[NIMS Conference 2012] Poster Presentation List

2012.5.29

1. Advanced Microstructural Characterization and Modeling

Poster No.	AID	First Name	Last Name	Affiliation/Company	Presentation Title
P1-01	A0099	Taisuke	Sasaki	NIMS	Correlative Multi-Scale Characterization of Nd-Fe-B Sintered Magnet
P1-02	A0013	Jin	Kawakita	NIMS	3D/4D Analyses of Stress Corrosion Cracking (SCC) in Stainless Steel
P1-03	A0008	Yusuke	Noda	Nagoya Institute of Technology	Three-dimensional Visualization of the Wear-structure of Al-Al_3Ti Functionally Graded Materials
P1-04	A0088	Yuri	Tanaka	Kyushu University	TEM Studies of Disorder-Order Transformation in $Fe_{45}Pd_{55}$ Alloy under Magnetic Field
P1-05	A0045	S.Q.	Wu	NIMS	The Relationship between ß-twinning Structure and Plate-like ω Phase in Ti-Nb Alloys
P1-06	A0081	Yamato	Mishiro	The University of Tokyo	Effect of Stress on Variant Selection of Lath Martensite in Low-carbon Steel
P1-07	A0063	Banafsheh	Karbakhsh Ravari	Kyushu University	Evaluation of Transformation Sequence of Multistage Martensitic Transformation (MMT) in Aged Ti-50.8 at.%Ni Alloy by Using of *in-situ* SEM Observations
P1-08	A0087	Shunichi	Motomura	Kyushu University	Detection of Local Elastic Strain in Pearlite Steel by Using a SEM-AsB Image
P1-09	A0090	Ki Hyuk	Kwon	Graduate Institute of Ferrous Technology, POSTECH, KOREA	*In-situ* Study on Deformation Behavior of Austenite-Base Duplex High Mn Steels
P1-10	A0060	Mayumi	Ojima	The University of Tokyo	Stress Partitioning Behavior in SUS316/WT780C Multilayered Steels
P1-11	A0046	Brian Richard	Pauw	NIMS	Multidimensional Nanostructure Information Retrieval from Anisotropic Small-Angle Scattering Pattern Analysis
P1-12	A0049	Pawel	Kozikowski	NIMS	SAXS Studies of Precipitation Processes in Nanostructured 7475 Aluminium Alloys
P1-13	A0033	Duancheng	Ma	Max-Planck Institut für Eisenforschung GmbH	Ab-initio Investigations of Solid Solution Strengthening in Aluminum Alloys: Dependence on Strengthening Parameters and Design Limit
P1-14	A0067	Sujit Kumar	Bidhar	NIMS	Empirical Method for Prediction of Fatigue Crack Initiation in Aluminum Pressure Die Castings
P1-15	A0096	Ikumu	Watanabe	NIMS	Geometry Extraction of Microstructure from EBSD Data for Crystal Plasticity Finite Element Analysis
P1-16	A0080	Gaku	Nakamura	Department of Systems Design Engineering, Seikei University	Computational Optimization of Microscopic Morphology for Multi-Component Elastoplastic Solids
P1-17	A0038	Keita	Goto	University of Tsukuba	Development of Free Edge Analysis Method for CFRP Laminates Based on a Homogenization Theory
P1-18	A0047	Naoya	Honda	University of Tsukuba	A Homogenization Theory for Elastic-Viscoplastic Analysis of Twill-Woven Composites
P1-19	A0048	Naoto	Kubota	University of Tsukuba	Microscopic Interlaminar Stress Analysis of Angle-ply CFRP Laminates
P1-20	A0086	Ryutaro	Daimon	Tokyo University of Science	Interaction Integral Method for the Quadratic Tetrahedral Finite Element with Correction Terms and Its Application to a Practical Structural Integrity Analysis System
P1-21	A0014	Machiko	Ode	NIMS	Numerical Prediction of Eutectic Temperature using a Multi-phase-field Model
P1-22	A0015	Kiyoshi	Hashimoto	NIMS	Development of the NIMS Thermodynamic Database for the Fe-based Systems
P1-23	A0072	Tetsuro	Suzuki	NIMS	Molecular Dynamics Study on the Route from Martensite to Spin Glass Transition
P1-24	A0082	Masao	Arai	NIMS	Numerical Study of Quantized Hall Conductance for Multi-Band Tight-Binding Models
P1-25	A0061	Kazuaki	Kobayashi	NIMS	Norm-Conserving Pseudopotential Database (NCPS2K): To add Rare-Earth Elements
P1-26	A0070	Taizo	Sasaki	NIMS	First-principles Study of the Ionic Conduction in La-Si-O Compound
P1-27	A0073	Shigeru	Suehara	NIMS	Fe_3C Thermal Expansion from the First-principles Density Functional Perturbation Theory

1. Advanced Microstructural Characterization and Modeling (continued)

Poster No.	AID	First Name	Last Name	Affiliation/Company	Presentation Title
P1-28	A0075	Hideyuki	Ohtsuka	NIMS	Effects of Carbon on Magnetic Properties and Structures in Fe-Based Alloys
P1-29	A0083	Mohammad	Khazaei	NIMS	High-pressure Phase Transitions of Hydrogen Cyanide and Cyanogen Molecules
P1-30	A0074	Jun-ichi	Inoue	NIMS	Adiabatic Photo-steering Theory of Electron Berry Phase in Low-Dimensional Insulating Systems
P1-31	A0103	Tsuyoshi	Miyazaki	NIMS	Development of a Large-scale First-principles Calculation Method for Complex Systems
P1-32	A0105	Jun	Nara	NIMS	Mechanism of Halogen Atom Diffusion on Si(111) Surface

2. Materials for Harsh Environment

Poster No.	AID	First Name	Last Name	Affiliation/Company	Presentation Title
P2-01	A0062	Wenjian	Sun	Fengtian Hospital Affiliated to Shenyang Medical College	The Thermodynamic Effects of Dextran 40
P2-02	A0076	Michal Jerzy	Wozniak	Warsaw University of Technology	Composite Scaffolds for Bone Tissue Regeneration Based on Biodegradable Polymers and Nanoceramic, Study of Structure and Effect on Living Cells
P2-03	A0053	Hiroyuki	Saito	NTT	Corrosion Rate of Metal in Concrete under Oxygen Supply Controlling Condition
P2-04	A0002	Sachiko	Hiromoto	NIMS	Corrosion Protection of AZ31 Magnesium Alloy by a Calcium Phosphate Coating
P2-05	A0100	Jayaprakash	Murugesan	Niigata Industrial Creation Organisation (NICO)	Fretting Fatigue Behavior of 304 Stainless Steel under High Temperature Environment
P2-06	A0025	Rafal Maksymilian	Molak	NIMS	Influence of Warm Spraying Parameters on Microstructure and Mechanical Properties of Ti-6Al-4V Coatings
P2-07	A0041	Yuta	Moriya	NIMS	Effect of Heat Treatment on Mechanical Properties of Warm Sprayed WC-Co Coatings
P2-08	A0042	Takeru	Mori	NIMS	Process Dependence of Bond Coat for Oxidation Resistance in the TBC System
P2-09	A0077	Ryo	Zempo	Shibaura Institute of Technology/NIMS	Oxidation Resistant coatings for new heat resistant Ti-based alloys
P2-10	A0079	Yoshitaka	Matsumura	Shibaura Institue of Technology	Development of Pt-Based Two Layered Coating for Oxidation Resistance
P2-11	A0078	Kazuki	Kasai	Shibaura Institute of Technology/NIMS	Effect of Thermal History on Microstructural Changes in Aluminized Nickel Based Single Crystal Superalloy
P2-12	A0084	Daishi	Ohtsubo	Shibaura Institute of Technology	Development of Novel Aluminizing Process for Ir Using Ni-Al Alloy Powder
P2-13	A0001	Takashi	Murakami	AIST	Microstructure of Gray Cast Iron Substrates Coated by Pack Cementation Methods
P2-14	A0091	Fahamsyah Hamdan	Latief	Tokyo Metropolitan University	Role of Detrimental Zone on Creep Behavior of Aluminized Ni-base Single Crystal Superalloys in (100) and (110) Orientations
P2-15	A0007	Kenta	Takeshima	Osaka Prefecture University	Effect of Solute Fe on High Temperature Deformation of High-purity Al
P2-16	A0094	Satoru	Kobayashi	NIMS	The Effect of Grain Boundary Precipitates on High Temperature Strength in Fe_3Al Based Alloys
P2-17	A0023	Yoshiaki	Toda	NIMS	Innovative Ferritic Heat-resistant Steels for Advanced High Efficiency Power Plants
P2-18	A0026	Yoshito	Sugino	Hokkaido University	The Role of Grain Boundary Deformation at High Temperature in ODS Ferritic Steels
P2-19	A0058	Wenlong	Xiao	NIMS	Development of Near-α High Temperature Ti Alloys
P2-20	A0020	Dehai	Ping	NIMS	High Temperature Ti-Al-Sn-Zr Alloys with Addition of Sc

3. Physical Metallurgy and Materials Reliability for Robust Infrastructures

Poster No.	AID	First Name	Last Name	Affiliation/Company	Presentation Title
P3-01	A0059	Kyohei	Tashima	Kumamoto University	Observation of Local Plastic Deformation in the Vicinity of Grain Boundary Using Nano-indentation Technique
P3-02	A0095	Kaoru	Sekido	University of Tsukuba	Effect of Dislocation Density on Plasticity Initiation of Low Carbon Steels
P3-03	A0097	Katsuya	Nakano	University of Tsukuba, NIMS	Analysis of the Initiation of Plastic Deformation in Fe-C Alloys
P3-04	A0012	Ling	Zhang	NIMS	Real Time Observation of Dislocation Nucleation by in situ Compression in Transmission Electron Microscopy
P3-05	A0102	Harsh	Maheshwari	NIMS	Experiments and Modelling to Understand Deformation of Micropillar Samples of Brittle Materials
P3-06	A0032	Xiaohua	Min	NIMS	Martensitic Transformation Reversibility in Polycrystalline Fe-Mn-Si Shape Memory Alloys
P3-07	A0010	Byoung-Soo	Lee	Tohoku University	Strain-Induced Martensitic Transformation in Deformed Co-Cr-Mo-N alloy
P3-08	A0043	Imran Muhammad	Khan	University of Tsukuba	Effects of Thermomechanical Treatment on the High Temperature Shape Memory Characteristics of a TiNiPdCu Alloy
P3-09	A0031	Yoko	Yamabe-Mitarai	NIMS	High Temperature Shape Memory Alloys
P3-10	A0028	Abdul	Wadood	NIMS	Study on Mechanical, Shape Memory and Psuedoelastic Properties of β Titanium Alloys for Advanced Materials Applications
P3-11	A0021	Xuejiao	Chen	NIMS	Evolution of Twin Structure and Its Effect on Work Hardening in β Titanium Alloys
P3-12	A0024	Haotian	Ni	NIMS	Aging Hardening Behavior by Isothermal ω Phase in β Titanium Alloys
P3-13	A0065	Satoshi	Emura	NIMS	Effect of Heterogeneous Mo Distribution on Mechanical Properties in Ti-Mo Alloys
P3-14	A0036	Julian	Rosalie	NIMS	The Effect of Size and Distribution of Rod-shaped β1' Precipitates on the Strength and Ductility of Mg-Zn(-Y) Alloys
P3-15	A0019	Alok	Singh	NIMS	Isotropic Ultra-high Strengths Combined with Ductility Obtained by Simple Processing of Mg-Zn-Y Alloys Containing Quasicrystal Phase
P3-16	A0005	Ren	Ito	Osaka Prefecture University	Influence of Local Structure Change on Plastic Deformability in Zr-based Ternary Metallic Glasses
P3-17	A0093	Masahiro	Yamada	University of Hyogo	Compressive Deformation of Zr-Cu-Ni-Al-(Pd, Pt, Au or Ag) Bulk Metallic Glasses
P3-18	A0039	Nozomu	Adachi	Toyohashi university of technology	Mechanical Property Evolution of $Zr_{50}Cu_{40}Al_{10}$ Bulk Glassy Alloy Deformed by High-pressure Torsion Straining
P3-19	A0022	Fanqiang	Meng	NIMS	Effect of High-Pressure Torsion on Deformation Mode in Bulk Metallic Glass
P3-20	A0035	Akihide	Hosokawa	NIMS	Microstructure and Magnetic Properties of Bulk Nanostructured Materials Produced by High Pressure Torsion
P3-21	A0034	Tiantian	Li	NIMS	Nanostructure Formation and Disordering in Fe_2VAl Heusler Compound
P3-22	A0029	Baozhen	Jiang	NIMS	Effect of HPT Deformation and Aging on Mechanical Properties in Ti15Mo Alloy
P3-23	A0030	Dayangku Noorfazidah	Awang Shri	NIMS	Surface Characteristic and Protein Adsorption Behavior on HPT-deformed TiNi Alloys
P3-24	A0052	Qingsong	Mei	NIMS	Microstructure Responses of Metallic Materials Processed by Surface Mechanical Deformation
P3-25	A0098	Arockiakumar	Raju	NIMS	Thermo-mechanical Behavior of ECAE Processed Ti-34Nb-0.14O Shape Memory Alloy
P3-26	A0040	Yoshikazu	Todaka	Toyohashi University of Technology	Pressure-Induced Phase Transformation Behavior in α-Mn Steels by High-Pressure Torsion Straining

3. Physical Metallurgy and Materials Reliability for Robust Infrastructures (continued)

Poster No.	AID	First Name	Last Name	Affiliation/Company	Presentation Title
P3-27	A0044	Toshiyuki	Nishimura	NIMS	Pulsed Electric Current Sintering of Aluminum Nitride Nanoceramics
P3-28	A0018	Hideaki	Tsukamoto	Nagoya Institute of Technology	Micro-and Macro-mechanical Properties of Aluminum/ Duralumin Multi-layered Clad Structures with Interface Compositional Gradient Fabricated by Hot Rolling
P3-29	A0017	Hideaki	Tsukamoto	Nagoya Institute of Technology	ZrO_2/Ti Functionally Graded Materials Fabricated by Spark Plasma Sintering
P3-30	A0009	Akira	Mizuno	Nagoya Institute of Technology	Optimization of Process Conditions for Cu-Diamond Grinding Wheel Fabrication by a Centrifugal Mixed-powder Method
P3-31	A0069	Naoki	Nihei	Nihon University	Fabrication of Alumina Film with Cylindrical Pores by Rapid Solidification in Hydrogen Atmosphere
P3-32	A0068	Junwoo	Lee	Nihon University	Fabrication of Bi-Modal Porous Clay Mineral by Unidirectional Solidification of Clay Mineral Water Solution Containing CO_2 Gas and Its Freeze Dry method
P3-33	A0071	Masaki	Koba	The University of Tokyo	Bonding Interface Formation between Mg Alloy and Steel by LIQUID-PHASE BONDING using Ag Interlayer
P3-34	A0006	Hideaki	Iwami	Osaka Prefecture University	Influence of Solute Atoms on Minimum Grain Size after Friction Stir Processing in High-purity Al
P3-35	A0027	Kunika	Yamanaka	Nagoya Institute of Technology	Development of a Grain Refiner Using $L1_2$ Intermetallic Compounds for Al Casting Alloys
P3-36	A0003	Norihiro	Suzuki	NIMS	Fabrication of Metal Oxides Thin Films with Large Spherical Mesopores
P3-37	A0037	Hideyuki	Nakanishi	NIMS	Nanostructured Metallic Materials for Electronic Applications
P3-38	A0050	Prathik	Roy	National Taiwan University	Highly Sensitive Detection of Glucose using Enzyme Mimics of Iron Telluride Nanorods
P3-39	A0092	Tue Chi	Dao	Institute of Materials Science, Vietnam	Analyzing the Reason Leading to Failures of Motorbike Steering Head Pipe That Occurred during Manufacture Process
P3-40	A0066	Nobuhiko	Kyokuta	The University of Tokyo	Fracture Toughness Evaluation of Thin Fe-Al Intermetallic Compond Layer at Reactive Interface between Dissimilar Metals
P3-41	A0055	Sho	Ikeda	The University of Tokyo	Quantitative Non-destructive Evaluation of Crack in Thin Plate Using Laser Induced Ultrasonic Waves
P3-42	A0051	Takayuki	Shiraiwa	The University of Tokyo	Development of Wireless Stress-memory Patch for Fatigue Damage Monitoring
P3-43	A0016	Kimiyoshi	Naito	NIMS	Tensile Properties of Polyacrylonitrile-based Carbon Fiber Epoxy Impregnated Bundle Composites at High Strain Rate
P3-44	A0085	Yoshihisa	Tanaka	NIMS	Fatigue Damage Evolution and Degradation of Mechanical Properties in the Hybrid CFRP
P3-45	A0056	Takashi	Yasutomi	The University of Tokyo	Quantitative Evaluation of Detwinning Mechanism in Extruded AZ31 Mg Alloy by AE Method
P3-46	A0054	Hitoshi	Kuriki	The University of Tokyo	Laser AE Monitoring and Thermal Stress Analysis during Plasma Spraying of Thermal Barrier Coatings
P3-47	A0057	Mitsuharu	Shiwa	NIMS	Research Cooperation between NIMS-AIST-JAXA for Nondestructive Materials Reliability Evaluation