

Proceedings of the VIII International Conference Ion Implantation and Other Applications
of Ions and Electrons ION 2010, Kazimierz Dolny, Poland, June 14–17, 2010

L. Thomé, S. Moll, J. Jagielski, A. Debelle, F. Garrido, G. Sattonnay, <i>Damage Accumulation in Nuclear Ceramics</i>7	J. Sakaliūnienė, J. Čyviienė, B. Abakevičienė, J. Dudonis, <i>Investigation of Structural and Optical Properties of GDC Thin Films Deposited by Reactive Magnetron Sputtering</i> ...63
L. Wójcik, A. Markowski, <i>Influence of Repeller Potential on Ion-Molecule Reactions in H₂S and CH₄ Mixtures</i>13	Z. Kavaliauskas, L. Marcinauskas, P. Valatkevicius, <i>Enhanced Capacitance of Porous Carbon Electrodes through Deposition of Small Amounts of NiO</i>66
F.F. Komarov, A.S. Kamyshan, V.V. Pil'ko, <i>Peculiarities of Swift Proton Transmission through Tapered Glass Capillaries</i>16	Z.W. Kowalski, <i>Comprehensive Analysis of Ion Beam Induced Stainless Steel Surface Morphology</i>70
M. Krysztof, W. Słowko, <i>Numerical Modelling of the Electron Backscattering at the Variable Gas Pressure</i>19	Z. Swiatek, M. Michalec, N. Levintant-Zayonts, J. Bonarski, A. Budziak, O. Bonchuk, G. Savitskij, <i>Structural Evolution of Near-Surface Layers in NiTi Alloy Caused by an Ion Implantation</i>75
W. Słowko, M. Krysztof, <i>Environmental Equipment for Classic SEM Enabling Investigations of Dielectric and Wet Surfaces</i>23	N. Levintant-Zayonts, S. Kucharski, <i>Influence of High Fluence Nitrogen Ion Implantation on Pseudoelastic Behaviour of NiTi Shape Memory Alloy</i>79
A. Grigonis, Z. Rutkuniene, V. Vinciuonaite, <i>Different Wavelength Laser Irradiation of Amorphous Carbon</i>26	B. Sartowska, J. Piekoszewski, L. Waliś, M. Barlak, W. Starosta, C. Pochrybniak, K. Bocheńska, <i>Structure and Composition of Scales Formed on AISI 316 L Steel Alloyed with Ce/La Using High Intensity Plasma Pulses after Oxidation in 1000°C</i>83
S. Prucnal, T. Shumann, W. Skorupa, B. Abendroth, K. Krockert, H.J. Möller, <i>Solar Cell Emitters Fabricated by Flash Lamp Millisecond Annealing</i>30	F. Komarov, L. Vlasukova, O. Milchanin, A. Mudryi, B.S. Dunetz, W. Wesch, E. Wendler, C. Karwat, <i>Structure and Optical Properties of Silicon Layers with GaSb Nanocrystals Created by Ion-Beam Synthesis</i>87
T.N. Kołtunowicz, P. Zhukowski, V.V. Fedotova, A.M. Saad, A.V. Larkin, A.K. Fedotov, <i>The Features of Real Part of Admittance in the Nanocomposites (Fe₄₅Co₄₅Zr₁₀)_x(Al₂O₃)_{100-x} Manufactured by the Ion-Beam Sputtering Technique with Ar Ions</i>35	M. Tuleta, <i>Effect of Argon Plasma on the Float Glass Surface</i>91
T.N. Kołtunowicz, P. Zhukowski, V.V. Fedotova, A.M. Saad, A.K. Fedotov, <i>Hopping Conductance in Nanocomposites (Fe_{0.45}Co_{0.45}Zr_{0.10})_x(Al₂O₃)_{1-x} Manufactured by Ion-Beam Sputtering of Complex Target in Ar+O₂ Ambient Gas</i>39	A.D. Pogrebniak, A.P. Shpak, G.V. Kirik, N.K. Erdybaeva, M.V. Il'yashenko, A.A. Dem'yanenko, Yu.A. Kunitskii, A.Sh. Kaverina, V.S. Baidak, N.A. Makhmudov, P.V. Zukowski, F.F. Komarov, V.M. Beresnev, Sh.M. Ruzimov, A.P. Shypylenko, <i>Multilayered Nano-Microcomposite Ti-Al-N/Al₂O₃ Coatings. Their Structure and Properties</i>94
P. Zhukowski, T.N. Kołtunowicz, P. Węgierek, J.A. Fedotova, A.K. Fedotov, A.V. Larkin, <i>Formation of Noncoil-Like Inductance in Nanocomposites (Fe_{0.45}Co_{0.45}Zr_{0.10})_x(Al₂O₃)_{1-x} Manufactured by Ion-Beam Sputtering of Complex Targets in Ar+O₂ Atmosphere</i>43	A.D. Pogrebniak, A.P. Shpak, V.M. Beresnev, M.V. Il'yashenko, F.F. Komarov, A.P. Shypylenko, M.V. Kaverin, P.V. Zukovski, Y.A. Kunitskiy, D.A. Kolesnikov, O.V. Kolisnichenko, N.A. Makhmudov, <i>Structure and Properties of Nano- and Microcomposite Coating Based on Ti-Si-N/WC-Co-Cr</i>100
N. Vabishchevich, D. Brinkevich, V. Volobuev, M. Lukashевич, V. Prosolovich, Yu. Sidorenko, V. Odzhaev, J. Partyka, <i>Structure and Electron-Transport Properties of Photore-sist Implanted by Sb⁺ Ions</i>46	N.V. Frantskevich, A.V. Mazanik, A.V. Frantskevich, T. Kołtunowicz, P. Żukowski, <i>Formation of Cone-Shaped Inclusions and Line Defects on the Cz-Si Wafer Surface by the Helium Implantation and DC Nitrogen Plasma Treatment</i>105
J. Domaradzki, D. Kaczmarek, E.L. Prociow, Z.J. Radzinski, <i>Study of Structure Densification in TiO₂ Coatings Prepared by Magnetron Sputtering under Low Pressure of Oxygen Plasma Discharge</i>49	A. Fedotov, O. Korolik, A. Mazanik, T. Kołtunowicz, P. Żukowski, <i>Influence of Annealing on the Electrical Properties of Cz-Si Wafers Previously Subjected to the Hydrogen Ion-Beam Treatment</i>108
A. Stepkowska, D.M. Bieliński, G. Przybytniak, <i>Application of Electron Beam Radiation to Modify Crosslink Structure in Rubber Vulcanizates and Its Tribological Consequences</i>53	N.A. Poklonski, N.I. Gorbachuk, M.I. Tarasik, S.V. Shpakovski, V.A. Filipenia, V.A. Skuratov, A. Wieck, T.N. Kołtunowicz, <i>Effects of Fluences of Irradiation with 107 MeV Krypton Ions on the Recovery Charge of Silicon p⁺n-Diodes</i>111
T. Tsvetkova, S. Takahashi, P. Sellin, I. Gomez-Morilla, O. Angelov, D. Dimova-Malinovska, J. Zuk, <i>Optical Pattern Fabrication in Amorphous Silicon Carbide with High-Energy Focused Ion Beams</i>56	
A. Iljinis, S. Burinskas, J. Dudonis, <i>Synthesis of Bismuth Oxide Thin Films Deposited by Reactive Magnetron Sputtering</i>60	

I. Tashlykov, A. Turavets, P. Zhukowski, <i>Influence of Xe⁺ Irradiation on Topography and Wettability of Graphite Surface</i>	115
J. Jagielski, A. Piatkowska, P. Aubert, S. Labdi, O. Maciejak, M. Romaniec, L. Thomé, I. Jozwik, A. Debelle, A. Wajler, M. Boniecki, <i>Effect of Grain Size on Mechanical Properties of Irradiated Mono- and Polycrystalline MgAl₂O₄</i> ...	118
P. Węgierek, P. Billewicz, <i>Jump Mechanism of Electric Conduction in n-Type Silicon Implanted with Ne⁺⁺ Neon Ions</i>	122
P. Żukowski, P. Węgierek, P. Billewicz, T.N. Kołtunowicz, F. Komarov, <i>Jump Mechanism of Electric Charge Transfer in Gallium Arsenide Exposed to Polyenergy Implantation with H⁺ Ions</i>	125
Y.M. Pokotilo, A.N. Petukh, A.V. Giro, P. Węgierek, <i>Formation of Submicron n⁺-Layers in Silicon Implanted with H⁺-Ions</i>	129
J. Fedotova, D. Ivanou, Y. Ivanova, A. Fedotov, A. Mazanik, I. Svito, E. Streltsov, A. Saad, S. Tyutyunnikov, T.N. Kołtunowicz, S. Demyanov, V. Fedotova, <i>Magnetoresistance in n-Si/SiO₂/Ni Nanostructures Manufactured by Swift Heavy Ion-Induced Modification Technology</i>	133
R. Ratajczak, A. Turos, A. Stonert, L. Nowicki, W. Strupiński, <i>Defect Transformations in Ion Bombarded InGaAsP</i>	136
G.M. Wu, B.H. Tsai, S.F. Kung, C.F. Wu, <i>Improved Light Extraction Efficiency by Photonic Crystal Arrays on Transparent Contact Layer Using Focused Ion Beams</i>	140
S. Abd El Aal, <i>Identification of Painting Layers of Sennefer Tomb by Ion Beam Analysis</i>	144
G.M. Wu, Y.F. Chen, H.C. Lu, <i>Aluminum-Doped Zinc Oxide Thin Films Prepared by Sol-Gel and RF Magnetron Sputtering</i>	149
K. Pałowska, R. Ratajczak, A. Stonert, A. Turos, L. Nowicki, N. Sathish, P. Józwik, A. Muecklich, <i>RBS/Channeling and TEM Study of Damage Buildup in Ion Bombarded GaN</i>	153
J.L. Sullivan, S.O. Saied, T. Zaharia, <i>Properties of Ultra Fast Deposited Diamond-Like Hydrogenated Carbon Films</i>	156
A. Turos, R. Ratajczak, K. Pałowska, L. Nowicki, A. Stonert, P. Caban, <i>Stopping Power and Energy Straggling of Channeled He-Ions in GaN</i>	163
A.E. Muñoz-Castro, R. López-Callejas, R. Valencia Alvarado, R. Peña-Eguiluz, A. Mercado-Cabrera, S.R. Barocio, B.G. Rodríguez-Méndez, A. de la Piedad-Beneitez, <i>Aluminium Morphological Modification by Nitrogen-Argon Mixture PIII</i>	167
M. Ali, S. Abd El Aal, G. Mahgoub, A. Sihame, A. Turos, A. Korman, A. Stonert, <i>The Use of Analytical Methods in Evaluation of Coptic Wall Paintings Conservation — A Case Study</i>	171
K. Reszka, M. Szczypiński, M. Pomorska, <i>Influence of Substrate Local Heating on Morphology of Al and Al₂O₃ Nanofilms</i>	177
G. Gawlik, J. Sarnecki, I. Józwik, J. Jagielski, M. Pawłowska, <i>Ion and Electron Beam Induced Luminescence of Rare Earth Doped YAG Crystals</i>	181
M. Turek, A. Drożdździel, K. Pyszniak, S. Prucnal, D. Mączka, <i>Plasma Ion Source with an Internal Evaporator</i>	184
M. Turek, <i>Modeling of Ionization in a Spherical Surface Ionizer</i>	188
M. Rawski, J. Żuk, M. Kulik, A. Drożdździel, L. Lin, S. Prucnal, K. Pyszniak, M. Turek, <i>Influence of Hot Implantation on Residual Radiation Damage in Silicon Carbide</i>	192
A. Misiuk, W. Wierzchowski, K. Wieteska, A. Barcz, J. Bak-Misiuk, L. Chow, R. Vanfleet, M. Prujarczyk, <i>Properties of Si:V Annealed under Enhanced Hydrostatic Pressure</i>	196
W. Słysz, M. Guzewicz, M. Borysiewicz, J.Z. Domała, I. Pasternak, K. Hejduk, W. Rządziejewicz, J. Ratajczak, J. Bar, M. Węgrzecki, P. Grabiec, R. Grodecki, I. Węgrzecka, R. Sobolewski, <i>Ultrathin NbN Films for Superconducting Single-Photon Detectors</i>	200
F. Komarov, L. Vlasukova, O. Milchanin, A. Mudryi, J. Żuk, K. Pyszniak, M. Kulik, <i>Nanocrystal- and Dislocation-Related Luminescence in Si Matrix with InAs Nanocrystals</i>	204