münster, Germany*

Acousto-optoelectric Spectroscopy on Transition Metal Dichalcogenides with Surface Acoustic Waves

10:15 – 10:30 Th A-4

**E. Pruszyńska-Karbownik**<sup>1</sup>, D. Yavorskiy<sup>2</sup>, T. Stefaniuk<sup>1</sup>, T. Fąs<sup>1</sup>, T. Czystanowski<sup>3</sup>, W. Pacuski<sup>1</sup> and J. Suffczyński<sup>1</sup>

<sup>1</sup>*Faculty of Physics, University of Warsaw, Warsaw, Poland,* <sup>2</sup>*Institute of Physics, Polish Academy of Sciences, Warsaw, Poland,* <sup>3</sup>*Institute of Physics, Łódź University of Technology, Łódź, Poland*

Subwavelength gratings made of molybdenum diselenide

10:30 – 11:00 Coffee Break

**Session Th B: Excitons**

Chair:

- 11:00 – 11:30 Th B-1 (invited)  
**M. Bieniek**  
*Institute of Theoretical Physics, Wrocław University of Science and Technology, Poland*  
 Fine Structure of Excitons in Gated 2D TMD's Heterostructures
- 11:30 – 12:00 Th B-2 (invited)  
 D. Thureja<sup>1,2</sup>, T. Smoleński<sup>1</sup>, X. Lu<sup>1</sup>, T. Taniguchi<sup>3</sup>, K. Watanabe<sup>4</sup>, M. Kroner<sup>1</sup>, A. Imamoğlu<sup>1</sup> and **J. Kasprzak**<sup>5,6</sup>  
<sup>1</sup>*Institute for Quantum Electronics, ETH Zurich, Switzerland*, <sup>2</sup>*Optical Materials Engineering Laboratory, Department of Mechanical and Process Engineering, ETH Zurich, Switzerland*, <sup>3</sup>*International Center for Materials Nanoarchitectonics, National Institute for Materials Science, Tsukuba, Japan*, <sup>4</sup>*Research Center for Functional Materials, National Institute for Materials Science, Tsukuba, Japan*, <sup>5</sup>*Université Grenoble Alpes, CNRS, Grenoble INP, Institut Néel, France*, <sup>6</sup>*Japanese-French Laboratory for Semiconductor physics and Technology (J-FAST), CNRS–Université Grenoble Alpes–Grenoble INP–University of Tsukuba, Tsukuba, Japan*  
 Electronically tunable exciton confinement in a MoSe<sub>2</sub> monolayer probed with nonlinear spectroscopy
- 12:00 – 12:15 Th B-3  
**H. Mittenzwey**<sup>1</sup>, A. Kumar<sup>2</sup>, K. Bolotin<sup>2</sup>, M. Selig<sup>1</sup> and A. Knorr<sup>1</sup>  
<sup>1</sup>*Technische Universität Berlin, Institut für Theoretische Physik, Nichtlineare Optik und Quantenelektronik, Germany*, <sup>2</sup>*Freie Universität Berlin, Department of Physics, Germany*  
 Interlayer-Field-Induced Spin Relaxation of Excitons in a MoSe<sub>2</sub>/MoS<sub>2</sub> Heterostructure
- 12:15 – 12:30 Th B-4  
**J. Heckötter**, M. Harati, B. Panda, S. Siegeroth, J. Rütter and M. Aßmann  
*Experimentelle Physik 2a, Technische Universität Dortmund, Germany*  
 Two-dimensional Fourier transform spectroscopy of Rydberg excitons in Cu<sub>2</sub>O
- 12:30 – 14:00 Lunch

**Session Th C: Excitons, polaritons and magneto-excitons**

Chair:

14:00 – 14:30 Th C-1 (invited)

**M. Aßmann**

*Experimentelle Physik 2, Technische Universität Dortmund, Germany*

Quantum Coherence of Polariton Condensates

14:30 – 15:00 Th C-2 (invited)

H. Mittenzwey and **A. Knorr**

*Nichtlineare Optik und Quantenelektronik, Institut für Theoretische Physik, Technische Universität Berlin, Germany*

Exciton-Bloch-equation approach to study the competition of exciton-exciton and exciton-light interaction

15:00 – 15:15 Th C-3

**M. Śmiertka**<sup>1</sup>, K. Posmyk<sup>2</sup>, P. Peksa<sup>2</sup>, K. Widaj<sup>1</sup>, O. Janikowska<sup>1</sup>, A. Surrente<sup>1</sup>, M. Dyksik<sup>1</sup>, M. Baranowski<sup>1</sup>, S. Acharya<sup>5</sup>, F. Dirnberger<sup>6</sup>, Z. Sofer<sup>4</sup> and P. Płochocka<sup>2</sup>

<sup>1</sup>*Faculty of Fundamental Problems of Technology, Wrocław University Of Science and Technology, Poland,* <sup>2</sup>*Laboratoire National des Champs Magnétiques Intenses, EMFL, CNRS UPR 3228, Toulouse, France,* <sup>4</sup>*Department of Inorganic Chemistry, University of Chemistry and Technology Prague, Czech Republic,* <sup>5</sup>*National Renewable Energy Laboratory, Golden, Colorado, USA,* <sup>6</sup>*Institute of Applied Physics and Würzburg-Dresden Cluster of Excellence, TU Dresden, Germany*

Magnetic Excitons in 2D Semiconductor CrSBr

15:15 – 15:30 Th C-4

R. Komar<sup>1</sup>, A. Łopion<sup>1</sup>, M. Raczyński<sup>1</sup>, M. Rybak<sup>1</sup>, T. Woźniak<sup>1</sup>, M. Birowska<sup>1</sup>, K. Mosina<sup>2</sup>, A. Soll<sup>2</sup>, Z. Sofer<sup>2</sup>, C. Faugeras<sup>3</sup>, W. Pacuski<sup>1</sup>, M. Goryca<sup>1</sup>, P. Kossacki<sup>1</sup> and **T. Kazimierczuk**<sup>1</sup>

<sup>1</sup>*Faculty of Physics, University of Warsaw, Warsaw, Poland,* <sup>2</sup>*Department of Inorganic Chemistry, University of Chemistry and Technology Prague, Czechia,* <sup>3</sup>*LNCMI-CNRS (UJF, UPS, INSA), Grenoble, France*

Colossal field-induced energy shift of higher-energy excitons in CrSBr

15:30 – 16:00 Coffee Break



**Session Th D: Single-photon sources**

Chair:

16:00 – 16:30 Th D-1 (invited)

**A. Musiał**

*Laboratory for Optical Spectroscopy of Nanostructures, Department of Experimental Physics, Faculty of Fundamental Problems of Technology, Wrocław University of Science and Technology, Poland*

Quantum dot-based non-classical light sources emitting at telecom C-band

16:30 – 17:00 Th D-2 (invited)

**E. Semenova<sup>1,2</sup>**

*<sup>1</sup>NanoPhoton - Center for Nanophotonics, Technical University of Denmark, Kongens Lyngby, Denmark, <sup>2</sup>Department of Electrical and Photonics Engineering, Technical University of Denmark, Kongens Lyngby, Denmark*

From Quantum Dots to Quantum Networks: Scalable Photonic Devices Operating in the Telecom C-Band

17:00 – 17:15 Th D-3

**D. Groll<sup>1</sup>, D. Wigger<sup>2</sup>, T. Kuhn<sup>1</sup> and P. Machnikowski<sup>3</sup>**

*<sup>1</sup>Institute of Solid State Theory, University of Münster, Germany, <sup>2</sup>Department of Physics, University of Münster, Germany, <sup>3</sup>Institute of Theoretical Physics, Wrocław University of Science and Technology, Poland*

Impact of acousto-optical double dressing on resonance fluorescence spectra

17:15 – 17:30 Th D-4

**E. Żuberek<sup>1</sup>, J. Olejnik<sup>1</sup>, J. Debus<sup>2</sup>, C.-H. Ho<sup>3</sup>, K. Watanabe<sup>4</sup>, T. Taniguchi<sup>4</sup>, L. Bryja<sup>1</sup> and J. Jadczyk<sup>1</sup>**

*<sup>1</sup>Department of Experimental Physics, Wrocław University of Science and Technology, Poland, <sup>2</sup>Department of Physics, TU Dortmund University, Germany, <sup>3</sup>Graduate Institute of Applied Science and Technology, National Taiwan University of Science and Technology, Taiwan, <sup>4</sup>National Institute for Materials Science, Tsukuba, Japan*

Photon upconversion of defect-bound excitons in hBN-encapsulated MoS<sub>2</sub> monolayer

**Friday, 14 February 2025**

**Session Fr A: van der Waals materials**

Chair:

09:00 – 09:30 Fr A-1 (invited)

H. Lambers, N.-L. Bathen, N. Saigal, V. Antic and **U. Wurstbauer**

*Institute of Physics and Center for Soft Nanoscience (SoN), University of Münster, Germany*

Collective excitations, moiré minibands and twist disorder in van der Waals structures

09:30 – 10:00 Fr A-2 (invited)

**W. Pacuski**

*Faculty of Physics, University of Warsaw, Poland*

Spectroscopy and epitaxy of 2D materials on hBN

10:00 – 10:15 Fr A-3

**J. W. Jung**<sup>1</sup>, H. S. Choi<sup>1</sup>, Y. J. Lee<sup>1</sup>, Y. Kim<sup>2</sup>, T. Taniguchi<sup>3</sup>, K. Watanabe<sup>4</sup>, M. Y. Choi<sup>5</sup>, J. H. Jang<sup>5</sup>, H. S. Chung<sup>5</sup>, D. Kim<sup>1</sup>, Y. Kim<sup>1</sup> and C. H. Cho<sup>1</sup>

*<sup>1</sup>Department of Physics and Chemistry, Daegu Gyeongbuk Institute of Science and Technology, (DGIST), Daegu, South Korea, <sup>2</sup>School of Physics, Korea Institute for Advanced Study (KIAS), Seoul, South Korea, <sup>3</sup>International Center for Materials Nanoarchitectonics, National Institute for Materials Science, Tsukuba, Japan, <sup>4</sup>Research Center for Functional Materials, National Institute for Materials Science, Tsukuba, Japan, <sup>5</sup>Electron Microscopy and Spectroscopy Team, Korea Basic Science Institute, Daejeon, South Korea*

Defect Passivation of Two-Dimensional Semiconductors by Fixating Chemisorbed Oxygen Molecules via h-BN Encapsulations

10:15 – 10:30 Fr A-4

**I. Niehues**<sup>1</sup>, D. Wigger<sup>2</sup>, K. Kaltenecker<sup>3</sup>, A. Klein-Hitpass<sup>1</sup>, P. Roelli<sup>4</sup>, A. K. Dąbrowska<sup>5</sup>, K. Ludwiczak<sup>5</sup>, P. Tatarczak<sup>5</sup>, J. O. Becker<sup>1</sup>, R. Schmidt<sup>1</sup>, M. Schnell<sup>4,6</sup>, J. Binder<sup>5</sup>, A. Wysmołek<sup>5</sup> and R. Hillenbrand<sup>4,6,7</sup>

*<sup>1</sup>Institute of Physics, University of Münster, Germany, <sup>2</sup>Department of Physics, University of Münster, Germany, <sup>3</sup>Chair in Hybrid Nanosystems, Nano-Institute Munich, Department of Physics, Ludwig-Maximilians-Universität München, Germany, <sup>4</sup>CIC nanoGUNE BRTA, Spain, <sup>5</sup>Faculty of Physics, University of Warsaw, Poland, <sup>6</sup>IKERBASQUE, Basque Foundation for Science, Spain, <sup>7</sup>Department of Electricity and Electronics, UPV/EHU, Spain*

Tip-enhanced and tip-assisted PL of individual color centers in hBN

10:30 – 11:00 Coffee Break

**Session Fr B: Many-body and cooperative phenomena**

Chair:

11:00 – 11:30 Fr B-1 (invited)

**I. D'Amico**

*School of Physics, Engineering and Technology, The University of York, United Kingdom*

Many-body interactions in quantum thermal machines and batteries

11:30 – 11:45 Fr B-2

**J. Wiercinski**<sup>1</sup>, M. Cygorek<sup>2</sup> and E. M. Gauger<sup>1</sup>

<sup>1</sup>*SUPA, Institute of Photonics and Quantum Sciences, Heriot-Watt University, Edinburgh, United Kingdom*, <sup>2</sup>*Condensed Matter Theory, Department of Physics, TU Dortmund, Germany*

Cooperative emission from self-assembled quantum dots

11:45 – 12:00 Fr B-3

**N. E. Kopteva**, A. Greilich, V. L. Korenev and M. Bayer

*Experimental Physics 2, TU Dortmund, Germany*

Nonlinear dynamics of an electron-nuclear spin system in periodically driven time crystal

12:00 – 12:15 Closing session

12:15 – 14:00 Lunch

## Poster Session

- We P-1 **B. Mayer**, F. Ehring, M. Weiß, H. J. Krenner, U. Wurstbauer and E. D. S. Nysten  
*Institute of Physics, University of Münster, Germany*  
Surface acoustic wave-controlled photocurrent in few-layer WSe<sub>2</sub>
- We P-2 **L. Nimmegern**<sup>1</sup>, M. Cygorek<sup>2</sup>, D. E. Reiter<sup>2</sup> and V. M. Axt<sup>1</sup>  
<sup>1</sup>*Theoretical Physics III, University of Bayreuth, Germany*, <sup>2</sup>*Condensed Matter Theory, Department of Physics, TU Dortmund, Germany*  
Dynamical control of photon number wave packets in a microcavity
- We P-3 **A. Penkała**<sup>1</sup>, M. Mendoza Delgado<sup>2</sup>, C. Popov<sup>2</sup> and P. Podemski<sup>1</sup>  
<sup>1</sup>*Department of Experimental Physics, Faculty of Fundamental Problems of Technology, Wrocław University of Science and Technology, Poland*, <sup>2</sup>*Institute of Nanostructure Technologies and Analytics (INA), Center for Interdisciplinary Nanostructure Science and Technology (CINSaT), University of Kassel, Germany*  
Optical properties of NV color centers in diamond nanopillars
- We P-4 **K. Jürgens**<sup>1</sup>, D. Wigger<sup>2</sup> and T. Kuhn<sup>1</sup>  
<sup>1</sup>*Institute of Solid State Theory, University of Münster, Germany*, <sup>2</sup>*Department of Physics, University of Münster, Germany*  
Theory of phonon sidebands in the absorption spectra of moiré exciton-polaritons
- We P-5 **J. Kim** and K. Kyhm  
*Department of Optics & Cogno-Mechatronics Engineering, Pusan National University, Republic of Korea*  
Refractive Index of CsPbBr<sub>3</sub> nanocrystal with effective medium approximations
- We P-6 **T. Gzyl**<sup>1</sup>, P. Mrowiński<sup>1</sup>, G. Bucci<sup>2</sup>, V. Zannier<sup>2</sup>, A. Musiał<sup>1</sup>, L. Sorba<sup>2</sup>, W. Rudno-Rudziński<sup>1</sup> and G. Sęk<sup>1</sup>  
<sup>1</sup>*Department of Experimental Physics, Faculty of Fundamental Problems of Technology, Wrocław University of Science and Technology, Poland*, <sup>2</sup>*NEST Istituto Nanoscienze CNR and Scuola Normale Superiore, Pisa, Italy*  
Designing geometry of zinc blende InP nanowires with InAsP QDs for efficient emission extraction in telecom spectral range
- We P-7 **C. Ruiz**<sup>1,2</sup>, P. Wyborski<sup>1</sup>, M. Xiong<sup>1,2</sup>, B. Munkhbat<sup>1</sup>, P. Holewa<sup>1,2</sup> and E. Semenova<sup>1,2</sup>  
<sup>1</sup>*DTU Electro, Technical University of Denmark, Denmark*, <sup>2</sup>*NanoPhoton – Center for Nanophotonics, Technical University of Denmark, Denmark*  
Deterministic fabrication of quantum dots operating at telecom C-band
- We P-8 **C. C. Palekar**<sup>1</sup>, P. E. Faria Junior<sup>2</sup>, B. Rosa<sup>1</sup>, F. B. Sousa<sup>3</sup>, L. M. Malard<sup>3</sup>, J. Fabian<sup>2</sup> and S. Reitzenstein<sup>1</sup>  
<sup>1</sup>*Institute of Solid State Physics, Technische Universität Berlin, Germany*, <sup>2</sup>*Institute for Theoretical Physics, University of Regensburg, Germany*, <sup>3</sup>*Departamento de Física, Universidade Federal de Minas Gerais, Belo Horizonte, Brazil*  
Twist angle dependent enhancement of interlayer exciton emission in twisted WSe<sub>2</sub>/WSe<sub>2</sub>/MoSe<sub>2</sub> heterotrilayers

- We P-9 **P.-M. Piel**<sup>1</sup>, J.-H. Larusch<sup>1</sup>, A. Łopion<sup>1</sup>, N.-L. Bathen<sup>1</sup>, S. Schaper<sup>1</sup>, Z. Sofer<sup>2</sup> and U. Wurstbauer<sup>1</sup>  
<sup>1</sup>*Institute of Physics, Muenster University, Germany*, <sup>2</sup>*Department of Inorganic Chemistry, University of Chemistry and Technology Prague, Czech Republic*  
 Strong anisotropy behavior of the 2D magnetic semiconductor CrSBr
- We P-10 **M. Raczyński**, J. Kucharek, A. Rodek, K. Oreszczuk, R. Bożek, T. Kazimierczuk, W. Pacuski and P. Kossacki  
*Division of Solid State Physics, Institute of Experimental Physics, Faculty of Physics, University of Warsaw, Poland*  
 Systematic study of Photoluminescence Response from the MBE-grown MoSe<sub>2</sub> Monolayers – Towards the Performance of the Exfoliated Samples
- We P-11 **T. K. Bracht**<sup>1,2</sup>, F. Kappe<sup>3</sup>, M. Cygorek<sup>2</sup>, Y. Karli<sup>3</sup>, V. Remesh<sup>3</sup>, V. M. Axt<sup>4</sup>, G. Weihs<sup>3</sup> and D. E. Reiter<sup>2</sup>  
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- We P-12 **V. Senthappan Vellaippan Uthayasurian**<sup>1</sup>, P. Steeger<sup>1</sup>, J.-H. Graalman<sup>2</sup>, R. Schmidt<sup>1</sup>, P. Marauhn<sup>2</sup>, M.-C. Heissenbüttel<sup>2</sup>, J. Nellesen<sup>2</sup>, I. Kupenko<sup>3</sup>, C. Sanchez-Valle<sup>3</sup>, S. Michaelis de Vasconcellos<sup>1</sup>, M. Rohlfing<sup>2</sup> and R. Bratschitsch<sup>1</sup>  
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