

## Poster Session A

### Poster Session A – Monday, Aug. 31

- P-A01 **The surface swelling of ion-implanted diamond: experiments and numerical analysis**  
Bosia, Olivero, Vittone, Picollo, Lo Giudice, Jakšić, Skukan, Giuntini, Massi, Calusi, Vannoni, Lagomarsino, Sciortino
- P-A02 **Microstructural modifications induced by MeV heavy ion irradiation in cubic zirconia**  
Debelle, Moll, Thome, Sattonnay, Vincent, Garrido, Jagielski
- P-A03 **Study of narrow-band filters optical stability for Space applications**  
Di Sarcina, Menchini, Scaglione
- P-A04 **Swift heavy ion induced modifications of optical and microstructural properties of a:C-Ag nanocomposite thin films**  
Singhal
- P-A05 **Impact of fast neutrons and annealing on optical properties of MgO crystals with transition ions**  
Skvortsova, Trinkler, Jakimovica
- P-A06 **Nano-structural change of iron disilicide (beta-FeSi<sub>2</sub>) thin films by high-energy heavy ion irradiation**  
Sasase, Yamamoto  
WITHDRAWN
- P-A07 **Surface structure modification after slow ion irradiation**  
Alzaher, Akcöltekin, Mace, Ban d'Etat, Manil, Rothard, Schleberger, Lebius
- P-A08 **Surface patterning on Indium Phosphide with low energy bombardment : an evolution from nanodots to nanoripples**  
Sulania, Tripathi, Avasthi
- P-A09 **Radiation-stimulated diffusion in memory single cells**  
Fuks, Kiv, Roizin, Lisiansky
- P-A10 **Influence of ion irradiation on internal residual stress in DLC films**  
Podsvirov, Karaseov, Titov, Smirnov, Azarov, Karabeshkin, Vinogradov, Karasev
- P-A11 **Catastrophic processes in dielectrics**  
Oleshko, Damamme, Malys, Lisitsyna, Lisitsyn
- P-A12 **Effects of Mg-ion implantation in  $\alpha$ -Al<sub>2</sub>O<sub>3</sub> and  $\alpha$ -Al<sub>2</sub>O<sub>3</sub>:Mg crystals: electrical conductivity and electronic structure changes.**  
Tardio, Colera, Ramirez, Alves
- P-A13 **Hillock-like Nano-protrusions Production by Slow Highly Charged Ions Bombardment on Mica Surface**  
Cheng, Facsko, Peng, Liu, Wang, Moeller
- P-A14 **Shielding optimization for GeHP detector in Prompt gamma activation analysis with <sup>241</sup>Am-Be neutron source using MCNP**  
Rachid, Bode, Arezki
- P-A15 **Relaxation cascades in pre-irradiated by an electron beam atomic solids: the role of dopants**  
Gumenchuk, Ponomaryov, Khyzhniy, Uyutnov, Savchenko, Bondybe
- P-A16 **Mechanical properties of irradiated spinel ceramics**  
Jagielski
- P-A17 **Electrical property modifications of In-doped ZnO films by ion irradiation**  
Matsunami, Sataka, Okayasu, Sugai  
MOVED TO POSTER SESSION B

- P-A18 **Effects of ion irradiation on the surface mechanical properties of  $\text{SiO}_x\text{C}_y(\text{Na}_2\text{O})_z$  sol-gel derived thin films**  
Lucca, Qi, Prenzel, Wang, Nastasi, Dong, Mehner
- P-A19 **The effect of ion-implantation on the resistive switching response of dielectric thin films**  
Venkatachalam, Saleh, Kim, Belay, Kim, Elliman
- P-A20 **The Effect of Ga Doping on Antisite Defects in Aluminate Garnets**  
Stanek, Uberuaga, Patel, Grimes, Nikl, Vedda
- P-A21 **Defect Volumes in Ceramics**  
Patel, Volz, Byler, McClellan, Chronos, Parfitt, Murphy, Zacate, Grimes, Stanek
- P-A22 **Radiation effects in atomic and molecular cryogenic solids**  
Savchenko, Khyzhniy, Uytunov, Gumenchuk, Ponomaryov, Bondybey
- P-A23 **Absorption and photoluminescence study of  $\text{Al}_2\text{O}_3$  single crystal irradiated with reactor neutrons**  
Izerrouken
- P-A24 **T-center production in yttria-stabilized zirconia by electron and ion irradiations**  
Costantini, Beuneu, Schwartz, Trautmann  
WITHDRAWN
- P-C12 **Irradiation damage in  $\text{CeO}_2$  irradiated with high-energy heavy ions**  
Ishikawa
- P-A25 **Dynamics of Microstructural Evolution in Electron-Irradiated Fluor-Apatite**  
Li, Li, Wang, Ewing, Kotomin
- P-A26 **Amorphization of alpha-quartz and comparative study of defects in amorphized quartz and Si nanocrystals embedded in amorphous silica.**  
Djurabekova, Backholm, Pakarinen, Backman, Nordlund, Keinonen, Devine, Shan, Sinnott
- P-A27 **Kinetics of change of anionic vacancy and color center concentrations in the dielectric crystals after a radiative irradiation**  
Voitovich, Kalinov, Martynovich, Naumenko, Runets, Stupak
- P-A28 **Electron irradiated NTD-FZ-Silicon for stable resistivity in power devices**  
Efremov, Kamaev, Stuchinsky, Mikhailov
- P-A29 **Thermal stability of charged centers in solid Kr pre-irradiated by an electron beam**  
Savchenko, Uytunov, Khyzhniy, Gumenchuk, Ponomaryov, Bondybey
- P-A30 **Radiation Effects at the  $\text{MgO} - \text{HfO}_2$  interface**  
Smith, Scott, Uberuaga, Sickafus
- P-A31 **Key role of the cation interstitial structure in the radiation resistance of pyrochlores**  
Chartier
- P-A32 **Defect engineering strategies to control implanted ions in microelectronic devices**  
Chronos, Parfitt, Grimes, Schwingenschlögl, Bracht
- P-A33 **Molecular dynamics simulations of fission gas resolution in uranium dioxide**  
Parfitt, Bishop, Grimes
- P-A34 **Void superlattice formation in electron irradiated  $\text{CaF}_2$ : theoretical analysis**  
Kotomin, Kuzovkov, Zvejnieks, Li, Wang
- P-A35 **Structure and Defect mechanisms in  $\beta$ -Tricalcium Phosphate**  
Jay, Michie, Grimes, Metcalfe
- P-A36 **Cascade-Driven Mixing at Metal Oxide Interfaces**  
Valone
- P-A37 **The significance of local electron density distribution in the electronic stopping force for molecular dynamic simulation**

- Nakagawa, Sakai, Whitlow
- P-A38 **Molecular Dynamics Simulations of Oxygen Frenkel Pairs in Cerium Dioxide**  
Shiyyama, Yamamoto, Takahashi, Guglielmetti, Chartier, Yasuda, Matsumura, Yasunaga, Meis
- P-A39 **Impurity activation and nanocrystals formation in amorphous silicon films under excimer laser irradiation**  
Arzhannikova, Efremov, Vishnyakov, Volodin, Kamaev, Kochubei
- P-A40 **Surface amorphization of silicon during Ga<sup>+</sup> focused-ion beam milling**  
Pastewka, Moseler  
WITHDRAWN
- P-A41 **On the exciton model for ion-beam damage: the examples of LiNbO<sub>3</sub> and TiO<sub>2</sub>**  
Rivera, Crespillo, Olivares, Sanz, Jensen, Agulló-López
- P-A42 **Effect of inter-atomic Auger processes on relaxation of electronic vacancies at deep levels of highly ionized atoms in swift heavy ion tracks**  
Medvedev, Shcheblanov, Volkov, Rethfeld
- P-A43 **Molecular Dynamics simulation of the irradiation damage for energetic ions bombarding copper nanowire**  
Xue, Zou, Wang
- P-A44 **Effective charge of low projectile energy in solids**  
El Bounagui, Erramli
- P-A45 **Defect Formation and Growth Processes on Rutile {110} TiO<sub>2</sub>**  
Vernon
- P-A46 **Radioparagenesis: synthesizing novel materials via the decay of radioactive species**  
Jiang, Stanek, Marks, Sickafus, Uberuaga
- P-A47 **Photoluminescence from colour centres generated in lithium fluoride thin films and crystals by extreme-ultraviolet irradiation**  
Nichelatti, Almaviva, Bonfigli, Franzini, Montereali, Vincenti
- P-A48 **Spectral investigation of colour centres in gamma irradiated lithium fluoride thin films**  
Montereali, Marolo, Montecchi, Nichelatti
- P-A49 **Color center creation in LiF crystals irradiated with Xe, Kr and N ions**  
Dauletbekova, Zdorovets, Akilbekov
- P-A50 **Creation of regular nanocrystal phases Si on surface CaF<sub>2</sub>/Si (111)**  
Tashmukhamedova, Umirzakov, Mavlonov
- P-A51 **Radiation modification of the uranium complexes in LiF crystals**  
Lisitsyna
- P-A52 **Depth resolved investigation of ion-beam induced radiation defects in LiF using magnetic field gradient NMR**  
Schuster, Stork, Schwartz, Fujara, Trautmann, Neumann