

Monday, 27 June 2022		Stream A
8:00-9:00	Registration	
9:00-9:20	Opening Remarks	
9:20-9:50	Opening Lecture: Terrence Jach	High-resolution X-ray emission spectroscopy including many-body and phonon effects
	Session 1A	X-ray absorption and X-ray emission Spectrometry
9:50-10:10	Frank de Groot	Resonant inelastic X-ray scattering of transition metal oxides
10:10-10:30	Karina Bzheumikhova et al.	High-resolution X-ray Spectroscopy of Ti and TiOx - Experiments and Theory
10:30-11:00	Coffee	
11:00-11:20	Adam A. L. Michalchuk et al.	Time resolved in situ monitoring of mechanochemical transformations by X-ray spectroscopy (XAS)
11:20-11:40	Talgat Mamyrbayev et al.	Efficient femtosecond time-resolved hard X-ray absorption spectroscopy at the SwissFEL
11:40-12:00	Anicó Kulow et al.	Spectral X-ray Ptychography
12:00-14:00	Lunch break	
14:00-14:30	Invited Lecture: Sofia Pessanha	Advantages and limitations of portable XRF in environmental and cultural heritage studi
	Session 2A	Applications of X-ray spectrometry: Biosciences and Health
14:30-14:50	Birgit Kanngießer et al.	X-Ray Nanoscopy for Investigations in Life Science
14:50-15:10	Katarzyna Matusiak et al.	Elemental changes occurring in selected organs after iron oxide nanoparticles administration stud
15:10-15:30	Ian Byrnes et al.	Micro and Nanoscale X-ray Techniques Provide Spatial Distributions of Uranium and Correlated Hist
15:30-15:50	Carlo Porfido et al.	Combined XRF techniques as a valuable tool for the study and early detection of plant viruses
15:50-16:10	Eva Margui et al.	Ultrasound assisted enzyme based hydrolytic microextraction as a simple and green method for deter
16:10-16:30	Tea	
16:30-18:30	Poster Session I	

Monday, 27 June 2022		Stream B
8:00-9:00	Registration	
9:00-9:20	Opening Remarks	
9:20-9:50	Opening Lecture: Terrence Jach	High-resolution X-ray emission spectroscopy including many-body and phonon effects
	Session 1B	Theory, fundamental interactions and modelling
9:50-10:10	Burkhard Beckhoff et al.	International Initiative on X-ray Fundamental Parameters – Status and next steps
10:10-10:30	Andreas Karydas et al.	Experimentally Revisited X-ray Fundamental Parameters at the XRF beamline of Elettra Sincrotrone
10:30-11:00	Coffee	
11:00-11:20	Hina Verma et al.	Interface Analysis of Mg/Sc and Sc/Mg bilayer using X-ray reflectivity
11:20-11:40	Leonhard Lohr et al.	Soft X-ray fluorescence supplemented by simultaneous scattering for nanoscale grating reconstruct
11:40-12:00	Víctor H. Elvira et al.	Absolute calibration of photodiodes with a monochromatic beam measured with an electrical-substit
12:00-14:00	Lunch break	
14:00-14:30	Invited Lecture: Sofia Pessanha	Advantages and limitations of portable XRF in environmental and cultural heritage studi
	Session 2B	Jean-Claude Dousse Memorial session
14:30-14:50	Joanna Hoszowska	Jean-Claude Dousse and his contributions to Atomic physics and high-resolution X-ray spectroscopy
14:50-15:10	Jakub Szlachetko et al.	Near-edge X-ray spectroscopy using non-monochromatized XFEL radiation
15:10-15:30	Yves Kayser et al.	The von Hamos spectrometer of the University of Fribourg applied towards material characterizatio
15:30-15:50	Łukasz Jabłoński et al.	Two-electron processes in relaxation of hollow atoms
15:50-16:10	Matjaz Kavcic	Inner-shell ionization induced in ion-atom collisions studied by high energy resolution X-ray spe
16:10-16:30	Tea	
16:30-18:30	Poster Session I	

Monday, 27 June 2022		Stream C
8:00-9:00	Registration	
9:00-9:20	Opening Remarks	
9:20-9:50	Opening Lecture: Terrence Jach	High-resolution X-ray emission spectroscopy including many-body and phonon effects
Session 1C Instrumentation		
9:50-10:10	S.H. Lau et al.	New Developments in Laboratory X-ray Absorption Spectroscopy, X-ray Fluorescence Microscopy and H
10:10-10:30	Alexei Erko et al.	Light element analysis with the novel wavelength-dispersive spectrometer "WDSX-300"
10:30-11:00	Coffee	
11:00-11:20	Craig Hiley et al.	Transitioning a High Resolution Non-Invasive XRD Technique from the Synchrotron to the Laboratory
11:20-11:40	Björn Eckert et al.	Subpixel Resolution for Pixelated Semiconductor Tracking Detectors Based on Neural Networks
11:40-12:00	Jonas Baumann et al.	Flexible enlargement of synchrotron beams for coarse X-ray fluorescence imaging scans
12:00-14:00 Lunch break		
14:00-14:30	Invited Lecture: Sofia Pessanha	Advantages and limitations of portable XRF in environmental and cultural heritage studi
Session 2C Vendors		
14:30-14:50	KETEK	TBD
14:50-15:10	HITACHI	TBD
15:10-15:30	XIA	TBD
15:30-15:50	DECTRIS	TBD
15:50-16:10	PNDetector	TBD
16:10-16:30	Tea	
16:30-18:30	Poster Session I	

Oral programme EXRS-2022

Version of Tuesday, 21 June 2022

Tuesday, 28 June 2022		Stream A
8:00-9:00	Registration	
9:00-9:30	Invited Lecture: Zoltán Németh	Variations on a laboratory high-energy-resolution X-ray spectrometer
	Session 3A	Synchrotron Radiation
9:30-9:50	Ina Holfelder et al.	Effective and calibratable wavelength-dispersive high-resolution X-ray emission spectrometer for
9:50-10:10	Simone Sala et al.	Combining in-line holography and X-ray fluorescence for multimodal imaging with synchrotron radia
10:10-10:30	Giuliana Aquilanti et al.	The X-ray fluorescence beamline at Elettra synchrotron: an instrument for structural and chemica
10:30-11:00	Coffee	
11:00-11:20	Paweł Wróbel et al.	Project of the new multimodal X-ray imaging beamline PolyX at SOLARIS National Synchrotron Radia
11:20-11:40	André Wählich et al.	A Compact Vibration Compensating Setup for Scanning nm-XRF and STXM
11:40-12:00	Lars Lühl et al.	XRF-Nanoscopy of Sediment combined with C/P K-edge NEXAFS in Fluorescence Mode
12:00-14:00	Lunch break	
14:00-14:30	Invited Lecture: Tom Schoonjans	xraylib: a library for interactions of X-rays with matter
	Session 4A	Data Analysis - "Piet Van Espen Retirement Session"
14:30-14:50	Piet Van Espen	X-ray spectrum evaluation into the 21st century; new challenges, new solutions?
14:50-15:10	Matteo Ippoliti et al.	XRFitProc : a novel web based XRF fitting system
15:10-15:30	Ignazio Allegretta et al.	Direct use of TXRF spectral signal for multivariate data analysis: a new strategy for food finger
15:30-15:50	Nathaly De La Rosa et al.	Clustering methods for the characterization of synchrotron radiation X-ray fluorescence images of
15:50-16:10	Iva Bozicevic Mihalic et al.	Multivariate approach in the analysis of PIXE/XRF images
16:10-16:30	Tea	
16:30-18:30	Poster Session II	
19:30 - ...	Public Lecture: Frank Brenker	Advanced X-ray analysis of Asteroid Material

Tuesday, 28 June 2022		Stream B
8:00-9:00	Registration	
9:20-9:50	Invited Lecture: Zoltán Németh	Variations on a laboratory high-energy-resolution X-ray spectrometer
	Session 3B	Quantitative Analysis
9:50-10:10	Jorge Fernandez	Understanding the x-ray emission spectrum after excitation with a source of x-rays: from theory t
9:50-10:10	Imre Szalóki et al.	Development of Reverse Monte Carlo algorithm for quantification procedure of X-ray fluorescence
10:10-10:30	Alexandre Subercaze et al.	Monte Carlo determination of gamma and X-rays spectrometry sample corrective factors: an applicat
10:30-11:00	Coffee	
11:00-11:20	Michael Iro et al.	Steps towards quantitative confocal micro X-ray fluorescence analysis (QCMXRF)
11:20-11:40	Frank Förste et al.	Quantification routine for full 3D elemental distributions obtained with laboratory confocal micr
11:40-12:00	Stephanie Melhem et al.	Estimating the uncertainties in combined GIXRF-XRR for the characterization of innovative materia
12:00-14:00	Lunch break	
14:00-14:30	Invited Lecture: Tom Schoonjans	xraylib: a library for interactions of X-rays with matter
	Session 4B	Quantitative Analysis
14:30-14:50	Timo Wolff et al.	On the interaction of X-rays and samples by quantification of energy deposition
14:50-15:10	Markus Kraemer et al.	New types of calibration samples for X-ray fluorescence analysis instruments
15:10-15:30	Elisabeth Holub et al.	Spectral Correction for Transmission X-ray Tubes for Use in the Quantification Software ATI-QUANT
15:30-15:50	Jorge Machado et al.	Accuracy improvement in the XRF quantification using different matrix reference materials with lo
15:50-16:10	Yves Kayser et al.	Traceable chemical analysis of aerosols by reference-free X-ray spectrometry
16:10-16:30	Tea	
16:30-18:30	Poster Session II	
19:30 - ...	Public Lecture: Frank Brenker	Advanced X-ray analysis of Asteroid Material

Tuesday, 28 June 2022		Stream C
8:00-9:00	Registration	
9:20-9:50	Invited Lecture: Zoltán Németh	Variations on a laboratory high-energy-resolution X-ray spectrometer
	Session 3C	X-ray absorption and X-ray emission Spectrometry
9:50-10:10	Jens Rauschenberger	XAS from synchrotrons to labs: novel compact XAS instrumentation
9:50-10:10	Jonathan Holburg et al.	High-Resolution Table-Top NEXAFS Spectroscopy
10:10-10:30	Sebastian Praetz et al.	In Situ laboratory-XAFS at the Technische Universität Berlin
10:30-11:00	Coffee	
11:00-11:20	Srivatsan Seshadri et al.	Development of a Versatile Laboratory based X-Ray Absorption Spectroscopy System for Characteriza
11:20-11:40	Adrian Jonas et al.	Laboratory nanosecond pump probe NEXAFS spectroscopy on organic thin films
11:40-12:00	Andrey Sokolov et al.	Accurate XUV absorption and reflection spectroscopy at the At-Wavelength Metrology facility at BE
12:00-14:00	Lunch break	
14:00-14:30	Invited Lecture: Tom Schoonjans	xraylib: a library for interactions of X-rays with matter
	Session 4C	Vendors
14:30-14:50	Helmut Fisher	TBD
14:50-15:10	XOS	TBD
15:10-15:30	AMPTEK	TBD
15:30-15:50	MIRION	TBD
15:50-16:10	MOXTEK	TBD
16:10-16:30	Tea	
16:30-18:30	Poster Session II	
19:30 - ...	Public Lecture: Frank Brenker	Advanced X-ray analysis of Asteroid Material

Wednesday, 29 June 2022 Stream A

8:00-9:00	Registration	
9:00-9:30	Invited Lecture: Philippe Hoenicke	Dimensional and compositional characterization of nanostructures using the grazing inci
	Session 5A	Total reflection and Grazing Incidence/Emission XRF
9:30-9:50	Diane Eichert	Toward a Road Map in Total Reflection X-Ray Fluorescence Analysis
9:50-10:10	Kouichi Tsuji et al.	Evaluation of Analyzing Volume in TXRF arrangement
10:10-10:30	Armin Gross et al.	TXRF works – A proof through round robin tests of preselected and well characterized samples
10:30-11:00	Coffee	
11:00-11:20	Claudia Giuseppina Fatuzzo et al	TXRF/GIXRF high precision laboratory setup with high flux monochromatic sources
11:20-11:40	Sven Hampel et al.	Investigation of picoliter derived artificial samples and their behavior in grazing incidence XRF
11:40-12:00	Steffen Staeck et al.	Towards laboratory investigations of periodic 2D nanostructures with soft X-ray GEXRF

Wednesday, 29 June 2022 Stream B

8:00-9:00	Registration	
9:20-9:50	Invited Lecture: Philippe Hoenicke	Dimensional and compositional characterization of nanostructures using the grazing inci
	Session 5B	X-ray Imaging and Scanning
9:50-10:10	Ioanna Mantouvalou et al.	SynCLab – joint X-ray imaging and spectroscopy measurements at the synchrotron and in the laborat
9:50-10:10	Andrea Sorrentino et al.	Visualizing samples chemical state at the nanometers scale using energy resolved soft X-ray micro
10:10-10:30	Dieter Ingerle et al.	A monochromatic confocal micro X-ray Fluorescence (μ XRF) spectrometer using polycapillaries for t
10:30-11:00	Coffee	
11:00-11:20	Ana Luisa Silva et al.	3D printing in EDXRF: A solution to produce new imaging apertures for full-field of view imaging
11:20-11:40	Martin Radtke et al.	Getting more efficient - The use of Bayesian optimization and Gaussian processes at the BAMline
11:40-12:00	Roald Tagle et al.	3D chemical analysis of the Gujba meteorite by micro-XRF: Is a preparative approach justified by

Wednesday, 29 June 2022 Stream C

8:00-9:00	Registration	
9:20-9:50	Invited Lecture: Philippe Hoenicke	Dimensional and compositional characterization of nanostructures using the grazing inci
	Session 5C	Other X-ray methods incl. Ion Beam Analysis
9:50-10:10	Stjepko Fazinic et al.	IBA and microscopy methods in morphology studies of dust particles after JET-ILW campaigns
9:50-10:10	Quentin Mouchard et al.	High energy PIXE: new K-shell ionization
10:10-10:30	Philippe Jonnard et al.	PIXE-Kossel with an energy dispersive CCD
10:30-11:00	Coffee	
11:00-11:20	Kristina Isaković et al.	External microbeam at the Microanalytical center of the Jožef Stefan Institute
11:20-11:40	Pia Schweizer et al.	Optimisation of light element measurement with high resolution wavelength dispersive spectrometry
11:40-12:00	Flavien Ralite et al.	High energy proton beam monitoring: X-rays bremsstrahlung production cross section measurements f

Thursday, 30 June 2022		Stream A
8:00-9:00	Registration	
9:00-9:20	EXSA Young Scientist Award	
9:20-9:50	Prize Winner's lecture	
	Session 6A Applications of X-ray Spectrometry: Cultural Heritage	
9:50-10:10	Claudia Caliri et al.	A novel MA-XRF scanner operated with a 6-SDDs hodoscopic system for painting investigation
10:10-10:30	Henry Chopp et al.	Spatial and Spectral Denoising of Macro X-Ray Fluorescence Images of Paintings
10:30-11:00	Coffee	
11:00-11:20	Francesco Paolo Romano et al.	A novel MA-XRD/MA-XRF scanner for pigment-specific mapping of paintings
11:20-11:40	Mareike Gerken et al.	Determination of paint thickness by Compton scattering
11:40-12:00	Zdenek Preisler et al.	Deep Learning for MA-XRF Imaging spectroscopy of Paintings
12:00-14:00	Lunch break	
14:00-14:30	Invited lecture: Katrien Keune	Operation Night Watch: macro- and microscale X-ray imaging studies on Rembrandts'
	Session 7A Applications of X-ray Spectrometry: Cultural Heritage	
14:30-14:50	Victor Gonzalez et al.	Synchrotron X-ray Diffraction studies of Leonardo da Vinci's inorganic pigments
14:50-15:10	Letizia Monico et al.	Properties and stability of cadmium-based paints probed by state-of-the-art analysis at multiple
15:10-15:30	Frédérique Broers et al.	Correlative 3D Micro X-ray Fluorescence and Ptychographic Tomography on Rembrandt's Night Watch
15:30-15:50	Marco Colombo et al.	Combining the optical and MA-XRF elemental information with advanced data processing routines to
15:50-16:10	Ermanno Avranovich Clerici et al	X-ray imaging of pigments and their secondary products in frescoes of the Upper Basilica of St. F
16:10-16:30	Tea	
16:30-18:30	Poster Session III	
19:30 - ...	Conference Dinner	

Thursday, 30 June 2022		Stream B
8:00-9:00	Registration	
9:00-9:20	EXSA Young Scientist Award	
9:20-9:50	Prize Winner's lecture	
	Session 6B Applications of X-ray spectrometry: Biosciences and Health	
9:50-10:10	Katarina Vogel-Mikuš et al.	Selenium affects mercury ligand environment in terrestrial food chain – a XAS study
10:10-10:30	Anna Turyanskaya et al.	Gadolinium mapping in bone by micro-/submicro-XRF
10:30-11:00	Coffee	
11:00-11:20	Andre L. C. Conceição et al.	3-D elemental map in breast cancer tissue by combining X-ray fluorescence and scattering computed
11:20-11:40	Flávia Leite et al.	Monitoring heavy metal accumulation in Zebrafish with a full-field of view imaging system based o
11:40-12:00	Brecht Laforce et al.	Analyzing Tumor-Drug interactions for Intraperitoneal Treatment of Ovarian Cancer Using Synchrotr
12:00-14:00	Lunch break	
14:00-14:30	Invited lecture: Katrien Keune	Operation Night Watch: macro- and microscale X-ray imaging studies on Rembrandts'
	Session 7B Applications of X-ray Spectrometry: Nano, Energy and Industrial materials	
14:30-14:50	Marianna Gambino et al.	From Particle Batch Analysis to Single Particle Characterization: A Correlative X-ray Microscopy
14:50-15:10	Ursula Fittschen et al.	Studying vanadium cross over in polymer electrolyte membranes
15:10-15:30	Etienne Brun	Characterization of Low-Density Materials for Laser Megajoule Targets by Micro X-Ray Computed Tom
15:30-15:50	Edyta Beyer et al.	Investigation of native silicon oxide growth on silicon spheres by XRF and XPS measurements
15:50-16:10	Ksenija Maver et al.	XAS analysis of the Sn and SnO ₂ modified TiO ₂ nanocomposites with improved photocatalytic activit
16:10-16:30	Tea	
16:30-18:30	Poster Session III	
19:30 - ...	Conference Dinner	

Thursday, 30 June 2022		Stream C
8:00-9:00	Registration	
9:00-9:20	EXSA Young Scientist Award	
9:20-9:50	Prize Winner's lecture	
Session 6C Applications of X-ray Spectrometry: Environmental and Geomaterials		
9:50-10:10	Paulo Artaxo	Aerosol links to radiative forcing, cloud properties and climate change in Amazonia
10:10-10:30	Yang Cui et al.	Characteristics and sources of hourly trace elements in airborne fine particles in urban Beijing,
10:30-11:00	Coffee	
11:00-11:20	Laurence Lemelle et al.	Nanoscale trace metal imprinting of biocalcification of planktic foraminifers by Toba's super-eru
11:20-11:40	Lutz Hecht et al.	Non-destructive characterization of meteorites by micro X-ray fluorescence analysis
11:40-12:00	Alexandre Simionovici et al.	X-rays search of life's origins on Earth and beyond
12:00-14:00	Lunch break	
14:00-14:30	Invited lecture: Katrien Keune	Operation Night Watch: macro- and microscale X-ray imaging studies on Rembrandts'
Session 7C Instrumentation		
14:30-14:50	Andreas Pahlke et al.	Silicon Drift Detectors with improved spectroscopic performance
14:50-15:10	Giacomo Ticchi et al.	ARDESIA-16: a 16-Channel X-ray Spectrometer for Synchrotron Applications
15:10-15:30	Mathieu Morelle et al.	Development of compact SDD modules for synchrotron applications
15:30-15:50	Adrian Niculae et al.	Single and Multichannel SDDs for High Resolution Energy Dispersive X-ray Spectroscopy
15:50-16:10	Dieter Michael Schlosser et al.	A Compact High Solid Angle Four Segmented Annular Silicon Drift Detector System for Synchrotron a
16:10-16:30	Tea	
16:30-18:30	Poster Session III	
19:30 - ...	Conference Dinner	

Friday, 1 July 2022		Stream A
8:00-9:00	Registration	
9:00-9:30	Invited Lecture: Sylvain Bohic	Nanosopic Quantitative X-ray Fluorescence Imaging of Cells with a High Energy X-ray Cr
	Session 8A	Applications of X-ray Spectrometry: Nano, Energy and Industrial materials
9:30-9:50	Roozbeh Valadian et al.	Mass Transport Simulation in a Single Catalyst Particle based on X-ray Microscopy and Pore Networ
9:50-10:10	Federica Zingaro et al.	Toxicological research: labelled microplastics detection in an in vitro model by soft X-Ray Micro
10:10-10:30	Emmanuel Nolot et al.	In-fab X-ray fluorescence for nanoelectronics
10:30-11:00	Coffee	
	Session 9A	Applications of X-ray Spectrometry: Nano, Energy and Industrial materials
11:00-11:20	Rafal Sitko et al.	Determination and speciation of ultra-trace metal ions in complex matrix samples by total-reflect
11:20-11:40	Tsugufumi Matsuyama et al.	Confocal 3D micro-X-ray fluorescence analysis of zinc-coated steel plate in salt solution under
11:40-12:00	Konstantin Skudler et al.	Operando NEXAFS investigating Lithium Sulfur Batteries
12:00-12:20	Closing Remarks	

Friday, 1 July 2022		Stream B
8:00-9:00	Registration	
9:20-9:50	Invited Lecture: Sylvain Bohic	Nanosopic Quantitative X-ray Fluorescence Imaging of Cells with a High Energy X-ray Cr
	Session 8B	Applications of X-ray Spectrometry: Cultural Heritage
9:50-10:10	Jacopo Orsilli et al.	Angle resolved-XRF: analysis of layers in cultural heritage related samples
9:50-10:10	Anna Zymakova et al.	A fast-integrated X ray Emission Spectrometer dedicated on the investigation of the Pt presence i
10:10-10:30	Steven De Meyer et al.	Uncovering the prevalence of metal oxalates in 15th-17th century oil paintings by means of macros
10:30-11:00	Coffee	
	Session 9B	Applications of X-ray Spectrometry: Cultural Heritage
11:00-11:20	Renan Oliveira et al.	Analysis of a wooden statue by non-destructive X-ray techniques
11:20-11:40	Javier Moreno Soto et al.	Material and imaging analyses procedure for the investigation of paintings by anonymous authors i
11:40-12:00	Juan José Leani et al.	Painting characterization by spatially-resolved Energy Dispersive Inelastic X-ray Scattering spec
12:00-12:20	Closing Remarks	

Friday, 1 July 2022		Stream C
8:00-9:00	Registration	
9:20-9:50	Invited Lecture: Sylvain Bohic	Nanosopic Quantitative X-ray Fluorescence Imaging of Cells with a High Energy X-ray Cr
	Session 8C	Total reflection and Grazing Incidence XRF
9:50-10:10	Janos Osan et al.	TXRF to trace quick and seasonal changes in elemental size distribution of airborne particulate m
9:50-10:10	Jasna Jablan et al.	Potential of total reflection X-ray fluorescence spectrometry for plant cosmetic ingredient analy
10:10-10:30	Natasha Hedden et al.	Quantifying cytotoxicity and cellular uptake of naked gold nanoparticles in breast cancer cells u
10:30-11:00	Coffee	
	Session 9C	Applications of X-ray Spectrometry: Environmental and Geomaterials
11:00-11:20	Lucyna Samek et al.	The Elemental Concentrations in PM _{2.5} determined by XRF Method Together with The Emission Sources
11:20-11:40	Margaret Gitau et al.	Source Identification of PM _{2.5} using Trace Elements in Digested Filter Samples: Application of TX
11:40-12:00	Simone Pollastri et al.	A combined XRF and XANES study on bottom ashes from municipal solid waste incineration
12:00-12:20	Closing Remarks	

Theory, fundamental interactions and modelling

PI-TH-1	Flávia Fernandes et al.	K-Shell X-Ray Production Cross Sections of Ti, Cr, Ni and Zn Induced by Chlorine Ions
PI-TH-2	Christine Jansing et al.	Soft-X-ray refractive index of graphene across the C 1s edge exploiting total-electron-yield and specular
PI-TH-3	Toshihiro Okajima et al.	Geometric structure of V in TiO ₂ by using inverse partial fluorescence yield on hard X-ray absorption spec
PI-TH-4	Rainer Unterumsberger et al.	Accurate experimental fundamental parameter determinations at PTB
PI-TH-6	Paweł Jagodziński et al.	Concept and simulations of asymmetric von Hamos spectrometer for a high-resolution low-energy X-ray
PI-TH-7	Krzysztof Tyrala et al.	One- and two-photon below threshold cross-sections mechanisms and the dependency on the atomic nu
PI-TH-8	Vibha Ayri et al.	Influence of cascade vacancy decay on the average M-shell Fluorescence Yield for Rhenium
PI-TH-9	André Wählich et al.	Experimental determination of differential scattering coefficients for nickel by means of linearly polarize
PI-TH-10	Pierre Adatte et al.	L X-ray emission spectrum of Terbium
PI-TH-11	Daniel Pinheiro et al.	K- and L-shell theoretical fluorescence yields for the Fe isonuclear sequence

Quantitative Analysis

PI-QA-1	Peter Kump	A novel FP approach to EDXRF quantification
PI-QA-2	Dimitrios Anagnostopoulos et al.	X-ray tracing for Von-Hamos spectrometers
PI-QA-3	Theofanis Tsakiris et al.	Depth profiling of implanted Fe and Xe ions in silicon using synchrotron induced GI-XRF spectrometry
PI-QA-4	Fernando Coimbra et al.	Experimental study of the intensity linearity of a characteristic line as a function of the mean Z of a sampl
PI-QA-5	Piet Van Espen et al.	Analysis of x-ray spectra by iterative least squares (AXIL), a history of 45 years.

Instrumentation

PI-INST-1	Mourad Kaddeche et al.	Study of Single-Photon Avalanche Diode for Laser Raman Spectroscopy
PI-INST-2	Philipp Hönicke et al.	Characterization of the geometrical parameters of a Bruker S ₄ T-STAR instrument for advanced in-lab gr
PI-INST-3	Adrian Niculae et al.	New High Transparent and Light Tight Windows for Next Generation X-ray Detectors
PI-INST-4	Alessandro Migliori et al.	IAEA Nuclear Science and Instrumentation Laboratory: Support to XRF laboratories and recent applicati
PI-INST-5	Eugene Tikhomirov et al.	2 mm thick SDD for Hard XRF applications
PI-INST-6	Arpit Patel	Characterization and Signal readout from the new linear silicon drift detector for soft x-ray studies
PI-INST-7	Martin Huth et al.	Imaging spectrometry combining XRD and XRF
PI-INST-8	Julius Hällstedt et al.	Advanced X-ray spectroscopy applications using high brightness MetalJet Sources
PI-INST-9	Gesa Goetzke et al.	Assessment of the potential of neural networks for photon event evaluation with 2D pixel detectors of the
PI-INST-10	Valeri D Saveliev et al.	Multi-Element SDD detectors for X-ray Spectroscopy at Ultra-High Count Rate
PI-INST-11	Daisuke Matsunaga et al.	Low energy X-ray measurement using desktop Micro-XRF
PI-INST-12	Alexei Erko et al.	WDSX-300: a novel spectrometer for ultra-light element analysis
PI-INST-13	Cevahir Cigla et al.	Position Independence for Consistent Effective Atomic Number Estimation in Dual-Energy X-ray Devices
PI-INST-14	Gyungtae Kim et al.	Low-cost silicon drift detector for X-ray spectroscopy
PI-INST-15	Eduardo Rodrigues et al.	Development of a new XRF equipment for petiole analysis
PI-INST-16	Kai Schüller et al.	Alignment strategies for a von Hamos spectrometer with a full cylinder geometry
PI-INST-17	Julius Hällstedt et al.	Next generation high brightness MetalJet sources enabling advanced Xray spectroscopy applications
PI-INST-18	Yue Yu	A laboratory-based reflectometer at IPOE
PI-INST-19	Jonathan Kranz et al.	Capillary optics for X-ray color cameras with a magnification factor of 40 and 3 µm spatial resolution
PI-INST-20	Brendan Waffle et al.	Mini Beam – A Compact X-ray Microbeam Generator for Micro X-ray Analysis

Applications of X-ray spectrometry: Biosciences and Health

PI-BIO-1	Maria-Luisa Carvalho et al.	Polarized geometry by secondary target XRF spectrometer to quantify trace elements in farmed fish
PI-BIO-2	Marijan Necemer et al.	The determination of the geographic origins of hops (<i>Humulus lupulus</i> L.) by multi-elemental fingerprinting
PI-BIO-3	Hudson Angeyo Kalambuka et al.	Direct Analysis of Soft Human Body Tissue for Cancer Diagnostics Utilizing Scatter Modulated Chemometrics
PI-BIO-4	Rodolfo Gabriel Figueroa et al.	A new EDXRF confocal method and device for tumor targeting and treatment
PI-BIO-5	Jaime Guarda et al.	Gold nanoparticles X-ray fluorescence K-lines spectrometry for tumor targeting by OXIRIS
PI-BIO-6	Alfredo Di Filippo et al.	Evaluation of chemical elements presence in tree rings and related "wood anatomy" through micro X-Ray
PI-BIO-7	Justus Okonda et al.	Chemometrics-Aided Energy Dispersive X-Ray Fluorescence and Scattering (EDXRFS) Analysis of Biomedical
PI-BIO-8	Leona Bauer et al.	Complementary X-ray techniques reveal hidden details in dental materials
PI-BIO-9	Héctor Sánchez et al.	Analysis of structural changes at interfaces of dental tissues by EDIXS and FTIR
PI-BIO-10	Viviana Sbarato et al.	Copper Speciation in Aquatic Plants by Energy-Dispersive Inelastic X-ray Scattering with X-ray Tube Excitation
PI-BIO-11	Camila A. Salvego et al.	Trace elements concentration and electron density variation in canine breast tumors using a synchrotron
PI-BIO-12	Kalotina Geraki et al.	Investigating disruption of metal homeostasis in the human retina
PI-BIO-13	Samuel Menzi et al.	Towards the ultrafast dynamics of methylene blue
PI-BIO-14	Wiktoria Stańczyk et al.	Examination of prospective chemotherapeutics with the use of the X-ray Absorption Spectroscopy
PI-BIO-15	Gabriela Sena Souza et al.	X-ray Fluorescence Microtomography for imaging 3D elemental characterization of <i>Rhodnius prolixus</i>
PI-BIO-16	Arissa Pickler et al.	Protective Effect of Losartan in coronary arteries of rats submitted to radiotherapy for breast cancer.
PI-BIO-17	Pedro Pedrosa et al.	Evaluation of Au nanoparticles' diffusion in 3D cancer cell spheroids through benchtop micro-XRF
PI-BIO-18	Abdallah Shaltout et al.	Comparison of suspension-assisted and digested sample preparations for elemental quantification in urine
PI-BIO-19	Abdallah Shaltout et al.	Utilization of the TXRF Spectrometry for quantitative elemental analysis of few milligrams of Urinary stone
PI-BIO-20	Nelson K. Rotish et al.	Essential Trace Elements in the African Spider Plant (<i>Cleome gynandra</i>). A Case Study in Molo, Nakuru County
PI-BIO-21	Nikolaos Kallithrakas-Kontos et al.	Kernel and olive oil analysis by EDXRF
PI-BIO-22	Marcin Musielak et al.	Non-destructive elemental analysis of herbal teas from South Africa by energy dispersive X-ray fluorescence
PI-BIO-23	Camila Grazielle Correa et al.	Monitoring the foliar absorption of nutrients by X-ray fluorescence spectrometry
PI-BIO-24	Gabriel Montanha et al.	Depicting in vivo XRF radiation damage in plants: elemental, histochemical, and structural insights
PI-BIO-25	Gabriel Montanha et al.	High-resolution XRF probing of elemental distribution in soybean seeds
PI-BIO-26	Gabriel Montanha et al.	Quantitative μ -XRF assessment of nutrient distribution across three Fabaceae species
PI-BIO-27	Katja Frenzel et al.	Quantitative analysis of trace elements in pancreatic carcinoma and pancreas sections by reference-free
PI-BIO-28	Andrej Gcozdic et al.	Elemental Analysis of Nasolacrimal Duct Tissue using Total Reflection X-ray Fluorescence: A Pilot Study
PI-BIO-29	Eduardo Rodrigues et al.	XRF monitoring the uptake of calcium by tomato leaves
PI-BIO-30	Justus Okonda et al.	Diagnostic Spectral Imaging of Early Cancer in Single Cells: A Machine Learning Synchrotron-Radiation Based
PI-BIO-31	Thomas Bretschneider et al.	Nanostructural, elemental and mechanical changes in response to monotonously degrading Mg implants
PI-BIO-32	Hudson Angeyo Kalambuka et al.	Spectral Diagnostic Modeling of Cancer: Machine Learning Peak-Free EDXRFS Approaches
PI-BIO-33	Patrícia Carvalho et al.	New insights into the study of normal and tumour tissues using EDXRF analysis and imaging
PI-BIO-34	Andreas Haidl et al.	Synchrotron based analytical X-ray nanoscopy of biomedical samples with the AnImaX endstation
PI-BIO-35	Joanna Chwiej et al.	The use of X-ray fluorescence based methods for the study of pathological processes occurring in living organisms
PI-BIO-36	Dickson Ombewa et al.	Trace Elements in Selected Fish Species from Kenya

Total reflection and Grazing Incidence/Emission XRF

PII-TXRF-1	Michael Iro et al.	jGiXa 2.0 and further advances in GIXA Software
PII-TXRF-2	Peter Kregsamer et al.	Establishment of a comprehensive uncertainty budget for a TXRF spectrometer Atomika 8030C
PII-TXRF-3	Thomas Bretschneider et al.	Characterization of light element nanolayers by GIXRF in combination with JGIXA software
PII-TXRF-4	Lorella Pascolo et al.	TXRF for rapid ionic profiling of fluids in Assisted Reproductive Technologies
PII-TXRF-5	Karolina Planeta et al.	The TXRF study of elemental anomalies occurring in the rat brain as a result of implantation with GBM ce
PII-TXRF-6	Sven Hampel et al.	Application of picoliter droplets for calibration and sample preparation in TXRF
PII-TXRF-7	Anna Andriele et al.	Element sensitive reconstruction of nanostructures from Grazing incidence X-ray fluorescence measure
PII-TXRF-9	Abdallah Shaltout et al.	Elemental composition and the molecular structure of human Gallstones by means of TXRF and FTIR Sp
PII-TXRF-10	Heiko Sebastian Till et al.	Exploring the boundaries of double excitation in TXRF
PII-TXRF-11	Marcin Musielak et al.	Ultrasensitive determination of trace Cu(II), Zn(II), Co(II), Ni(II), Cd(II), Pb(II), Se(IV), Hg(II) ions using carb
PII-TXRF-12	Diane Eichert et al.	European Network for Chemical Elemental Analysis by Total Reflection X-ray fluorescence
PII-TXRF-13	Jessica Hiller et al.	Different approaches for the stabilization of slag suspensions and comparison of their impact on suspens
PII-TXRF-14	Ignazio Allegretta et al.	Direct analysis of light elements in aluminosilicates using a Low-Z TXRF spectrometer
PII-TXRF-15	Hina Verma et al.	XRR-GIXRF combined characterization of Mg/Sc multilayer
PII-TXRF-16	Atul Tiwari et al.	Characterization of strong metal-support interaction (SMSI) using X-ray standing waves (XSW)
PII-TXRF-17	Sven Hampel et al.	Understanding of thin film sample preparation and analysis using picoliter derived micro deposits
PII-TXRF-18	Sven Hampel et al.	Preparation of picoliter derived specimen for grazing incidence XRD
PII-TXRF-19	Eva Margui et al.	Study of the effects of suspension preparation conditions in TXRF analysis of vegetation samples by using
PII-TXRF-20	Tsugufumi Matsuyama et al.	X-ray fluorescence analysis of small samples with ultrasonic levitation
PII-TXRF-21	Kaushik Sanyal et al.	A novel method of uranium pre-concentration and TXRF determination at ultra trace level using amidoxi

Other X-ray methods incl. Ion Beam Analysis

PII-OTH-1	Dan Cureatz et al.	Multiple ionization X-ray satellites in alpha particle PIXE
PII-OTH-2	Carlos Gonzales Lorenzo et al.	Thermoluminescence studies of polycrystalline CaSiO ₃ pellets for X-rays dosimetry
PII-OTH-3	Matteo Gugiatti et al.	Characterization of a 32-Channel Module Coupling Strip Detectors and CUBEs for Combined XRF-XRD A
PII-OTH-4	Javier Flores-Maldonado et al.	Sulfur content in PM _{2.5} during FW burning events in comparison with current days
PII-OTH-5	Christopher McKenzie et al.	Filament Lifetime Calculation Under Constant Electron Beam Current
PII-OTH-6	Luan Bastos et al.	Effect of gamma radiation in concrete structure determined by X-Ray diffraction
PII-OTH-7	Yuichiro Saitou et al.	The continuous measurement system of tritium at Fukushima nuclear power plant

Synchrotron Radiation

PII-SR-1	Oksana Travnikova et al.	Energy dependent non-stoichiometric intensities in core-electron photoionization
PII-SR-2	Daniela Cirrincione et al.	Characterization of the monolithic 64-channel detection system based on Silicon Drift Detectors for the)
PII-SR-3	Ina Holfelder et al.	A compact and calibratable double crystal von Hamos spectrometer for high-resolution XES and RIXS
PII-SR-4	Filip Kosiorowski et al.	Ray-tracing of the new multi-modal X-ray imaging beamline PolyX at SOLARIS National Synchrotron Ra
PII-SR-5	Matthias Müller et al.	New Tender X-ray micro focus beamline for XRF, XAFS and XES
PII-SR-6	Anico Kulow et al.	Full-field X-ray Fluorescence Imaging With Coded Apertures
PII-SR-7	Ella De Pauw et al.	Wavelength dispersive X-ray fluorescence detection by means of a full-field energy dispersive pnCCD det

X-ray absorption and X-ray emission Spectrometry

PII-XAS-1	Cafer Tufan Cakir et al.	Implementation of Bayesian optimization on grazing-exit XANES: applications on compositionally complex
PII-XAS-2	Antonella Balerna et al.	MXAN XANES fitting in the soft X-ray region
PII-XAS-3	Karina Bzheumikhova et al.	Resonant X-ray Emission Spectroscopy of Sodium Cyanate and Sodium Thiocyanate
PII-XAS-4	Cornelia Streeck et al.	Studying gases and volatile organic compounds by using X-Ray Absorption Spectrometry in an in situ gas
PII-XAS-5	Sven Hampel et al.	Improvements studying vanadium crossover in hydrated polymer electrolyte membranes through plane
PII-XAS-7	Jakub Szlachetko et al.	X-ray spectroscopy projects at SOLARIS synchrotron

Applications of X-ray Spectrometry: Nano, Energy and Industrial materials

PII-NEI-1	Regina Stachura et al.	Application of XRR and GIXRF in analysis of Ti and TiO ₂ nanolayers irradiated with Xe ions
PII-NEI-2	Susumu Imashuku et al.	Non-destructive evaluation of alumina film using X-ray excited optical luminescence analysis
PII-NEI-3	Susumu Imashuku et al.	Quantitative analysis of free lime in slag by cathodoluminescence
PII-NEI-4	Hiroshi Yoshii et al.	X-ray Fluorescence Analysis of Actinides Collected from Contaminated Water
PII-NEI-5	Charalampos Zarkadas et al.	Combined XRF – NIR analysis of oil specimens
PII-NEI-6	Edyta Beyer et al.	Study of the repeatability of a cleaning method for silicon spheres by XRF and XPS measurements
PII-NEI-7	Klaudia Wojtaszek et al.	Tracking changes in electronic structure during thermal oxidation of titanium
PII-NEI-8	Karina Bzheumikhova et al.	Unraveling Degradation Effects in Lithium-Ion Batteries with X-ray Spectrometry Techniques
PII-NEI-9	Philippe Jonnard et al.	Combined x-ray reflectivity and grazing incidence x-ray fluorescence analysis of a Ta/Cr/Pt trilayer stack
PII-NEI-10	Eleonora Cara et al.	Reference-free X-ray fluorescence for the molecular quantification: determination of SERS enhancement
PII-NEI-11	Hikari Takahara et al.	Characterization of Silicon-based Anodes for Lithium Ion Battery using X-ray Emission Spectroscopy
PII-NEI-12	Katja Frenzel et al.	Shape- and element-sensitive characterization of nanoparticles by Grazing Incidence X-ray Fluorescence
PII-NEI-13	Yves Ménesguen et al.	Combined XRR-GIXRF analysis at LNHB: technical and analytical developments
PII-NEI-14	Nils Wauschkuhn et al.	Reconstruction of TiO ₂ -HfO ₂ gratings with scanning-free grazing emission X-ray fluorescence
PII-NEI-15	Ava Rajh et al.	Characterization of Electrochemical Processes in Metal Organic Batteries by X-ray Raman Spectroscopy
PII-NEI-16	Heiko Sebastian Till et al.	Laboratory GIXRF on metallic nanoparticles: modelling and measurements
PII-NEI-17	Eric Berthier et al.	Analysis of multi-layer thin film materials using benchtop XRD and XRF systems
PII-NEI-18	Khalil Hassebi et al.	DFT Simulation of the X-Ray Emission and Absorption Spectra for Different Lithium Compounds
PII-NEI-19	Marko Petric et al.	The X-ray Emission Spectroscopy as a Tool to Study Li-S Battery Systems
PII-NEI-20	Ursula Fittschen et al.	Laboratory XANES studying vanadium in polymer electrolyte membranes and manganese in slags
PII-NEI-21	Heinrich Tost et al.	Investigating the setting and hardening process of refractory cement using a laboratory X-ray microscope
PII-NEI-22	Rafał Faselow et al.	Special microliter-stirred sample system dedicated for X ray spectroscopy studies of nanomaterial suspensions
PII-NEI-23	Claudia Zech et al.	Spatially and time-resolved x-ray spectrometry of energy materials under operation
PII-NEI-24	Alessandra Machado et al.	Analysis of the quality of industrialized coffee powder using the techniques of computed microtomography
PII-NEI-25	Dirk Kok	Stay with the flow: Highlights from XRF analysis of flowing liquids
PII-NEI-27	Georgia Vlamaki et al.	Analysis of Platinum Group Elements after Membrane Complexing and X-Ray Analysis
PII-NEI-28	Peter A. Alpert et al.	Imaging and characterization of particles from hydrothermal gasification of biomass by STXM/NEXAFS

X-ray Imaging and Scanning

PIII-IM-1	Tâmara Teixeira et al.	Evaluation of the influence of X-ray spectra in microCT images
PIII-IM-2	Giacomo Ticchi et al.	ASCANIO: an Annular SDD Detector for Large Solid Angle Nanoprobing Imaging
PIII-IM-3	João Lima et al.	X-ray microCT time-dependent analysis of sandwich bread in different storage conditions
PIII-IM-4	Renata Funcke et al.	Methodology for identification of microplastic fragments in aqueous media through computerized micro
PIII-IM-5	Masanori Nakae et al.	Mathematical and Experimental Evaluation of X-ray Beam Size for Micro-XRF Analysis

Applications of X-ray Spectrometry: Environmental and Geomaterials

PIII-ENV-1	Cebastien Joel Guembou Shouop et al.	EDXRF, γ -ray Spectrometry, and Multivariate Statistical Approach for soil characterization
PIII-ENV-2	Gerelmaa Gunchin et al.	Determination of chromium and zinc speciation in airborne particulate matter by x-ray absorption near-e
PIII-ENV-3	Kodai Takamura et al.	Application of X-ray fluorescence analysis of trace uranium in Japanese seawater extracted by graphene
PIII-ENV-4	Nancy Lara Almazán et al.	Total Reflection X-Ray Fluorescence Spectrometry: Biomonitoring of urban air pollution using moss bags
PIII-ENV-5	Olga Araujo et al.	Imaging techniques as tools in the characterization of Indiana Limestone embedded in oil
PIII-ENV-6	Johan Boman et al.	PM _{2.5} at a semi-rural site near Beijing, China
PIII-ENV-7	Ottó Czömpöly et al.	Application of X-ray fluorescence methods in metal uptake studies of argillaceous rocks
PIII-ENV-8	Johan Boman et al.	Elemental content of PM _{2.5} collected in South Africa
PIII-ENV-9	Anna Ryś et al.	Optimization of the Energy Dispersive X-Ray Fluorescence Spectrometer for determination of chemical c
PIII-ENV-10	Beata Zawisza et al.	Determination of ultra-trace noble metal ions and nanoparticles by energy dispersive X-ray fluorescence
PIII-ENV-11	Camila Grazielle Correa et al.	Evaluation of atmospheric PM _{2.5} particulate matter present in the municipalities of Itapetinga and Pira
PIII-ENV-12	Tomas Trojek et al.	Comparison of tabletop macro- and micro-XRF scanning for detection of uranium in geological samples
PIII-ENV-13	Irdi Murataj et al.	Geometrical characterization and traceable quantification of block copolymer-based standards for hybrid
PIII-ENV-14	Thainara Rebelo da Silva et al.	XRF in agriculture probing soil, plant, and grain quality
PIII-ENV-15	Ignazio Allegretta et al.	"Datamuncher Gamma": a new tool for the analysis of SEM-EDX data - application to soil aggregates
PIII-ENV-16	Olga Araujo et al.	Characterization of Indiana Limestone embedded in oil by microCT and microXRF
PIII-ENV-17	Carlo Porfido et al.	An integrated XRF techniques approach for the study of Pb bioavailability in a polluted firing range soil
PIII-ENV-19	Ana Paula F. Almeida et al.	Analysis of particulate matter suspended in air through
PIII-ENV-20	Paola Cirelli et al.	XRF analysis of air filters under grazing incidence condition
PIII-ENV-21	Francisca Aldape et al.	Impact Evaluation of Wildfires Episodes in Central Mexico During May 2019 Using PIXE and Meteorologic
PIII-ENV-22	Benjamin Bazi et al.	Trace-element analysis of mineral grains in Ryugu rock fragments by synchrotron-based confocal X-ray fl
PIII-ENV-23	Laura Torrent et al.	Elemental analysis of lettuce roots by μ -PIXE to determine the effects of different sized and coated silver

Applications of X-ray Spectrometry: Cultural Heritage

PIII-CH-1	Roberto Cesareo et al.	Energy-dispersive X-ray fluorescence analysis of paintings and metals; ;history and instrumental progres
PIII-CH-3	Rosarosa Manca et al.	Archaeometallurgical applications of portable μ XRF analysis
PIII-CH-4	Maja Gajic Kvascev et al.	The comparison of the multivariate techniques applied in the EDXRF provenance study of the archaeolog
PIII-CH-5	Maria Aguiar et al.	"Painting frescoes in the tropics". Candido Portinari's mural paintings at the Gustavo Capanema Palace,
PIII-CH-6	Velibor Andrić et al.	X-Ray based techniques as helpful tool in process of restoration of cultural heritage objects
PIII-CH-7	Ilaria Carlomagno et al.	How X-rays can tell a story long fifteen centuries
PIII-CH-8	Goran Kvaščev et al.	The use of neural networks for EDXRF spectra processing
PIII-CH-9	Patricia Carvalho et al.	A new approach to evaluate large area samples of Portuguese ceramics
PIII-CH-10	Vanessa Antunes et al.	Still lifes technical and material evolution in Iberian 17th century Studio Practice
PIII-CH-11	Sergio Augusto Barcellos Lins et al.	Development of modular MA-XRF system for Cultural Heritage
PIII-CH-12	Marek Fikrle et al.	XRF - front line analytical method in Czech Republic cultural heritage in last two decades
PIII-CH-13	Pedro de Campos et al.	Candido Portinari's palette in MASP's "North-eastern" series
PIII-CH-14	Leandro Sottili et al.	Development of a bench-top multi-technique device for cultural heritage applications
PIII-CH-15	Carlo Nocco et al.	Diagnostic studies on miniature bronze pilgrim flasks from Sardinia
PIII-CH-16	Kalliopi Tsampa et al.	A comparative study of scanning PIXE and XRF microprobes in Cultural Heritage studies
PIII-CH-17	Gabriel C. Ferreira et al.	Identification of modern papyrus leaf using Rayleigh to Compton scattering ratio peaks
PIII-CH-18	Hussein Marey Mahmoud	Morphological-chemical and spectroscopic measurements on some Ptolemaic mural paintings in Upper I
PIII-CH-19	Natasha Hedden et al.	Use of Total Reflection X-ray fluorescence for pigment analysis in an early 1900s art piece
PIII-CH-20	Roberto Cesareo et al.	Tumbaga-gold alloy : a difficult problem for EDXRF-analysis
PIII-CH-21	Luis Manuel de Almeida Nieto et al.	Comparison of macro X-ray florescence and reflectance imaging spectroscopy for the quantitative analy
PIII-CH-22	Inés Ortega-Feliu et al.	Gold or golden coins: non-destructive technique to distinguish them
PIII-CH-23	Anne-Clothilde Dumargne et al.	Techniques and Material of Late Medieval and Modern Copper Alloy Alms Basins: first insights into work
PIII-CH-24	Diogo Francisco Bernardes Pereira et al.	Interactions of X-rays with a 16th Century Painting: Radiography and X-Ray Fluorescence Spectrometry
PIII-CH-25	Matthias Alfeld et al.	Data intrinsic correction for working distance variations in MA-XRF of historical paintings based on the A
PIII-CH-26	Vaclava Antuskova et al.	Elemental analysis for pigment identification on medieval panel painting
PIII-CH-27	Caio dos Santos et al.	Morphological and elemental analysis of a Puma concolor fossil by non-destructive X-ray techniques
PIII-CH-28	Alexandre Gillon et al.	High energy ion beam analysis of cultural heritage objects, a study of provenance and manufacturing tec
PIII-CH-29	Theofanis Gerodimos et al.	MA-XRF and machine learning techniques for digital image restoration
PIII-CH-30	Christina Makarona et al.	Good practice guidelines for the application of pXRF in the field prospection of archeometallurgical activ
PIII-CH-31	Hernán Fernández et al.	ATLAS Scanner: A novel general purpose multi-detector MA-XRF setup
PIII-CH-32	Anastasios Asvestas et al.	MA - XRF scanner using handheld spectrometer
PIII-CH-33	Roberto Cesareo et al.	Moche Gold from the pre-Columbian North of Peru
PIII-CH-34	Arthur Gestels et al.	Imaging of alteration products in the Nightwatch using MA-XRPD
PIII-CH-35	Arthur Gestels et al.	The Combined MA-XRF, MA-XRPD and SEM-EDX analysis of a medieval stained-glass panel formerly frc
PIII-CH-36	Charbel Koumeir et al.	Proton Activation Analysis of medieval lead pipes
PIII-CH-37	Natalia Ortega Saez et al.	Unravelling the material history of an early 19th century painted textile banner by means of macro X-ray
PIII-CH-38	Andreas Germanos Karydas et al.	An integrated approach to the study of commonplace Late Bronze Age faience cylinder seals by means c
PIII-CH-39	Annelies Rios-Casier et al.	Exploration of Ensor's pigment palette via MA-XRF examination of The Intrigue
PIII-CH-40	Nina Deleu et al.	Posnjakite, a 16th century green pigment encountered in The Ghent Altarpiece (15th c.)