DIMAT 2004

Sixth International Conference on Diffusion in Materials

Kraków, Poland
July 18-23, 2004

DIMAT 2004 Conference is organized under the Patronage of:

AGH University of Science and Technology
Polish Academy of Sciences
Polish Association of Materials Science
Cracow University of Technology

Sponsored by:

Polish State Committee for Scientific Research
6th Framework Programme EU, Marie Curie Conferences and Training Courses, Structuring the European Research Area, Marie Curie Actions
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INFORMATION ABOUT DIMAT 2004

Conference Venue

The Conference is held at the AGH University of Science and Technology in Krakow.

Registration and Get-Together Party (Sunday, 18 July 2004)

Location: the main building of the AGH University of Science and Technology (pavilion A-O),
Address: 30, A. Mickiewicza Av.

- 17:00 - 20.00 REGISTRATION
- 19:00 - 21.00 WELCOME PARTY

Sessions and the Conference Desk (Monday - Friday, 19 - 23 July 2004)

Location: the building of the Faculty of Physics and Nuclear Techniques (pavilion D-10),
Address: 19, Reymonta St.
Tel: (12) 617 2934
During the week the conference desk will be open from 8:30 to 13:00 and from 14:00 to 18:00

How to get there… see the map - page 4.

Oral and Poster Presentations

There will be three parallel sessions for oral presentations. The poster sessions will start on Monday (session P1) and Wednesday (session P2 and P3) after the afternoon coffee break.
The Round Table devoted to "New challenges in diffusion" will start on Tuesday after the afternoon coffee break.
The duration of the invited and key talks are 40 and 25 minutes, respectively. The duration of oral contributions is 15 minutes, including 2-3 minutes for questions.
For the details on the **program of oral and poster presentations - see page 5.**
In case of speakers who will need video projector, please remember to contact technical staff (room 204) to place your presentation on the server.
The speakers will have at their disposal overhead projector and video projector. Following your suggestions we provide computer with Microsoft Windows XP operating system and Microsoft Office 2000 to drive the video projector. We strongly recommend bringing with you presentation on CD. Name your presentation using the following format:

Surname_Day_Room.ext

where: Day - is the day of your presentation (e.g., 19, 20, 21, 22 or 23), Room - is the conference room (e.g., 1, 2 or 3) and ext - is an extension, e.g., pst for Power Point presentation.

Poster will be presented during the whole conference on poster boards. The poster can therefore be put in place on Monday and removed on Friday.

Manuscripts and Proceedings

The full proceedings of the conference will be published by Trans Tech Publication, Uetikon-Zuerich, Switzerland, in Defect and Diffusion Forum. The maximum length of the contributed papers is 6 pages and 12 pages for invited talks.
Authors are strongly requested to comply with all the publisher requirements - Author Instructions for Papers.
Manuscripts in triplicate in camera ready form and signed Copyright Transfer Agreement must be remitted at the conference desk on the day of arrival.
All the contributions will be reviewed during the conference by attendees. The referees will receive the contributions to be reviewed on the second day and are kindly asked to return their conclusions

by the end of the conference. The deadline for receiving the revised versions, if any, at the conference secretary will be November 15, 2004.
The manuscripts not returned to the conference secretary in their final form at this date will not be included in the proceedings, whatever their status.

Additional offers available at the conference desk:

- Proceedings: 150 EUR
- Lunches: 30 EUR
- Conference banquet: 70 EUR
- Guided tour (Wieliczka Salt Mine, Thursday): 30 EUR
- Other guided tours: for the details please contact the conference desk.

Transport

Depending on the location of your hotel various buses can be used to reach the AGH University of Science and Technology. From the airport you can reach our University site by a bus number 208, direction "DWORZEC GLOWNY" (about 30 minutes travel). The bus stop is located in front of the Terminal. Get off at the bus stop "CZARNOWIEJSKA". From the Main Railway Station you can reach our University site by bus lines: 179 (get off at the bus stop "AGH"), 208, 228, 501, 511 (get off at the bus stop "CZARNOWIEJSKA"). The single ticket for public transport costs 2.40 Polish Zloty (0.5 Euro). You can also buy a day ticket or a week card. The tickets are available at the newspaper agents.
The participants interested in getting more Information on the conference neighborhood, are invited to consult our web site that proposes bus and tram maps.
E-mail: dimat2004@agh.edu.pl, WEB site : www.dimat2004.agh.edu.pl.

Practical Info

Currency exchange

The currency of Poland is zloty (abbreviation - zl). It's international code is PLN. 1 zloty = 100 groszy (abbreviation - gr). Coins are: 1, 2, 5, 10, 20, 50 gr, and 1, 2, 5 zl. There are also 10, 20, 50, 100 and 200 zl banknotes. Currency-exchange offices are available at the airports, hotel receptions, banks. Many small exchange offices called "kantor" are located all around the city center (these usually offer the best exchange rates).
Current exchange rates from National Bank of Poland are: 1 EUR= 4,5 PLN
International credit cards (VISA, Mastercard, Eurocard, etc.) are accepted in most of hotels, shops, restaurants, as well as in cash distributors ("bankomat").

Access to Internet - room 100 and 101

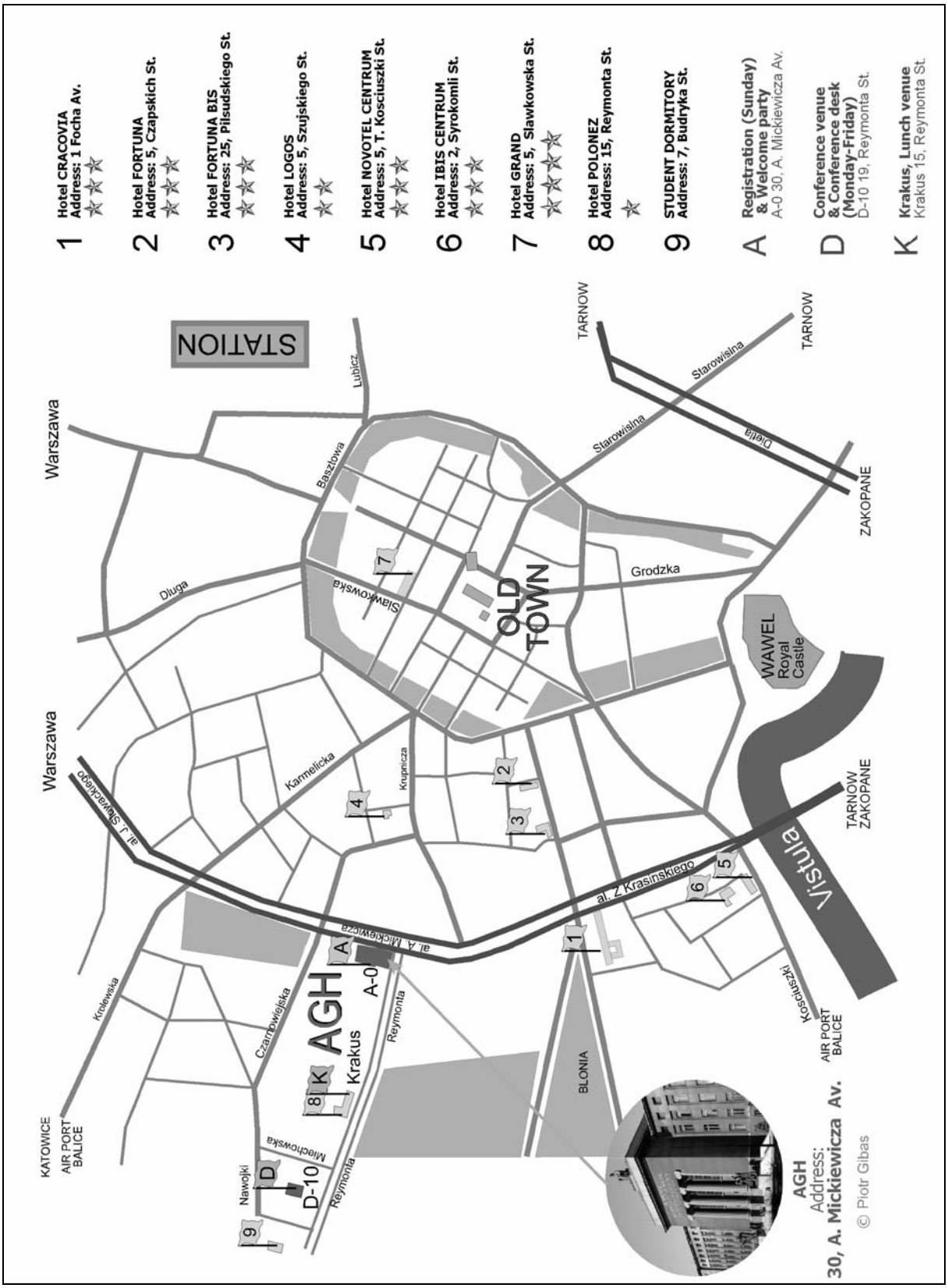
Telephone, post offices and other services

Telecards for public phones (chip or magnetic) may be purchased at the post offices, kiosks, hotels. Post offices are generally open from 8 a.m. to 8 p.m. The post office facing the central railway station is open 24 hours.

Taxi Phone

Barbakan	(12) 9661
MEGA	(12) 9625
Radiotaxi	(12) 919

Map of Kraków in the vicinity of the conference venue



Program of oral presentations

DIMAT 2004 Kraków , Poland, Jul. 18-23, SCIENTIFIC PROGRAM
Monday, 19. Jul. 2004 (1. Day)

	ROOM I	ROOM II	ROOM III
8:45	**Opening Ceremony**		
8:50			
8:55			
9:00			
9:05	**2- Main Classes of Materials** **Chairmen: S. Mrowec**		
9:10	Martin M. (I-1) Diffusion in Oxides		
9:15			
9:20			
9:25			
9:30			
9:35			
9:40			
9:45			
9:50	Mehrer H. (I-2) Diffusion and Ionic Transport in Borate Glasses		
9:55			
10:00			
10:05			
10:10			
10:15			
10:20			
10:25			
10:30	Mishin Y. (I-3) Atomistic Modeling of Diffusion		
10:35			
10:40			
10:45			
10:50			
10:55			
11:00	**COFFEE BREAK**		

	ROOM I	ROOM II	ROOM III
	2- Main Classes of Materials **Chairmen: M. Uematsu**	**0- Fundamentals of Diffusion** **Chairmen: M. Faehnle**	**1- Tools for Diffusion Studies** **Chairmen: K. Sikorski**
11:30	Herzig Ch. (I-4) Diffusional Properties in Technologically Advanced Intermetallics	Nakajima H. (I-6) Diffusion in L10-type Single Crystal TiAl and FePt Intermetallic Compounds	Rabkin E. (I-7) Application of Scanning Probe Microscopy for Studyng of Interfacial Kinetics
11:35			
11:40			
11:45			
11:50			
11:55		Sprengel W. (I-30) Thermal Defects and Diffusion in MoSi2	Szpunar J. (O-7) Software of Simulation of Oxidation Processes
12:00			
12:05			
12:10	Lesage B. (O-1) Oxygen Diffusion in Doped Polycrystalline Alpha-Alumina. Influence of Grain size ...		Collins G.S. (O-8) Atom Jump Frequency in Compounds Measured Using Nuclear Quadrupole Relaxation
12:15			
12:20		Korte C. (I-31) Influence of Interfaces on the Morphological Evolution of Electric Field Driven Solid State Reactions	
12:25	Mashimo T. (I-13) Sedimentation of Substitutional Atoms in Condensed Matter: New Type of Diffusion		Turrion M. (O-9) A Diffusion-Effusion Database for ISOL-Target Improvements
12:30			
12:35			
12:40			Koster U. (O-33) TARGISOL: Release Measurements for the Optimization of Radioactive Ion Beams
12:45			
12:50			
12:55			
13:00	**LUNCH**		

	ROOM I	ROOM II	ROOM III
	2- Main Classes of Materials **Chairmen: H. Mehrer**	**0- Fundamentals of Diffusion** **Chairmen: H. Nakajima**	**1- Tools for Diffusion Studies** **Chairmen: E. Rabkin**
14:30	Mrowec S. (I-28) Kinetic Methods in Studying Transport Properties of Sulphides	Beke D.L. (I-23) Non-linear Effects on Diffusion in Nanoscale	Zięba P. (I-33) Atomic Transport Measured by Analytical Electron Microscpy Technique
14:35			
14:40			
14:45			
14:50			Fielitz P. (O-10) Approximate Solutions of Grain Boundary Diffusion Equations in the B2 Regime
14:55			
15:00			
15:05	Schulz M. (O2) Diffusion of Oxygen and Gallium in Langasite		
15:10		Filipek R. (I-32) Self- and Interdiffusion in Ternary Cu-Fe-Ni Alloys	Popov V. (O-11) Computer Simulation of Precipitate Evolution in Multicomponent Metal Alloys
15:15			
15:20	Berbezier I. (I-24) Redistribution of Doping Elements in SiGe Nanostructures		Svoboda J. (O-12) Modelling of Phase Transformations in Substitutional Alloys
15:25			
15:30			
15:35		Dluzewski P. (O-6) Nonlinear Theory of Stress Induced Diffusion in Crystalline Solids	Lupulescu A. (O-13) Kinetics Lecture Modules
15:40			
15:45	Uematsu M. (I-29) Unified Simulation of Diffusion in Silicon and Silicon Dioxide		
15:50		Wu C.H. (O-4) The Nonlinear Interplays of Mechanical and Chemical Strains in Diffusion	Li H. (O-14) Software for Simulation of Diffusion Process in Polycrystalline Material
15:55			
16:00			
16:05		Cahoon J. (O-5) The “C” Factor in LeClaire’s Theory of Solute Impurity Diffusion	
16:10	Weller M. (O-3) Defects and Diffusion in Polycrystalline d-AlNiCo-Quasicrystals - Application ...		Monchoux J.P. (O-15) Bi and Pb Surface Diffusion on Polycrystalline Cu Studied by Scanning Auger Microscopy
16:15			
16:20			
16:25			
16:30	**COFFEE BREAK**		
17:00	**POSTER SESSION- P1**		

DIMAT 2004 Kraków , Poland, Jul. 18-23, SCIENTIFIC PROGRAM
Tuesday, 20. Jul. 2004 (2. Day)

	ROOM I	ROOM II	ROOM III	
	10- New Challenges **Chairmen: D.L. Beke**	**0- Fundamentals of Diffusion** **Chairmen: R. Kozubski**	**2- Main Classes of Materials** **Chairmen: S. Divinski**	
9:00			Lerner L. (O-26) Vacancy Concentrations in Silicon Determined by the Diffusion of Iridium Into Silicon Wafers	9:00
9:05				9:05
9:10				9:10
9:15	Chakraborty S. (I-8) Diffusion studies in Earth and Planetary Sciences	Faehnle M. (I-10) The Influence of Magnetism on Atomic Defects and Diffusion: Model Calculations and Ab-Initio Electron Theory	Koizumi Y. (O-27) Diffusion of Si in Ti3Al intermetallic compound	9:15
9:20				9:20
9:25				9:25
9:30			Christ H.J. (O-28) Diffusion of Hydrogen in Single-Phase and Two-Phase Beta Titanium Alloys	9:30
9:35				9:35
9:40		Martin-Samos L. (O-17) Self-defects in a Silica Glass, a First-Principles Study		9:40
9:45			Klotsman S. (O-29) 'Instrinsic' and 'Impurity' Mechanism of Volume Diffusion of Gold in Iridium Single Crystals	9:45
9:50	Vogl G. (I-9) Diffusion over Long Distances and in Cages: Atoms, Animals, Men, Ideas			9:50
9:55		Numakura H. (I-42) Diffusional Jumps of Intrinsic Atomic Defects in Ordered Alloys Observed Through Anelastic Relaxation Effects		9:55
10:00			Gobal F. (O-30) Diffusion and Conformation Relaxation Control of Charge Compensating Ion ...	10:00
10:05				10:05
10:10				10:10
10:15			Yamazaki Y. (O-31) Diffusion of Nb in Nb-H Alloys	10:15
10:20	Gudowska-Nowak E. (I-44) Charge Transport Processes in Biomaterials: Electron Transfer in Proteins and Gating Kinetics of Biological Channels	Ugaste U. (O-18) The Effective Interdiffusion Coefficients in Experimental Investigation of Interdiffusion ...		10:20
10:25				10:25
10:30				10:30
10:35			Bracht H. (O-32) Advanced Diffusion Studies with Isotopically Controlled Semiconductors	10:35
10:40				10:40
10:45	Ono M. (O-16) Sedimentation of Substitutional Solute Atoms in Intermetallic Compound of Bi-Pb System ...			10:45
10:50				10:50
10:55				10:55
11:00	**COFFEE BREAK**			11:00

	ROOM I	ROOM II	ROOM III	
	4- Diffusion-Controlled Processes **Chairmen: K.-N. Tu**	**0- Fundamentals of Diffusion** **Chairmen: H. Numakura**	**6- Corrosion** **Chairmen: S. Chakraborty**	
11:30				11:30
11:35				11:35
11:40	Gusak A.M. (I-34) Flux-driven Coarsening in Open Systems	Belova I.V. (I-11) Random Walk Calculations in Intermetallic Compounds	Chevalier S. (I-43) Oxygen Diffusion in Alumina. Application to Synthetic and Thermally Grown Al2O3	11:40
11:45				11:45
11:50				11:50
11:55				11:55
12:00	Kozubski R. (I-35) Atomic Migration as a Mechanism of Superstructure Formation in Intermetallic Compounds	Malinov S. (I-41) Modelling, Simulations and Monitoring of Lamella Structure Formation in Titanium Alloys Controlled by Diffusion Redistribution	Trilleros J.A. (I-14) High Temperature Difussion Coatings by CVD in Fluidized Bed Reactors	12:00
12:05				12:05
12:10				12:10
12:15				12:15
12:20		Fu C.C. (O-19) Ab-initio Study of the Stability and Mobility of Self-Interstitials and Small Interstitial Clusters ...	Rodin A. (O-105) The Model of Liquid Channel Growth with Excessive Chemical Potential as a Driving Force.	12:20
12:25	Pyun S.-I. (I-36) Anomalous Behaviour in Hydrogen Diffusion through Palladium and Metal Hydrides			12:25
12:30				12:30
12:35		Pokoev A. (O-20) Diffusion of Al in Fe in the Alternating Magnetic Field	Naumenko D. (I-63) Paremeters Affecting the Oxidation Limited Lifetime of Thin Walled FeCrAl Components	12:35
12:40				12:40
12:45	Paritskaya L. (O-102) Kinetics of Competitive Phase Growth in Cu-Ni-Sn System			12:45
12:50				12:50
12:55				12:55
13:00				13:00

	ROOM I	ROOM II	ROOM III	
	4- Diffusion-Controlled Processes **Chairmen: Ch. Herzig**	**0- Fundamentals of Diffusion** **Chairmen: W. Sprengel**		
14:30				14:30
14:35	Glickman E. (I-37) Liquid Metal Embrittlement: Fast Diffusion Under Stress and Strain Gradients	Weron K. (I-45) Scaling properties of the diffusion process underlying the Havriliak-Negami relaxation response		14:35
14:40				14:40
14:45				14:45
14:50				14:50
14:55		Roma G. (O-21) Native Neutral and Charged Defects in Alpha-quartz: from Ab-initio Calculations ...		14:55
15:00	Limoge Y. (I-38) Ageing of Oxides in Irradiation Environment			15:00
15:05				15:05
15:10		Gryaznov D. (O-22) Numerical Study of Grain Boundary Diffusion in Nanocrystalline Materials		15:10
15:15				15:15
15:20				15:20
15:25	Iijima Y. (I-39) Interdiffusion Between Metals of Widely Different Self-diffusion Rates	Nazarov A. (O-23) Theory and Simulation of Diffusion under Pressure		15:25
15:30				15:30
15:35				15:35
15:40		Willaime F. (O-24) Vacancy Properties and Vacancy-Carbon Interactions in Alpha-Fe and Their Impact ...		15:40
15:45				15:45
15:50	Kodentsov A.A. (I-40) The Kirkendall Effect in Multiphase Diffusion			15:50
15:55		Pueschl W. (O-25) Comparative Ab Initio Study of Point Defect Energies and Atom Migration Profiles ...		15:55
16:00				16:00
16:05				16:05
16:10				16:10
16:15				16:15
16:20				16:20
16:25				16:25
16:30				16:30
16:35	**COFFEE BREAK**			
17:00	**ROUND TABLE** **Chairman: B. Straumal**			17:00

DIMAT 2004 Kraków , Poland, Jul. 18-23, SCIENTIFIC PROGRAM
Wednesday, 21. Jul. 2004 (3. Day)

	ROOM I	ROOM II	ROOM III	
	5- Reactive diffusion **Chairmen: A.J. Ardell**	**2- Main Classes of Materials** **Chairmen: E. Glickman**	**6- Corrosion** **Chairmen: S. Chevalier**	
9:00	Gas P. (I-15) Reactive Diffusion in Nanoscale System	Peteline S. (O-38) Self-dffusion in Nickel-Manganese Alloys	Weber T. (O-55) Diffusion Coatings for Corrosion Protection of Structural Materials	9:00
9:05				9:05
9:10				9:10
9:15		Galler R. (O-39) Diffusion in Decagonal and Icosahedral Quasicrystals and a Hexagonal Approximant	Park E. (O-56) Annealing of Fe-15at.%Cr Alloy in N2-H2 Gas Mixtures: Effect of Hydrogen	9:15
9:20				9:20
9:25	Becker K.D. (I-47) Spectroscopic Studies of Diffusion and Reaction in Complex Oxides			9:25
9:30		Ratzke K. (O-40) Diffusion in Bulk-Metallic Glass-Forming Pd-Cu-Ni-P Alloys from the Glass to the Equilibrium Melt	Parezanovic I. (O-57) B and N Segregation on Dual Phase Steel after Selective Annealing	9:30
9:35				9:35
9:40				9:40
9:45		Borodin V. (O-41) Simulation of Diffusion Kinetics in Intermetallic Compounds of D03 and L12 Structures	Krupp U. (O-59) The Effect of Grain-Boundary Diffusion during the Oxidation of Cr-Containing Steels	9:45
9:50	Murch G.E. (I-16) Consequences on Chemical Diffusion and Demixing in Materials of the Sum-rule Relations Between Phenomenological Coefficients			9:50
9:55				9:55
10:00		Nakamura R. Activation Volume for Interdiffusion in B2 Type Intermetallic Compounds NiAl and FeAl	Salazar M. (O-60) Strains, Mass Transport and Reaction Interactions at the Metal/Oxide Interface: Novel	10:00
10:05				10:05
10:10				10:10
10:15	Lavoie C. (I-48) Reactive Diffusion in the Ni-Si System: Phase Sequence, Texture and Agglomeration in Thin Films	Indris S. (O-43) Dynamics of Water in Hydrous Aluminosilicate Glasses Studied by Quasilelastic ...	Agarwala R.C. (O-61) Studies on Electroless Coatings ...	10:15
10:20				10:20
10:25				10:25
10:30		Imre A. (O-44) Mixed Alkali Effect in Sodium-Rubidium Borate Glasses		10:30
10:35				10:35
10:40	Schmitz G. (O-35) Nucleation and Growth of Product Phase at Reactive Diffusion			10:40
10:45		Korte C. (O-104) Field Driven Solid State Reactions and the Influence of Grain Boundaries		10:45
10:50				10:50
10:55				10:55
11:00	**COFFEE BREAK**			11:00

	ROOM I	ROOM II	ROOM III	
	5- Reactive diffusion **Chairmen: P. Gas**	**6- Corrosion** **Chairmen: F.J.P. Trujillo**	**4- Diffusion-Controlled Processes** **Chairmen: F. Hodaj**	
11:30	Thomas O. (I-17) Stress Development During Reactive Film Formation of Silicides	Buschmann U. (O-45) Modelling and Numerical Simulation of Diffusion Processes During Non-protective Oxidation ...	Koyama T. (I-19) Computer Simulation of Phase Decomposition in Magnetic Materials Based on the Phase-field Method	11:30
11:35				11:35
11:40				11:40
11:45		Jedliński J. (O-46) Defects-Diffusion-Stress Relationships in Modeling of the Oxidation and Degradation ...		11:45
11:50				11:50
11:55			Christien F. (O-62) Effect of Self-Interstitial Diffusion Anisotropy in Electron-Irradiated Zirconium. A Cluster ...	11:55
12:00		Grzesik Z. (O-47) Experimental Errors in Studying the Defect Mobility in Nonstoichiometric Metal Oxides		12:00
12:05				12:05
12:10	Ardell A.J. (I-49) Chemical Diffusion Coefficients from Analysis of Data on Kinetics of Coarsening		Legros C. (O-63) Phase Transformation and Densification of Nanostructured Alumina: Effect of Seeding ...	12:10
12:15		Kusinski J. (O-48) Diffusion in Anionic Conducting Oxides under Non Equilibrium Conditions		12:15
12:20				12:20
12:25			Maugis Ph. (O-64) Kinetics of Precipitation: Comparison between Monte Carlo Simulations and the Classical Laws.	12:25
12:30		Agarwala V. (O-49) Thermo Mechanical Treatment of Nickel and Titanium Aluminides		12:30
12:35	Kharatyan S. (O-36) A Diffusion Model for Chemical Compounds Layer Growth in Multiphase Binary Systems			12:35
12:40			Fujikawa H. (O-65) Microstructural Control of Chromised Nickel-Plated Layers for Austenitic Stainless Steel	12:40
12:45				12:45
12:50				12:50
12:55				12:55
13:00	**LUNCH**			13:00

	ROOM I	ROOM II	ROOM III	
	9- Diffusion in Nanoscale **Chairmen: C. Lavoie**	**1- Tools for Diffusion Studies** **Chairmen: A.M. Gusak**	**4- Diffusion-Controlled Processes** **Chairmen: Y. Iijima**	
14:30	Heitjans P. (I-50) Nuclear Magnetic Resonance and Impedance Studies of Diffusion in Nanocrystalline Ceramics	Sikorski K. (I-53) Electron Probe Microanalysis in the Study of Diffusion in Thin Solid Coatings	Hodaj F. (I-20) Interfacial reactions in the Cu-Ni/Sn system	14:30
14:35				14:35
14:40				14:40
14:45				14:45
14:50				14:50
14:55	Wuerschum R. (I-52) Diffusion and Free Volumes in Nanocrystalline Materials	Gupta M. (O-50) Self-Diffusion of Iron in Nanocrystalline Fe64N26Zr10 Measured with Nuclear ...	Cermak J. (I-54) Concentration Dependence of Ternary Interdiffusion Coefficients	14:55
15:00				15:00
15:05				15:05
15:10		Masoud M. (O-51) Impedance Spectroscopy Analysis of Li Ion Dynamics in Single Crystal ...		15:10
15:15				15:15
15:20	Bernardini J. (I-51) Diffusion and Segregation in Nanomaterials		Dohmen R. (O-66) Mechanism and Kinetics of Element and Isotopic Exchange Mediated by a Fluid Phase	15:20
15:25		Lyashenko Y. (O-52) Inverse T-sample Method of Determination the Interdiffusion Coefficients in Cu-Ni-Sn ...		15:25
15:30				15:30
15:35			Wolski K. (O-67) Evidence for a Diffusion-based Mechanism of Liquid Metal Intergranular Penetration: ...	15:35
15:40		Lupulescu A. (O-53) Kinetics of Zero Flux Planes in Ni-Cu-Zn		15:40
15:45	Bagraev N. (O-37) Fractal Self-Assembled Nanostructures on Monocrystalline Silicon Surface			15:45
15:50			Laporte V. (O-68) Diffusion-Controlled Liquid Bismuth Induced Intergranular Embrittlement of Copper	15:50
15:55		Bouchet R. (O-54) Influence of Platinum and Palladium on Diffusion in Beta-NiAl Phase		15:55
16:00				16:00
16:05				16:05
16:10				16:10
16:15				16:15
16:20				16:20
16:25				16:25
16:30	**COFFEE BREAK**			16:30
17:00	**POSTER SESSIONS- P2 and P3**			17:00

DIMAT 2004 Kraków , Poland, Jul. 18-23, SCIENTIFIC PROGRAM
Thursday, 22. Jul. 2004 (4. Day)

	ROOM I	ROOM II	ROOM III	
	7- Electronics, 8-Electrochemistry **Chairmen: G. Vogl**	**3- Spatially Limited Media** **Chairmen: Y. Mishin**		
9:00	Tu K.N. (I-55) Electromigration in VLSI Interconnects	Aufray B. (I-59) Self-organisation of Semiconductors on Metallic Surfaces		9:00
9:05				9:05
9:10				9:10
9:15				9:15
9:20				9:20
9:25	Mangelinck D. (I-21) Synthesis and Stability of Some Silicide/Semiconductor Interface in Microelectronics: Diffusion and Reaction	Divinski S. (O-72) Grain Boundary Wetting and Pre-Wetting Studied by Grain Boundary Diffusion Measurements ...		9:25
9:30				9:30
9:35				9:35
9:40		Schmidt H. (O-73) Nitrogen Self-Diffusion in Thin Film Si3N4 Isotope Heterostructures		9:40
9:45				9:45
9:50	Wakihara M. (I-22) Diffusion of Lithium in Surface Modified Electrode	Bokstein B. (I-60) Grain Boundary Segregation versus Precipitation in Grains. Effect on Diffusion.		9:50
9:55				9:55
10:00				10:00
10:05				10:05
10:10				10:10
10:15	Stolwijk N. (I-56) Radiotracer Diffusion and Ion Conduction in Polymer Electrolytes	Gergaud P. (O-74) Stress Development and Relaxation During Reaction of a Cobalt Film with a Silicon Substrate		10:15
10:20				10:20
10:25				10:25
10:30				10:30
10:35		Klinger L. (O-75) Enhanced Diffusional Self-healing of Polycrystalline Thin Films		10:35
10:40	Shirakawa J. (O-70) Lithium Diffusion in Li1-2yCo1+yVO4 for Cathode Materials in Lithium-Ion Cells			10:40
10:45				10:45
10:50				10:50
10:55		Peteline A. (O-76) Grain Boundary Grooving and Wetting in Metals		10:55
11:00				11:00
11:05		Scharnberg M. (O-77) Radiotracer Diffusion Measurements of Noble Metal Atoms in Semiconducting Organic Films		11:05
11:10				11:10
11:15				11:15
11:20				11:20
11:25	**COFFEE BREAK**			11:25
11:50				11:50
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13:00	**LUNCH**			13:00
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15:20	**EXCURSION**			15:20
15:25				15:25
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16:25				16:25
16:30	**BANQUET**			16:30

DIMAT 2004 Kraków , Poland, Jul. 18-23, SCIENTIFIC PROGRAM
Friday, 23. Jul. 2004 (5. Day)

	ROOM I	ROOM II	ROOM III	
	3- Spatially Limited Media **Chairmen: G.E. Murch**	**Young Scientists Session** **Chairmen: P. Zięba**		
9:00	Straumal B. (I-25) Grain Boundary Phase Transitions. Influence on Diffusion and Transport Processes	Bachorczyk R. (O-81) Long-Term, Cyclic Oxidation Behaviour ...		9:00
9:05				9:05
9:10		Barros J. (O-82) Chemical and Physical Interactions of Si-rich		9:10
9:15				9:15
9:20		Eder A. (O-83) Nitrogen Induced Formation of Nanostructured ...		9:20
9:25				9:25
9:30		Ganchenkova M.G. (O-84) Simulation of Vacancy-Type Complex Annealing		9:30
9:35				9:35
9:40	Divinski S. (I-26) Solute Segregation Studied by Grain Boundary Diffusion	Kinoshita T. (O-85) MD simulation study of B1-B2 phase transition ...		9:40
9:45				9:45
9:50		Kovacs A. (O-86) Kinetics of Phase Formations in the Al-Pt Thin ...		9:50
9:55				9:55
10:00		López G.A. (O-87) Auger Electron Spectroscopical Investigation ...		10:00
10:05	Girardeaux C. (I-61) Evolution of Ultra Thin Deposits (Diffusion, Segregation) and Surface Alloys			10:05
10:10		Liapina T. (O-88) Phase Transformations in epsilon-/gamma'-Iron		10:10
10:15				10:15
10:20		Moskal G. (O-89) Microstructural Characterization of TiAlSi ...		10:20
10:25				10:25
10:30	Roussel J.M. (O-78) Long Lived Transient Vacancy Distribution in Multilayers	Miszuris W. (O-90) Refinement in the Mathematical and Numerical ...		10:30
10:35				10:35
10:40		Stahlmecke B. (O-91) In-Situ Observation of Electromigration in Gold ...		10:40
10:45	Erdelyi Z. (O-79) 'Surfactant-Like Dissolution' of a Thin Deposit for Composition Dependent Diffusion Coefficient			10:45
10:50		Zenisek J. (O-92) Monte-Carlo Simulations of Diffusion in System		10:50
10:55				10:55
11:00	**COFFEE BREAK**			11:00

	ROOM I	ROOM II	ROOM III	
	4- Diffusion-Controlled Processes **Chairmen: N. Stolwijk**	**Young Scientists Session** **Chairmen: P. Zięba**		
11:30	Kaganovskii Y. (O-99) Diffusion of Silver in Silicate Glass and Clustering in Hydrogen Atmosphere	Tourleigh Ye.V. (O-93) Molecular Diffusion at the Water-Membrane		11:30
11:35				11:35
11:40		Troncale V. (O-94) Diffusion studies of Na and Mg for the production		11:40
11:45	Keddam M. On the growth kinetics of carbonitrided layers for the pure iron: modelling and experimental			11:45
11:50		Wilkening M. (O-95) Ultraslow Motions in Crystalline and Amorphous		11:50
11:55				11:55
12:00	Lodder A. (O-100) Direct Force on Migrating Hydrogen in Metals	Wojewoda J. (O-96) Growth Kinetics of the Intermetallic Phases in the		12:00
12:05				12:05
12:10		Partyka E. (O-97) Long Range Order Kinetics in Intermetallics ...		12:10
12:15	Smirnov E. (I-62) Hydrogen Diffusion, Embrittlement and Delayed Hydride Cracking in Zirconium Alloys.			12:15
12:20		Pasichnyy M.O. (O-98) Modelling of Phase Competition and Diffusion		12:20
12:25				12:25
12:30		Meeting of Young Scientists Session Committee		12:30
12:35				12:35
12:40	Howe A. (O-103) An Alternative Treatment of Diffusion and Thermomigration			12:40
12:45				12:45
12:50				12:50
12:55	**Closing Ceremony**			12:55
13:00				13:00
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13:15				13:15
13:20	**LUNCH**			13:20

Program of poster presentations

Session P1

P1-1	M. Danielewski and M. Wakihara	Kinetic Constraints in Diffusion
P1-2	P. Hetman, K. Weron	Randon walk model of the mechanical relaxation
P1-3	L. Klinger	Diffusion in network structures
P1-4	Yu.O. Lyashenko, O.A. Smatko, N.V. Zaitzeva	Peculiarities of Discontinuous Precipitation in the Pb-Sn Alloy
P1-5	V.A. Tatarenko, S.V. Moklyak	On the Pressure and Temperature Dependences of the Self-Diffusion Coefficient for Simple Liquids
P1-6	M.J. Brown, I.V. Belova and G.E. Murch	Direct steady-state simulation of the phenomenological and diffusion coefficients for interstitial diffusion
P1-7	A.V. Nazarov, A.A. Mikheev	Diffusion under stress in interstitial alloys. Theory and simulation.
P1-8	M.A.N. Nogueira, W.B. Ferraz, A.C.S. Sabioni	65Zn Diffusion in Pure and Al-Doped ZnO
P1-9	A. Sikorski	The Diffusion of Confined Polymer Chains
P1-10	G. Neumann, C. Tuijn	On Vacancy Concentrations in Dilute fcc Alloys
P1-11	U.E. Ugaste, A.A. Kodentsov, F.J.J. van Loo	Interdiffusion and the Kirkendall Effect in Ternary Solid Solutions
P1-12	F. Willaime and C.-C. Fu	Ab Initio Study of Self Interstitials in alpha-Zr
P1-13	M.S.A. Karunaratne, J.M. Bonar, J. Zhang, P. Ashburn and A.F.W. Willoughby	Diffusion of Boron in Silicon and Silicon-Germanium in the Presence of Carbon
P1-14	G. Adjanor, M. Athenes	A Path-quenching Scheme for Identifying Saddle States in Diffusive Dynamical Systems Involving High Energy Barriers.
P1-15	D.-K. An and P.-A. Tuan	Numerical Estimation of Point Defect Distribution Generated During Dopant Diffusion Using Irreversible Thermodynamic Theory
P1-16	R. Filipek	Modelling of Interdiffusion and Reactions at the Boundary; Initial-value Problem of Interdiffusion in the Open Systems
P1-17	R. Filipek, K. Szyszkiewicz	Numerical Analysis of Interdiffusion in Multi-Component Systems
P1-18	B.B. Khina, B. Formanek	Mathematical Modeling of Solid-State Interdiffusion during the Mechanical Alloying Process
P1-19	Ch.-G. Lee, B.-S. Lee, J.-H. Lee, Y.-I. Lee, T. Shimozaki, T. Okino	Measurement of the Impurity Diffusivity of Cu in Fe by Laser Induced Breakdown Spectrometry
P1-20	M. Salamon, H. Mehrer	Diffusion in the High-Temperature Material Molybdenum Disilicide
P1-21	Y. Mishin, I.V. Belova and G.E. Murch	Atomistic Modeling of Diffusion in gamma-TiAl
P1-22	A.C.S. Sabioni, A.M.J.M. Daniel, W.A.A. Macedo, M.D. Martins, A.M. Huntz, F. Jomard	First Study of Iron Self-Diffusion in Fe2O3 by SIMS
P1-23	E.M. Tanguep N., H. Mehrer	Tracer Diffusion and Ionic Conduction in Soda-Lime Glasses
P1-24	A. Myagi, Y. Ugaste, V.N. Pimenov, R. Mankin, V.A. Gribkov, E.V. Demina, A.V. Dubrovski	The Superposition Method of Thin Layer Stochastic Dissipation and its Application to the Light Elements Diffusion Problem in Finite Space
P1-25	K. Yamada K, Y.A.D. Shanaka P., Y. Kato and Y. Iijima	MPI assisted MD Calculation for relaxation processes in Fe-based Amorphous-like structures
P1-26	L. Demchenko, S. Sidorenko	Nitrogen Diffusion in Deformed Iron and Iron-Based Alloys
P1-27	J. Nyeki, G. Erdelyi, C. Lexcellent, J. Bernardini and D. L. Beke	Ni63 Grain Boundary Diffusion in NiTi Shape Memory Alloy
P1-28	R.A. Essawy and A.M. Mostafa	Mechanical Properties as a Function of Zinc Content, Degree of Cold Drawing and Annealing Temperature in alfa-Brasses
P1-29	M. Gupta, A. Gupta, T. Gutberlet, M. Horisberger, P. Allenspach	Self-Diffusion of Iron in a-Fe-Zr Multilayers Measured with Neutron Reflectivity
P1-30	M. Abu-Samak, Mousa. M.A. Imran	Core-Level and Valance Band Studies of the Pseudomorphic Growth of Tin on the Low Miller Index Faces of the InSb
P1-31	A.V. Ermakov, S.M. Klotsman, V.N. Kaigorodov, G.N. Tatarinova, A.N. Timofeev	Grain-Boundary Diffusion of 57Co and 195Au in Polycrystalline Iridium
P1-32	S.M. Klotsman, V.N. Kaigorodov, A.V. Ermakov, V.K. Rudenko	Point Defects in Lattice Regions Adjacent to the Grain Boundary Core in Pd, Ta, W and Pt Polycrystals that Determine Pumping of Substitutional Components During Grain-Boundary Diffusion
P1-33	S.M. Klotsman, V.N. Kaigorodov, M.I. Kurkin, A.V. Ermakov, V.K. Rudenko	Formation Activation Enthalpies of Vacancy-Oxygen Complexes Outside Grain Boundary Cores in Adjacent Regions of the Lattice of Pd, Ta, W and Pt Polycrystals and in Grain Boundary Cores in Cr, Ta and W Polycrystals
P1-34	H.-M. Lee, B.-S. Lee, Ch.-G. Lee, Y. Hayashi, B.-H. Koo	Interdiffusion in Co/Ta Multilayer Thin Films

P1-35	E. Rabkin, A. Gabelev, T. Matsuzaki and T. Watanabe	The Effect of Magnetic Field on Kinetics of Grain Boundary Grooving in Iron
P1-36	B. Bokstein, V. Golovanov, A. Logunov, I. Razumovskii	Diffusion mechanism of pores dissolving in nickel-based superalloys under hot isostatic pressing
P1-37	H. Schmidt, G. Borchardt, M. Bruns, M. Rudolphi, H. Baumann	Diffusion of Ion Implanted Hydrogen in Si3N4:H Films
P1-38	N. Chaabane,L. Schmirgeld-Mignot, H. de Monestrol, S. Poissonnet and G. Martin	Role of Cu at the Ni-Ag Interface on the Reactive Solid State Dewetting by Cavitation in the System Ag-Ni-O
P1-39	V.V. Krivolapchuk, M.M. Mezdrogina	Kinetics of Minority Carriers in GaN Epilayers Doped with Rare-Earth Elements
P1-40	S. Sidorenko, Y.P. Lee, Y. Kudryavtsev, Y. Makogon, E. Pavlova, Y.H. Hyun and T. Verbitska	Ellipsometric Evidence of CoSi2 Formation in Co/Si Multilayer Induced by Thermal Annealing
P1-41	V. Sursaeva, P. Zieba	Diffusion Impurity Drag of Incoherent Twin Grain Boundaries in Zn
P1-42	I. Apikhtina, N. Dolgopolov, S. Gulevskii, A. Peteline, S. Rakov, A. Rodin	Crack Formation Induced by Grain Boundary Wetting
P1-43	I.V. Belova and G.E. Murch	Analysis of the Time-Dependence of Atomic and Vacancy Concentration Profiles during Interdiffusion
P1-44	K. Barmak, P. Gas, V.G. Khoruzha, V. I. Dybkov	Reaction Kinetics at the Interface of Nickel with Liquid Bismuth and a 51Bi-42Sn-5In-2Zn Alloy
P1-45	O.V. Dybkov, V.I. Dybkov	Mathematical Treatment of Diffusional Growth Kinetics of Two Intermetallic Layers
P1-46	I. Beszeda, D.L. Beke, Yu. Kaganovskii	Kinetics of Growth and Lateral Spreading of a Spinel Layer around NiO Particles on Al2O3
P1-47	H.A. Chatilyan, L.H. Arakelyan, S.L. Kharatyan	Growth Kinetics and Silicon Diffusivity in MoSi2 and WSi2 Disilicides
P1-48	H.A. Chatilyan, S.L. Kharatyan	Diffusion Annealing of Mo/MoSi2 Couple and Silicon Diffusivity in Mo5Si3 Layer
P1-49	G.S. Galstyan, H.A. Chatilyan and S.L. Kharatyan	Reaction Diffusion in Mo-Si System Above the Melting Point of Silicon
P1-50	A.G. Kirakosyan, Ts.A. Adamyan, K.V. Asatryan, S.L.Kharatyan	Reactive Diffusion and Kinetics of Niobium Carbidization in Methane
P1-51	T. Shimozaki, T. Okino and Ch.-G. Lee	Vacancy Formation and Annihilation areas in Ti/Al and Ti/TiAl3 Multiphase Diffusion Couples
P1-52	S. Sidorenko, S. Zamulko, E. Pavlova	Growth Kinetics of the NiSi2 Spherical Inclusions in the NiSi Thin Film System .
P1-53	I. A.Szabo, C. Cserhati, I. Ivan, S. Kokenyesi I. Mojzes	Surface Pattern Formation during Interdiffusion and Surface Reaction in the Au/GaAs System
P1-54	Yu.S. Yusfin, L.I. Leontev, A.L. Peteline	Destruction Kinetic of Organic Super Toxic Compounds. Diffusion Stage
P1-55	M. Danielewski, R. Filipek, D. Klassek, K. Kurzydlowski	Modelling of Oxidation of Fe-Ni-Cr Alloys
P1-56	B. Kucharska, R. Filipek, M. Danielewski	Prediction of the Depletion Zone due to Selective Oxidation of P91 Steel
P1-57	Z. Zurek, J. Jedlinski, M. Homa, A. Bernasik	Growth Mechanism of the Scale on Fe18Cr5Al Foil Preoxidised in SO2 + 1%O2 Mixture
P1-58	K. Adamaszek, Z. Jurasz	Comparison of Two Methods of Calculation of Activation Energy for Selected Industrial Steels after its Oxidation at High-Temperatures in Air
P1-60	P. Krukovsky, K. Tadlya, A. Rybnikov, V. Kolarik, W. Stamm	Lifetime Estimation for MCrAlY Coatings on Industrial Gas Turbine Blades Based on Diffusion-Controlled Processes Moddelling
P1-61	F. Costa and S. Chakraborty	Duration of Volcanic Processes and Implications for Assessment of Volcanic Hazards from Diffusion Modeling Studies
P1-62	X. Huang, O. Masao, T. Kinoshita, H. Ueno, T. Osakabe and T. Mashimo	Sedimentation of Atoms in Se-Te Solid Solution under an Ultra-Strong Gravitational Field
P1-63	Y. Kucherinenko, S. Protasova, B. Straumal	Faceting of Sigma3 grain boundaries in Cu: threedimensional Wulff diagrams
P1-64	F. Willaime and P. Pochet	Ab initio calculation of vacancy formation and migration energies in FCC metals: LDA versus GGA
P1-65	T. Okino, T. Shimozaki and C.-G. Lee	Which is larger, a Self-Interstitial or a Vacancy Activation Energy of Diffusion in Silicon?
P1-66	A.C.S. Sabioni, A.M. Huntz, F. Silva, F. Jomard	Study of Fe Diffusion in Cr2O3 by Secondary Ion Mass Spectrometry

Session P2

P2-1	I.V. Belova and G.E. Murch	An Analysis of the Effective Diffusivity in Three-Phase Composite Material Consisting of the Host and Coated Inclusions
P2-2	L.B. Magalas and M.S. Blanter	Coupling Effect in Diffusion of Carbon Atoms in the Cottrell Atmospheres
P2-3	J. Cermak, V. Rothova	Influence of Composition on Diffusion in Nickel Aluminides
P2-4	M.O. Zacate and G.S. Collins	Jump Frequency of Cd Tracer Atoms in beta-Mn
P2-5	F. Dyment, S.N. Balart, C. Lugo, R.A. Perez, N. Di Lalla	Ru Self-Diffusion and Ru Diffusion in Al
P2-7	R. Filipek, M. Danielewski, R. Bachorczyk, A. Milewska	Interdiffusion Studies in Co-Fe-Ni Alloys
P2-8	K. Gomann, G. Borchardt, B. Lesage, O. Kaitasov, S. Hoffmann-Eifert, Th. Schneller	Sr Diffusion in La-doped SrTiO3 under Oxidizing Conditions
P2-9	W. Gruber, H. Schmidt, G. Borchardt, A. Muller, J. Bill	Diffusion of Hydrogen in Amorphous Ceramics in the System Si-(B)-C-N
P2-10	M.S.A. Karunaratne and R.C. Reed	Interdiffusion of Niobium (Columbium) and Molybdenum in Nickel between 900 - 1300C
P2-11	A.V. Ermakov, S.M. Klotsman, S.S. Matveev, G.N. Tatarinova, A.N. Timofeev, V.K. Rudenko, N.I. Timofeev, G.F. Kuzmenko	Volume Diffusion and Magnetic State of Iron, Cobalt and Rhodium in Single Crystals of Iridium
P2-12	P. Laitinen, J. Likonen, I. Riihimaki and J. Raisanen	Implantation Fluence Effect on As Diffusion in Relaxed SiGe
P2-13	Ch.-G. Lee, R. Nakamura, T. Shimozaki, T. Okino	Interdiffusion in Fe/Pt Bulk Diffusion Couples
P2-14	C. Legros, B. Lesage, M. Kilo, G. Borchardt	Lanthanide Diffusion in Single Crystalline and Polycrystalline pure or Yttrium-Doped alpha-Alumina
P2-15	O.B. Bodnar, I.M. Aristova, A.A. Mazilkin, L.N. Pronina, A.N. Chaika	Non-Destructive Methods of Diffusion Parameters Determination in Solid States
P2-16	M. Salamon, S. Dorfmann, D. Fuks, H. Mehrer	Interdiffusion and Aluminum Self-Diffusion in Iron-Aluminides
P2-17	Y. Nose T. Ikeda, H. Nakajima, H. Numakura	Tracer Diffusion of Fe and Pd in FePt and FePt3
P2-18	L.N. Paritskaya, S.V. Kornienko, V.V. Bogdanov	"Up-Hill" Interdiffusion and Accompanying Effects in Ternary Cu-Ni-5 at. % Sn(In) Systems
P2-19	R.A. Perez, D.N. Torres, F. Dyment and M. Weissman	Ferromagnetic Influence on alfa-Fe Diffusion
P2-20	M. Radecka and M. Rekas	Chemical Diffusion and Ionic Conduction in TiO2
P2-21	I. Riihimaki, P. Laitinen, and J. Raisanen	Impurity Diffusion of 66Ga in Relaxed Intrinsic Si1-xGex
P2-22	Sh. Obeidi, N.A. Stolwijk	Ion Tracer Diffusion and Electrical Conductivity in a PEO-NaI Polymer Electrolyte
P2-23	O. Taguchi, Y. Iijima, S. Suzuki, R. Nakamura, A. Hirano, H. Kono	Application of Grow Discharge Spectrometry for Impurity Diffusion in Pure Iron
P2-24	M.A. Taylor, M. Kilo, Chr. Argirusis, G. Borchardt, I. Valov, C. Korte, J. Janek, T.C. Rodel, M. Lerch	Nitrogen Tracer Diffusion in Yttria Doped Zirconium Oxy-nitride
P2-25	J. Vacik, U. Koster, J. Cervena, G. Lenk	Diffusion of Li and B in Refractory Materials Studied with the Neutron Depth Profiling Technique
P2-26	H. Wolf, F. Wagner, Th. Wichert, and ISOLDE collaboration	The Role of Intrinsic Defects for the Diffusion of Ag and Cu in CdTe
P2-27	H.-I. Yoo and C.-E. Lee	Chemical diffusivities of donor-doped BaTiO3
P2-28	I.V. Belova, M.J. Brown and G.E. Murch	Analysis of the Time Dependence of Demixing of Oxides (A,B)O in an Oxygen Potential Gradient and an Electric Field
P2-29	N. Bouzroura, A. Raho and M. Kadi-Hanifi	Influence of the Lacunar Diffusion on the Initial Stages of Precipitation of Supersaturated Cu-2%Be-0.3%Cd Solid Solution
P2-30	E. Clouet, M. Nastar and C. Sigli	A Monte Carlo Study of Kinetics of Precipitation in Al-Zr-Sc Alloys
P2-31	D.S. dos Santos, V.M. Azambuja, S. Miraglia and D. Fruchart	Effects of High Hydrogen Pressure and Fugacity on a Pd90Pt10 Alloy
P2-32	K. Barmak, V.R. Sidorko, A.V. Samelyuk, V.I. Dybkov	Formation of Intermetallic Layers at the Interface of Iron-chromium Alloys and Molten Aluminium
P2-33	K. Barmak, V.G. Khoruzha, K.E. Meleshevich, V.I. Dybkov	Diffusion Coefficients of Iron and Chromium from Fe-Cr Alloys into Molten Aluminium
P2-34	A. Ekrami, S. Moeinifar and A.h. Koukabi	Transient Liquid Phase Diffusion Bonding of Nickel Base Superalloy Rene 80
P2-35	R. Filipek, M. Danielewski, E. Tyliszczak, S. Datta	Thermal Stability of NiAl-base Coatings for High Temperature Applications
P2-36	C.-C. Fu, J. Dalla Torre, F. Willaime, J.-L. Bocquet and A. Barbu	Multi-scale Modeling of Isochronal Resistivity Recovery Experiments of Electron-Irradiated alpha-Fe
P2-37	D.S. Gertzricken, A.M. Gusak, V.F. Mazanko, T.V. Zaporozhets	Phase Formation under Pulse Loading

P2-38	C. Hin, F. Soisson, Ph. Maugis	Atomic Monte Carlo Simulations of Homogeneous and Heterogeneous Precipitation of NbC in Steels
P2-39	M.M.A. Imran, M. Abu-Samak	Phase Transformations Study of Se98In1.5Sn0.5 Chalcogenide Glass before and after Slow Neutron and High Energy C12 Ion Irradiation.
P2-40	I. Beszeda, D.L. Beke, Yu. Kaganovskii, D. Ianetz	Calculation of Surface Self-diffusion Coefficients from AES Data on Decay of Thin Metal Films
P2-41	Ya. Matychak, V. Fedirko, O. Yeliseyeva, V. Tsisar	Peculiarities of Diffusion Mass Transfer in System Fe[Cr]-Pb[O]
P2-42	A. Mazilkin, O. Kogtenkova, B. Straumal, R. Valiev, B. Baretzky	Decomposition of Solid Solution and Formation of Nanostructure During High-PressureTorsion of Al?Zn, Al?Mg and Al?Zn?Mg Alloys
P2-43	F. Muktepavela, N. Zaporina	The Role of Diffusion in Superplasticity and Brittleness of Fine-grained Binary Eutectics
P2-44	J.V. Osinskaya, A.V. Pokoev	Ageing Kinetics of Beryllium Bronze in the Constant Magnetic Field
P2-45	A.V. Pokoev, D.I. Stepanov.	An Opportunity of Introduction of Critical Indices at the Description of Nickel- 63 Diffusion in Monocrystal Siliceous Iron in a Constant Magnetic Field
P2-46	A. Raho, N. Bouzroura, M. Kadi-Hanifi	Determination of Diffusion Coefficient in Al-Li Alloy
P2-47	O. Kozlova and A. Rodin	Liquid Gallium Penetration along Grain Boundaries in pure Al and Al-Ga Alloys.
P2-49	N. Chaabane, L. Schmirgeld-Mignot , H. de Monestrol, S. Poissonnet and G. Martin	Role of Cu at the Ni-Ag interface on the Reactive Solid State Dewetting by Cavitation in the System Ag-Ni-O
P2-50	E.A. Smirnov	The Peculiarities of the Radiation - Enhanced Diffusion Processes in Metals with Consideration of the Impurities and Grain Boundaries Effects
P2-51	B. Szabat, A. Jurlewicz	Temperature Dependent Cluster Model of the Cole-Davidson Relaxation Response
P2-52	Y. Cao, J.A. Szpunar and W. Shmayda	Effects of Grain Size and Grain Boundary Character Distributions (GBCD) on Hydrogen Permeation in Nickel Membranes
P2-53	I. Wierszyllowski, S. Wieczorek	Ageing Kinetics of Al.-4.7 % Cu Alloy. Dilatometric And DTA Studies.
P2-54	W.-B. Lee, Y.-M. Yeon, S.-B. Jung	The evaluation of the recrystallized grains in the friction stir welded 6061 Al alloys
P2-55	W.-B. Lee, Y.-M. Yeon, Y.-J. Kim, S.-B. Jung	Bonding interface in friction welded Al alloys and carbon steel after annealing heat treatment.
P2-56	W. Kucza, H. Woznica	Diffusion in Multicomponent and Multiphase System, Modeling of Zinc Hot-dip Galvanizing Process
P2-57	N.T. Bagraev, L.E. Klyachkin, A.M. Malyarenko, A.S. Shcheulin, A.I. Ryskin	p+-CdB2 - n-CdF2 and p+-Si - p-CdB2 - n-CdF2 Diffusion Heterostructures
P2-58	V. Rothova, J. Cermak	Diffusion as Stability-limiting Factor in FINEMET Type Materials
P2-59	S. Divinski, F. Hisker, Y.-S. Kang, J.-S. Lee and Ch. Herzig	Diffusion and Segregation in Nanocrystalline gamma-Fe-Ni Alloy of a Two-Scale Microstructure
P2-60	Y. Cao, H. Li, J.A. Szpunar and W. Shmayda	Anisotropic Characteristics of Hydrogen Permeation in Nano/Poly Crystalline-Nickel Membranes
P2-61	F. Nemouchi, D. Mangelinck, C. Bergman, P. Gas, U. Smith, S.-L. Zhang	Differential Scanning Calorimetry Analysis of the Formation of Nanometric Ni Silicide Thin Films on Si Substrate
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