

Thin Films Division Fachverband Dünne Schichten (DS)

Dietrich R. T. Zahn
Chemnitz University of Technology
Semiconductor Physics
Reichenhainer Straße 70
09126 Chemnitz
zahn@physik.tu-chemnitz.de

Overview of Invited Talks and Sessions

(lecture rooms H 2013 and H 2032; Poster A - Galerie 2.OG)

Invited Talks

DS 1.1	Mon	9:30–10:00	H 2013	Organic Spintronics five years later — ●CARLO TALIANI
DS 1.2	Mon	10:00–10:30	H 2013	Organic spintronics: can theory play a role? — ●STEFANO SANVITO
DS 1.3	Mon	10:30–11:00	H 2013	Spintronic and electro-mechanical effects in single-molecule transistors — ●MAARTEN R. WEGEWIJS
DS 2.1	Mon	11:45–12:15	H 2013	Tunable electron spin resonance spectroscopy of multi-center paramagnetic molecular complexes in strong magnetic fields — ●VLADISLAV KATAEV
DS 2.2	Mon	12:15–12:45	H 2013	Coordinated metal centers: Single-molecule magnets and highspin to lowspin switching — ●PAUL MÜLLER
DS 2.3	Mon	12:45–13:15	H 2013	Substrate-induced magnetic ordering and switching of iron porphyrin molecules — ●H. WENDE, M. BERNIEN, J. LUO, C. WEIS, N. PONPANDIAN, J. KURDE, J. MIGUEL, M. PIANTEK, X. XU, PH. ECKHOLD, W. KUCH, K. BABERSCHKE, P. SRIVASTAVA, P.M. PANCHMATIA, B. SANYAL, P.M. OPPENEER, O. ERIKSSON
DS 6.1	Mon	9:30–10:15	H 2032	High Speed Nano-Photonics — ●GADI EISENSTEIN
DS 7.1	Mon	11:15–12:00	H 2032	Recent advances of VCSEL photonics — ●FUMIO KOYAMA
DS 7.4	Mon	12:30–13:00	H 2032	Recent Advances on Long Wavelength VCSELs (> 1300 nm) — ●MARKUS C. AMANN
DS 8.1	Mon	14:00–14:45	H 2032	High Efficiency Nonpolar InGaN/GaN based Blue Light Emitting Diodes and Laser Diodes — ●STEVEN P. DENBAARS, MATHEW C. SCHMIDT, ROBERT FARRELL, DANIEL FEZZELL, STACIA KELLER, JAMES S. SPECK, SHUJI NAKAMURA
DS 8.2	Mon	14:45–15:15	H 2032	Polarization induced effects in GaN-based devices — ●OLIVER AMBACHER
DS 8.3	Mon	15:15–15:45	H 2032	The optoelectronic chameleon - GaN-based light emitters from the UV to green — ●MICHAEL KNEISSL
DS 9.1	Mon	16:00–16:30	H 2032	GaN-Photonics on Silicon — ●ALOIS KROST
DS 10.1	Mon	17:30–18:00	H 2032	Nanotechnology based single-mode lasers for telecommunication and sensing — MARTIN KAMP, SVEN HÖFLING, ●ALFRED FORCHEL
DS 13.1	Tue	9:30–10:15	H 2032	Film Production Technologies — ●HANS K. PULKER
DS 13.2	Tue	10:15–10:45	H 2032	Innovative stationary and in-line sputter technologies for precision optical coatings — ●PETER FRACH, HAGEN BARTZSCH, JOERN-STEFFEN LIEBIG, JOERN WEBER, VOLKER KIRCHHOFF
DS 13.3	Tue	10:45–11:15	H 2032	Novel Process Concepts for Ion Beam Sputtering Deposition — ●KAI STARKE, HENRIK EHLERS, MARC LAPPSCHIES, NILS BEERMANN, DETLEV RISTAU
DS 14.1	Tue	12:00–12:30	H 2032	Demands on Coating Technologies in the Optical Component Industry — ●MARCUS SERWAZI
DS 14.2	Tue	12:30–13:00	H 2032	Optische Prüfverfahren für die Qualitätssicherung in der Schicht- und Oberflächentechnik — ●UWE BECK

DS 14.3	Tue	13:00–13:30	H 2032	Mixed oxide coatings for advanced fs-laser applications — ●MARCO JUPE, MARC LAPPSCHIES, KAI STARKE, DETLEV RISTAU, ANDRIUS MELNINKAITIS, VALDAS SIRUTKAITIS, IGOR CRAVETCHI, WOLFGANG RUDOLPH
DS 15.1	Tue	14:30–15:00	H 2032	The truth about ferromagnetic ZnO — ●KAY POTZGER, SHENGQIANG ZHOU, GEORG TALUT, KARSTEN KUEPPER, HELFRIED REUTHER, ARNDT MÜCKLICH, JÖRG GRENZER, MANFRED HELM, JÜRGEN FASSBENDER, HEIDEMARIE SCHMIDT, QUINGYU XU, MICHAEL LORENZ
DS 15.2	Tue	15:00–15:30	H 2032	ZnO-based Hetero- and Quantum Well Structures for Light-Emitting Applications — ●FRITZ HENNEBERGER, SERGEY SADOFEV
DS 15.3	Tue	15:30–16:00	H 2032	Large Area Deposition of Transparent Conductive Oxide Films — ●BERND SZYSZKA, VOLKER SITTINGER, ANDREAS PFLUG, STEPHAN ULRICH, FELIX HORSTMANN
DS 16.1	Tue	17:00–17:30	H 2032	Zinc Oxide Nanostructures: Optical resonators and lasing — ●KLAUS THONKE, ANTON REISER, MARTIN SCHIRRA, MARTIN FENEBERG, GUENTHER M. PRINZ, TOBIAS RÖDER, ROLF SAUER, JOHANNES FALLERT, FELIX STELZL, HEINZ KALT, STEFAN GSELL, MATTHIAS SCHRECK, BERND STRITZKER
DS 16.4	Tue	18:00–18:30	H 2032	Electrochromic coatings and windows — ●SABINE HEUSING
DS 16.5	Tue	18:30–19:00	H 2032	Semiconducting metal oxides for gas sensors — ●TILMAN SAUERWALD, THORSTEN WAGNER
DS 19.1	Wed	14:30–15:00	H 2013	Organometallic Nanojunctions Probed by Different Chemistries: Thermo-, Photo, and Mechanochemistry — ●I. STICH, M. KONOPKA, R. TURANSKY, J. REICHERT, N. L. DOLTSINIS, H. FUCHS, D. MARX
DS 20.1	Wed	17:45–18:15	H 2013	Designing the nanostructure of the organic polymer - metal interface — ●STEPHAN V. ROTH
DS 21.1	Wed	14:30–15:00	H 2032	Challenges and Chances with new materials in semiconductor device applications — ●STEFAN JAKSCHIK, KARL-HEINZ KÜSTERS
DS 21.2	Wed	15:00–15:30	H 2032	Are Optical Measurements Sensitive to Quantum Confinement? — ●ALAIN DIEBOLD
DS 22.1	Wed	16:45–17:15	H 2032	Development of novel processes for atomic layer deposition of high-k dielectrics — ●JAAKKO NIINISTÖ, KAUPU KUKLI, MIKKO RITALA, MARKKU LESKELÄ
DS 22.2	Wed	17:15–17:45	H 2032	Towards a better understanding of the dielectric collapse in high-K BST thin film capacitors — ●REGINA DITTMANN, RAFAEL PLONKA, NIKOLAY PERTSEV, SUSANNE HOFFMANN-EIFERT, RAINER WASER
DS 24.1	Thu	9:30–10:00	H 2013	Nanostructures produced with energetic heavy ion projectiles — ●CHRISTINA TRAUTMANN
DS 24.2	Thu	10:00–10:30	H 2013	Low energy maskless implantation with high lateral resolution. — ●JAN MEIJER, SEBASTIEN PEZZAGNA, DIRK REUTER, IVO W. RANGELOW, HARTMUT WIGGERS, FEDOR JELEZKO, INAM MIRZA, JÖRG WRACHTRUP, FERDINAND SCHMIDT-KALER, WOLFGANG SCHNITZER, KILIAN SINGER
DS 24.3	Thu	10:30–11:00	H 2013	Cluster ion-surface interactions: from meV to MeV energies — ●KAI NORDLUND, KRISTOFFER MEINANDER, TOMMI T. JÄRVI, JARKKO PELTOLA, JUHA SAMELA
DS 26.1	Thu	13:45–14:15	H 2013	Profiling of Fibre Texture Gradients by Anomalous X-ray Diffraction — ●M. BIRKHOLZ, N. DAROWSKI, I. ZIZAK
DS 27.1	Thu	14:30–15:00	H 2013	Surface engineering with ion beams: from self-organized nanostructures to ultra-smooth surfaces — ●FRANK FROST, BASHKIM ZIBERI, AXEL SCHINDLER, BERND RAUSCHENBACH
DS 27.2	Thu	15:00–15:30	H 2013	Rare earth doping of GaN — ●ANDRÉ VANTOMME
DS 27.3	Thu	15:30–16:00	H 2013	Junction and Channel Engineering for Advanced Microprocessors — ●MANFRED HORSTMANN
DS 35.1	Thu	17:00–17:30	H 2032	Nanostructure and transport in regioregular polythiophenes and their block copolymers — RUI ZHANG, BO LI, JESSICA R. COOPER, MICHAELA IOVU, GENEVEVIE SAUVE, DAVID N. LAMBETH, DETLEF-M. SMILGIES, RICHARD D. MCCULLOUGH, ●TOMASZ KOWALEWSKI
DS 36.1	Fri	10:15–10:45	H 2013	Infrared ellipsometry on functional films at the solid-liquid-interface — ●KARSTEN HINRICHS
DS 36.2	Fri	10:45–11:15	H 2013	Surface enhanced infrared spectroscopy — ●ANNEMARIE PUCCI
DS 37.1	Fri	13:30–14:00	H 2013	Ambient pressure spectroscopy of catalytically active nanostructures: Mind the gap! — ●GÜNTHER RUPPRECHTER

DS 37.2	Fri	14:00–14:30	H 2013	Near-field Infrared Nanoscopy and Nanospectroscopy — ●RAINER HILLENBRAND
DS 38.1	Fri	15:15–15:45	H 2013	Vibrational dynamics on the nanoscale — ●MARKUS RASCHKE
DS 38.2	Fri	15:45–16:15	H 2013	UHV-based TERS on adsorbed molecules — ●BRUNO PETTINGER, JENS STEIDTNER
DS 38.3	Fri	16:15–16:45	H 2013	Tip enhanced Raman scattering on biological samples — ●VOLKER DECKERT
DS 39.1	Fri	10:15–10:45	H 2032	Vortex Manipulation in Superconductor/Ferromagnet Hybrid Nanosystems(*) — ●VICTOR MOSHCHALOV
DS 39.2	Fri	10:45–11:15	H 2032	Investigating the interaction between single-crystalline antiferromagnetic films and ferromagnets — ●WOLFGANG KUCH
DS 40.1	Fri	12:15–12:45	H 2032	Influence of antiferromagnetic layers on the magnetization dynamics of exchange coupled thin films — ●JEFFREY MCCORD
DS 40.4	Fri	13:15–13:45	H 2032	Ion Beam Induced Magnetic Nanostructures — ●PETER VARGA

Geade Prize

VA 6.1	Wed	13:30–14:15	HE 101	Structure formation, kinetics and mechanics in thin films and solids: from nanoscale to macroscopic properties in experiments and simulations. — ●S. G. MAYR
--------	-----	-------------	--------	---

Invited talks of the joint symposium SYSA

SYSA 1.1	Tue	9:30–10:00	H 0105	Level alignment at metal/organic interfaces — ●FERNANDO FLORES
SYSA 2.1	Tue	10:45–11:15	H 0105	Organic film growth and organic-metal interfaces — ●NORBERT KOCH
SYSA 2.5	Tue	12:00–12:30	H 0105	Molecular n-doping of organic semiconductors — ●ANTOINE KAHN, CALVIN CHAN
SYSA 3.1	Tue	14:30–15:00	H 2013	Charge transport and contact effects in organic semiconductors — ●ALBERTO SALLEO, LESLIE JIMISON, JONATHAN RIVNAY, LUDWIG GORIS, MICHAEL TONEY
SYSA 4.1	Tue	16:30–17:00	H 2013	Polymer electronics - Charge transport at organic-organic heterointerfaces — ●HENNING SIRRINGHAUS
SYSA 6.1	Wed	14:30–15:00	H 2013	Organometallic Nanojunctions Probed by Different Chemistries: Thermo-, Photo, and Mechanochemistry — ●I. STICH, M. KONOPKA, R. TURANSKY, J. REICHERT, N. L. DOLTSINIS, H. FUCHS, D. MARX
SYSA 7.1	Wed	17:45–18:15	H 2013	Designing the nanostructure of the organic polymer - metal interface — ●STEPHAN V. ROTH
SYSA 8.1	Thu	17:00–17:30	H 2032	Nanostructure and transport in regioregular polythiophenes and their block copolymers — RUI ZHANG, BO LI, JESSICA R. COOPER, MIHAELA IOVU, GENEVEVIE SAUVE, DAVID N. LAMBETH, DETLEF-M. SMILGIES, RICHARD D. MCCULLOUGH, ●TOMASZ KOWALEWSKI

Invited talks of the joint symposium SYNf

SYNF 2.1	Tue	14:30–15:00	A 151	Tunable two-dimensional electron gases in correlated electronic systems — ●J. MANNHART, G. HAMMERL, T. KOPP, C. RICHTER, C.W. SCHNEIDER, S. THIEL, N. REYREN, A.D. CAVIGLIA, S. GARIGLIO, D. JACCARD, J.-M. TRISCONE, L. FITTING-KOURKOUTIS, D. MULLER, C. CHENG, J. LEVY
SYNF 2.2	Tue	15:00–15:30	A 151	New physics from electron correlations at oxide interfaces — ●WARREN E. PICKETT, ROSSITZA PENTCHEVA
SYNF 2.3	Tue	15:30–16:00	A 151	Gigantic magnetoelectric responses in hellimagnets — ●Y. TOKURA
SYNF 2.4	Tue	16:00–16:30	A 151	Electrical field control of ferromagnets using multiferroics — ●RAMAMOORTHY RAMESH
SYNF 2.5	Tue	16:30–17:00	A 151	Spintronics with multiferroic materials — ●AGNES BARTHELEMY
SYNF 2.6	Tue	17:00–17:30	A 151	Magnetoelectric effects at multiferroic interfaces — ●EVGENY TSYMBAL

Sessions

DS 1.1–1.5	Mon	9:30–11:30	H 2013	Towards Molecular Spintronics
DS 2.1–2.5	Mon	11:45–13:45	H 2013	Towards Molecular Spintronics
DS 3.1–3.6	Mon	14:30–16:00	H 2013	Organic Thin Films
DS 4.1–4.5	Mon	16:15–17:30	H 2013	Organic Thin Films
DS 5.1–5.6	Mon	17:45–19:15	H 2013	Organic Thin Films
DS 6.1–6.4	Mon	9:30–11:00	H 2032	Semiconductor Nanophotonics: Materials, Models, Devices - High Speed Photonics
DS 7.1–7.4	Mon	11:15–13:00	H 2032	Semiconductor Nanophotonics: Materials, Models, Devices - Surface Emitters
DS 8.1–8.3	Mon	14:00–15:45	H 2032	Semiconductor Nanophotonics: Materials, Models, Devices - GaN based Photonics I: Polarization Fields
DS 9.1–9.4	Mon	16:00–17:15	H 2032	Semiconductor Nanophotonics: Materials, Models, Devices - GaN based Photonics II
DS 10.1–10.5	Mon	17:30–19:00	H 2032	Semiconductor Nanophotonics: Materials, Models, Devices - Novel Concepts
DS 11.1–11.8	Tue	9:30–11:30	H 2013	Thin Film Characterisation: Structure Analyse and Composition (XRD, TEM, XPS, SIMS, RBS, ...)
DS 12.1–12.7	Tue	11:45–13:30	H 2013	Thin Film Characterisation: Structure Analyse and Composition (XRD, TEM, XPS, SIMS, RBS, ...)
DS 13.1–13.4	Tue	9:30–11:30	H 2032	Optical Layers: Basic Research and Applications
DS 14.1–14.3	Tue	12:00–13:30	H 2032	Optical Layers: Basic Research and Applications
DS 15.1–15.5	Tue	14:30–16:30	H 2032	Functional Oxides
DS 16.1–16.8	Tue	17:00–19:45	H 2032	Functional Oxides
DS 17.1–17.65	Tue	9:30–13:30	Poster A	Poster: Trends in Ion Beam Technology, Magnetism in Thin Films, Functional Oxides, High-k Dielectric Materials, Semiconductor Nanophotonics, Nanoengineered Thin Films, Layer Deposition Processes, Layer Growth, Layer Properties, Thin Film Characterisation, Metal and Amorphous Layers, Application of Thin Films
DS 18.1–18.39	Tue	14:30–19:30	Poster A	Poster: Towards Molecular Spintronics, Organic Thin Films, Optical Layers, Vibrational Spectroscopy, Tailoring organic interfaces
DS 19.1–19.11	Wed	14:30–17:30	H 2013	Organic Interfaces (SYSA 6)
DS 20.1–20.6	Wed	17:45–19:30	H 2013	Organic Polymer-Metal Interfaces (SYSA 7)
DS 21.1–21.6	Wed	14:30–16:30	H 2032	High-k Dielectric Materials - Synthesis, Properties, Applications
DS 22.1–22.5	Wed	16:45–18:30	H 2032	High-k Dielectric Materials - Synthesis, Properties, Applications
DS 23.1–23.12	Wed	18:30–20:30	Poster C	High-k Dielectric Materials - Synthesis, Properties, Applications
				The posters can also be presented at Poster A on Tuesday morning (DS poster session).
DS 24.1–24.3	Thu	9:30–11:00	H 2013	Trends in Ion Beam Technology: From the Fundamentals to the Application
DS 25.1–25.7	Thu	11:15–13:00	H 2013	Trends in Ion Beam Technology: From the Fundamentals to the Application
DS 26.1–26.1	Thu	13:45–14:15	H 2013	Birkholz
DS 27.1–27.3	Thu	14:30–16:00	H 2013	Trends in Ion Beam Technology: From the Fundamentals to the Application
DS 28.1–28.6	Thu	16:15–17:45	H 2013	Trends in Ion Beam Technology: From the Fundamentals to the Application
DS 29.1–29.6	Thu	18:00–19:30	H 2013	Nanoengineered Thin Films
DS 30.1–30.6	Thu	9:30–11:00	H 2032	Layer Properties: Electrical, Optical and Mechanical Properties
DS 31.1–31.5	Thu	11:15–12:30	H 2032	Application of Thin Films
DS 32.1–32.5	Thu	13:15–14:30	H 2032	Metal and Amorphous Layers
DS 33.1–33.3	Thu	14:45–15:30	H 2032	Surface Modification
DS 34.1–34.4	Thu	15:45–16:45	H 2032	Hard and Superhard Coatings
DS 35.1–35.5	Thu	17:00–18:30	H 2032	Nanostructured block copolymer films (SYSA 8)
DS 36.1–36.5	Fri	10:15–12:00	H 2013	Vibrational Spectroscopy of Nanolayers with Optical Probes

DS 37.1–37.4	Fri	13:30–15:00	H 2013	Vibrational Spectroscopy of Nanolayers with Optical Probes
DS 38.1–38.3	Fri	15:15–16:45	H 2013	Vibrational Spectroscopy of Nanolayers with Optical Probes
DS 39.1–39.5	Fri	10:15–12:00	H 2032	Magnetism in Thin Films: Interaction Phenomena and Heterostructures
DS 40.1–40.6	Fri	12:15–14:15	H 2032	Magnetism in Thin Films: Interaction Phenomena and Heterostructures
DS 41.1–41.6	Fri	14:30–16:00	H 2032	Layer Deposition Processes
DS 42.1–42.4	Fri	16:15–17:15	H 2032	Layer Growth: Evolution of Structure and Simulation

Annual General Meeting of the Thin Films Division (DS)

Wednesday 18:45–19:15 Room H 2032

Annual General Meeting of the German Vacuum Society (DVG)

Wednesday 19:15–19:45 Room H 2032