



MAPPIC
Moscow Autumn Perovskite Photovoltaics
International Conference



**Moscow Autumn Perovskite Photovoltaics
International Conference
(MAPPIC-2021)**

October, 11th (Moscow time, UTC+3)

10:00-10:15	Welcome speech of the organizing committee Taking photos	
10:15-10:45	Prof. Juan Bisquert	Impedance spectroscopy of memory effects in halide perovskites: Control of hysteresis in solar cells and memristors
10:45-11:15	Prof. Ulrich Paetzold	2D/3D Perovskite Heterostructure Passivation Strategies for Perovskite-Based Tandem Photovoltaics
11:15-11:45	Prof. Hin-Lap Yip	Composition and Optical Engineering for White Perovskite LEDs
11:45-12:00	Break	
12:00-12:30	Dr. Giulia Grancini	Tunable 2D Perovskites: a Colourful Palette
12:30-13:00	Prof. Emmanuelle Deleporte	Discussing optical processes in 2D-layered perovskites incorporating tetrazine-based photo-active spacers: towards a type-II electronic interface
13:00-13:30	Dr. Sergii Yakunin	High-resolution remote thermometry and thermography using luminescent low-dimensional tin-halide perovskites
13:30-14:30	Break	
14:30-15:00	Prof. Tianquan Lian	Auger Recombination in CdSe and CsPbBr ₃ 2D Colloidal Nanoplatelets
15:00-15:15	Dr. Inga Ermanova	Passivating strategy in p-i-n planar perovskite cells for scale-up
15:15-15:30	Natalia Udalova	A detailed stability study of layered BA ₂ MA _{n-1} Pb _n I _{3n+1} perovskites: new lessons learned
15:30-15:45	Philipp Ramming	Suppressed ion migration in powder-based perovskite thick films using an ionic liquid
15:45-16:00	Aleksandra Furasova	Mie-Resonant electron transport layer for light harvesting by perovskite PV devices
16:00-16:15	Pavel Tonkaev	Nonlinear photoluminescence in halide perovskites
16:00-16:15	Sergey Fateev	Low-dimensional phases in MAX-FAX-PbX ₂ system (X = I, Br): myths, real structures, phase diagram and optical properties
16:30-16:45	Andrei Tutantsev	The challenge to obtain phase-pure BA ₂ MA _{n-1} Pb _n I _{3n+1} films by using proper additives

October, 12th (Moscow time, UTC+3)

10:00-10:15	Welcome speech of the organizing committee	
10:15-10:45	Prof. Oleg Prezhdo	Ab Initio Quantum Dynamics of Charge Carriers in Metal Halide Perovskites
10:45-11:15	Prof. Wan-Jian Yin	Materials Design of Novel Perovskites by High-Throughput Computing and Machine Learning
11:15-11:45	Prof. Saiful Islam	Atomic-Scale Insights into Hybrid Perovskites: Ion Transport, Cation Substitution & Degradation Mechanisms
11:45-12:00	Break	
12:15-12:30	Dr. Ekaterina Marchenko	Quantitative descriptor for classification of layered hybrid halide perovskites and relationships between distortions of inorganic framework and band gap
12:30-12:45	Abhishek Raj	Evaluation of front and back electrode material in lead-free double perovskite material Cs ₂ AgBiBr ₆ based solar cell through numerical simulation
12:45-13:00	Surbhi Ramawat	CsSnI ₃ lead-free perovskite-based inverted perovskite solar cell with Cu ₂ O as HTM: The theoretical insights
13:00-13:15	Nadezhda Tarabrina	Time-resolved luminescence spectroscopy of MAPb _x Hg _{1-x} Br ₃ single crystals
13:15-13:30	Dr. Olga Syzgantseva	First principles simulations for solution of the PSC stability challenge
13:30-14:00	Break	
14:00-14:30	Prof. Osman Bakr	Multiscale Crystal Engineering for Hybrid Perovskite Optoelectronics
14:30-15:00	Prof. Sergey Makarov	Halide perovskite micro- and nanolasers
15:00-15:30	Prof. Feng Gao	High-Performance Perovskite LEDs and Their Applications
15:30-16:00	Prof. Oana Jurchescu	Transistors – Another Exciting Application of Metal Halide Perovskite or a Deadlock?
16:00-16:30	Prof. Ajay Ram Srimath Kandada	Insights into the physics of exciton polarons from coherent spectroscopy
16:30-17:00	Dr. Alexey Tarasov	Recent advances in solution chemistry of hybrid perovskites
17:00-18:30	Poster session	

October, 13th (Moscow time, UTC+3)

10:00-10:15	Welcome speech of the organizing committee	
10:15-10:45	Dr. Maryna Bodnarchuk	Highly luminescent lead halide perovskite nanocrystals: from synthesis advancements to multicomponent superlattices
10:45-11:15	Prof. Yana Vaynzof	Strategies for Efficient Inverted Architecture Perovskite Solar Cells
11:15-11:30	Dr. Mohamed Mohamed Elnaggar	New Fullerene-Based Electron Transport Materials for p-i-n Perovskite Solar Cells with Improved Efficiency and Stability
11:30-11:45	Bening Tirta Muhammad	Ammonium sulfate treatment on metal oxide-based ETL prevents deprotonation of PSC's A-site organic cations in operational condition
11:45-12:00	Ishteev Arthur	Single source chemical vapor deposition (ssCVD) for highly luminescent inorganic halide perovskite films
12:00-12:15	Aleksei Grishko	Evidence for polarization-induced phase transformations and degradation in $\text{CH}_3\text{NH}_3\text{PbI}_3$.
12:15-12:30	Break	
12:30-12:45	Nishi Parikh	Atomic layer deposited Nb_2O_5 electron transport layer for efficient and stable perovskite solar cells
12:45-13:00	Thai Son Le	All-slot die printed inverted perovskite solar cells and mini-modules
13:00-13:15	Salvatore Valastro	Full Efficiency Recovery in Hole-Transporting Layer-Free Perovskite Solar Cells With Free-Standing Dry-Carbon Top-Contacts
13:15-13:30	Nigina Talbanova	Semi-transparent perovskite solar cell with Ion Beam Sputtering top-contact
13:30-14:30	Break	
14:30-14:45	Tatiana Komaricheva	P-i-n perovskite solar cells for indoor and BIPV applications
14:45-15:00	Elizaveta Rubtsova	Temperature and excitation density dependence of luminescence properties of MAPbBr_3 and MAPbCl_3 single crystals
15:00-15:15	Vasilisa Anikeeva	Broad-range spectroscopy of a single crystal of hybrid perovskite MAPbBr_3
15:15-15:30	Andrey Petrov	Intermediate solvate phases in the ternary systems $\text{MAI-PbI}_2\text{-DMF}$ and $\text{MAI-PbI}_2\text{-DMSO}$
15:30-16:00	Dr. Julie Euvard	Doping perovskites: a challenge that requires exploring different options
16:00-16:30	Dr. Danila Saranin	Interface engineering and advanced methods for identification of charged defect parameters in perovskite solar cells
16:30-16:45	Cryotrade Engineering (sponsor talk)	
16:45-17:00	Abolfazl Mahmoodpoor	Realtime suppression of interfacial trap states in perovskite solar cell using external doping of electron transport layer
17:00-17:15	Dr. Asya Mhamdi	Correlation between efficiency and device characterization in MAPbBr_3 inverted solar cells
17:15-17:30	Diana Melikhova	Сравнительное исследование перовскитных квантовых точек на основе компонентов $\text{CsBr}\cdot\text{PbBr}_2$
17:30-17:45	Abhijeet Jaysingrao Kale	CsMX_3 (M=Pb, Sn, Ge, and X= Cl, Br, I) halide perovskites as potential absorber candidates for photovoltaic applications
17:45-18:00	Closing of the Conference	