Posters A (Tuesday, 2 September)

a) Fundamental aspects, Structure and Spectroscopy

A-a01 EUV spectroscopy of heavy elements near Z=74 at the NIST EBIT
Ilija N Draganic, John D Gillaspy, Joseph N Tan, Joshua M Pomeroy, Yuri Ralcehnko, Joseph Reader

A-a02 Experimental studies of 3.1-3.5 keV X-ray spectra of highly charged Au ions at Shanghai EBIT
Jun Xiao, Zhixian Geng, Yang Yang, Ke Yao, Yunqing Fu, Baoren Wei, Di Lu, Xuemei Zhang, Roger Hutton, Yaming Zou

A-a03 Experimental study of X-ray transition in Li-like ions with EBIT
Xue Mei Zhang, Chong Yang Chen, Martin Andersson, Yong Liu, Roger Hutton, Ya Ming Zou, Nobuyuki Nakamura, Shunsuke Ohtani

A-a04 Soft X-ray laser spectroscopy of HCIs with free electron lasers
S. W. Epp, M. C. Simon, T. Baumann, G. Brenner, V. Maeckel, N. Guerassimova, E. A. Schneidmiller, R. Treusch, J. R. Crespo Lopez-Urrutia, J. Ullrich

A-a05 Precision lifetime determinations of the green and red iron coronal lines in an electron beam ion trap
Guenter Brenner, Jose R. Crespo Lopez-Urrutia, Joachim Ullrich

A-a06 Microcalorimeter observations of the L-shell spectra of Ne- through Fe-like Au ions in an EBIT
Elmar Traebert, Stephanie B. Hansen, Gregory V. Brown, Peter Beiersdorfer, Klaus Widmann, Hyun-kyung Chung

A-a07 Hyperfine interaction induced decays in highly charged ions: Successful radiative decay rate measurements and some puzzling problems
Elmar Traebert

A-a08 Comparison of the effective electron density for ions in different charge states in an electron beam ion trap
Guiyun Y. Liang, Jose R. Crespo Lopez-Urrutia, Thomas M. Baumann, Sascha W. Epp, Anastasia Gonchar, Alain Lapierre, Paul H. Mokler, Martin C. Simon, Hiroyuki Tawara, K. Yao, G. Zhao, Yaming Zou, Joachim Ullrich

A-a09 Radiative decay of few-electron ions
Lakshmi Natarajan, Anuradha Natarajan

A-a10 Quasirelativistic *ab initio* study of gallium-like molybdenum and tungsten
Pavel Bogdanovich, Olga Rancova, Rasa Karpuškienė

A-a11 The hyperfine quenching of polarized two-electron ions in an external magnetic field
Anastasiya Bondarevskaya, Anton Prozorov, Leonti Labzowsky, Gunter Plunien, Dieter Liesen, Fritz Bosch

A-a12 Hyperfine dependent lifetimes in neon like ions
Martin Andersson, Roger Hutton, Yaming Zou

A-a13 QED calculation of interelectron interaction corrections for transition probabilities in two-electron ions
Oleg Yu. Andreev, Leonti N. Labzowsky, Guenter Plunien

A-a14 The resonant states of Li II between the n=2 and 3 thresholds
Ming- Keh Chen

A-a15 Observation and modeling of hollow multicharged ions X-ray spectra radiated by laser produced plasma
Anatoly Faenov, Tatiana Pikuz, Igor Skobelev, Yuji Fukuda, James Colgan, Joe Abdallah, Jr

A-a16 A tale of two lines in promethium-like ion spectra
Elmar Traebert, Marius J. Vilkas, Yasuyuki Ishikawa

A-a17 Line emission from M-shell titanium ions
Joel Clementson, Peter Beiersdorfer, Reginald D. Wood

A-a18 EUV spectra from highly charged tin ions observed in low density plasmas in LHD
Chihiro Suzuki, Takako Kato, Kuninori Sato, Naoki Tamura, Daiji Kato, Shigeru Sudo, Norimasa Yamamoto, Hajime Tanuma, Hayato Ohashi, Shintaro Suda, Gerry O'Sullivan, Akira Sasaki

b) Collisions with Electrons, Ions, Atoms and Molecules

A-b01 Precise experimental and theoretical studies on resonant energies of the KLL dielectronic recombination proceses for He- up to O-like xenon
Weidong Chen, Ke Yao, Jun Xiao, Yang Shen, Yunqing Fu, Baoren Wei, Fanchang Meng, Chongyang Chen, Di Lu, Xuemei Zhang, Roger Hutton, Yaming Zou

A-b02 Angle-resolved studies of hypersatellite radiation following dielectronic recombination of heavy ions
Andrey Surzhykov, Nikolai M. Kabachnik, Stephan Fritzsche

A-b03 Photorecombination of sodiumlike silicon ions: Astrophysically motivated storage ring experiments and MCDF calculations
Eike Schmidt, Stephan Fritzsche, Dietrich Bernhardt, Jens Hoffmann, Claude Krantz, Michael Lestinsky, Dragan Lukic, Alfred Mueller, Dimitry Orlov, Daniel Wolf Savin, Stefan Schippers, Andreas Wolf

A-b04 Experimental rate coefficient for dielectronic recombination of neonlike iron forming sodiumlike iron
Eike Schmidt, Dietrich Bernhardt, Jens Hoffmann, Michael Lestinsky, Dragan Lukic, Alfred Mueller, Dimitry Orlov, Daniel Wolf Savin, Stefan Schippers, Andreas Wolf, Dejang Yu

A-b05 Evaluation of direct ionization cross sections for C_{60} by electron interaction
Neeraj Kumar, Satyendra Pal

A-b06 Determination of angular cross sections for electron dissociative ionization of CCl_4 molecule
Satyendra Pal, Anshu Neeraj Kumar

A-b07 The first test experiment performed at the electron cooler of storage rings in Lanzhou
Xinwen Ma, Lingjie Meng, Huiping Liu, Jiawen Xia, Hushan Xu, Zhenguo Hu, Xiaodong Yang, Meng Wang, Ruishi Mao, Dacheng Zhang, Lijun Mao, Guohong Li, Shengli Yang, Youjin Yuan, Jianhua Zheng, Guoqing Xiao, Wenlong Zhan

A-b08 Angular momentum transfer and polarization degree of ions with one-valence electron by electron-impact
Kenichi Akita, Takeshi Kai, Shinobu Nakazaki, Akinori Igarashi

A-b09 Effective collision strengths for Mg-like iron peak ions
Patrick H Norrington, Claire E Hudson

A-b10 Dielectronic and radiative recombination of Si to N-like tungsten ions
Christoph Biedermann, Rainer Radtke, Robert Seidel, Ehud Behar

A-b11 Electron impact excitation of Ni II
C M Cassidy, C A Ramsbottom, M P Scott, P G Burke

A-b12 Effect of electron-impact ionization in damage of bio-molecules irradiated by XFEL
Takeshi Kai, Kengo Moribayashi

A-b13 High-energy electron-impact excitation cross-sections of hydrogen-like iron and nickel ions
Daniel B. Thorn, Peter Beiersdorfer, Gregory V. Brown, Richard L. Kelley, C. A. Kilbourne, F. Scott Porter

A-b14 Angular momentum transfer and polarization degree of ions with two-valence electron by electron-impact
Kenichi Akita, Takeshi Kai, Shinobu Nakazaki, Akinori Igarashi

A-b15 Electron impact ionization of multiply charged xenon and tin ions
Alexander Borovik, Mohammad Gharaibeh, Stefan Schippers, Alfred Mueller

A-b16 Excitation rates for transitions in Kr XXXII
Kanti M Aggarwal, F P Keenan, K D Lawson

A-b17 Neutron radiation effects on metal oxide semiconductor (MOS) devices
Haider F Al-Shemeri, Abdullah Chik

A-b18 Structure deformation dynamics of acetylene molecules following electron loss and capture collisions of 6 MeV O^{4+} ions
Tomoya Mizuno, Takahiro Yamada, Yoichi Nakai, Hidetsugu Tsuchida, Akio Itoh

A-b19 Systematic multiconfiguration dirac-fock method study of the K X-ray spectra of silicon
Katarzyna Slabkowska, Marek Polasik

A-b20 Electron angular distributions for He single ionization in collisions with "fixed-in-space" H_2^+ ions at 0.5 MeV and 1 MeV
Shaofeng Zhang, J Suske, D Fischer, K U Kuehnel, S Hagmann, A Voitkiv, B Najjaril, A Krauss, R Moshammer, J Ullrich, Xinwen Ma

A-b21 Electron-molecular and atom-molecule scattering in few-body approach
Serguey Alekseevich Pozdneev

A-b22 State-selected differential cross section measurements for the one-electon capture processes in the F^{4+} - He, Ne, Ar systems at E_{lab} = 45 eV
Yoh Itoh, Kazumasa Ohtsuki

A-b23 Branching ratio of N_2 in collisions with Ar^{q+} ($q \geq 6$) at energies below 1 keV/u
Yoko Inoue, Kunikazu Ishii, Hidemi Ogawa

A-b24 Interference effects in electron emission spectra for 3 MeV $H^+ + O_2$ collisions
Melike Winkworth, Pablo D. Fainstein, Mariel E. Galassi, Jamie L. Baran, Susanta Das, Buddhika S. Dassanayake, Tamer Elkafrawy, David Cassidy, Asghar Kayani John A. Tanis

A-b25 Electron capture processes from excited hydrogen atoms by highly charged ions of beryllium and carbon
Noriyuki Shimakura, Naoki Kobayashi, Mayumi Honma, Tomohide Nakano, Hirotaka Kubo

A-b26 Isotope effect in dissociation of methanol dications produced by collision of Ar^{8+}
Kenichi Hayakawa, Jun Matsumoto, Haruo Shiromaru, Yohji Achiba

A-b27 Analysis of charge asymmetric Coulomb explosion of N_2 molecules with slow Kr^{8+} ions
Tomoko Ohyama-Yamaguchi, Atsushi Ichimura

A-b28 Coster-kronig electrons from N^{q+} (q=1-3) Rydberg states produced in high energy collisions with He
Kiyoshi Kawatsura, Katsumi Takahiro, Masao Sataka, Makoto Imai, Hiroyuki Sugai, Kouichi Ozaki, Kazuhiro Kawaguchi, Hiromi Shibata, Ken-ichiro Komaki

A-b29 Coster-Kronig electrons from O^{q+} (q=1-4) Rydberg states produced in high energy collisions with He
Kiyoshi Kawatsura, Katsumi Takahiro, Masao Sataka, Makoto Imai, Hiroyuki Sugai, Kouichi Ozaki, Kazuhiro Kawaguchi, Hiromi Shibata, Ken-ichiro Komaki

A-b30 Single charge transfer in collisions of diatomic molecules with slow highly charged ions
Mykhaylo Khoma, Olexandr Karbovanets, Myroslav Karbovanets, Robert Buenker

A-b31 Theoretical predictions of the structure of m-X-ray lines of heavy atoms
Piotr Matuszak, Karol Koziol, Marek Polasik, Katarzyna Slabkowska

A-b32 Influence of changes in the valence electronic configuration on the structure of L-X-ray spectra
Marek Polasik, Karol Koziol, Katarzyna Slabkowska, Marcin Czarnota, Marek Pajek

A-b33 Cahrge transfer cross sections of W^{2+} ions in collisions with rare gas targets
Manabu Saito, Makoto Imai, Syunsuke Hosokawa, Yoichi Haruyama, Akio Itoh

A-b34 X-ray signatures of charge exchange in L-shell ions
Miriam Frankel, Peter Beiersdorfer, Gregory V. Brown, Joel Clementson, Ming F. Gu, Richard L. Kelley, C. A. Kilbourne, F. Scott Porter, Bradford Wargelin

A-b35 Studies of X-ray production following charge exchange recombination between highly charged ions and neutral atoms and molecules
Gregory V. Brown, Peter Beiersdorfer, Hui Chen, Joel Clementson, Miriam Frankel, Ming F. Gu, Richard L. Kelley, C. A. Kilbourne, F. Scott Porter, Daniel B. Thorn, Bradford Wargelin

A-b36 Vacuum ultraviolet spectra in charge transfer collisions of multiply charged Sn ions
Shintaro Suda, Hayato Ohashi, Hajime Tanuma, Shinsuke Fujioka, Hiroaki Nishimura, Katsunobu Nishihara

A-b37 Dissociative and non-dissociative charge-changing processes in 1.0-2.0 MeV/u O^{5+} + O_2 collisions
D P Cassidy, E Y Kamber, A Kayani, J A Tanis

A-b38 Charge transfer processes in collisions of slow highly charged ions with polar molecules CO and C_3H_8
Makoto Imai, Mykhaylo V Khoma, O M Karbovanets, Y Kikuchi, Manabu Saito, Yoichi Haruyama, M I Karbovanets, I Yu Kretinin, Akio Itoh, Robert J Buenker

A-b39 Single electron capture in collisions of N^{2+} with He at low energies
Keisuke Toida, Kouichi Soejima, Atsunori Danjo

A-b40 Gross and partial ionization cross sections in 6-MeV/amu bare-ion collisions with methane
Yumiko Ohno, Takashi Matsuo, Toshiyuki Kohno, Tomoharu Nakazato, Shin-ichi Watanabe, Takeshi Murakami

A-b41 QED approach to calculating electron collision strengths for multicharged ions in a plasma: within the debae approximation
Alexander V. Glushkov, Olga Yu. Khetselius, Andrew V. Loboda, Elena V. Mischenko, Ludmila Lovett

c) Interactions with Clusters, Surfaces and Solids

A-c01 Fragmentation of small biomolecules induced by highly charged ion impact
Bin Li, Li Chen, Richard Brédy, Jérome Bernard, Guillaume Montagne, Xinwen Ma, Serge Martin

A-c02 Evidence of giant dipole plasmon resonance in electron spectrum of C_{60} and beam induced polarization
Aditya Kelkar, S Kasthurirangan, S Chatterjee, Lokesh C Tribedi

A-c03 Angular anisotropy in KLL Auger electron emission from C_{60} and CH_4 in collision with 4 MeV/u F^{9+}
Aditya Kelkar, Lokesh C Tribedi

A-c04 Low energy carbon ion irradiation of water ices
Christopher Adam Hunniford, Daniele Fulvio, Anita Dawes, Bhala Sivaraman, Tony L Merrigan, Robert W McCullough, Nigel J Mason, Maria Elisabetter Palumbo

A-c05 Optical emission spectroscopy of excited atoms sputtered on a Ti surface under irradiation with multicharge Ar ions
Kenji Motohashi, Yuichi Saitoh, Sin-iti Kitazawa

A-c06 Potential energy threshold for nano-hillock formation on CaF_2 by impact of very slow, highly charged ions
Ayman S. El-Said, Walter Meissl, Rene Heller, Robert Ritter, Stefan Facsko, Christoph Lemell, Beate Solleder, Ille C. Gebeshuber, Gerhard Betz, Wolfhard Moeller, Joachim Burgdoerfer, Friedrich Aumayr

A-c07 Electron emission from insulators bombarded with very slow highly charged ions
Walter Meissl, Daniel Winklehner, Rene Heller, Stefan Facsko, Wolfhard Moeller, Friedrich Aumayr

A-c08 Secondary-ion emission from GaN(0001) and dodecanethiol/Au(111) surfaces irradiated with Ar^{q+} (q = 3-6) at glancing angle
Kenji Motohashi, Marcos Flores, Yasuyuki Kanai, Yasunori Yamazaki

A-c09 Simulation of ion guiding through nanocapillaries: Energy dependence
Klaus Michael Schiessl, Karoly Tőkési, Christoph Lemell, Joachim Burgdörfer

A-c10 Potential energy threshold of surface nanostructures formation by the interaction of slow xeon ions on a HOPG surface
Yu Yu Wang, Guo Qing Xiao, Yong Tao Zhao, De Hui Li, Di Zhao, Zhong Feng Xu, Fu Li Li

A-c11 Absolute sputtering yields from solid rare gases by singly- and multiply-charged ion impact
Shinya Fujita, Takayuki Tachibana, Tetsuo Koizumi, Takato Hirayama

A-c12 Potential sputtering of ionic species from rare gas solids by multiply charged ion impact
Kentaro Fukai, Shinya Fujita, Takayuki Tachibana, Tetsuo Koizumi, Takato Hirayama

A-c13 Secondary ion emission from a KCl(001) surface by grazing-angle incidence of swift ions
Kaoru Nakajima, Motofumi Suzuki, Kenji Kimura

A-c14 Guiding of very highly charged ions with a glass capillary
Akira Yamazaki, Ryo Nakayama, Masahide Tona, Nobuyuki Nakamura, Hirofumi Watanabe, Nobuo Yoshiyasu, Chikashi Yamada, Shunsuke Ohtani, Makoto Sakurai

A-c15 STM observations of highly charged ion irradiated alkanethiol monolayers
Brian E O'Rourke, Marcos Flores, Vladimir Esaulov, Yasunori Yamazaki

A-c16 Theory of crystal-assisted free-bound pair production by relativistic ions
Hideo Nitta

A-c17 Electron transfer proceess in ion neutralisation on nanoscale metal systems
Hicham Hamoudi, Lin Chen, Thirunavukkarasu Kandasamy, Celine Dablemont, Vladimir A Esaulov

A-c18 Density matrix description of resonant coherent excitation of swift highly charged ions in oriented crystals
Vsevolod Balashov, Igor Bodrenko, Alexey Sokolik, Alexey Stysin

A-c19 Unexpected differences between kinetic energy release distributions for C_2^+-emission from multiply charged C_{60} and C_{70} fullerenes
Henrik Cederquist, Nicole Haag, Zoltán Berenyi, Peter Reinhed, Daniel Fischer, Magnus Gudmundsson, Henrik A.B. Johansson, Henning T. Schmidt, Henning Zettergren

A-c20 Hydrogen atoms sputtered by highly charged ions from a Si(111)-H surface
H.Watanabe, J. Sun, M. Tona, N. Nakamura, M. Sakurai, C. Yamada and S. Ohtani

A-c21 Imaging dynamics of charge-self-organisation in glass capillaries: Latest results and prospectives
A.Cassimi, L.Maunoury, P.Rousseau, B.Manil, T.Muranaka, B.Huber, K.Rani Dey, H.Lebius, D.Lelievre, J.M.Ramillon, T.Been, T.Ikeda, Y.Kanai, T.M.Kojima, Y.Iwai, Y.Yamazaki, H.Khemliche, N.Bundaleski, P.Roncin

d) Interactions with Photons, Plasmas and Strong Field Processes

A-d01 A systematic study of the 4d-giant resonance in Xe^{n+} (n=0,1-7)
Andrew Domondon, Xiao Min Tong, Tsutomu Watanabe

A-d02 Photoionization of highly charged ions in an electron beam ion trap by synchrotron radiation
Martin C. Simon, Sascha W. Epp, Jose R. Crespo Lopez-Urrutia, Joachim Ullrich

A-d03 Lowly ionized Ar and Xe plasma diagnostics and modeling
Konstantinos Katsonis, Chloe Berenguer, Marguerite Cornille

A-d04 Effects of Debye plasmas on the resonance states of highly stripped two-electron ions using the stabilization method
Yew Kam Ho, Sabyasachi Kar

A-d05 Probing electrons and ions in stagnation layers at the collision front between colliding laser produced plasmas
Padraig Hough, Conor McLoughlin, Thomas Kelly, Sivanandan Harilal, Jean Paul Mosnier, John Costello

A-d06 Two-photon transitions in the He+ ion embedded in strongly coupled plasmas
H. F. Lai, Y. C. Lin, Y. K. Ho

A-d07 Atomic processes of damage on bio-molecules irradiated by XFEL
Kengo Moribayashi, Takeshi Kai

A-d08 Progress of opacity experiment on “Shengguang II” laser facility
Jiamin Yang, Jiyan Zhang, Yan Xu, Jianmin Yuan, Jun Yan, Yaonan Ding, Yang Zhao, Fengtao Jin, Zhimin Hu, Guohong Yang, Baohan Zhang

e) Production, Experimental developments and Applications

A-e01 Theoretical and experimental research of ion charge state evolution in electron beam ion trap
Zhixian Geng, Ke Yao, Yaming Zou

A-e02 Simulation of electron beam in Shanghai EBIT
Xincheng Wang, Yang Yang, Baoren Wei, Yong Liu, Yaming Zou

A-e03 A tandem linear Paul trap as an ion source
Kenji Izawa, Hiroyuki Higaki, Hiroshi Yamate, Kiyokazu Ito, Haruki Hitomi, Masao Kuriki, Hiromi Okamoto

A-e04 The SPARC EBIT at GSI; Comissioning and future plans at the HITRAP beamline
Brian E O'Rourke, Sabrina Geyer, Alexey Solokov, Gleb Vorobjev, Oliver Kester, Thomas Stohlker

A-e05 Development of high current electron beam ion traps for charge breeding of radioactive ion beams
Jose R. Crespo Lopez-Urrutia, Stefan Schwarz, Georg Bollen, Jens Dilling, Joachim Ullrich

A-e06 Electron beam density distribution studies using an portable slit imaging slit imaging system at the Shanghai electron beam ion trap
Yang Yang, Ke Yao, Weidong Chen, Yong Liu, Jun Xiao, Zhixian Geng, Baoren Wei, Di Lu, Xuemei Zhang, Roger Hutton, Yaming Zou

A-e07 The multi-parameter data acquisition system at Shanghai EBIT
Xincheng Wang, Baoren Wei, Xuemei Zhang, Jun Xiao, Yang Shen, Yaming Zou

A-e08 A progress report of 320 kV multi-discipline research platform for highly charged ions
Xinwen Ma, Huiping Liu, Lingting Sun, Mingtao Song, Xiaolongzhu Zhu, Shan Sha, Wentian Feng, Dacheng Zhang, Jinyu Li, Daqing Gao, Zhiguang Wang, Xiaohong Cai, Wenjian Li, Pingzhi Wang, Lizhen Ma, Kaidi Man, Shaofeng Zhang, Bin Li, Guoqing Xiao, Hongwei Zhao, Wenlong Zhan

A-e09 Evolution of X-ray calorimeter spectrometers at the Lawrence Livermore electron beam ion trap
F. Scott Porter, Peter Beiersdorfer, Gregory V. Brown, Ming F. Gu, Richard L. Kelley, C. A. Kilbourne, Daniel B. Thorn

A-e10 The MEVVA source ion injection at the Shanghai EBIT
Yunqing Fu, Yaming Zou, Baoren Wei

A-e11 A power saving and compact electron beam ion source using a periodic permanent magnet system
Toshio Kusakabe

A-e12 Diagnostics of the highly charged ion beam extracted from the tokyo-EBIT
Takahiro Shimazaki, Masahide Tona, Hirofumi Watanabe, Nobuyuki Nakamura, Chikashi Yamada, Shunsuke Ohtani

A-e13 Enhancement of soft X-ray emission from fs laser plasma by using mixture of molecule and atomic gases as cluster jet targets and its application for nanostructure imaging
Tatiana Pikuz, Anatoly Faenov, Igor Skobelev, Sergei Gasilov, Alexei Boldarev, Vladimir Gasilov, Yuji Fukuda, Masaki Kando, Hideyuki Kotaki, Izuru Daito, Takayuki Homma, Keigo Kawase, Takashi Kameshima, Tetsuya Kawachi, Paul Bolton, Hiro Daido, Toyoaki Kimura, Toshiki Tajima, Yoshiaki Kato, Sergei Bulanov

A-e14 Narrowband X-ray source for applications in medicine
Ilija N. Draganic, John D. Gillaspy, Yuri Ralchenko, Jacek Capala

A-e15 The atomic model of the Sn plasmas for the EUV sources
Akira Sasaki, Atsushi Sunahara, Katsunobu Nishihara, Takeshi Nishikawa, Fumihiro Koike, Hajime Tanuma

Posters B (Thursday, 4 September)

a) Fundamental aspects, Structure and Spectroscopy

B-a01 EUV spectroscopy of highly charged iron ions with a low energy compact EBIT
Hiroyuki A Sakaue, Daiji Kato, Nobuyuki Nakamura, Etsushi Watanabe, Norimasa Yamamoto, Tetuya Watanabe

B-a02 Measurement of the $K\beta_2$ /$K\beta_1$ ratio for heliumlike krypton
M. F. Gu, P. Beiersdorfer, A. J. Smith, D. B. Thorn

B-a03 EBIT X-ray microcalorimeter measurements of the K-shell emission from heliumlike ions
P. Beiersdorfer, G. V. Brown, H. Chen, J. H. T. Clementson, M. F. Gu, S. M. Kahn, R. L. *Kelley, C. A. Kilbourne, F. S. Porter, D. B. Thorn, E. Traebert*

B-a04 Analysis of EUV spectra from highly charged iron ions with a compact EBIT
Norimasa Yamamoto, Hiroyuki Sakaue, Daiji Kato, Izumi Murakami, Takako Kato, Nobuyuki Nakamura, Etsushi Watanabe, Tetsuya Watanabe

B-a05 EUV spectroscopy of tin and xenon ions with a compact electron beam ion trap
Etsushi Watanabe, Hiroyuki A. Sakaue, Nobuyuki Nakamura

B-a06 Charge state selective EUV spectroscopy of HCI at very low collision energies in an electron beam ion trap
Thomas M. Baumann, Jose R. Crespo Lopez-Urrutia, Sascha W. Epp, Anastasia Gonchar, Zoltan Harman, Guiyung Y. Liang

B-a07 Measurement of the bound electron g-factor in highly charged ions by double resonance spectroscopy
W. Quint, D. L. Moskovkhin, W. Noertershaeuser, V. M. Shabaev, M. Vogel

B-a08 Energy levels and oscillator strengths for transitions in Fe XIV
Kanti M Aggarwal, T Kato, F P Keenan

B-a09 Electron shake off in the beta decay of trapped $^6He^+$ ions
Xavier Flechard, Gilles Ban, Claire Couratin, Dominique Durand, Etienne Lienard, François Mauger, Alain Mery, Oscar Naviliat-Cuncic, Daniel Rodriguez, Philippe Velten

B-a10 Stability of highly charged fullerene cations and anions
Fernando Martin, Henning Zettergren, Yang Wang, Manuel Alcami

B-a11 Relativistic light shifts in highly charged ions
O. Postavaru, Z. Harman, C. H. Keitel

B-a12 Multiconfiguration Dirac-Hartree-Fock method for the calculation of static electric dipole moment in the many-electron atoms
Erikas Gaidamauskas, Gediminas Gaigalas

B-a13 The influence of relativistic effect for the DR of many electron ion
Xiaoying Han, Yueming Li

B-a14 Study of inter sub-shell and inter shell electron correlations in 4d open-shell heavy atomic ions
Fumihiro Koike

B-a15 Accurate spectroscopy of excited levels in He-like uranium
Martino Trassinelli, Ajay Kumar, Heinrich F. Beyer, Paul Indelicato, Renate Märtin, Regina Reuschl, Carsten Brandau, Harald Bräuning, Sabrina Geyer, Alex Gumberidze, Sebastian Heß, Pawel Jagodzinski, Christophor Kozhuharov, Sergiy Trotsenko, Günter Weber, Thomas Stöhlker

B-a16 Two-photon decay in highly charged heavy ions: Spectral shape of the 2E1 ($2^1S_0 \rightarrow 1^1S_0$) in He-like tin
Sergej Trotsenko, Ajay Kumar, Andrej Volotka, Dariusz Banas, Heinrich Beyer, Harald Braeuning, Alexander Gumberidze, Siegbert Hagmann, Sebastian Hess, Christophor Kozhuharov, Regina Reuschl, Uwe Spillmann, Martino Trassinelli, Guenter Weber, Thomas Stoehlker

B-a17 Theoretical simulation of extreme ultraviolet spectra of tin in laser-produced plasmas
Maogen Su, Yuee Luo, Chenzhong Dong, Luyou Xie, Yanbiao Fu, Paddy Hayden, Lynn Gaynor, Gerry O'Sullivan, John White

B-a18 Visible spectroscopy with the Tokyo-EBIT
H.Watanabe, N. Nakamura, and S. Ohtani

B-a19 QED perturbation theory in calculating nuclear quadrupole moments and hyperfine structure parameters for Li-like mulricharged ions
Alexander V. Glushkov, Olga Yu. Khetselius, Elena P. Gurnitskaya , Denis E. Sukharev, Ludmila Lovett

b) Collisions with Electrons, Ions, Atoms and Molecules

B-b01 Electron impact ionization of ground-state and metastable Li^+ ions
Alexander Borovik, Igor Bray, Dmitry Fursa, Stefan Schippers, Alfred Müller

B-b02 Observation of higher order resonant electron recombination processes by highly charged krypton ions
Christian Beilmann, Zoltan Harmann, Jose R. Crespo Lopez-Urrutia, Volkhard Maeckel, Hiroyuki Tawara, Joachim Ullrich

B-b03 High resolution low-energy dielectronic recombination rate coefficients of beryllium-like germanium: QED test bench for two-valence-electron systems
Dmitry A. Orlov, Claude Krantz, Dietrich Bernhardt, Carsten Brandau, Jens Hoffmann, Alfred Müller, Ticia Ricsóka, Stefan Schippers, Andrey Shornikov, Andreas Wolf

B-b04 Low-lying dielectronic resonances of Fe XXII and Fe XVIII for accurate energy determination of autoionising Rydberg levels for boron- and fluorinelike cores
Claude Krantz, Dmitry A. Orlov, Jens Hoffmann, Ticia Ricsóka, Sándor Ricz, Stefan Schippers, Andreas Wolf

B-b05 Dielectronic recombination of Li- and Be-like xenon ions
Dietrich Bernhardt, Sebastian Boehm, Holger Knopp, Joerg Jacobi, Stefan Kieslich, Paul Mokler, Alfred Müller, Stefan Schippers, Wei Shi, Peter Beller, Fritz Bosch, Carsten Brandau, Christophor Kozhuharov, Fritz Nolden, Markus Steck

B-b06 Effective collision strengths for the electron impact excitation of Ni XVII
Claire Hudson, Patrick Norrington, Catherine Ramsbottom

B-b07 Dielectronic recombination into Mg-like ions
Izumi Murakami, Ulyana I. Safronova, Takako Kato

B-b08 Correlated strong-field dynamics and nuclear properties explored by resonant electron recombination with highly charged ions
Z. Harman, O. Postavaru, U. D. Jentschura, C. H. Keitel, W. Scheid, V. Maeckel, C. Beilmann, J. R. Crespo Lopez-Urrutia, H. Tawara, J. Ullrich, C. Brandau, C. Kozhuharov, Th. Stoehlker

B-b09 High precision measurement of the spectral width of the nickel-like molybdenum X-ray laser
Noboru Hasegawa, Tetsuya Kawachi, Akira Sasaki, HIroshi Yamatani, Maki Kishimoto, Momoko Tanaka, Yoshihiro Ochi, Masaharu Nishikino, Yuichi Kunieda, Hitoki Yoneda

B-b10 Electron ion collision studies at the Stockholm electron beam ion trap
S. Böhm, I. Orban, R. Schuch

B-b11 Investigating correlated high-field few-electron QED by means of dielectric recombination in $W^{69+...72+}$ ions
Volkhard Maeckel, Jose R. Lopez-Urrutia, Antonio J. Gonzalez-Martinez, Zoltan Harman, Hiroyuki Tawara, Joachim Ullrich

B-b12 Dielectronic recombination of Na-like S and Na-like Ar in the presence of external fields
I. Orban, S. Böhm, S. Trotsenko, R. Schuch

B-b13 Possibility of resonant capture of antiprotons by electron excitation in hydrogenlike ions
Michael Genkin, Eva Lindroth

B-b14 The enhancement effect in radiative recombination of bare uranium ions with cooling electrons
D. Banas, M. Pajek, Th. Stoehlker, H. Beyer, F. Bosch, C. Brandau, S. Chatterjee, M. Czarnota, A. Gumberidze, S. Hagmann, C. Kozhuharov, D. Liesen, P. Mokler, R. Reuschl, U. Spillmann, S. Tachenov, S. Trotsenko, P. Verma, D. Sierpowski, A. Warczak, S. Boehm, A. Mueller, E. Schmidt, J.-Cl. Dousse, J. Szlachetko

B-b15 Theoretical investigation on quantum interference effects between dielectronic recombination and radiative recombination for highly charged ions
Yinglong Shi, Jianjie Wan, Chenzhong Dong

B-b16 Resonance electron impact excitation and polarization of magnetic quadrupole line of neonlike Ba^{46+} ions
Jun Jiang, Chenzhong Dong, Luyou Xie, Jianguo Wang

B-b17 Isomer effect on ionization processes in collisions of 6-MeV/amu bare-ions with C_3H_6 molecules
Tomoharu Nakazato, Takashi Matsuo, Toshiyuki Kohno, Yumiko Ohno, Shin-ichi Watanabe, Takeshi Murakami

B-b18 State-selective differential cross sections for single, double electron capture in low energy He^{2+}-He collisions
Xiaolong Zhu, Xinwen Ma, Li Bin, Shaofeng Zhang, Wentian Feng, Huiping Liu, Lanfang Chen, Shiping Cao, Dongbin Qian, Dacheng Zhang

B-b19 Asymptotic theory for single and double electron capture in low - energy collisions of highly charged ions with molecules
Mykhaylo Khoma, Volodymyr Lazur, Ratko Janev

B-b20 Energy gain measurements of highly charged Xe ions in collisions with rare gas targets at 200 eV
Kunikazu Ishii, Yoko Inoue, Hidemi Ogawa

B-b21 Differential cross sections for single-electron capture by low-energy O_2^{2+} ions from Ne and O_2
Emanuel Y. Kamber

B-b22 Non-perturbative investigation of the interference effects in the ionization of H_2 by charged particle impact
Ladislau Nagy, Sándor Borbély, Katalin Póra

B-b23 A distorted wave model for electron ionization in collisions between clothed-ions and atomic targets
Juan Manuel Monti, Roberto Daniel Rivarola, Pablo Daniel Fainstein

B-b24 A full four-body continuum distorted wave - eikonal initial state model for ionization of He by ion impact
Juan Manuel Monti, Omar Ariel Fojón, Jocelyn Hanssen, Roberto Daniel Rivarola

B-b25 New classical CTMC approaches to A^{q+} + He processes
Francisco Guzmán, Luis Fernando Errea, Luis Méndez, Bernard Pons, Armando Riera

B-b26 A new MOTRIMS apparatus for high resolution measurements in ion-atom collisions and trapped atoms studies
Jeremy Blieck, Xavier Flechard, Amine Cassimi, Herve Gilles, Sylvain Girard, Dominique Hennecart

B-b27 Vacancy distribution of the X-ray satellite spectra of SiO_2 aerogel bombarded with calcium ions
Aneta Maria Gojska, Jacek Rzadkiewicz, Olga Rosmej, Marek Polasik, Katarzyna Slabkowska

B-b28 Complementary spectroscopy of tin ions by using ion beams and electron beams
Hayato Ohashi, Shintaro Suda, Hajime Tanuma, Shinsuke Fujioka, Hiroaki Nishimura, Katsunobu Nishihara, Takeshi Kai, Akira Sasaki, Hiroyuki A. Sakaue, Nobuyuki Nakamura, Shunsuke Ohtani

B-b29 Linear polarization studies for radiative electron capture transitions into highly charged uranium
Sebastian Hess, Harald Braeuning, Carsten Brandau, Sabrina Geyer, Maik Hegewald, Christophor Kozhuharov, Thomas Krings, Ajay Kumar, Renate Maertin, Brian O'Rourke, Davor Protic, Regina Reuschl, Uwe Spillmann, Martino Trassinelli, Sergej Trotsenko, Guenter Weber, Thomas Stoehlker

B-b30 One- and two- electron transfer to continuum in near-relativistic ion-atom collisions
Siegbert Hagmann, Muaffaq Nofal, Thomas Stoehlker, Andrej Surzhykov, Stefan Fritzsche, Doris Jakubassa-Amundsen, Benaceur Najjari, Alexander Voitkiv, Christophor Kozhuharov, Joachim Ullrich, Robert Moshammer, Alexander Gumberidze, Uwe Spillmann, Regina Reuschl, Sebasian Hess, Sergej Trotsenko, Fritz Bosch, Dieter Liesen, Reinhard Doerner, Hermann Rothard, Gaetano Lanzano, Enrico De Filippo

B-b31 Strong forward-backward asymmetry of H_2O ionic fragments by slow highly charged ions impact
Zoran Pesic, Rolf Hellhammer, Bela Sulik, Nikolaus Stolterfoht

B-b32 Investigation of the multiple electron scattering sequences in C^{n+} + Ar collisions
Karoly Tokesi, Bela Sulik

B-b33 Young type interference in electron emission frm H_2 and forward-backward asymmetry: A new approach
D Misra, S Chatterjee, Lokesh C Tribedi

B-b34 Interference patterns in spectra of electron ionization of heteronuclear HeH^+ targets in interaction with fast ion beams
Carmen Alejandra Tachino, Mariel Elisa Galassi, Fernando Martín, Roberto Daniel Rivarola

B-b35 Theoretical analysis of multiple ionization of Ar-ions in gas targets
Gerald Schenk, Tom Kirchner, Viatcheslav Shevelko

B-b36 High-resolution X-ray study of multiple ionization of Pd atoms by fast oxygen ions
M. Czarnota, D. Banas, M. Pajek, J.-Cl. Dousse, J. Hoszowska, Y.-P. Maillard, O. Mauron, M. Berset, P.A. Raboud, D. Chmielewska, J. Rzadkiewicz, Z. Sujkowski, M. Polasik, K. Slabkowska

B-b37 Radiative electron capture and subsequent radiative decay in collisions of U^{89+} ions with N_2
Jianjie Wan, Yongjun Wang, Xiaobin Ding, Chenzhong Dong, Xinwen Ma, Jacek Rzadkiewicz, Thomas Stohlker, Stephan Fritzsche

B-b38 Loss mechanism and lifetime of ions beam in HIRFL-CSRE
Yingli Xue, Xiaohong Cai, Deyang Yu, Caojie Shao, Fangfang Ruan, Dejun Qi, Mingwu Zhang, Wei Wang

B-b39 Investigation of multiple electron transfer in ion atom collisions
Ina Blank, Gabriel Hasan, Simone Götz, Terry Mullins, Wenzel Salzmann, Reinhard Morgenstern, Matthias Weidemüller, Ronnie Hoekstra

B-b40 Electron-impact excitation of $2p^5 3l \rightarrow 2p^5 3l'$ line emission of Fe XVII
Daiji Kato, Hiroyuki A Sakaue, Izumi Murakami, Takako Kato, Nobuyuki Nakamura, Shunsuke Ohtani, Norimasa Yamamoto, Tetsuya Watanabe

c) Interactions with Clusters, Surfaces and Solids

B-c01 Fragmentation of adenine induced by He^{2+} and F^{2+}
Xinwen Ma, Bin Li, Li Chen, Richard Bredy, Xiaolong Zhu, Huiping Liu, Shaofeng Zhang, Wentian Feng, Dongbing Qian, Dacheng Zhang

B-c02 Projectile q-dependence of single, double and multiple ionization and fragmentation of C_{60} under first ion-impact and influence of GDPR
Aditya Kelkar, Lokesh C. Tribedi

B-c03 Multiply charged ions within a fullerene cage: photoionization of $Ce@C_{82}^+$
Alfred Müller, Stefan Schippers, Mustapha Habibi, David Esteves, Jing-Cheng Wang, Ronald Arthur Phaneuf, David Kilcoyne, Alejandro Aguilar, Lothar Dunsch

B-c04 Absolute charge transfer and fragmentation cross sections in He^{2+} - C_{60} collisions
A. Rentenier, L. F. Ruiz, S. Diaz-Tendero, B. Zarour, P. Moretto-Cappelle, D. Bordenave-Montesquieu, A. Bordenave-Montesquieu, P. A. Hervieux, M. Alcami, M. F. Politis, J. Hanssen, F. Martin

B-c05 Potential and kinetic sputtering of molecular fragments from alkanethiols-SAMs due to HCI impact
Marcos I Flores, Brian E O'Rourke, Vladimir A Esaulov, Yasunori Yamazaki

B-c06 Guiding of argon ions trough PET nano capillary foils
Martin Kreller, Guenther Zschornack, Ulrich Kentsch

B-c07 Ion desorption from solid rare gases by singly- and multiply-charged ion impact
Takayuki Tachibana, Kentro Fukai, Tetsuo Koizumi, Takato Hirayama

B-c08 Formation of nano pits on the KBr (001) surface induced by single impact of slow highly charged ions
Rene Heller, Stefan Facsko, Richard Wilhelm, Wolfhard Möller

B-c09 X-ray emission in the interaction of slow H-like ions with a metal surface
Jian Sun, Hirofumi Watanabe, Masahide Tona, Tsutomu Watanabe, Nobuyuki Nakamura, Chikashi Yamada, Shunsuke Ohtani

B-c10 Guiding of slow highly charged ions through a thin gap between a pair of parallel glass plates
Tokihiro Ikeda, Yoshio Iwai, Takao M. Kojima, Shigeki Onoda, Yasuyuki Kanai, Kristina A. Vokhmyanina, Grigory P. Pokhil, Yasunori Yamazaki

B-c11 Collisions of ions with insulating surfaces: Charging and discharging dynamics
Nenad Bundaleski, Hocine Khemliche, Patrick Rousseau, Amine Cassimi, Laurent Maunoury, Philippe Roncin

B-c12 Charge-up dynamics in guiding slow highly charged ions through nano-capillaries
Patrik Skog, Hongqiang Zhang, Inna Soroka, Nadeem Akram, Kristina Vokhmyanina, Reinhold Schuch

B-c13 Investigation on a nano-structure on a hydrogen-terminated Si surface induced by individual HCI impacts
Masahide Tona, Makoto Sakurai, Hirofumi Watanabe, Jian Sun, Chikashi Yamada, Nobuyuki Nakamura, Shunsuke Ohtani

B-c14 Guiding effect of mediate and low energy electron-beam by quartz tube
Dejun Qi, Xiaohong Cai, Deyang Yu, Wei Wang, Yingli Xue, Fangfang Ruan, Mingwu Zhang, Caojie Shao

B-c15 Dynamic features of beam guiding by insulator capillaries: Incident energy dependence
Yasuyuki Kanai, Masamitsu Hoshino, Tokihiro Ikeda, Tadashi Kambara, R. Hellhammer, N. Stolterfoht, Yasunori Yamazaki

B-c16 Ion guiding through nanocapillaries in PET polymers with variable diameter
Nico Stolterfoht, R. Hellhammer, Bela Sulik, Zoltan Juhasz, Erwin Bodewits, Hong Dang, Ronnie Hoekstra

B-c17 Computation of dose distributions for heavy charged particles in theraputic applications
Houshyar Noshad

B-c18 Selective formation of multiply excited states by resonant coherent excitation
Yuji Nakano, Kenichi Metoki, Yasushi Takano, Atsushi Hatakeyama, Yoichi Nakai, Toshiyuki Azuma, Kenichiro Komaki, Yasunori Yamazaki, Eiichi Takada, Takeshi Murakami

B-c19 Solid-density plasma existed at initial stage of heavy ion track formation in solids
Sergey A. Pikuz Jr., Igor Yu. Skobelev, Igor V. Morozov, Alexander V. Lankin, Genry E. Norman

d) Interactions with Photons, Plasmas and Strong Field Processes

B-d01 Above-threshold two-photon transitions between bound states of multicharged hydrogen-like ions
Nikolay Leonidovich Manakov, Sergey Ivanovich Marmo, Sergey Aleksandrovich Sviridov, Sergey Aleksandrovich Zapryagaev

B-d02 Production of multiply charged ions from the 4d photoionization of Cs^+
Tetsuo Koizumi, Takao M Kojima, Mutsumi Sano, Naoki Watanabe

B-d03 X-ray absorption by highly charged ions in plasmas: Toward photo-pumping X-ray laser
Tetsuya Kawachi, Yoshiaki Kato

B-d04 Behaviour of impurity ions for radiation collapse in large helical device
Takako Kato, Izumi Murakami, Daiji Kato, Hisamichi Funaba, Kuninori Sato, Motoshi Goto, Byron Peterson, Norimasa Yamamoto

B-d05 Investigating the emission angle, charge and energy of ions produced from laser produced extreme ultraviolet sources
E Sokell, A O'Connor, P Dunne, P Hayden, O Morris, F O'Reilly, G O'Sullivan

B-d06 Electron temperature modifications by upgraded injection power of IBW heating system on HT-7 tokamak
Sarwar Sajjad, Xiang Gao, Bili Ling, Ti Ang

B-d07 Optimal pulse duration in laser-cluster interactions
Cornelia Deiss, Christophe Prigent, Emily Lamour, Jean-Pierre Rozet, Dominique Vernhet, Joachim Burgdörfer

B-d08 On the solution of the time dependent Dirac equation for hydrogen-like systems
Sølve Selstø, Jakob Bengtsson, Eva Lindroth

B-d09 QED theory of laser-atom and laser-nucleus interaction and multi-body dynamics in a strong laser field pulse
Alexander V. Glushkov

e) Production, Experimental developments and Applications

B-e01 Status of the g-factor experiment on highly charged calcium
W. Quint, K. Blaum, H.-J. Kluge, B. Schabinger, S. Sturm, A. Wagner, G. Werth

B-e02 HITRAP - a facility for precision experiments on heavy highly charged ions in extreme electromagnetic fields
W. Quint, Z. Andjelkovic, K. Blaum, G. Birkl, D. Bodewits, L. Dahl, F. Herfurth, R. Hoekstra, O. Kester, H.-J. Kluge, S. Koszudowski, C. Kozhuharov, G. Maero, W. Noertershaeuser, J. Pfister, U. Ratzinger, W. Salzmann, A. Schempp, D. Segal, A. Sokolov, Th. Stoehlker, R. Thompson, J. Ullrich, V. Varentsov, M. Vogel, G. Vorobjev, A. Warczak, M. Weidemueller, C. Weinheimer, D. F.A. Winters

B-e03 Re-trapping and cooling highly-charged ions
M. Hobein, S. Böhm, A. Solders, M. Suhonen, L. Yuwen, O. Kamalou, Sz. Nagy, G. Marx, R. Schuch

B-e04 Trapping of highly charged ions with an electrostatic ion trap
Alexandre Gumberidze, Paul Indelicato, Csilla Szabo, Dina Attia, Alexandre Vallette, S. Carmo

B-e05 X-ray spectroscopy characterization of Ar^{17+} produced by an ECRIS in the afterglow mode
Christophe Prigent, Emily Lamour, Jacques Merot, Bernard Pascal, Jean - Pierre Rozet, Martino Trassinelli, Dominique Vernhet, Jean - Yves Pacquet, Laurent Maunoury, Fabien Noury, Jean - Marc Ramillon

B-e06 Highly charged ion injector in terminal of tandem accelerator
Makoto Matsuda, Takamitsu Nakanoya, Kenichi Kutsukake, Susumu Hanashima, Suehiro Takeuchi

B-e07 Continuous beams of highly charged ions from the Dresden EBIS-A
Ulrich Kentsch, Frank Grossmann, Rene Heller, Vladimir P. Ovsyannikov, Guenther Zschornack, Martin Kreller

B-e08 A Si(Li) multistrip detector- an efficient compton polarimeter
Uwe Spillmann, Harald Braeuning, Sebastian Hess, Thomas Krings, Istvan Mohos, Davor Protic, Thomas Stoehlker

B-e09 The commissioning of the cooler storage ring HIRFL-CSR in Lanzhou
Jiawen Xia, Wenlong Zhan, Hushan Xu

B-e10 Development of multichannel Doppler tuned beam-foil X-ray absorption spectrometer at IUAC
Ranjeet Kumar Karn, Nissar Ahmad, Anjan Dutta, C. P. Safvan, T. Nandi and A. Roy

B-e11 Absolute detection efficiencies of an ion counting system with a channel-electron multiplier
Tetsuo Koizumi, Yuta Chihara

B-e12 Time resolved extreme ultraviolet tin spectra from laser produced plasmas
Patrick Hayden, Padraig Dunne, Gerry O'Sullivan, Eugene T. Kennedy, John T Costello

B-e13 Development and applications of electron beam ion source for nanoprocesses
Makoto Sakurai, Masahide Tona, Hirofumi Watanabe, Nobuyuki Nakamura, Shunsuke Ohtani, Toshifumi Terui, Shinro Mashiko, Hiroyuki A Sakaue

B-e14 Tin LPP source modelling for EUVL at 13.5 nm
John White, Padraig Dunne, Oran Morris, Fergal O'Reilly, Emma Sokell, Gerry O'Sullivan

B-e15 Angle-resolved studies of tin-based laser produced plasma EUV sources
Oran Morris, Paddy Hayden, Tom McCormack, Aodh O'Connor, Fergal O'Reilly, Gerry O'Sullivan, Emma Sokell, John White, Padraig Dunne

B-e16 Calculation of stability diagrams and ion trajectories in quadrupole ion trap with impulsional potential by matrix method
Alireza Doroudi