



**SHORT
WAVELENGTH
LABORATORY
SOURCES**

COST MP0601

COST Action MP0601

Working Group 2 - COST Action MP0601

**Source Development, Improvement and
Characterisation**

Activities during the Action

COST Presentations - Orals

Meeting	Author	Title
Pisa 7	Sergey Bobashev	Laser-produced plasma source based on the supersonic Xe-gas jet and its optimization
	Bill Brockelsby	Capillary based high harmonic generation
	Jim Pinfeld	Transition radiation as a source of x-rays
	Andrzej Bartnik	Compact laser plasma EUV source based on a gas puff target for micro- and nanoprocessing of polymers
	Vasily Shvedunov	Thomson scattering x-ray generator - University scale x-ray source
	Matt Zepf	High harmonics from relativistically oscillating plasma surfaces - a high brightness attosecond source at keV photon energies
	Peter Hoghoj	Microsources with focusing optics
Warsaw 6	Sergey Zakharov	Next generation EUV lithography light source
	Andrzej Bartnik	Laser Plasma EUV Source Based on a Gas Puff Target and Applications
	Klaus Mann	EUV/XUV source for material interaction studies and NEXAFS experiments
	Bedrich Rus	Laser-driven x-ray lasers and applications
	Dino Jaroszynski	Radiation sources based on laser-plasma wakefield accelerators: latest results and outlook
	Antoine Rouse	Ultrafast x-ray beams from laser plasmas
Dresden 3	Sergey Zakharov	Optimisation of next generation EUVL light source for metrology and HVM
	Ladislav Pina	EC project AXIS
	Matt Zepf	Diffraction limited performance of relativistic mirror harmonics
Salamanca 4	Ruben Seisyan	The simplest laboratory LPP source of EUV (SXR) radiation
	Eric Robert	Energetic radiation from nanosecond discharge plasmas: source development and applications
	Cruz Méndez	13 keV electrons generated by a GW laser
	Sergey Zakharov	High performance NGL EUV light source for AIM and HVML

COST Presentations - Orals

Meeting	Author	Title
Smolnice	Sergey Zakharov	High intensity thermal and selective radiation sources based on laser- or discharge – produced plasma for applications
6	Klaus Bergmann	Discharge based XUV sources for applications on the nanoscale
	Michela Fratini	Advanced x-ray source based on field emitting carbon nanotubes cold cathode
	Przemyslaw Wachulak	Soft x-ray sources in the water-window spectral region based on a gas-puff target
	Fabien Tissandier	Spatial and spectral characterization of a seeded soft-x-ray laser
	Paul Blackborow	Electrodeless z-pinch and laser-driven light sources for short wavelength light
	Krakow	Sergey Zakharov
4	Leonida Gizzi	Progress towards the design of an all-optical, tuneable Thomson scattering X-ray source
	Ulf Zastrau	Temperature and K -yield radial distributions in laser-produced solid density plasmas
	Ruben Seisyan	Design of two colour - two pulse LPP EUV source and 4m high NA EUV objective for laboratory nanolithography tool.
Southampton	Olivier Guilbaud	Coherence of plasma based soft x-ray lasers both from exp and theoretical aspects.
5	Aaron Parsons	Ultrafast pulse compression and XUV generation from gas-filled capillaries
	Stuart Mangles	Bright x-rays from laser wakefield accelerators
	Anna Barszczak	
	Sardinha	Polarization of a high harmonic source
	Andrzej Bartnik	EUV-source dedicated for surface modification of polymers

COST Presentations - Orals

Meeting	Author	Title
Dublin 5	O Guilbaud D Bleiner I Tobin T Higashiguchi K Mann	Coherence properties of laser produced soft x-ray sources Plasma evolution in laser-irradiated microcylinder targets Z-pinch discharge in a laser produced plasma Recent progress in source development for lithography at 6.x nm Lab-scale EUV/XUV source for material interaction studies and absorption spectroscopy
Paris 6	Paolo Di Lazzaro Takeshi Higashiguchi Vladimir Zvorykin Michela Fratini Larissa Juschkin Ruben Seisyan	Mitigation and selection of ion and particulate emission from laser-plasma sources used for extreme ultraviolet lithography sources Extreme ultraviolet alkali metal source at 40 nm Powerful X-ray source on the basis of CW 600-keV electron LINAC Towards an advanced X-ray source based on field emitting carbon nanotubes cold cathode: latest updates Investigation and optimization of spatial and spectral characteristics of EUV emission from laser assisted vacuum arc The two pulses two colour system of EUV radiation LPP source and of 4m Bragg mirror lens for laboratory EUV lithography tool: Development of the ISTC project #3857
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COST Presentations - Posters

Meeting	Author	Title
Pisa 0		
Warsaw 5	Silvia Cipiccia Konrad Dąbrowski Nikoletta Jegenyés Aodh O'Connor Magdalena Sawicka	X-ray production techniques using laser-plasma accelerators Spectral characteristics of EUV radiation from a laser plasma source based on a gas puff target with various gas mixture Experimental study on VUV radiation generated on LiF target by using femtosecond UV laser pulses Angular investigation of ions emitted from laser produced plasma EUV sources Formation of EVU beam with spectral selection using multilayer ellipsoidal mirrors
Dresden 2	Matt Zepf Tomas Burian	Spatial phase and divergence of CWE harmonics Characterizing the focused beam of desktop 10-Hz capillary-discharge XUV laser
Salamanca 2	Leonida Gizzi Maria Maciejewska	An all-optical, Thomson scattering, tuneable x-ray source. Laser-plasma EUV source for nanoimaging using a Fresnel optics

COST Presentations - Posters

Meeting	Author	Title
Smolnice 4	Hugo Ferrari Daniel Ursescu Piotr Rudawski Gerry O'Sullivan	Synchrotron radiation from laser accelerated electrons in capillary tubes Optimisation of gain and bandwidth in x-ray lasers Soft x-ray sources in the water-window spectral region based on a gas-puff target Observation and origin of an intense transition array near 13.5 nm observed in charge exchange spectra of Sn XV to Sn XVIII
Krakow 1	Radka Havlíková	Microfocus high brightness x-ray tubes metrology
Southampton 0		

COST Presentations - Posters

Meeting	Author	Title
Dublin 8	R Stefanuik	High harmonic radiation from Laser plasmas
	I Földes	High contrast UV laser beam based on active nonlinear temporal and spatial filtering
	D Urescu	GRIP x-ray laser pumped with one long and two short pulses
	T Cummins	Optimisation of CO2 laser-produced Sn plasmas for next generation semiconductor lithography
	C O’Gorman	Emission Spectroscopy of Laser Produced Plasmas of Relevance to Source Development
	E Scally V Zvorykin	Laser Produced Lead-Tin Plasma alloy for EUV lithography sources Bremsstrahlung X-ray spectra reconstruction based on transmission measurements
	I Kambali	Laser-produced plasma of tin-gold alloy for EUV source
Paris 1	Niksa Krstulovic	X-ray emission from plasma induced by dual pulse laser ablation with the ns and fs pulses
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Orals – 46
Posters – 23
Total – 69

Presentations on Sources

