

	Paper #	First Name	Last Name	Company	Title	Duration	Start	Finish
All Times are local time in Amsterdam, The Netherlands.								
From October 21-23, 2024 workshop is in-person only. On October 19-20, 2024 Short Courses will be held on-line only, as live events.								
Version: October 14, 2024. For questions or comments please contact info@euvlitho.com								
Short Course								
12:00 PM, Saturday, October 19, 2024, Amsterdam, The Netherlands (Course is held online Only)								
Short Course: EUV Lithography								
Instructors: Vivek Bakshi (EUV Litho, Inc.), Patrick Naulleau (EUV Tech), Sangsul Lee (POSTECH) and Jan van Schoot (ASML)								
EUVL Short Courses and EUVL Workshop require separate registrations. Please visit www.euvlitho.com for information.								
					Module orders have been readjusted to accommodate instructor schedules			
					AV Test and Speaker Check-in	0:15	12:00 PM	12:15 PM
			Jan van Schoot	ASML	Module 4: EUVL and High NA EUVL Scanners	1:30	12:15 PM	1:45 PM
					Break	0:15	1:45 PM	2:00 PM
			Sangsul Lee	POSTECH	Module 3: EUV Mask	1:30	2:00 PM	3:30 PM
					Break	0:15	3:30 PM	3:45 PM
			Vivek Bakshi	EUV Litho Inc.	Module 1: Introduction to EUVL; Module 2: EUV Sources	1:30	3:45 PM	5:15 PM
					Break	0:15	5:15 PM	5:30 PM
			Patrick Naulleau	EUV Tech	Module 5: EUVL Optics and Patterning	1:30	5:30 PM	7:00 PM
Short Course Adjourned								

Paper #	First Name	Last Name	Company	Title	Duration	Start	Finish
Short Course							
12:00 PM, Sunday, October 20, 2024, Amsterdam, The Netherlands (Course is held online Only)							
Short Course: EUV and Soft X-Ray Sources							
Instructors: Gerry O'Sullivan (UC Dublin), Ladislav Pína (CTU Prague), Bjorn Manuel Hegelich (Tau Systems), Henry Kapteyn (K&M Lab), Dinh Nguyen (xLight)							
EUV and Soft X-ray Short Course and EUVL Workshop require separate registrations. Please visit www.euvlitho.com for information.							
				AV Test and Speaker Check-in	0:05	12:00 PM	12:05 PM
		Gerry O'Sullivan	University College Dublin	Module 1: Physics of EUV and Short Wavelength Sources with Focus on Atomic Physics	1:30	12:05 PM	1:35 PM
				Break	0:10	1:35 PM	1:45 PM
		Ladislav Pína	Technical University in Prague	Module 2: Grazing Incidence Optics and Applications for EUV and Soft X-ray Sources	1:30	1:45 PM	3:15 PM
				Break	0:10	3:15 PM	3:25 PM
		Bjorn Manuel Hegelich	TAU Systems, Inc. and UT Austin	Module 3: Laser-driven accelerators and coherent EUV and X-ray Sources	1:30	3:25 PM	4:55 PM
				Break	0:10	4:55 PM	5:05 PM
		Henry C. Kapteyn	K&M Lab and Univ. of Colorado, Boulder	Module 4: Fundamentals and Applications of Coherent High Harmonic EUV Sources	1:30	5:05 PM	6:35 PM
				Break	0:10	6:35 PM	6:45 PM
		Dinh Nguyen	xLight	Module 5: FEL for EUV Lithography	1:30	6:45 PM	8:15 PM
Short Course Adjourned							

	Paper #	First Name	Last Name	Company	Title	Duration	Start	Finish
2024 Source Workshop								
<i>Please see Abstract Book on website www.euvlitho.com for abstracts and co-author(s) information by paper #.</i>								
Day 1: 4:00 PM, Monday, October 21, 2024								
ARCNL, Science Park 106, 1098 XG Amsterdam (2nd floor)								
ARCNL Lab Tour, Registration and Reception								
					Registration and ARCNL Tour	1:30	4:00 PM	5:30 PM
					Registration and Welcome Reception	1:00	5:30 PM	6:30 PM
Workshop Adjourn for the day - Buses to the hotel								

	Paper #	First Name	Last Name	Company	Title	Duration	Start	Finish
Day 2: 8:30 AM, Tuesday, October 22, 2024								
WCW Colloquiumzalen, Science Park 123, 1098 XG Amsterdam (Walking distance from ARCNL)								
Session 1: Keynote Presentations; Session 2: HVM Sources;								
Session 3: Code Comparison and Modeling; Session 4: Metrology Sources								
Session 5: Poster Session (at ARCNL Atrium)								
Session 1: Session Co-Chairs: Oscar Versolato (ARCNL)								
					<i>AV Test, Speaker Check-in and Registration</i>	0:30	9:00 AM	9:30 AM
		Vivek	Bakshi	EUV Litho	Announcements	0:10	9:30 AM	9:40 AM
1	S1	Jan	van Schoot	ASML	Overlay, including source power expectations	0:30	9:40 AM	10:10 AM
1	S5	Konstantin	Koshelev	ISTEQ	Lithium, a “dream fuel” for actinic inspection?	0:30	10:10 AM	10:40 AM
					Break	0:20	10:40 AM	11:00 AM
Session 2A: HVM Sources, Session Co-Chairs: Hakaru Mizoguchi (Kyushu University) and Oscar Versolato (ARCNL)								
2A	S49	Job	Beckers	TU Eindhoven	Plasma-particle Interaction under conditions relevant to EUV Lithography	0:15	11:00 AM	11:15 AM
2A	S48	Hakaru	Mizoguchi	Kyushu university	Plasma Dynamics and Future of LPP-EUV Source for Semiconductor Manufacturing II	0:15	11:15 AM	11:30 AM
2A	S50	Dion	Engels	ARCNL	Spectroscopic Imaging of Tin Gas Vaporized Near Plasma Threshold	0:15	11:30 AM	11:45 AM
2A	S51	Felix	Kohlmeier	ARCNL	Power Partitioning Reconstruction for Laser Produced Plasmas	0:15	11:45 AM	12:00 PM
					Lunch	1:15	12:00 PM	1:15 PM
Session 2B: HVM Sources, Session Co-Chairs: Mark van de Kerkhof (ASML) and Ahmed Diallo (PPPL)								
2B	S45	Mark	van de Kerkhof	ASML	Pulsed EUV induced plasma: fast transients, accumulation and hybrid 3D-PIC model	0:15	1:15 PM	1:30 PM

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2B	S46	Ahmed	Diallo	PPPL	Laser Plasmas Interactions for Microelectronics: Status Update	0:15	1:30 PM	1:45 PM
2B	S42	Emiel	de Wit	University of Groningen	Electron capture in collisions of Sn ions with H ₂ molecules	0:15	1:45 PM	2:00 PM
2B	S41	Jorge	Gonzalez Munoz	ARCNL	Effect of target mass on CO ₂ -driven EUV emitting tin plasma for nanolithography	0:15	2:00 PM	2:15 PM
					Break	0:20	2:15 PM	2:35 PM
Session 3: Modeling and Code Comparison; Session Co-Chairs: John Sheil (ARCNL) and Samuel Totorica (PPPL)								
3	S10	John	Sheil	ARCNL	2024 Code Comparison Summary	0:15	2:35 PM	2:50 PM
3	S12	Igor	Golovkin	Prism Computations	The model and method used in SPECT3D code to calculate EUV spectrum of Sn	0:15	2:50 PM	3:05 PM
3	S13	Akira	Sasaki	QST	The model and method used in JATOM2 code to calculate EUV spectrum of Sn	0:15	3:05 PM	3:20 PM
3	S11	Samuel	Totorica	PPPL	Kinetic Simulations of Ion Dynamics in Laser-Driven Tin Plasma EUV Sources	0:15	3:20 PM	3:35 PM
					Break	0:20	3:35 PM	3:55 PM
Session 4: Metrology Sources; Session Co-Chairs: Yusuke Teramoto (USHIO) and David Reisman (Energetiq)								
4	S63	Keitaro	Hayashida	Laseretec	Status update of EUV light source development for inspection tools	0:15	3:55 PM	4:10 PM
4	S62	Fumio	Iwamoto	Gigaphoton	Development progress of Gigaphoton's Sn-LPP	0:15	4:10 PM	4:25 PM
4	S61	David	Reisman	Energetiq	Next-Generation Discharge-Produced Plasma (DPP) EUV Source	0:15	4:25 PM	4:40 PM
4	S65	Yusuke	Teramoto	Ushio	A compact laser-driven short-wavelength radiation source	0:15	4:40 PM	4:55 PM
4	S64	Peter	Smorenburg	ASML	XUV light sources for semiconductor metrology	0:15	4:55 PM	5:10 PM
					Break	0:20	5:10 PM	5:30 PM

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Session 5: Poster Session (with Drinks and snacks) Session Chair; Vivek Bakshi (EUV Litho)								
5	S81	Abdul	Rehman	Univ of Twente	Predicting the chemical stability of thin film coatings in hydrogen for EUV applications	1:30	5:30 PM	7:00 PM
5	S83	Tatsuya	Soramoto	Utsunomiya University	Short-wavelength EUV source by a continuous liquid bismuth jet			
5	S84	Tsukasa	Sugiura	Utsunomiya University	Enhancement of the EUV conversion efficiency using multiple-solid-state-laser pulse			
5	S82	Duncan	Ramsamoedj	Univ of Twente	Investigating EUV degradation with in-situ EUV transmission measurements			
5	S85	Karl	Schubert	ARCNL	Observation of Surface Modulation on Free-Flying Liquid Metal Sheets			
5	S87	David	Reisman	Energetiq	Next-Generation DPP EUV Light Source to Support the HVM Lithography Ecosystem			
5	S88	Moinuddin	Kadiwala	Helmut-Schmidt-Universität	High Harmonic Generation with a compact amplification-free thin-disk laser-oscillator system			
5	S89	Chun-Tse	Wu	National Central University	Numerical Study of Laser-Produced Plasma Light Source on Improving Conversion Efficiency by Three Pulse Scheme			
5	S90	Ismael	Gisch	RWTH	Broadband reflective spectrometer for high-resolution spectral characterization of radiation sources			
5	S91	Alexander	Tovstopyat	ISTEQ Group	LEUS: A Novel LPP EUV Light Source with Fast-Rotating Lithium Target and Unique Spectral Brightness			
5	S92	Akira	Miyake	TOYAMA CO.	EUV and Soft X-ray Optical Evaluation System Development in TOYAMA			
5	S93	Alessandro	Ruocco	FS Dynamics	Plasma Modeling at FS Dynamics			
Workshop Adjourn for the day - Buses to the hotel								

Paper #	First Name	Last Name	Company	Title	Duration	Start	Finish
Day 3: 9:00 AM, Wednesday, October 23, 2024							
WCW Colloquiumzalen, Science Park 123, 1098 XG Amsterdam (Walking distance from ARCNL)							
Session 6: Keynote Presentations; Session 7: Laser, HHG and Applications							
Session 8: Metrology Sources; Session 9: EUVL Extension and Blue-X							
<i>Session 6: Keynote Presentations; Session Chair: Marcelo Ackerman (University of Twente)</i>							
				AV Test, Speaker Check-in and Registration	0:30	8:30 AM	9:00 AM
	Announcements	Vivek Bakshi	EUV Litho, Inc.	Welcome and Announcements	0:10	9:00 AM	9:10 AM
6 S3	Manuel	Guizar-Sicairos	PSI	3D Nanotomography via Coherent X-ray Lensless Imaging	0:30	9:10 AM	9:40 AM
6 S4	Torsten	Feigl	optiXfab	2024 Source Workshop Keynote Presentation (Tentative Title)	0:30	9:40 AM	10:10 AM
1 S2	Peter	Moulton	MIT LL	Solid state laser drivers for EUV plasma sources	0:30	10:10 AM	10:40 AM
				Break	0:20	10:40 AM	11:00 AM
<i>Session 7: Laser, HHG and Applications; Session Chair: Thomas Metzger (Trumpf) and Brendan Reagan (LLNL)</i>							
7 S23	Thomas	Metzger	Trumpf	Ultrafast Thin-Disk Amplifiers and Nonlinear Pulse Compression	0:15	11:00 AM	11:15 AM
7 S21	Sven	Breitkopf	AFS (Trumpf)	High-Flux XUV Beamlines enabling photon-hungry imaging and spectroscopy methods	0:15	11:15 AM	11:30 AM
7 S22	Bastian	Manschwetius	Class 5 Photonics	Recent advances on High-Brilliance EUV Sources based on high harmonic generation	0:15	11:30 AM	11:45 AM
7 S24	Oleg	Pronin	n2-Photonics GmbH	Pulse shortening with multipass cells	0:15	11:45 AM	12:00 PM
7 S25	Jens	Limpert	Univ. of Jena	2µm wavelength fiber lasers for next generation EUV plasma sources	0:15	12:00 PM	12:15 PM

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7	S32	Brendan	Reagan	LLNL	Solid state $\lambda \approx 2 \mu\text{m}$ laser drivers for EUV lithography	0:15	12:15 PM	12:30 PM
					Lunch and Steering Committee Meeting (Closed)	1:30	12:30 PM	2:00 PM
Session 8: Optics and Metrology, Session Co-Chairs: Muharrem Bayraktar (University of Twente) and Sascha Brose (RWTH)								
8	S77	Peter	Kraus	ARCNL	How can we achieve at-resolution metrology in optical microscopy?	0:15	2:00 PM	2:15 PM
8	S73	Lucas	Poirier	TNO	EUV-sources for optics-lifetime and materials testing	0:15	2:15 PM	2:30 PM
8	S76	Linus	Nagel	RWTH	Extreme ultraviolet high intensity exposure setup for small-spot in-band exposures	0:15	2:30 PM	2:45 PM
8	S71	Sascha	Brose	RWTH	Ultra-compact inline transmission grating spectrograph for EUV wavelengths	0:15	2:45 PM	3:00 PM
8	S72	Analia	Fernande	PTB	From EBL Gratings to Advanced Photonics for the inspection of Complex Nanostructures	0:15	3:00 PM	3:15 PM
8	S75	Martin	Wünsche	Indigo Optics	EUV Reflectometry and Non-Destructive Nanoscale	0:15	3:15 PM	3:30 PM
8	S74	Muharrem	Bayraktar	University of Twente	EUV source metrology using transmissive and diffractive optics	0:15	3:30 PM	3:45 PM
					Break	0:20	3:45 PM	4:05 PM
Session 9: EUV Extension - Blue-X; Session Co-Chairs: Takeshi Higashiguchi (Utsunomiya University) and Ladislav Pina (Rigaku)								
9	S31	Takeshi	Higashiguchi	Utsunomiya University	Recent progress of beyond EUV sources	0:15	4:05 PM	4:20 PM
9	S34	Ladislav	Pina	Rigaku	Grazing Incidence Optics Calculations for Plasma and 6.xx nm Coherent Beams	0:15	4:20 PM	4:35 PM
9	S36	Marcelo	Ackermann	University of Twente	2024 Source Workshop - Invited Presentation (Tentative Title)	0:15	4:35 PM	4:50 PM
9	S35	Bjorn	Hegelich	TAU Systems / University of Texas at Austin	Industrialization of laser-driven accelerators and light sources	0:15	4:50 PM	5:05 PM

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9	S33	Nicholas	Kelez	xLight	A Path to 2000 W	0:15	5:05 PM	5:20 PM
9	S37	Vivek	Bakshi	EUV Litho, Inc.	Blue-X Consortium : Plan B for Extension of EUVL	0:15	5:20 PM	5:35 PM
			Vivek Bakshi	EUV Litho, Inc.	Announcements	0:10	5:35 PM	5:45 PM
					Break	0:15	5:45 PM	6:00 PM
Workshop Adjourned. Leave for Off-Site Workshop Dinner								