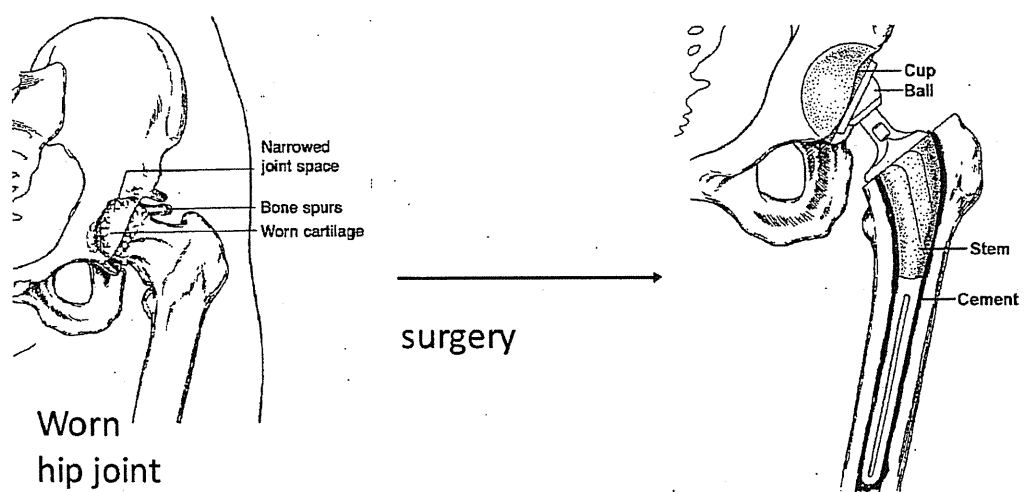
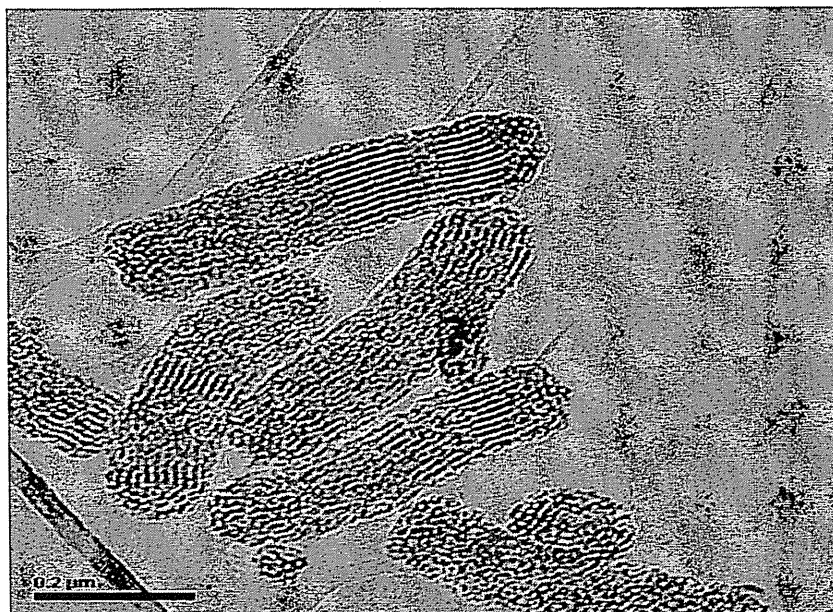
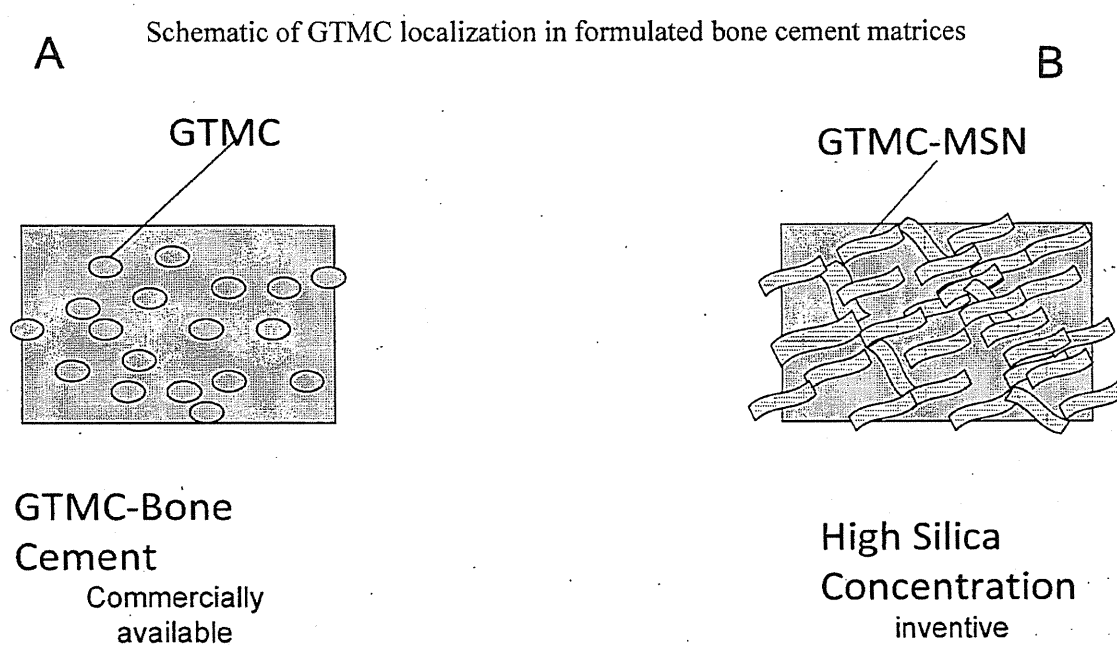




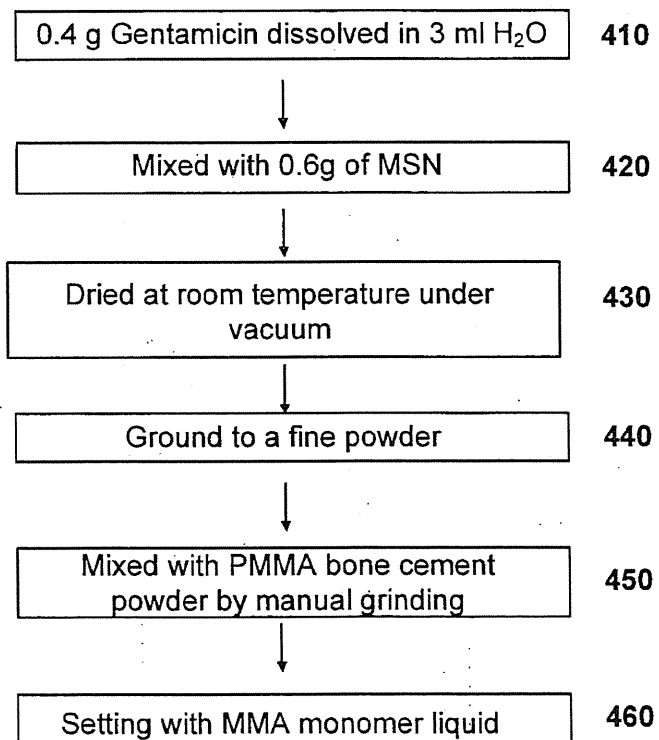
**FIG. 1**

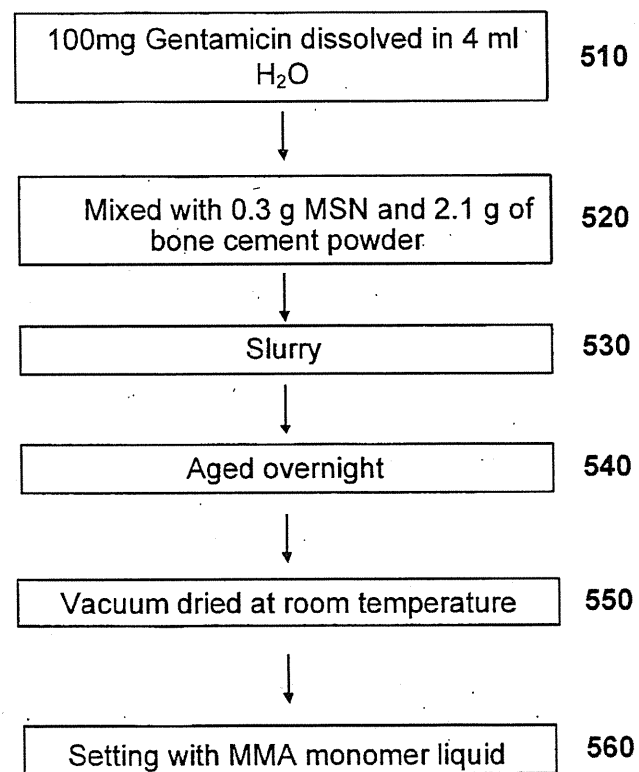


**FIG. 2**

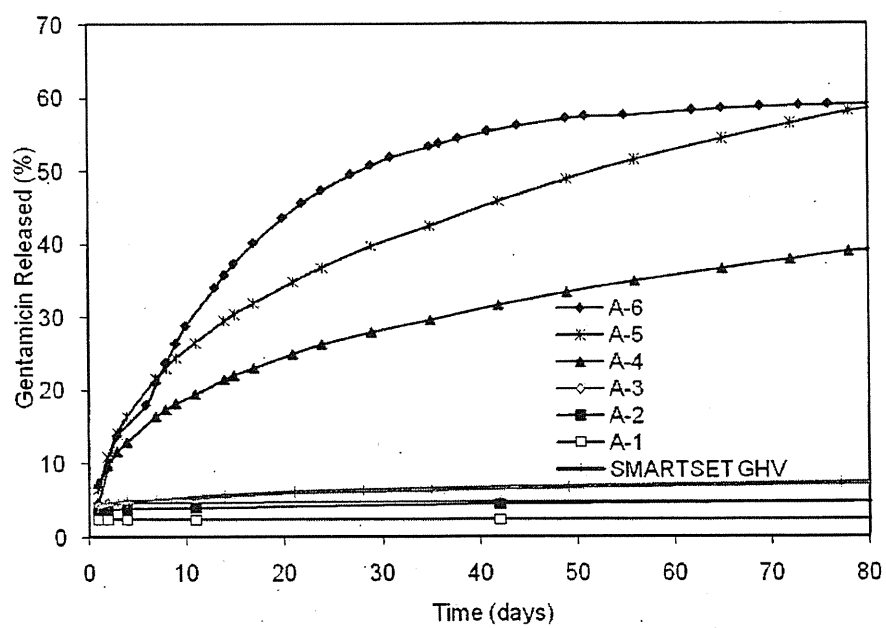


**FIG. 3**

**Method 400****FIG. 4**

**Method 500****FIG. 5**

Gentamicin release profiles from Gentamicin loaded MSN formulated bone cement.



**FIG. 6**

Gentamicin release profiles from Gentamicin loaded MSN formulated bone cements

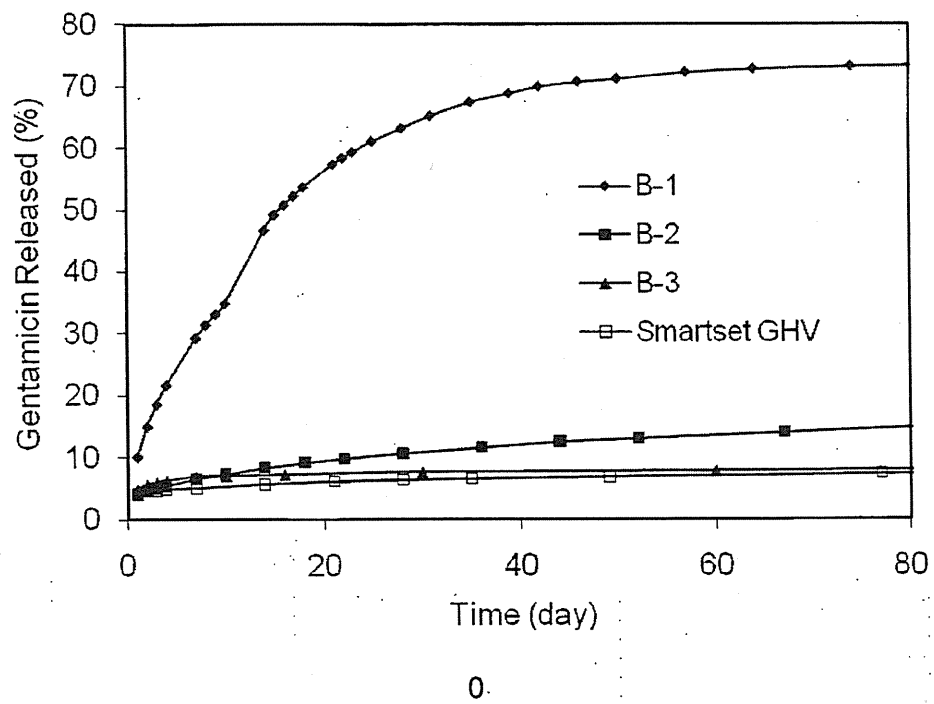


FIG. 7

Gentamicin release profiles from MSN formulated SmartSet HV bone cement

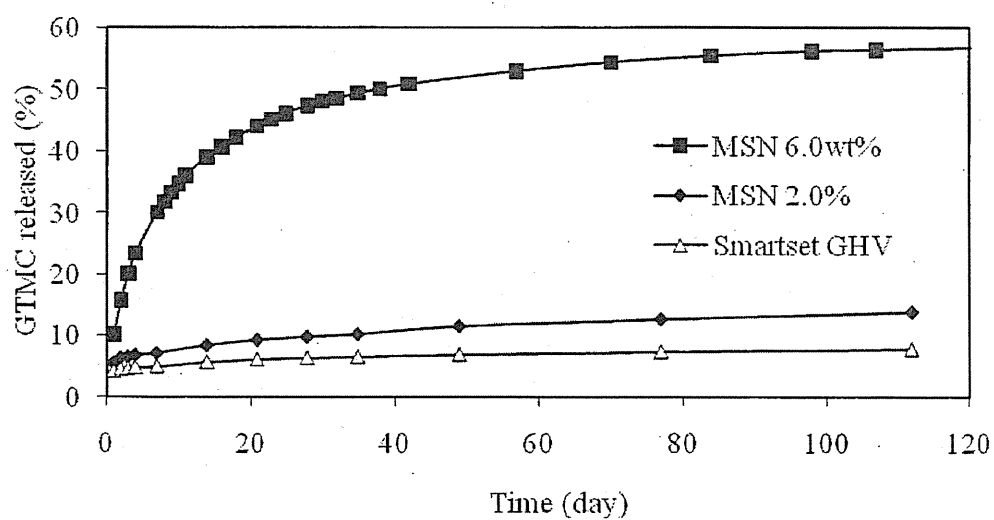
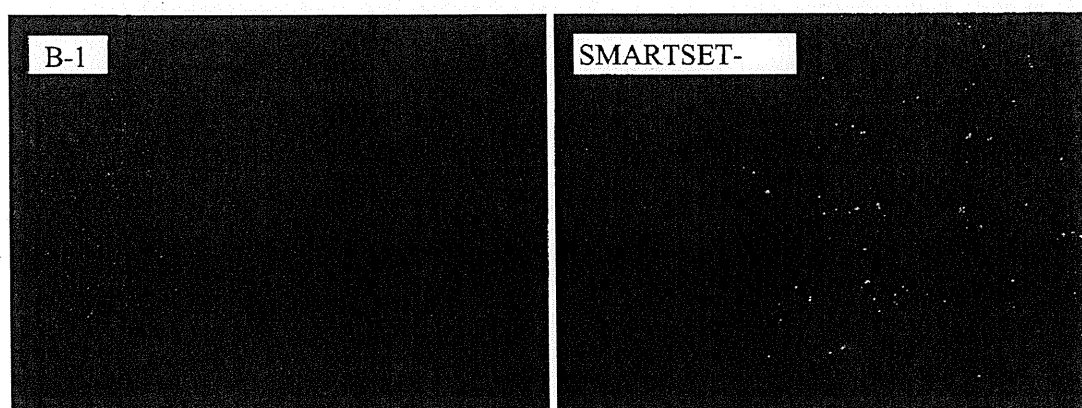
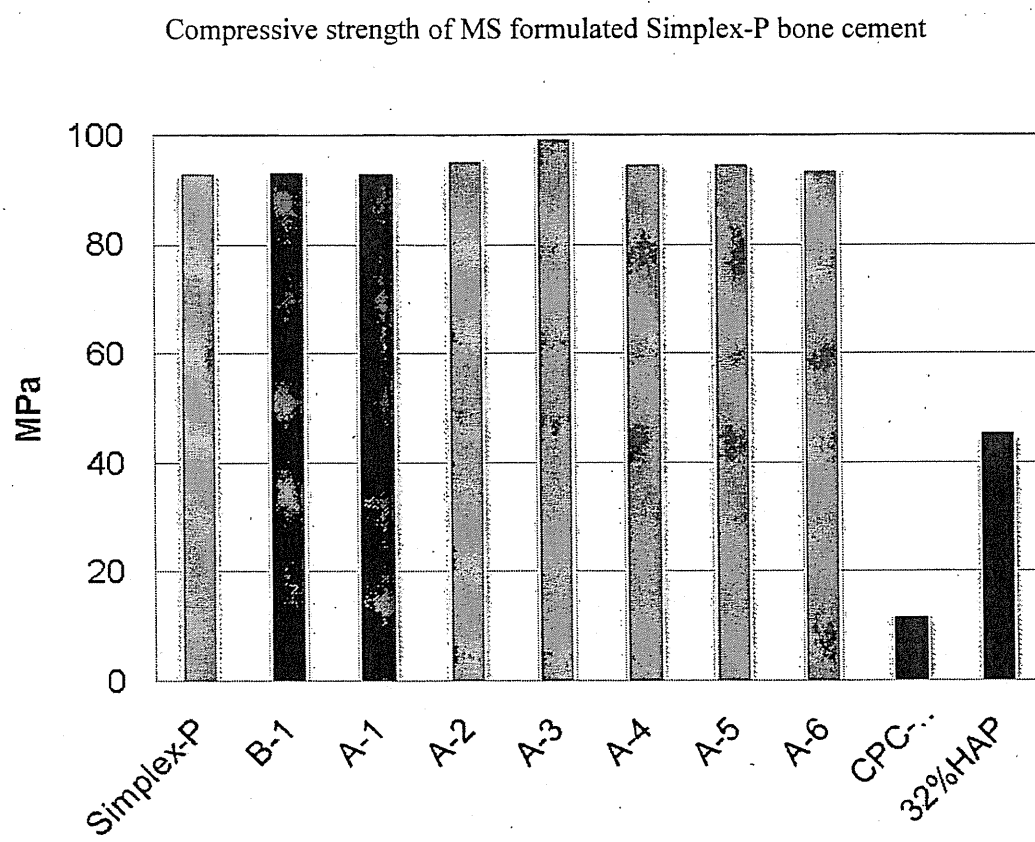


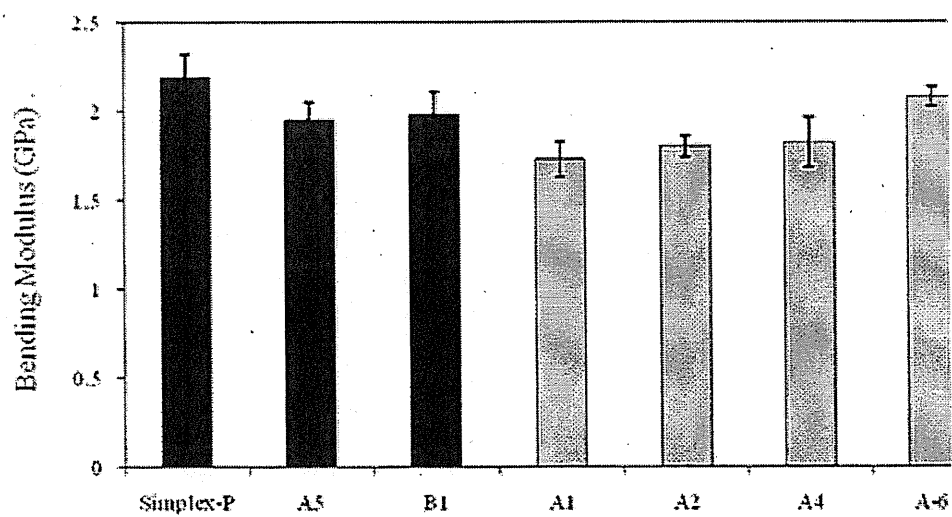
FIG. 8

Antibacterial property of Gentimicin loaded MSN formulated bone cement compared to commercially available antibiotic loaded bone cement SMARTSET-GHV



**FIG. 9**

**FIG. 10**

**FIG. 11**

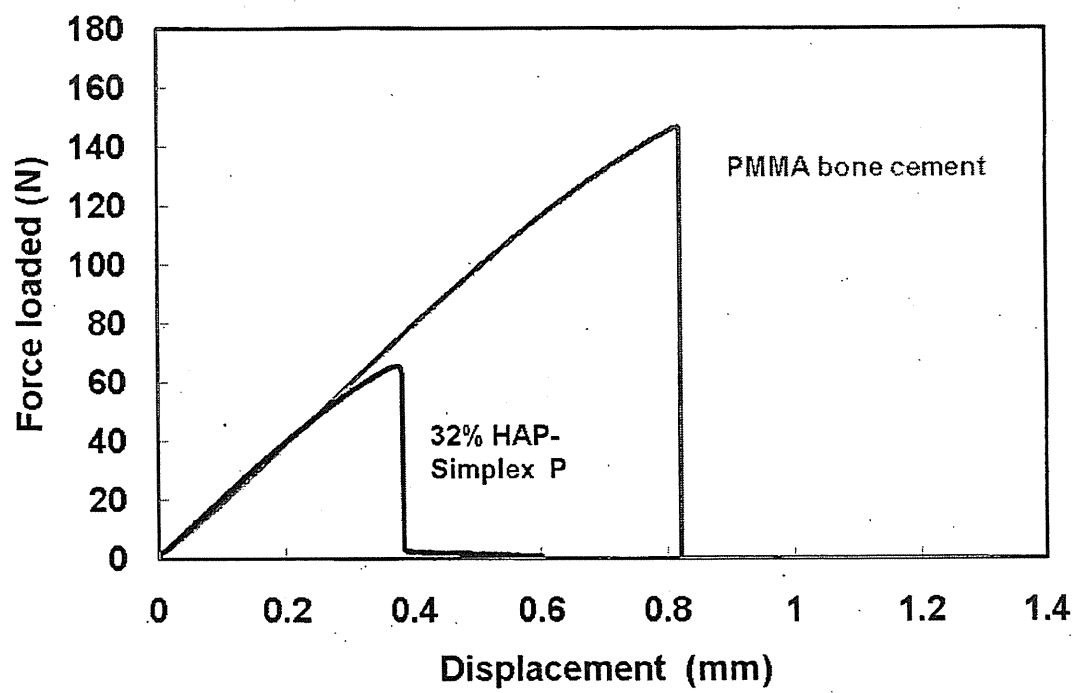


FIG. 12

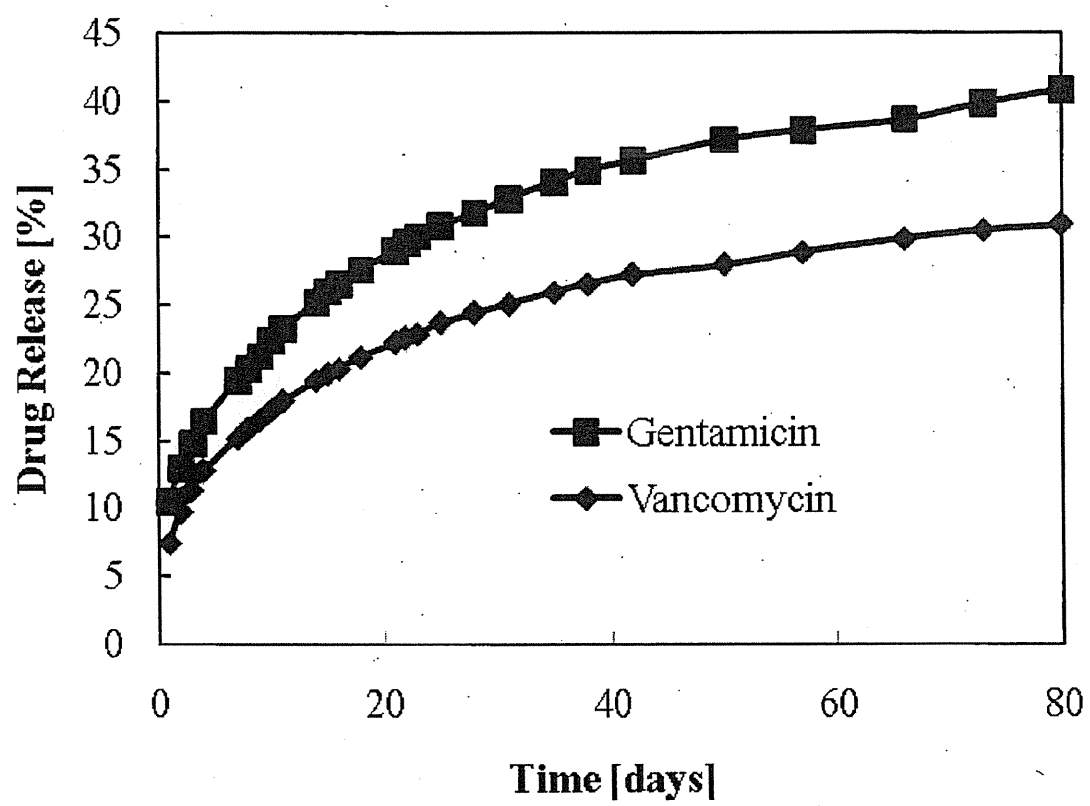


FIG. 13

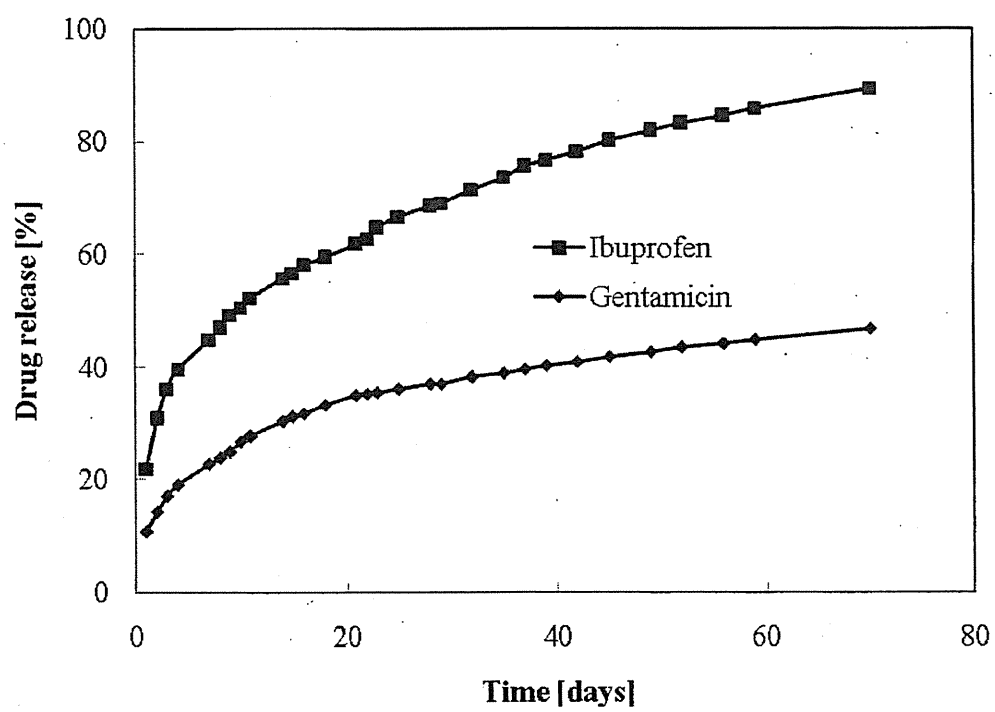


FIG. 14

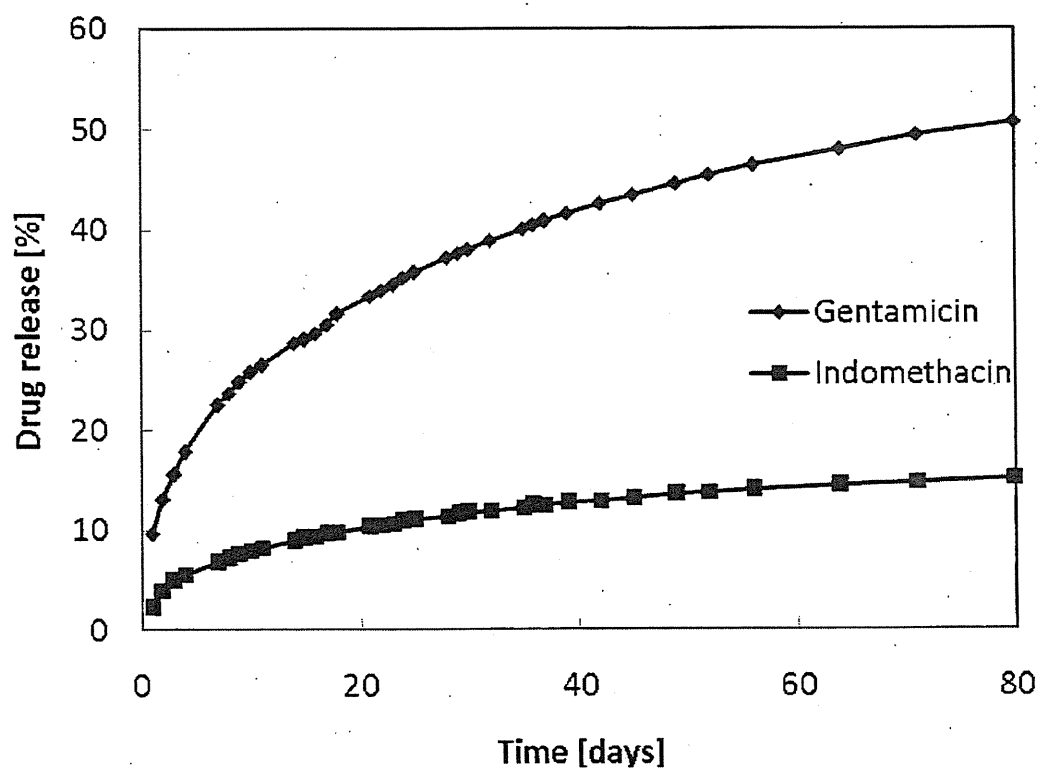
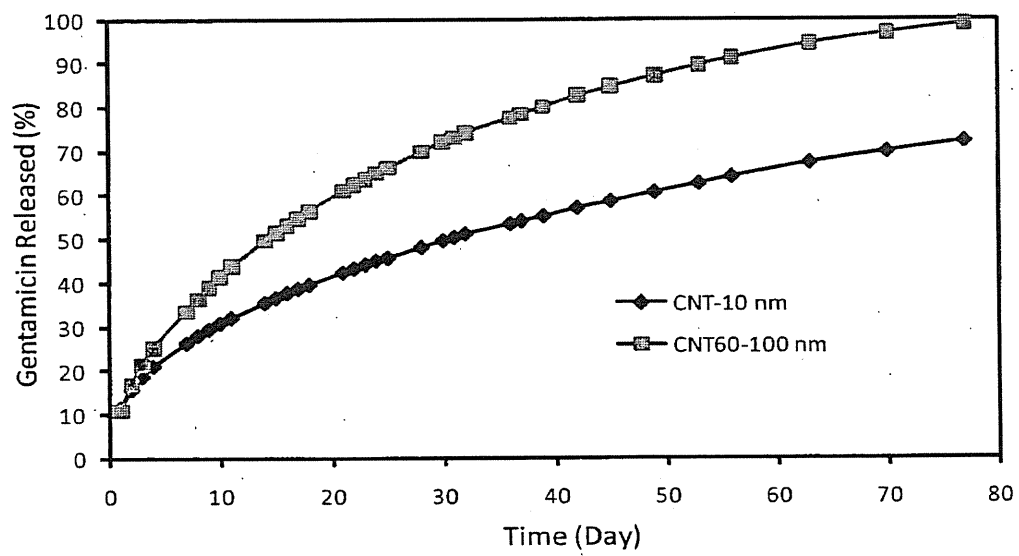
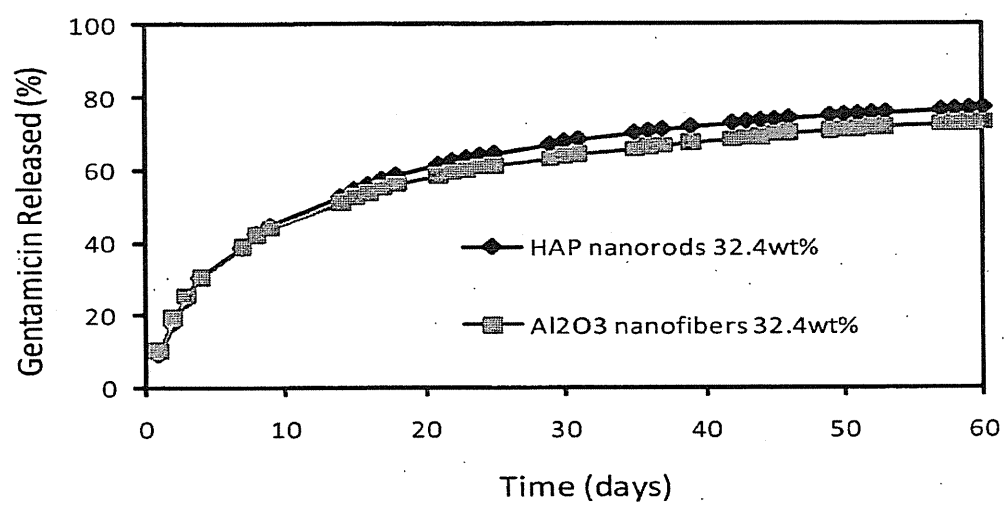


FIG. 15

**FIG. 16**

**FIG. 17**

## Cytotoxicity of nanostructured materials

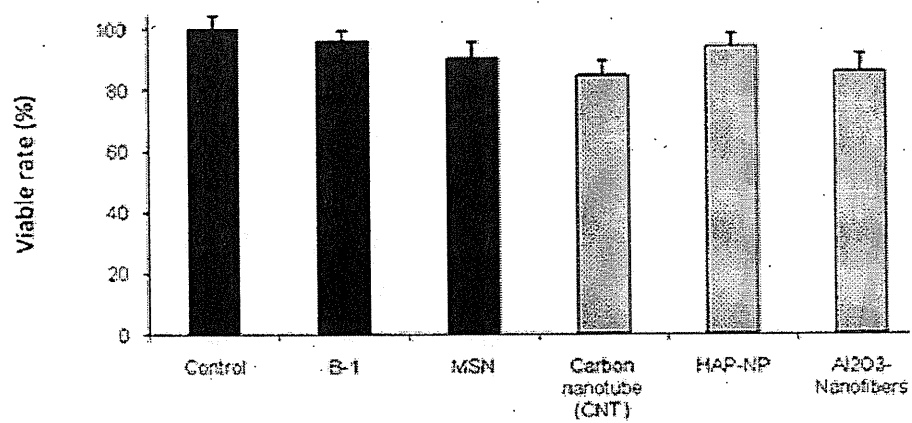


FIG. 18

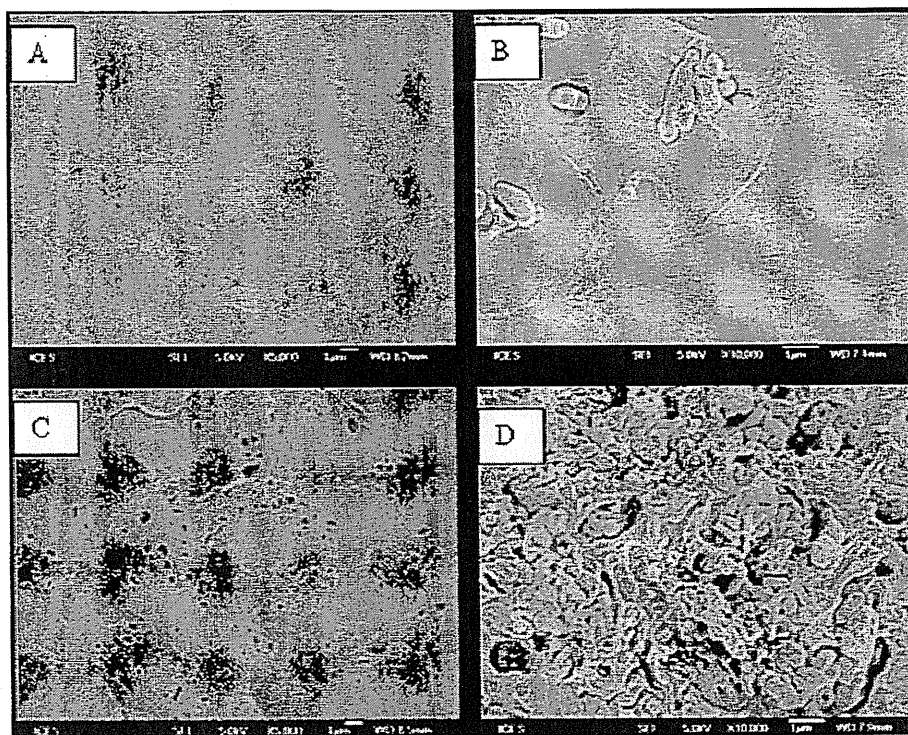


FIG. 19