

MATSUS

Materials for Sustainable
Development Conference

MATSUS Spring 2025 Program

nanoge
CONFERENCES



scito
fundació



	Time	Monday 03 rd	Tuesday 04 th	Wednesday 05 th	Thursday 06 th	Friday 07 th	Time
Room Santa Cruz	08:40 - 09:00	Opening MATSUS Spring 2025				Closing & Awards Ceremony	08:30 - 08:55
	09:00 - 10:30	Plenary Session					
	11:15 - 13:00	PeroLight	PeroLight	PeroMat	PeroMat	NextGenSolar	
	15:30 - 17:30				NextGenSolar		
Room Nervión I - II	09:00 - 10:30		ChalcoQD	LeadFreePero	NCAAdv	NCAAdv	
	11:15 - 13:00	ChalcoQD	LeadFreePero				
	15:30 - 17:30						
Room Arenal II - III	09:00 - 10:30		RECIPE25	MemTech	Perfut25	Perfut25	
	11:15 - 13:00	RECIPE25	MemTech				
	15:30 - 17:30						
Room Prado	09:00 - 10:30		FunPorMat	SIMULSOLED	PhotoPero	PhotoPero	
	11:15 - 13:00	FunPorMat					
	15:30 - 17:30						
Room Triana	09:00 - 10:30		EmergingPV	ChalcoPV	ChalcoPV	PeroQuant25	
	11:15 - 13:00	EmergingPV			PeroQuant25		
	15:30 - 17:30						
Room Giralda III	09:00 - 10:30		U-perSA	III-VQDS	Charm		
	11:15 - 13:00	U-perSA	III-VQDS				
	15:30 - 17:30						
Room Giralda V	09:00 - 10:30		SusOrg	SuccessOPV	SUPER	NextDetectors	
	11:15 - 13:00	SusOrg	SuccessOPV				
	15:30 - 17:30						
Room Magnolia	09:00 - 10:30		Nitroconversion	CATSUS	CATSUS		
	11:15 - 13:00	Nitroconversion					
	15:30 - 17:30						
Room Azalea	09:00 - 10:30		NEMX25	ELECTROWAT	ELECTROWAT		
	11:15 - 13:00	NEMX25					
	15:30 - 17:30						
Room Carmona	09:00 - 10:30		SusMat	SusBatT	SusBatT		
	11:15 - 13:00	SusMat					
	15:30 - 17:30						
Room Estepa	09:00 - 10:30		AdvanceSSB	AdvanceSSB	Operax		
	11:15 - 13:00	SUSEES		NewGenBatt			
	15:30 - 17:30						
Lunch: 13:00 - 15:30 (not served)		Room Santa Cruz	Call for Symposia Announcement (17:30 h)			Poster Session (17:30 h)	
		Room Giralda I-II	Poster Session (17:45 h)	Social Dinner (19:45 h)			

Monday 03rd

Room Santa Cruz	08:40 - 09:00	Opening MATSUS Spring 2025	
	09:00 - 10:30	Plenary Session	Prof. Maksym Kovalenko & Prof. Valeria Nicolosi
	11:15 - 13:10	PeroLight	Photophysics of metal halide perovskites: from fundamentals to emerging applications
	15:30 - 17:15		
Room Nervión I - II	11:15 - 12:55	ChalcoQD	I-III-VI Colloidal Nanocrystals and Derivatives: From Synthesis to Applications
	15:30 - 17:00		
Room Arenal II - III	11:15 - 12:55	RECIPE25	Reliability and Circularity of Perovskite-Based Photovoltaics
	15:30 - 17:00		
Room Prado	11:15 - 12:55	FunPorMat	Multifunctional microporous materials for advanced applications in materials science
	15:30 - 16:45		
Room Triana	11:15 - 12:55	EmergingPV	The claim for sustainable materials in long lasting application
	15:30 - 17:15		
Room Giralda III	11:15 - 12:40	U-perSA	Unconventional Perovskites and Related Materials: From Synthesis to Applications
	15:30 - 17:00		
Room Giralda V	11:15 - 12:55	SusOrg	Sustainable org semiconductors for light to current applications
	15:30 - 17:05		
Room Magnolia	11:15 - 13:10	Nitroconversion	Interlinking heterogeneous catalysts, mechanisms, and reactor concepts for dinitrogen reduction
	15:30 - 17:15		
Room Azalea	11:15 - 12:55	NEMX25	Nano Exploration of MXenes 2025
	15:30 - 17:00		
Room Carmona	11:15 - 12:40	SusMat	Sustainable energy materials and circularity
	15:30 - 17:00		
Room Estepa	11:15 - 12:40	SUSEES	Advances in Electrochemical Energy Storage Systems: Driving Towards a Sustainable Future
	15:30 - 17:30		

Plenary Speakers



Maksym Kovalenko

Swiss Federal Institute of Technology ETH Zurich

09:00 - 09:45 h



Valeria Nicolosi

School of Chemistry at Trinity College Dublin

09:45 - 10:30 h

Tuesday 04th

Photophysics of metal halide perovskites: from fundamentals to emerging applications	PeroLight	09:00 - 10:30	Room Santa Cruz
I-III-VI Colloidal Nanocrystals and Derivatives	ChalcoQD	09:00 - 10:30	Room Nervión I - II
Lead-free perovskites: Fundamentals and device applications	LeadFreePero	11:15 - 12:40	Room Nervión I - II
Reliability and Circularity of Perovskite-Based Photovoltaics	RECIPE25	09:00 - 10:30	Room Arenal II - III
Advancements in Memristor Technology	MemTech	15:20 - 17:15	Room Arenal II - III
Multifunctional microporous materials for advanced applications in materials science	FunPorMat	09:00 - 10:30	Room Prado
The claim for sustainable materials in long lasting application	EmergingPV	11:15 - 12:30	Room Prado
Unconventional Perovskites and Related Materials: From Synthesis to Applications	U-perSA	09:00 - 10:30	Room Triana
#III-VQD - III-V: Quantum Dots and Beyond	III-VQDS	11:15 - 13:00	Room Triana
Sustainable org semiconductors for light to current applications	SusOrg	15:30 - 16:40	Room Triana
Understanding success of OSCs	SuccessOPV	09:00 - 10:30	Room Giralda III
Interlinking heterogeneous catalysts, mechanisms, and reactor concepts for dinitrogen reduction	Nitroconversion	11:15 - 12:55	Room Giralda III
Nano Exploration of MXenes 2025	NEMX25	15:20 - 17:00	Room Giralda III
Sustainable energy materials and circularity	SusMat	09:00 - 10:30	Room Giralda V
Advances in Li-Metal All-Solid-State Batteries: Processing, Manufacturing, and Integration	AdvanceSSB	11:15 - 12:55	Room Giralda V
Call for symposia MATSUS Spring 2026		15:20 - 17:30	Room Giralda V
Poster Session		09:00 - 10:30	Room Magnolia
		11:15 - 13:00	Room Magnolia
		15:30 - 17:25	Room Magnolia
		09:00 - 10:30	Room Azalea
		11:15 - 13:00	Room Azalea
		15:30 - 16:55	Room Azalea
		09:00 - 10:30	Room Carmona
		11:15 - 12:30	Room Carmona
		15:30 - 16:40	Room Carmona
		08:50 - 10:30	Room Estepa
		11:15 - 13:00	Room Estepa
		15:30 - 17:15	Room Estepa
		17:30 - 17:45	Room Santa Cruz
		17:45	Room Santa Cruz
			Room Giralda I-II

Wednesday 05th

Room Santa Cruz	08:50 - 10:30 11:15 - 12:45 15:30 - 16:45	PeroMat	From halide perovskites to perovskite-inspired materials -Synthesis and Applications-
Room Nervión I - II	09:00 - 10:30 11:15 - 13:10 15:30 - 17:30	LeadFreePero	Lead-free perovskites: Fundamentals and device applications
Room Arenal II - III	09:00 - 10:30 11:15 - 12:45 15:30 - 16:40	MemTech	Advancements in Memristor Technology: From Materials to Devices and Applications
Room Prado	08:50 - 10:30 11:15 - 13:00 15:30 - 17:25	SIMULSOLED	Numerical device modelling and SIMulation of SOLar cells and Light Emitting Diodes: methodologies and applications
Room Triana	08:50 - 10:30 11:15 - 12:45 15:30 - 16:45	ChalcoPV	Emerging chalcogenide materials for thin film photovoltaic applications
Room Giralda III	09:00 - 10:30 11:15 - 13:00 15:30 - 16:55	III-VQDS	III-V: Quantum Dots and Beyond: Pioneering Core-only and Core-Shell Structures for Future Applications
Room Giralda V	09:00 - 10:30 11:15 - 13:15 15:30 - 16:40	SuccessOPV	Understanding success of OSCs: stability and efficiency
Room Magnolia	08:50 - 10:30 11:15 - 12:30 15:30 - 17:15	CATSUS	CO2 electrocatalysis for sustainable fuels and chemicals
Room Azalea	08:50 - 10:30 11:15 - 13:00 15:30 - 17:00	ELECTROWAT	Electrochemical Water Treatment
Room Carmona	08:50 - 10:30 11:15 - 13:00 15:30 - 17:00	SusBatT	Post-Lithium Technologies toward Sustainable Batteries
Room Estepa	09:00 - 10:30 11:15 - 12:55 15:20 - 17:30	AdvanceSSB NewGenBatt	Advances in Li-Metal All-Solid-State Batteries New Generation Batteries, operando Characterization techniques & advanced Manufacturing
	19:45	Social Dinner	

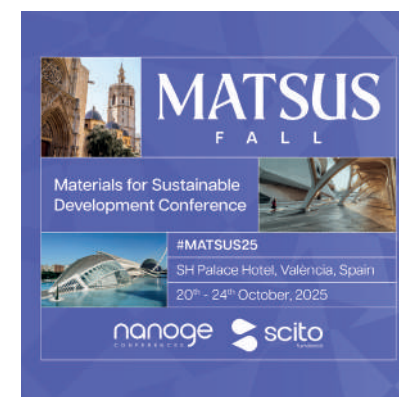
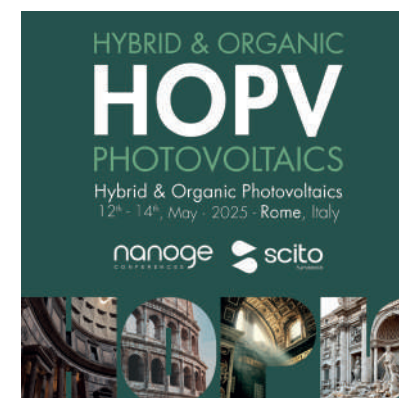
Thursday 06th

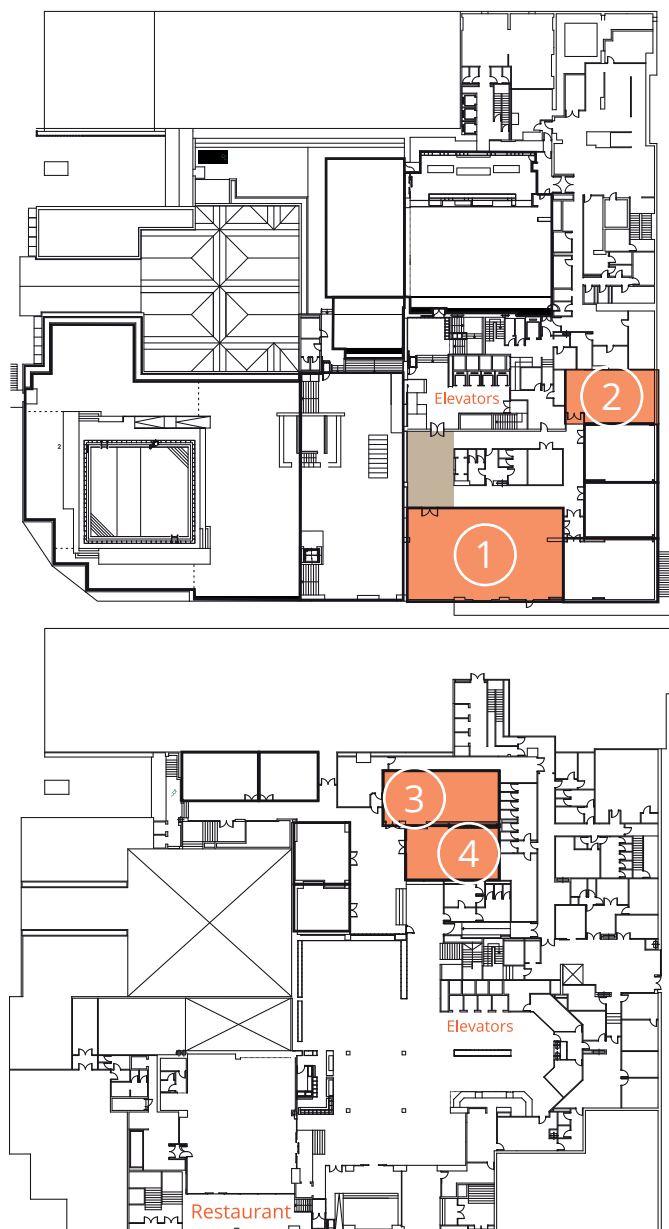
From halide perovskites to perovskite-inspired materials -Synthesis and Applications-	PeroMat	09:00 - 10:30 11:15 - 12:40 15:20 - 17:30	Room Santa Cruz
Emerging Inorganic Photoabsorbers	NextGenSolar		
Advances in Nanocrystals: Fundamental approaches and technological perspectives	NCAAdv	09:00 - 10:30 11:15 - 12:30 15:30 - 17:15	Room Nervión I - II
Future of Metal Halide Perovskites: Fundamental Approaches and Technological Challenges	Perfut25	08:50 - 10:30 11:15 - 13:00 15:30 - 17:30	Room Arenal II - III
Illuminating the Future: Advancements in Photon sources, Photodetectors, and Photonic Applications with 3D	PhotoPero	09:00 - 10:30 11:15 - 12:45 15:30 - 16:45	Room Prado
Emerging chalcogenide materials [...]	ChalcoPV	09:20 - 10:30 11:15 - 12:55 15:30 - 17:00	Room Triana
Halide perovskites for quantum technologies	PeroQuant25		
Chiral Hybrid Organic-Inorganic Metal Halides: Synthesis - Theory - Applications	Charm	08:50 - 10:30 11:15 - 12:45 15:30 - 16:45	Room Giralda III
Sustainability of halide perovskites	SUPER	08:50 - 10:30 11:15 - 12:45 15:30 - 16:40	Room Giralda V
CO2 electrocatalysis for sustainable fuels and chemicals	CATSUS	09:00 - 10:30 11:15 - 12:25 15:30 - 17:30	Room Magnolia
Electrochemical Water Treatment	ELECTROWAT	09:00 - 10:30 11:15 - 12:55 15:30 - 17:30	Room Azalea
Post-Lithium Technologies toward Sustainable Batteries	SusBatT	09:00 - 10:30 11:15 - 12:45 15:30 - 16:40	Room Carmona
In situ/operando characterization of electrochemical energy materials with synchrotron X-ray techniques	Operax	08:50 - 10:30 11:15 - 13:00 15:30 - 17:25	Room Estepa
Poster Session		17:30	Room Giralda I-II

Friday 07th

Room Santa Cruz	08:30 - 08:55	Closing and Awards Ceremony	
	09:00 - 10:30	NextGenSolar	Emerging Inorganic Photoabsorbers: Beyond ABX ₃ Perovskites
	11:15 - 13:10		
	15:30 - 17:30		
Room Nervión I - II	09:00 - 10:30	NCAdv	Advances in Nanocrystals: Fundamental approaches and technological perspectives
	11:15 - 12:45		
	15:30 - 17:10		
Room Arenal II - III	09:00 - 10:30	Perfut25	Future of Metal Halide Perovskites: Fundamental Approaches and Technological Challenges
	11:15 - 12:45		
	15:30 - 16:40		
Room Prado	09:00 - 10:30	PhotoPero	Illuminating the Future: Advancements in Photon sources, Photodetectors, and Photonic Applications with 3D and low- dimensional metal halide perovskites
	11:15 - 12:30		
	15:30 - 16:40		
Room Triana	09:00 - 10:30	PeroQuant25	Halide perovskites for quantum technologies
	11:15 - 12:55		
	15:30 - 17:30		
Room Giralda V	08:50 - 10:30	NextDetectors	Emerging Radiation Detectors
	11:15 - 13:00		
	15:30 - 16:25		

Upcoming conferences





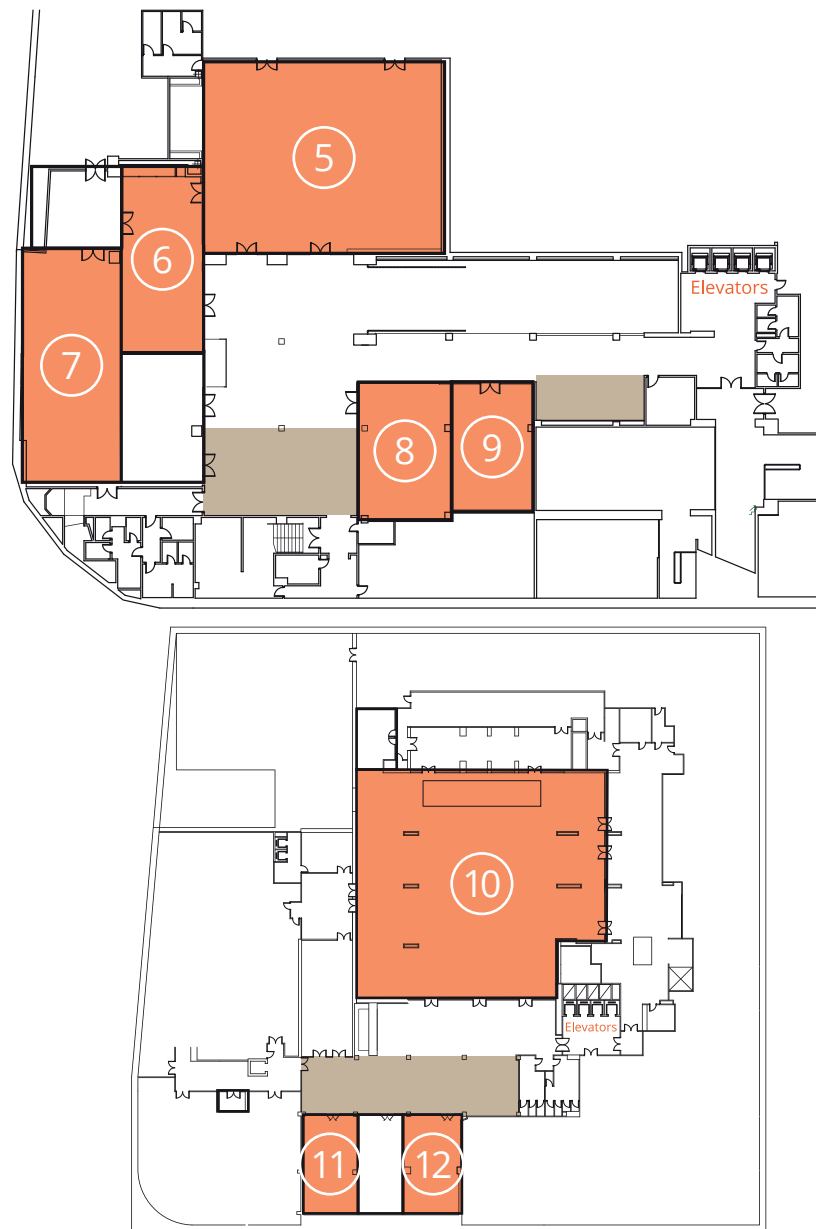
1st Floor

Meliá's Hall

- 1: Room Carmona
- 2: Room Estepa

- 3: Room Magnolia
- 4: Room Azalea

Networking areas



1st Basement

2nd Basement

- 5: Room Santa Cruz
- 6: Room Arenal II - III
- 7: Room Nervión I - II
- 8: Room Prado
- 9: Room Triana

- 10: Room Giralda I - II
(Registration, Coffee,
Sponsors & Posters Area)
- 11: Room Giralda V
- 12: Room Giralda III

Announcements in Room Santa Cruz

- **Monday 3rd at 08:40h. Opening MATSUS Spring 2025.** Welcome from Nanoge team & general scientific organizers.
- **Tuesday 04th at 17:30h. Call for Symposia – MATSUS Spring 2026.**
We are now accepting proposals for the upcoming MATSUS Spring 2026 taking place in Barcelona from March 2nd to 6th, 2026.
Send your proposals via the event website: nanoge.org/matsusspring26

Don't miss the opportunity to join us!

- **Friday 07th at 08:30h. Closing and Awards Ceremony.**
Several poster prizes will be awarded courtesy of the MATSUS Spring 2025 conference sponsors.

Poster Session

- Tuesday March 04th at 17:45h.
Set up at 15:00h. Pick up your poster at the end of the session.
- Thursday March 06th at 17:30h.
Set up at 15:00h. Pick up your poster at the end of the session.

Cocktail & Drinks included.

Social Dinner

 Wednesday March 05th at 19:45h.

 Abades Triana Restaurant.

Remember to bring your ticket!



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