

		Monday, Sep. 15th		Tuesday, Sep. 16th		Wednesday, Sep. 17th			
8:45 AM		Opening: Karsten Albe							
	Talk No.	FERROELECTRICS I		Talk No.	OLED I		Talk No.	BATTERIES II	
9:00 AM	K 1	Mark Hoffman		K 2	Roland Schmechel		K 3	Claude Delmas	
10:00 AM	O 1	Jürgen Rödel		O 3	Heinz von Seggern		O 5	Helmut Ehrenberg	
							I 7	Rüdiger Eichel	
10:30 AM	COFFEE								11:00 AM
		FERROELECTRICS II			OLED II			POINT DEFECTS	
11:00 AM	1	Wolfgang Donner, B3		I 6	Katja Stegmaier		I 8	Paul Erhart	
11:15 AM	2	Pedro B. Groszewicz, B9							
11:30 AM	3	Melanie Gröting, C1		11	Nicole Vilbrandt, A5		13	Mareike Hohmann, D3	
11:45 AM	4	Marina Zakhosheva, B3		12	Sergey Yampolskii, C5		14	Karsten Albe, C2	
12:00 PM	I 1	Philippe Ghosez		O 4	Andreas Klein				
12:30 PM	LUNCH								12:30 PM
		BATTERIES I		Excursion		FERROELECTRICS III			
2:30 PM	I 2	Hirokazu Munakata				I 9	Tor Grande		2:30 PM
3:00 PM	5	Magdalena Graczyk-Zajac, A4				15	Yinan Zuo, C6		3:00 PM
3:15 PM	6	Christian Hess, B8				16	Wolfgang Rheinheimer, T2		3:15 PM
3:30 PM	7	René Hausbrand, A3				17	Jurij Koruza, D6		3:30 PM
3:45 PM	8	Sabrina Sicolo, C1				18	Shunyi Li, B7		3:45 PM
4:00 PM	I 3	Alois Kuhn				COFFEE		4:00 PM	
4:30 PM	COFFEE					FERROELECTRICS IV			
		FATIGUE AND AGEING				I 10	Nina Balke		4:30 PM
5:00 PM	I 4	Akira Ando				19	Na Liu, TU Darmstadt		5:00 PM
5:30 PM	9	Eva Sapper, D1		20	Martin Blömker, A2		5:15 PM		
5:45 PM	10	Feng Chen, Hefei		Concluding Remarks		5:30 PM			
6:00 PM	I 5	Xiaoli Tan							
6:30 PM	O 2	Yuri Genenko							
7:30 PM	DINNER								7:30 PM
9:00 PM	Poster session								

Legend
Keynote speakers 60min.
Invited speakers 30 min.
Overview report 30 min.

	Authors	Title	SFB Project
Ferroelectrics I			
K 01	Mark Hoffman	<i>Effect of Relaxor-Ferroelectric Transitions on Fatigue of BNT-based Lead-Free Piezoceramics</i>	
O 01	Jürgen Rödel	<i>Developing Lead-Free Piezoceramics</i>	
Ferroelectrics II			
Talk 01	Wolfgang Donner , Florian Pforr, Marton Major	<i>Static and Dynamic Disorder in Ba-doped Bismuth Sodium Titanate</i>	B3
Talk 02	Pedro B. Groszewicz , Hergen Breitzke, Wook Jo, Robert Dittmer, Eva Sapper, Gerd Buntkowsky, Jürgen Rödel	<i>Lead-free BNT-xBT relaxor ferroelectrics characterized by ²³Na NMR</i>	B9
Talk 03	M. Gröting , K. Albe	<i>Structure-Property Relationships in the Relaxor Ferroelectric Na_{1/2}Bi_{1/2}TiO₃</i>	C1
Talk 04	M. Zakhosheva , L. A. Schmitt, M. Acosta, W. Jo, J. Rödel, H. Guo, H.-J. Kleebe, X. Tan	<i>Reversible multi- to single domain transition in Ba(Zr_{0.2}Ti_{0.8})O_{3-x}(Ba_{0.7}Ca_{0.3})TiO₃ ferroelectrics under poling conditions</i>	B3 (Kleebe)
I 01	Phillippe Ghosez	<i>Interplay between lattice, spin, orbital and charge orders in bulk and layered ABO₃ perovskites</i>	
Batteries I			
I 02	Hirokazu Munakata , Jungo Wakasugi, Keisuke Ando, Mao Shoji, Kiyoshi Kanamura	<i>Design and Fabrication of all-solid-state rechargeable lithium batteries using ceramic electrolytes</i>	
Talk 05	M. Graczyk-Zajac , J. Kaspar, L. M. Reinold, V. S. Pradeep, G.-D. Soraru, R. Riedel	<i>New insights into understanding of irreversible and reversible lithium storage within SiOC and SiCN ceramics</i>	A4
Talk 06	Toni Gross, Christian Hess	<i>In Situ Raman Diagnostics of Intercalation Batteries</i>	B8
Talk 07	René Hausbrand , Gennady Cherkashinin, André Schwöbel, Wolfram Jaegermann	<i>Surface science investigations of electrode-electrolyte interfaces in Li-ion batteries</i>	A3
Talk 08	Sabrina Sicolo , Karsten Albe	<i>Structure and Properties of Amorphous LiPON Electrolyte by First-Principles Simulations</i>	C1
I 03	J.C. Pérez-Flores, C. Baehtz, M. Hoelzel, F. García-Alvarado, A. Kuhn	<i>Sodium insertion properties of titanates and related materials as negative electrodes for Na-ion batteries</i>	
Fatigue and Ageing			
I 04	Akira Ando , Takafumi Okamoto, Noriyuki Inoue, Shoichiro Suzuki, Koichi Banno	<i>Degradations of Dielectric ceramic materials</i>	
Talk 09	Eva Sapper , Robert Dittmer, Dragan Damjanovic, Emre Erdem, David Keeble, Wook Jo, Torsten Granzow, Jürgen Rödel	<i>Aging in of Fe-doped (1-x)(Bi_{1/2}Na_{1/2})TiO₃-xBaTiO₃ piezoelectric ceramics</i>	D1
Talk 10	Feng Chen , Yuan-Hang Li, Wenbin Wu, Ke Wang, Jin-Feng Li	<i>Fatigue free in epitaxial KNN films</i>	
I 05	Xiaoli Tan , Hanzheng Guo, Cheng Ma	<i>In situ TEM Study on the Aging and Fatigue of Piezoelectric Ceramics</i>	

O 02	Yuri Genenko	<i>Aging and fatigue in ferroelectrics: experimental results and current understanding</i>	
OLED I			
K 02	Roland Schmechel	<i>Electrical Engineering with nanostructured materials: Examples from Photovoltaic and Thermoelectric</i>	
O 03	Andrea Gassmann, Heinz von Seggern	<i>Electrical fatigue of polymer light-emitting diodes based on poly (p-phenylene vinylene) derivatives: a comprehensive approach</i>	
OLED II			
I 06	Katja Stegmaier	<i>Status, Technology and Challenges in OLED Development</i>	
Talk 11	Nicole Vilbrandt , Matthias Rehahn	<i>Poly(p-phenylene vinylene)s – Highlights of 12 years of research within the SFB 595</i>	A5
Talk 12	Sergey V. Yampolskii , Yuri A. Genenko	<i>Self-consistent description of charge-carrier injection at a conductor/organic semiconductor interface: extension to the case of a degenerate semiconductor</i>	C5
O 04	Andreas Klein	<i>Do TCOs contribute to electrical fatigue of organic light emitting diodes?</i>	
Batteries II			
K 03	Claude Delmas	<i>An overview of the behaviour of layered oxides in lithium and sodium batteries</i>	
O 05	Helmut Ehrenberg	<i>Investigations on fatigue of Li-ion batteries</i>	
I 07	Rüdiger Eichel	<i>High-power, high energy-density lithium ion batteries – impact of atomic-scale processes on electrochemical performance and cyclic aging</i>	
Point Defects			
I 08	Paul Erhart	<i>Polarons in oxides and halides</i>	
Talk 13	M. Hohmann , H. Wardenga, A. Wachau, Y. Gassenbauer, C. Körber, M. Weidner, A. Klein	<i>Transparent Conducting Oxide Electrodes</i>	D3
Talk 14	Jochen Rohrer and Karsten Albe	<i>Point defects and surfaces of transparent electrodes studied by electronic structure calculations</i>	C2
Ferroelectrics III			
I 09	Tor Grande , Espen T. Wefring, Maxim I. Morozov, Mari-Ann Einarsrud	<i>On the electrical conductivity and point defects in BiFeO₃-Bi_{0.5}K_{0.5}TiO₃ materials</i>	
Talk 15	Yinan Zuo , Baixiang Xu	<i>Phase field simulation of domain structure in ferroelectrics with semiconducting features</i>	C6
Talk 16	Wolfgang Rheinheimer , Moritz Oldenkotte, Hans Kungl, Michael J. Hoffmann	<i>Influence of Lead Oxide Stoichiometry Microstructure and Characteristics of PZT Ceramics and Multilayer Actuators</i>	T2

Talk 17	J. Koruza , D. Franzbach, V. Rojas and K.G. Webber	<i>True Operational Range of Piezoelectric Actuators</i>	D6
Talk 18	Shunyi Li , Feng Chen, Andreas Hubmann, Andreas Klein	<i>Interfaces of Ferroelectrics</i>	B7
Ferroelectrics IV			
I 10	Nina Balke , Stephen Jesse, Petro Maksymovych, Sergei Kalinin	<i>Investigation and Manipulation of Domains on Small Length Scales in Ferroelectric Materials: Limits and Opportunities</i>	
Talk 19	Na Liu , Matias Acosta, Wook Jo, Christian Dietz, Robert Stark	<i>Core-shell domain structure investigation of lead-free incipient piezoceramics by piezoresponse force microscopy</i>	
Talk 20	S-T. Zhang, A. Kounga, K. T. P. Seifert, R. Dittmer, M. Blömker , W. Jo, J. Rödel	<i>(Co-)doping of lead-free Bi_{1/2}Na_{1/2}TiO₃-Bi_{1/2}K_{1/2}TiO₃-based piezoceramics</i>	A1

Poster			
P 01	M. Acosta, M. Scherrer, V. Rojas, J. Koruza, P. Groszewicz, W. Jo, L. A. Schmitt, M. Deluca, H. Breitzke, K. G. Webber, G. Buntkowsky, W. Donner, H. J. Kleebe, and J. Rödel	<i>Characterization of the Bi_{1/2}Na_{1/2}TiO₃-25SrTiO₃ lead-free incipient piezoceramic</i>	extra Poster
P 02	Claudia Groh, Wook Jo, Jürgen Rödel	<i>Relaxor/Ferroelectric composites for high strain actuator applications</i>	extra Poster
P 03	Hans Kungl, Manuel Hinterstein, Michael Knapp, Ljubomira A. Schmitt, Kristin A. Schönau, Ralf Theissmann, Roland Schierholz, Jens Kling, Rüdiger A. Eichel, Hartmut Fuess and Michael J. Hoffmann	<i>Influence of Grain Size on Temperature Dependence of Electric Field Induced Strain in Soft Doped Morphotropic PZT Ceramics</i>	extra Poster
P 04	Christian Melzer, Christopher Siol, Heinz von Seggern	<i>Temporal phenomena in organic field-effect transistors through Kelvin Probe Force Microscopy</i>	extra Poster
P 05	V.S. Pradeep, M. Graczyk-Zajac, G.D. Soraru, R. Riedel	<i>Carbon-Rich SiOC Ceramic Aerogels as Anode Materials for Rechargeable Lithium-ion Batteries</i>	extra Poster
P 06	J. Rohrer	<i>Structural evolution and degradation of Si anodes: insights from first-principle calculations</i>	extra Poster
P 07	R. Schierholz, L. A. Schmitt, K. A. Schönau, R. Theissmann, H. Kungl, M.J. Hoffmann, H. Fuess	<i>Crystal symmetry and domain structure of morphotropic PbZr_{1-x}Ti_xO₃-ceramics</i>	extra Poster
P 08	D. Schneider, Wook Jo, J.Rödel, D. Rytz and T. Granzow	<i>Anisotropy of Ferroelectric Behavior of (1-x)Bi_{1/2}Na_{1/2}TiO₃ – xBaTiO₃ Single Crystals across the Morphotropic Phase Boundary</i>	extra Poster
P 09	Monika Wilamowska, Pawel Puczkarski, Zofia Grabowska, Jan Kaspar, Magdalena Graczyk-Zajac, Ralf Riedel, Gian Domenico Soraru	<i>Silicon Oxycarbide (SiOC) as Anodes for Li-Ion Batteries: Synthesis and Optimization of Ceramics Prepared from Sol-Gel Precursors</i>	extra Poster
P 10	Ying Zhao, Peter Stein, Baixiang Xu	<i>Isogeometric FE analysis of diffusion induced stresses and phase segregation in Li-ion battery electrode particles</i>	extra Poster

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P 11	A. Zintler, L. A. Schmitt, M. Zakhozheva, M. Acosta, Wook Jo, U. Kunz, J. Rödel, H.-J. Kleebe	<i>In situ electric field transmission electron microscopy: Sample preparation & Experiment</i>	extra Poster
P 12	S-T. Zhang, A. Kounga, K. T. P. Seifert, R. Dittmer, M. Blömker, W. Jo, J Rödel	<i>Manufacturing of ceramic, textured actuators with high strain</i>	A1
P 13	G. Cherkashinin, W. Jaegermann	<i>Electronic structure as a fingerprint of thermodynamic stability of the layered structure cathode materials and of their chemical compatibility with the electrolytes</i>	A3
P 14	Jan Kaspar, Magdalena Graczyk-Zajac, Ralf Riedel	<i>Carbon-rich silicon oxycarbide – A promising anode material: Recent findings related to microstructural, electrochemical and electroanalytical characterization</i>	A4
P 15	Nicole Vilbrandt, Matthias Rehahn	<i>Poly(p-phenylene vinylene) – Highlights within the SFB 595</i>	A5
P 16	F. Pforr, L. A. Schmitt, M. Hinterstein, J. Kling, E. Sapper, M. Zakhozheva, R. Schierholz, K. A. Schönau, R. Theissmann, M. Major, A. Zintler, Wook Jo, X. Tan, H. Kungl, M. J. Hoffmann, J. Rödel, H. Fuess, W. Donner, H.-J. Kleebe	<i>Structural investigations on lead-free Bi_{1/2}Na_{1/2}TiO₃-based piezoceramics</i>	B3
P 17	Lars Riekehr, Jinlong Liu, Björn Schwarz, Ljubomira Schmitt, Yongyao Xia, Helmut Ehrenberg	<i>Correlation between nanostructure and electrochemical performance of Li-rich cathode active ceramics</i>	B4
P 18	S. Zhukov, Y.A. Genenko, S.V. Yampolskii, E. Sapper, R. Dittmer, W. Jo, H. Kungl, M.J. Hoffmann and H. von Seggern	<i>Universality of polarization reversal in virgin and fatigued ferroelectrics</i>	B7
P 19	Toni Gross, Christian Hess	<i>In Situ Raman Diagnostics of Intercalation Batteries</i>	B8
P 20	Pedro B. Groszewicz, Yeping Xu, Hergen Breitzke, Magdalena Graczyk-Zajac, Jan Kasper, Li Zhao, Wook Jo, Robert Dittmer, Eva Sapper, Ralf Riedel, Helmut Ehrenberg, Jürgen Rödel and Gerd Buntkowsky	<i>Characterization of Structure-Property-Relationships of electrical Functional Materials with Solid State-NMR</i>	B9
P 21	Melanie Gröting, Karsten Albe	<i>Ab-initio calculations of the relaxor ferroelectric Na_{1/2}Bi_{1/2}TiO₃ and its solid solutions</i>	C1
P 22	Arno Fey, Paul Erhart, Karsten Albe	<i>First-principles calculations – bonding of benzene on Indiumoxide</i>	C2
P 23	Sergey V. Yampolskii, Yuri A. Genenko	<i>Phenomenological modelling of field, charge and polarization distributions in ferroelectrics and organic semiconductors</i>	C5
P 24	Yangbin Ma, Karsten Albe, Baixiang Xu	<i>Monte Carlo simulation of phase transition, polarization switching and electrocaloric effects in ferroelectrics with random fields</i>	C6
P 25	Eva Sapper, Robert Dittmer, Dragan Damjanovic, Emre Erdem, David Keeble, Nikola Novak, Wook Jo, Torsten Granzow, Jürgen Rödel	<i>The impact of relaxor properties on aging and fatigue in lead-free (1-x)BNT-xBT</i>	D1
P 26	Mareike Hohmann, Andreas Klein	<i>Hall-effect and conductivity relaxation of doped In₂O₃</i>	D3
P 27	Oili Pekkola, Andrea Gassmann, Heinz von Seggern	<i>The harmful influence of triplet excitons on the lifetime of polymer light-emitting diodes</i>	D4

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P 28	Jurij Koruza, Daniel J. Franzbach, Virginia Rojas, and Kyle G. Webber	<i>The effect of electric field-induced phase transitions on the blocking force in lead-free ferroelectrics.</i>	D6
P 29	G. Picht, W. Rheinheimer, K. Webber M. J. Hoffmann	<i>Grain Size Effects on the Electromechanical Properties of donor-doped PZT-Ceramics</i>	T2
P 30	Florian Sigel, Peter Jakes, Lars Riekehr, Björn Schwarz, Rüdiger Eichel, Cordula Braun and Helmut Ehrenberg	<i>Investigation of degradation behavior in Li-rich NCM cathode materials with spectroscopic methods</i>	T3