

Posters

Poster sessions will be held at the Poster area located at the underground level. All posters should be put up on Tuesday and should remain at display until Thursday evening. Odd-numbered posters should be presented by the author(s) on Tuesday, while even-numbered posters on Thursday.

Novel approaches

- P1 Parameter Optimization in MD Simulations by Using a Genetic Algorithm
L. Briquet, L. Angibaud, P. Philipp, J. Kieffer, T. Wirtz

Sputtering

- P2 Molecular Dynamics Simulation of Surface Deformation via Ga⁺ Ion Collision Process
Shin-ichi Satake, Akinori Fukushige, Shun Yamashina, Masahiko Shibahara, Sadao Momota, Jun Taniguchi
- P3 Cluster Formation at Self-sputtering of Cu(001) Surface
A. A. Dzhurakhlov, A. X. Rasulov, S. E. Rahmatov, V. G. Stelmakh, I. D. Yadgarov
- P4 Synergy in Sputtering of Copper Nanoclusters on Graphite Substrate at Low Energy Cu₂ Bombardment
G. V. Kornich, G. Betz, V. G. Kornich, V. I. Shulga, Oleksandr. A. Yermolenko
- P5 Molecular Dynamics Simulations of Low Energy Argon Ion Sputtering of Copper Clusters on Polyethylene Surfaces
Oleksandr A. Yermolenko, G. V. Kornich, G. Betz
- P6 Effect of Impact Angle on Sputtering of Thick Benzene by Large Ar Clusters.
Bartłomiej Czerwinski, Łukasz Rzeznik, Robert Paruch, Barbara J. Garrison, Zbigniew Postawa
- P7 Computer Modelling of Continuous Bombardment of Ag(111) by keV C₆₀ Clusters
Robert Paruch, Łukasz Rzeznik, Bartłomiej Czerwinski, Barbara J. Garrison, Zbigniew Postawa
- P8 Stopping of Clusters in Solids
Christian Anders, Gerolf Ziegenhain, Herbert M. Urbassek

Surface phenomena/topography

- P9 Topography Simulation of Sputtering Using an Algorithm with Second Order Approximation in Space
Matthias Budil, Gerhard Hobler
- P10 Ion Milling and Ion Implantation In MBE MCT
A. V. Voitsekhovskij, D. V. Grigorjev, A. P. Kokhanenko, A. G. Korotaev, N. H. Talipov, I. I. Izhnin
- P11 Depth Distribution of the Cobalt in Rutile (TiO₂) Implanted to High Fluences
A. A. Achkeev, R. I. Khaibullin, L. R. Tagirov, A. Mackova, V. Hnatowicz

Electronic stopping

- P12 The Effect of Some Effective Quantities to Electronic Stopping Power
Hasan Gümüş, Önder Kabaday
- P13 Approaches for Development of Fast Monte-Carlo Code For Calculation of The Electron Stopping in Substance
V.A.Astapenko, V.V.Berezovskii, P.L.Menshikov, L.I.Menshikov
- P14 Simulation of Incoherent Bremsstrahlung in Flat and Deformed Crystals
V. V. Syshchenko, A. I. Tarnovsky, V.A. Astapenko
- P15 Comparison Between Monte Carlo and Experimental Aluminium and Silicon Electron Energy Loss Spectra
Maurizio Dapor, Lucia Calliari, Giorgina Scarduelli

Emission of electrons and ions

- P16 Backscattered Electrons from Surface Films Deposited on Bulk Targets: a Comparison Between Computational and Experimental Results
Maurizio Dapor, Nicola Bazzanella, Laura Toniutti, Antonio Miotello, Stefano Gialanella
- P17 Kinetic Excitation of Solid Surfaces: the Influence of Projectile Impact Angle
S. Hanke, A. Duvenbeck, B. Weidtmann, A. Wucher

Photon/electron stimulated processes

- P18 Numerical Study of Formation Mechanisms of Periodic Surface Structures Induced on Silicon under Femtosecond Laser Irradiation
Thibault JY. Derrien, Rémi Torres, Thierry Sarnet, Marc Sentis, Tatiana E. Itina
- P19 Monte Carlo Calculation of Electron Dose Point Kernels in Water Using Different Transport Approximations
Christos Bousis, Dimitris Emfietzoglou, Panagiotis Hadjidoukas, Hooshang Nikjoo, Anand Pathak
- P20 Hybrid Continuum-atomistic Simulations for Ultrashort Pulsed Laser Ablation
A. Maeyens, A. A. Dzhurakhalov, W. Wendelen, A. Bogaerts

Nanostructures

- P21 Mechanism of Anisotropic Damage Creation Around the Track of a Sub-surface Channeled Ion
Yudi Rosandi, Alex Redinger, Thomas Michely, Herbert M. Urbassek
- P22 Molecular Dynamics Simulation of Nanoscale Track Formation by Swift Heavy Ions in Zircon
Pedro A. F. P. Moreira, Ram Devanathan, Jianguo Yu, William J. Weber
- P23 Nanocluster Modification by Swift Heavy Ion Tracks
Olli Pakarinen, Aleksi Leino, Flyura Djurabekova, Kai Nordlund
- P24 Spatio-temporal Dynamics of Ion Tracks in Silicon
A. Akkerman, M. Murat, J. Barak

- P25 Compaction and Structural Disorder Induced by Swift Heavy Ion Irradiation on Silica (α -SiO₂): an MD Approach
L.P. Dávila, M.-J. Caturla
- P26 Modeling Damage Accumulation in Fe and Fe-Cr Alloys Irradiated with Ions
D. Díaz, M.-J. Caturla, M. Hernández-Mayoral, M. Victoria, J. M. Perlado
- P27 Simulation of End-bridge-like Radiation Defects in Carbon Multi-wall Nanotubes
A. M. Ilyin

Materials for nuclear and fusion industry

- P28 First-principles Study of Point Defects and Oxygen Self-diffusion in Uranium Dioxide
Boris Dorado, Michel Freyss, Marjorie Bertolus
- P29 Modelling He in Pu
M. Robinson, S. D. Kenny, R. Smith, M. T. Storr
- P30 Ab-initio Modelling of W-Ta and W-V Alloys for Fusion Applications
M. Muzyk, D. Nguyen-Manh, K. J. Kurzydowski, N. L. Baluc, S. L. Dudarev
- P31 Stress Effects on Stability and Diffusion of H in Intrinsic W: a First-principles Study
Wenyong Li, Ying Zhang, Hong-Bo Zhou, Shuo Jin, Guang-Hong Lu, Tianmin Wang
- P32 First-principles Study of Hydrogen Behavior in V-4Ti-4Cr Alloy
Pengbo Zhang, Jijun Zhao, Ying Qin, Bin Wen
- P33 Fission-fusion Mixed Neutron Field
Deng Yong-jun, Li Run-dong, LIU Yong-kang, FENG Qi-jie
- P34 First-principles Investigation on the Effect of Carbon on Hydrogen Trapping in Tungsten
Shuo Jin, Yue-Lin Liu, Hong-Bo Zhou, Ying Zhang, Guang-Hong Lu

Metals and alloys

- P35 Mobility of Self-interstitial Defects and Small Dislocation Loops in Fe-Cu-Ni Alloys: Model Alloy for RPV Steels
G. Bonny, D. Terentyev, V. Jansson, N. Castin
- P36 The Importance of the Interaction Radius Between Cr and Self-interstitial Fe in Object Kinetic Monte Carlo Calculations of Irradiated Fe-Cr Diluted Alloys
L. Gámez, B. Gámez, M. J. Caturla, D. Terentyev, L. Malerba, J. M. Perlado
- P37 Computer Simulation of Radiation Damage in Fe-Cr Alloy Produced by Neutron
W. Zhou, Y. K. Liu, D. Z. Qian
- P38 Surface and Grain Boundary Segregation in Low Cr Fe-Cr Alloys: the Effect of Radiation Induced Vacancies Studied by Metropolis Monte Carlo Simulations
E. E. Zhurkin, M. Hou, J. Kuriplach, T. Ossowski, A. Kiejna

P39 Radiation-induced Formation, Annealing and Ordering of Voids in Crystals: Theory and Experiment
V. I. Dubinko, A. G. Guglya

P40 Vacancies at Tilt $\Sigma 5$ (210) and $\Sigma 3$ (111) Grain Boundaries in Iron-Chromium System
J. Kuriplach, E. E. Zhurkin, T. Ossowski, M. Hou, A. Kiejna

Ceramics

P41 The Role of Y_2O_3 for Ods Anti-irradiation Property Revealed by Ab Initio Calculations
Y. D. Ou, W. S. Lai

P42 Nucleation and Growth of Self-interstitial Atom Clusters in β -SiC During Irradiation
Y. Watanabe, K. Morishita, Y. Yamamoto

Other phenomena

P43 Modeling Resistivity Recovery Experiments with Event-based Monte Carlo: Beyond the Binary Collision Approximation
T. Luypaert, M. C. Marinica, T. Jourdan, A. Donev, V. V. Bulatov

P44 MD Study on Carbon Film Deposition
T. Muramoto, T. Hyakutake, M. Nishida, T. Kenmotsu

P45 Molecular Dynamics Simulations of Effects of High Electric Fields on Metal Nanotips
Stefan Parviainen, Flyura Djurabekova, Kai Nordlund

P46 Genetic Optimization of Noble Gas Clusters Doped with Metal Ions
Tomasz M. Gwizdała

P47 Free Volume Evolution in 50 MeV Li_3^+ Ion Irradiated Polymers Studied by Positron Annihilation Lifetime
Paramjit Singh, Rajesh Kumar, Amit Kumar, Poonam Bhatt, R. G. Sonakwade, F. Singh, D. Das, Rajendra Prasad

P48 Physical and Chemical Response of 145 MeV Ne^{+6} Ion Irradiated Polymethylmethacrylate (PMMA) Polymer
Rajesh Kumar, S. A. Ali, Paramjit Singh, Udayan De, H. S. Virk, F. Singh, R. G. Sonkawade, Rajendra Prasad

P49 Rietveld Computer Simulation of Nanostructural Perovskite Manganite by X-Ray Beam Scattering
G. Batdemberel, Yongfa Zhu, R. E. Dinnebier, P. Munkhbaatar, D. Sangaa, Sh. Chadraabal, T. Galbaatar

P50 Estimation of the Detection Efficiency for Cr-39 NTDs and the Calibration Factor for Different Dosimeter for Radon and Thoron Gas
Asaad H. Ismail, M. S. Jafaar

P51 Mass Dependence of Sputtering Characteristics for a Number of Metals with Different Properties
E. Yu. Zykova, A. S. Mosunov, V. E. Yurasova