Flatlands Beyond Graphene 2023 (25-29/9, Hotel Olšanká)			
POSTER SESSION SHOTGUN PRESENTATIONS			
Tuesday 26 September			
No.	***Title***	***Name***	
Chair: Nikolas Antonatos			
1	Mode-selective Raman Signal Enhancement in MoS_2/WS_2 Heterostructures	Annika Bergmann	S
2	Optical Properties of a monolayer semiconductor coupled to plasmonic gratings	Riccardo Chiesa	S
3	Optical Fiber-Enhanced Photoreflectance and Contactless Electroreflectance Measurements for van de Waals crystals and layers Characterization	Karolina Ciesiołkiewicz	S
4	Single Heterojunction-Based Spectrometer Beyond Linear Response	Rana Darweesh	S
5	The effect of 2D nanosheet size on the performance of printed devices	Anthony Dawson	S
6	Raman spectroscopy of patterned functionalized graphene and twisted bilayer graphene	Tobias Dierke	S
7	Morphological characterization of networks of nanomaterials printed with size selected inks	Luke Doolan	S
8	Understanding hydrogen diffusion in between layers of 2D materials	Ismail Eren	S
9	Printable Nanoelectronics: Low-Cost Prototyping with a Pen Plotter	Gülsüm Ersü	S
10	Tunable transport dynamics of layer-hybridized excitons in a natural van Der Waals homobilayer	Shun Feng	S
11	Zintl Phases a 2D family precursor: An “in-situ” HF Synthesis	Yiannis Georgantas	S
12	Growth Optimization of Transition Metal Dichalcogenides by Design of Experiments	Stefan Heiserer	S
13	Temperature-Dependent Phase Transition of 2D polar Gallium Revealed by Cryogenic Spectroscopic Ellipsometry	Jakob Henz	S
14	Investigating the chemical and structural evolution of sub-monolayer Sn on Au(111)	Julian Hochhaus	S
15	Localized (spectro)electrochemistry near the Dirac point of graphene	Martin Jindra	S
16	Iron-rich phyllosilicates as an air-stable platform for two-dimensional magnetic materials	Muhammad Zubair Khan	S
17	Electrical Control of Intra- and Interlayer Excitons in $MoSe_2/WSe_2$ Heterostructures	Johannes Krause	S

18	Photoluminescence tuning in hybrid devices of monolayer transition metal dichalcogenides and perylene dyes	Theresa Kuechle	S
19	Probing positively charged trion in α-MoO_3/MoS_2 van der Waals heterostructure	Ravindra Kumar	S
20	Probing phonon anharmonicity induced thermal conductivity in multilayer MXene $Ti_3C_2T_x$	Kaushlaya Kumari	S
21	Contact engineering for 2D materials through ion implantation and flash lamp annealing	Kaiman Lin	S
22	Ferromagnetic interlayer coupling in CrSBr crystals irradiated by ions	Fangchao Long	S
23	Manipulation of thermal conductivity in twisted bilayer $MoSe_2$	Manab Mandal	S
24	Is the Surface of Hofmann-like Spin-Crossover {Fe(pz)[$Pt(CN)_4$]} Same as its Bulk?	Alejandro Martínez Serra	S
25	Electronic and optical properties of two dimensional WS_2 on lattice matched III-V semiconductor substrates	Annie Mathew	S
26	Design and implementation of a micro-dropper system for fabrication of flexible electronic devices	Bob McLarnon	S
27	Improved coverage of monolayer TMDs on SiO_2/Si via confining precursor flow	Kalaiarasan Meganathan	S
28	Optical Dipole Orientation of Excitons in a van der Waals Magnet	Ferdinand Menzel	S
29	In-Situ SEM Etching Observation of the Graphene Layers by O_2 and H_2	Hossein Mirdamadi	S
30	Functionalization of Layered Magnet CrSBr	Kseniia Mosina	S
31	Microscopic picture of interlayer exciton-phonon coupling	Muralidhar Nalabothula	S
32	Disorder-Induced Effects in High-Harmonic Generation Process in Fullerene Molecules	Hamlet Avetissian	
33	High Harmonic Generation in Graphene Quantum Dots	Vadym Apalkov	
34	Thickness-dependent exciton fine structure splitting of two-dimensional perovskites	Michał Baranowski	
35	Rhenium Doped Tungsten Selenide photocathode for Photo-Rechargeable Zinc-Ion Capacitor	Monaam Benali	
36	Optoelectronic properties of 2D AFM crystals	Magdalena Birowska	
37	Ex situ XRD, XPS, SEM, EIS investigation of intercalation/surface adsorption ratio during CVA-electrochemical testing of 2D manganese oxide for aqueous sodium batteries and supercapacitors	Andrii Boichuk	

38	Electrochemical properties of two-dimensional microsized Na-Mn-O systems in aqueous electrolytes for sodium supercapacitors	Tetiana Boichuk	
39	Hybrid Spinterfaces for Organic Antiferromagnetic Spintronics	Alberto Brambilla	
40	High-Mobility Flexible Transistors with Low-Temperature Solution-Processed Tungsten Dichalcogenides	Tian Carey	
41	Development of a Liquid Interface Deposition for High Mobility Nanosheet Networks	Oran Cassidy	
42	Development of nanocatalysts for photo/electrochemical energy conversion through alkaline water electrolysis	Levna Chacko	
43	Synthesis and Optical Properties of Colloidal 2D Transition Metal Dichalcogenide Heterostructures	Markus Fröhlich	
44	Morphological Characterisation of Nanostructured Networks using 3D FIBSEM Nanotomography	Cian Gabbett	
45	Optical anisotropy of high-order harmonic generation in rectangular graphene quantum dots	Armenuhi Ghazaryan	
46	2D Multiferroicity with Ferroelectric Switching Induced Spin-Constrained Photoelectricity	Yilyu Guo	
47	Optical Spectroscopy for Characterization of Alloyed/Doped Antiferromagnetic van der Waals Semiconductors	Adi Harchol	
48	Computational insights into phase changes in two-dimensional TaS_2	Katherine Inzani	
49	Optical Properties of Two-Dimensional Antiferromagnetic $NiPS_3$ Layers Encapsulated by Hexagonal Boron Nitride	Kodimana Ramakrishnan	
50	High-Performance Supercapacitor based on Bi-modified V_2C MXene	Dana Koňáková	
51	Origin of optically active donor-acceptor pair in two-dimensional lead iodide perovskites revealed by photoemission	Marie Krecmarová	
52	The measurement of junction properties in solution-processed nanosheet networks using impedance spectroscopy	Adam Kelly	
53	TO BE SPECIFIED	Md. Zaved Hossain Khan	
54	Study of properties of microstructures prepared by ion beam writing and ion beam implantation through a polymer mask in graphene oxide, reduced graphene oxide, and polyimide	Petr Malinský	

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POSTER SESSION
SHOTGUN PRESENTATIONS

Thursday 28 September			
No.	***Title***	***Name***	
Chair: Zdenek Sofer			
55	Untangling the Intertwined: What Happens During Colloidal MoS_2 Nanosheet Syntheses?	André Niebur	S
56	Two-dimensional VSe_2 nanoflake as a promising sensing electrocatalyst for nitrobenzene detection in water samples	Anastasios Papavasileiou	S
57	Electrical detection of the flat band dispersion in van der Waals field-effect structures	Gabriele Pasquale	S
58	Phosphorene Quantum Dots for Energy Storage	Michal Pawlus	S
59	Electrical contacts for TMD layers: methods, characterization, comparison	Adrianna Piejko	S
60	Magnetic anisotropy in excitonic resonances and exciton-phonon coupling of the 2D magnetic semiconductor CrSBr	Pierre-Maurice Piel	S
61	Engineering of Bulk Bandgap in CVD Grown $Bi_2Se_{(3-x)}S_x$ Topological Insulator Alloys	Michal Poplinger	S
62	Unleashing the potential of integrated complex oxides and 2D semiconductors in optoelectronics	Thomas Pucher	S
63	Tailoring electrical properties of FeFETS with freestanding complex oxides	Sergio Puebla	S
64	Mesoscopic reconstruction in semiconductor van der Waals structures	Ana Rupp	S
65	Tuning optoelectronic properties of 2D MPX_3 via spin-reorientation	Miłosz Rybak	S
66	Raman and photoluminescence studies on twisted bilayer CVD-grown MoS_2	Eileen Schneider	S
67	Photoluminescence of Organic-Dye/TMD Hybrid Structures	Julian Schröer	S
68	Interaction of 2D materials with laser-written waveguide circuits	Alina Schubert	S
69	2D Bi_2Se_3 nanoparticles as photothermal catalysts	Ido Schwartz	S
70	Formation of exciton-polariton in single tungsten disulfide nanotube	Hila Shalom	S
71	Machine-Learned Interatomic Potentials for Transition Metal Dichalcogenide $Mo_{1-x}W_xS_{2-2y}Se_{2y}$ Alloys	Anas Siddiqui	S

72	Liquid Interface Deposition: A Novel Technique to Produce Thin Films and Heterostructures of Two-Dimensional Materials	Amy Smith	S
73	Massive parallel mechanical exfoliation: a scalable and low-cost production method for few-layer 2D materials	Yigit Sozen	S
74	Ferroelectric domain writing in misfit layer compound $(PbS)_{1.18}VS_2$ using electron-beam lithography	Kateřina Tetalová	S
75	Origins of the thermoelectric properties of the group IV monochalcogenides – photoemission spectroscopy investigation of the electronic band structure	Agata Tołłoczko	S
76	Siloxene: modification and application as a polymer filler	Jonáš Uřičář	S
77	Sliding ferroelectricity in bulk misfit layer compound $(PbS)_{1.18}VS$	Jiří Volný	S
78	Exfoliated 2D Layered and Nonlayered Metal Phosphorous Trichalcogenides Nanosheets as Promising Electrocatalysts for CO_2 Reduction	Honglei Wang	S
79	Substitutional P-type Doping in NbS_2-MoS_2 Lateral Heterostructures Grown by MOCVD	Zhenyu Wang	S
80	Entangled two-photon absorption in 2D semiconductors	Till Weickhardt	S
81	Gate-Tunable Van der Waals Weyl Semimetal Contacts for Two-Dimensional InSe Schottky Diodes	Peiting Wen	S
82	Electronic Properties of Two-Dimensional Bilayer Antimony Oxide	Stefan Wolff	S
83	Lowering the dimension of 2-D ternary thiophosphate $Nb_4P_2S_{21}$ into 1-D for advanced sodium-ion batteries	Bing Wu	S
84	Exploring valley spin-selective photoconductivity and proximity effects in 2D $NiPS_3/WSe_2$ interface	Rajesh Kumar Yadav	S
85	Production of Magnetic Arsenic Phosphorus Nanoribbons	Fengfei Zhang	S
86	Catalytic Potential of 2D Transition Metal Carbides in the Photocatalytic Oxidation of HMF	Nilesh Manwar	
87	Enhancing alkaline media nitrogen reduction reaction through formation of 2D/2D hybrid structures of MoS_2/rGO	Boitumelo Joyce Matsoso	
88	N-Heterocyclic Carbenes as Modifiers of Metal-Supported Graphene and Alkylidenes as Modifiers of MXenes	Peter McBreen	

89	Polysulfide regulator of ZrN/Mn_2N_3 embedded N-doped graphene for high performance lithium-sulfur battery	Thanh Tuan Nguyen	
90	Emergent high conductivity in size-selected nanosheet networks	Sean Olgivie	
91	Reduced graphene oxide: its versatility in electromagnetic shielding and energy conversion applications	Filipa Oliveira	
92	Electrochemical Exfoliation of Transition Metal Dichalcogenides for Printed Optoelectronic Devices	Manila Ozhukil Valappil	
93	Impact of antiferromagnet/paramagnet transition on Raman scattering in transition metal thiophosphates	Maciej Peter	
94	Challenges in 2D $PtSe_2$ device preparation	Ondrej Pohorelec	
95	Modelling of graphene/2D porous polymer heterostructures in experimentally relevant setups	Miroslav Položij	
96	Development of Highly Stable Perovskite Photoelectrocatalytic Systems: Harnessing MoS_2 as an Efficient Electron Transport Layer	Neena Prasad	
97	Layered III-VI monochalcogenides for broadband optoelectronics	Kalyan Jyoti Sarkar	
98	Thiol-Based Defect Healing of WSe_2 and WS_2	Aviv Schwarz	
99	Strongly anharmonic structural dynamics in 2D hybrid halide perovskites	Rituraj Sharma	
100	Dispersion Effect of Graphene Oxide for CNT/NS/GO Composites	Hongyun So	
101	Fabrication of few-layer transition metal dichalcogenide films by one-zone chalcogenization	Michaela Sojkova	
102	Bulk Photovoltaic Effect in Ultrathin 2D $CuInP_2S_6$	Amutha Subramani	
103	Shaping Flatlands: Morphological Control of Nanosheet Networks and Heterostructures in Langmuir-Type Deposited Thin Films	Kevin Synnatschke	
104	Crystal growth and characterization of misfit layer compound $(PbS)_{1.18}VS_2$	Klára Uhlířová	
105	Ti_3AlC_2 MAX phase conversion to newly 2D titanium carbo-oxide by eco-friendly and low-cost method: High selective gas-sensing and supercapacitor evaluations	Eva Vejmelková	
106	Advancements in strain tunable 2D semiconducting materials for ultraminiature spectrometry	Thiago Vasconcelos	

107	Exploring Transition Metal Hafnium Trisulfide (HfS_3) Micro-Belts as Viable Anode Materials for Lithium-ion Batteries	Shuangying Wei	
108	Czech Nano Lab services for 2D materials	Radim Zahradníček	
109	Atomically precise graphene nanoribbons for quantum electronics	Jian Zhang	