

Crystalline Solids and their Microstructure Division

Fachverband Kristalline Festkörper und deren Mikrostruktur (KFM)

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Overview of Invited Talks and Sessions

(Lecture rooms EMH 025, EMH 225, E 020, and E 124; Poster E)

Invited Talks

KFM 1.1	Mon	9:30–10:00	EMH 025	Collective nano-optomechanics and liquids — •IVAN FAVERO
KFM 1.2	Mon	10:00–10:30	EMH 025	Whispering gallery optical parametric oscillators — •INGO BREUNIG
KFM 2.1	Mon	9:30–10:00	EMH 225	Atomic-resolution imaging of electronic inversion layers at ferroelectric domain walls — •JULIA MUNDY, J. SCHAAB, Y. KUMAGAI, A. CANO, M. STENGEL, I. KUNG, D. GOTTLOB, H. DOGANAY, M. HOLTZ, R. HELD, Z. YAN, E. BOURRET, C. SCHNEIDER, D. SCHLOM, D. MULLER, R. RAMESH, N. SPALDIN, D. MEIER
KFM 2.7	Mon	11:30–12:00	EMH 225	Understanding the dielectric enhancement from domain walls in conventional and relaxor ferroelectrics — •ANDREW RAPPE
KFM 5.1	Mon	15:00–15:30	EMH 025	Whispering-gallery-like modes in two and three dimensional microcavities — •MARTINA HENTSCHEL
KFM 6.1	Mon	15:00–15:30	EMH 225	First-principles studies of ferroelectric and ferroelastic domain walls — •JORGE ÍÑIGUEZ
KFM 6.7	Mon	17:15–17:45	EMH 225	Probing STO domain walls with scanning SQUID microscopy — •BEENA KALISKY
KFM 10.1	Tue	9:30–10:00	EMH 225	Insights into the Inside provided by Coherent X-ray Imaging — •TIM SALDITT
KFM 13.1	Wed	9:30–10:00	E 020	Advanced Cell Adhesion of Modified Ultrananocrystalline Diamond Surfaces — •CYRIL POPOV
KFM 13.5	Wed	11:20–11:50	E 020	CVD diamond for high power electronic devices — •VERENA ZÜRBIG
KFM 14.1	Wed	9:30–10:00	EMH 025	Resource-efficient dielectric materials for short-time energy storage — •STEPHAN KROHNS
KFM 14.7	Wed	12:00–12:30	EMH 025	Dielectric Polymer Nanocomposites for Electrical Energy Storage — •QING WANG
KFM 15.1	Wed	9:30–10:00	EMH 225	Oxygen vacancy controlled functionalities at interfaces of multi-ferroic tunnel junctions. — •JACOBO SANTAMARIA
KFM 18.1	Wed	15:00–15:30	E 124	Application of Diamond Technology to Microwave Systems in Nuclear Fusions Machines — •GIOVANNI GROSSETTI, GAETANO AIELLO, FRANCESCO MAZZOCCHI, ANDREAS MEIER, SABINE SCHRECK, PETER SPAEH, DIRK STRAUSS, THEO SCHERER
KFM 19.1	Wed	15:00–15:30	EMH 025	Electrical double layer capacitors, Insights from fundamental research and their impact on storage devices — •GUDRUN REICHENAUER
KFM 20.1	Wed	15:00–15:30	EMH 225	Merging Nonlinear Optics and Multiferroic Heterostructure Design — •MANFRED FIEBIG
KFM 23.1	Thu	9:30–10:00	EMH 025	3D Nanoprinting via Focused Electron Beams — •HARALD PLANK, ROBERT WINKLER, JASON FOWLKES, PHILIP RACK
KFM 23.5	Thu	11:20–11:50	EMH 025	Diffraction X-ray Optics for Synchrotrons and Free Electron Lasers - a challenge from the lithographer's point of view — •CHRISTIAN DAVID

KFM 24.1	Thu	9:30–10:00	E 124	Discovering Ancient Secrets in Aluminum Alloys – A New Combination of Analytical Techniques and ab-initio Calculations — ●TORSTEN E.M. STAAB, DANNY PETSCHKE, FRANK LOTTER, ELISCHA BLÄSS
KFM 26.1	Thu	15:00–15:30	EMH 025	Electron Beam Lithography and Ion Beam Patterning for Applications in Quantum Technology — ●JÖRG STODOLKA, MICHAEL KAHL, AXEL RUDZINSKI, SVEN BAUERDICK

Invited talks of the joint symposium SYVC

See SYVC for the full program of the symposium.

SYVC 1.1	Wed	15:00–15:30	H 0105	Magneto-ionic control of interfacial magnetism — ●GEOFFREY BEACH
SYVC 1.2	Wed	15:30–16:00	H 0105	Ionic Control of Materials Beyond Interfaces — ●DUSTIN GILBERT
SYVC 1.3	Wed	16:00–16:30	H 0105	Microscopic Mechanisms of Memristive Switching in Metal Oxides — ●RAINER WASER, STEPHAN MENZEL, REGINA DITTMANN
SYVC 1.4	Wed	17:00–17:30	H 0105	In-situ and operando SQUID magnetometry under electrochemical control — ●ROLAND WÜRSCHUM, MARKUS GÖSSLER, GREGOR KLINSER, EVA-MARIA STEYSKAL, HEINZ KRENN
SYVC 1.5	Wed	17:30–18:00	H 0105	Reversible chemistry as a tool for dynamic control of physical properties — ●ROBERT KRUK, SUBHO DASGUPTA, BIJOY DAS, HORST HAHN

Invited talks of the joint symposium SYAM

See SYAM for the full program of the symposium.

SYAM 1.1	Fri	9:30–10:00	H 0105	Bringing Dino-Birds to life – Synchrotron X-ray fluorescence and Raman imaging of ancient materials — ●UWE BERGMANN
SYAM 1.2	Fri	10:00–10:30	H 0105	Linear and Nonlinear Optical Properties of Cultural Heritage Materials — ●MARTA CASTILLEJO
SYAM 1.3	Fri	10:30–11:00	H 0105	Morphology and topology of multiscale pore networks: Imaging structural alteration and hydric invasion — ●PIERRE LEVITZ
SYAM 1.4	Fri	11:15–11:45	H 0105	Painting cracks: a way to reveal physical properties of matter — ●LUDOVIC PAUCHARD
SYAM 1.5	Fri	11:45–12:15	H 0105	Finite element analysis and biomechanical interpretation of fossil material properties — ●EMILY RAYFIELD

Sessions

KFM 1.1–1.8	Mon	9:30–12:50	EMH 025	Whispering Gallery Mode Resonators I
KFM 2.1–2.10	Mon	9:30–12:45	EMH 225	Ferroelectric Domain Walls I (joint session KFM/TT)
KFM 3.1–3.10	Mon	9:30–13:10	E 124	Crystal Structure, Defects, Real Structure and Microstructure in Materials
KFM 4.1–4.12	Mon	15:00–18:30	EB 301	Skyrmions I (joint session MA/KFM/TT)
KFM 5.1–5.8	Mon	15:00–18:10	EMH 025	Whispering Gallery Mode Resonators II
KFM 6.1–6.10	Mon	15:00–18:30	EMH 225	Ferroelectric Domain Walls II (joint session KFM/TT)
KFM 7.1–7.9	Mon	15:00–18:20	E 124	Microstructure of thin films / TEM-based Nanoanalysis
KFM 8.1–8.10	Tue	9:30–12:15	EB 202	Multiferroics and magnetoelectrics I (joint session MA/KFM)
KFM 9.1–9.13	Tue	9:30–13:15	EB 301	Skyrmions II (joint session MA/TT/KFM)
KFM 10.1–10.11	Tue	9:30–13:40	EMH 225	Spectroscopy and Microscopy I with X-rays and Ions
KFM 11.1–11.5	Tue	10:00–11:40	EMH 025	Dielectric, Elastic and Electromechanical Properties
KFM 12.1–12.9	Wed	9:30–12:00	EB 202	Multiferroics and magnetoelectrics II (joint session MA/KFM)
KFM 13.1–13.8	Wed	9:30–12:50	E 020	Diamond I
KFM 14.1–14.7	Wed	9:30–12:30	EMH 025	Materials for Energy Storage I (joint session KFM/PPP)
KFM 15.1–15.11	Wed	9:30–12:45	EMH 225	Multiferroic Oxide Thin Films and Heterostructures I (joint session KFM/TT/MA)
KFM 16.1–16.9	Wed	9:30–13:00	H 2032	Lithography I: Focused Electron Beam Induced Processing: 3D Nano-Printing for Material Science (Focussed Session): Morning Session (joint session DS/KFM)

KFM 17.1–17.14	Wed	15:00–18:30	EB 301	Skymions III (joint session MA/TT/KFM)
KFM 18.1–18.10	Wed	15:00–17:30	E 124	Diamond II + Poster
KFM 19.1–19.7	Wed	15:00–17:50	EMH 025	Materials for Energy Storage II (joint session KFM/ CPP)
KFM 20.1–20.10	Wed	15:00–18:15	EMH 225	Multiferroic Oxide Thin Films and Heterostructures II (joint session KFM/TT/MA)
KFM 21.1–21.11	Wed	15:00–18:00	H 2032	Lithography II: Focused Electron Beam Induced Processing: 3D Nano-Printing for Material Science (Focussed Session): Afternoon Session (joint session DS/KFM)
KFM 22	Wed	18:30–19:00	EMH 025	Annual General Meeting of the KFM division
KFM 23.1–23.8	Thu	9:30–12:50	EMH 025	Lithography III: Lithography and Structuring (joint session KFM/DS)
KFM 24.1–24.7	Thu	9:30–12:20	E 124	Spectroscopy and Microscopy II with Positrons
KFM 25.1–25.11	Thu	9:30–13:30	EMH 225	Ferroics and Multiferroics (joint session KFM/TT/MA)
KFM 26.1–26.8	Thu	15:00–18:10	EMH 025	Lithography IV: Lithography and Structuring (joint session KFM/DS)
KFM 27.1–27.35	Thu	15:00–17:00	Poster E	Postersession KFM
KFM 28.1–28.13	Fri	9:30–13:00	H 0110	Complex Oxides: Bulk Properties, Surfaces and Interfaces (joint session TT/MA/KFM)

Annual General Meeting of the Crystalline Solids and their Microstructure Division

Mittwoch 18:30–19:00 Raum EMH 025

- Bericht
- Verschiedenes