

Figure 1

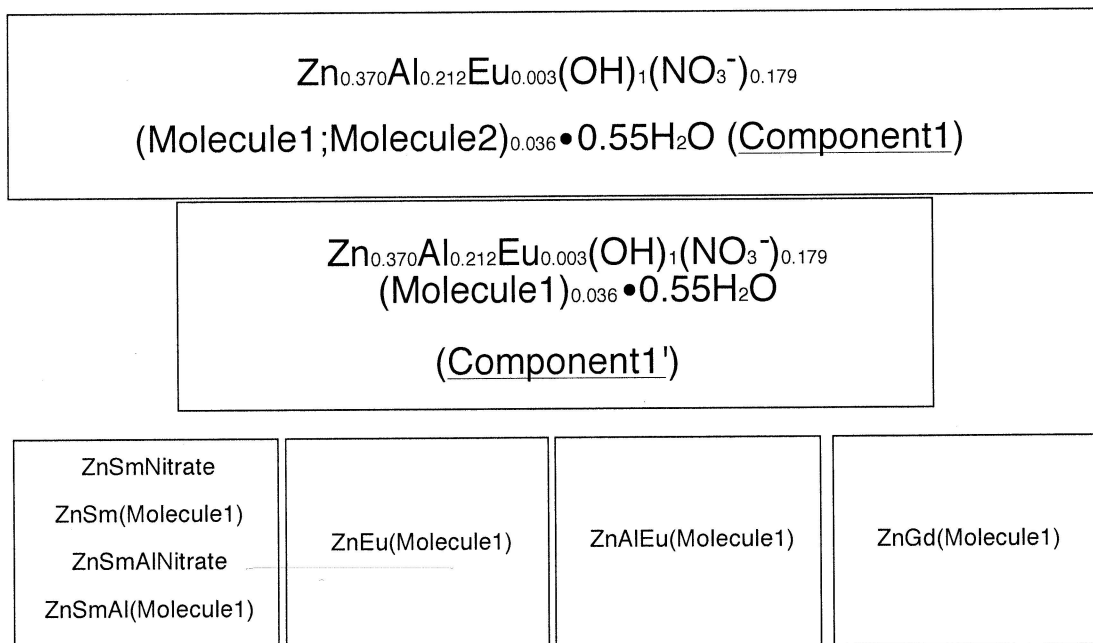


Figure 2

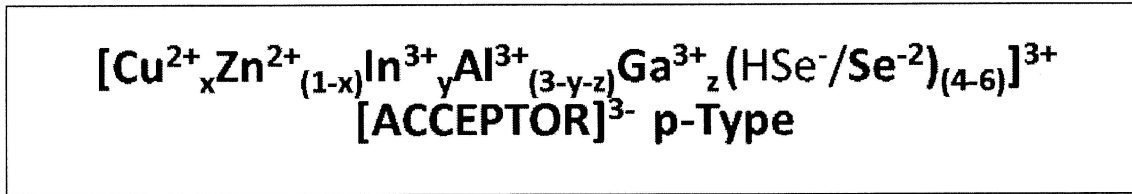
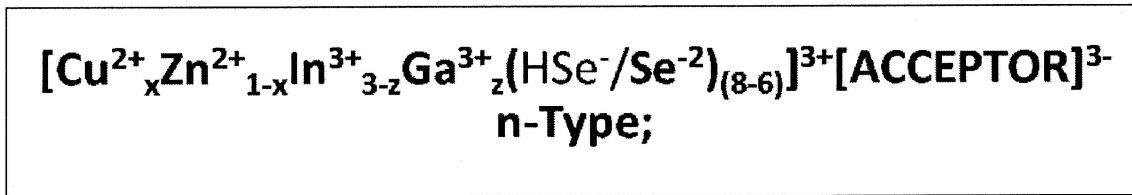
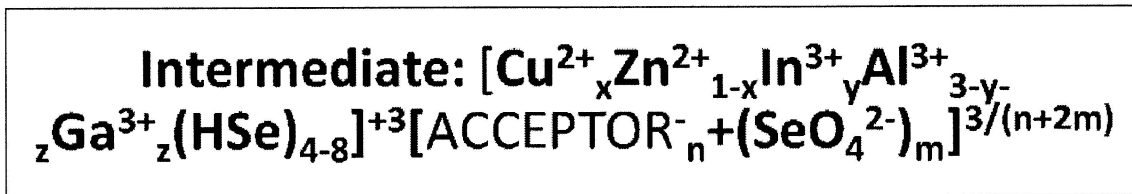
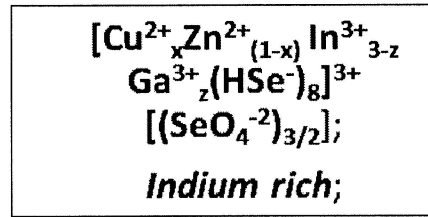
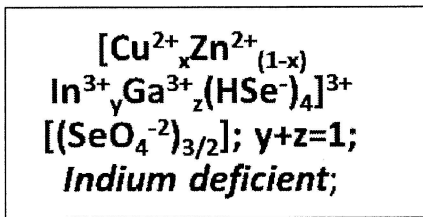
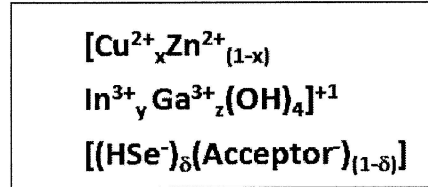
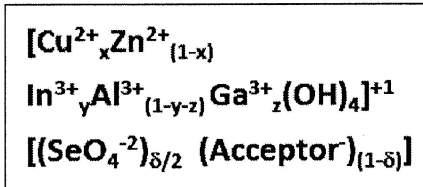
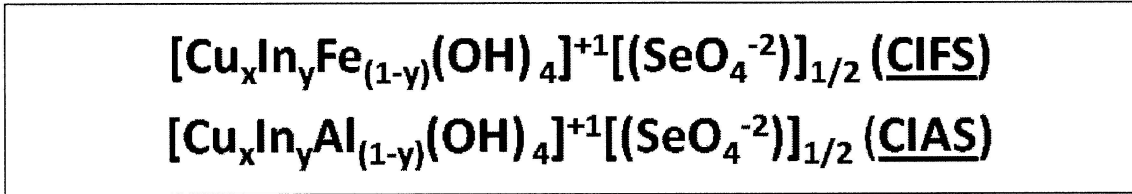
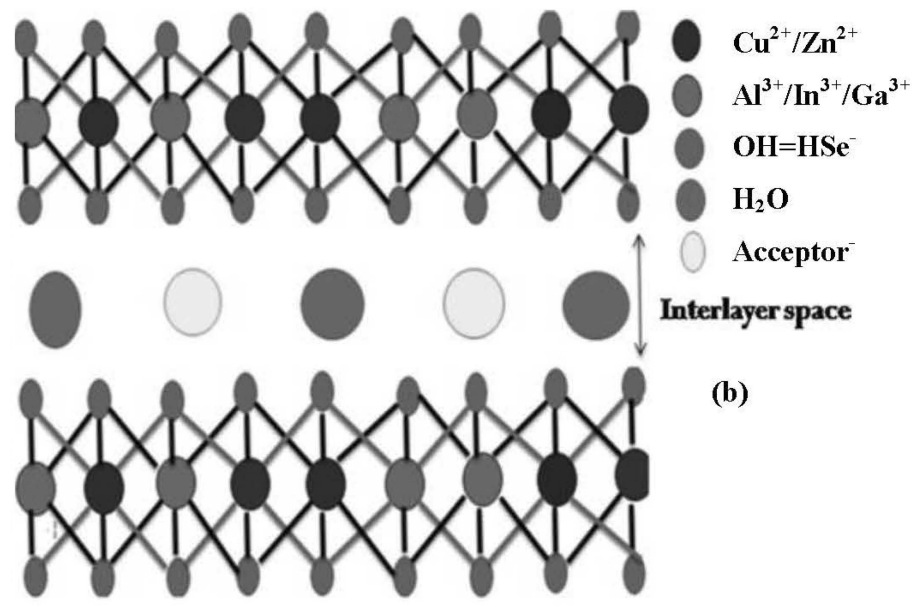
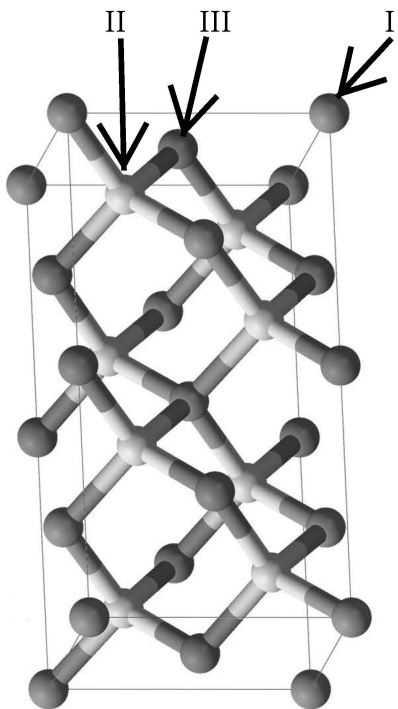
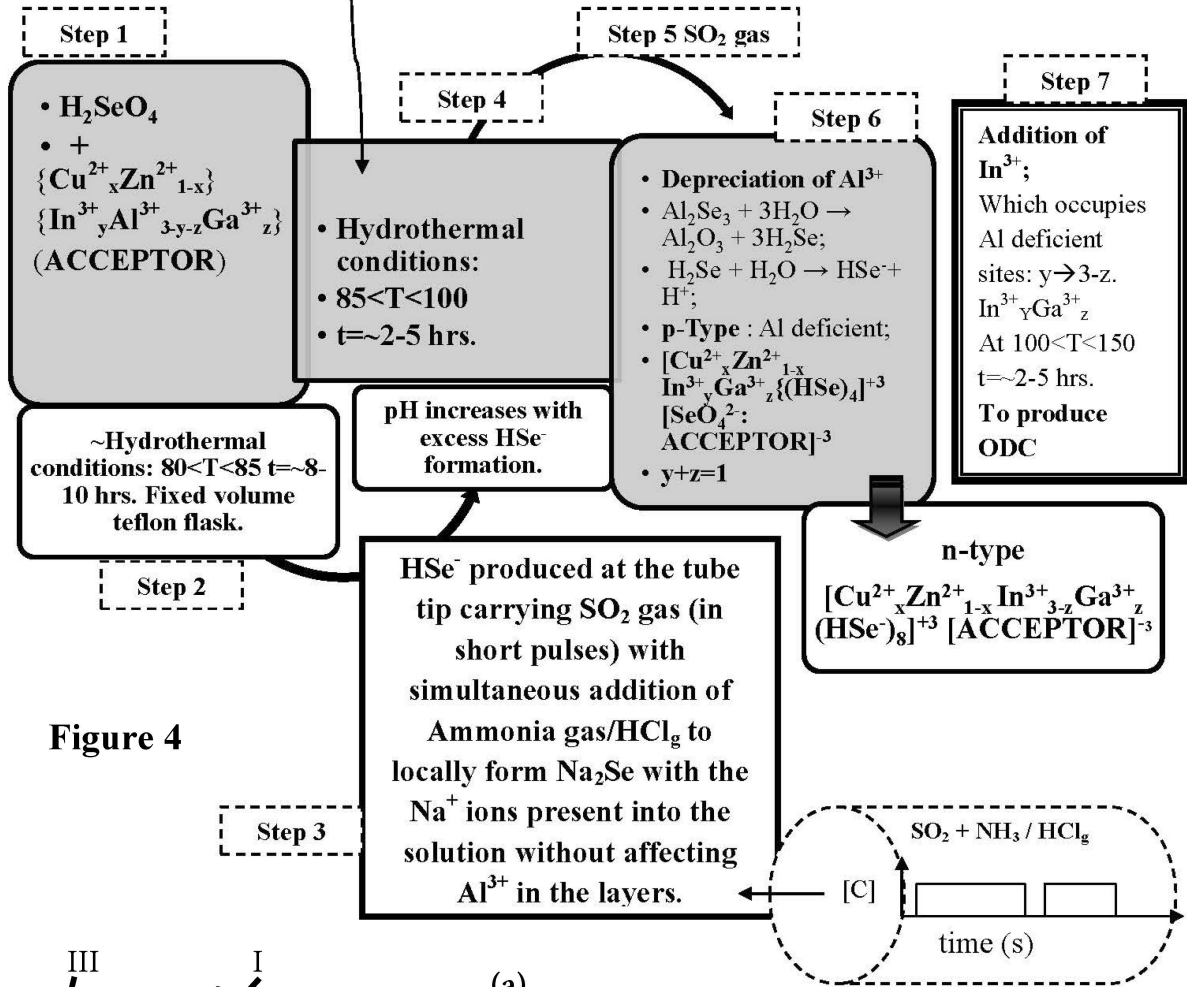
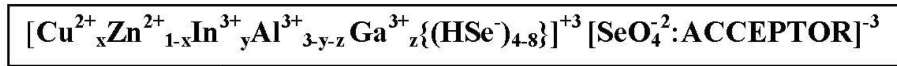
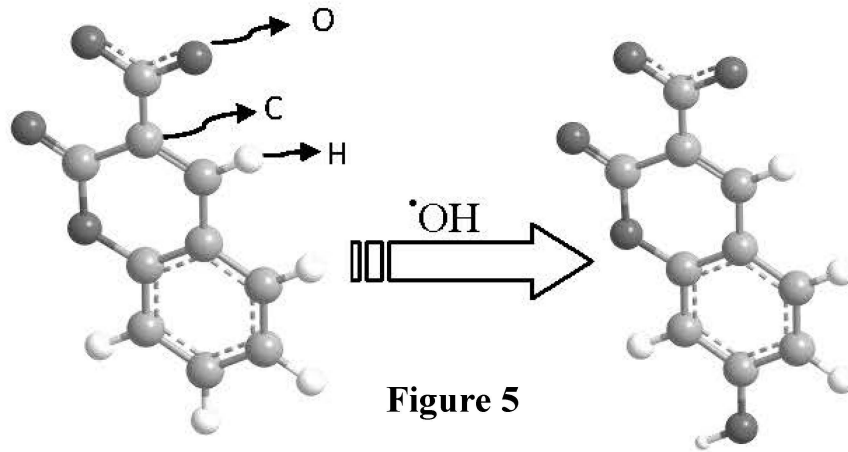


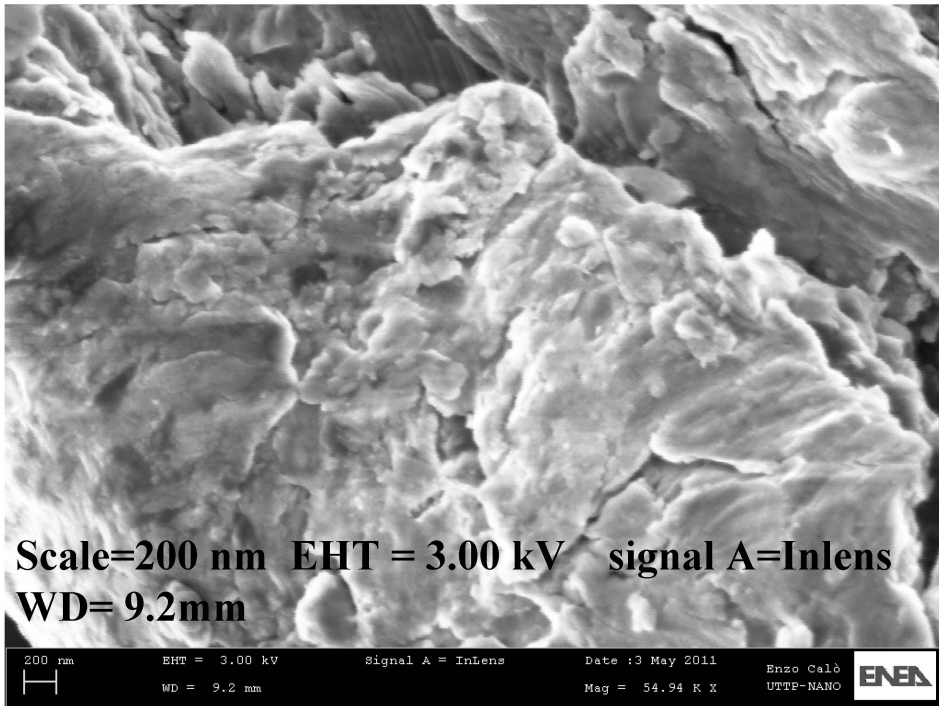
Figure 3



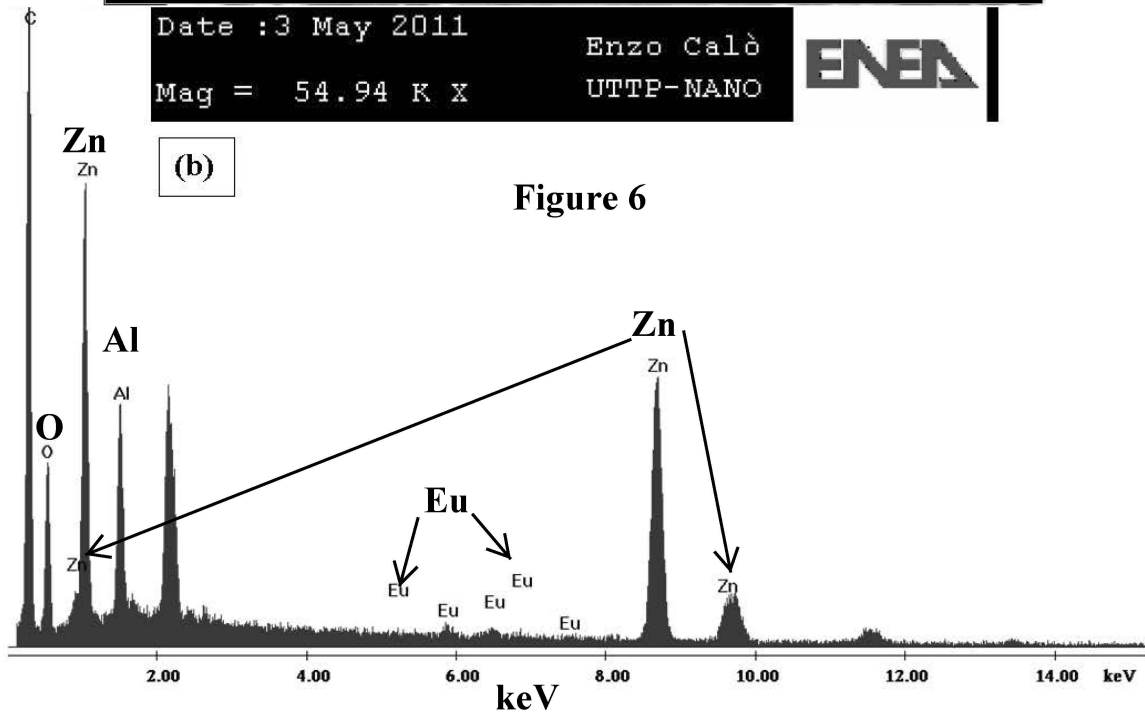
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(a)



C



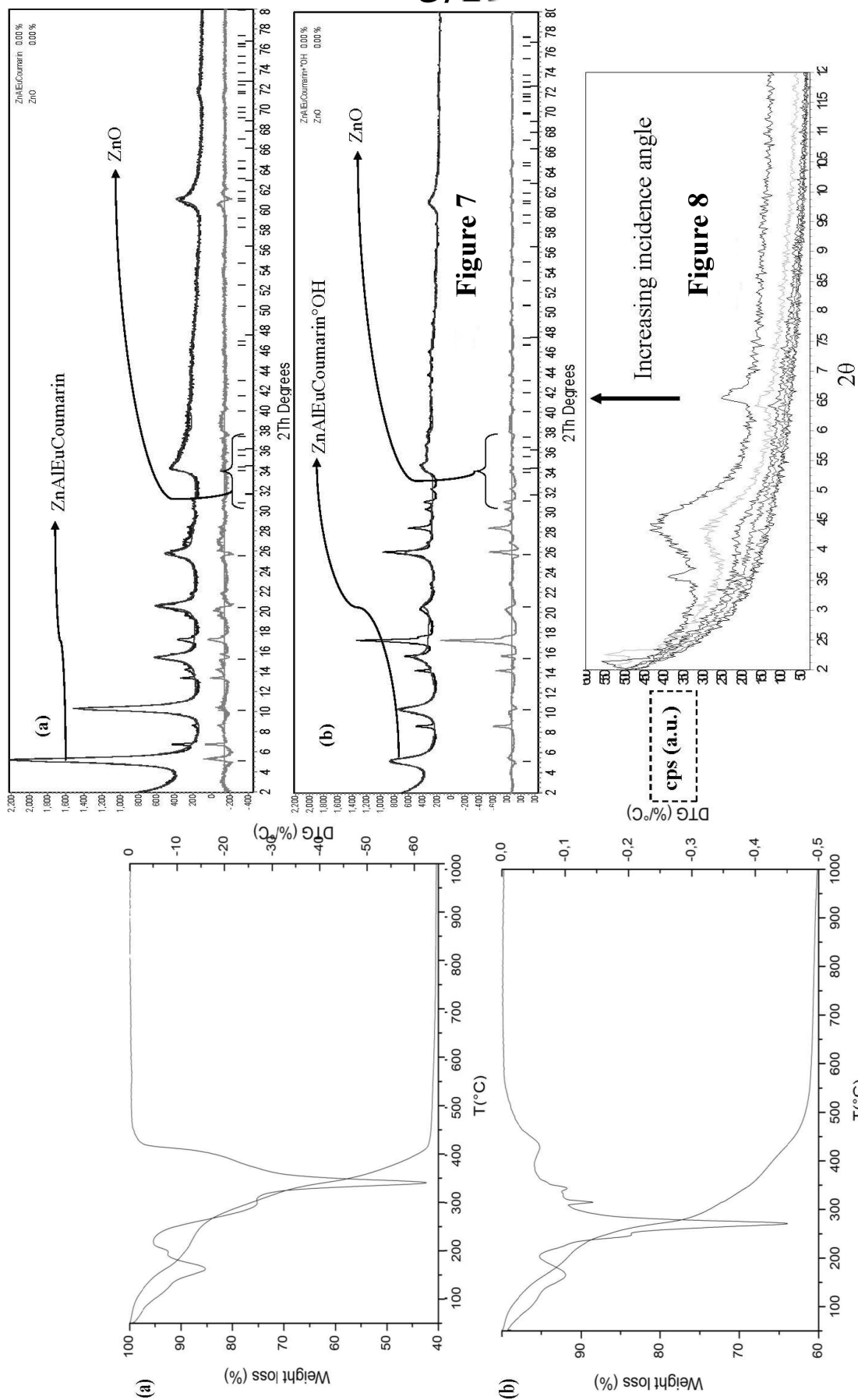


Figure 9

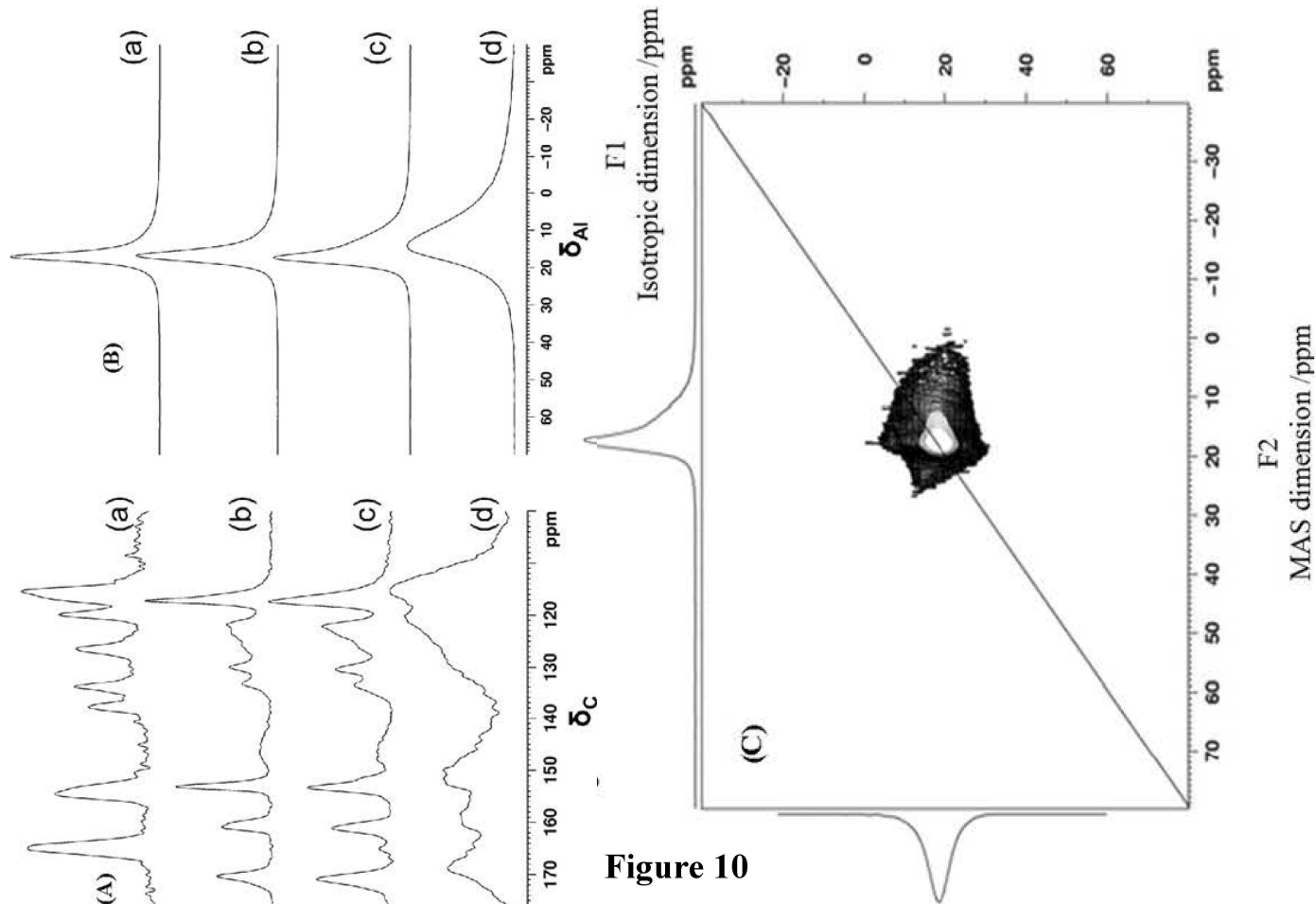


Figure 10

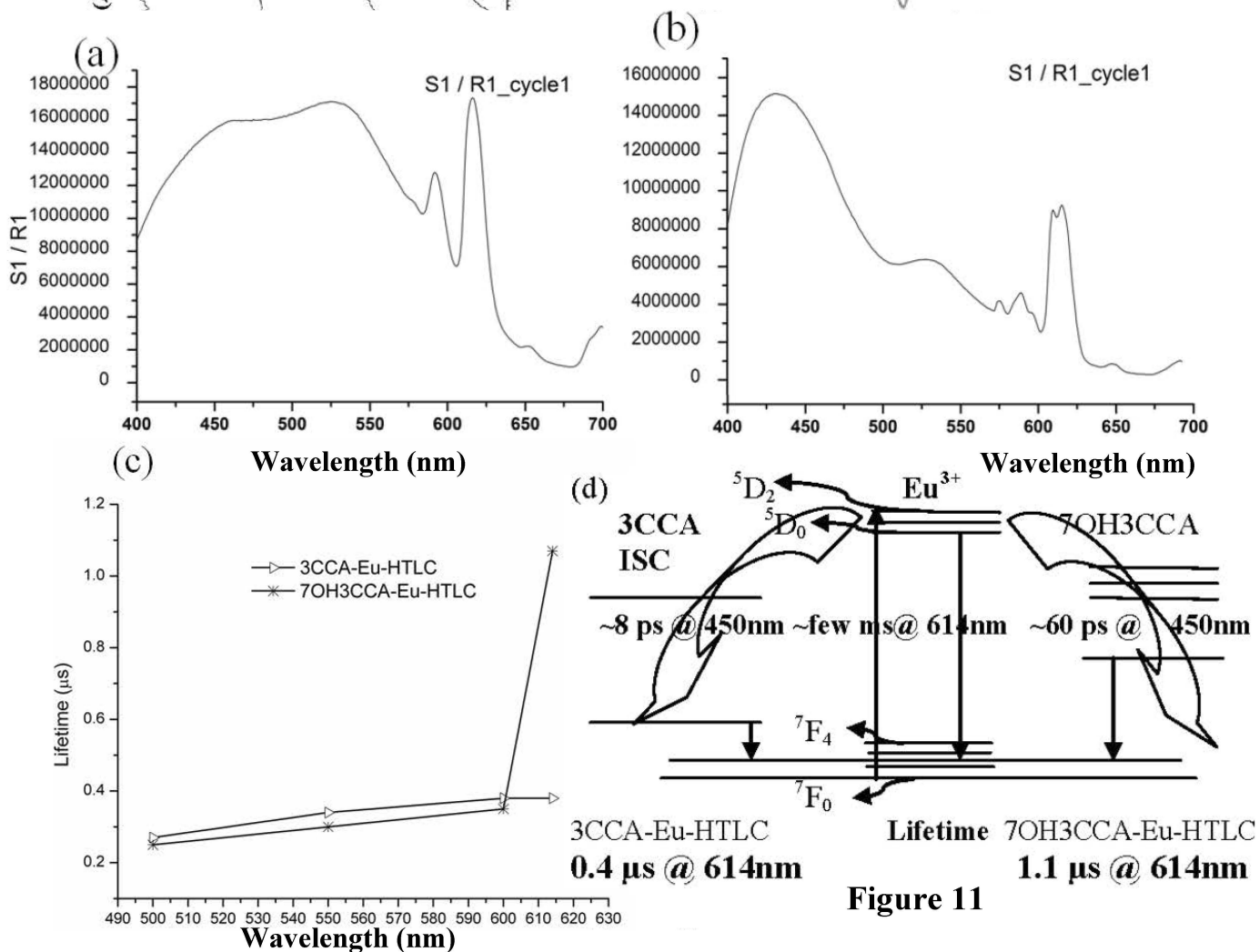


Figure 11

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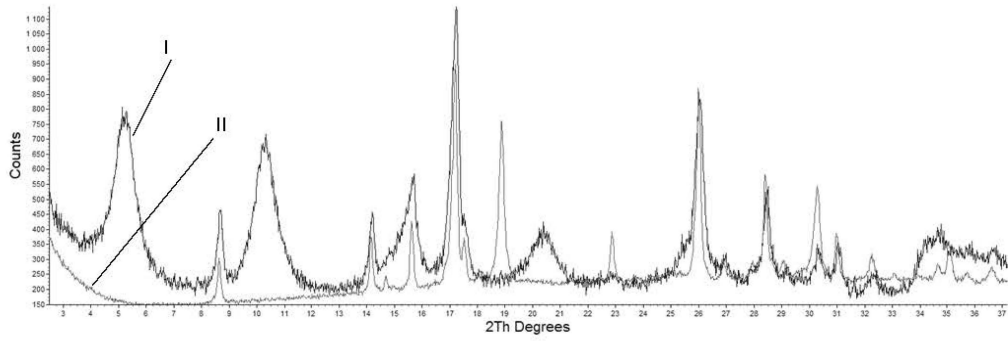


Figure 12

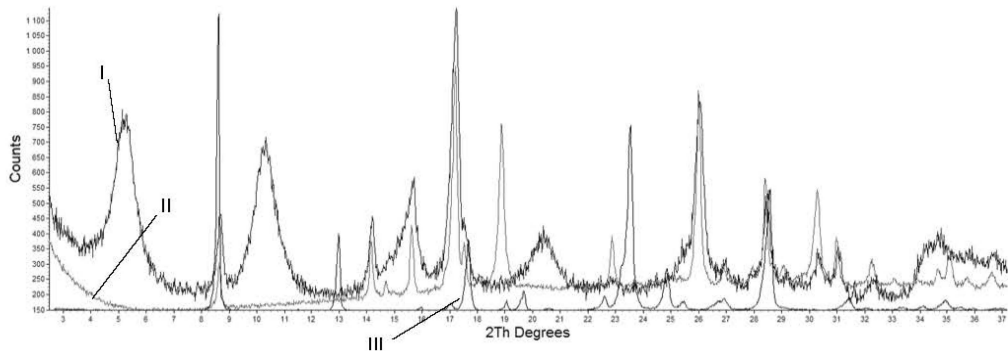


Figure 13

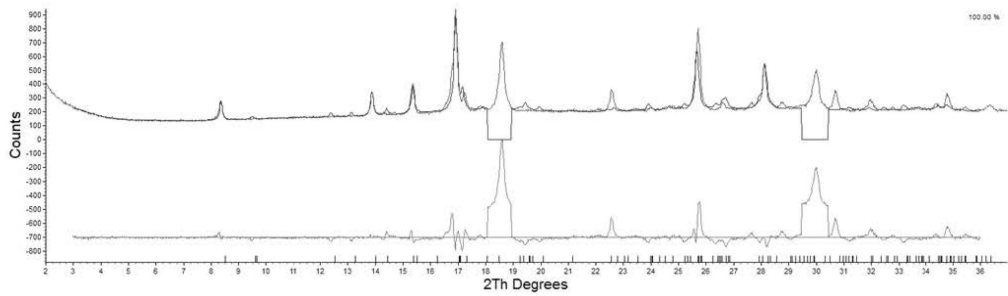


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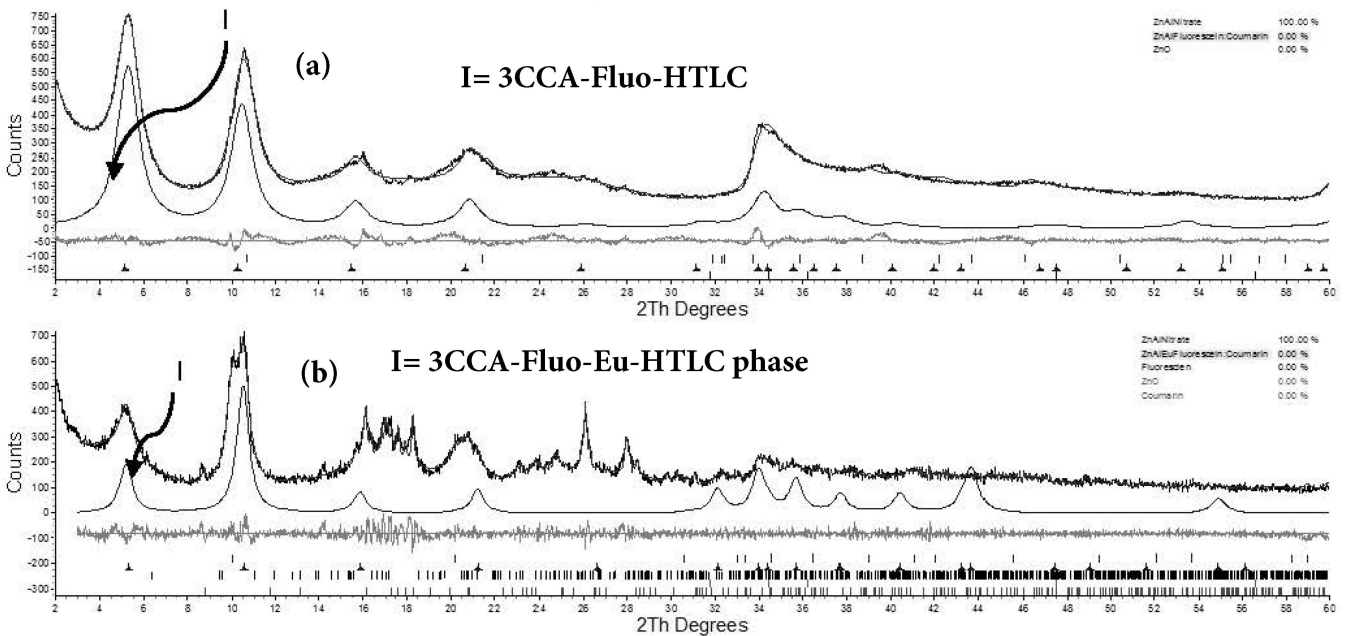


Figure 15

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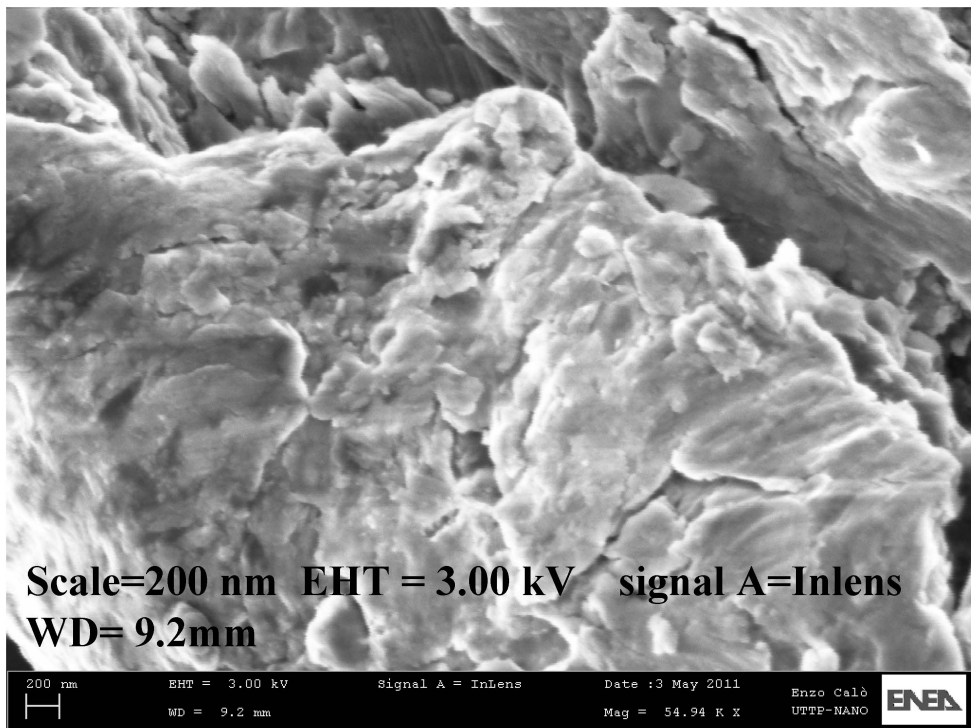
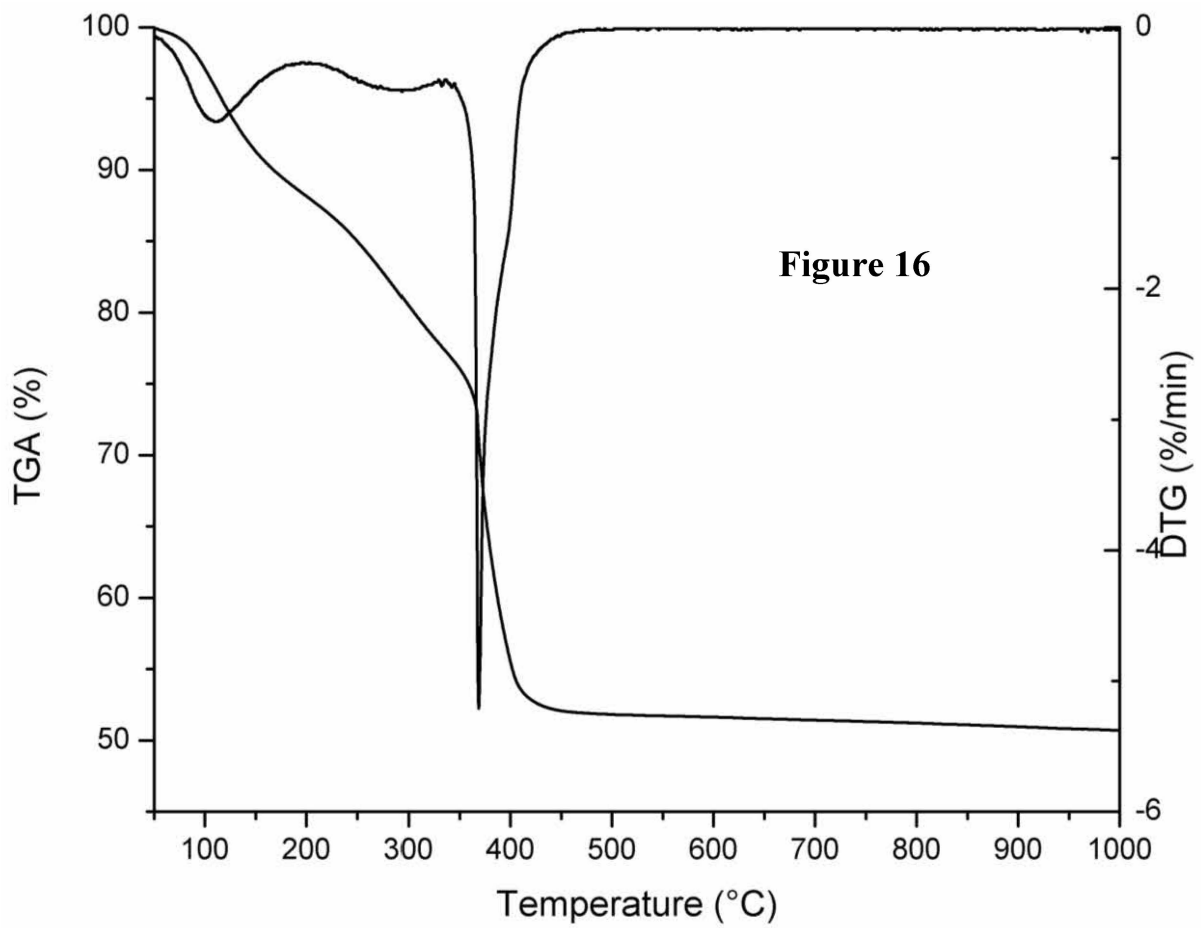


Figure 17

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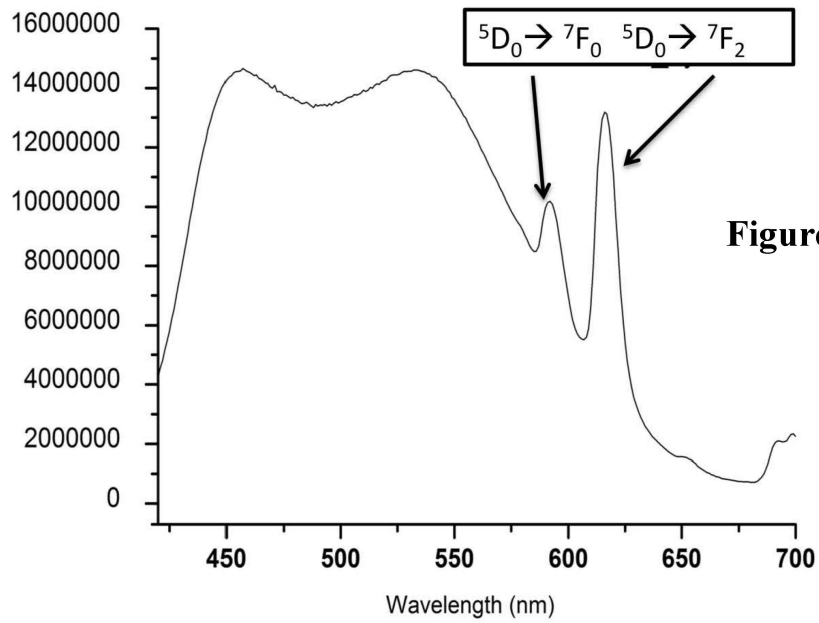


Figure 18

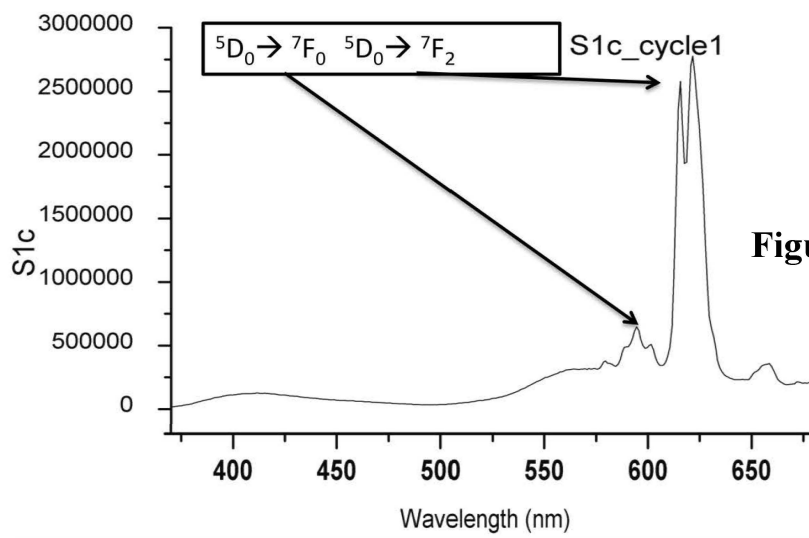


Figure 19

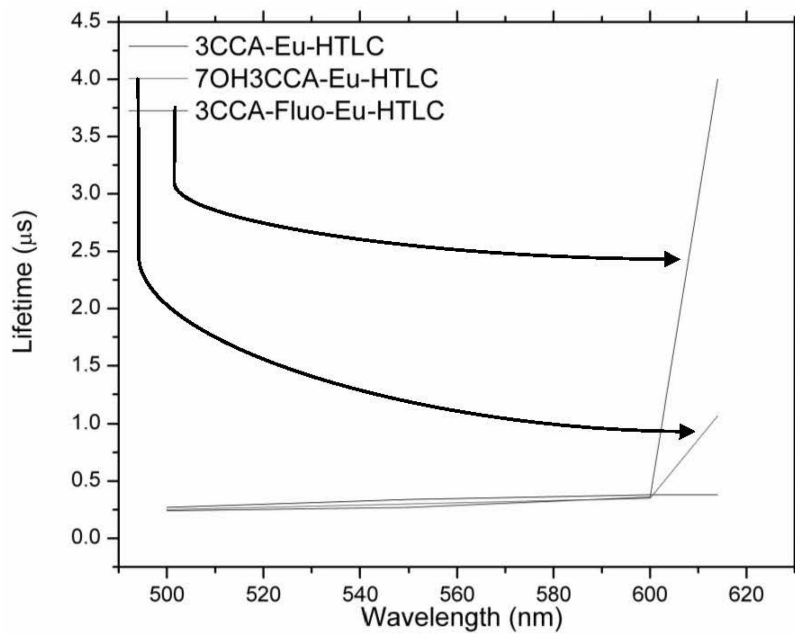


Figure 20

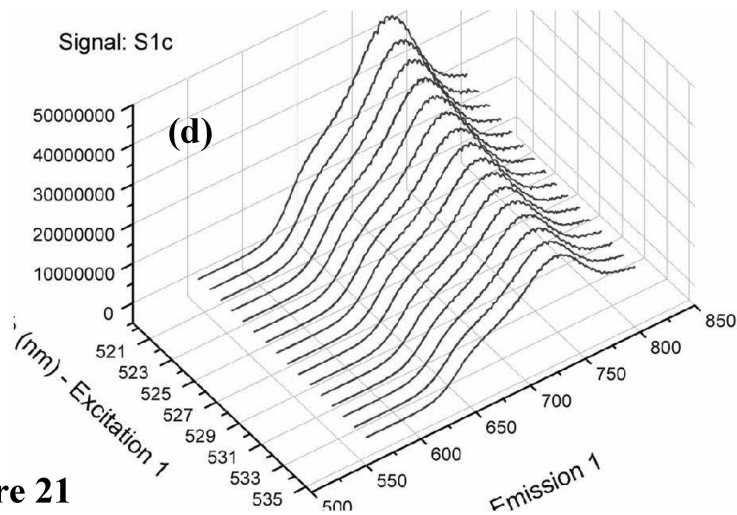
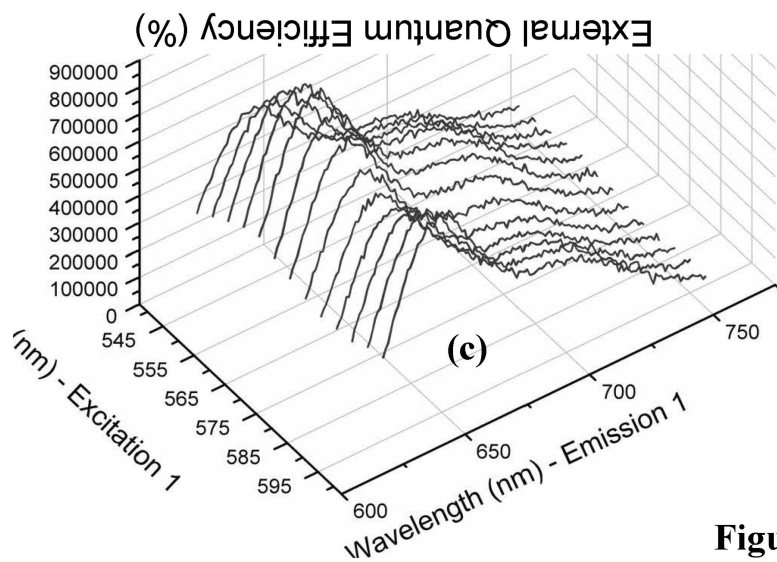
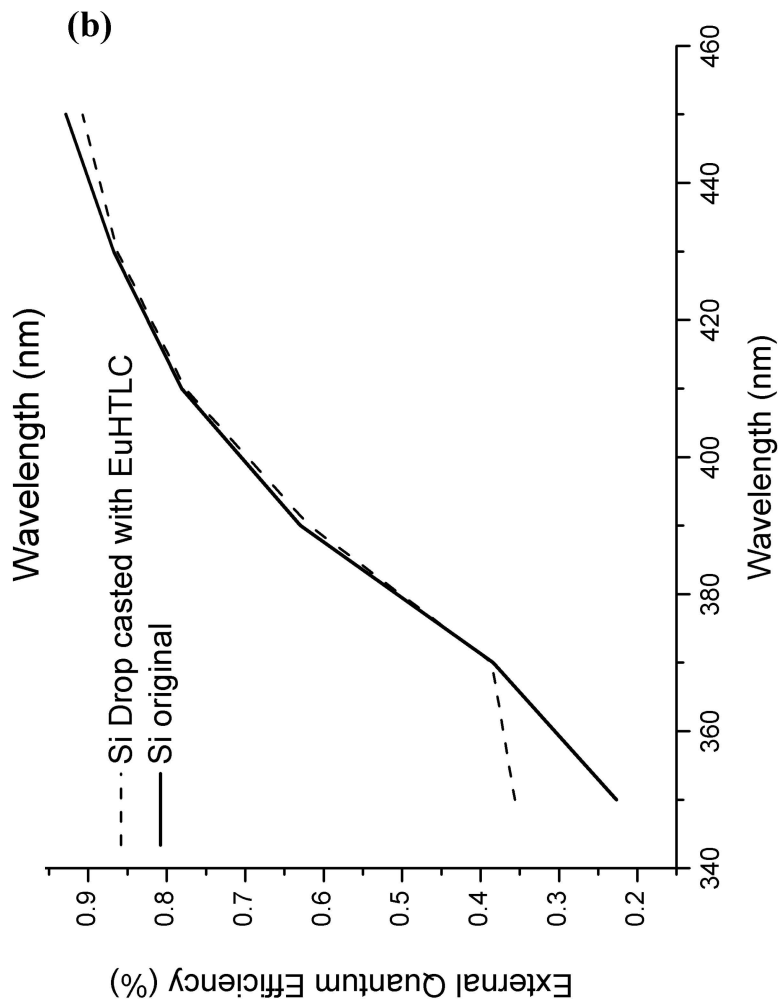
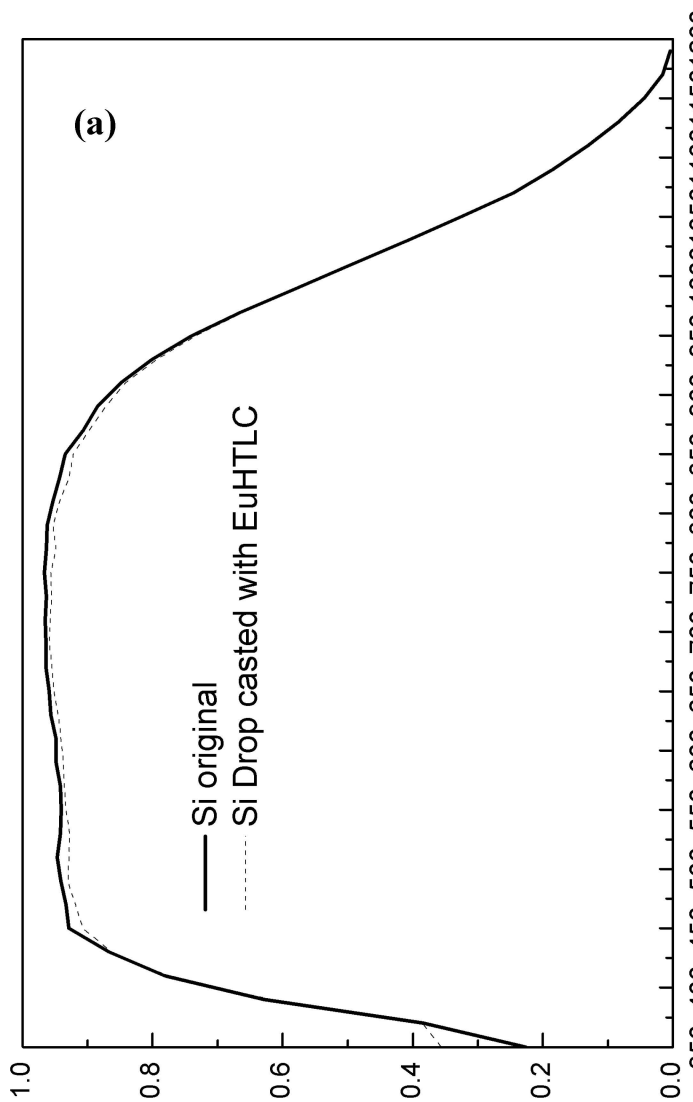


Figure 21

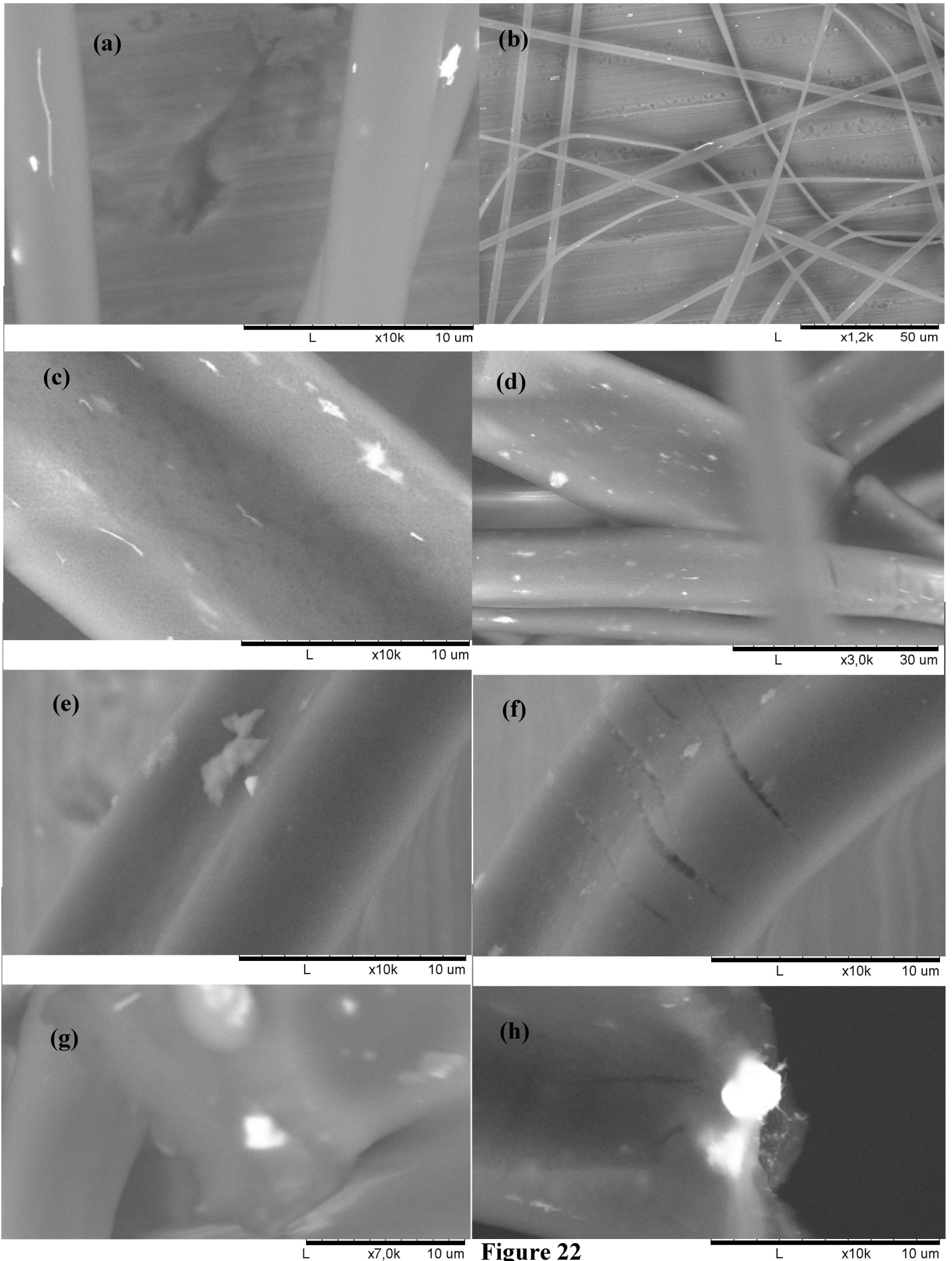


Figure 22

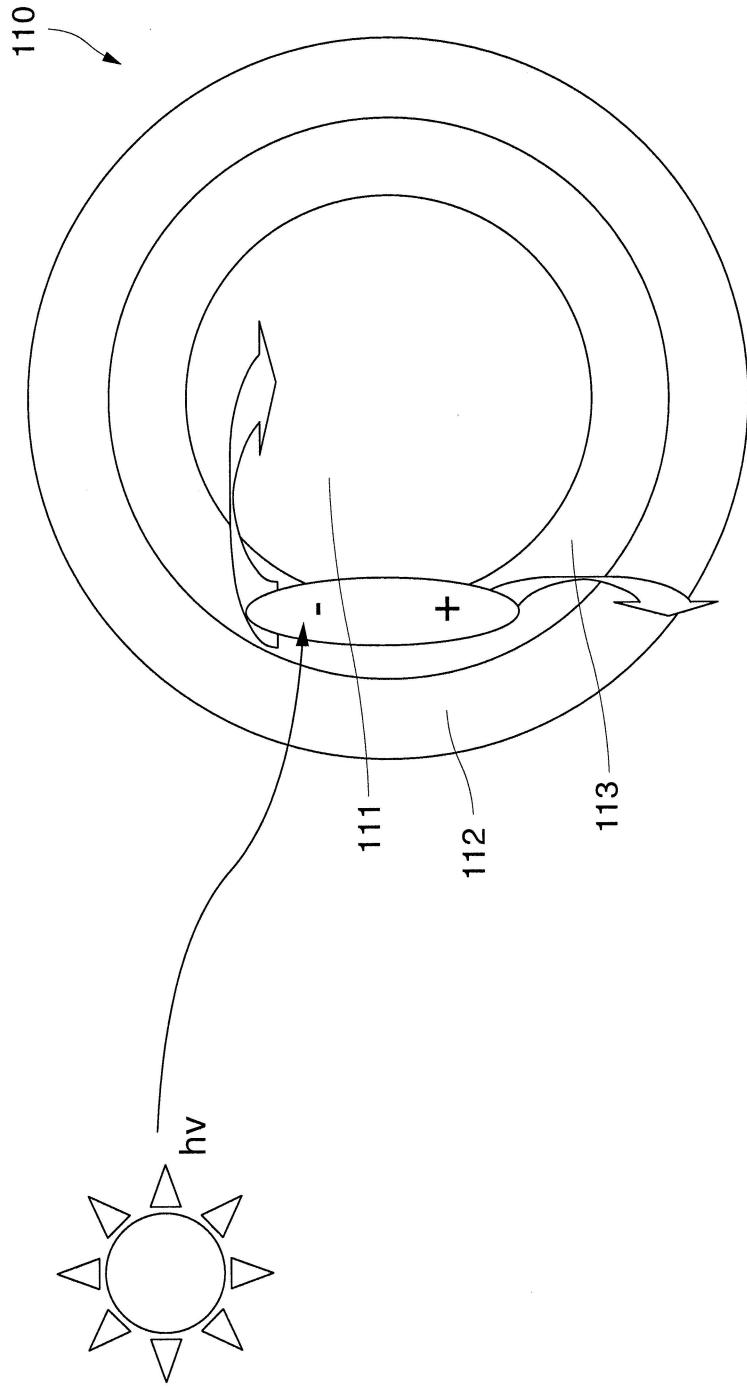


Figure 23

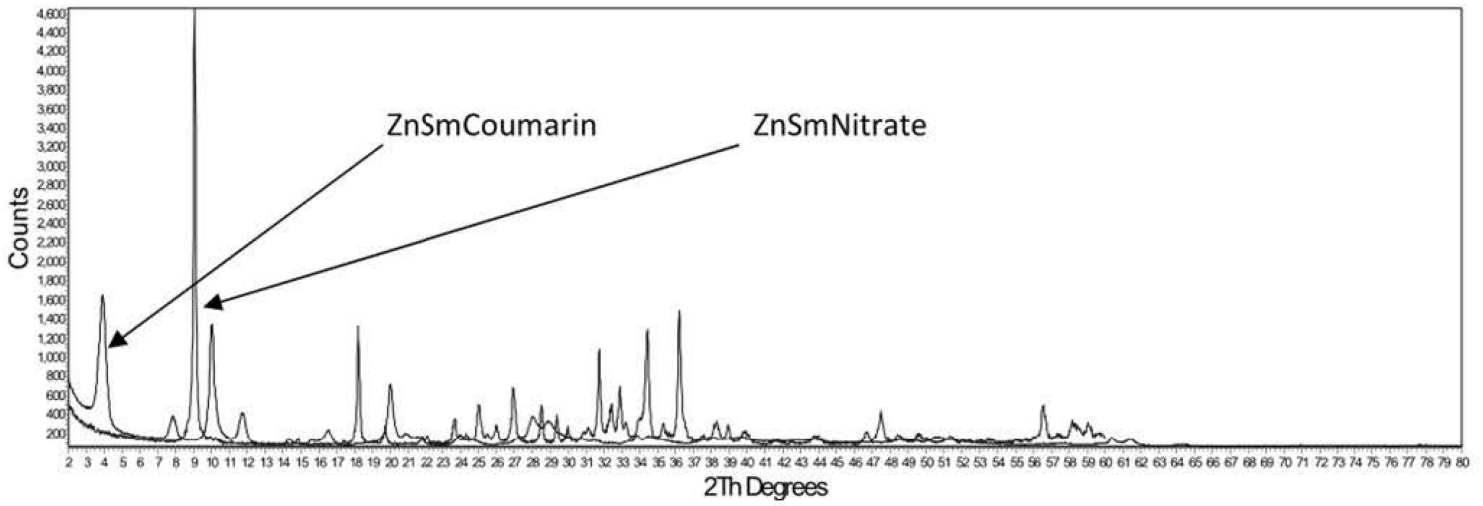


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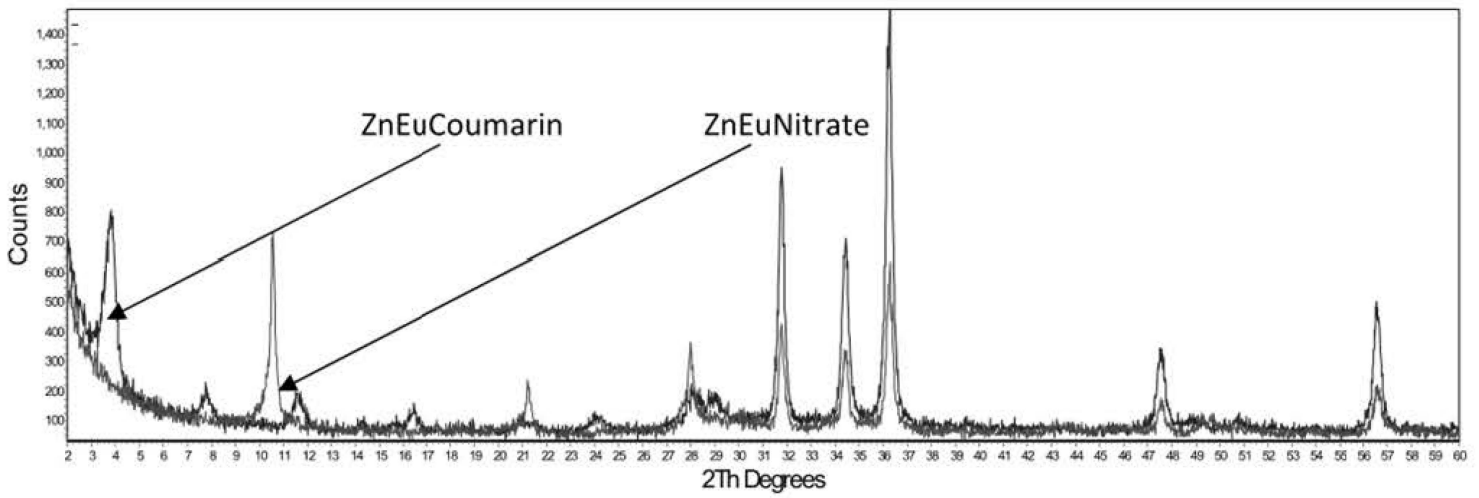


Figure 25

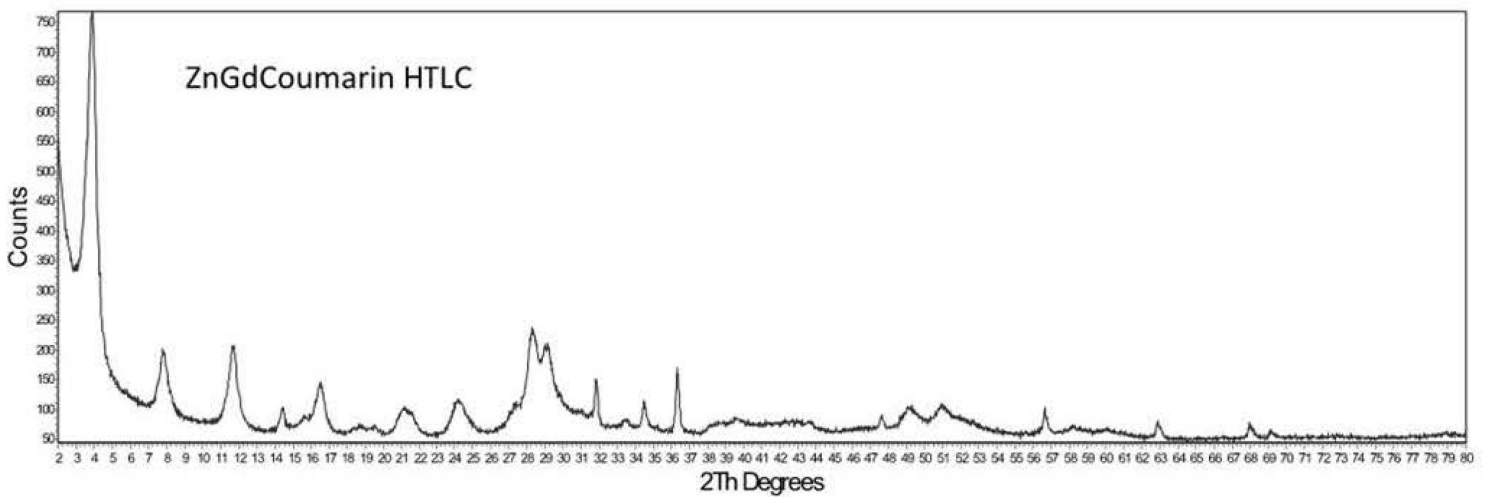
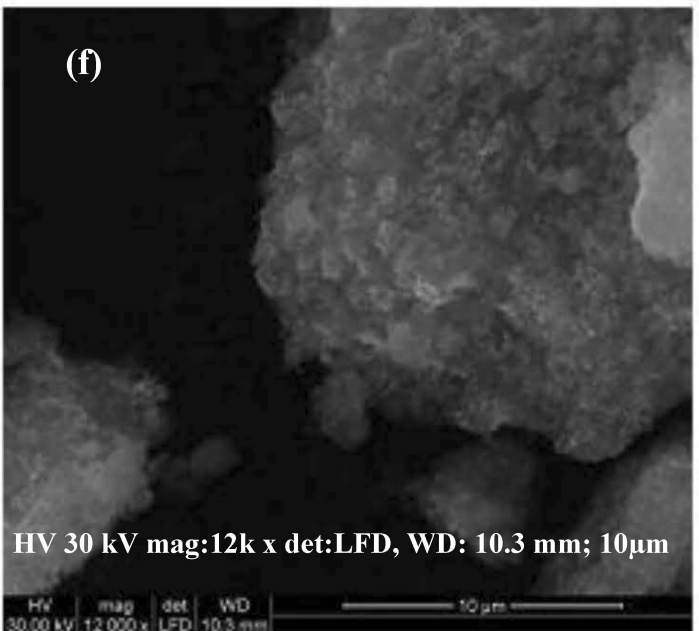
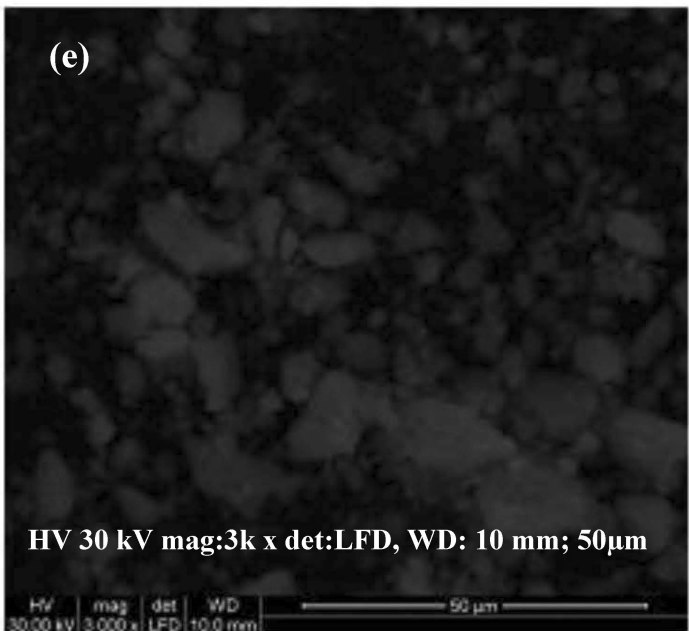
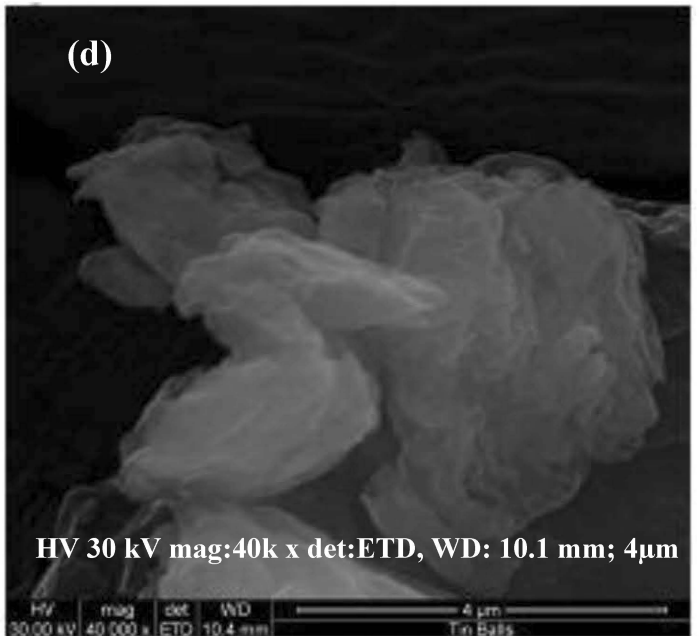
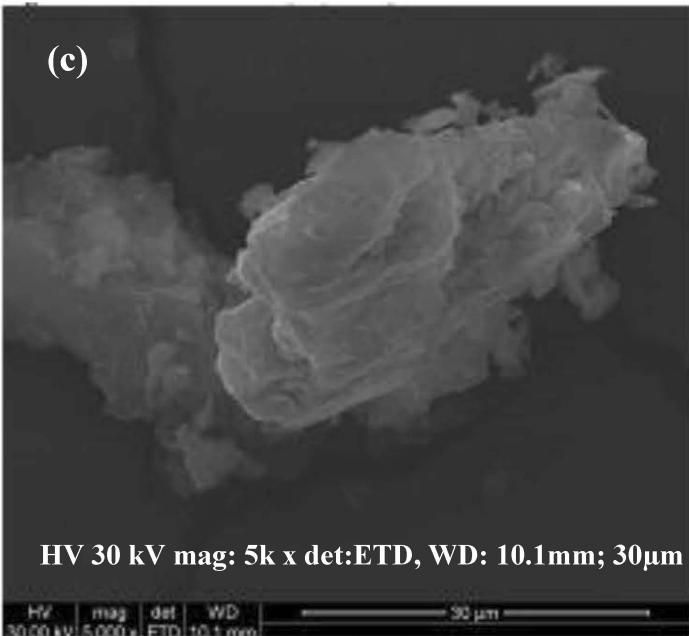
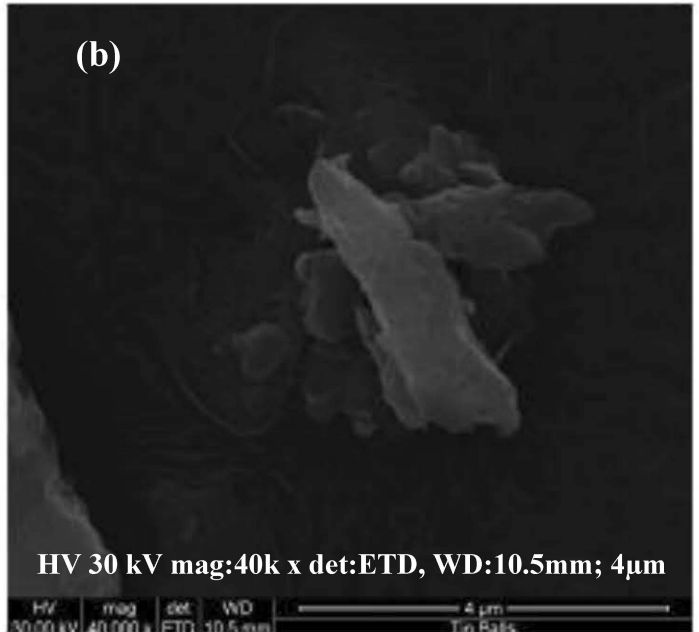
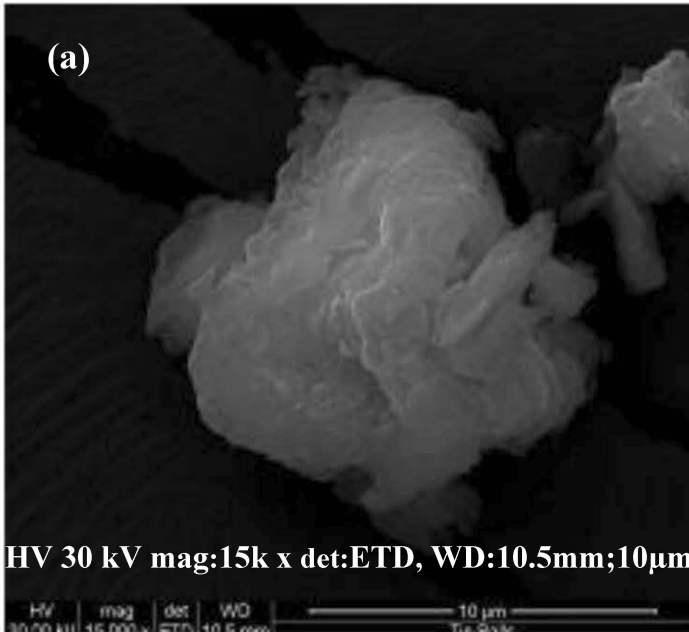


Figure 26



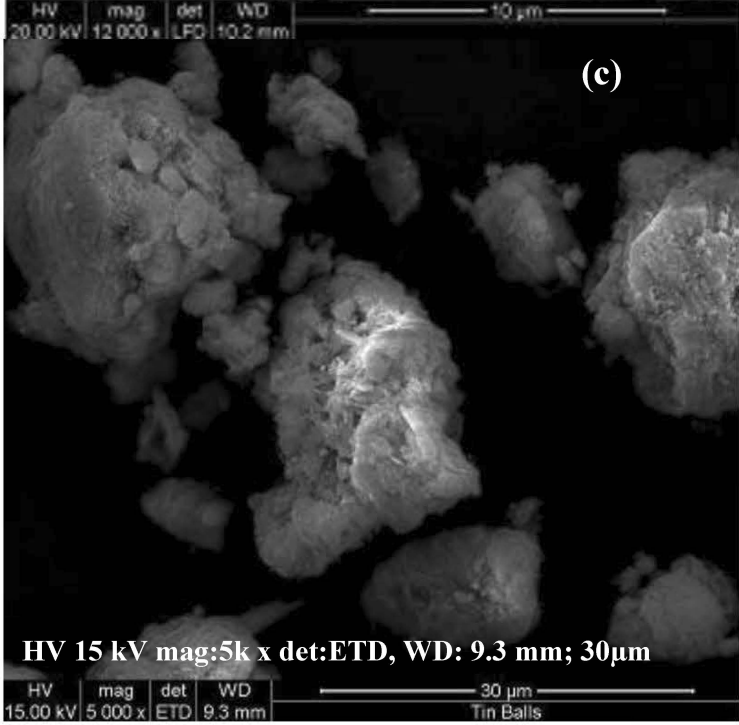
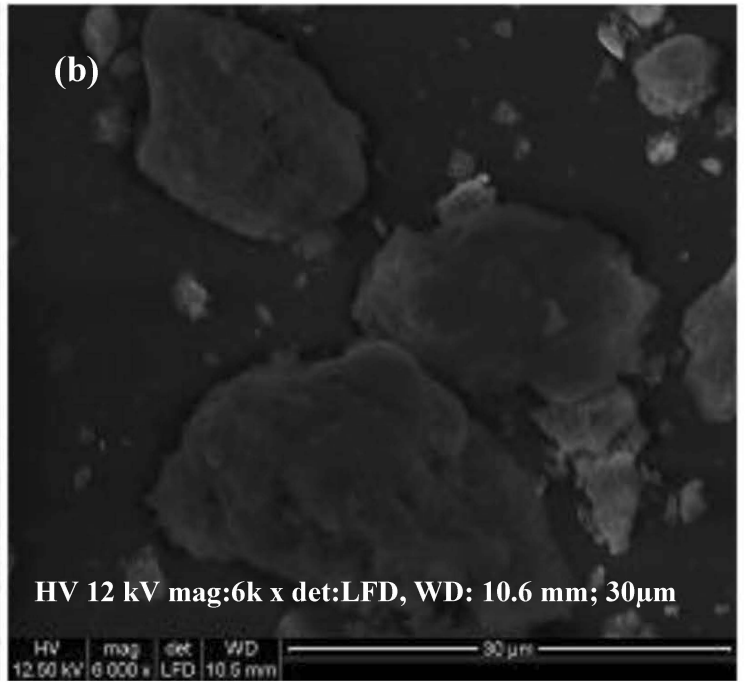
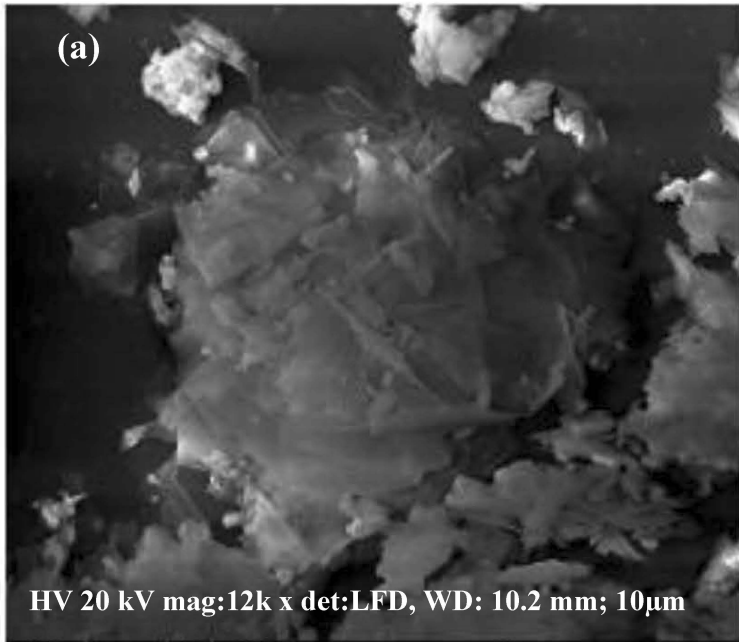


Figure 28

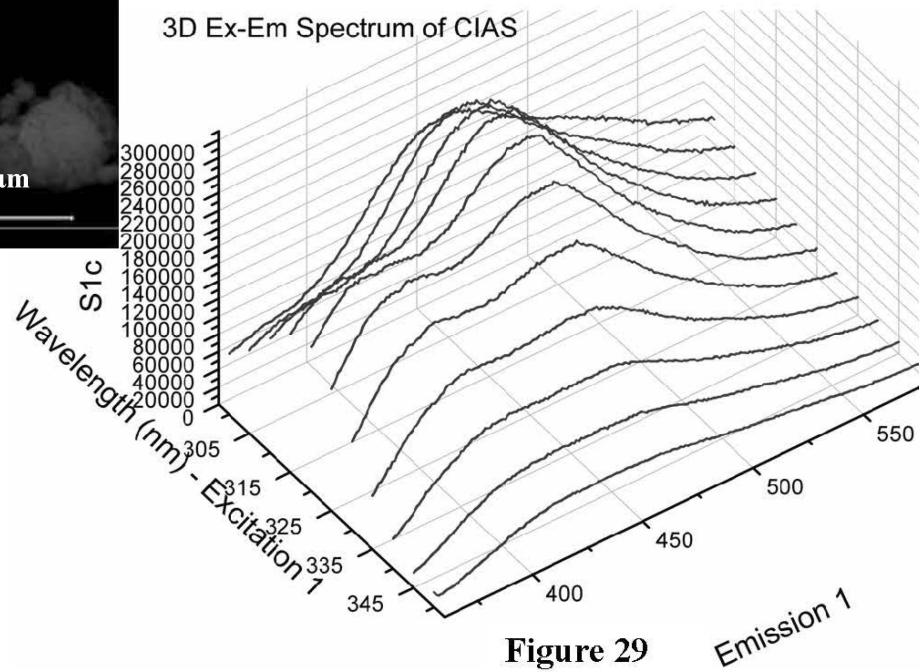


Figure 29

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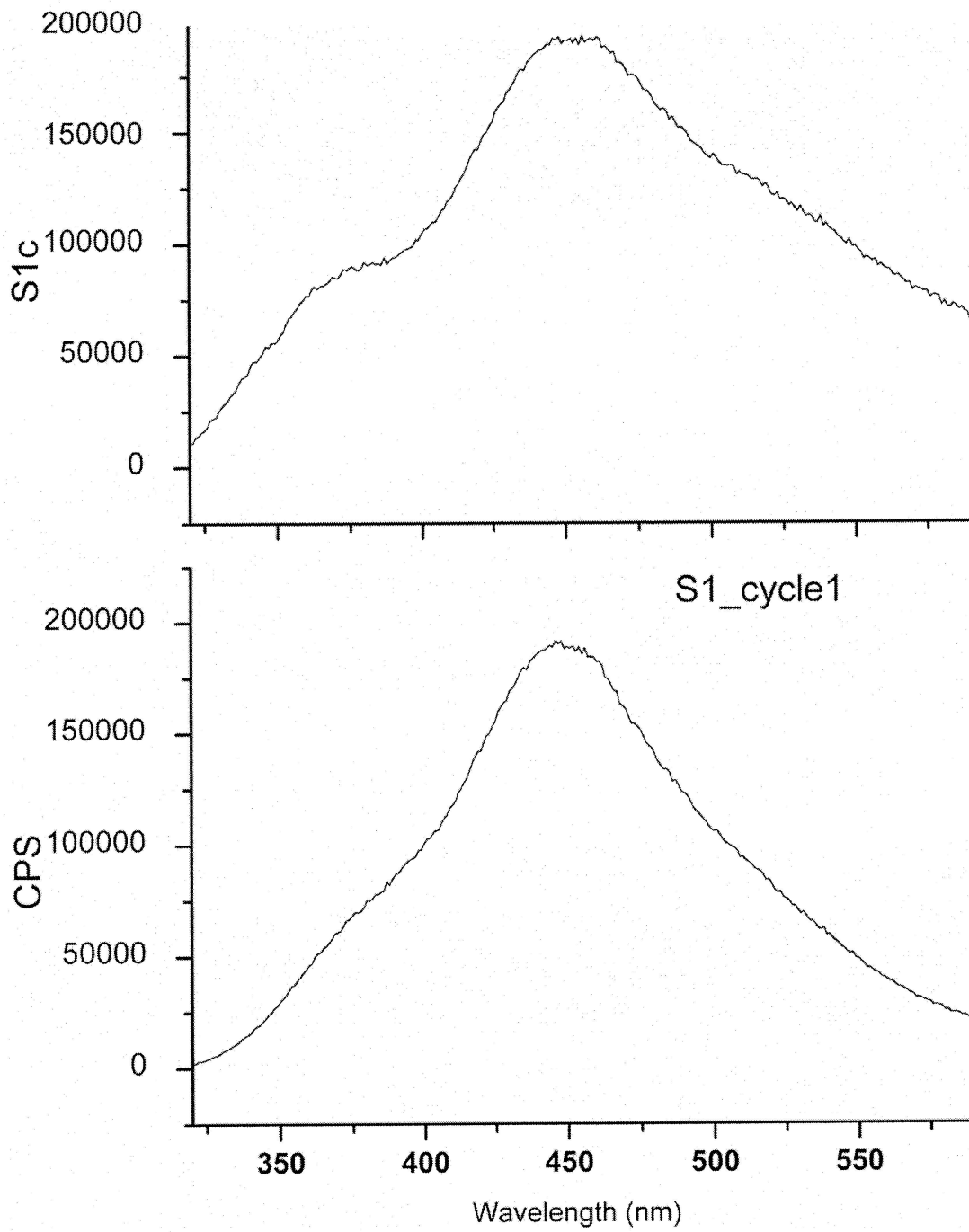


Figure 30

Figure 31

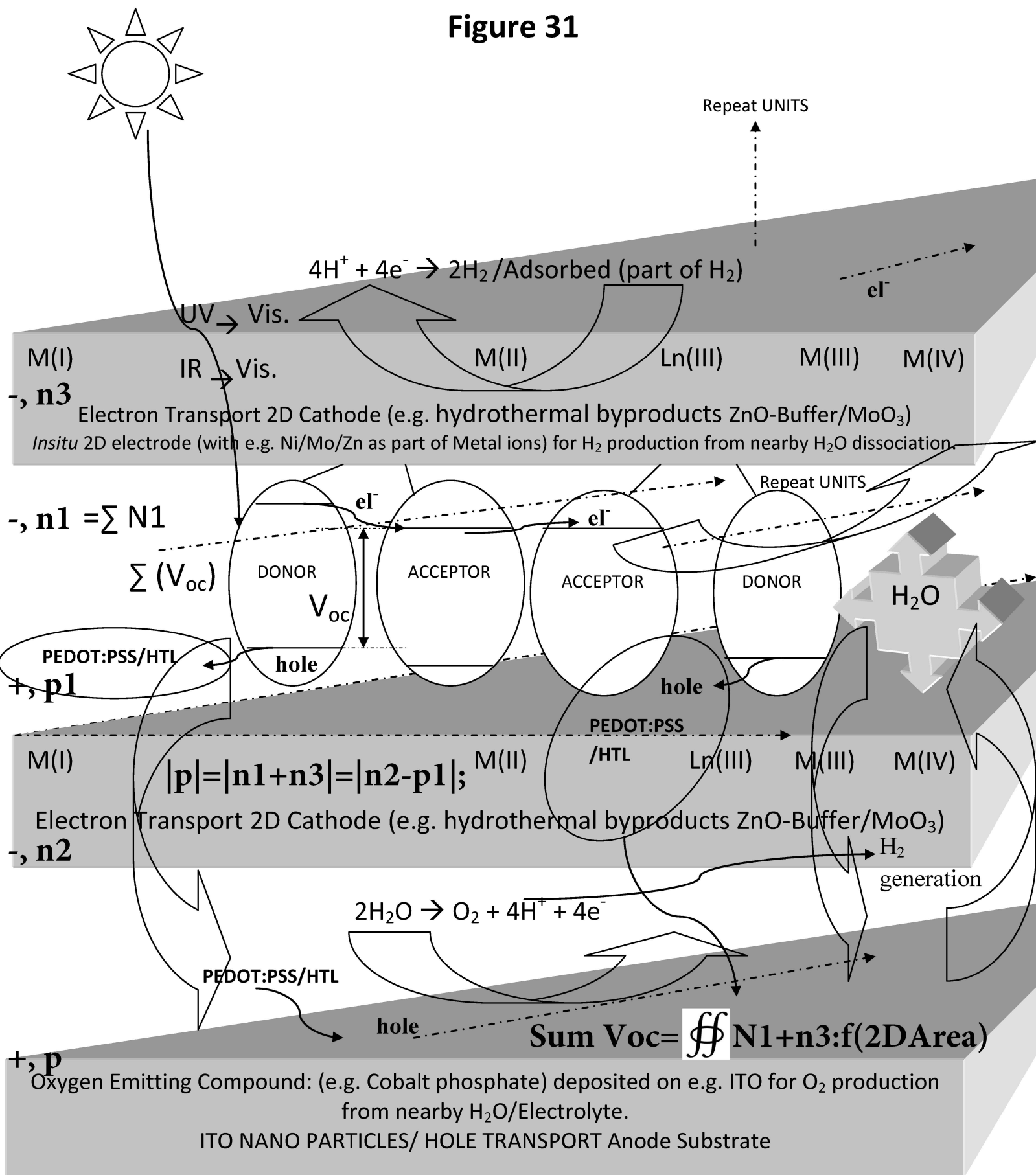


Figure 32(a)

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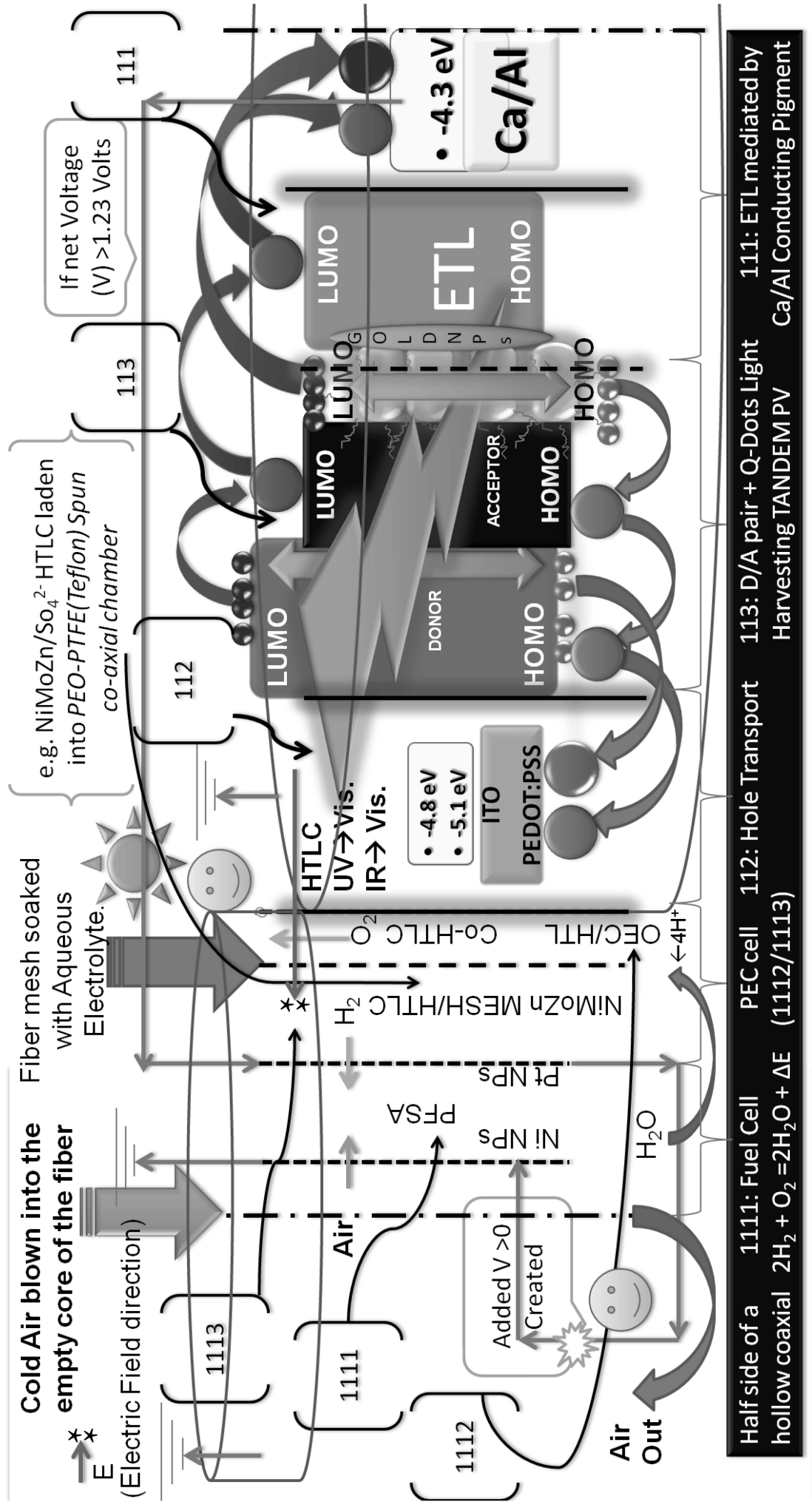
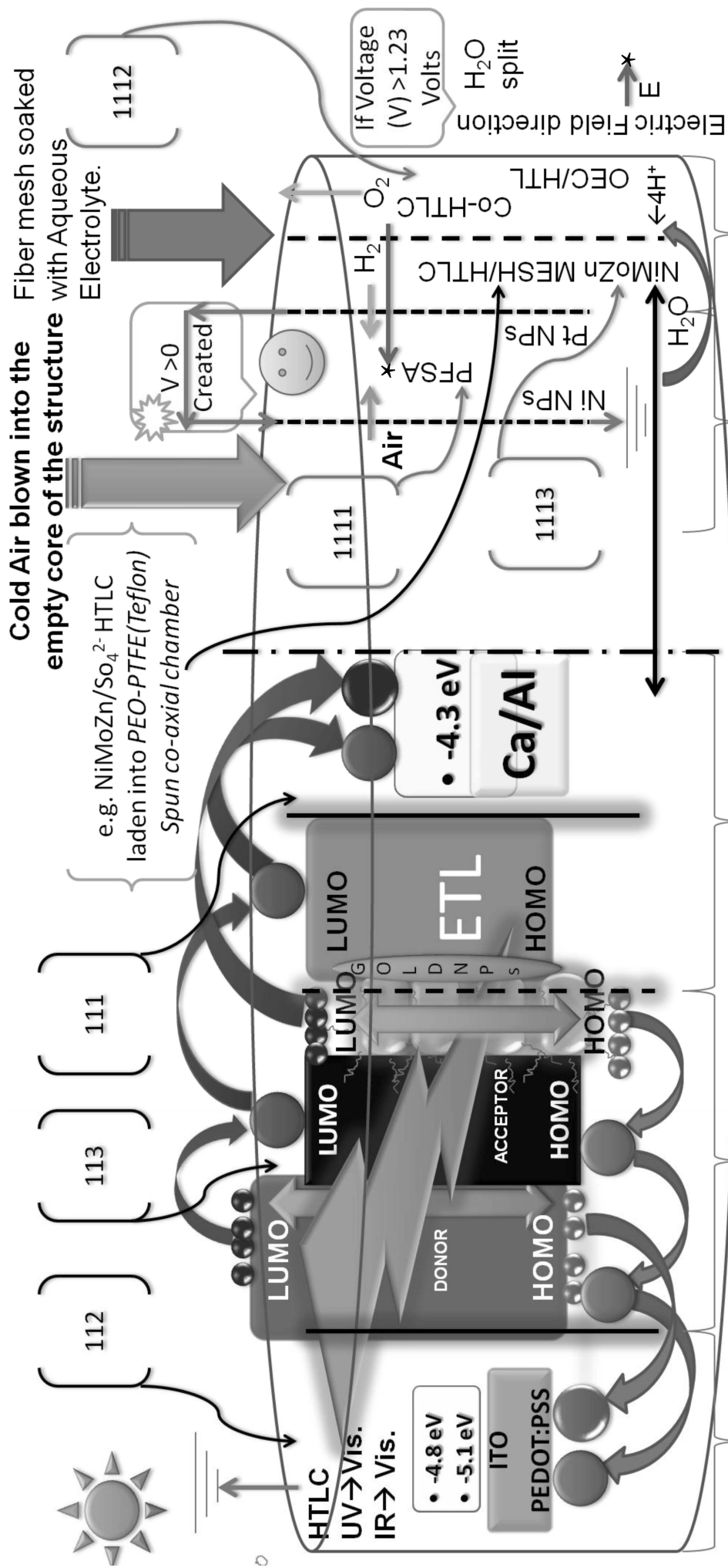


Figure 32(b)

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1112: Hole Transport Layer
 1113: Fuel Cell (PEM/AFC)
 PEC cell (1112/1113)
 $2H_2 + O_2 = 2H_2O + \text{Energy}$
 111: ETL mediated by Ca/Al Conducting Pigment
 1113: D/A pair + Q-Dots Light Harvesting TANDEM PV