DETAILED POGRAM

UPDATED ON JUNE 28, 2018

Sunday 1 July

Chair: Marcel TOULEMONDE

14:00 - 15:30 Tutorial #1 // Thermal spike model used for reviewing the ion-matter interaction
Christian Dufour
CIMAP, Caen, France

15:30 - 16:00 COFFEE BREAK PM

Chair: Clara GRYGIEL

16:00 - 17:30 Tutorial #2 // Multiscale modelling of ion-solid interactions
Kai Nordlund
Helsinki University, Finland

18:00 - 20:00 WELCOME RECEPTION

Monday 2 July

9:00 - 9:30 OPENING CEREMONY

Chair: Peter SIGMUND

9:30 - 10:30 LINDHARD LECTURE
Electronic stopping of protons and He ions in solids: a (personal) survey — INV01-69
Peter BAUER
Atomic Physics and Surface Science, Institute Experimental Physics, Johannes Kepler University, Austria

10:30 - 11:10 COFFEE BREAK AM

Chair: Karoly TOKESI

11:10 - 11:40 INVITED TALK
Stopping power, experimental trends and open subjects, with focus on the low to intermediate energy region — INV02-119
Claudia MONTANARI
Instituto de Astronomia y Fisica del Espacio, CONICET and University of Buenos Aires, Argentina

11:40 - 12:00 Nuclear stopping power of antiprotons — T01.1-O1-176
Kai NORDLUND [(1)], Dage SUNDHOLM [(2)], Pekka PYYKKÖ [(2)], Flyura DJURABEKOVA [(3)], Daniel M. ZAMBRANO [(4)]
[(1)]Department of Physics, University of Helsinki, Finland, [(2)]Department of Chemistry, University of Helsinki, Finland, [(3)]Helsinki Institute of Physics, University of Helsinki, Finland, [(4)]CERN, Switzerland

Monday 2 July

Basic processes (atomic collisions, scattering, stopping) - Part I

12:00 - 12:20	Electronic stopping in transition metal nitrides **Barbara BRUCKNER [(1)], Marcus HANS [(2)], Tomas NYBERG [(3)], Peter BAUER [(4)], Daniel PRIMETZHOFER [(1)]** *[(1)]Department of Physics and Astronomy, Uppsala University, Sweden, [(2)]Materials Chemistry, RWTH Aachen University, Germany, [(3)]Department of Engineering Sciences, Uppsala University, Sweden, [(4)]Institute of Experimental Physics, Johannes Kepler University Linz, Austria*	T01.1-O2-68
12:20 - 14:00	MONDAY LUNCH	
	Chair: Flyura DJURABEKOVA	
14:00 - 14:30	Electronic excitation, luminescence and particle emission: studying ion-induced phenomena in ToF-MEIS **Svenja LOHMANN, Maurício SORTICA, Valentina PANETA, Daniel PRIMETZHOFER** *Uppsala University, Department of Physics and Astronomy, Box 516, 75120 Uppsala, Sweden*	INV03-92
14:30 - 14:50	Femto-clock for the electronic system in swift-heavy ion tracks **Nikita MEDVEDEV [(1)], Alexander VOLKOV [(2)]** *[(1)]Institute of Physics and Institute of Plasma Physics, Academy of Science of Czech Republic, Czech republic, [(2)]National Research Center 'Kurchatov Institute'; Joint Institute for Nuclear Research; Lebedev Physical Institute of the Russian Academy of Sciences, Russian federation*	T02.1-O1-50

Materials (Bulk): Damage, Tracks - Part I

14:50 - 15:10	A non-perturbative approach for the stopping power of ions and dimers in an free electron gas system **Pedro Luis GRANDE [(1)], Flavio MATIAS [(1)], Raul Carlos FADANELLI [(1)], Nestor Ricardo ARISTA [(2)]** *[(1)]Universidade Federal do Rio Grande do Sul, Brazil, [(2)]Centro Atomico de Bariloche, Argentina*	T02.1-O2-78
15:10 - 15:30	Probing scattering phase information of ion-atom collisions **Shaofeng ZHANG [(1)], Yong GAO [(1)], Xiaolong ZHU [(1)], Dalong GUO [(1)], Michael SCHULZ [(2)], Alexander VOITKIV [(3)], Xinwen MA [(1)]** *[(1)]Institute of Modern Physics, CAS, China, [(2)]Department of Physics and LAMOR, Missouri University of Science & Technology, United States of America, [(3)]Theoretische Physik I, Heinrich Heine Universitat Dusseldorf, Germany*	T02.1-O3-253
15:30 - 16:00	COFFEE BREAK PM	

Chair: Xinwen MA

16:00 - 16:30 INVITED TALK
The influences of tracks on two-dimensional functional materials
Jie LIU, Pengfei ZHAI, Jian ZENG, Shengxia ZHANG, Peipei HU, Zongzhen LI, Lijun XU, Jinglai DUAN, Huijun YAO, Youmei SUN
Institute of Modern Physics, Chinese Academy of Sciences, China
INV04-64

16:30 - 16:50
Latent track formation and surface potential modulation in swift heavy ion irradiated TMDC nanosheets
Tanuja MOHANTY, Sanjeev KUMAR
School of Physical Sciences, Jawaharlal Nehru University,, India
T03.1-O1-288

Surfaces, 2D materials and Emission Phenomena - Part I

16:50 - 17:10
A comparison between highly charged and swift heavy ion induced defects in graphene on silicon carbide
Lara BRÖCKERS [(1)], Henning LEBIUS [(2)], Stéphane GUILLOUS [(2)], Marika SCHLEBERGER [(1)]
[(1)]Fakultät für Physik and CENIDE, Universität Duisburg-Essen, Germany, [(2)]CIMAP, (CEA-CNRS-ENSICAEN-UCN), France
T03.1-O2-133

17:10 - 17:40 INVITED TALK
Relaxation pathways of slow highly charged ions transmitted through 2D materials
Janine SCHWESTKA [(1)], Richard A. WILHELM [(1)], Sascha CREUTZBURG [(2)], Anna NIGGAS [(1)], Elisabeth GRUBER [(1)], Rene HELLER [(2)], Roland KOZUBEK [(3)], Marika SCHLEBERGER [(3)], Stefan FACSKO [(2)], Friedrich AUMAYR [(1)]
[(1)]TU Wien, Austria, [(2)]HZDR, Germany, [(3)]University Duisburg-Essen, Germany
INV05-97

Tuesday 3 July

Chair: Denis DAUVERGNE

8:30 - 9:00 INVITED TALK	A locally driven relaxation for ion irradiated solid films **Luca REPETTO, Roberto LO SAVIO, Elena ANGELI, Giuseppe FIRPO, Patrizia GUIDA, Denise PEZZUOLI, Diego REPETTO, Ugo VALBUSA** *Department of Physics, Università di Genova, Italy*	INV06-224
9:00 - 9:30 INVITED TALK	Molecular Imaging by Transmission SIMS in combination with Secondary Electron Microscope **Kaoru NAKAJIMA, Kazuki YAMAMOTO, Shunya KITAMURA, Hiroaki ISHII, Jumpei SAWADA, Kenji KIMURA** *Department of Micro Engineering, Kyoto University, Japan*	INV07-10
9:30 - 9:50	A new time-of-flight method to investigate the emission velocity distribution of sputtered particles **Andreas WUCHER, Abdullah SEVIM, Matthias HERDER** *Fakultät für Physik, Universität Duisburg-Essen, Germany*	T03.2-O1-72

Surfaces, 2D materials and Emission Phenomena - Part II

9:50 - 10:10	Cosmic rays electronic sputtering yield of interstellar H2O ice mantles **Emmanuel DARTOIS [(1)], Marin CHABOT [(2)], Hermann ROTHARD [(3)], Tijani ID BARKACH [(2)], Philippe BODUCH [(3)], Basile AUGÉ [(4)], Adithya Narain AGNIHOTRI [(3)], Alicja DOMARACKA [(3)]** *[(1)]ISMOUMR8214, CNRS, Univ. Paris Sud, Université Paris-Saclay, F-91405 Orsay, France, France, [(2)]Institut de Physique Nucléaire d'Orsay (IPNO), CNRS-IN2P3, Univ. Paris Sud, Université Paris-Saclay, F-91406 Orsay, France, France, [(3)]Centre de Recherche sur les Ions, les Matériaux et la Photonique CIMAP (CEA/CNRS/ENSICAEN/Université de Caen Normandie), 14070 Caen Cedex 05, France, France, [(4)]Centre de Sciences Nucléaires et de Sciences de la Matière, UMR 8609 CNRS/IN2P3-Univ. Paris-Sud, Université Paris-Saclay, 91405 Orsay Campus, France, France*	T03.2-O2-23
10:10 - 10:30	What do we know about swift heavy ion induced electronic sputtering of insulators **Christina TRAUTMANN [(1)], Walter ASSMANN [(2)], Marcel TOULEMONDE [(3)]** *[(1)]GSI Helmholtzzentrum, and Technische Universität Darmstadt, Germany, [(2)]Ludwig-Maximilians-Universität München, Germany, [(3)]CIMAP (ENSICAEN, CEA, CNRS, Univ. Caen), France*	T03.2-O3-232
10:30 - 11:00	COFFEE BREAK AM	

Chair: Patrick KLUTH

Materials (Bulk): Damage, Tracks - Part II

11:00 - 11:20 Effects of electronic energy deposition in concentrated solid solution alloys — T02.2-O1-8

Yanwen ZHANG [(1)], Mohammad W. ULLAH [(1)], Neila SELLAMI [(1)], Ritesh SACHAN [(1)], Ke JIN [(1)], Aurélien DEBELLE [(2)], Daniel SCHAURIES [(3)], Patrick KLUTH [(3)], Jie LIU [(4)], Pengfei ZHAI [(4)], Christina TRAUTMAN [(5)], German SAMOLYUK [(1)], Hongbin BEI [(1)], Hans M. CHRISTEN [(6)], Jong K. KEUM [(6)], William J. WEBER [(7)]

[(1)]Materials Science and Technology Division, Oak Ridge National Laboratory, United States of America, [(2)]Centre de Sciences Nucléaires et de Sciences de la Matière (CSNSM), Univ. Paris-Sud, France, [(3)]Department of Electronic Materials Engineering, Research School of Physics and Engineering, Australian National University, Australia, [(4)]Institute of Modern Physics, Chinese Academy of Sciences, China, [(5)]GSI Helmholtzzentrum für Schwerionenforschung GmbH, Planckstrasse 1; Materialwissenschaft, Technische Universität Darmstadt, Germany, [(6)]Center for Nanophase Materials Sciences, Oak Ridge National Laboratory, United States of America, [(7)]Department of Materials Science and Engineering, University of Tennessee, United States of America

11:20 - 11:40 Radiation tolerance against swift heavy ions: Effect of grain size and irradiation temperature — T02.2-O2-131

Parswajit KALITA [(1)], Santanu GHOSH [(1)], Udai SINGH [(1)], Vinita GROVER [(2)], Pawan KULRIYA [(3)], Gaël SATTONNAY [(4)], Devesh AVASTHI [(5)]

[(1)]Department of Physics, Indian Institute of Technology Delhi, India, [(2)]Chemistry Division, Bhabha Atomic Research Centre, India, [(3)]Materials Science Group, Inter-University Accelerator Center, India, [(4)]CSNSM, Université Paris-Sud, CNRS, IN2P3, France, [(5)]Amity Institute of Nanotechnology, Amity University, India

11:40 - 12:00 Effect of the irradiation temperature on the SHI-induced defect-annealing efficiency in SiC — T02.2-O3-81

Aurélien DEBELLE [(1)], Lionel THOMÉ [(1)], Frédérico GARRIDO [(1)], Isabelle MONNET [(2)], Olli PAKARINEN [(3)], William John WEBER [(4)]

[(1)]CSNSM / Univ. PSud / CNRS, France, [(2)]CIMAP/GANIL, ENSICaen, France, [(3)]ORNL, United States of America, [(4)]University of Tennessee / ORNL, United States of America

12:00 - 12:20 Effect of In concentration on the damage buildup in InxGa(1-x)N during ion-irradiation — T02.2-O4-261

Tieshan WANG, Shuo ZHANG, Limin ZHANG, Wensi AI, Jinxin PENG

School of Nuclear Science and Technology, Lanzhou University, China

12:20 - 14:00 TUESDAY LUNCH

Chair: Toshiyuki AZUMA

14:00 - 14:30 INVITED TALK	Self-organized focusing power in insulating capillaries **Eric GIGLIO, Stéphane GUILLOUS** *Centre de Recherche sur les Ions, les Matériaux et la Photonique (CIMAP), France*	INV08-12

Nanotechnology and Applications, including Capillaries - Part I

14:30 - 14:50	Swift highly-focused ion beams in diamond to create superconducting nanostructures **Nuria GORDILLO [(1)], Rafa JIMÉNEZ-RIOBÓO [(2)], Alicia DE ANDRÉS [(2)], Miguel Ángel RAMOS [(3)], Mª Dolroes YNSA [(3)]** *[(1)]Departamento de Física Aplicada, Universidad Autónoma de Madrid (UAM), Spain and Centro de Micro-Análisis de Materiales, Universidad Autónoma de Madrid (CMAM-UAM), Spain, Spain, [(2)]Instituto de Ciencia de Materiales de Madrid (ICMM-CSIC), Spain, Spain, [(3)]Departamento de Física Aplicada, Universidad Autónoma de Madrid (UAM), Spain, Centro de Micro-Análisis de Materiales, Universidad Autónoma de Madrid (CMAM-UAM), Spain and Instituto Nicolás Cabrera (INC-UAM), Madrid, Spain, Spain*	T04.1-O1-221
14:50 - 15:10	Appearance of a new optical absorption peak around the wavelength of 600 nm in silica glass implanted with energetic Ag ions **Hiroshi AMEKURA [(1)], Akihiro IWASE [(2)], Kengo FUKUDA [(2)], Fuminobu HORI [(2)], Yuichi SAITOH [(3)], Satoshi SEMBOSHI [(4)]** *[(1)]National Institute for Materials Science, Japan, [(2)]Osaka Prefecture University, Japan, [(3)]Institutes for Quantum and Radiological Science and Technology, Japan, [(4)]Tohoku University, Japan*	T04.1-O2-152

Materials (Bulk): Damage, Tracks - Part III

15:10 - 15:30	Phase transformations induced by swift heavy ion irradiations in rare earth sesquioxides **Gaël SATTONNAY [(1)], Suheyla BILGEN [(1)], Clara GRYGIEL [(2)], Isabelle MONNET [(2)], Patrick SIMON [(3)], Lionel THOMÉ [(4)]** *[(1)]University of Paris Sud, France, [(2)]CIMAP, France, [(3)]CEMHTI, France, [(4)]CSNSM, France*	T02.3-O1-33
15:30 - 16:00	COFFEE BREAK PM	
16:00 - 18:00	**POSTER SESSION #1** *details on the poster program*	

Wednesday 4 July

Chair: Maik LANG

8:30 - 9:00 INVITED TALK	Ion track and hillock structure in the non-overlapping regime. A temperature dependent investigation **Jacques O'CONNELL [(1)], Vladimir SKURATOV [(2)], Ruslan RYMZHANOV [(2)], Maxim ZDOROVETS [(3)]** *[(1)]CHRTEM, South africa, [(2)]FLNR, JINR, Russian federation, [(3)]L.N.Gumilyov Eurasian National University, Kazakhstan*	INV09-115

Materials (Bulk): Damage, Tracks - Part IV

9:00 - 9:20	Morphology of etched ion tracks in SiO2: dependence on ion energy and etching parameters **Andrea HADLEY [(1)], Christian NOTTHOFF [(1)], Pablo MOTA-SANTIAGO [(1)], Ummehabiba HOSSAIN [(1)], Nigel KIRBY [(2)], Christina TRAUTMANN [(3)], Maria Eugenia TOIMIL-MOLARES [(3)], Patrick KLUTH [(1)]** *[(1)]Research School of Physics and Engineering, The Australian National University, Canberra, Australia, Australia, [(2)]Australian Synchrotron, ANSTO; 800 Blackburn Rd, Australia, [(3)]GSI Helmholtzzentrum für Schwerionenforschung GmbH, Technische Universität, Germany*	T02.4-O1-187
9:20 - 9:40	Helium in swift heavy ion irradiated ODS alloys **Vladimir SKURATOV [(1)], Alexander SOHATSKY [(1)], Arno JANSE VAN VUUREN [(2)], Tiep NGUYEN VAN [(1)], Jacques O'CONNELL [(2)], Anel IBRAEVA [(3)], Maxim ZDOROVETS [(3)], Srdjan PETROVICH [(4)]** *[(1)]Flerov Laboratory of Nuclear Reactions, Joint Institute for Nuclear Research, Russian federation, [(2)]CHRTEM, Nelson Mandela University, South africa, [(3)]Astana Branch of Institute of Nuclear Physics, Kazakhstan, [(4)]Laboratory of Physics, Vinca Institute of Nuclear Sciences, Serbia*	T02.4-O2-91
9:40 - 10:10 INVITED TALK	Is a hillock just a protrude part of an ion track? **Norito ISHIKAWA [(1)], Tomitsugu TAGUCHI [(2)], Nariaki OKUBO [(1)], Akane KITAMURA [(1)]** *[(1)]Japan Atomic Energy Agency (JAEA), Japan, [(2)]The National Institutes for Quantum and Radiological Science and Technology (QST), Japan*	INV10-236

Materials (Bulk): Damage, Tracks - Part IV.

10:10 - 10:30	Characterizing Radiation Effects with Neutron Total Scattering **Eric O'QUINN [(1)], Raul PALOMARES [(1)], Will CURETON [(1)], Cameron TRACY [(2)], Joerg NEUEFEIND [(3)], Christina TRAUTMANN [(4)], Rodney EWING [(2)], Maik LANG [(1)]** *[(1)]University of Tennessee, United States of America, [(2)]Stanford University, United States of America, [(3)]Oak Ridge National Laboratory, United States of America, [(4)]GSI Helmholtzzentrum für Schwerionenforschung, Germany*	T02.4-O3-38
10:30 - 11:00	COFFEE BREAK AM	

Chair: Pedro Luis GRANDE

11:00 - 11:30	Functional defects in 2D materials **Marika SCHLEBERGER** *Universität Duisburg-Essen, Germany*	INV11-305
INVITED TALK		

Surfaces, 2D materials and Emission Phenomena - Part III

11:30 - 11:50	Novel MD study of nanohillock chain formation under grazing angle SHI irradiation **Henrique VAZQUEZ MUIÑOS [(1)], Marika SCHLEBERGER [(2)], Flyura DJURABEKOVA [(1)]** *[(1)]Helsinki Institute of Physics and Physics Department, University of Helsinki, Finland, [(2)]Fakultät für Physik and CENIDE, Universität Duisburg-Essen, Duisburg, Germany, Germany*	T03.3-O1-117
11:50 - 12:10	Comparison of Si and Ge surface patterns produced by ion irradiation in the reverse epitaxy regime **Stefan FACSKO [(1)], Xin OU [(2)], Martin ENGLER [(1)], Ricardo DE SCHULTZ [(1)], Denise ERB [(1)]** *[(1)]Intitute of Ion Beam Physics and Materials Research, Helmholtz-Zentrum Dresden-Rossendorf, Germany, [(2)]State Key Laboratory of Functional Material for Informatics, Shanghai Institute of Microsystem and Information Technology, Chinese Academy of Sciences, China*	T03.3-O2-242
12:10 - 12:30	Ion shaping of Au nanoparticles in silica: control of the vertical size using amorphous silicon nitride as a diffusion barrier **Pablo MOTA-SANTIAGO [(1)], Felipe KREMER [(2)], Giancarlo RIZZA [(3)], Christian DUFOUR [(4)], Christian NOTTHOFF [(1)], Andrea HADLEY [(1)], U. H. HOSSAIN [(1)], Patrick KLUTH [(1)]** *[(1)]Australian National University, Australia, [(2)]Centre for Advanced Microscopy, Australia, [(3)]Ecole Polytechnique, Laboratoire des Solides Irradies [(LSI) CEA/DSM/IRAMIS, France, [(4)]Universite de Caen, CIMAP/CEA/CNRS/ENSICAEN, France*	T03.3-O3-170
12:30 - 14:00	WEDNESDAY LUNCH	
14:00 - 22:00	**SOCIAL PROGRAM: OUTING & BANQUET**	

Thursday 5 July

Chair: Ricardo PAPALEO

8:40 - 9:10 INVITED TALK	Polymers under ionizing radiations: evidences and quantification of energy transfers in presence of particular chemical functions **Muriel FERRY [(1)], Stephane ESNOUF [(1)], Emmanuel BALANZAT [(2)], Yvette NGONO-RAVACHE [(2)]** *[(1)]Den-Service d'Étude du Comportement des Radionucléides (SECR), CEA, Université Paris-Saclay, F-91191, Gif-sur-Yvette, France, France, [(2)]CIMAP (CEA/CNRS/ENSICaen/UNICaen), CIMAP site GANIL, Caen, France, France*	INV12-4

Radiobiology, Ion beam Therapy, Organics, Polymers – Part I

9:10 - 9:30	Effects induced by electron beam in methane „ices" **Elena SAVCHENKO [(1)], Ivan KHYZHNIY [(1)], Sergei UYUTNOV [(1)], Mikhail BLUDOV [(1)], Galina GUMENCHUK [(2)], Vladimir BONDYBEY [(2)]** *[(1)]Institute for Low Temperature Physics & Engineering NASU, Ukraine, [(2)]Lehrstuhl für Physikalische Chemie TUM, Germany*	T05.1-O1-102
9:30 - 9:50	PAH destruction by heavy cosmic rays – carbon chains feed production rates **Marin CHABOT [(1)], Karine BEROFF [(2)], Emmanuel DARTOIS [(2)], Thomas PINO [(2)], Marie GODARD [(3)]** *[(1)]Institut de Physique Nucléaire d'Orsay (IPNO), CNRS-IN2P3, Univ. Paris Sud, Université Paris-Saclay, F-91406 Orsay, France, [(2)]Institut des Sciences Moléculaires d'Orsay (ISMO), CNRS, Univ. Paris Sud, Université Paris-Saclay, F-91405 Orsay, France, [(3)]Centre de Sciences Nucléaires et de Sciences de la Matière (CSNSM), CNRS-IN2P3, Univ. Paris Sud, Université Paris-Saclay, F-91405 Orsay, France*	T05.1-O2-54
9:50 - 10:10	Cosmic ray effects in astrophysical ices: formation and radioresistance of complex organic molecules **Alicja DOMARACKA [(1)], Gabriel SILVA VIGNOLI MUNIZ [(1)], Aditya AGNIHOTRI [(1)], Basil AUGÉ [(2)], Christian MEJÍA [(3)], Rafael MARTINEZ [(4)], Hermann ROTHARD [(1)], Philippe BODUCH [(1)]** *[(1)]Centre de Recherche sur les Ions, les Matériaux et la Photonique, Normandie Univ, ENSICAEN, UNICAEN, CEA, CNRS, CIMAP, France, [(2)]Centre de Sciences Nucléaires et de Sciences de la Matière, UMR 8609 CNRS/IN2P3-Univ. Paris-Sud, Université Paris-Saclay, Orsay (France); Centre de Recherche sur les Ions, les Matériaux et la Photonique, Normandie Univ, ENSICAEN, UNICAEN, CEA, CNRS, CIMAP, France, [(3)]Faculty of Chemical Sciences, Universidad de Cuenca, Cuenca (Ecuador);Departamento de Física, Pontifícia Universidade Católica do Rio de Janeiro (Brazil); Centre de Recherche sur les Ions, les Matériaux et la Photonique, Normandie Univ, ENSICAEN, UNICAEN, CEA, CNRS, CIMAP, France, [(4)]Departamento de Física, Universidade Federal do Amapá, Macapá (Brazil); Centre de Recherche sur les Ions, les Matériaux et la Photonique, Normandie Univ, ENSICAEN, UNICAEN, CEA, CNRS, CIMAP, France*	T05.1-O3-67
10:10 - 10:30	Elastic and inelastic interactions of high energy cosmic protons with on-board spacecraft electronics **Nikolay CHECHENIN, Tatiana CHUVILSKAYA, Alla SHIROKOVA** *Lomonosov Moscow State University, Skobeltsyn Institute of Nuclear Physics, Russian federation*	T05.1-O4-234
10:30 - 11:00	COFFEE BREAK AM	

Chair: Maria Eugenia TOIMIL-MOLARES

11:00 - 11:30 INVITED TALK	Controlled fabrication of Ion track-based nanostructures with tuned plasmonic and electric properties **Jinglai DUAN, Jie LIU, Huijun YAO, Dan MO, Youmei SUN, Yonghui CHEN, K. MAAZ, Shuangbao LYU, Cong ZHAO, Kejing HUANG, Hongwei CHENG, Mindong HOU** *Institute of Modern Physics, CAS, China*	INV13-75

Nanotechnology and Applications, including Capillaries - Part II

11:30 - 11:50	Nano-porosity in GaSb and InSb prepared by swift heavy-ion irradiation **Christian NOTTHOFF [(1)], Pablo MOTA-SANTIAGO [(1)], Andrea HADLEY [(1)], U Habiba HOSSAIN [(1)], Nigel KIRBY [(2)], Peter KAPPEN [(2)], Patrick KLUTH [(1)]** *[(1)]Research School of Physics and Engineering, The Australian National University, Australia, [(2)]Australian Synchrotron, ANSTO; 800 Blackburn Road, Australia*	T04.2-O1-141
11:50 - 12:10	Ion-induced nanopatterning of crystalline surfaces for applications in bottom-up nanostructure fabrication **Denise ERB [(1)], René HÜBNER [(1)], Gerald MALSCH [(2)], Ricardo DE SCHULTZ [(1)], Jörg GRENZER [(1)], Kilian LENZ [(1)], Jürgen LINDNER [(1)], Stefan FACSKO [(1)]** *[(1)]Helmholtz-Zentrum Dresden, Rossendorf, Germany, [(2)]Technische Universität Dresden, Germany*	T04.2-O2-122
12:10 - 12:30	Ion-track technologie for the fabrication of Bi_(1-x)Sb_x nanowire networks for thermoelectric applications **Michael WAGNER** *GSI Helmholtzzentrum für Schwerionenforschung, Germany*	T04.2-O3-281
12:30 - 14:00	THURSDAY LUNCH	

Chair: Platon KARASEOV

14:00 - 14:30 INVITED TALK — Radiation defect dynamics in solids studied by pulsed ion beams — INV14-130
Sergei KUCHEYEV
Lawrence Livermore National Laboratory, United States of America

Materials (Bulk): Damage, Tracks - Part V

14:30 - 14:50 — Photothermal radiometry study of heavy ion beam induced modification of polycrystalline graphite thermal properties — T02.5-O1-265
Alexey PROSVETOV [(1)], Georges HAMAOUI [(2)], Nicolas HORNY [(2)], Mihai CHIRTOC [(2)], Florent YANG [(3)], Christina TRAUTMANN [(1)], Marilena TOMUT [(3)]
[(1)]Materials Research Department, GSI Helmholtz Center of Heavy Ion Research, Planckstr. 1, 64291 Darmstadt, Germany; Department of Materials and Earth Sciences, Technical University of Darmstadt, Alarich-Weiss-Straße 2, 64287 Darmstadt, Germany, Germany, [(2)]Multiscale Thermophysics Lab., GRESPI, Université de Reims Champagne-Ardenne URCA, Moulin de la Housse BP 1039, 51687 Reims, France, France, [(3)]Materials Research Department, GSI Helmholtz Center of Heavy Ion Research, Planckstr. 1, 64291 Darmstadt, Germany, Germany

14:50 - 15:10 — Thermal annealing of calcium fluoride crystals irradiated with swift heavy ions: Optical absorption, Raman scattering and luminescence — T02.5-O2-196
Igor ALENCAR [(1)], Pedro Luis GRANDE [(1)], Marcelo Barbalho PEREIRA [(1)], Shigueo WATANABE [(2)], Björn WINKLER [(3)], Kurt SCHWARTZ [(4)], Christina TRAUTMANN [(4)]
[(1)]Universidade Federal do Rio Grande do Sul, Brazil, [(2)]Universidade de São Paulo, Brazil, [(3)]Johann Wolfgang Goethe Universität, Germany, [(4)]Helmholtzzentrum für Schwerionenforschung, Germany

15:10 - 15:30 — Optimisation of giant magnetocaloric materials with ion irradiation — T02.5-O3-121
Martino TRASSINELLI [(1)], Sophie CERVERA [(1)], Andras BARTOK [(2)], Cécile CARRÉTÉRO [(3)], Mahmoud EDDRIEF [(1)], Etgens VICTOR [(2)], Vincent GARCIA [(3)], Eric JACQUET [(3)], Emily LAMOUR [(1)], Martino LO BUE [(2)], Anna LÉVY [(1)], Frédéric MAZALEYRAT [(2)], Stéphane MACÉ [(1)], Alexandre PASKO [(2)], Christophe PRIGENT [(1)], Sébastien STEYDLI [(1)], Massimiliano MARANGOLO [(1)], Dominique VERNHET [(1)]
[(1)]Institut des NanoSciences de Paris, INSP, CNRS, Sorbonne Universite´, F-75252 Paris, France, France, [(2)]SATIE, ENS Cachan, CNRS, Université Paris-Saclay, F-94230 Cachan, France, France, [(3)]Unité Mixte de Physique, CNRS, Thales, Univ. Paris-Sud, Université Paris-Saclay, 91767, Palaiseau, France, France

15:30 - 16:00 COFFEE BREAK PM

16:00 - 18:00 **POSTER SESSION #2**
details on the poster program

Friday 6 July

Chair: John O'CONNOR

8:30 - 9:00	Transport of convoy electrons in solid under fast molecular ion penetration **Shigeo TOMITA [(1)], Yoko SHIINA [(1)], Ryo KINOSHITA [(1)], Makoto IMAI [(2)], Kiyoshi KAWATSURA [(3)], Makoto MATSUDA [(4)], Kimikazu SASA [(5)], Masao SATAKA [(5)]** *[(1)]Institute of Applied Physics, University of Tsukuba, Japan, [(2)]Department of Nuclear Engineering, Kyoto University, Japan, [(3)]Theoretical Radiation Research Laboratory, Japan, [(4)]Nuclear Science Research Institute, Japan Atomic Energy Agency, Japan, [(5)]Tandem Accelerator Complex, University of Tsukuba, Japan*	INV15-109

Basic processes (atomic collisions, scattering, stopping) - Part II

9:00 - 9:20	Reciprocity Analysis of Electronic Stopping of Slow Ions **Peter SIGMUND [(1)], Valery KUZMIN [(2)], Andreas SCHINNER [(3)]** *[(1)]University of Southern Denmark, Denmark, [(2)]Joint Institute of Nuclear Research, Russian federation, [(3)]Johannes Kepler University, Austria*	T01.2-O1-82
9:20 - 9:40	New Insight in the importance of quasi-resonant charge transfer in Low Energy Ion Scattering (LEIS) **Hidde BRONGERSMA [(1)], Andrey ZAMESHIN [(2)], Andrey YAKSHIN [(2)], Marko STURM [(2)], Philipp BRÜNER [(1)]** *[(1)]IONTOF GmbH, Germany, [(2)]Industrial Focus Group XUV Optics, MESA+, University of Twente, Netherlands*	T01.2-O2-93
9:40 - 10:00	Matrix effects involving quasiresonant neutralization from valence band in Low Energy Ion Scattering **Andrey ZAMESHIN, Andrey YAKSHIN, Marko STURM, Cristiane STILHANO VILAS BOAS, Fred BIJKERK** *XUV Optics Group, University of Twente, Netherlands*	T01.2-O3-190
10:00 - 10:20	Acoustic detection of energetic heavy ions **Walter ASSMANN [(1)], Sebastian LEHRACK [(1)], Marcus BENDER [(2)], Rong YANG [(1)], Daniel HAFFA [(1)], Jörg SCHREIBER [(1)], Christina TRAUTMANN [(2)], Katia PARODI [(1)]** *[(1)]Department for Medical Physics, LMU München, Germany, [(2)]GSI-Helmholtzzentrum für Schwerionenforschung, Germany*	T01.2-O4-15
10:20 - 11:00	COFFEE BREAK AM	

Chair: Christina TRAUTMANN

11:00 - 11:30	Radiobiology at GANIL: a CIMAP experience **Yannick SAINTIGNY, Siamak HAGHDOOST, François CHEVALIER, Florent DURANTEL** *LARIA, CIMAP, France*	INV16-334
INVITED TALK		

Radiobiology, Ion beam Therapy, Organics, Polymers - Part II

11:30 - 11:50	TILDA-V: a full-differential Monte Carlo code for proton and alpha particle tracking in a realistic biological environment **Mario Enrique ALCOCER AVILA [(1)], Christophe CHAMPION [(1)], Michele Arcangelo QUINTO [(2)], Juan Manuel MONTI [(2)], Omar Ariel FOJON [(2)], Roberto Daniel RIVAROLA [(2)], Philippe WECK [(3)]** *[(1)]CELIA, Bordeaux University, France, [(2)]Instituto de Física Rosario, CONICET, Universidad Nacional de Rosario, Argentina, [(3)]Sandia National Laboratories, United States of America*	T05.2-O1-254
11:50 - 12:10	Irradiation of isolated collagen triple helix models by ionizing photon and ion beams **Mathieu LALANDE [(1)], Marwa ABDELMOULEH [(1)], Lucas SCHWOB [(2)], Fabien CHIROT [(3)], Alain MERY [(1)], Jimmy RANGAMA [(1)], Violaine VIZCAINO [(1)], Philippe DUGOURD [(3)], Thomas SCHLATHÖLTER [(4)], Jean-Christophe POULLY [(1)]** *[(1)]CIMAP, France, [(2)]DESY, Germany, [(3)]ILM, France, [(4)]ZIAM, Netherlands*	T05.2-O2-277
12:10 - 12:30	A chemical origin for the isotopic heterogeneities found in extraterrestrial organic matter **Basile AUGÉ [(1)], Emmanuel DARTOIS [(2)], Jean DUPRAT [(1)], Ting Di WU [(3)], Jean Luc GUERQUIN-KERN [(3)], Philippe BODUCH [(4)], Adithya AGNIHOTRI [(4)], Hermann ROTHARD [(4)]** *[(1)]Centre de Sciences Nucléaires et de Sciences de la Matière, Université Paris Sud, UMR 8609-CNRS/IN2P3, France, [(2)]Institut des Sciences Moléculaires d'Orsay, Université Paris Sud, UMR 8609-CNRS/IN2P3, France, [(3)]Institut Curie, PSL Research University, INSERM, U1196, France, [(4)]Centre de Recherche sur les Ions, les Matériaux et la Photonique, Normandie Univ, ENSICAEN, UNICAEN, CEA, CNRS, CIMAP, France*	T05.2-O3-149
12:30 - 13:00	CLOSING CEREMONY	
13:00 - 14:30	FRIDAY LUNCH	
14:30 - 16:00	**VISIT OF THE GANIL LAB.**	

POSTER PROGRAM

Poster session #1

Reconstruction of the atom-surface potential using rainbow scattering data **P1-T01-16**
Aleksandr ZINOVEV, Pavel BABENKO, Daria MELUZOVA, Andrei SHERGIN
Ioffe Institute, Russian federation

Contribution of molecular orbital promotion to inelastic energy losses in ion-solids collisions **P1-T01-17**
Aleksandr ZINOVEV, Pavel BABENKO, Daria MELUZOVA, Andrei SHERGIN
Ioffe Institute, Russian federation

Anomalous reduction of energy deposition by heavy ions near incident surface **P1-T01-22**
Norito ISHIKAWA, Tatsuhiko OGAWA, Takeshi KAI
Japan Atomic Energy Agency, Japan

Effective charge parameter for Li, C and O ions in Aluminum, silver, gold, polypropylene and Makrofol foils **P1-T01-34**
Samira OURABAH [(1)], Mamoun CHEKIRINE [(2)], Boualem BOUZID [(3)], Rachid KHELIFI [(2)]
[(1)]Ecole Supérieure en Sciences Appliquées Alger, Algeria, [(2)]LPTHIRM, Faculté des sciences, Université Saad Dahlab, Algeria, [(3)]Faculté de physique, Université des sciences et de la technologie Houari-Boumédiène, Algeria

Interatomic Coulombic Decay: The Mechanism for Rapid Deexcitation of Hollow Atoms **P1-T01-36**
Richard WILHELM [(1)], Sascha CREUTZBURG [(2)], Janine SCHWESTKA [(1)], Elisabeth GRUBER [(3)], Teresa MADEIRA [(4)], José MARQUES [(5)], Jacek KOBUS [(6)], Arkady KRASHENINNIKOV [(2)], Friedrich AUMAYR [(1)]
[(1)]TU Wien, Institute of Applied Physics, Austria, [(2)]Helmholtz-Zentrum Dresden-Rossendorf, Institute of Ion Beam Physics and Materials Research, Germany, [(3)]Aarhus University, Department of Physics and Astronomy, Denmark, [(4)]TU Chemnitz, Semiconductor Physics, Germany, [(5)]Universidade de Lisboa, BioISI—Biosystems & Integrative Sciences Institute, Portugal, [(6)]Nicolaus Copernicus University, Faculty of Physics, Astronomy and Informatics, Poland

Fragmentation of the ethane molecules induced by MeV-energy proton bombardment **P1-T01-37**
Sándor KOVÁCS, Sándor DEMES, Péter HERCZKU, Zoltán JUHÁSZ, Béla SULIK
Institute for Nuclear Research, Hungarian Academy of Sciences (MTA Atomki), Hungary

Expanded PASS Stopping Code **P1-T01-39**
Peter SIGMUND [(1)], Andreas SCHINNER [(2)], Valery KUZMIN [(3)]
[(1)]University of Southern Denmark, Denmark, [(2)]Joh. Kepler University, Austria, [(3)]Joint Institute of Nuclear Research, Russian federation

Reflection of hydrogen and deuterium atoms from the surface of carbon and polycrystalline beryllium and tungsten **P1-T01-45**
Aleksandr ZINOVEV [(1)], Daria MELUZOVA [(1)], Pavel BABENKO [(1)], Andrei SHERGIN [(1)], Kai NORDLUND [(2)]
[(1)]Ioffe Institute, Russian federation, [(2)]University of Helsinki, Finland

Fragmentation of water and methane induced by MeV-energy sigly charged projectiles **P1-T01-52**
Sándor KOVÁCS, Péter HERCZKU, Zoltán JUHÁSZ, László SARKADI, László GULYÁS, Béla SULIK
Institute for Nuclear Research, Hungarian Academy of Sciences (MTA Atomki), Hungary

Electron-impact ionizations in dense plasmas including the renormalization screening **P1-T01-58**
Myoung-Jae LEE, Young-Dae JUNG
Hanyang University, Korea, republic of

On the impact of crystallinity on the energy loss of medium energy H and He ions in V and Fe **P1-T01-66**
Mauricio SORTICA, Barbara BRUCKNER, Vassilios KAPAKLIS, Marcos MORO, Daniel PRIMETZHOFER
Department of Physics and Astronomy, Uppsala University, Sweden

The impact of scattering potential and electronic stopping on the spectrum shape in Medium Energy Ion Scattering **P1-T01-79**
Daniel PRIMETZHOFER [(1)], Barbara BRUCKNER [(1)], Tomas STRAPKO [(1)], Peter BAUER [(2)]
[(1)]Department of Physics and Astronomy, Uppsala University, Sweden, [(2)]Institute of Experimental Physics, Johannes Kepler University Linz, Austria

Analysis of the energy dependent ion yield of keV He ions scattered from metals with and without surface oxides **P1-T01-80**
Barbara BRUCKNER [(1)], Daniel PRIMETZHOFER [(2)], Peter BAUER [(1)]
[(1)]Institute of Experimental Physics, Johannes Kepler University Linz, Austria, [(2)]Department of Physics and Astronomy, Uppsala University, Sweden

Experimental study of electronic stopping of light ions in transition and rare-earth metals at velocities around the stopping maximum **P1-T01-94**
Marcos MORO [(1)], Barbara BRUCKNER [(1)], Peter BAUER [(2)], Daniel PRIMETZHOFER [(1)]
[(1)]Department of Physics and Astronomy, Uppsala University, Box 516, 751 20, Sweden, [(2)]Atomic Physics and Surface Science, Johannes Kepler University, A-4040, Austria

Energy-loss straggling of protons in monocarbides obtained by elastic resonant backscattering **P1-T01-128**
Mitsuo TOSAKI, Yasuhito ISOZUMI
Kyoto University, Japan

Investigation of the energy loss of heavy ions in noble metals at energies below the Bragg peak **P1-T01-135**
Karim Alexandros KANTRE, Valentina PANETA, Daniel PRIMETZHOFER
Ion Physics, Dept. of Physics and Astronomy, Uppsala University, P.O. Box 516, SE 751 20, Sweden

Fully relativistic structure calculations of heavy targets for inelastic collisions **P1-T01-136**
Claudia MONTANARI, Alejandra MENDEZ, Dario MITNIK
Instituto de Astronomía y Física del Espacio, CONICET and University of Buenos Aires, Argentina

L shell ionization cross sections in relativistic atoms by swift heavy ions **P1-T01-147**
Claudia MONTANARI [(1)], Alejandra MENDEZ [(1)], Darío MITNIK [(1)], Udai SINGH [(2)], Mumtaz OSWAL [(3)], Sunil KUMAR [(2)], Gurjeets SINGH [(4)], D MEHTA [(4)], K.P. SINGH [(4)], Tapan NANDI [(5)]
[(1)]Instituto de Astronomía y Física del Espacio, CONICET and Universidad de Buenos Aires, Argentina, [(2)]Department of Applied Sciences, Chitkara University, India, [(3)]Department of Physics, Dev Samaj College, India, [(4)]Department of Physics, Panjab University, India, [(5)]Inter-University Accelerator Centre, India

Zirconium Stopping Power for Partially Stripped Projectiles in 0.1-1 MeV/u energy domain **P1-T01-158**
C.A. PINEDA-VARGAS [(1)], Abdelkader GUESMIA [(2)]
[(1)]iThemba Labs, National Research Foundation, South africa, [(2)]University of Saad Dahlab, Algeria

Application of Doppler-broadening spectroscopy for the characterization of damage induced in SiO2 by 2 MeV Au+2 implantation **P1-T01-160**
Oscar G DE LUCIO MORALES, Miguel PÉREZ-FLORES
Instituto de Física, Universidad Nacional Autónoma de México, Apartado Postal 20-364, 01000 Cd. Mx., México, Mexico

Stereoscopic collisions of MeV molecular ion with atom and molecule **P1-T01-165**
Misaki MASATSUGU [(1)], Kunikazu ISHII [(2)], Hidemi OGAWA [(2)]
[(1)]Graduate school of Humanities and Sciences, Nara Women's University, Japan, [(2)]Department of Physics, Nara Women's University, Japan

Anisotropy of Electronic Stopping Power in Graphite **P1-T01-181**
Jessica HALLIDAY [(1)], Emilio ARTACHO [(1)], Rafi ULLAH [(2)]
[(1)]Theory of Condensed Matter, Cavendish Laboratory, Universty of Cambridge, United kingdom, [(2)]CIC nanoGUNE, Ave. Tolosa 76, Spain

New insights of molecular (H2+) ion channeling phenomenon in ultra-thin Si membranes **P1-T01-219**
Raul FADANELLI [(1)], Mallikarjuna Rao MOTAPOTHULA [(2)], Mark B. H. BREESE [(3)]
[(1)]Ion Implantation Laboratory, Physics Institute, Universidade Federal do Rio Grande do Sul, Brazil, [(2)]Department of Physics and Astronomy, Ion Physics Group, Applied Nuclear Physics, Uppsala University, Sweden, [(3)]Singapore Synchrotron Light Source (SSLS) and Center for Ion Beam Applications, Physics Department, National University of Singapore, Singapore

TD-DFT simulations of proton irradiation of water ice: technical challenges **P1-T01-262**
Daniel MUÑOZ-SANTIBURCIO, Emilio ARTACHO
CIC nanoGUNE, Spain

Ionization and electron capture total cross sections for biological molecules impacted by ions **P1-T01-264**
Mario Enrique ALCOCER AVILA [(1)], Christophe CHAMPION [(1)], Michele Arcangelo QUINTO [(2)], Juan Manuel MONTI [(2)], Omar Ariel FOJON [(2)], Philippe WECK [(3)], Roberto Daniel RIVAROLA [(2)]
[(1)]CELIA, Bordeaux University, France, [(2)]Instituto de Física Rosario, CONICET, Universidad Nacional de Rosario, Argentina, [(3)]Sandia National Laboratories, United States of America

Defects in swift heavy ion irradiated n-4HSiC **P1-T02-3**
Shandirai TUNHUMA, Thulani HLATSHWAYO, Mmantsae DIALE, Jacqueline NEL, Francois AURET
University of Pretoria, South africa

A molecular dynamics study on helium bubble growth in tungsten under strain fields **P1-T02-9**
Minghuan CUI, Ning GAO, Zhiguang WANG
Institute of Modern Physics, Chinese Academy of Sciences, China

Ion irradiation effects in antimonide films **P1-T02-13**
Raquel GIULIAN, Charles A. BOLZAN, Danay J. MANZO, Victor C. VIANA, Bruno FAGHERAZZI, Julio C. ROHR, Fabiano BERNARDI, Antônio M. H. De ANDRADE, Daniel L. BAPTISTA, Paulo F. P. FICHTNER, Rita M. C. De ALMEIDA, Gilberto L. THOMAS
Universidade Federal do Rio Grande do Sul, Brazil

Defect kinetics in lithium fluoride crystals irradiating with swift ions at room temperature **P1-T02-32**
Michael SOROKIN [(1)], Kurt SCHWARTZ [(2)], Vladimir DUBINKO [(3)], Anatole KHODAN [(4)], Alma DAULETBEKOVA [(5)]
[(1)]National Research Centre 'Kurchatov Institute', Russian federation, [(2)]GSI Helmholtzzentrum für Schwerionenforschung, Germany, [(3)]National Science Center 'Kharkov Institute of Physics and Technology', Ukraine, [(4)]A.N.Frumkin Institute of Physical Chemistry and Electrochemistry RAS, Russian federation, [(5)]L.N.Gumilyov Eurasian National University, Kazakhstan

a methodological study on molecular dynamics for high energy collision cascades in tungsten **P1-T02-41**

Jiechao CUI, Min LI, Baoqin FU, Qing HOU
Key Lab for Radiation Physics and Technology ,Ministry of Education; Institute of Nuclear Science and Technology, Sichuan University,, China

Damage formation and optical activation in Er implanted m-plane and a-plane ZnO **P1-T02-42**

Adela JAGEROVA [(1)], Anna MACKOVA [(1)], Petr MALINSKY [(1)], Romana MIKSOVA [(1)], Zdenek SOFER [(2)], Roman BÖTTGER [(3)], Katerina KLIMOVA [(2)], Jiri OSWALD [(4)]
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High enegy helium implantation for evolution of microstructural changes of nickel based alloy **P1-T02-44**

Hyung-Ha JIN, I Seul RYU, Gyeong Geon LEE, Junhyun KWON
Korea Atomic Energy Research Institute, Korea, republic of

Effect of vacancy defects or cavities induced by ion implantation on rare gas diffusion in uranium dioxide **P1-T02-46**

Marie GERARDIN [(1)], Eric GILABERT [(2)], Denis HORLAIT [(2)], Marie-France BARTHE [(3)], Pierre DESGARDIN [(3)], Gaëlle CARLOT [(1)], Catherine SABATHIER [(1)]
[(1)]CEA Cadarache, France, [(2)]CENBG, France, [(3)]CEMHTI, France

Track size dependence on the velocity of swift heavy ions in Mg2SiO4 **P1-T02-53**

Ruslan RYMZHANOV [(1)], Sergey GORBUNOV [(2)], Nikita MEDVEDEV [(3)], Alexander VOLKOV [(4)]
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Swift heavy ion track in single crystal rutile: Experiments and inelastic thermal-spike analysis **P1-T02-63**

Pengfei ZHAI [(1)], Jie LIU [(1)], Shuai NAN [(2)], Lijun XU [(1)], Weixing LI [(2)]
[(1)]Institute of Modern Physics, Chinese Academy of Sciences, China, [(2)]CAS Center for Excellence in Tibetan Plateau Earth Sciences, and Key Laboratory of Continental Collision and Plateau Uplift, Institute of Tibetan Plateau Research, Chinese Academy of Sciences, China

Structural and optical properties in yttria-stabilized zirconia modified by Si+-implanted ions **P1-T02-71**

Romana MIKSOVA [(1)], Anna MACKOVA [(1)], Adela JAGEROVA [(1)], Petr MALINSKY [(1)], Zdenek SOFER [(2)], Václav HOLÝ [(3)], Ondrej CAHA [(4)]
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Investigations of cation disordering in magnesium aluminate spinel induced by SHI using X-ray absorption near edge structure and first-principles calculations **P1-T02-83**

Satoru YOSHIOKA [(1)], Konosuke TSURUTA [(1)], Tomokazu YAMAMOTO [(1)], Kazuhiro YASUDA [(1)], Syo MATSUMURA [(1)], Norito ISHIKAWA [(2)], Eiichi KOBAYASHI [(3)]
[(1)]Kyushu University, Japan, [(2)]Japan Atomic Energy Agency, Japan, [(3)]Kyushu Synchrotron Light Research Center, Japan

Molecular dynamics simulation studies of displacement cascade induced defects in gold nanotubes **P1-T02-84**

Wenqiang LIU, Jinglai DUAN, Yonghui CHEN, Jie LIU
Institute of Modern Physics, Chinese Academy of Science, China

Atomic and electronic properties of Al2O3 and diamond under intense excitation of the electronic system **P1-T02-87**

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Effect of the electronic kinetics on graphitization of diamond irradiated with swift heavy ions and fs-lasers **P1-T02-88**

Alexander E. VOLKOV [1], Alexey GIPPIUS [2], Sergey GORBUNOV [2], Roman KHMELNITSKI [2], Vitaliy KONONENKO [3], Jacques O' CONNEL [4], Vladimir SKURATOV [5], Gennadiy SYRYKH [6]

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Depth resolved chemical activation and etching of swift heavy ion tracks in olivine **P1-T02-89**

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The Influence of Stopping Power and Temperature on Latent Track Formation in YAP and YAG **P1-T02-90**

Arno JANSE VAN VUUREN [1], Vladimir SKURATOV [2], Jacques O'CONNELL [1], Maxim SAIFULIN [2], Gul'nara ARALBAYEVA [3], Alma DAULETBEKOVA [3], Maxim ZDOROVETS [4]

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Grain Size Effects on Irradiated CeO2, ThO2, and UO2 **P1-T02-96**

William CURETON [1], Raul PALOMARES [1], Jeffrey WALTERS [1], Cameron TRACY [2], Curtis CHEN [2], Rodney EWING [2], Christina TRAUTMANN [3], Jie LIAN [4], Maik LANG [1]

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Ion beam induced damage in nanostructured ZrN film **P1-T02-108**

Salah Eddine NACERI [(1)], Mahmoud IZERROUKEN [(2)], Nadia SAOULA [(3)], Samia MESSACI [(3)], Mustafa GHAMNIA [(1)], Samia MAZROU [(2)]
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Structural modifications induced in GaN/Al2O3 under swift heavy ions **P1-T02-111**

Alexis RIBET, Isabelle MONNET, Clara GRYGIEL
CIMAP, France

TEM investigations of structural and chemical order in III-N semiconductors irradiated by swift heavy ion **P1-T02-112**

Jean-Gabriel MATTEI [(1)], Xavier PORTIER [(1)], Florent MOISY [(1)], Miguel SEQUEIRA [(2)], Delphine LEVAVASSEUR [(1)], Emmanuel GARDES [(1)], Alexis RIBET [(1)], Clara GRYGIEL [(1)], Katharina LORENZ [(2)], Christian WETZEL [(3)], Pablo MOTA SANTIAGO [(4)], Patrick KLUTH [(4)], Isabelle MONNET [(1)]
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Recrystallization role in ion track formation in dielectrics **P1-T02-116**

Alexander E. VOLKOV [(1)], Ruslan RYMZHANOV [(2)], Nikita MEDVEDEV [(3)], Jacques O' CONNEL [(4)], Arno JANSE VAN VUUREN [(4)], Vladimir SKURATOV [(5)]
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Swift heavy ion-irradiated calcite (CaCO3) analyzed by UV-C Laser excited Fluorescence-Spectrometry **P1-T02-120**

Ulrich Anton GLASMACHER [(1)], Sebastian DEDERA [(1)], Andreas SCHENK [(1)], Ioannis TZIFAS [(1)], Michael BURCHARD [(1)], Christina TRAUTMANN [(2)]
[(1)]Institute of Earth Sciences, University of Heidelberg, Germany, [(2)]GSI Helmholtzzentrum für Schwerionenforschung GmbH, Germany

Swift heavy ion induced lattice defects in apatite (Ca5(PO4)3(OH,F,Cl)) using UV-laser stimulated fluorescence. **P1-T02-125**

Ioannis TZIFAS [(1)], Ulrich A. GLASMACHER [(1)], Michael BURCHARD [(1)], Christina TRAUTMANN [(2)]
[(1)]Institute of Earth Sciences, University of Heidelberg Im Neuenheimer Feld 234 69120, Germany, [(2)]GSI Helmholtzzentrum für Schwerionenforschung GmbH, Planckstrasse 1, D-64291, Germany

Enhanced track formation in pre-damaged strontium titanate by energetic heavy ions **P1-T02-129**
William WEBER [(1)], Haizhou XUE [(1)], Eva ZARKADOULA [(2)], Ritesh SACHAN [(2)], Christina TRAUTMANN [(3)], Yanwen ZHANG [(2)]
[(1)]University of Tennessee, United States of America, [(2)]Oak Ridge National Laboratory, United States of America, [(3)]GSI Helmholtzzentrum für Schwerionenforschung GmbH, Germany

Raman study of ion beam irradiation damage on nanostructured TiO2 **P1-T02-132**
Rafik HAZEM
URMPE Unit, University M`Hamed bougara boumerdes, 35000 Boumerdes, Algeria, Algeria

Non-destructive visualization of swift heavy ion induced lattice defects in apatite (Ca5(PO4)3(OH,F,Cl)) using UV-laser stimulated fluorescence. **P1-T02-138**
Ioannis TZIFAS [(1)], Ulrich. A. GLASMACHER [(1)], Michael BURCHARD [(1)], Christina TRAUTMANN [(2)]
[(1)]Institute of Earth Sciences, University of Heidelberg Im Neuenheimer Feld 234, 69120, Germany, [(2)]GSI Helmholtzzentrum für Schwerionenforschung GmbH, Planckstrasse 1, 64291 Darmstadt and Technische Universität Darmstadt, Germany

Application of proton irradiation for study on radiation induced changes in microstructure and mechanical property of austenitic stainless steel **P1-T02-142**
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Transition and crystallization phenomena in gamma irradiated isotactic Polypropylene **P1-T05-255**

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Yongsok SEO
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Mario MERY [(1)], Juan D. URIBE [(1)], Marcos FLORES [(2)], Christian ROMERO [(3)], Vladimir A. ESAULOV [(4)], Jorge VALDÉS [(1)]
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Extended wave packet model to calculate energy loss moments in matter **P2-T01-208**
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Proton energy loss in multilayer graphene and carbon nanotubes **P2-T01-233**
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Considerations about projectile and target X-rays induced during heavy ion bombardment **P2-T01-238**
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Resonant coherent excitation of heavy ions in a crystal using a high-energy accelerator and a storage ring at GSI/FAIR **P2-T01-252**

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Ion impact induced fragment emission from hydrogen molecule **P2-T01-258**

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Experimental energy loss of Hydrogen molecules fragments at keV energies traversing multi walled carbon nanotubes **P2-T01-260**

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Multiple ionization cross sections for swift ion impact on ne-like molecules **P2-T01-263**

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A single method to calculate multiple ionization cross sections of Air molecules by ion impact. **P2-T01-268**

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Theoretical study of W-values for particle impact on vapour and liquid water **P2-T01-269**

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Comparison between anion and cation emission from methane molecules colliding with 10.5-keV singly charged carbon cations **P2-T01-271**

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Influence of xenon ions charge state on depth distribution and defect formation during implantation in silicon **P2-T01-291**

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Deuterated propane (C3D8) fragmentation at EBIS facility in Kielce **P2-T01-294**

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Ionization probability of sputtered coronene molecules **P2-T01-327**

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k-shell Photoionization of O2+ molecular ions **P2-T01-340**

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Non-equilibrium lattice structure induced by high energy heavy ion bombardment in NiTi alloy **P2-T02-70**

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A new type of refractive index modification in YAG crystals induced by swift heavy ion irradiation **P2-T02-113**

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Microstructure and Raman spectra of third generation SiC fibers by 410 MeV 112Sn26+ ion beam irradiation **P2-T02-161**

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Measurement of Local Temperature around the Impact Points of Fast Ions under Grazing Incidence **P2-T02-163**

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New insight of interaction between dislocation and helium bubbles **P2-T02-169**

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Modification of ”silica+zinc” nanocomposite by swift heavy ions: radiation-induced intense visible luminescence and shape elongation of zinc nanoparticles **P2-T02-195**

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Energetic helium irradiation damage in hexagonal tungsten carbide studied with XRD and AFM **P2-T02-212**

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120 Au9+ ion induced modifications in optical, electrical, structural and surface morphological properties of titanium dioxide and tin oxide nanocomposite thin film by RF Sputtering **P2-T02-304**

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Irradiation hardening of F82H, T91, SIMP and ODS steels under dual Fe3+/He+-ion irradiation at 300℃ and 450℃ **P2-T02-328**

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Secondary ion and neutral mass spectrometry with swift heavy ion projectiles **P2-T03-211**

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A comparison of primary damage formation in the bulk and on the surface of irradiated materials **P2-T03-235**

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A compact, flexible low energy experimental platform of highly charged ions for ion-matter interaction — P2-T04-251

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A transmission experiment of carbon ion beam of 100 MeV/u through tapered glass capillaries — P2-T04-276

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Evolution of the multi-walled carbon nanotubes irradiated by noble gases — P2-T04-314

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