

Program

4th International Conference on Electrophoretic Deposition: Fundamentals and Applications

October 2-7, 2011

CasaMagna Marriott Hotel, Puerto Vallarta, Mexico

Conference Chair

Prof. Aldo R. Boccaccini

Department of Materials Science and Engineering
University of Erlangen-Nuremberg, Germany

Conference Co-Chairs

Prof. Omer Van der Biest

Department of Metallurgy and Materials Engineering
Katholieke Universiteit Leuven, Belgium

Prof. Rolf Clasen

Department of Powder Technology
University of Saarland, Saarbrücken, Germany

Prof. James Dickerson

Department of Physics and Astronomy
Vanderbilt University, USA



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We would like to acknowledge the generous support of the United States National Science Foundation's Particulate and Multiphase Processes Program.



Sunday, October 2, 2011

16:00 – 18:00	Registration
18:00 – 20:00	Welcome Reception and Dinner

Notes

- *Technical sessions will be in the Vallarta IV.*
- *Poster Sessions will be in the Vallarta V*
- *Meals will be held in the:*
 - *Breakfast – Restaurant Champions & Main Garden (will advise on site each day's location)*
 - *Lunch – Mikado Restaurant*
 - *Dinner:*
 - *Sunday – Beach Patio*
 - *Monday – El Patio*
 - *Tuesday – Beach Patio*
 - *Wednesday – Vallarta VI-VIII*
 - *Thursday – Las Casitas Garden*
- *Audiotaping, videotaping and photography of presentations are prohibited.*
- *Speakers – Please have your presentation loaded onto the conference computer prior to the session start (preferably the day before).*
- *Speakers – Please leave at least 3-5 minutes for questions and discussion.*
- *Please do not smoke at any conference functions.*
- *Turn your mobile telephones to vibrate or off during technical sessions.*
- *Be sure to make any corrections to your name/contact information on the Master Participant List or confirm (by your initials) that the listing is correct. A corrected copy will be sent to all participants after the conference.*

Monday, October 3, 2011

07:30 – 08:30 Breakfast

08:30 – 08:45 Conference Introduction

SESSION I: ADVANCED EXPERIMENTAL TECHNIQUES I

Session Chair: Omer van der Biest

08:45 – 09:05 ELECTROPHORETIC MICRO DEPOSITING
Rolf Clasen
Saarland University, Saarbrücken, Germany

09:05 – 09:25 DEPOSITION OF METAL AND METAL-OXIDE COATINGS USING NANOFUID
PRECURSORS
Vahid Firouzdor
Department of Engineering Physics, University of Wisconsin-Madison, USA

09:25 – 09:45 HYBRID ELECTROPHORETIC DEPOSITION WITH ANODIZING PROCESS FOR
SUPERHYDROPHILIC SURFACES ENHANCING CRITICAL HEAT FLUX IN POOL
BOILING
Young Soo Joung
Massachusetts Institute of Technology, USA

09:45 – 10:05 THE ORIENTATION OF BARIUM FERRITE FILMS: APPLIED MAGNETIC FIELD
VERSUS ELECTROPHORETIC DEPOSITION
Darja Lisjak
Jozef Stefan Institute, Slovenia

10:05 – 10:25 TEXTURED Ti_3SiC_2 BY EPD IN A STRONG MAGNETIC FIELD
Mrinalini Mishra
National Institute for Materials Science, Japan

10:25 – 11:00 Coffee Break

SESSION II: ADVANCED EXPERIMENTAL TECHNIQUES II

Session chair: Jan Ma

11:00 – 11:20 ORIENTATION CONTROL OF HEMATITE VIA TRANSFORMATION OF TEXTURED
GOETHITE PREPARED BY EPD IN A STRONG MAGNETIC FIELD
Tetsuo Uchikoshi
National Institute for Materials Science, Japan

11:20 – 11:40 GROWTH DYNAMICS OF CDS-PAMAM DENDRIMERS NANOCOMPOSITES STUDIED
IN THE PRESENCE AND THE ABSENCE OF AN ELECTRIC FIELD
Perla Méndez
Centro de Investigación y Desarrollo Tecnológico en Electroquímica S.C., Mexico

11:40 – 12:00 PULSE PULSE/REVERSE ELECTRIC FIELDS FOR EPD OF THERMAL BARRIER
COATINGS
Heather McCrabb
Faraday Technology, Inc., USA

12:30 – 14:00 Lunch

14:00 – 16:30 *Ad hoc* sessions and/or free time

Monday, October 3, 2011 (continued)

16:30 – 17:00 Afternoon Coffee

SESSION III: EPD IN CERAMIC PROCESSING

Session chair: Jan Talbot

17:00 – 17:30

Keynote

ELECTROPHORETIC DEPOSITION OF CERAMIC COMPACTS FROM AQUEOUS SUSPENSIONS

Rolf Clasen, University of Saarland, Germany

17:30 – 17:50

FLY ASH/RARE EARTH OXIDE COATINGS BY EPD: PROCESSING AND CHARACTERIZATION

Ana Maria Arizmendi-Morquecho

Centro de Investigacion en Materiales Avanzados, S.C. Unidad Monterrey, Mexico

17:50 – 18:10

ELECTROPHORETIC DEPOSITION OF THIN-FILM ENERGY-STORAGE DEVICES

Diana Golodnitsky

Tel Aviv University, Israel

18:10 – 18:30

CATODIC ELECTRODEPOSITION AND CHARACTERIZATION CERIA STABILIZED ZIRCONIA FILM USING XPS, TEM, SEM AND AFM

M. Eugenia Contreras Garcia

FIQ Universidad Michoacana de San Nicolas de Hidalgo, Mexico

19:00 – 20:30

Dinner

20:30 – 21:30

Social Hour

Tuesday, October 4, 2011

07:30 – 08:30 Breakfast

SESSION IV: NANOSTRUCTURED MATERIALS AND FILMS I

Session chair: James Dickerson

08:30 – 09:00 **Keynote**
ASSEMBLING AND PACKING OF NANOSTRUCTURES UNDER AN ELECTRIC FIELD
Begoña Ferrari, Instituto de Cerámica y Vidrio, CSIC, Spain

09:00 – 09:20 HIGH VOLTAGE ELECTROPHORETIC DEPOSITION OF VERTICALLY-ALIGNED NANOFORESTS FOR SCALABLE NANOMANUFACTURING OF ELECTROCHEMICAL ENERGY STORAGE DEVICES
Dennis Desheng Meng
Multi-Scale Energy Systems (MuSES) Laboratory, Michigan Technological University, USA

09:20 – 09:40 THIN FILMS OF EUROPIUM(III) DOPED-TIO₂ PREPARED BY ELECTROPHORETIC DEPOSITION FROM NANOPARTICULATE SOLS
Mario Borlaf
Instituto de Cerámica y Vidrio, Spain

09:40 – 10:00 OPTIMIZATION OF AQUEOUS ELECTROPHORETIC DEPOSITION OF NANOSTRUCTURED TITANIA FILMS FOR DYE-SENSITIZED SOLAR CELL APPLICATION
Nima Parsi Benekohal
McGill University, Montreal, Canada

10:00 – 10:20 TUNABLE SURFACE WETTING IN TRANSFERABLE FILMS OF GRAPHENE OXIDE
James H. Dickerson
Vanderbilt University, USA

10:20 – 11:00 Coffee Break

SESSION V: NANOSTRUCTURED MATERIALS AND FILMS II

Session chair: James Dickerson

11:00 – 11:20 FUNCTIONALLY GRADED, NANOSTRUCTURED MATERIALS VIA PATTERNED ELECTROPHORETIC DEPOSITION
Andrew J. Pascall
Lawrence Livermore National Laboratory, USA

11:20 – 11:40 FABRICATION OF 2-DIMENSIONAL IRON OXIDE NANOPARTICLE SUPERLATTICES BY ELECTROPHORETIC DEPOSITION
Alex Krejci
Vanderbilt University, USA

11:40 – 12:00 ASSEMBLING OF ZNO NANOFILAKES WITHIN ORGANISED THICK FILMS
Maria Verde
Instituto de Cerámica y Vidrio, CSIC, Spain

12.00 – 12.20 EPD OF METAL OXIDE NANOPARTICLES FROM POLYOL-BASED COLLOIDAL SUSPENSIONS
Carmen Galassi
CNR-ISTEC, Faenza, Italy

Tuesday, October 4, 2011 (continued)

- 12.20 – 12.40 MECHANICAL PROPERTIES OBTAINED BY NANOINDENTATION OF NANOSTRUCTURED TITANIA-ALUMINA FILMS
María Eugenia Contreras-García
IIM, UMSNH, Mexico
- 13:00 – 14:30 Lunch
- 14:30 – 16:30 **Optional excursion**
Ad hoc sessions and/or free time
- 16:30 – 17:00 Afternoon Coffee
- SESSION VI: NANOSTRUCTURED MATERIALS AND FILMS III***
Session Chair: James Dickerson
- 17:00 – 17:20 ELECTROPHORETIC ASSEMBLY OF TiO₂ NANOCRYSTALS IN NON POLAR-SOLVENTS
Maria Isabel Gonzalo-Juan
Vanderbilt University, USA
- 17:20 – 17:40 ZN BASED STRUCTURES THROUGH HOMOGENEOUS PACKING AND SEEDING OF ZNO NANOPARTICLES BY EPD
Amador Caballero
Instituto de Ceramica y Vidrio, Madrid, Spain
- SESSION VII: NOVEL APPROACHES AND MODELLING***
Session chair: Rodrigo Moreno
- 17:40 – 18:00 DIRECT NUMERICAL SIMULATIONS OF ELECTROPHORETIC DEPOSITION OF CHARGED COLLOIDAL SUSPENSIONS
David Saintillan
University of Illinois at Urbana-Champaign, USA
- 18:00 – 18:20 FUNDAMENTALS OF ELECTROPHORETIC INFILTRATION FOR COMPOSITE MATERIAL FABRICATION
Cullen Buie
Massachusetts Institute of Technology, USA
- 18:30 – 19:30 ***SESSION VIII: POSTER SESSION I***
- 19:30 – 21:00 Dinner
- 21:00 – 22:00 ***POSTER SESSION I*** (continued) and *Social Hour*

Wednesday, October 5, 2011

07:30 – 08:30 Breakfast

***SESSION IX: EPD INTEGRATED MANUFACTURING TECHNOLOGIES
AND INDUSTRIAL APPLICATIONS I***

Session Chair: Rolf Clasen

08:30 – 09:00

Keynote

EPD OF PHOSPHORS FOR DISPLAY AND SOLID STATE LIGHTING TECHNOLOGIES

Jan B. Talbot

University of California, San Diego, USA

09:00 – 09:20

MACRO- AND MICROSCALE FABRICATION BY FIELD ASSISTED NANOPARTICLE
ASSEMBLY – THE CHALLENGING PATH FROM SCIENCE TO ENGINEERING

Guido Falk

Saarland University, Saarbruecken, Germany

09:20 – 09:40

ELECTROPHORETIC FABRICATION OF RECHARGEABLE MICRO LITHIUM-ION
BATTERY WITH 3D CONFIGURATION

Hirokazu Munakata

Tokyo Metropolitan University, Japan

09:40 – 10:00

EPD OF REVERSE MICELLE PALLADIUM OR PLATINUM NANOPARTICLES ONTO
INDIUM PHOSPHIDE OR GALLIUM NITRIDE FOR HIGH-RESPONSE HYDROGEN
SENSORS

Karel Zdansky

Institute of Photonics and Electronics, Academy of Sciences, Czech Republic

10:00 – 10:20

ELECTROPHORETIC DEPOSITION OF POLYARYLETHETHERETHERKETONE (PEEK)
FROM A MATCHING DENSITY SOLVENT MIXTURE

Janet Hope

LVH Coatings Ltd., UK

10:20 – 10:40

DIELECTRIC MULTILAYER THICK FILMS OF BAO-LN₂O₃-TiO₂ (LN = ND, LA)
PREPARED BY ELECTROPHORETIC DEPOSITION

Paula M. Vilarinho

University of Aveiro, Portugal

10:40 – 11:00

Coffee Break

SESSION X: COATINGS AND COMPOSITES

Session Chair: Tetsuo Uchikoshi

11:00 – 11:30

Keynote

THE ELECTRODEPOSITION OF METAL-MATRIX NANOCOMPOSITES: A PATENT
REVIEW

Gregorio Vargas-Gutiérrez

Cinvestav-Unidad Saltillo, Mexico

Wednesday, October 5, 2011(continued)

- 11:30 – 11:50 INFILTRATION OF 3D FABRIC PREFORM FOR THE FABRICATION OF SICF/SIC COMPOSITE
Aljaž Ivekoviæ
Jožef Stefan Institute, Slovenia
- 11:50 – 12:10 ELECTROPHORETIC DEPOSITION ON NON-CONDUCTING SUBSTRATES FOR SOLID OXIDE FUEL CELL APPLICATION
Laxmidhar Besra
Institute of Minerals & Materials Technology (IMMT), India
- 12:10 – 13:30 Lunch
- 13:30 – 16:30 *Ad hoc* sessions and/or free time
- 16:30 – 17:00 Afternoon Coffee
- SESSION XI: EPD OF BIOMATERIALS AND BIOLOGICAL ENTITIES I***
Session chair: Aldo R. Boccaccini
- 17:00 – 17:20 ELECTROPHORETIC DEPOSITION OF BIOMOLECULES: FUNDAMENTALS AND APPLICATIONS
Omer Van der Biest
K.U.Leuven, Belgium
- 17:20 - 17:40 ALTERNATING CURRENT ELECTROPHORETIC DEPOSITION (AC-EPD) OF LIVING CELLS
Bram Neirinck
K.U.Leuven, Belgium
- 17:40 – 18:00 DESIGN OF EXPERIMENTS (DOE) APPROACH FOR THE ELECTROPHORETIC DEPOSITION OF PEEK COATINGS
Sigrid Seuss
Institute of Biomaterials, University of Erlangen-Nuremberg, Germany
- 18:00 – 18:20 ANTIBACTERIAL PROPERTIES OF NANOSTRUCTURED TITANIA-CERIA FILMS ON E-COLI
María Eugenia Contreras-García
Instituto de Investigaciones Metalúrgicas, UMSNH, Mexico
- 18:20 – 18:40 ELECTROPHORETIC DEPOSITION OF BIOMEDICAL COATINGS BASED ON CHITOSAN/BIOACTIVE GLASS COMPOSITES
Aldo R. Boccaccini
Imperial College London, United Kingdom
- 20:00 – 22:00 Conference Banquet

Thursday, October 6, 2011

07:30 – 08:30 Breakfast

SESSION XII: FUNCTIONAL FILMS AND DEPOSITS

Session chair: Paula M. Vilarinho

08:30 – 09:00

Keynote

STABILITY AND EPD OF CONCENTRATED SUSPENSIONS OF ALUMINA WITH NANOSIZED TITANIA

Rodrigo Moreno

Instituto de Cerámica y Vidrio, CSIC, Spain

09:00 – 09:20

ELECTROPHORETIC DEPOSITION OF POLYETHER ETHER KETONE (PEEK) FROM AN AQUEOUS SUSPENSION.

Beata Zalinska

Materials Science and Engineering, University of Sheffield, United Kingdom

09:20 – 09:40

PREPARATION OF PEROVSKITE-TYPE OXIDE THICK-FILM BY EPD METHOD AND ITS APPLICATION FOR ELECTROCHEMICAL ION-SENSOR DEVICE

Youichi Shimizu

Kyushu Institute of Technology, Japan

09:40– 10:00

FABRICATION OF BARIUM FERRITE FILMS WITH A HIGH DEGREE OF MAGNETIC ORIENTATION USING ELECTROPHORETIC DEPOSITION

Simona Ovtar

Jozef Stefan Institute, Slovenia

10:00 – 10:30

Coffee break

10:30 – 10:50

HYBRID SUPERCAPACITOR SYSTEMS VIA EPD

Jan Ma

Nanyang Technological University, Singapore

10:50 – 11:10

GROWTH OF TITANIA MESOPOROUS COATINGS INDUCED BY ELECTROPHORESIS

Yolanda Castro

Instituto de Ceramica y Vidrio, CSIC, Spain

11:10 – 11:30

MULTI-WALLED CARBON NANOTUBE AND HEXAMETHYLENE DIISOCYANATE COMPOSITE COATING ON COPPER SUBSTRATE BY EPD

Laxmidhar Besra

Colloids & Materials Chemistry Department, India

11:30 – 12:30

Ad hoc discussions

12:30 – 14:00

Lunch

14:00 – 16:30

Ad hoc sessions and/or free time

16:30 – 17:00

Afternoon Coffee

Thursday, October 6, 2011 (continued)

**SESSION XIII: EPD INTEGRATED MANUFACTURING TECHNOLOGIES
AND INDUSTRIAL APPLICATIONS II**

Session Chair: Begona Ferrari

17:00 – 17:30

Keynote

ELECTROPHORETIC DEPOSITION ON NON CONDUCTING SUBSTRATES: A NEW
APPROACH AND DEVICE APPLICATION DEMONSTRATION

Paula M. Vilarinho

University of Aveiro, Portugal

17:30 – 17:50

EXAMPLES OF EPD PROCESS APPLICATIONS IN THE ELECTRONIC INDUSTRY AND
THEIR CHARACTERISTICS

Rolf Clasen, N.J.M. van Leth

Philips, The Netherlands

17:50 – 19:30

SESSION XIV: POSTER SESSION II

19:30 – 21:00

Dinner

21:00 – 22:00

POSTER SESSION II (continued) *and Social Hour*

Friday, October 7, 2011

07:30 – 08:30 Breakfast

SESSION XV: ADVANCED EXPERIMENTAL TECHNIQUES & NOVEL APPROACHES

Session chair: Gregorio Vargas-Gutiérrez

08:30 – 08:50 THE ROLE OF TRIETHANOLAMINE IN THE ELECTROPHORETIC DEPOSITION OF DIELECTRIC THICK FILMS

Paula M. Vilarinho
University of Aveiro, Portugal

08:50 – 09:10 CHARACTERIZATION OF A CERAMIC POWDER SURFACE BY CONTACT ANGLE MEASUREMENTS AND INFRARED SPECTROSCOPY

Bram Neirinck
K.U.Leuven, Leuven, Belgium

09:10 – 09:30 AC ELECTROPHORESIS, A NEW TECHNIQUE FOR DEPOSITION OF CERAMIC NANOPARTICLES; INTRODUCTION, APPLICATION AND MECHANISM

Babak Raissi
Materials and Energy Research Center, Iran

09:30 – 10:30 **Conclusions** (NEXT EPD CONFERENCE, INDUSTRIAL INVOLVEMENT, SCIENTIFIC NETWORK ON EPD, EUROPEAN PROJECTS, INCREASE PARTICIPATION OF “ELECTROCHEMISTRY COMMUNITY”, EDUCATIONAL MATTERS, ETC.)

Adjournment

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POSTERS

1. AQUEOUS EPD OF BIMODAL TITANIUM OXIDE SUSPENSIONS
Rodrigo Moreno
Instituto de Cerámica y Vidrio, CSIC, Spain
2. ELECTROPHORETIC DEPOSITION OF PEEK-TIO₂ COMPOSITE COATINGS ON STAINLESS STEEL
Sigrid Seuss
Institute of Biomaterials, University of Erlangen-Nuremberg, Germany
3. ELECTROPHORETIC DEPOSITION OF BIODEGRADABLE POLYESTER COMPOSITE COATINGS WITH BIOACTIVE GLASS NANOPARTICLES
Sigrid Seuss
Institute of Biomaterials, University of Erlangen-Nuremberg, Germany
4. ELECTROPHORETIC DEPOSITION AND DIELECTRIC PROPERTIES OF BI_{1.5}ZN_{1.0}NB_{1.5}O₇ THICK FILMS
Paula M. Vilarinho
University of Aveiro, Portugal
5. MECHANICAL AND TRIBOLOGICAL PROPERTIES OF AL₂O₃-ZRO₂ COMPOSITES PREPARED BY EPD
Pavol Hvizdos
Institute of Materials Research, Slovak Academy of Sciences, Slovakia
6. DEGRADATION OF THE BACTERIUM E. COLI THROUGH THE FILM OF TIO₂-CEO₂
M. Eugenia Contreras Garcia
FIQ Universidad Michoacana De San Nicolas De Hidalgo, Mexico
7. ELECTROPHORETIC DEPOSITION OF BIOGLASSES COATINGS ON Ti₁₂MO₅TA ALLOY
J. Faure
University of Reims, INSERM UMR-S926, France
8. DEVELOPMENT AND CHARACTERIZATION OF COMPOSITE CERAMIC-POLYMER MEMBRANE
Gilat Ardel
Tel Aviv University, Israel
9. ELECTROPHORETIC DEPOSITION OF YBA₂CU₃O_{7-x} ON METALLIC SUBSTRATES: INFLUENCE OF THE SHAPE OF THE ELECTRODES
Rudi Cloots
University of Liege, Belgium

10. ELECTROPHORETIC DEPOSITION OF YBA₂CU₃O_{7-X} SUPERCONDUCTING POWDERS ON BUFFERED NICKEL SUBSTRATES
Frédéric Boschini
University of Liege, Belgium
11. ELECTROPHORETIC DEPOSITION OF CADMIUM SULFIDE NANOPARTICLES: ELECTRIC FIELD AND PARTICLE SIZE EFFECTS
Israel López
Facultad de Ciencias Químicas, Universidad Autónoma de Nuevo León, Mexico
12. CADMIUM SULFIDE AND ZINC SULFIDE NANOSTRUCTURES FORMED BY ELECTROPHORETIC DEPOSITION
Alejandro Vázquez
Facultad de Ciencias Químicas, Universidad Autónoma de Nuevo León, Mexico
13. A PHYSICO-CHEMICAL AND ELECTRICAL STUDY OF PZT (1-X)/X SOL-GEL BASED PRECURSORS
Suárez-Gómez
Universidad de Guadalajara-Cuvalles, Chile
14. ELECTROCHEMICAL FUNCTIONALIZATION OF SINGLE-WALLED CARBON NANOTUBES FILMS OBTAINED BY ELECTROPHORETIC DEPOSITION
Luisa Pilan
Faculty of Applied Chemistry and Materials Science, University Politehnica of Bucharest, Romania
15. FABRICATION OF POLYANILINE/CARBON NANOTUBES COMPOSITES USING CARBON NANOTUBES FILMS OBTAINED BY ELECTROPHORETIC DEPOSITION
Mariana Ionita
Faculty of Applied Chemistry and Materials Science, University Politehnica of Bucharest, Romania
16. A STUDY OF YTTRIA STABILIZED ZIRCONIA PARTICLES' BEHAVIORS IN ALCOHOLIC SOLVENTS FOR ELECTROPHORETIC DEPOSITION APPLICATIONS
Iman Azarian Borojeni
Materials and Energy Research Center, Iran
17. AN INVESTIGATION OF YTTRIA STABILIZED ZIRCONIA PARTICLES BEHAVIORS IN KETONE BASED SOLVENTS FOR ELECTROPHORETIC DEPOSITION APPLICATIONS
Iman Azarian Borojeni
Materials and Energy Research Center, Iran
18. FABRICATION OF HIGH PRECISION ELECTROPLATED DIAMOND TOOLS FOR OPTICAL MANUFACTURE
Luis Alvarez
Instituto de Astronomia Universidad Nacional Autonoma de Mexico, Mexico
19. AN AFM STUDY OF NANOPARTICLE ARRANGEMENT WITH DEPOSITION TIME
Juan Escribano
Instituto de Ceramica y Vidrio (CSIC), Spain
20. NI-BASED FILMS BY ELECTROPHORETIC DEPOSITION OF NICKEL HYDROXIDE NANOFLOWERS AND NANOFILAKES
Sandra Cabanas-Polo
Instituto de Ceramica y Vidrio (CSIC), Spain

21. FUNCTIONALIZING TI-SURFACES THROUGH EPD OF HAP/Y₂O₃ COATINGS
Paola Parente
Instituto de Ceramica y Vidrio (CSIC), Spain
22. EPD AND COMBUSTION SYNTHESIS: TWO POTENTIALLY COMPLEMENTARY TECHNIQUES
Aldo Boccaccini
Department of Materials and Environmental Engineering, University of Modena and Reggio Emilia, Italy
23. CONTROL OF ELECTROPHORETIC DEPOSITION KINETICS FOR PREPARATION OF LAMINATED ALUMINA/ZIRCONIA CERAMIC COMPOSITES
Hynek Hadraba
Institute of Physics of Materials, Academy of Sciences of the Czech Republic, Czech Republic
24. CONTROLLED DEVELOPMENT OF INTERNAL STRESSES OF ALUMINA-ZIRCONIA LAMINATED STRUCTURES
Zdenek Chlup
Institute of Physics of Materials, Academy of Sciences of the Czech Republic, Czech Republic
25. FABRICATION OF ZNO NANOWIRE ARRAYS BY ELECTROPHORETIC DEPOSITION
Mónica Tirado
Laboratorio de Propiedades Dieléctricas de la Materia, Dep. de Física, Universidad Nacional de Tucumán, Argentina
26. PEEK-BIOGLASS®-TiO₂ COMPOSITE COATINGS FOR ORTHOPEDIC APPLICATIONS GROWN BY EPD
Silvia C. Clavijo
Facultad Ciencias Aplicadas a la Industria, Universidad Nacional de Cuyo, Argentina
27. ELECTROPHORETIC COATINGS ON CERAMICS
Rolf Clasen
Institute for Powder Technology of Glass and Ceramics, Saarland University, Germany
28. ELECTROPHORETIC DEPOSITION ONTO IONIC LIQUID LAYERS
Bram Neirinck
K.U.Leuven, Leuven, Belgium
29. THE ROLE OF DEPOSITION PARAMETERS ON THE CHAIN FORMATION BEHAVIOR OF ZNO NANOPARTICLES UNDER THE APPLICATION OF LOW FREQUENCY ELECTRIC FIELDS
B. Raissi
Materials and Energy Research Center, Iran
30. ELECTROCHEMICAL STUDIES ON THE STABILITY AND CORROSION RESISTANCE OF ELECTROPHORETICALLY DEPOSITED HYDROXYAPATITE COATINGS FOR IMPLANT APPLICATIONS
Aldo R. Boccaccini
University of Erlangen-Nuremberg, Germany
31. INFLUENCE OF DOLAPIX AS A DISPERSANT IN DEPOSITION PATTERN FOR FAST FABRICATION OF ELECTRONIC DEVICE BY USING LOW FREQUENCY ALTERNATIVE CURRENT ELECTROPHORETIC DEPOSITION (LFACEPD)
B. Raissi
Material & Energy Research Center, Iran