

FIG. 1

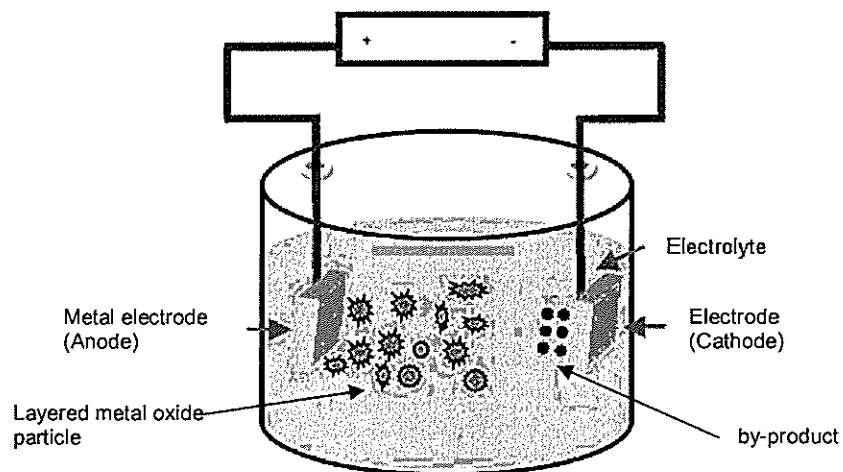
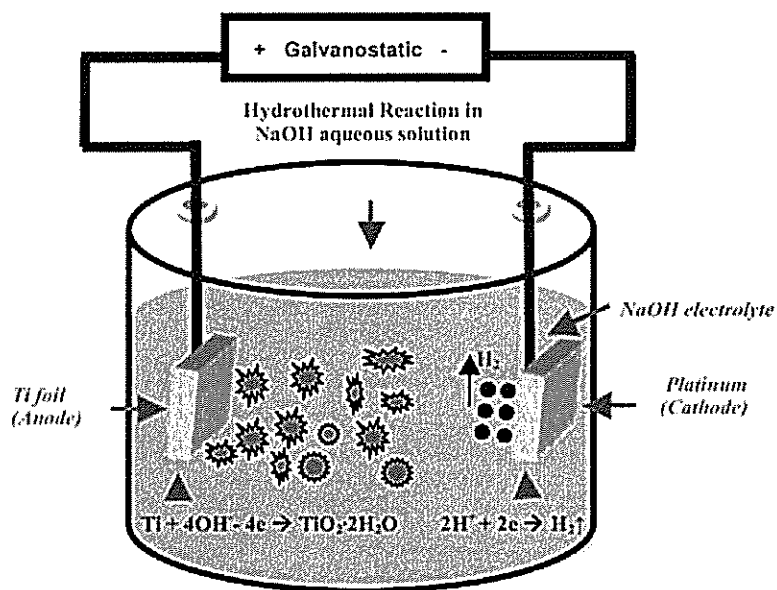
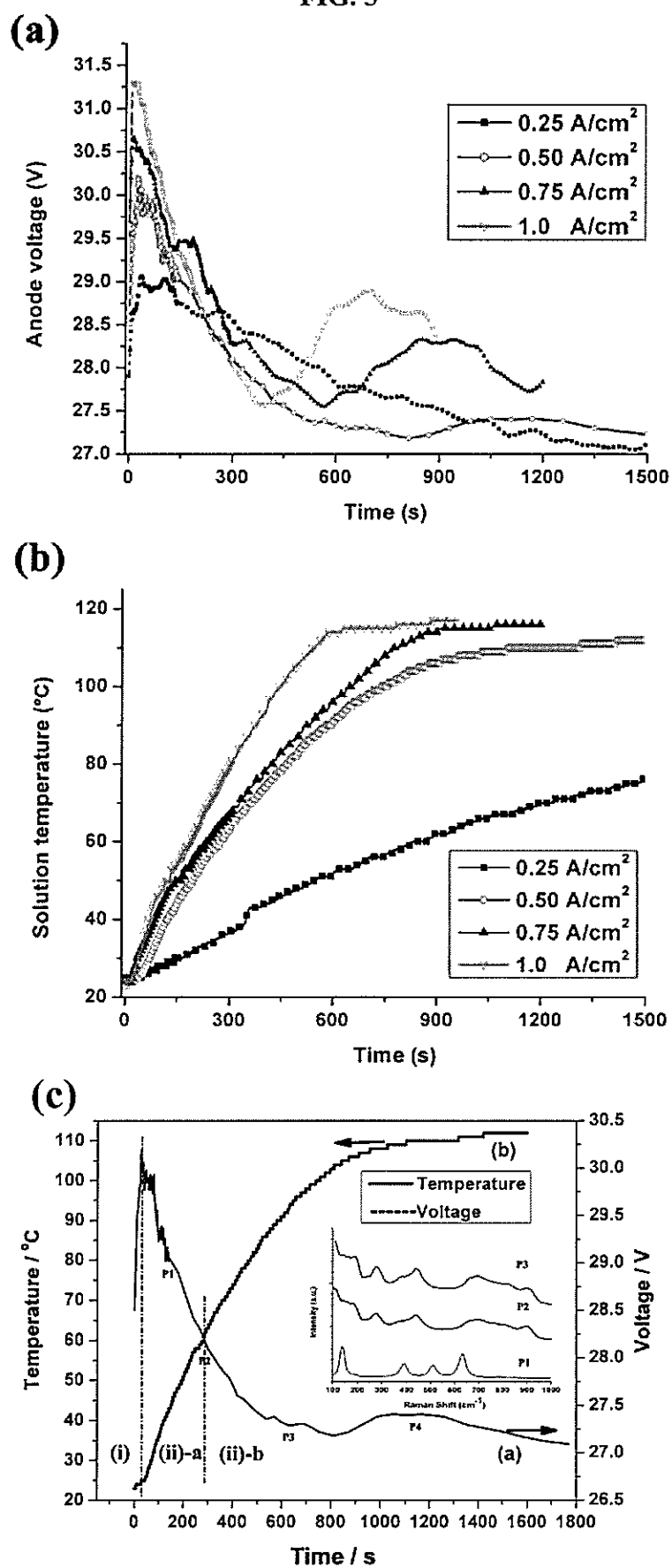


FIG. 2



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FIG. 3



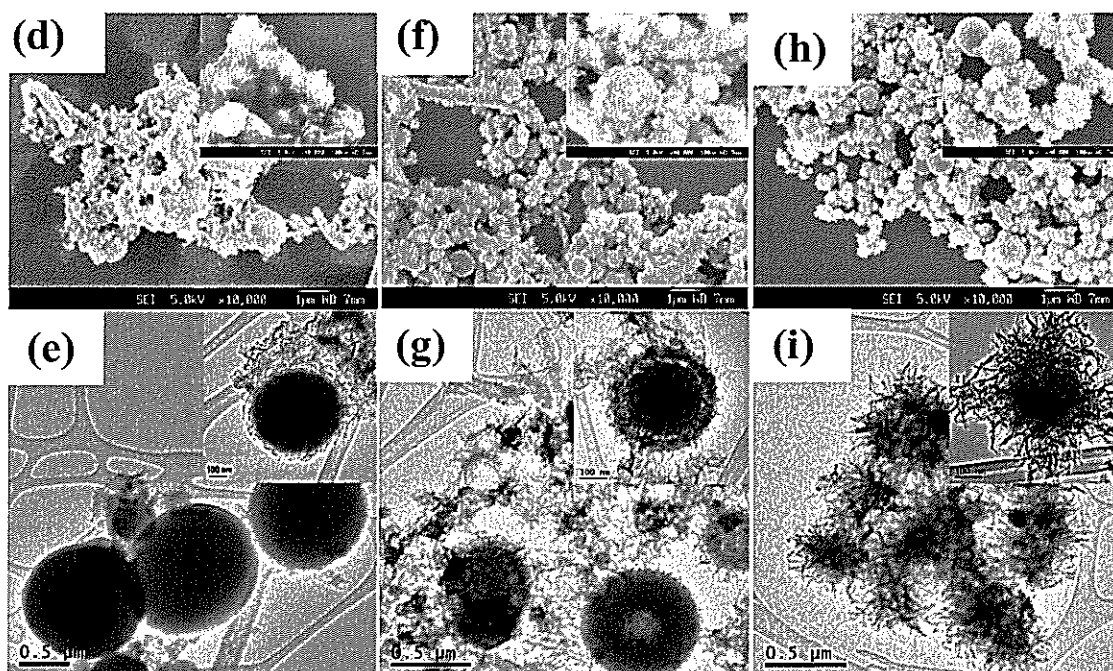


FIG. 4

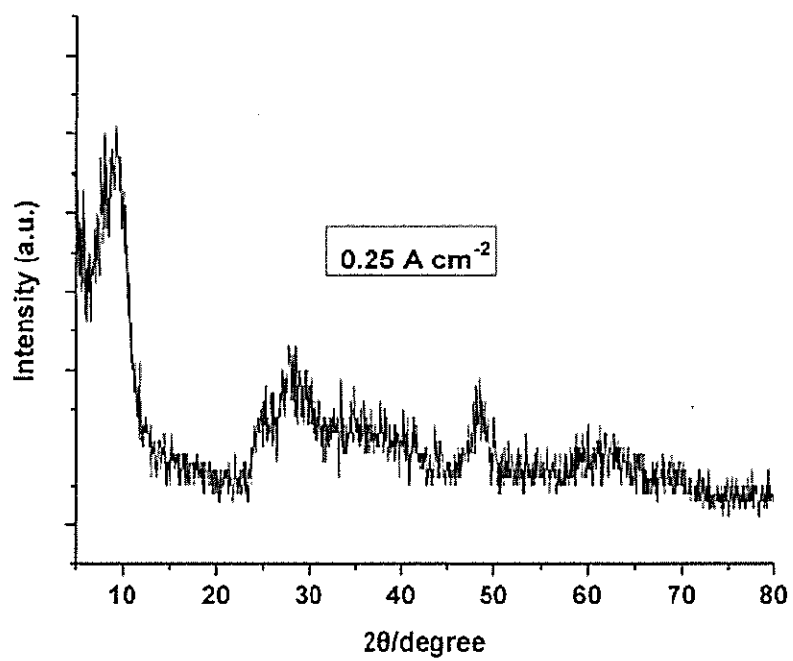


FIG. 5

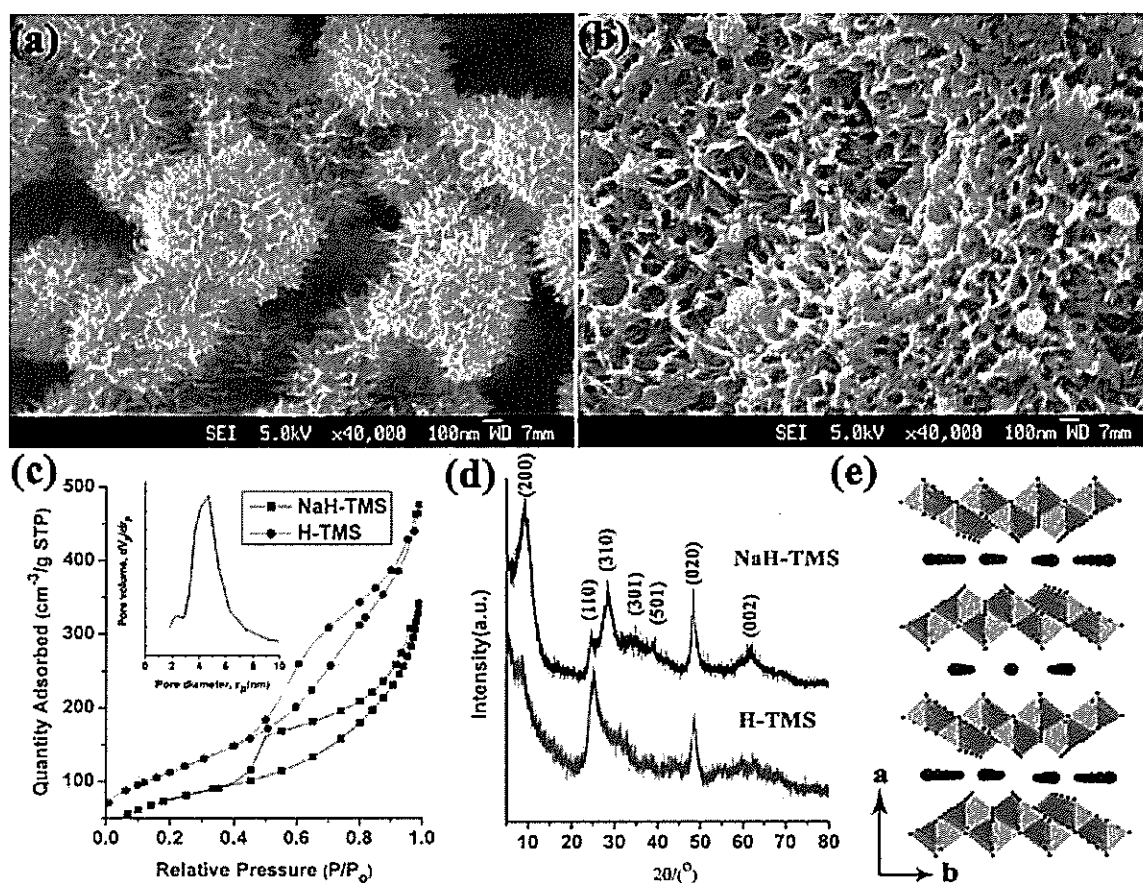


FIG. 6

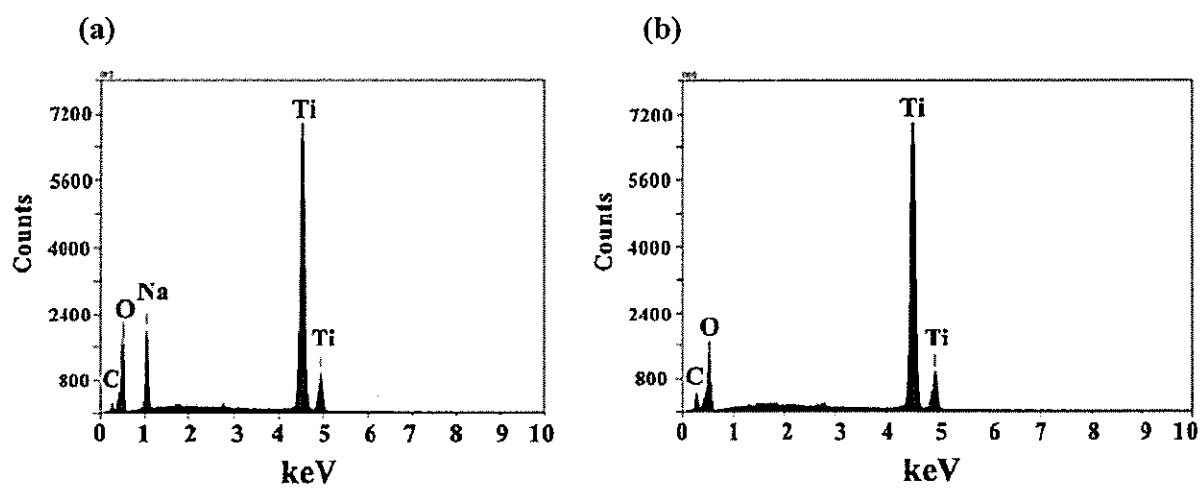


FIG. 7

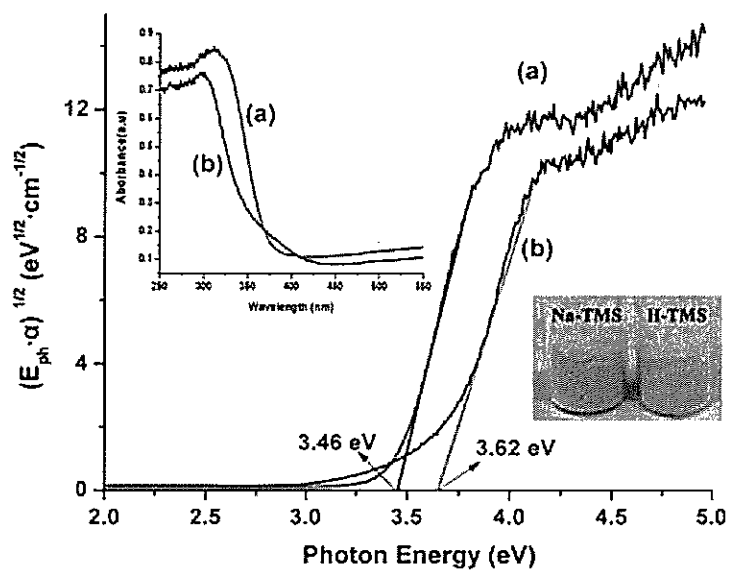


FIG. 8

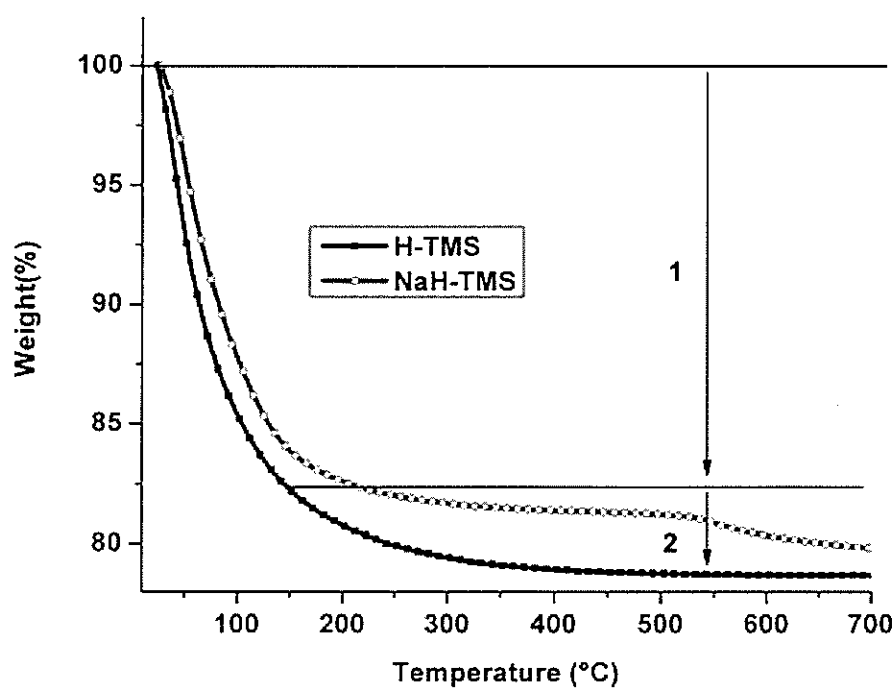
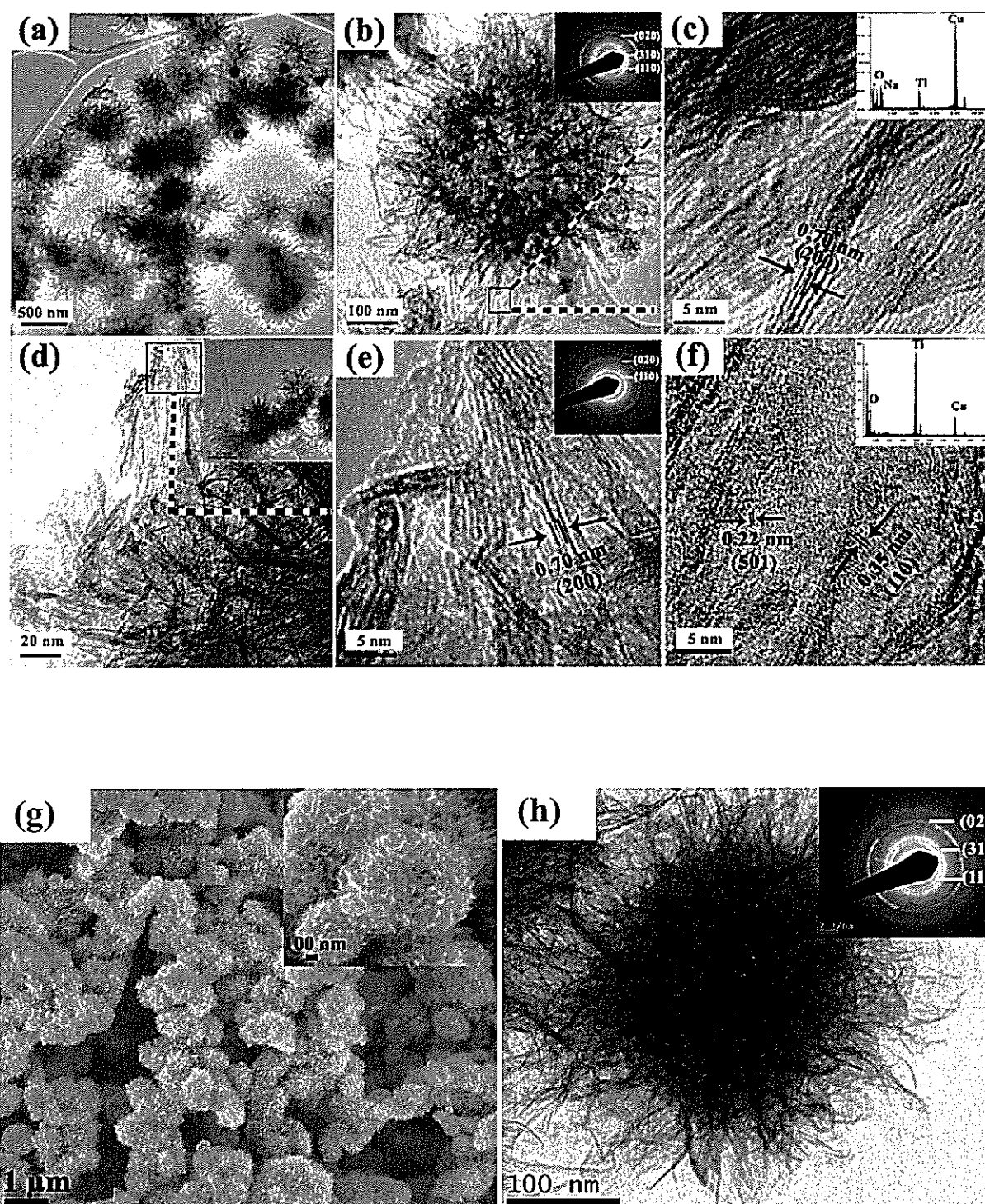


FIG. 9



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FIG. 10

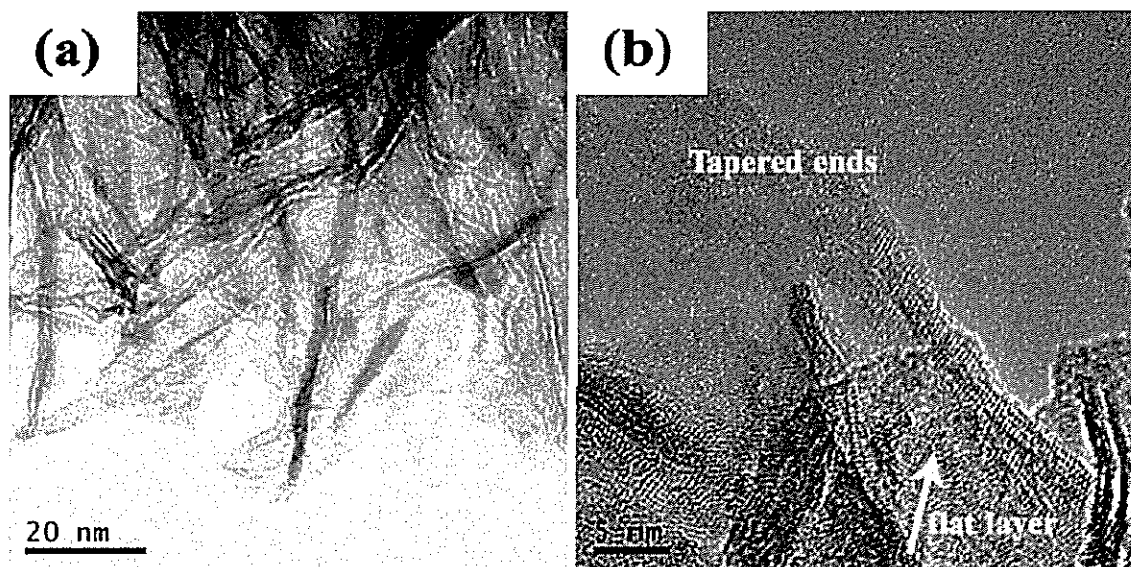


FIG. 11

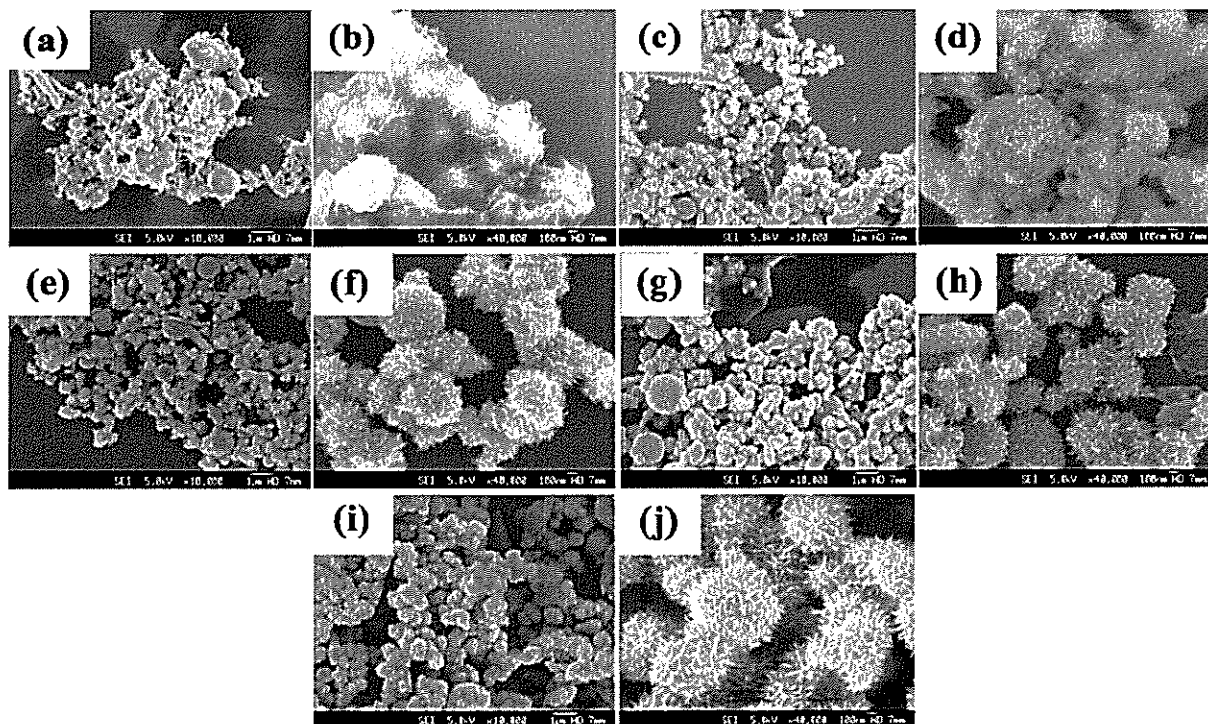


FIG. 12

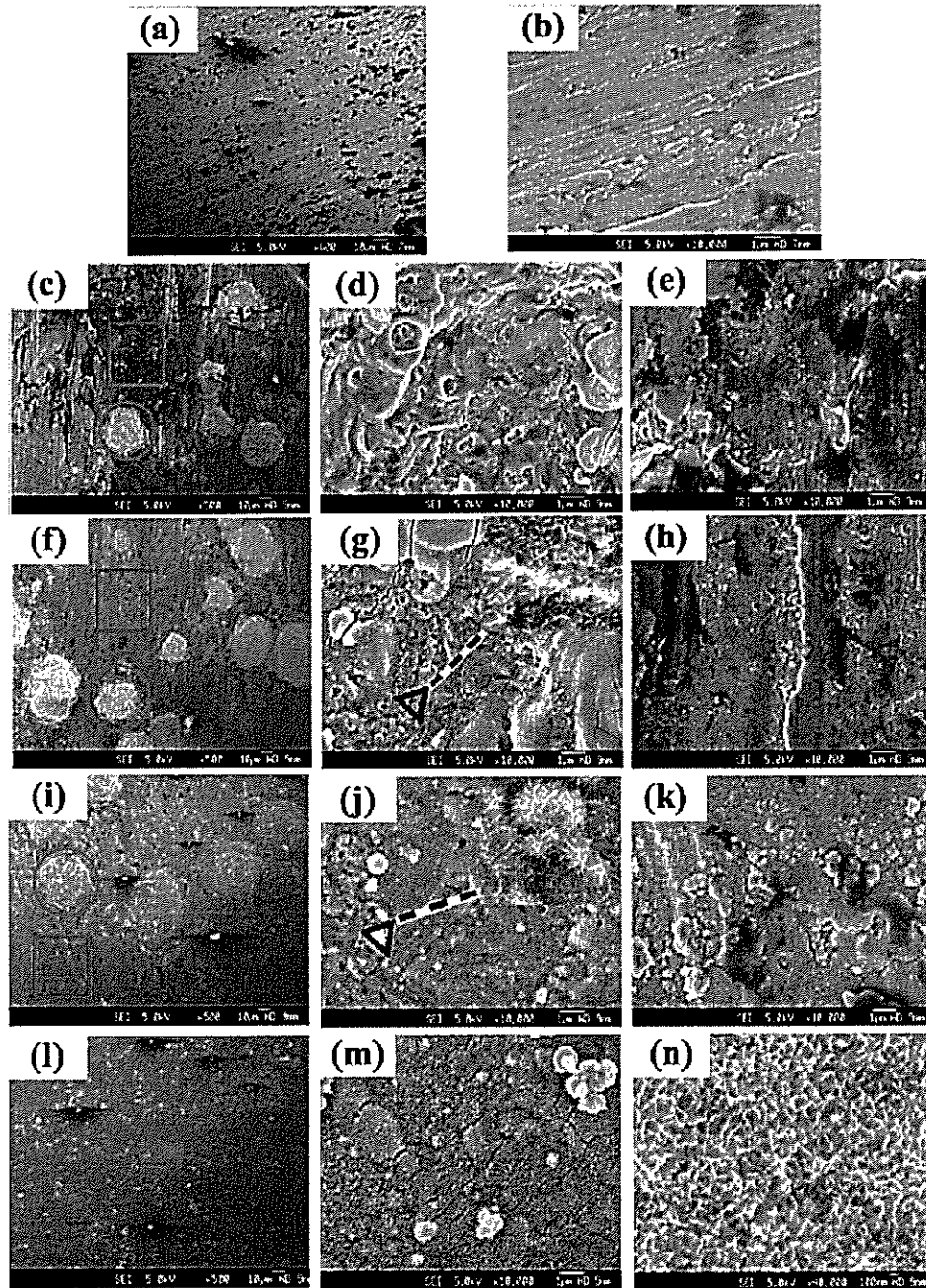


FIG. 13

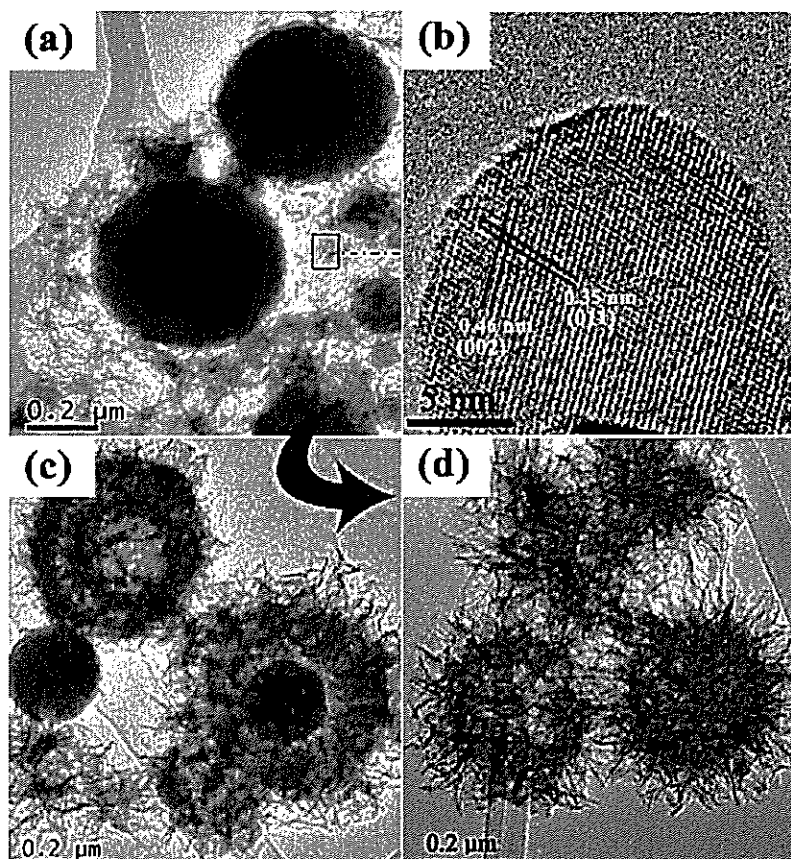


FIG. 15

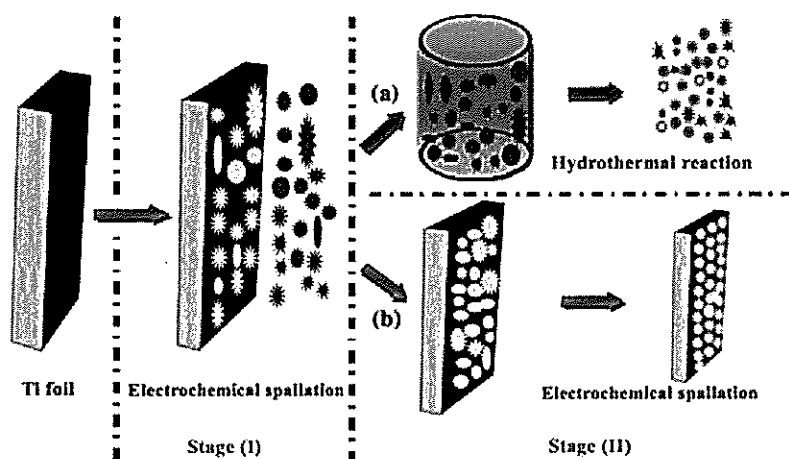


FIG. 14

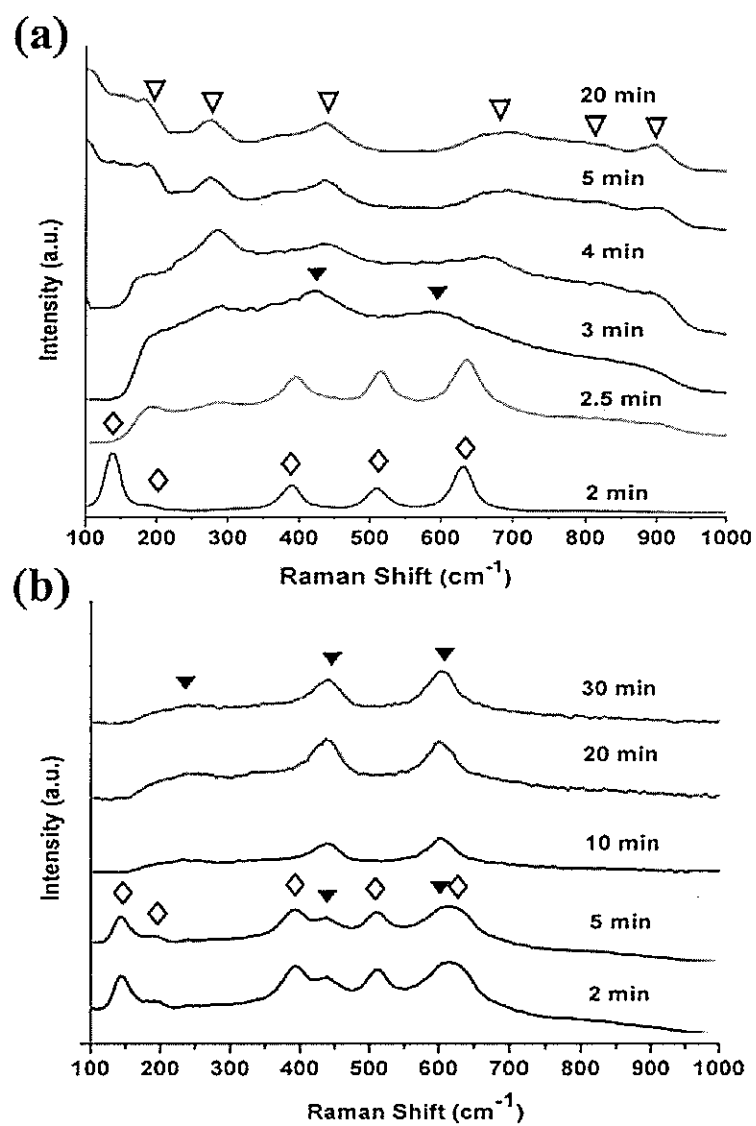


FIG. 16

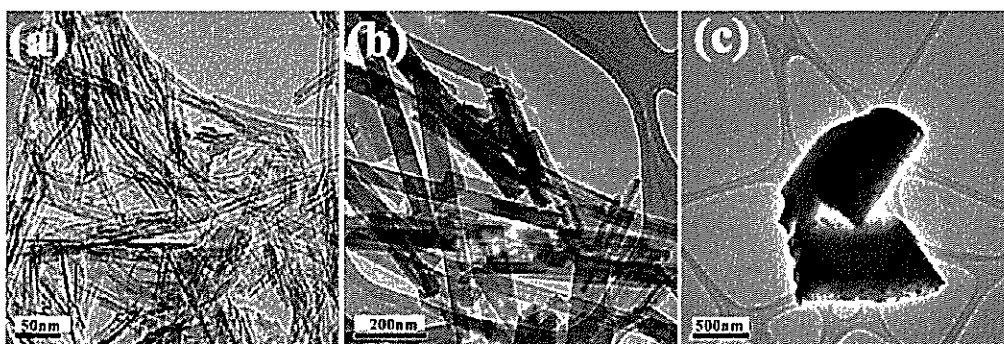


FIG. 16 (cont.)

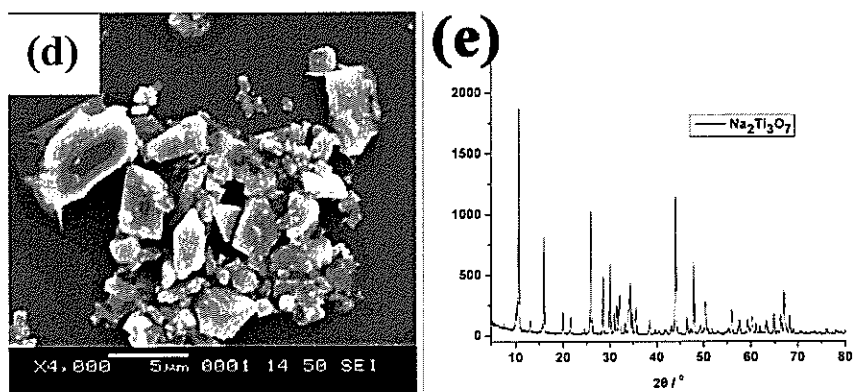
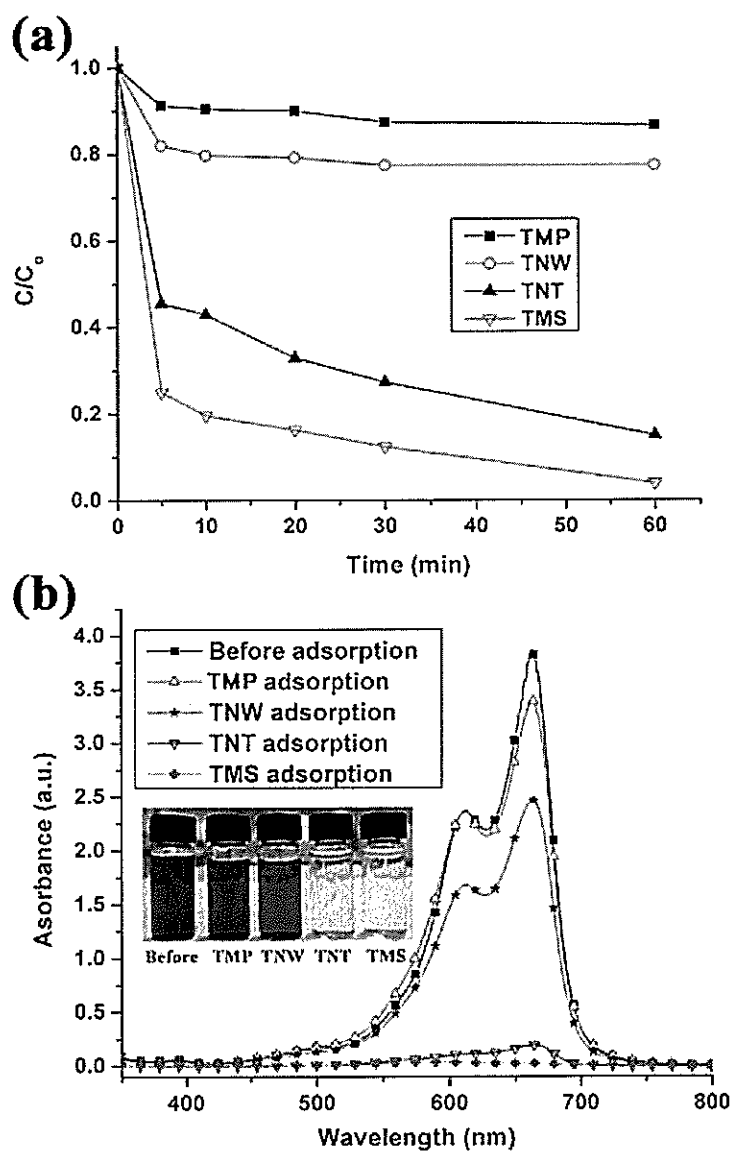


FIG. 17



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FIG. 18

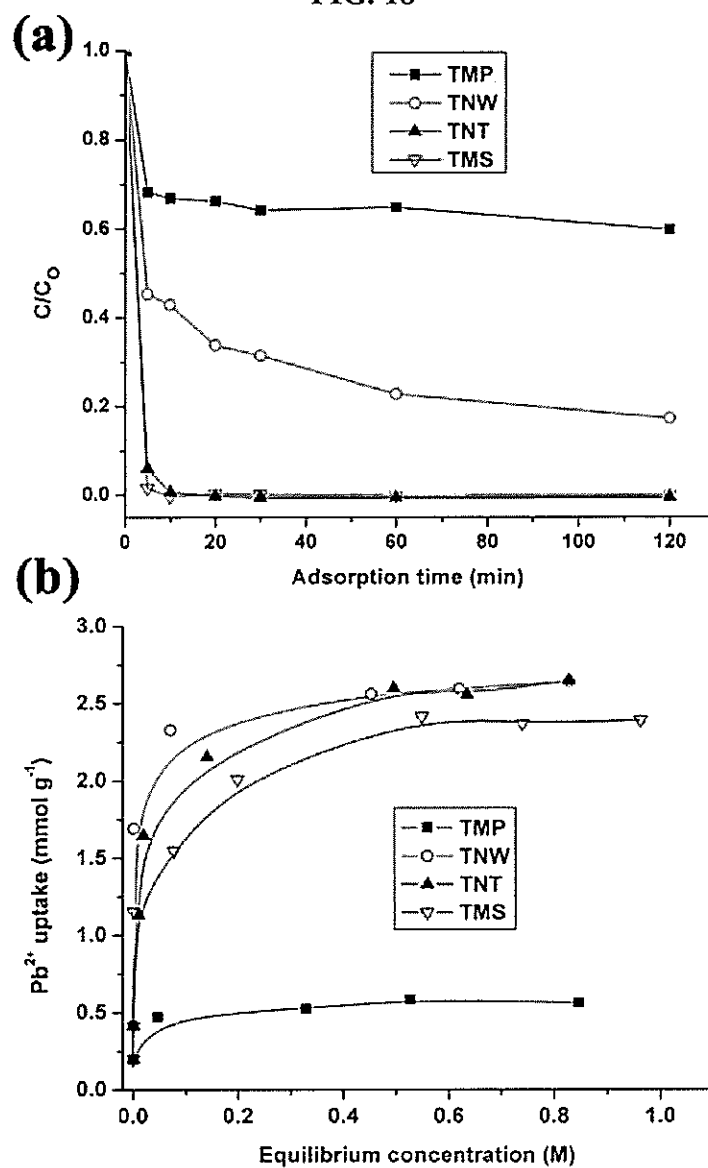


FIG. 19

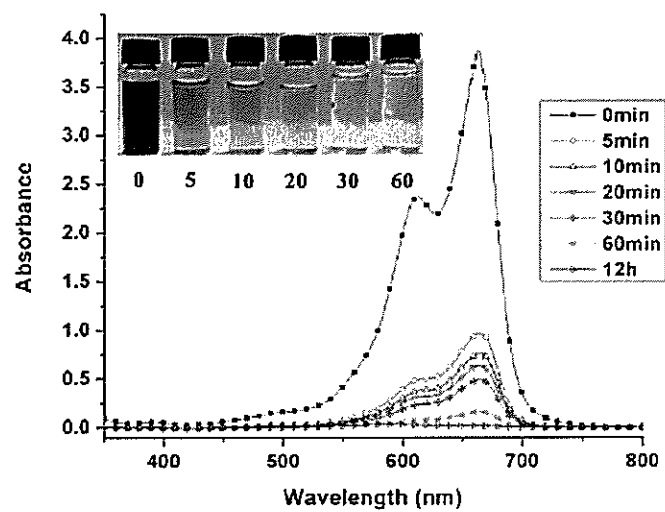


FIG. 20

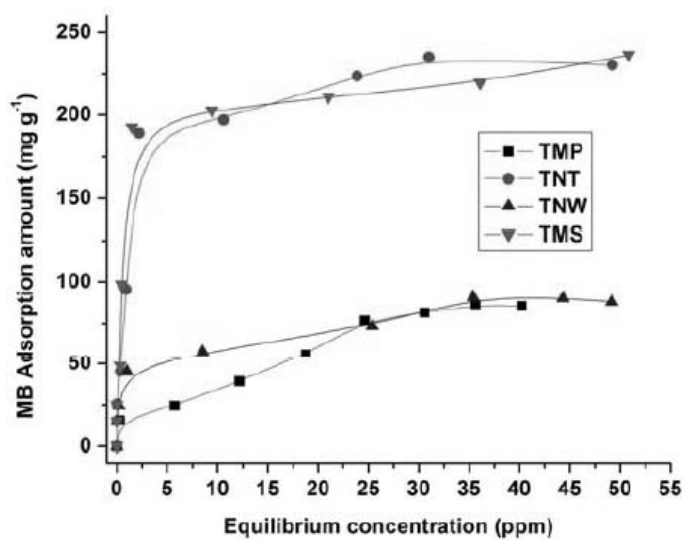


FIG. 21

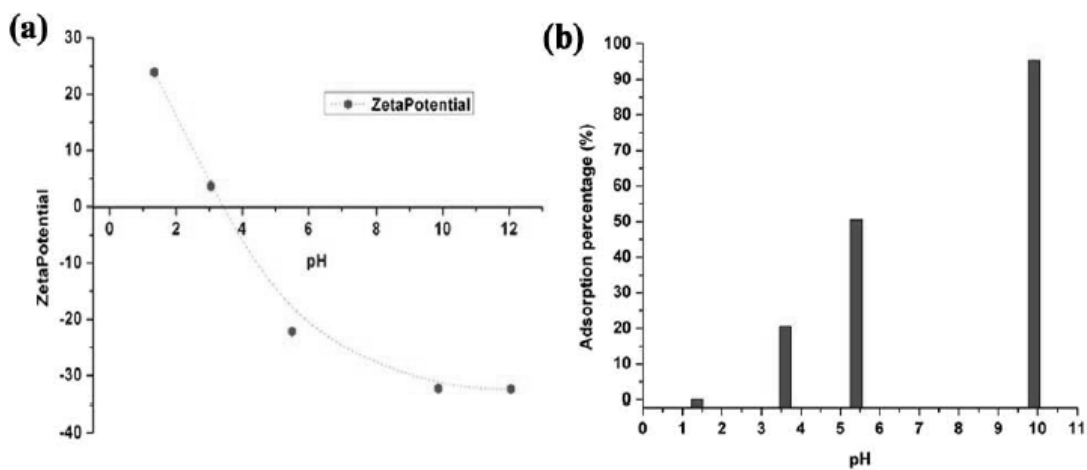


FIG. 22

Table 1 BET surface area and removal capacity of different absorbent samples

Absorbent samples	BET surface area [m ² g ⁻¹]	Experimental capacity for MB [mg g ⁻¹]	Experimental capacity for Pb ^{II} [mmol g ⁻¹]
TMP	1.07	80.8 ± 7.4	0.56 ± 0.03
TNW	13.82	94.6 ± 4.5	2.62 ± 0.06
TNT	157.64	232.2 ± 11.0	2.60 ± 0.05
TMS	277.52	236.2 ± 10.3	2.41 ± 0.06

FIG. 23

Adsorbent sample	BET surface ^[a]	Removal capacity for Pb ²⁺ [b]
Zeolite	---	0.44
Magnesium silicate	355.21	0.314
Activated carbon	612, 686.3	0.64, 0.56
Clay	156	0.25
Polymer resin	---	2.1
Sodium trititanate (this work)	<50	0.56
Titanate nanofiber	---	1.36
Titanate TMS (this work)	406	2.42

[a](m²·g⁻¹); [b](mmol·g⁻¹); ---- not available