## Combined techniques for advanced failure analysis of Photonic Devices

Massimo Vanzi, University of Cagliari

In solid -state lasers and LEDs, the active region, where "everything happens", is currently a fraction of a micrometer thick. The combined use of FIB, HAADF STEM and standard TEM allows for individuation and analysis of the extended degradation patterns that sole can decode the various failure mechanisms. Results from real cases in the telecom world will be shown.