List of Leading EUVL Technical Challenges

2015 International Workshop on EUVL
Makena Beach, Maui, Hawaii, June 15-19, 2015

Source

Power scaling of Sn LPP sources to 250 W
Feasibility of FEL based EUV sources for > 250 to 1000 W
HVM EUV source performance – status and challenges
High brightness EUV sources to support mask metrology
Source power requirements for high NA scanners

Optics and Contamination

High NA optics design including "Anamorphic Optics" design
Innovative collector optics designs for HVM sources
New capping layers for extending lifetime
In-situ optics cleaning
Contamination measurement in EUV tools

Mask

Mask technology to support high NA scanners (design and materials)
Strategies for low defect mask blanks
Mask defect metrology (Actinic and non-actinic inspection)
Mask defect reduction (In-situ mask cleaning and pellicles, defect reduction strategies)
Mask infrastructure readiness

Resist and Patterning

New EUV resists chemistries including high absorption resists
EUV resist outgassing and testing
Negative tone resists and patterning
Role of secondary electrons in EUV resists
Multiple patterning using EUVL
DSA's role in EUVL patterning

EUV Extension to < 7 nm resolution

Multiple pattering vs High NA – technical and economic challenges
EUV resolution enhancement techniques