

# Crystalline Solids and their Microstructure Division

## Fachverband Kristalline Festkörper und deren Mikrostruktur (KFM)

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### Overview of Invited Talks and Sessions

(Lecture halls TOE 317, HSZ 301; Poster P2/1OG)

#### **Invited Talks**

KFM 1.1	Mon	9:30–10:00	HSZ 105	Doped CVD diamond layers for electronic device applications: Experimental and theoretical study — •KEN HAENEN
KFM 1.2	Mon	10:00–10:30	HSZ 105	Research and development for fabrication of diamond wafers for industrial use — •HIDEAKI YAMADA
KFM 1.3	Mon	10:50–11:20	HSZ 105	Diamond: Material of the future for high power, high frequency devices and quantum applications — •SHANNON NICLEY
KFM 2.1	Mon	9:30–10:00	TOE 317	Novel device integration - combining bottom-up and top-down approaches — •ARTUR ERBE
KFM 2.5	Mon	11:20–11:50	TOE 317	Shapeable materials technologies for high resolution patterning of 3D microelectronic devices — •DANIIL KARNAUSCHENKO
KFM 13.5	Thu	11:10–11:40	TOE 317	3D Printing with Electrons - Advances and Opportunities — •HARALD PLANK

#### **Invited talks of the joint symposium SYSD**

See SYSD for the full program of the symposium.

SYSD 1.1	Mon	9:30– 9:55	HSZ 02	Disentangling transport in topological insulator thin films down to the nanoscale — •FELIX LÜPKE
SYSD 1.2	Mon	9:55–10:20	HSZ 02	Spintronics with Terahertz Radiation: Probing and driving spins at highest frequencies — •TOM SEBASTIAN SEIFERT, TOBIAS KAMPFRATH
SYSD 1.3	Mon	10:20–10:45	HSZ 02	Non-radiative voltage losses in organic solar cells — •JOHANNES BEN-DUHN
SYSD 1.4	Mon	10:45–11:10	HSZ 02	Multivalent ions for tuning the phase behaviour of protein solutions — •OLGA MATSARSKAIA
SYSD 1.5	Mon	11:10–11:35	HSZ 02	Network Dynamics under Constraints — •MALTE SCHRÖDER
SYSD 1.6	Mon	11:35–12:00	HSZ 02	Exciton spectroscopy of van der Waals heterostructures — •PHILIPP NAGLER

#### **Invited talks of the joint symposium SYES**

See SYES for the full program of the symposium.

SYES 1.1	Thu	9:30–10:00	HSZ 02	Understanding the physical variables driving mechanosensing — •PERE ROCA-CUSACHS
SYES 1.2	Thu	10:00–10:30	HSZ 02	Mechanics of life: Cellular forces and mechanics far from thermodynamic equilibrium — •TIMO BETZ
SYES 1.3	Thu	10:30–11:00	HSZ 02	A hydrodynamic approach to collective cell migration in epithelial tissues — •JAUME CASADEMUNT
SYES 1.4	Thu	11:15–11:45	HSZ 02	The spindle is a composite of two permeating polar gels — DAVID ORIOLA, BENJAMIN DALTON, FRANZISKA DECKER, FRANK JULICHER, •JAN BRUGUES

SYES 1.5	Thu	11:45–12:15	HSZ 02	<b>Adding magnetic properties to epitaxial graphene — •RODOLFO MIRANDA</b>
SYES 2.1	Thu	15:00–15:30	HSZ 01	<b>Interactions in assemblies of surface-mounted magnetic molecules — •WOLFGANG KUCH</b>
SYES 2.2	Thu	15:30–16:00	HSZ 01	<b>Towards phononic circuits based on optomechanics — •CLIVIA M. SOTOMAYOR-TORRES</b>
SYES 2.3	Thu	16:00–16:30	HSZ 01	<b>Optical properties of 2D materials and heterostructures — •JANINA MAULTZSCH</b>
SYES 2.4	Thu	16:45–17:15	HSZ 01	<b>Bringing nanophotonics to the atomic scale — •JAVIER AIZPURUA</b>
SYES 2.5	Thu	17:15–17:45	HSZ 01	<b>Infrared signatures of the coupling between vibrational and plasmonic excitations — •ANNEMARIE PUCCI</b>

## Sessions

KFM 1.1–1.4	Mon	9:30–11:40	HSZ 105	<b>Focus: Diamond Technology and Electronics (joint session KFM/DS/HL)</b>
KFM 2.1–2.8	Mon	9:30–12:50	TOE 317	<b>Focus: High-resolution Lithography and 3D Patterning (Part I) (joint session KFM/HL/CPP)</b>
KFM 3.1–3.3	Mon	12:00–13:00	HSZ 105	<b>Dielectric, Elastic and Electromechanical Properties</b>
KFM 4.1–4.7	Mon	15:00–17:40	HSZ 105	<b>Multiferroics (joint session KFM/MA)</b>
KFM 5.1–5.7	Mon	15:00–17:40	TOE 317	<b>Microscopy and Spectroscopy with X-rays, Ions and Positrons (joint session KFM/CPP)</b>
KFM 6.1–6.6	Tue	9:30–11:50	TOE 317	<b>Diamond</b>
KFM 7.1–7.5	Tue	12:00–13:40	TOE 317	<b>Whispering-Gallery-Mode Resonators</b>
KFM 8.1–8.10	Wed	9:30–12:15	HSZ 401	<b>Multiferroics and Magnetoelectric Coupling I (joint session MA/KFM)</b>
KFM 9.1–9.11	Wed	9:30–13:30	TOE 317	<b>Focus: Polar oxide crystals and solid solutions</b>
KFM 10.1–10.8	Wed	15:00–17:00	HSZ 401	<b>Multiferroics and Magnetoelectric Coupling II (joint session MA/KFM)</b>
KFM 11.1–11.9	Wed	15:00–18:20	TOE 317	<b>Ferroics - Domains and Domain Walls (joint session KFM/MA)</b>
KFM 12.1–12.6	Thu	9:30–11:50	HSZ 301	<b>Materials for Energy Storage (joint session KFM/CPP)</b>
KFM 13.1–13.7	Thu	9:30–12:20	TOE 317	<b>Focus: High-resolution Lithography and 3D Patterning (Part II) (joint session KFM/HL/CPP)</b>
KFM 14.1–14.6	Thu	14:10–16:20	HSZ 301	<b>TEM-based Nanoanalysis and Microstructure of thin films (joint session KFM/CPP)</b>
KFM 15.1–15.30	Thu	16:00–18:30	P2/1OG	<b>Postersession KFM</b>
KFM 16	Thu	18:30–19:30	TOE 317	<b>Annual General Meeting of the KFM division</b>
KFM 17.1–17.8	Fri	9:30–12:30	TOE 317	<b>Microstructure, Real Structure and Crystal Defects</b>

## Annual General Meeting of the Crystalline Solids and their Microstructure Division

Donnerstag 18:30–19:30 TOE 317

- Bericht
- Verschiedenes