

## Poster Session C

### Poster Session C – Thursday, Sept. 3

- P-C01 **Structural transformations in delta-phase  $\text{Sc}_2\text{O}_3\text{:ZrO}_2$  compounds induced by light ion irradiation**  
Zhang, Wang, Tang, Valdez, Sickafus
- P-C02 **Effects of composition on the behaviour of pyrochlores irradiated with swift heavy ions**  
Moll, Sattonnay, Thomé, Legros, Decorse-Pascanut, Monnet
- P-C03 **First principles calculations of defect migration in UN nuclear fuels**  
Rashkeev, Kotomin, Mastrikov
- P-C04 **Study of the structural modifications induced by He implantation in zirconia**  
Velisa, Vincent, Debelle, Thomé, Pantelica, Declémy
- P-C05 **EDS analysis of loops induced into stabilized YSZ single crystals irradiated with neon ions at high temperatures**  
Hojo, Yasuhara, Furuno, Yamamoto, Hojou
- P-C06 **The Effects of Gamma-ray Irradiation on Electrical Resistivity of Zr-based Bulk Metallic Glass**  
Ahmad Shah
- P-C07 **Damage evolution in Au-implanted titanate pyrochlores**  
Zhang, Xiang, Jagielski, Thome, Weber
- P-C08 **Radiation defects behavior in oxide nuclear fuels: first principles modelling and helium release measurements**  
Gryaznov, Kotomin, Rashkeev, Maugeri, Wiss
- P-C09 **Clarification of high density electronic excitation effects on the microstructural evolution in  $\text{UO}_2$**   
Sonoda, Kinoshita, Ishikawa, Sataka, Iwase, Yasunaga
- P-C10 **Thermal annealing of induced fission tracks in uranium-doped apatites**  
Carpena, Lacout
- P-C11 **Radiation damage and intermixing in layered thin film  $\text{MgO}$  and  $\text{HfO}_2$  structures.**  
Usov, Valdez, Won, Devlin, Jarvinen, Sickafus
- P-C12 **Irradiation damage in  $\text{CeO}_2$  irradiated with high-energy heavy ions**  
Ishikawa  
MOVED TO POSTER SESSION A
- P-C13 **Swift Heavy Ion Irradiation-induced Microstructure Modification of two Delta-phase Oxides:  $\text{Sc}_4\text{Zr}_3\text{O}_{12}$  and  $\text{Lu}_4\text{Zr}_3\text{O}_{12}$**   
Tang, Kluth, Zhang, Uberuaga, Reichhardt, Sickafus
- P-C14 **Irradiation Damage Effects in Uranium-Bearing Delta-phase Oxides ( $\text{A}_6\text{U}_1\text{O}_{12}$  and  $\text{A}_6\text{U}_2\text{O}_{15}$ )**  
Tang, Holliday, Valdez, Jiang, Dickerson, Dickerson, Uberuaga, Wang, Czerwinski, Sickafus  
WITHDRAWN
- P-C15 **Structural transformations in pyrochlore compounds induced by light ion irradiation**  
Li, Wang, Tang, Valdez, Sickafus
- P-C16 **AFM Characterization of Model Nuclear Fuel Oxide Multilayer Structures Modified by Heavy Ion Beam Irradiation**  
Hawley, Usov, Devlin, Sickafus, Valdez
- P-C17 **Atomic Scale Simulation of the surfaces of Magnesium Hydroxide**  
Fatet
- P-C18 **Quantitative chemical state analysis of nitrogen implanted  $\text{TiO}_2$  photocatalyst**  
Yoshida, Muto, Kuda

- P-C19 **Nonlinear optical properties of Au-Ag nanoplanets made by ion beam processing of bimetallic nanoclusters in silica.**  
Cesca, Pellegrini, Bello, Scian, Calvelli, Mazzoldi, Battaglin, Mattei
- P-C20 **Carbon Negative-Ion Implantation on Silicone Rubber with Narrower Line Width for Pattern Adhesion of Mesenchymal Stem Cells and Control of Nuclei Orientation**  
Tsuji, Sommani, Kojima, Sato, Gotoh, Takaoka, Ishikawa
- P-C21 **Luminescence Improvement of Germanium Implanted Silica layer by Two-Stage Heat Treatments for Reduction of Ge atoms and Oxidation Control**  
Tsuji, Arai, Hattori, Ohsaki, Gotoh
- P-C22 **Ion Radiation Effects on Chitosan Membrane Biocompatibility with Human Cells**  
Yu
- P-C23 **Luminescence properties of Ge implanted SiO<sub>2</sub> Layer on Si and Oxidation State of Ge atoms**  
Arai, Tsuji, Kotaki, Takahashi, Gotoh, Ishikawa
- P-C24 **Radiation Effect of Carbon Negative-Ion Implantation on Polytetrafluoroethylene for Controlling Cell-Adhesion Property**  
Sommani, Tsuji, Kojima, Sato, Gotoh, Ishikawa, Takaoka
- P-C25 **Structural and compositional characterization of LiNbO<sub>3</sub> crystals implanted with high energy iron ions**  
Sada, Argiolas, Bazzan, Ciampolillo, Zaltron, Mazzoldi, Agarwal, Avasthi
- P-C26 **The coupling effect in array waveguide formed in LiNbO<sub>3</sub> crystal by oxygen ion implantation**  
Zhao, Liu, Huang, Liu, Wang, Wang
- P-C27 **Irradiation of Polystyrene and Polypropylene to study NIH 3T3 fibroblasts adhesion**  
Arbeitman, del Grosso, Ibáñez, García Bermudez, Durán, Chappa, Mazzei, Behar
- P-C28 **Light-emitting Si nanocrystals synthesized in silica by irradiation with swift heavy ions**  
Kachurin, Skuratov, Cherkova, Marin, Cherkov
- P-C29 **Influence of UV irradiation and RTA process on optical properties of Si implanted SiO<sub>2</sub>**  
Iwayama, Hama, Hole
- P-C30 **Refractive index tailoring in congruent Lithium Niobate by ion implantation**  
Sugliani, Bentini, Bianconi, Chiarini, De Nicola, Malacarne, Menin, Montanari, Potì
- P-C31 **Thermal Emission and Thermal Behavior of OH Molecule in Pure Silica Core Fiber Annealed at High Temperature**  
Mohamad Mohsin
- P-C32 **Ion irradiation effects on optical properties of tungsten oxide films**  
Nagata, Fujita, Inouye, Yamamoto, Tsuchiya, Shikama
- P-C33 **Formation of regular arrays of nanoscale surface features using a mask of ion beam modified silica particles**  
Cheang-Wong  
WITHDRAWN
- P-C34 **Nanopatterning of silica with mask-assisted ion implantation**  
Perotto, Bello, Cesca, Mattei, Mazzoldi, Pellegrini, Scian
- P-C35 **Scanning probe microscopy and Raman spectroscopy on fluorapatite irradiated with swift heavy ions**  
Liu, Glasmacher, Zhai, Trautmann, Lang, Voss, Duan, Sun, Neumann, Wagner
- P-C36 **Effect of energetic cluster ion impacts on secondary ion emission yields of organic materials**  
Hirata, Saitoh, Chiba, Yamada, Takahashi, Narumi
- P-C37 **Modifications of the mechanical properties of cubic zirconia induced by swift heavy ion irradiation**

Sattonnay

- P-C38 **TEM observations of SrTiO<sub>3</sub> irradiated by swift heavy ions under grazing incidence**  
Dey, Monnet, Lebius, Schleberger
- P-C39 **Modification of magnetic properties of Fe<sub>3</sub>O<sub>4</sub> ferrite thin films induced by swift heavy ion irradiation**  
Sun, Wang, Wei, Zang, Yao, Shen, Ma, Gou, Shen, Li
- P-C40 **Complete phase transformation in zirconia induced by very high electronic excitations**  
Benyagoub
- P-C41 **Ion emission of a-SiO<sub>2</sub>/c-Si targets under Au<sup>9+</sup> cluster impact.**  
Fallavier, Canut, Calvié, Albertini
- P-C42 **Ionization damage in Gd<sub>2</sub>Zr<sub>2</sub>O<sub>7</sub> induced by C<sub>60</sub> and swift uranium ions**  
Zhang, Lang, Lian, Liu, Trautmann, Della Negra, Toulemonde, Ewing
- P-C43 **Structural disorder in sapphire induced by 90.3 MeV xenon ions**  
Kabir, Meftah, Stoquert, Toulemonde, Monnet
- P-C44 **Study of surface reaction using cluster-size-controlled O<sub>2</sub> and N<sub>2</sub> gas cluster ion beams**  
Toyoda, Mashita, Yamada
- P-C45 **Optimization of planarization condition on patterned surface using gas cluster ion beams**  
Hitota, Toyoda, Yamamoto, Yamada
- P-C46 **Track creation after swift heavy ion irradiation of insulators**  
Medvedev, Osmani, Rethfeld
- P-C47 **Study of swift heavy ion irradiation effect on indium tin oxide coated electrode for the dye-sensitized solar cell application**  
Singh, Agarwal, Chavhan, Mehra, Aggarwal, Kulriya, Singh, Tripathi, Avasthi
- P-C48 **Recrystallization of amorphous layers and tracks generated in lithium niobate by swift-ion beam irradiation**  
Crespillo, Ynsa, Olivares, Agulló-López
- P-C49 **Damage formation in rutile TiO<sub>2</sub> by swift heavy ion irradiation: Analysis with a non-radiative exciton decay model.**  
Rivera, Crespillo, Olivares, Jensen, Sanz, Agulló-López  
MERGED INTO P-A41
- P-C50 **Heavy-ion implantation enhanced wet etching of pattern GaN**  
Xue, Gao, Wang, Yan
- P-C51 **Raman Investigation of N-doped ZnO Films after 2.03 GeV Kr-ion irradiation**  
Zang, Wang, Wei, Sun, Yao, Shen, Pang, Ma, Yang, Zhu
- P-C52 **The M-Branch, a new UNILAC irradiation facility at GSI providing in-situ analytical techniques for materials research**  
Severin, Trautmann, Neumann
- O24 **Optical waveguides obtained by swift-ion irradiation on silica**  
Manzano, Zobot, Crespillo, Olivares, Agulló-López, Moróño, Hodgson