10th International EUV Initiative Resist Technical Working Group

February, 28, 2008

San Jose, USA

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Japan
- EUVA
- Nikon
- Canon
- Selete

Europe
- MEDEA+
- LETI
- PREUVE
- IMEC
- ASML

IEUVI

International EUV Initiative

USA
- EUV LLC
- SEMATECH
- SRC
- Albany

IEUVI
http://www.ieuvi.org

Chair: Paolo Gargini
- ***Regular coordination meetings***
- ***Technical Working Groups***
- ***Benchmarking data exchange***
- ***Co-sponsorship of workshops***

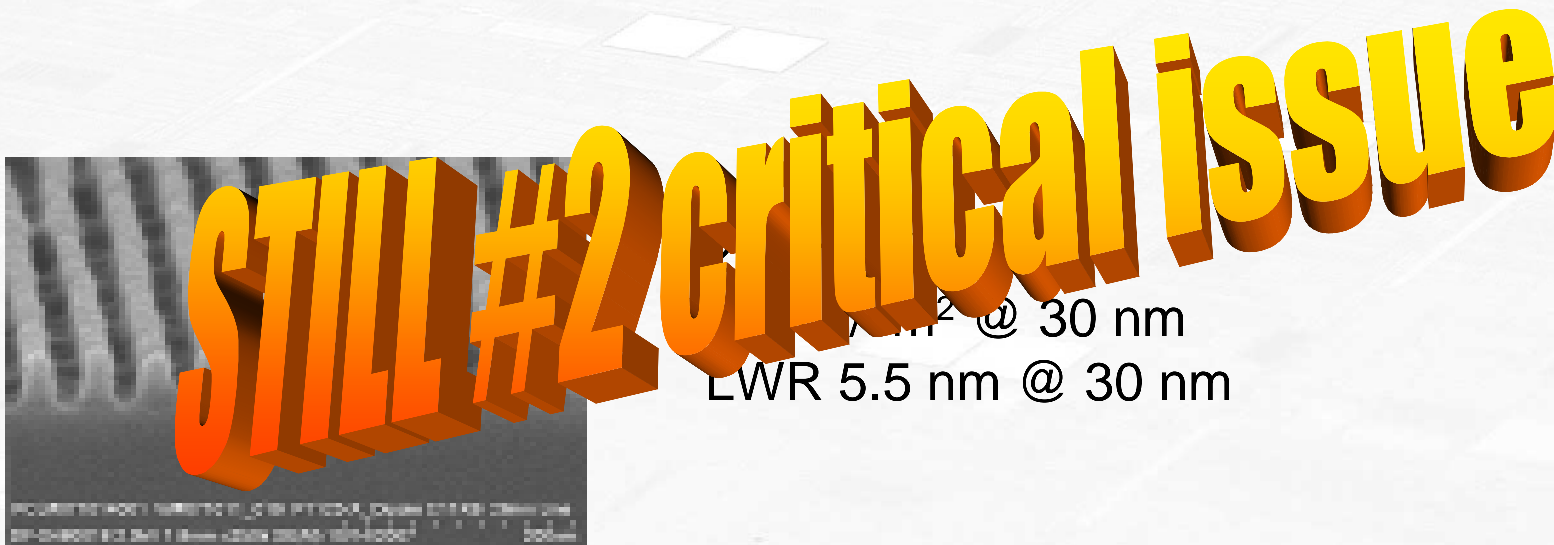
Goals and Objectives of Resist TWG

- Goal—increased cooperation among EUV resist community world wide

- Objectives—share data and information to speed development of EUV resist

Goals and Objectives of Resist TWG

- **Remove resist from #2 top critical issue!**



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- Non-Confidential Meetings-

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Today TWG objective

Help the source guys !

– Did the resist sensitivity measurements are accurate ?
– What level of resist sensitivity can we accommodate?
– Are we limited by:
  • Shot noise ?
  • Resist chemistry ?
  • Both?
  • Something else?

Please don’t hesitate to interact !

IEUVI Resist TWG Meeting Agenda

February 28, 2008 San Jose, California, Hilton

Time	Topic	Speaker
12:00	Lunch	All
13:00	Welcome, Introductions	Serge Tedesco (CEA/LETI)/ Stefan Wurm (Sematech)
13:10	Tool Dose Calibration	Patrick Naulleau (LBNL)
13:35	Shot Noise Speaker 1	Chuck Szmanda (Rohm and Haas)
14:00	Shot Noise Speaker 2	Gregg Gallatin (Applied Math Solutions)
14:25	Shot Noise Speaker 3	Yehiel Gotkis (KLA-Tencor)
14:50	Break	
15:05	Shot Noise Speaker 4	Robert Bristol (Intel)
15:30	Shot noise; the importance of considering 2 dimensions	Hank Smith (MIT)
15:55	Shot Noise Speaker 6	Fabian Pease (Stanford)
16:20	Wrap up, Topics for Next Meeting	Serge Tedesco (CEA/LETI)
16:30	Adjourn	

Wrap Up

Topics and Speakers for Next TWG

- Exposure tool dose calibrations and comparisons, Patrick Naulleau will follow up with Ezero data obtained on Calibrations and Standards beam line at LBNL. TWG requested data for MET-2D for ASML ADTs.
- Progress towards 16nm resists
- Recommendations: Report process windows, not just resolution. Standardize feature size reported for dose and LWR.
- LER/LWR of devices or etched features (EUV)--Ask Manish Chandhok (Intel) to present of 2004 SPIE paper
- Effects of 450 wafer size on resist processing?
- Aspect ratio, thin film effects

Plans for Next TWG Meeting

- EUVL Symposium, Lake Tahoe, California
  - Thursday October 2nd, 2008 (tbc)

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