Development and Application of BEOL Polymer Residue Removal Technology

Abstract

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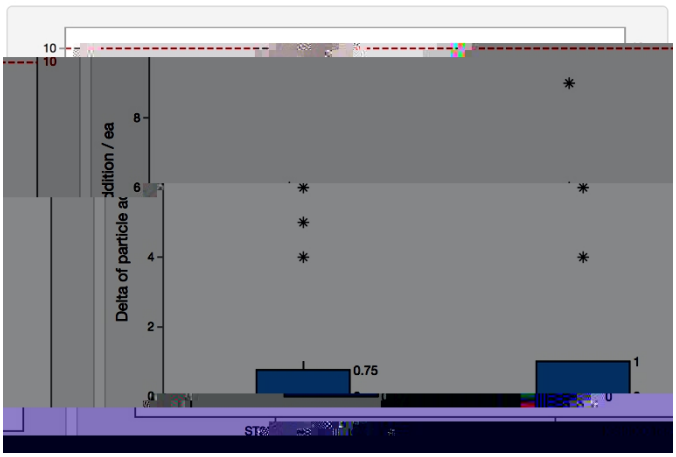
	ST250	ICS8000
Viscosity at 25℃ (mPa·s)		
Viscosity at 40℃ (mPa·s)		

1. Introduction

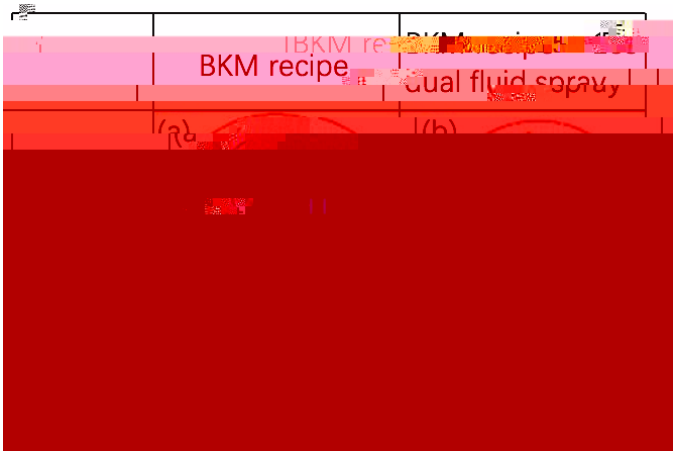
x *x* *x*



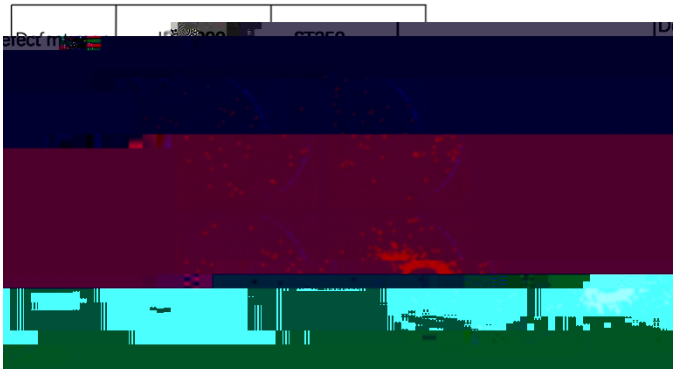
2.2 Particle removal on single-damascene structure wafer

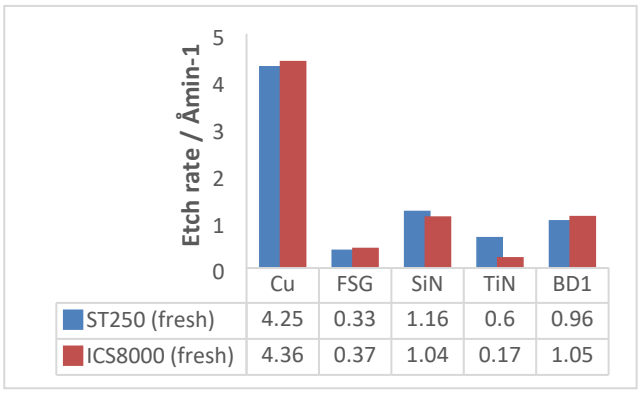
2. Experimental and Discussion

2.1 Particle addition on blanket wafer



2.3 Etch rate check





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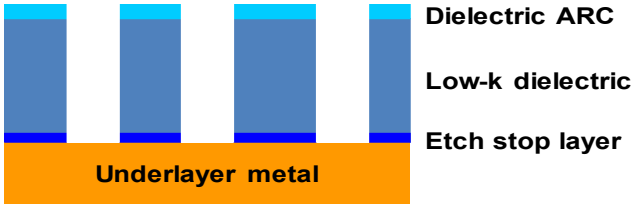
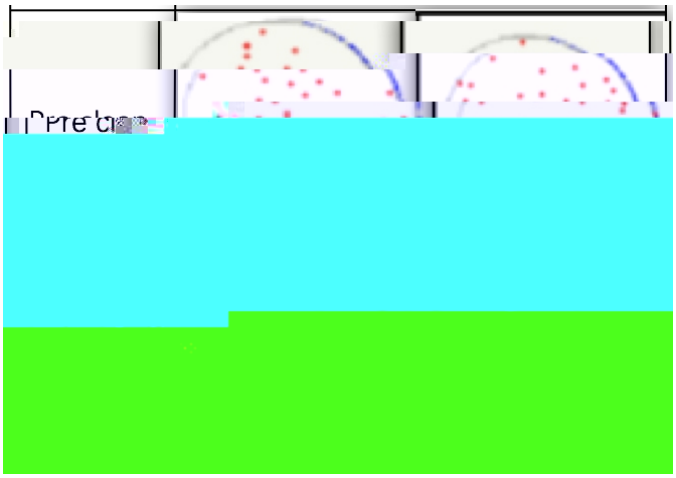
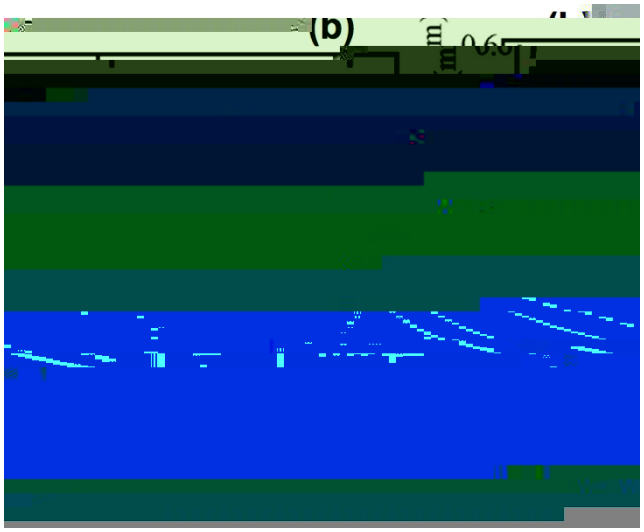
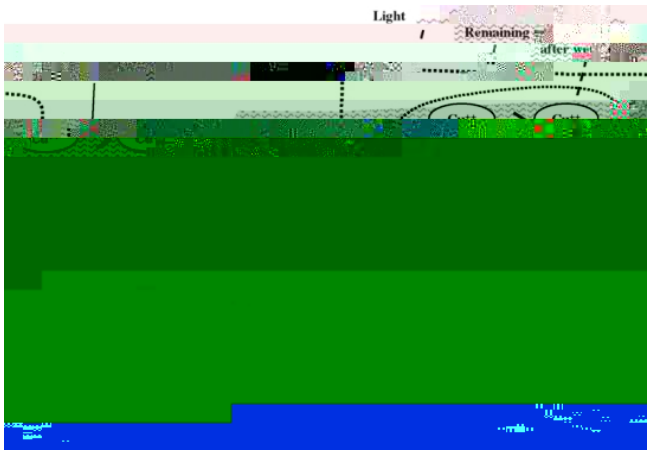
2.4 Suspected mechanism of ball defect formation



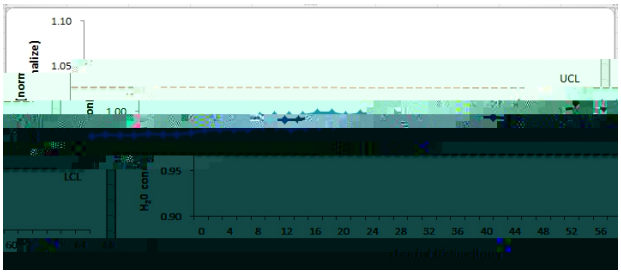




2.5 Photo-assistant copper corrosion failure



2.6 water content controllable



2.7 characteristic of Cu surface after clean

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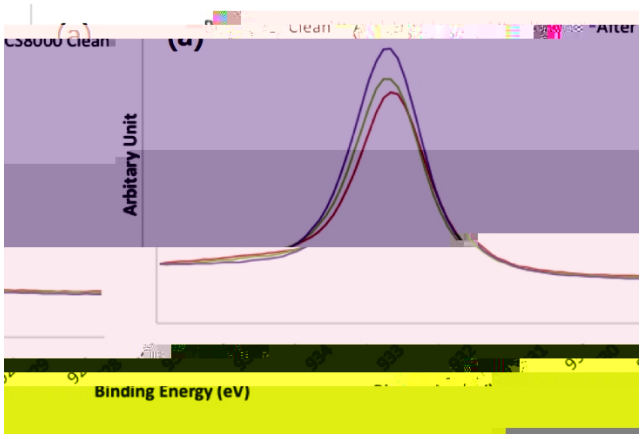
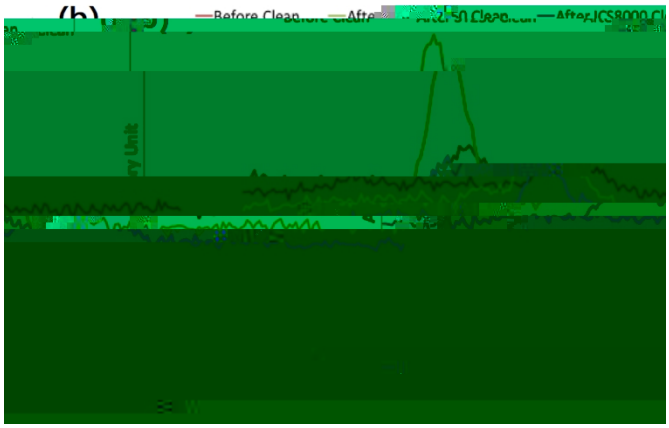
Acknowledgement





References

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Integration of copper with low-k dielectrics for 0.13 μm technology

J. Electrochem. Soc

Journal of the Electrochemical Society

姬峰　王英　铜互连双大马士革结构刻蚀清洗工艺中铜腐蚀失效机理及解决方案研究

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Conclusion