

**51. IWK**  
Internationales Wissenschaftliches Kolloquium  
International Scientific Colloquium



**PROCEEDINGS**

**11-15 September 2006**

**FACULTY OF ELECTRICAL ENGINEERING  
AND INFORMATION SCIENCE**



**INFORMATION TECHNOLOGY AND  
ELECTRICAL ENGINEERING -  
DEVICES AND SYSTEMS,  
MATERIALS AND TECHNOLOGIES  
FOR THE FUTURE**

Startseite / Index:

<http://www.db-thueringen.de/servlets/DocumentServlet?id=12391>

## Impressum

Herausgeber: Der Rektor der Technischen Universität Ilmenau  
Univ.-Prof. Dr. rer. nat. habil. Peter Scharff

Redaktion: Referat Marketing und Studentische  
Angelegenheiten  
Andrea Schneider

Fakultät für Elektrotechnik und Informationstechnik  
Susanne Jakob  
Dipl.-Ing. Helge Drumm

Redaktionsschluss: 07. Juli 2006

Technische Realisierung (CD-Rom-Ausgabe):  
Institut für Medientechnik an der TU Ilmenau  
Dipl.-Ing. Christian Weigel  
Dipl.-Ing. Marco Albrecht  
Dipl.-Ing. Helge Drumm

Technische Realisierung (Online-Ausgabe):  
Universitätsbibliothek Ilmenau  
[ilmedia](#)  
Postfach 10 05 65  
98684 Ilmenau

Verlag:  Verlag ISLE, Betriebsstätte des ISLE e.V.  
Werner-von-Siemens-Str. 16  
98693 Ilmenau

© Technische Universität Ilmenau (Thür.) 2006

Diese Publikationen und alle in ihr enthaltenen Beiträge und Abbildungen sind urheberrechtlich geschützt. Mit Ausnahme der gesetzlich zugelassenen Fälle ist eine Verwertung ohne Einwilligung der Redaktion strafbar.

ISBN (Druckausgabe): 3-938843-15-2  
ISBN (CD-Rom-Ausgabe): 3-938843-16-0

Startseite / Index:  
<http://www.db-thueringen.de/servlets/DocumentServlet?id=12391>

## Inhalt

|   |    |
|---|----|
| Plenarvorträge.....   | 5  |
| Reihe 1: Multimediale Kommunikation.....  | 5  |
| Poster Reihe 1 .....  | 7  |
| Reihe 2: Drahtlose Kommunikationssysteme und Sensortechnologien.....                                  | 8  |
| Poster Reihe 2 .....  | 9  |
| Reihe 3: Angewandte Elektromagnetik und Netzwerktheorie .....   | 10 |
| Reihe 3.1: Berechnung von HF-Feldern .....  | 10 |
| Reihe 3.2: Modellierung und Simulation von EMF-Problemen .....  | 10 |
| Poster Reihe 3.3 .....  | 11 |
| Reihe 3.4: Inverse Feldprobleme und Optimierung / Nichtlineare dynamische Netzwerke und Systeme ..... | 13 |
| Reihe 3.5: Josephson Quantenelektronik-Schaltungen / Modellierung und Entwurf.....                    | 14 |
| Reihe 4: Mikro- und Nanoelektronik .....  | 16 |
| Poster Reihe 4 .....  | 16 |
| Reihe 4.1: Materialien, Entwurf, Technologien und Prozesse für Schaltungsträger.....                  | 16 |
| Reihe 4.2: Mikro- und Nanotechnologien für elektronische Bauelemente .....                            | 17 |
| Reihe 4.3: Mikro- und Nanosensoren.....   | 18 |
| Reihe 4.4: Nanoelektronische und Hochfrequenzleistungsbaulemente.....                                 | 18 |
| Reihe 5: Funktionswerkstoffe und Bauelemente .....  | 20 |
| Poster Reihe 5 .....  | 21 |
| Reihe 6: Elektrische Energietechnik.....  | 23 |
| Reihe 6.1: Elektroenergiequalität .....   | 23 |
| Reihe 6.2: Leistungselektronik.....   | 24 |
| Poster Reihe 6.2 .....  | 24 |
| Reihe 6.3: Hochspannungstechnik .....   | 25 |
| Poster Reihe 6.3 .....  | 26 |
| Reihe 6.4: Elektrische Maschinen und Antriebe.....  | 26 |
| Poster Reihe 6.4 .....  | 27 |
| Reihe 6.5: Elektrische Energiesysteme .....   | 28 |
| Poster Reihe 6.5 .....  | 29 |
| Reihe 7: Elektroprozess technik.....  | 30 |
| Poster Reihe 7 .....  | 32 |
| Autoren A-Z.....  | 33 |

## Content

|  |    |
|--|----|
| Plenary Talks.....   | 5  |
| Session 1: Multimedia Communications.....  | 5  |
| Posters Session 1 .....  | 7  |
| Session 2: Wireless Communication Systems and Sensor Technologies.....                                 | 8  |
| Posters Session 2 .....  | 9  |
| Session 3: Applied Electromagnetics and Circuit Theory.....  | 10 |
| Session 3.1: Computation of High Frequency Fields .....  | 10 |
| Session 3.2: Modelling and Simulation of EM Field Problems.....  | 10 |
| Posters Session 3.3 .....  | 11 |
| Session 3.4: Inverse Field Problems and Optimisation / Nonlinear Dynamic Circuits and<br>Systems ..... | 13 |
| Session 3.5: Josephson Quantum Electronic Circuits / Modelling and Design.....                         | 14 |
| Session 4: Micro- and Nanoelectronics.....   | 16 |
| Posters Session 4 .....  | 16 |
| Session 4.1: Materials Design, Technologies and Processes for Circuit .....                            | 16 |
| Session 4.2: Micro- and Nanotechnologies for Electronic Devices.....                                   | 17 |
| Session 4.3: Micro- and Nanosensors.....   | 18 |
| Session 4.4: Nanoelectronic and Highfrequency Devices.....   | 18 |
| Session 5: Functional Electrical and Electronic Materials and Devices .....                            | 20 |
| Posters Session 5 .....  | 21 |
| Session 6: Power Engineering .....   | 23 |
| Session 6.1: Power Quality .....   | 23 |
| Session 6.2: Power Electronics .....   | 24 |
| Posters Session 6.2 .....  | 24 |
| Session 6.3: High Voltage Equipment .....  | 25 |
| Posters Session 6.3 .....  | 26 |
| Session 6.4: Electric Machines & Drives .....  | 26 |
| Posters Session 6.4 .....  | 27 |
| Session 6.5: Power Systems.....  | 28 |
| Posters Session 6.5 .....  | 29 |
| Session 7: Electro-Processing Technologies.....  | 30 |
| Posters Session 7 .....  | 32 |
| Authors A-Z .....  | 33 |

## Plenarvorträge Plenary Talks

J. A. Nossek

The Why and How of Multiple Antenna Systems

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13926>

C. Rehtanz

Innovation in China and Europe - A comparison considering as example Wide Area Monitoring of Power Systems

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13927>

### Reihe 1:           Multimediale Kommunikation

### Session 1:        Multimedia Communications

A. Finger, H. Thierfelder, A. Schmidt, A. Wolf

Investigation of User Acceptance for TV Programmes

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13057>

E. Schön, H.-P. Schade

Multimedia Broadcast Data Services

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13059>

T. Jeutner, R. Brecht, T. Kunert, H. Krömker

Mobile TV: User-centered service development for an educational TV programme

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=12397>

C. Stiller, F. Roß, D. Karimanzira, R. Rost, D. Stein

A Framework for Individualized Route Planning and Navigation for Pedestrian Users

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13060>

M. Koch, R. Marquardt, C. Schüler

Design and realization of an accessible information terminal within a touristic assistant system

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13064>

D. Marpe, G. Marten, H. L. Cycon

A Fast Renormalization Technique for H.264/MPEG4-AVC Arithmetic Coding

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13062>

D. Oschlies, B. Albrecht, F. Melchior, D. de Vries

Arraytechnologie in der objektorientierten Audioproduktion

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=12393>

D. de Vries

Multi-Actuator Panel (MAP) loudspeaker arrays for Wave Field Synthesis

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13065>

---

U. Reiter

TANGA Updated - A Modular Framework for Real Time Audio Rendering of Object-Based (MPEG-4) Audio Visual Scenes

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13066>

---

T. Rathgen, A. Rehse, P. Amon, A. Hutter

Error Recovery in File Streaming Scenarios using Dynamic Updates

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13067>

---

A. Seeliger, R. Hampel

Image Processing Methods for Experimental Analysis of Particle-laden Coolant Flows

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13068>

---

U. Korgler, C. Käs, M. Hennhöfer, M. Haardt

Cross-Layer Optimization of Streaming Media over Wireless MIMO Communication Systems

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13069>

---

C. Weigel

Towards a 3D-TV System on the Basis of Image-Based Rendering Methods

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13070>

---

M. Erdmann, A. Nowak, J. Röder

Broadcast Systems Engineering: Ein Planungskonzept zur HDTV-Integration

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13071>

---

A. Nowak, L. Hörchens, J. Röder, M. Erdmann

Farbbasierte Stanzmaskenerzeugung für die Fernsehproduktion

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13072>

---

J. Röder, A. Nowak, M. Erdmann

Ethernet for Real-Time Applications

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13073>

---

R. Scholderer, J. Lukowski

Factories and value chains in computing centers for improving the quality of IT services

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13074>

---

T. Nikolov, A. Tsenov

Models of Alternative Management Architectures

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13075>

---

B. Erixson, J. Seitz

Service Discovery Modelling for Intelligent Building Network

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13076>

H. Kärst, R. Böringer, A. Mitschele-Thiel

Workflow for Autonomic Reconfiguration of Wireless Access Networks (ARN)

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13077>

A. Yousef, A. Mitschele-Thiel, R. Böringer, A. Diab

A New Framework to Support Mobility in Multi-hop Hybrid Networks

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13078>

R. Böringer, A. Mitschele-Thiel

Integrated-MPLS: An Applicability Statement

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13079>

E. Alnasouri, A. Mitschele-Thiel, R. Böringer, A. Diab

A QoS-aware Mobility Management Framework in All-IP Networks

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13080>

A. Diab, A. Mitschele-Thiel, R. Böringer

Integration between MIFA and HMIP to Support Fast Inter-domain Mobility in IP Networks

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13081>

## *Poster Reihe 1*

### *Posters Session 1*

C. Kloth

Systemtechnisches Modell für die Automatisierung in der Fernsehproduktion

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13083>

**Reihe 2: Drahtlose Kommunikationssysteme und Sensortechnologien**

**Session 2: Wireless Communication Systems and Sensor Technologies**

---

V. Algeier, B. Demissie, W. Koch, R. Thomä

Blind Localization of Mobile Terminals in Urban Scenarios

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13101>

---

R. Mikuta, G. Kuhleemann, E. P. Burte, J. Urban

Infrarotsensorarray für die Personenerfassung

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13102>

---

M. Kmec, R. Herrmann, J. Sachs, P. Peyerl

A family of M-Sequence based UWB sensors

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13103>

---

R. Zetik, J. Sachs, F. Krajenak

Detection of people behind obstacles using UWB radar

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13104>

---

M. Schühler, C. Schmidt, J. Weber, R. Wansch, M. A. Hein

Phase Shifters based on PIN-Diodes and Varactors: Two Concepts by Comparison

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13105>

---

M. Schneider, R. Gehring

Design of a High Power Ku-Band Feed Chain

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13106>

---

V. Muravjev, A. Tamelo, D. V. Zhuravlev

Passive system of radiovision of a millimetric range

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13107>

---

E. Kulagina, V. Lunin, H.-U. Seidel, A. Bock

Analyse von Wirbelstrom-Signalen bei der Kontrolle von Dampferzeugerrohren

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13108>

---

V. Barat, D. Slessarev

Statistisches Algorithmus von Signalklassifizierung in magnetischer zerstörungsfreier Prüfung

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13109>

---

M. K. Tchobanou

Multidimensional Nonseparable Multirate Systems - a New Tool for Signal Processing

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13110>



L. Radic, J. Wellmann, W. Mathis

Advantages and disadvantages of model order reductions

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13111>

J. Lotze, G. del Galdo, M. Haardt

Estimation of Reflection Coefficients for the IImProp Channel Modelling Environment Using path Loss Models

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13112>

A. Schreiber, M. Götze, E. Ulicna, W. Kattanek

System design issues in advanced applications of wireless sensor networks

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13113>

## *Poster Reihe 2*

### *Posters Session 2*

K. Boron, P. Bratek, A. Kos

Matrix of Thermal Characters for the Blind with Temperature Control System

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13114>

S. Dünkel, K. Kelber, C. Franco

Identification of Singing Birds based on the Analysis of their Sounds

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13190>

T. Nguyen, W. Kottermann, R. Thomä

An Automatic Scheme for Clustering Simultaneously on Delay, Angle and Power Parameter Estimates of MIMO Channels

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13191>

P. Rancic, M. Rancic

EM Field of Vertical Hertz's Dipole (VHD) Placed above a Lossy Half-space: Approximate Expression for the Sommerfeld's Integral

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13192>

D. Slessarev, P. Chobanu

Vergleich von einem direkten und adaptiven Algorithmen der Mustererkennung für MFL-Signale

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13193>

**Reihe 3: Angewandte Elektromagnetik und Netzwerktheorie**

**Session 3: Applied Electromagnetics and Circuit Theory**

*Reihe 3.1: Berechnung von HF-Feldern*

*Session 3.1: Computation of High Frequency Fields*

---

H. Streitwolf, R. Heinrich, U. Karsten, L. Dallwitz, H.-G. Behnke

Modelling approaches and experimental analysis of measurement uncertainty in radiated susceptibility tests

 <http://www.db-thuringen.de/servlets/DocumentServlet?id=13194>

---

L. Grcev, V. Arnautovski-Toseva

Efficient High Frequency Modeling of Large Structures in the Presence of Earth

 <http://www.db-thuringen.de/servlets/DocumentServlet?id=13196>

---

V. Javor, P. Rancic

One model for calculating the lightning generated electromagnetic field above real ground

 <http://www.db-thuringen.de/servlets/DocumentServlet?id=13197>

---

V. Berezovsky, S. Drobot, M. Khandogin, V. Rusakovich

The Waveguide Technique of Measurement of the Complex Permittivity of Materials

 <http://www.db-thuringen.de/servlets/DocumentServlet?id=13208>

---

M. Schneider, M. Rayner

Design of a shipborne dual-band reflector antenna

 <http://www.db-thuringen.de/servlets/DocumentServlet?id=13209>

---

A. Chervenkov, T. Chervenkova

Propagation of Solitons in Linear Structures

 <http://www.db-thuringen.de/servlets/DocumentServlet?id=13210>

---

D. Solomakho, V. Minchenya

Application of Noncontact Inductive Sensors for the Purpose of Flexible Thrombolysis Waveguides Acoustic Parameters Control

 <http://www.db-thuringen.de/servlets/DocumentServlet?id=13211>

*Reihe 3.2: Modellierung und Simulation von EMF-Problemen*

*Session 3.2: Modelling and Simulation of EM Field Problems*

---

R. Stancheva, I. Iatcheva, I. Lilyanova, H. Tahrilov

FEM Modelling of an Induction Heating System

 <http://www.db-thuringen.de/servlets/DocumentServlet?id=13212>

---

K. Capova, I. Cap, L. Janousek, D. Gombarska

Electromagnetic Non-Destructive Evaluation of Conducting Object

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13231>

---

S. Gebhardt, G. Scheinert, F. H. Uhlmann

Temperature influence on capacitive sensor structures

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13232>

---

A. Chervenkov

Determination of Electrical Field in oil cable muff

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13233>

---

J. Naumenko, V. Astakhov

Computing of Steady and Pseudo-Steady Magnetic Fields in Presence of Ideal Conducting Surfaces

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13234>

### *Poster Reihe 3.3*

#### *Posters Session 3.3*

---

M. Ziolkowski, H. Brauer

Comparison of different formulations of 3D magnetostatic problems in finite element method

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13235>

---

K. Gawrylczyk, M. Kugler, P. Putek

Similarity and Differences between Sensitivity Evaluation of Electromagnetic Quantities in the Frequency and the Time Domain

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13236>

---

D. Dimitrov

Investigation on the interference of low frequency currents in medical therapy

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13237>

---

S. Außerhofer, O. Biro, K. Preis

Efficient harmonic balance method in nonlinear eddy current problems

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13238>

---

A. Zhdanov, V. Lunin, F. H. Uhlmann, H. Brauer

Modelling of Ferrite-cored Multi-pancake Probe in Eddy Current Inspection of Tubes

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13239>

---

V. Kireev, R. Volkert, E. Kallenbach, N. Gorbatenko

Hysteresis Compensation for Electromagnetic Actuators Applied in a Planar Magnetic Guidance System

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13240>

N. Raicevic

Electric Field Calculation at Cable Terminations Using Conformal Mapping and Equivalent Electrodes Method

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13241>

M. Peric, S. Aleksic

Fictitious charges arrangement determination in charge simulation method

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13242>

B. Nikolic, S. Aleksic, Z. Cvetkovic

Influence of Fictitious Sources Type, Position and Number on Toroidal Grounding Electrode Conductivity Calculation

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13243>

S. Ilic, S. Aleksic

Field Distribution and Effective Height of Lightning Protection Rod with Horizontal Circular Loop - Full Model

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13244>

A. Mladenovic, S. Aleksic

Magnetic field calculation of permanent magnet

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13321>

A. Milovanovic, B. Kolundzija

Electric Field Calculation of Cube Electrode with Rounded Wedges

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13322>

M. Gacanovic

Static Electricity: Influence of Gas Cavities on Penetration in Vapoury-air Space of the Reservoir

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13323>

A. Pavlenko, D. Batishchev, P. Kolpahchyan, E. Kallenbach

Simulation of electromagnetic drives, taking into consideration external mechanical exposures

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13324>

A. Tkachev, S. Safarov

Simulation der Hysterese bei der planaren quasistatischen Ummagnetisierung des isotropen Stahls

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13325>

L. Sumichrast

Sampling-Theorem Criteria for the Implicit FDTD Methods

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13326>

W. Renhart, K. Hollaus, C. Magele, G. Matzenauer

Computation of a Bluetooth Antenna using FEM

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13327>

---

K. Hollaus, O. Biro, P. Caldera, G. Matzenauer, G. Paoli, K. Preis, W. Renhart, C. Stockreiter, B. Weiß

Simulation of Microstrips on Printed Circuit Boards

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13329>

---

G. Matzenauer, O. Biro, K. Hollaus, W. Renhart

Anisotropic PML in a Finite-Element T, Phi Formulation

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13330>

---

M. Ziolkowski, S. Gratkowski

Shape Optimization of Conducting Shields for Low Frequency Magnetic Fields

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13331>

---

T. Chervenkova

Stability of Solution of Inverse Problems for Identification of Moving Charges

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13332>

---

H. Töpfer, M. Sachs, S. Hollatz, S. Taubmann, G. Taubmann, N. Zeike, C. Schäffel

Electromagnetical Design and Performance of a Power Supply for Energy-Autonomous Electronic Control Units

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13333>

---

A. Bulgakov, D. Parshin, A. Medvedev

Integration of Management Systems for Construction Holdings on the Basis of Neuro Network Coordination

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13334>

---

I. Vrublevsky, V. Parkoun, P. Hamolka

Usage of nanoporous alumina in film temperature sensors

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13346>

---

L. Jazdowski, R. Palka

3D-Modelling of Interaction between Multigrain HTSC and Magnetic Field Systems

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13347>

*Reihe 3.4: Inverse Feldprobleme und Optimierung / Nichtlineare dynamische Netzwerke und Systeme*

*Session 3.4: Inverse Field Problems and Optimisation / Nonlinear Dynamic Circuits and Systems*

---

K. Gawrylczyk, F. H. Uhlmann

Inverse problems of electromagnetic field utilizing sensitivity analysis

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13348>

V. Lunin, A. Zhdanov

Inversion of Eddy Current Field Data for In-service Inspection of WWER Steam Generator Tubes

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13349>

H. Brauer, J. Haueisen, M. Ziolkowski

Evaluation of Magnetic Field Tomography Inverse Problem Solutions Using Physical Phantoms

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13351>

A. Ahranovich, S. Karpovich, K. Zimmermann, J. Zentner

Multicoordinate Positioning System for Industrial Equipment Design Method

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13352>

A. Pavlenko, V. P. Grinchenko, A. Gummel, J. Baumbach, E. Kallenbach

Algorithmus zur adaptiven Steuerung schnellwirkender elektro-magnetischer Antriebe mit vorgegebenen dynamischen Parametern

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13353>

L. Mandache, D. Topan

New Treatment of the Multiple Mutually Coupled Inductors to Improve the Modified Nodal Analysis in Harmonic Regime

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13354>

*Reihe 3.5: Josephson Quantenelektronik-Schaltungen / Modellierung und Entwurf*

*Session 3.5: Josephson Quantum Electronic Circuits / Modelling and Design*

V. Mladenov, V. Todorov, B. Dimov, T. Ortlepp, F. H. Uhlmann

Statistical Description and Optimization of the Time-Domain Parameters of Asynchronous RSFQ Digital Circuits

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13355>

B. Dimov, V. Mladenov, V. Todorov, T. Ortlepp, F. H. Uhlmann

Design Aspects of Complex Asynchronous RSFQ Digital Circuits

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13356>

V. Mladenov, V. Todorov, B. Dimov, T. Ortlepp, F. H. Uhlmann

High-Level Design of Asynchronous RSFQ Digital Circuits

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13357>

T. Reich, T. Ortlepp, F. H. Uhlmann

Development of a digital SQUID device for high sensitive measurement of widely varying magnetic fields

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13372>

T. Ortlepp, F. H. Uhlmann

Gate Delay Jitter in Superconductor Electronics

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13373>

E. Tolkacheva, M. Khabipov, D. Hagedorn, F.-I. Buchholz, J. Kohlmann, J. Niemeyer

Development of RSFQ circular memories for arbitrary AC waveform synthesizers

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13374>

O. Mielke, T. Ortlepp, F. H. Uhlmann

Improved stability of bistable RSFQ circuitry by using Josephson junctions with intrinsic pi-phase shift

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13375>

H. Töpfer, P. Febvre, T. Ortlepp, F. H. Uhlmann

Electromagnetic Analysis of Photosensitive Interfaces for Rapid Single Flux Quantum Circuit Applications

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13376>

B. Ebert, S. Humbla, A. Fell, T. Ortlepp, F. H. Uhlmann

Design of an ultra fast superconductor-to-semiconductor interface

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13377>

**Reihe 4: Mikro- und Nanoelektronik**  
**Session 4: Micro- and Nanoelectronics**

*Poster Reihe 4*  
*Posters Session 4*

---

D. Frolov, A. Tabachkov, O. Vinogradova  
Optics for Luminescent Microscopy

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13378>

---

I. Hotovy, T. Lalinsky, V. Rehacek, L. Spiess, M. Gubisch, S. Hascik, A. Rehakova  
Fabrication and characterization of a microheater on GaAs for gas sensors

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13379>

---

V. Rehacek, I. Hotovy, L. Spiess, M. Gubisch  
Determination of Trace Heavy Metals by Anodic Stripping Voltammetry at Mercury-plated Silicon Microelectrodes

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13380>

---

L. Lunin, V. Ratushniy, V. Kataev  
Measurement of magnetic field influence on thermal electromotive force in micro and nano semi-conductor films without creation of temperature gradient

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13381>

---

C. Schippel, F. Schwier, J. Fu  
On the  $f_{max}$  vs.  $f_t$  Characteristics for Different Types of Si-based RF Bipolar Transistors

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13382>

---

I. Ivan, R. Bourquin, V. Cimpoca  
Precise Temperature and Force Sensing with Quartz Thickness-Shear Resonators

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13456>

*Reihe 4.1: Materialien, Entwurf, Technologien und Prozesse für  
Schaltungsträger*

*Session 4.1: Materials Design, Technologies and Processes for Circuit*

---

P. Uhlig, S. Holzwarth, O. Litschke, A. Serwa, D. Tran  
The Influence of Layer-to-Layer Misalignment on the Microwave Performance of LTCC Antenna Modules

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13458>

---

L. Alhoury, J. Müller, S. Rentsch, R. Stephan, M. A. Hein  
45 GHz Patch-Antennen in LTCC-Technologie für breitbandige Datenübertragungssysteme

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13459>



---

D. Pannicke, S. Hirsch, R. Mikuta, E. P. Burte, B. Schmidt

Research on an Under-Bump-Metallization for lead free Flip-Chip-Process

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13460>

---

S. Rentsch, R. Stephan, J. Müller, L. Alhourri, M. A. Hein

Characterization of Parameters for Baluns at 60GHz and Aspects of their Technological Implementation

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13461>

---

E. Ulicna

A Study of reconfigurable SoC with Applications in Wireless Systems and SystemC

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13462>

*Reihe 4.2: Mikro- und Nanotechnologien für elektronische Bauelemente*

*Session 4.2: Micro- and Nanotechnologies for Electronic Devices*

---

J. C. Ferreira

Microstereolithography using digital micromirror devices

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13463>

---

M. Hoffmann, S. Stoebenau, M. Teschke, S. Sinzinger

Holographic lithography for continuous-relief diffractive optical elements

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13464>

---

J. Skriniarova, J. Kovác

Thick Photoresist Processing for Conductive Air Bridge Elements

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13465>

---

R. Adelung, D. Cengher, V. Cimalla, F. Will, Ch. Förster, M. Elbahri, S. Jebril, S. K. Raudra, O. Ambacher

New approach for nanowires fabrication for integration in sensor applications

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13466>

---

M. Fischer, M. Stubenrauch, T. Kups, H. Romanus, F. M. Morales, G. Ecke, M. Hoffmann, Ch. Knedlik, O. Ambacher, J. Pezoldt

Self organization and properties of Black Silicon

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13467>

*Reihe 4.3: Mikro- und Nanosensoren*

*Session 4.3: Micro- and Nanosensors*

M. Cimpoca, V. Cimpoca, I. Bancuta, C. Brezeanu, I. Cernica

Thermoelectric Microgenerators with Nanometric Films

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13486>

F. Will, K. Tonisch, V. Cimalla, D. Cengher, C. Haupt, K. Brückner, R. Stephan, M. A. Hein, O. Ambacher

Micro- and nanomechanical resonators for sensing applications

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13487>

K. Tonisch, V. Cimalla, F. Will, C. Haupt, D. Cengher, F. Weise, M. Stubenrauch, A. Albrecht, M. Hoffmann, O. Ambacher

First steps towards a nanowire-based electromechanical biomimetic sensor

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13488>

M. Ali, G. Ecke, V. Cimalla, T. Stauden, V. Tilak, P. Sandvik, O. Ambacher

SiC-based FET for NO<sub>x</sub> gas sensing applications using InVO<sub>x</sub> metal oxides as a gate material

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13489>

*Reihe 4.4: Nanoelektronische und*

*Hochfrequenzleistungsbauelemente*

*Session 4.4: Nanoelectronic and Highfrequency Devices*

B. Lübbers, G. Kittler, V. Cimalla, M. Gebinoga, C. Buchheim, D. Wegener, A. Schober, O. Ambacher

Setup for colorimetric measurements of aqueous micro- and nanoliter droplets

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13491>

G. Ecke, T. Baumann, O. Ambacher

Composition Measurement of Group-III Nitride Ternary and Quaternary Compound Nanostructures by AES

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13492>

G. Kittler, A. Spitznas, B. Lübbers, V. Lebedev, D. Wegener, A. Schober, M. Gebinoga, F. Schwierz, V. Polyakov, F. Weise, O. Ambacher

AlGa<sub>N</sub>/Ga<sub>N</sub>-sensors for monitoring of enzyme activity by pH-measurements

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13493>

M. Kittler, C. Schippel, R. Granzner, F. Schwierz

Benchmarking of Straddle-Gate MOSFETs

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13494>

C. Schippel, F. Schwierz, J. Fu

Investigations on the Non-Ideality of the Base Current of RF Bipolar Transistors

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13506>

D. Kirsten, S. Richter, D. Nuernbergk, St. Richter

An EEPROM cell for automotive applications in PD-SOI

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13507>

E. Serebryakova, D. Kholodnyak, I. B. Vendik

Design of one octave 3-bit digital phase shifter using metamaterial transmission lines with negative dispersion

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13508>

A. E. Panich, V. V. Janschisch, C. A. Cinjutin, M. Heit

Piezokeramische Materialien und Meßfühler zur Vibrationsmessung in Energieerzeugungsanlagen

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13509>

**Reihe 5: Funktionswerkstoffe und Bauelemente**  
**Session 5: Functional Electrical and Electronic Materials and Devices**

---

S. Belau, B. Halbedel, D. Hülsenberg

High coercive barium hexaferrite powders by partial Ba<sup>2+</sup>- and Fe<sup>3+</sup>-substitution for magnetic sensor applications

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13511>

---

U. Schadewald, B. Halbedel, H. Romanus, D. Hülsenberg

New results of the crystallization behaviour of hexagonal barium ferrites from a glassy matrix

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13512>

---

B. Dzur, G. Thomas, P. Linke

IC-plasma sprayed Nd-Fe-B-coatings for applications in electrodynamic microreactor systems

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13513>

---

M. Petrova, Z. Noncheva, E. Dobрева

Electroless Deposition of Nanocomposite NiP-Coatings on Metal Substrates

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13514>

---

S. Völlmeke, H. Bartuch, H. Laucht, D. Kovalev

Poröses Silizium - Basiswerkstoff für pyrotechnische Bauelemente

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13524>

---

M. Niebelschütz, G. Ecke, V. Cimalla, K. Tonisch, O. Ambacher

Work Function Analysis of GaN-based Lateral Polarity Structures by Auger Electron Energy Measurements

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13542>

---

I. Cimalla, F. Will, K. Tonisch, V. Lebedev, M. Niebelschütz, M. Himmerlich, S. Krischok, V. Cimalla, G. Kittler, C. Kremin, T. Friedrich, O. Ambacher

Impact of device processing on the surface properties and the biocompatibility of AlGaIn/GaN HEMT sensors

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13543>

---

L. Lunin, I. Sisoiev, S. Gazarjan, R. Veliev, A. Barannik

Obtaining of light emitting diodes and solar cells on the basis of AlGaAs/GaAs nanostructures

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13544>

---

V. Cimalla, V. Lebedev, F. M. Morales, M. Niebelschütz, G. Ecke, R. Goldhahn, O. Ambacher

Origin of n-type conductivity in nominally undoped InN

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13545>

---

V. Polyakov, F. Schwierz

Low-Field Electron Mobility in Wurtzite InN

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13546>

---

D. V. Kulikov, A. A. Schmidt, S. A. Korolev, F. M. Morales, T. Stauden, J. Pezoldt, Y. V. Trushin

Simulation of quality of SiC/Si interface during MBE deposition of C on Si

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13547>

---

S. Flickyngerova, I. Novotny, V. Tvarozek, M. Nigrovicova, A. Satka, J. Kovác, P. Sutta, V. Breternitz, L. Spiess, C. Knedlik

Zinc Oxide - Unique Material for Micro- /Nanotechnology

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13548>

---

C. Wang, V. Cimalla, O. Ambacher

Tuning of electrical properties of  $\text{In}_x\text{O}_y$  thin films grown by MOCVD for different applications

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13549>

---

A. Herasimovich, I. Hoerselmann, S. Scheinert

Electrical Investigations of the Source/Drain Contacts for the Field-Effect Transistors and MIS-Capacitors

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13550>

---

I. Hoerselmann, A. Herasimovich, S. Scheinert

Frequency Response of Transconductance on OFETs with Different Contact Designs

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13596>

---

M. Wilke, M. Analytis, V. Breternitz, C. Knedlik, G. Teichert

Recalibration-free measurement of the compound layer thickness of nitrocarburized samples by glow discharge optical emission spectrometry (GD-OES)

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13598>

---

V. Borikov

Neural-Method Alloys Identification by the Microplasma Oxidation Process in the Electrolyte Solutions

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13607>

## Poster Reihe 5

### Posters Session 5

---

D. Alfimova, A. Barannik, A. Blagin, M. Lunina

Properties of new NIR-materials - gallium arsenidephosphide solid solutions alloyed by bismuth

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13624>

L. Lunin, V. Ratushniy, V. Uelin, R. V. Levin

GaSb epitaxial layers: MOCVD growth and characterization

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13626>

---

S. Selve, A. Knote, T. Kups, H. Krüger, L. Spiess, H. Kern

Solid state physical analysis of nanoscale functional ceramic composite layers

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13627>

**Reihe 6: Elektrische Energietechnik****Session 6: Power Engineering***Reihe 6.1: Elektroenergiequalität**Session 6.1: Power Quality*

---

E. Goldstein, H. Schau, A. Novitskiy, N. Batseva, E. Radaev

The Spectrum Analysis of Complex Multi-frequency Signals in the Presence of Interharmonics

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13628>

---

L. Kuchumov, A. Kouznetsov, M. Sapunov

About Reality of Voltage Harmonic Distortions with Frequencies Higher than 2 kHz in Power Industry Networks

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13629>

---

L. Kuchumov, A. Kouznetsov, M. Sapunov

Instantaneous 3-Phases Power as Dignified Signal for Analysis of Electrical Equipment Energy Efficiency and Malfunction Diagnosis

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13630>

---

A. Novitskiy, H. Schau, U. Klemmer

Anwendung der Korrelationsanalyse zur Feststellung der Ursache unerwünschter Wechselströme in Rohrleitungen

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13675>

---

A. Novitskiy, H. Schau, T. Nachtwey, U. Klemmer

Bewertung der Neutralleiterbelastung in NS-Netzen

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13676>

---

B. Tzaneva, T. Heck, H. Schau

Konfigurierung eines Messsystems zur Konformitätsüberwachung in industriellen Energieversorgungsnetzen

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13677>

---

B. Tzaneva, T. Heck, H. Schau, D. Stade

Optimierung der Struktur industrieller Energieversorgungsnetze unter Berücksichtigung der Konformitätsanforderungen an die elektromagnetische Umgebung

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13678>

---

I. Konotop, A. Novitskiy, H. Schau, S. Westheuser

Analyse von Spannungseinbrüchen in Niederspannungsnetzen auf der Grundlage der mathematischen Modellierung elektromagnetischer Ausgleichsvorgänge

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13679>

*Reihe 6.2: Leistungselektronik*

*Session 6.2: Power Electronics*

J. Järvik, K. Janson, J. Shklovski

Novel Power Factor Correction Method and topology for AC/DC converters

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13680>

D. Kürschner

Three phase matrix converter with special control techniques for contactless energy transmission

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13681>

B. Vogler, M. Rossberg, R. Herzer

A fully integrated 600V SOI Half Bridge IGBT Gate Driver IC

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13683>

M. Yasin Dali, U. Rädcl, T. Ellinger, J. Büttner, J. Petzoldt

Vergleich zweier Topologien von Windkraftanlagen auf der Basis einer permanenterregten Synchronmaschine sowie die Realisierung einer MPP-Regelung für das Gesamtsystem

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13684>

U. Schwalbe, T. Reimann

Einsatz von SiC-Bauelementen in der elektronischen Stromversorgungstechnik

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13703>

I. Pawel, R. Siemieniec, F. Hirler, M. Röscl

Avalanche Behavior of Power MOSFETs

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13704>

H. Li, Z. Li, W. A. Halang

Calculation of the Invariant Density of the Chaotic Mapping in a DC-DC Converter and Its Applications

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13757>

D. Lalili, E. Berkouk, F. Boudjema, J. Petzoldt

A Simplified Space Vector Pulse with Modulation (SVPWM) Algorithm for Diode Clamping Five Level Inverter with DC-Voltage Balancing

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13758>

*Poster Reihe 6.2*

*Posters Session 6.2*

K. Jaracz, A. Paszek

Computing Research of Asynchronous Machine Supplied by Cycloconverter

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13759>



*Reihe 6.3: Hochspannungstechnik**Session 6.3: High Voltage Equipment*

---

M. Muhr, G. Knollseisen, R. Schwarz, C. Sumereder

Comparison of methods for the dissipation factor measurement

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13760>

---

A. Küchler, F. Hüllmandel, K. Böhm, M. Liebschner, M. Appold, R. Krump, J. Titze

Dielectric Diagnosis and Monitoring of High Voltage Bushings

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13761>

---

F. Reichert, D. Gonzalez, A. Marschall

Diagnostik von Niederspannungs-Schaltlichtbögen

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13762>

---

E. Goldstein, A. Pankratov

The Determination of Single-phase Transformer No-load Losses

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13763>

---

A. Tzinevrakis, D. K. Tsanakas, E. Mimos

Analytical calculation of the electric field produced by single circuit power lines with horizontal arrangement of the conductors

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13764>

---

E. Goldstein, N. Batseva, I. Katz

The calculation of the phase shift between current and voltage of the overhead lines by using the Tellegen's quasipower theorem

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13769>

---

A. Balkovoy, V. Cacenkin, G. Slivinskaia

Oversampling of Resolver Data

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13773>

---

J. Schönau, R. Schmitt

Ein digitales Messsystem mit faseroptischem Eingang : Einsatz in der elektrischen Energietechnik

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13774>

---

A. Ehrhardt, P. Zahlmann

Functional Characteristics of a Surge Arrester at Lightning Impulses and Mains Follow Currents

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13775>

---

H. Stammberger, P. Terhoeven, D. Koch

Simulation in the development process of low-voltage circuit-breakers

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13778>

Reihe 6: Elektrische Energietechnik

---

A. Marschall, F. Berger

Ligthing Current Study of Miniature Circuit Breakers

 <http://www.db-thuringen.de/servlets/DocumentServlet?id=13779>

---

K. Niayesh, P. Pourmohammadian

A Novel Technique for Control of Electromagnetic Devices: Liquid Metal Contact Changer

 <http://www.db-thuringen.de/servlets/DocumentServlet?id=13780>

---

### *Poster Reihe 6.3*

#### *Posters Session 6.3*

---

W. Nowak, R. Tarko, A. Jaglarz, J. Koziol

Analysis of Overhead Lines Working Conditions - Case Study of Electromagnetic Coupling Effect

 <http://www.db-thuringen.de/servlets/DocumentServlet?id=13781>

---

R. Wlodek, S. Moskwa

Modelling of HV Devices Diagnostic Procdures

 <http://www.db-thuringen.de/servlets/DocumentServlet?id=13782>

---

### *Reihe 6.4: Elektrische Maschinen und Antriebe*

#### *Session 6.4: Electric Machines & Drives*

---

T. Heidrich, A. Möckel

Analyse und Simulation des Motorstromes von Kommutatormotoren mit Permanentmagneterregung

 <http://www.db-thuringen.de/servlets/DocumentServlet?id=13783>

---

G. Frydrychowicz-Jastrzebska

The effect of rotor eccentricity and unbalance on one-sided magnetic pull and centrifugal force

 <http://www.db-thuringen.de/servlets/DocumentServlet?id=13784>

---

Z. Glowacz, A. Zdrojewski

Spectral Analysis of Field and Armature Currents of Commutator DC Motor

 <http://www.db-thuringen.de/servlets/DocumentServlet?id=13786>

---

P. K. Budig

Direct Linear Drives for the Application in High Vacuum

 <http://www.db-thuringen.de/servlets/DocumentServlet?id=13787>

---

P. K. Budig

Simplification of the Mechanical Design of Drives with the Application of Direct Drives

 <http://www.db-thuringen.de/servlets/DocumentServlet?id=13788>

---

---

A. Möckel, R. Schuder

Optimierung der Kommutierung von Dauermagnetmotoren

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13789>

---

F. Veselka

New conception on the electrical machine brush gear with auxiliary brushes

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13791>

---

U. Beckert, R. Schulze

Wirbelstromverluste in den Permanentmagneten von hochtourigen PM-Synchronmaschinen

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13792>

---

F. Veselka, P. Storek

The induction probe utilization to the metal commutator geometry detecting

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13793>

---

J. Järvi, V. Kesküla, A. Kill

Permanent Magnet Low-Speed Synchronous Generator for Wind Applications

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13794>

---

U. Beckert, H. Arnold

Sensorlose Zustandsregelung zur Verschleißminderung

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13795>

## *Poster Reihe 6.4*

### *Posters Session 6.4*

---

A. Bulgakov

Speed Optimization of Building Robots

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13796>

---

M. Mihov, K. Brandisky, E. Ratz, P. Mihaylova

Numerical and experimental investigation of the equivalent circuit parameters of induction machine

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13843>

---

I. Dainiak, U. Kaltunou, S. Karpovich

Interactive Simulation and Visualisation of Linear Stepping Drive

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13844>

---

R. Stancheva, I. Iatcheva

Effect of End Winding Transposition on the Electromagnetic Field in a Turbogenerator

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13845>

M. Bjekic

Numerical Simulation, Measuring and Foreseeing Dynamic Characteristics of the Energetic Permanent Magnet Step Motor

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13846>

*Reihe 6.5: Elektrische Energiesysteme*

*Session 6.5: Power Systems*

---

M. Muhr, S. Pack, R. Schwarz, S. Jaufer

Calculation of Overhead Line Sags

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13847>

---

D. Westermann, P. Moreno, R. Müller, P. Büchner

Einsatz dezentraler netzgekoppelter Stromerzeugungsanlagen im städtischen Versorgungsgebiet

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13848>

---

B. Valov, S. Heier

The complete use of receiver capacity of a grid through the control of the power generation units

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13849>

---

D. Westermann, M. Heit

East West Cross Border Electricity Trade enabled by Wide area measurement and control

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13850>

---

Y. Hnatyshyn, Y. Badera, O. Mukha

Effectiveness of developing heating energy out of wood by products

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13851>

---

S. Hetzel, W. Schufft

Assessment of investment strategies in medium-voltage cable grids

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13852>

---

A. Zolotarev, M. Kryvenka, M. Heit, D. Westermann

Mathematische Modellierung und Optimierung von Energieflüssen im deregulierten Umfeld

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13869>

---

D. Bokov, Y. V. Sharov, V. A. Stroev

Network congestion identification and elimination measures evaluation in the liberalised electricity markets

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13870>

*Poster Reihe 6.5*

*Posters Session 6.5*

---

D. Bokov, Y. V. Sharov

Analyse des zukünftigen Bedarfs an Übertragungskapazität im UCTE-Netz

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13871>

---

O. Mukha, Y. Hnatyshyn

Mathematisches Modell des anaerobischen Prozesses mit Hilfe einer  
Computersimulation

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13872>

**Reihe 7: Elektroprozessstechnik**  
**Session 7: Electro-Processing Technologies**

M. Conrath, V. Kocourek, C. Karcher

Behavior of a liquid metal disk in the magnetic field of a circular current loop

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13873>

V. Kocourek, J. Mohring

Stability of free surfaces of liquid metals affected by a high-frequency magnetic field

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13874>

R. Klein, A. Potherat

Experiment on MHD turbulence under low magnetic Reynold's number

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13875>

A. Jakovics, M. Kirpo, B. Nacke

LES modelling of turbulent structure and mass transfer processes in induction furnaces

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13881>

E. Baake, A. Umbrashko, A. Jakovics

Modeling of the turbulent melt flow in metallurgical processes

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13882>

U. Krieger, B. Halbedel, D. Hülsenberg

Electromagnetic Stirring of Glass Melts - Characterization of the Homogenization Effects

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13883>

U. Lüdtke

Numerical simulation of free surfaces of liquid metal under the influence of Lorentz-forces

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13884>

O. Pesteanu

Simulation des elektromagnetischen Kokillenrührens beim Stahlstranggießen

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13885>

J. Kozeny, D. Rot

Möglichkeiten zur Effizienzerhöhung beim HF-Kochen

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13888>

R. Krampitz, I. Horn, A. Quack, U. Werner

Jetzt das Plasma - an der Schwelle zur Kreislaufwirtschaft für die Veredelung von Kohlenstoffträger

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=14040>

---

A. B. Kuvaldin, A. R. Lepeshkin

Influence of a parameters of high-speed induction heating and properties of materials on thermal and thermostress state of blanks

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13889>

---

R. Müller, M. Zeisberger, S. Dutz, R. Hergt, W. Gawalek

Heating by magnetic ac-field losses of iron oxide nanoparticles

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13890>

---

M. Blattner, D. Ochs, T. Rettich, P. Wiedemuth

High Power RF and MF Systems for Sputter Applications in Flat Panel Display Production

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13891>

---

K. Niayesh, H. Ghorbani, A. Hayati-Soloot

A Maximum - Q inductor design for pulsed power applications

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13892>

---

B. Halbedel, U. Krieger

Modification of iron oxide containing glass melts and their crystallization behaviour under an inhomogeneous, low AC magnetic field

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13893>

---

C. Jakob, U. Schmidt, F. Petzoldt

Magneto-hydrodynamic convection in micro-structures with high aspect ratio

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13895>

---

I. Krastev

Self-organized periodic structures in silver alloy electrodeposits

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13896>

---

Y. Ludwig, D. Hülsenberg, U. Schadewald

Investigations of Crystallization Behaviour of Barium Hexaferrite Inside High Magnetic DC Fields

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13899>

---

B. Hamann, J. Schawohl, C. Kraffert

Large hexaferrite single crystals grown in a DC magnetic field

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13900>

---

T. Mache

Legierungsabscheidung für die Mikrosystemtechnik unter definierten hydrodynamischen Bedingungen

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13902>

---

H. Schülbe, A. Nikanorov, B. Nacke

Numerical and Experimental Investigations of High Flexible Transverse Flux Heating Systems

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13903>

O. Pesteanu, E. Baake, B. Nacke

Elektromagnetisches Zweifrequenzventil für Flüssigmetalle

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13904>

---

K. Niayesh, A. Karimi

Application of field-shapers to localize applied forces during impulse electromagnetic forming process

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13906>

---

D. Wohlfahrt, R. Jürgens

Induction heating of thin slabs and sheets in the rolling line

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13919>

---

D. Schulze, T. Zehringer

Electronic Temperature Estimation in Induction Heating Processes

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13920>

---

### *Poster Reihe 7*

#### *Posters Session 7*

P. Urbanek, J. Kucharski

The induction heated rotating steel cylinder as a control plant

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13922>

---

J. Zgraja

Simulation of Scanning Induction Heating of Flat Surfaces

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13923>

---

M. Reinhard, T. Mohr, R. Süße

Approximation von realem Übertragungsverhalten mittels fraktionaler Ableitung nach Riemann-Liouville

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13924>

---

M. Reinhard

Nachbildung einer realen Spule unter Einsatz der fraktionalen Differenziation

 <http://www.db-thueringen.de/servlets/DocumentServlet?id=13925>

---



**Autoren**            **A-Z**  
**Authors**           **A-Z**

**A**

|                             |                |
|-----------------------------|----------------|
| Adelung, R. ....            | 17             |
| Ahranovich, A. ....         | 14             |
| Albrecht, A. ....           | 18             |
| Albrecht, B. ....           | 5              |
| Aleksic, S. ....            | 12             |
| Alfimova, D. ....           | 21             |
| Algeier, V. ....            | 8              |
| Alhourri, L. ....           | 16, 17         |
| Alnasouri, E. ....          | 7              |
| Ambacher, O. ....           | 17, 18, 20, 21 |
| Amon, P. ....               | 6              |
| Analytis, M. ....           | 21             |
| Appold, M. ....             | 25             |
| Arnautovski-Toseva, V. .... | 10             |
| Arnold, H. ....             | 27             |
| Astakhov, V. ....           | 11             |
| Außerhofer, S. ....         | 11             |

**B**

|                     |        |
|---------------------|--------|
| Baake, E. ....      | 30, 32 |
| Badera, Y. ....     | 28     |
| Balkovoy, A. ....   | 25     |
| Bancuta, I. ....    | 18     |
| Barannik, A. ....   | 20, 21 |
| Barat, V. ....      | 8      |
| Bartuch, H. ....    | 20     |
| Batishchev, D. .... | 12     |
| Batseva, N. ....    | 23, 25 |
| Baumann, T. ....    | 18     |
| Baumbach, J. ....   | 14     |
| Beckert, U. ....    | 27     |
| Behnke, H.-G. ....  | 10     |
| Belau, S. ....      | 20     |
| Berezovsky, V. .... | 10     |
| Berger, F. ....     | 26     |
| Berkouk, E. ....    | 24     |
| Biro, O. ....       | 11, 13 |
| Bjekic, M. ....     | 28     |
| Blagin, A. ....     | 21     |
| Blattner, M. ....   | 31     |
| Bock, A. ....       | 8      |
| Böhm, K. ....       | 25     |

|                      |        |
|----------------------|--------|
| Bokov, D. ....       | 28, 29 |
| Borikov, V. ....     | 21     |
| Böringer, R. ....    | 7      |
| Boron, K. ....       | 9      |
| Boudjema, F. ....    | 24     |
| Bourquin, R. ....    | 16     |
| Brandisky, K. ....   | 27     |
| Bratek, P. ....      | 9      |
| Brauer, H. ....      | 11, 14 |
| Brecht, R. ....      | 5      |
| Breternitz, V. ....  | 21     |
| Brezeanu, C. ....    | 18     |
| Brückner, K. ....    | 18     |
| Buchheim, C. ....    | 18     |
| Buchholz, F.-I. .... | 15     |
| Büchner, P. ....     | 28     |
| Budig, P. K. ....    | 26     |
| Bulgakov, A. ....    | 13, 27 |
| Burte, E. P. ....    | 8, 17  |
| Büttner, J. ....     | 24     |

**C**

|                      |                |
|----------------------|----------------|
| Cacenkin, V. ....    | 25             |
| Caldera, P. ....     | 13             |
| Cap, I. ....         | 11             |
| Capova, K. ....      | 11             |
| Cengher, D. ....     | 17, 18         |
| Cernica, I. ....     | 18             |
| Chervenkov, A. ....  | 10, 11         |
| Chervenkova, T. .... | 10, 13         |
| Chobanu, P. ....     | 9              |
| Cimalla, I. ....     | 20             |
| Cimalla, V. ....     | 17, 18, 20, 21 |
| Cimpoca, M. ....     | 18             |
| Cimpoca, V. ....     | 16, 18         |
| Cinjutin, C. A. .... | 19             |
| Conrath, M. ....     | 30             |
| Cvetkovic, Z. ....   | 12             |
| Cycon, H. L. ....    | 5              |

**D**

|                   |      |
|-------------------|------|
| Dainiak, I. ....  | 27   |
| Dallwitz, L. .... | 10   |
| de Vries, D. .... | 5, 6 |

| Autoren                            | A-Z           |
|------------------------------------|---------------|
| del Galdo, G. ....                 | 9             |
| Demissie, B. ....                  | 8             |
| Diab, A. ....                      | 7             |
| Dimitrov, D. ....                  | 11            |
| Dimov, B. ....                     | 14            |
| Dobрева, E. ....                   | 20            |
| Drobot, S. ....                    | 10            |
| Dünkel, S. ....                    | 9             |
| Dutz, S. ....                      | 31            |
| Dzur, B. ....                      | 20            |
| <b>E</b>                           |               |
| Ebert, B. ....                     | 15            |
| Ecke, G. ....                      | 17, 18, 20    |
| Ehrhardt, A. ....                  | 25            |
| Elbahri, M. ....                   | 17            |
| Ellinger, T. ....                  | 24            |
| Erdmann, M. ....                   | 6             |
| Erixson, B. ....                   | 7             |
| <b>F</b>                           |               |
| Febvre, P. ....                    | 15            |
| Fell, A. ....                      | 15            |
| Ferreira, J. C. ....               | 17            |
| Finger, A. ....                    | 5             |
| Fischer, M. ....                   | 17            |
| Flickyngerova, S. ....             | 21            |
| Förster, Ch. ....                  | 17            |
| Franco, C. ....                    | 9             |
| Friedrich, T. ....                 | 20            |
| Frolov, D. ....                    | 16            |
| Frydrychowicz-Jastrzebska, G. .... | 26            |
| Fu, J. ....                        | 16, 19        |
| <b>G</b>                           |               |
| Gacanovic, M. ....                 | 12            |
| Gawalek, W. ....                   | 31            |
| Gawrylczyk, K. ....                | 11, 13        |
| Gazarjan, S. ....                  | 20            |
| Gebhardt, S. ....                  | 11            |
| Gebinoga, M. ....                  | 18            |
| Gehring, R. ....                   | 8             |
| Ghorbani, H. ....                  | 31            |
| Glowacz, Z. ....                   | 26            |
| Goldhahn, R. ....                  | 20            |
| Goldstein, E. ....                 | 23, 25        |
| Gombarska, D. ....                 | 11            |
| Gonzalez, D. ....                  | 25            |
| Gorbatenko, N. ....                | 11            |
| Götze, M. ....                     | 9             |
| Granzner, R. ....                  | 18            |
| Gratkowski, S. ....                | 13            |
| Grcev, L. ....                     | 10            |
| Grinchenkow, V. P. ....            | 14            |
| Gubisch, M. ....                   | 16            |
| Gummel, A. ....                    | 14            |
| <b>H</b>                           |               |
| Haardt, M. ....                    | 6, 9          |
| Hagedorn, D. ....                  | 15            |
| Halang, W. A. ....                 | 24            |
| Halbedel, B. ....                  | 20, 30, 31    |
| Hamann, B. ....                    | 31            |
| Hamolka, P. ....                   | 13            |
| Hampel, R. ....                    | 6             |
| Hascik, S. ....                    | 16            |
| Hau Eisen, J. ....                 | 14            |
| Haupt, C. ....                     | 18            |
| Hayati-Soloot, A. ....             | 31            |
| Heck, T. ....                      | 23            |
| Heidrich, T. ....                  | 26            |
| Heier, S. ....                     | 28            |
| Hein, M. A. ....                   | 8, 16, 17, 18 |
| Heinrich, R. ....                  | 10            |
| Heit, M. ....                      | 19, 28        |
| Heit, M. ....                      | 28            |
| Hennhöfer, M. ....                 | 6             |
| Herasimovich, A. ....              | 21            |
| Hergt, R. ....                     | 31            |
| Herrmann, R. ....                  | 8             |
| Herzer, R. ....                    | 24            |
| Hetzl, S. ....                     | 28            |
| Himmerlich, M. ....                | 20            |
| Hirler, F. ....                    | 24            |
| Hirsch, S. ....                    | 17            |
| Hnatyshyn, Y. ....                 | 28, 29        |
| Hoerselmann, I. ....               | 21            |
| Hoffmann, M. ....                  | 17, 18        |
| Hollatz, S. ....                   | 13            |
| Hollaus, K. ....                   | 12, 13        |
| Holzwarth, S. ....                 | 16            |
| Hörchens, L. ....                  | 6             |
| Horn, I. ....                      | 30            |
| Hotovy, I. ....                    | 16            |
| Hüllmandel, F. ....                | 25            |
| Hülzenberg, D. ....                | 20, 30, 31    |
| Humbla, S. ....                    | 15            |

|                        | Autoren    | A-Z                      |
|------------------------|------------|--------------------------|
| Hutter, A. ....        | 6          | Klemmer, U. .... 23      |
| <b>I</b>               |            | Kloth, C. .... 7         |
| Iatcheva, I. ....      | 10, 27     | Kmec, M. .... 8          |
| Ilic, S. ....          | 12         | Knedlik, C. .... 21      |
| Ivan, I. ....          | 16         | Knedlik, Ch. .... 17, 21 |
| <b>J</b>               |            | Knollseisen, G. .... 25  |
| Jaglarz, A. ....       | 26         | Knote, A. .... 22        |
| Jakob, C. ....         | 31         | Koch, D. .... 25         |
| Jakovics, A. ....      | 30         | Koch, M. .... 5          |
| Janousek, L. ....      | 11         | Koch, W. .... 8          |
| Janschisch, V. V. .... | 19         | Kocourek, V. .... 30     |
| Janson, K. ....        | 24         | Kohlmann, J. .... 15     |
| Jaracz, K. ....        | 24         | Kolpahchyan, P. .... 12  |
| Järvik, J. ....        | 24, 27     | Kolundzija, B. .... 12   |
| Jaufer, S. ....        | 28         | Konotop, I. .... 23      |
| Javor, V. ....         | 10         | Korger, U. .... 6        |
| Jazdowski, L. ....     | 13         | Korolev, S. A. .... 21   |
| Jebril, S. ....        | 17         | Kos, A. .... 9           |
| Jeutner, T. ....       | 5          | Kottermann, W. .... 9    |
| Jürgens, R. ....       | 32         | Kouznetsov, A. .... 23   |
| <b>K</b>               |            | Kováč, J. .... 17, 21    |
| Kallenbach, E. ....    | 11, 12, 14 | Kovalev, D. .... 20      |
| Kaltunou, U. ....      | 27         | Kozeny, J. .... 30       |
| Karcher, C. ....       | 30         | Koziol, J. .... 26       |
| Karimanzira, D. ....   | 5          | Kraffert, C. .... 31     |
| Karimi, A. ....        | 32         | Krajnak, F. .... 8       |
| Karpovich, S. ....     | 14, 27     | Krampitz, R. .... 30     |
| Kärst, H. ....         | 7          | Krastev, I. .... 31      |
| Karsten, U. ....       | 10         | Kremin, C. .... 20       |
| Käs, C. ....           | 6          | Krieger, U. .... 30, 31  |
| Kataev, V. ....        | 16         | Krischok, S. .... 20     |
| Kattanek, W. ....      | 9          | Krömker, H. .... 5       |
| Katz, I. ....          | 25         | Krüger, H. .... 22       |
| Kelber, K. ....        | 9          | Krump, R. .... 25        |
| Kern, H. ....          | 22         | Kryvenka, M. .... 28     |
| Kesküla, V. ....       | 27         | Kucharski, J. .... 32    |
| Khabipov, M. ....      | 15         | Küchler, A. .... 25      |
| Khandogin, M. ....     | 10         | Kuchumov, L. .... 23     |
| Kholodnyak, D. ....    | 19         | Kugler, M. .... 11       |
| Kilk, A. ....          | 27         | Kuhlemann, G. .... 8     |
| Kireev, V. ....        | 11         | Kulagina, E. .... 8      |
| Kirpo, M. ....         | 30         | Kulikov, D. V. .... 21   |
| Kirsten, D. ....       | 19         | Kunert, T. .... 5        |
| Kittler, G. ....       | 18, 20     | Kups, T. .... 17, 22     |
| Kittler, M. ....       | 18         | Kürschner, D. .... 24    |
| Klein, R. ....         | 30         | Kuvaldin, A. B. .... 31  |

| Autoren                 | A-Z        |
|-------------------------|------------|
| <b>L</b>                |            |
| Lalili, D.....          | 24         |
| Lalinsky, T.....        | 16         |
| Laucht, H.....          | 20         |
| Lebedev, V.....         | 18, 20     |
| Lepeshkin, A. R.....    | 31         |
| Levin, R. V.....        | 22         |
| Li, H.....              | 24         |
| Li, Z.....              | 24         |
| Liebschner, M.....      | 25         |
| Lilyanova, I.....       | 10         |
| Linke, P.....           | 20         |
| Litschke, O.....        | 16         |
| Lotze, J.....           | 9          |
| Lübbers, B.....         | 18         |
| Lüdtke, U.....          | 30         |
| Ludwig, Y.....          | 31         |
| Lukowski, J.....        | 6          |
| Lunin, L.....           | 16, 20, 22 |
| Lunin, V.....           | 8, 11, 14  |
| Lunina, M.....          | 21         |
| <b>M</b>                |            |
| Mache, T.....           | 31         |
| Magele, C.....          | 12         |
| Mandache, L.....        | 14         |
| Marpe, D.....           | 5          |
| Marquardt, R.....       | 5          |
| Marschall, A.....       | 25, 26     |
| Marten, G.....          | 5          |
| Mathis, W.....          | 9          |
| Matzenauer, G.....      | 12, 13     |
| Medvedev, A.....        | 13         |
| Melchior, F.....        | 5          |
| Mielke, O.....          | 15         |
| Mihaylova, P.....       | 27         |
| Mihov, M.....           | 27         |
| Mikuta, R.....          | 8, 17      |
| Milovanovic, A.....     | 12         |
| Mimos, E.....           | 25         |
| Minchenya, V.....       | 10         |
| Mitschele-Thiel, A..... | 7          |
| Mladenov, V.....        | 14         |
| Mladenovic, A.....      | 12         |
| Möckel, A.....          | 26, 27     |
| Mohr, T.....            | 32         |
| Mohring, J.....         | 30         |
| Morales, F. M.....      | 17, 20, 21 |
| Moreno, P.....          | 28         |
| Moskwa, S.....          | 26         |
| Muhr, M.....            | 25, 28     |
| Mukha, O.....           | 28, 29     |
| Müller, J.....          | 16, 17     |
| Müller, R.....          | 28, 31     |
| Muravjev, V.....        | 8          |
| <b>N</b>                |            |
| Nachtwey, T.....        | 23         |
| Nacke, B.....           | 30, 31, 32 |
| Naumenko, J.....        | 11         |
| Nguyen, T.....          | 9          |
| Niayesh, K.....         | 26, 31, 32 |
| Niebelschütz, M.....    | 20         |
| Niemeyer, J.....        | 15         |
| Nigrovicova, M.....     | 21         |
| Nikanorov, A.....       | 31         |
| Nikolic, B.....         | 12         |
| Nikolov, T.....         | 6          |
| Noncheva, Z.....        | 20         |
| Nosseck, J. A.....      | 5          |
| Novitskiy, A.....       | 23         |
| Novotny, I.....         | 21         |
| Nowak, A.....           | 6          |
| Nowak, W.....           | 26         |
| Nuernbergk, D.....      | 19         |
| <b>O</b>                |            |
| Ochs, D.....            | 31         |
| Ortlepp, T.....         | 14, 15     |
| Oschlies, D.....        | 5          |
| <b>P</b>                |            |
| Pack, S.....            | 28         |
| Palka, R.....           | 13         |
| Panich, A. E.....       | 19         |
| Pankratov, A.....       | 25         |
| Pannicke, D.....        | 17         |
| Paoli, G.....           | 13         |
| Parkoun, V.....         | 13         |
| Parshin, D.....         | 13         |
| Paszek, A.....          | 24         |
| Pavlenko, A.....        | 12, 14     |
| Pawel, I.....           | 24         |
| Peric, M.....           | 12         |
| Pesteanu, O.....        | 30, 32     |
| Petrova, M.....         | 20         |
| Petzoldt, F.....        | 31         |

|                         | Autoren | A-Z                   |                |
|-------------------------|---------|-----------------------|----------------|
| Petzoldt, J.....        | 24      | Sachs, M.....         | 13             |
| Peyerl, P.....          | 8       | Safarov, S. ....      | 12             |
| Pezoldt, J.....         | 17, 21  | Sandvik, P. ....      | 18             |
| Polyakov, V.....        | 18, 21  | Sapunov, M. ....      | 23             |
| Potherat, A.....        | 30      | Satka, A. ....        | 21             |
| Pourmohammadian, P..... | 26      | Schade, H.-P. ....    | 5              |
| Preis, K. ....          | 11, 13  | Schadewald, U.....    | 20, 31         |
| Putek, P. ....          | 11      | Schäffel, C. ....     | 13             |
| <b>Q</b>                |         | Schau, H. ....        | 23             |
| Quack, A.....           | 30      | Schawohl, J.....      | 31             |
| <b>R</b>                |         | Scheinert, G.....     | 11             |
| Radaev, E.....          | 23      | Scheinert, S.....     | 21             |
| Rädel, U.....           | 24      | Schippel, C.....      | 16, 18, 19     |
| Radic, L.....           | 9       | Schmidt, A. ....      | 5              |
| Raicevic, N. ....       | 12      | Schmidt, A. A.....    | 21             |
| Rancic, M. ....         | 9       | Schmidt, B. ....      | 17             |
| Rancic, P. ....         | 9, 10   | Schmidt, C. ....      | 8              |
| Rathgen, T.....         | 6       | Schmidt, U.....       | 31             |
| Ratushniy, V. ....      | 16, 22  | Schmitt, R. ....      | 25             |
| Ratz, E. ....           | 27      | Schneider, M. ....    | 8, 10          |
| Raudra, S. K.....       | 17      | Schober, A. ....      | 18             |
| Rayner, M.....          | 10      | Scholderer, R. ....   | 6              |
| Rehacek, V.....         | 16      | Schön, E.....         | 5              |
| Rehakova, A. ....       | 16      | Schönau, J. ....      | 25             |
| Rehse, A. ....          | 6       | Schreiber, A. ....    | 9              |
| Rehtanz, C.....         | 5       | Schuder, R. ....      | 27             |
| Reich, T.....           | 14      | Schufft, W. ....      | 28             |
| Reichert, F. ....       | 25      | Schühler, M. ....     | 8              |
| Reimann, T. ....        | 24      | Schülbe, H. ....      | 31             |
| Reinhard, M.....        | 32      | Schüler, C. ....      | 5              |
| Reiter, U. ....         | 6       | Schulze, D.....       | 32             |
| Renhart, W. ....        | 12, 13  | Schulze, R. ....      | 27             |
| Rentsch, S.....         | 16, 17  | Schwalbe, U.....      | 24             |
| Rettich, T.....         | 31      | Schwarz, R. ....      | 25, 28         |
| Richter, S. ....        | 19      | Schwierz, F. ....     | 16, 18, 19, 21 |
| Richter, St.....        | 19      | Seeliger, A. ....     | 6              |
| Röder, J. ....          | 6       | Seidel, H.-U.....     | 8              |
| Romanus, H.....         | 17, 20  | Seitz, J. ....        | 7              |
| Rösch, M. ....          | 24      | Selve, S. ....        | 22             |
| Roß, F. ....            | 5       | Serebryakova, E. .... | 19             |
| Rossberg, M. ....       | 24      | Serwa, A. ....        | 16             |
| Rost, R. ....           | 5       | Sharov, Y. V. ....    | 28, 29         |
| Rot, D. ....            | 30      | Shklovski, J. ....    | 24             |
| Rusakovich, V.....      | 10      | Siemieniec, R. ....   | 24             |
| <b>S</b>                |         | Sinzinger, S.....     | 17             |
| Sachs, J.....           | 8       | Sisoev, I. ....       | 20             |
|                         |         | Skriniarova, J. ....  | 17             |
|                         |         | Slessarev, D.....     | 8, 9           |

| Autoren               | A-Z            |
|-----------------------|----------------|
| Slivinskaia, G. ....  | 25             |
| Solomakho, D. ....    | 10             |
| Spiess, L. ....       | 16, 21, 22     |
| Spitznas, A. ....     | 18             |
| Stade, D. ....        | 23             |
| Stammberger, H. ....  | 25             |
| Stancheva, R. ....    | 10, 27         |
| Stauden, T. ....      | 18, 21         |
| Stein, D. ....        | 5              |
| Stephan, R. ....      | 16, 17, 18     |
| Stiller, C. ....      | 5              |
| Stockreiter, C. ....  | 13             |
| Stoebenau, S. ....    | 17             |
| Storek, P. ....       | 27             |
| Streitwolf, H. ....   | 10             |
| Stroev, V. A. ....    | 28             |
| Stubenrauch, M. ....  | 17, 18         |
| Sumereder, C. ....    | 25             |
| Sumichrast, L. ....   | 12             |
| Süße, R. ....         | 32             |
| Sutta, P. ....        | 21             |
| <b>T</b>              |                |
| Tabachkov, A. ....    | 16             |
| Tahrilov, H. ....     | 10             |
| Tamelo, A. ....       | 8              |
| Tarko, R. ....        | 26             |
| Taubmann, G. ....     | 13             |
| Taubmann, S. ....     | 13             |
| Tchobanou, M. K. .... | 8              |
| Teichert, G. ....     | 21             |
| Terhoeven, P. ....    | 25             |
| Teschke, M. ....      | 17             |
| Thierfelder, H. ....  | 5              |
| Thomä, R. ....        | 8, 9           |
| Thomas, G. ....       | 20             |
| Tilak, V. ....        | 18             |
| Titze, J. ....        | 25             |
| Tkachev, A. ....      | 12             |
| Todorov, V. ....      | 14             |
| Tolkacheva, E. ....   | 15             |
| Tonisch, K. ....      | 18, 20         |
| Topan, D. ....        | 14             |
| Töpfer, H. ....       | 13, 15         |
| Tran, D. ....         | 16             |
| Trushin, Y. V. ....   | 21             |
| Tsanakas, D. K. ....  | 25             |
| Tsenov, A. ....       | 6              |
| Tvarozek, V. ....     | 21             |
| Tzaneva, B. ....      | 23             |
| Tzinevrakis, A. ....  | 25             |
| <b>U</b>              |                |
| Uelin, V. ....        | 22             |
| Uhlig, P. ....        | 16             |
| Uhlmann, F. H. ....   | 11, 13, 14, 15 |
| Ulicna, E. ....       | 9, 17          |
| Umbrashko, A. ....    | 30             |
| Urban, J. ....        | 8              |
| Urbanek, P. ....      | 32             |
| <b>V</b>              |                |
| Valov, B. ....        | 28             |
| Veliev, R. ....       | 20             |
| Vendik, I. B. ....    | 19             |
| Veselka, F. ....      | 27             |
| Vinogradova, O. ....  | 16             |
| Vogler, B. ....       | 24             |
| Volkert, R. ....      | 11             |
| Völlmeke, S. ....     | 20             |
| Vrublevsky, I. ....   | 13             |
| <b>W</b>              |                |
| Wang, C. ....         | 21             |
| Wansch, R. ....       | 8              |
| Weber, J. ....        | 8              |
| Wegener, D. ....      | 18             |
| Weigel, C. ....       | 6              |
| Weise, F. ....        | 18             |
| Weiß, B. ....         | 13             |
| Wellmann, J. ....     | 9              |
| Werner, U. ....       | 30             |
| Westermann, D. ....   | 28             |
| Westheuser, S. ....   | 23             |
| Wiedemuth, P. ....    | 31             |
| Wilke, M. ....        | 21             |
| Will, F. ....         | 17, 18, 20     |
| Wlodek, R. ....       | 26             |
| Wohlfahrt, D. ....    | 32             |
| Wolf, A. ....         | 5              |
| <b>Y</b>              |                |
| Yasin Dali, M. ....   | 24             |
| Yousef, A. ....       | 7              |
| <b>Z</b>              |                |
| Zahlmann, P. ....     | 25             |
| Zdrojewski, A. ....   | 26             |

---

| Autoren             |    | A-Z                            |
|---------------------|----|--------------------------------|
| Zehringer, T. ....  | 32 | Zhdanov, A. .... 11, 14        |
| Zeike, N. ....      | 13 | Zhuravlev, D. V. .... 8        |
| Zeisberger, M. .... | 31 | Zimmermann, K. .... 14         |
| Zentner, J. ....    | 14 | Ziolkowski, M. .... 11, 13, 14 |
| Zetik, R. ....      | 8  | Zolotarev, A. .... 28          |
| Zgraja, J. ....     | 32 |                                |