

Agenda of OpenPICs WP 4 meeting 06-03-2017

Present: Longfei, Weiming, Steven, Rob, Roel, Rene, Tjibbe, Robert

Discussion/action points

Nr.	Description	Responsible
1.	Al-MQW Rene installed a new Al source in the reactor. Calibrations underway (morphology OK, PL not yet). QW design is underway in WP3.	Rene
2.	Zn diffusion tests Diffusion process has been reproduced in the new reactor with PH3. Doping levels are same as previous result. No differences before and after RTA, indicating no interstitial Zn (to be further checked with SIMS). Waiting for new wafers from Smart (to be delivered this week) to continue next tests. Rene will get old wafers from Smart with Zn diffused in actives (not working at that time) to do SIMS. One assumption is that the high concentration of interstitial Zn due to high pressure (900 mbar) will damage the active layers due to their fast diffusion.	Rene
3.	BCB planarization No time yet to do the adhesion tests. Roel found two wafers with polyimide for the planarization test.	Tjibbe Roel
4.	Stepper process Stepper is up. Robert plans experiments with AZ resist this week to re-measure the focus-energy window and etch profiles.	Robert
5.	Etching process Smart optimized the present CH ₄ -H ₂ recipe and will reproduce it in the ICP in Nanolab. Oxford provided us two baseline recipes for Cl ₂ -CH ₄ -H ₂ with low etch rate (controllable). Longfei will test it here to get first results, and also to see the influence on other recipes in the ICP.	Longfei
6.	DUV Weiming with Roel will design CDSEM test structures in SP20 to find the minimum gap and linewidth, which are important for the AWG design in WP3. Ronald will provide AWG test structures as well.	Roel Weiming

We will have a project periodic review in May/June, further details will be circulated soon.

Next meeting: 13:30-15:00, 3-4-2017, Flux 10.177