FIG. 1

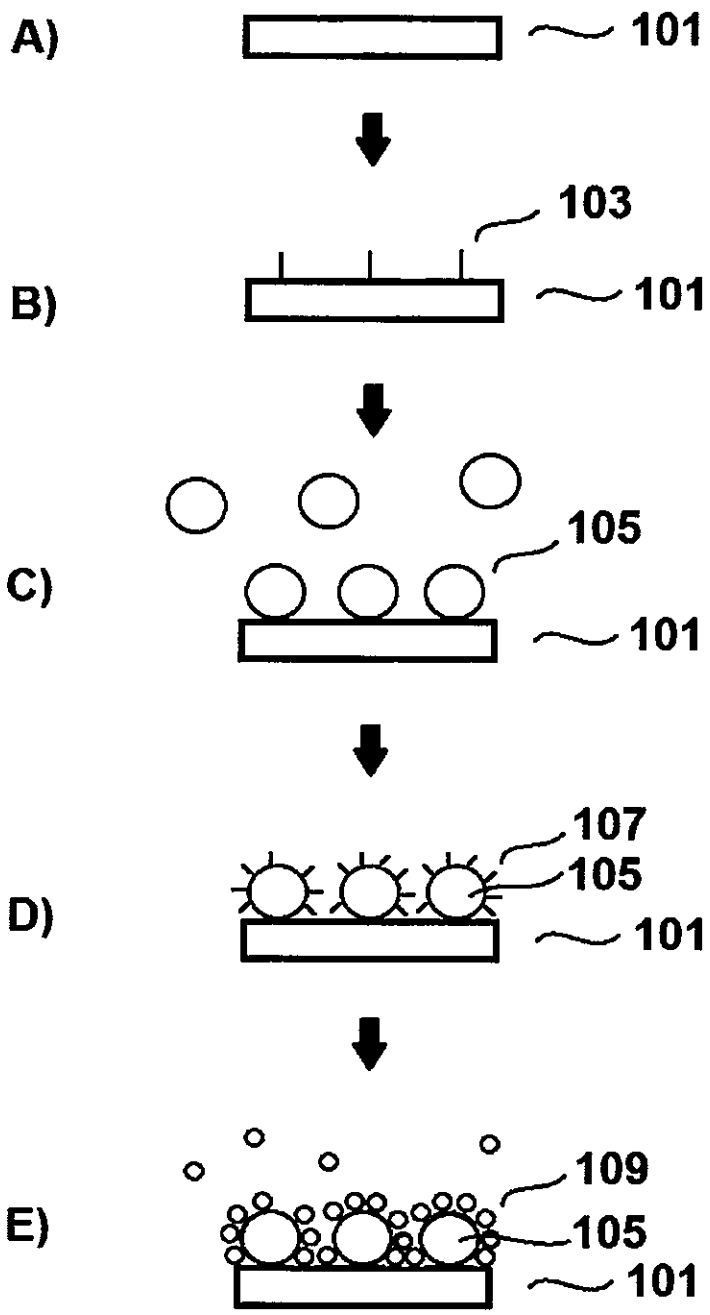


FIG. 2

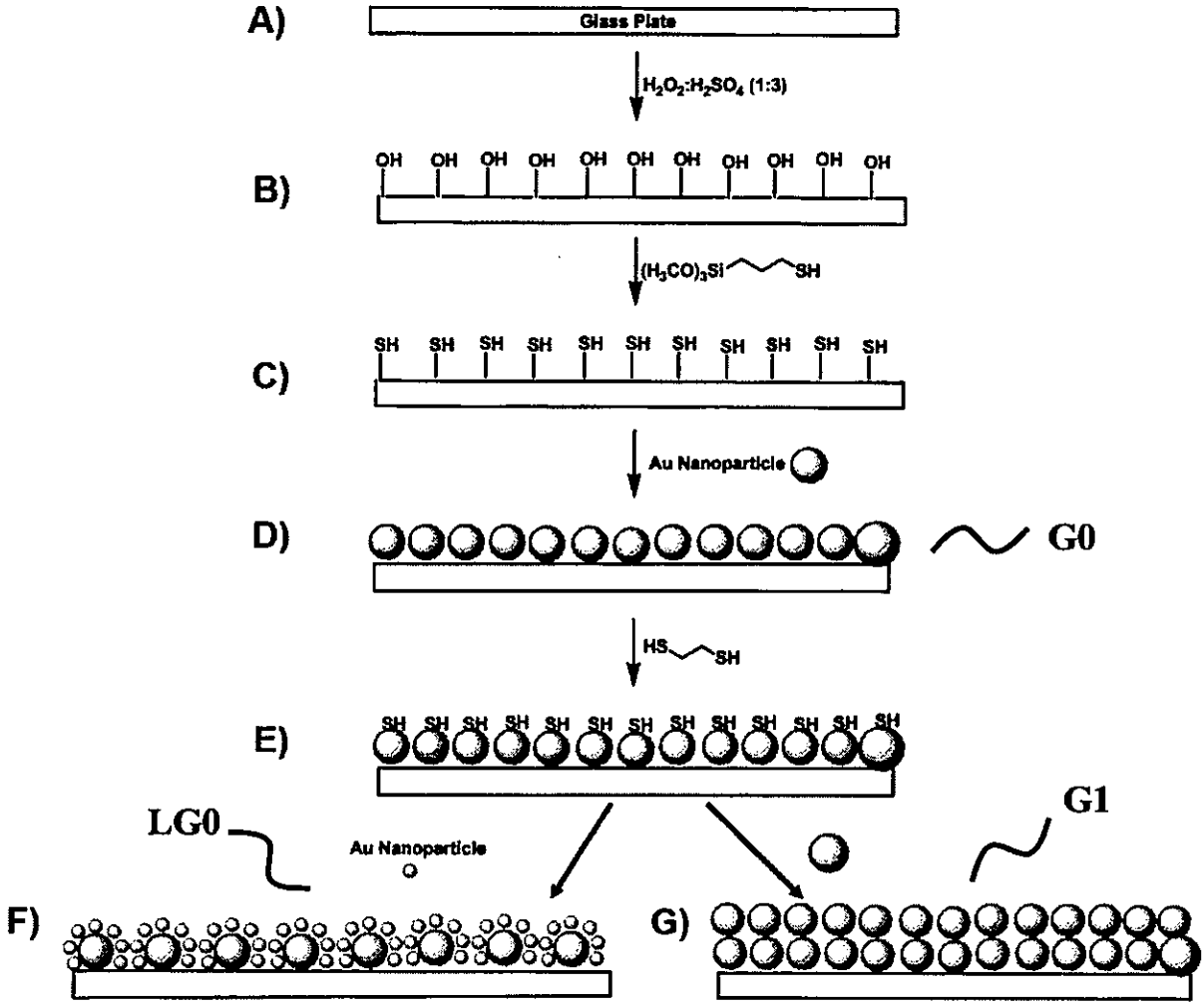

A)
Glass Plate
H_2O_2:H_2SO_4 (1:3)
B)
OH
$(H_3CO)_3Si$
SH
C)
Au Nanoparticle
D)
G0
HS
E)
LG0
Au Nanoparticle
G1
F)
G)

FIG. 3

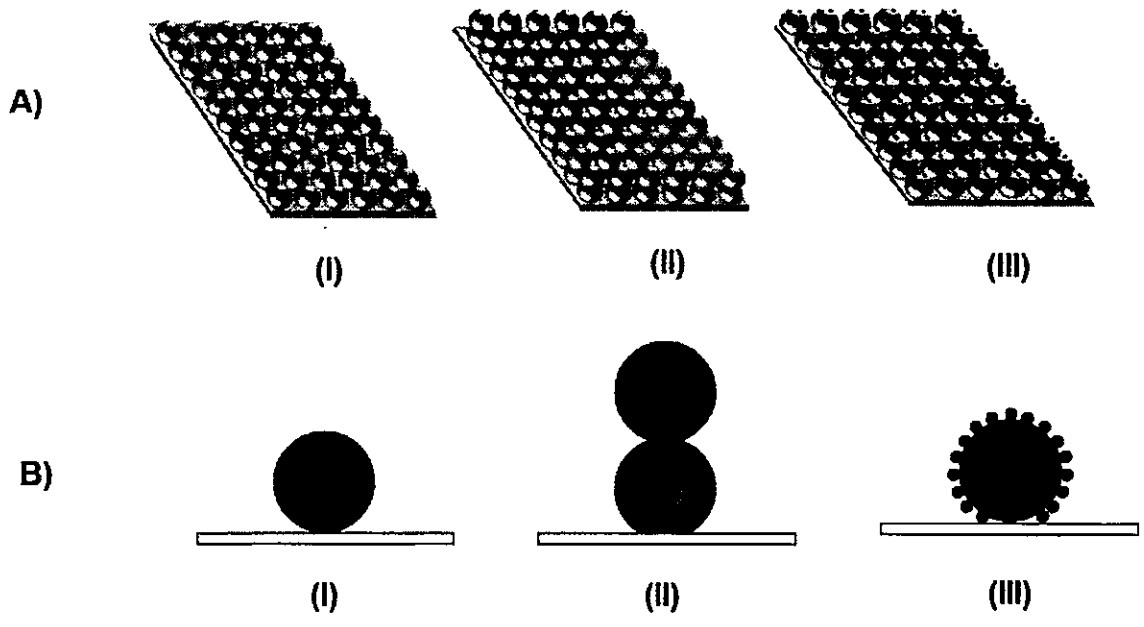

A)
(I)
(II)
(III)
B)
(I)
(II)
(III)

FIG. 4

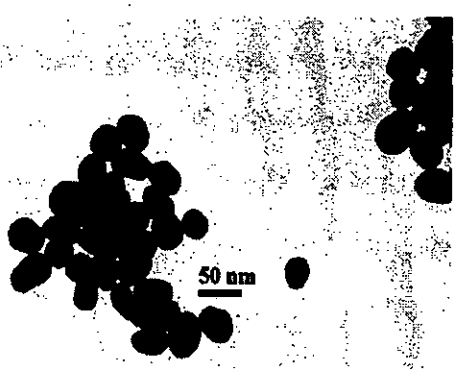


FIG. 5

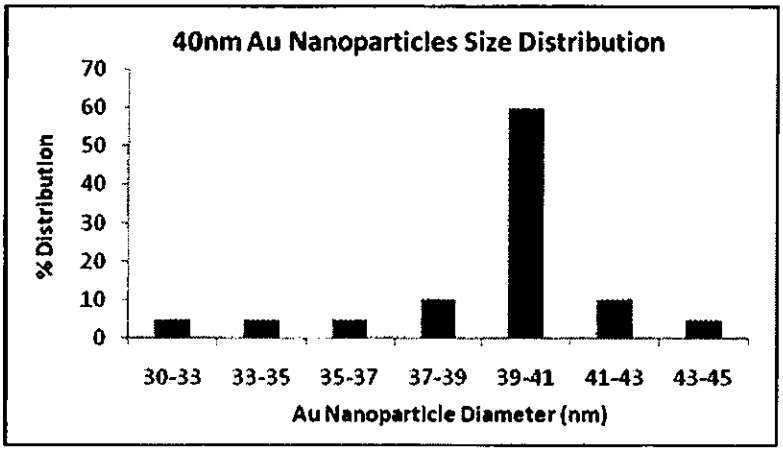


FIG. 6

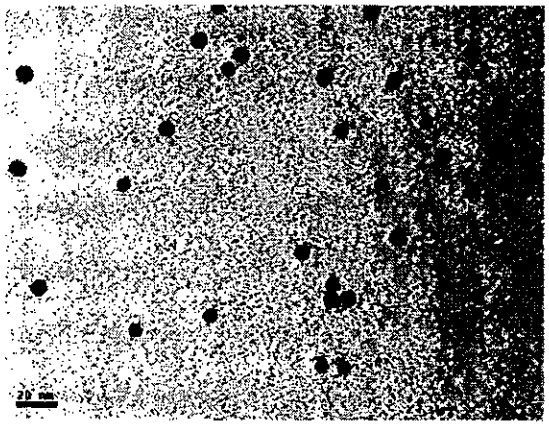


FIG. 7

A)



B)



C)

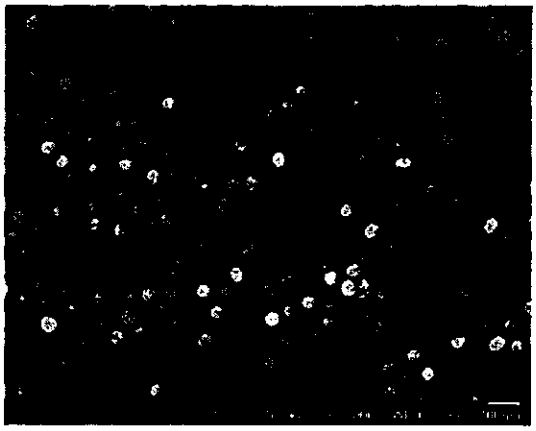
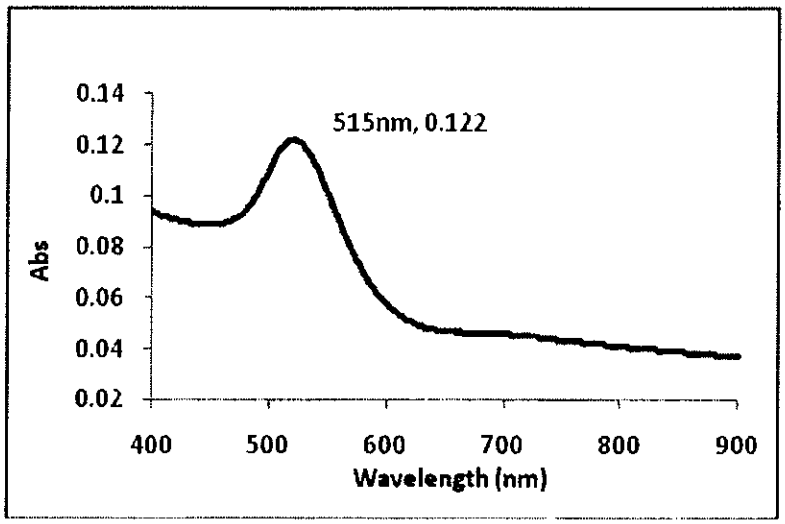
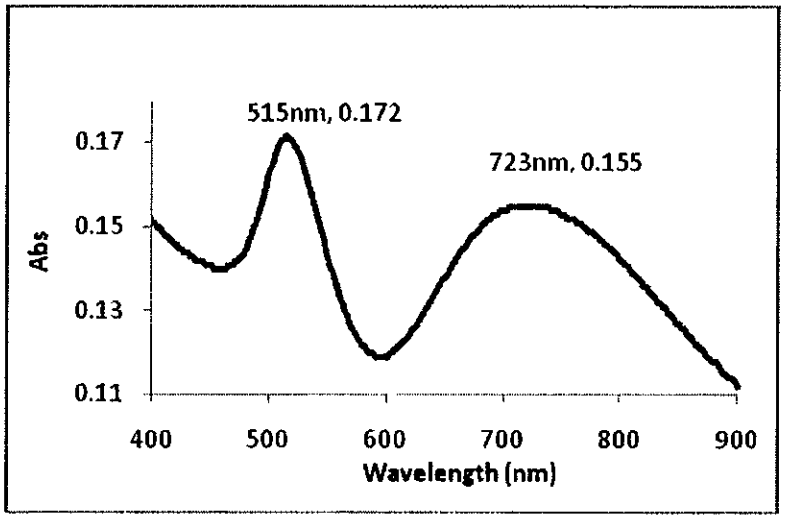


FIG. 8

A)


0.14
0.12
0.1
0.08
0.06
0.04
0.02
Abs
515nm, 0.122
400
500
600
700
800
900
Wavelength (nm)

B)


0.17
0.15
0.13
0.11
Abs
515nm, 0.172
723nm, 0.155
400
500
600
700
800
900
Wavelength (nm)

C)

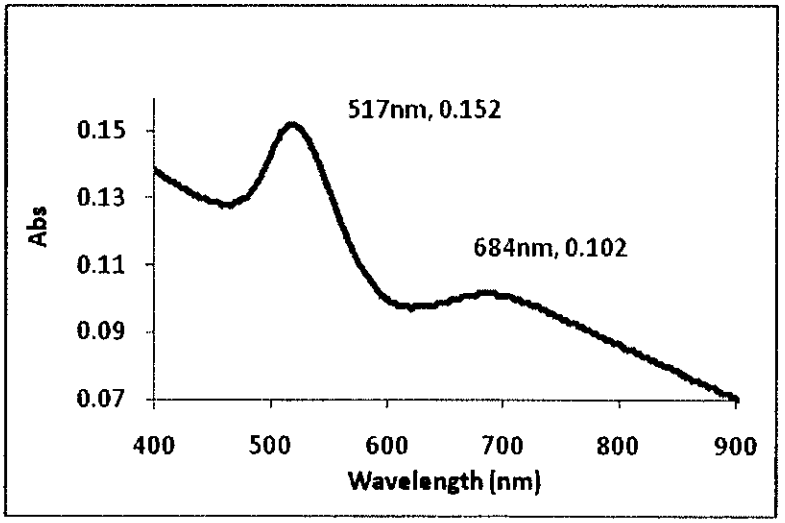
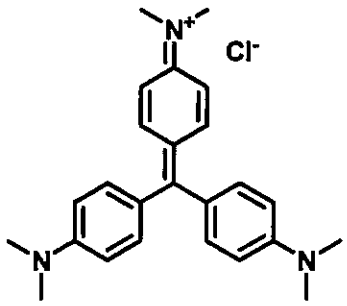
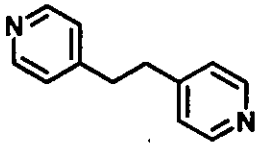

0.15
0.13
0.11
0.09
0.07
Abs
517nm, 0.152
684nm, 0.102
400
500
600
700
800
900
Wavelength (nm)

FIG. 9

A)



B)



C)

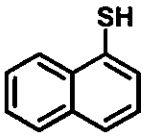


FIG. 10

A)

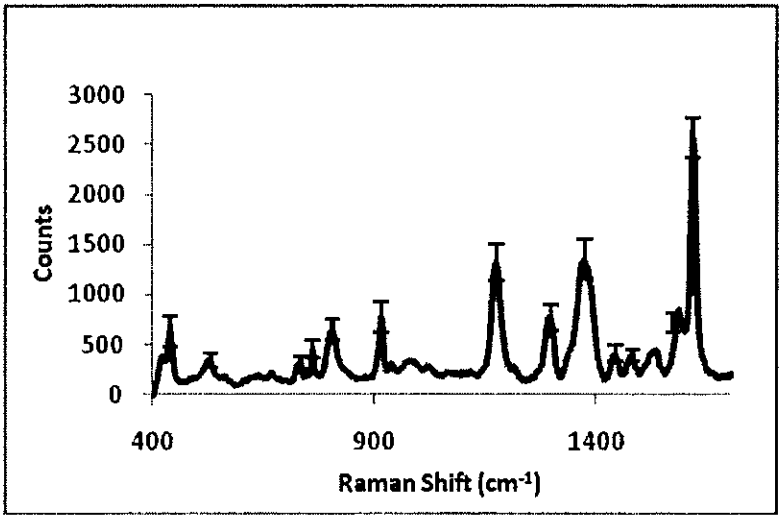
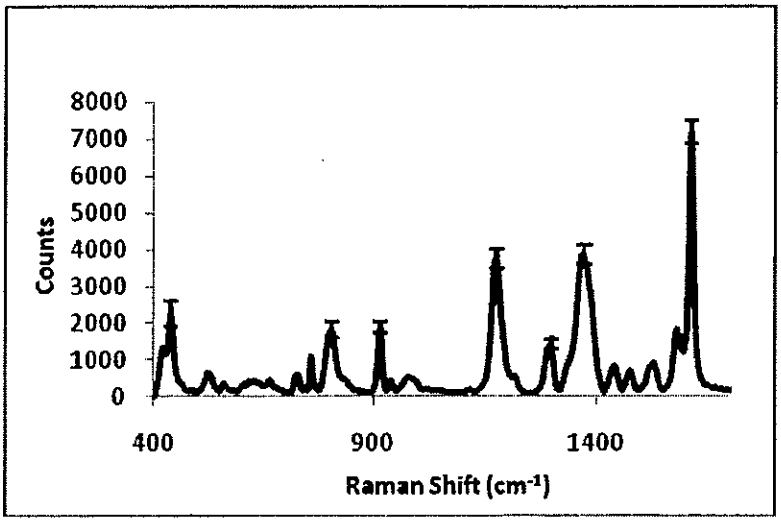
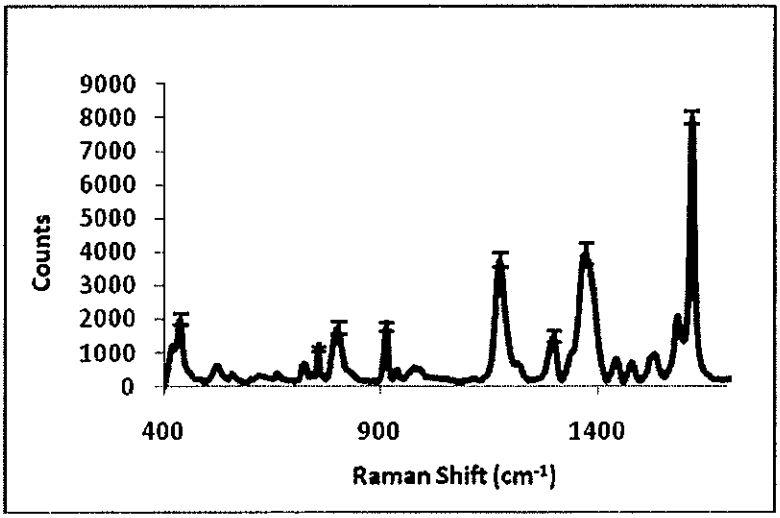


FIG. 10 (CONT.)

B)



C)



D)

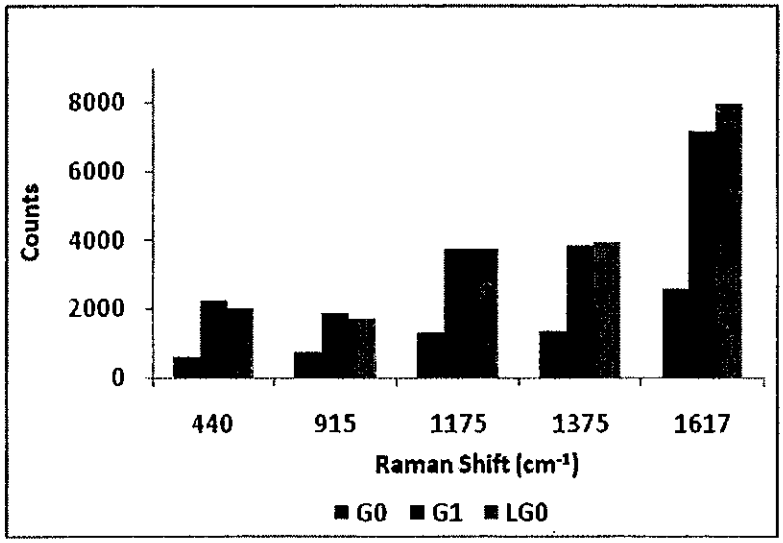


FIG. 10 (CONT.)

E)

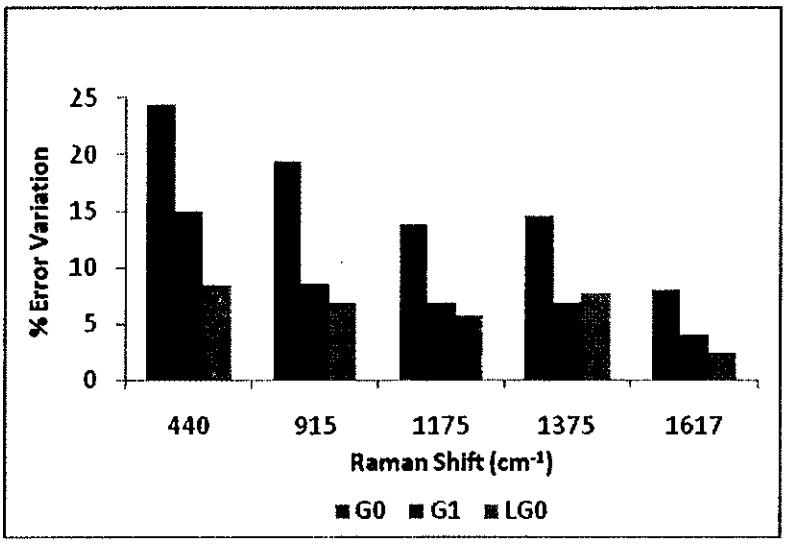
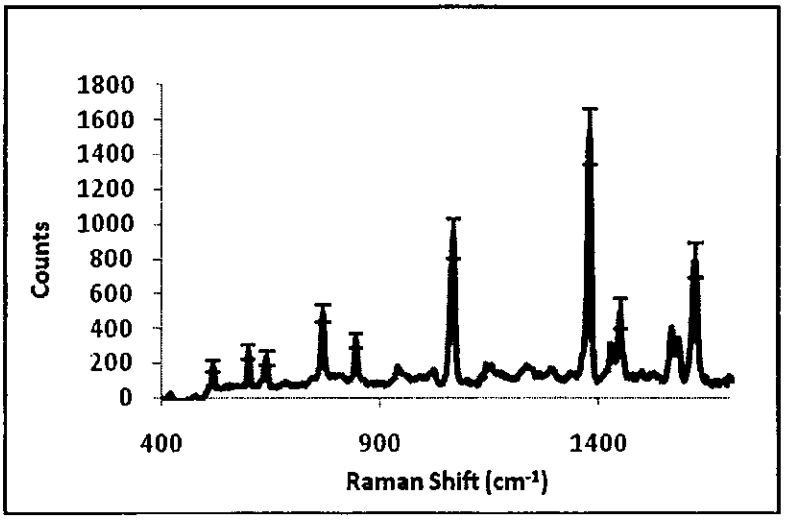


FIG. 11

A)



B)

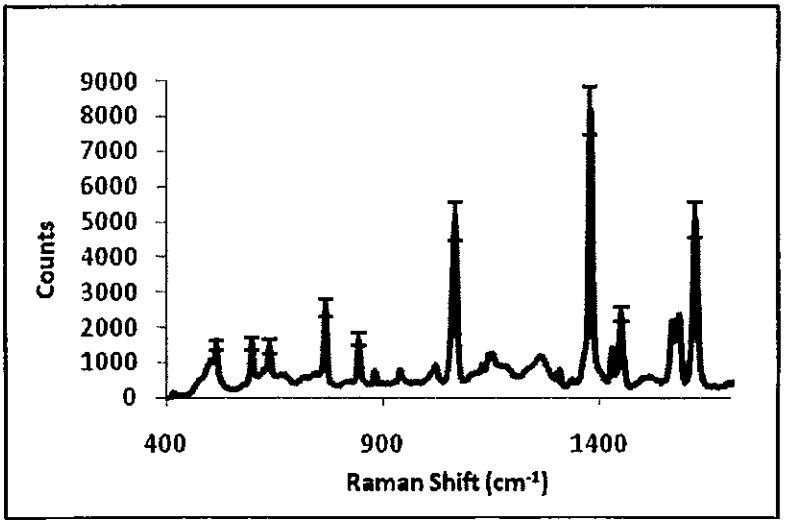
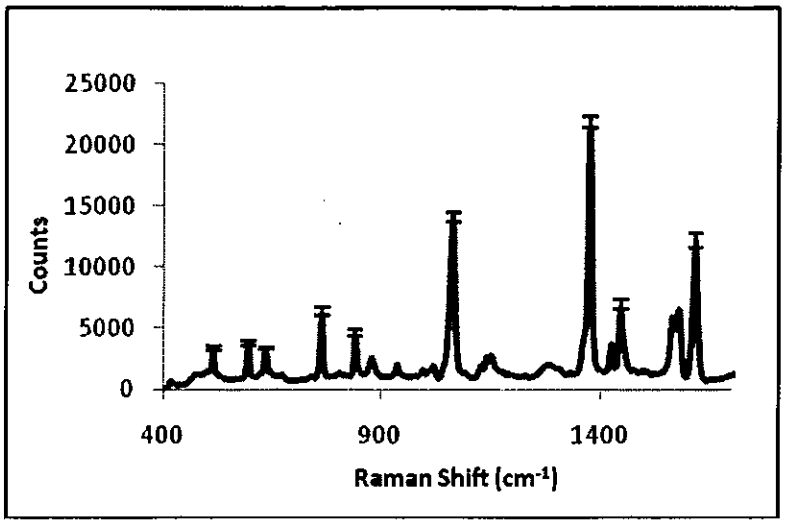
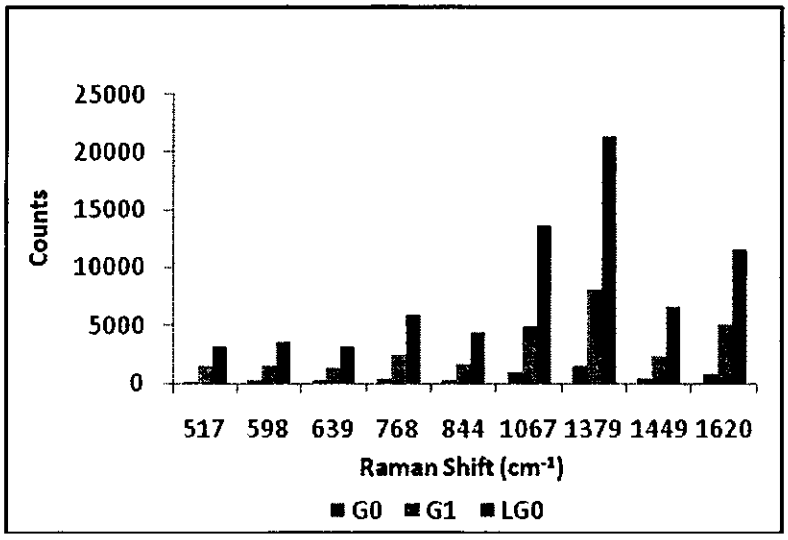


FIG. 11 (CONT.)

C)



D)



E)

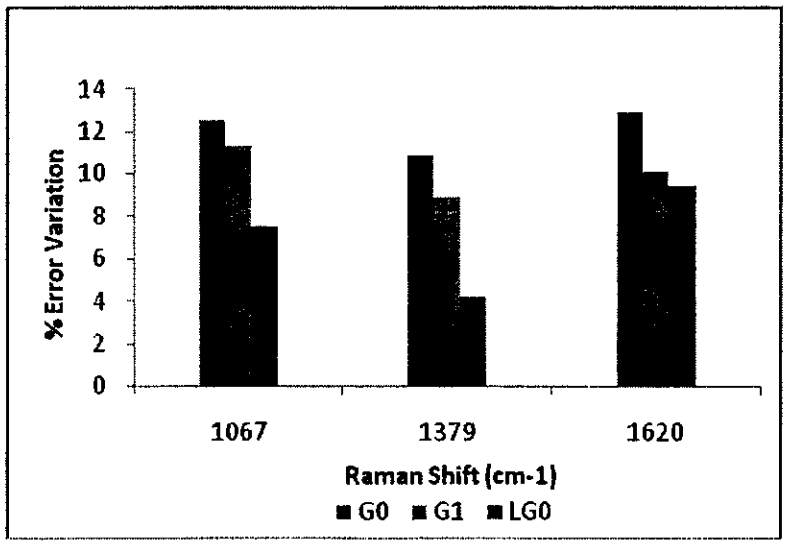
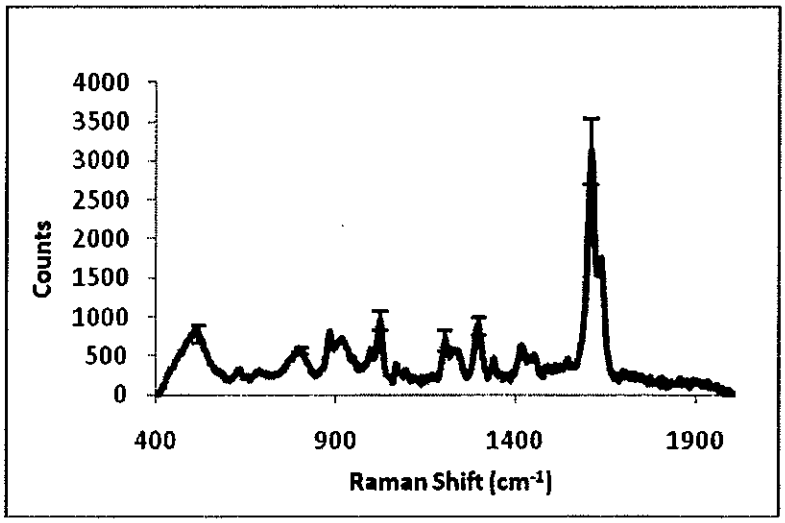
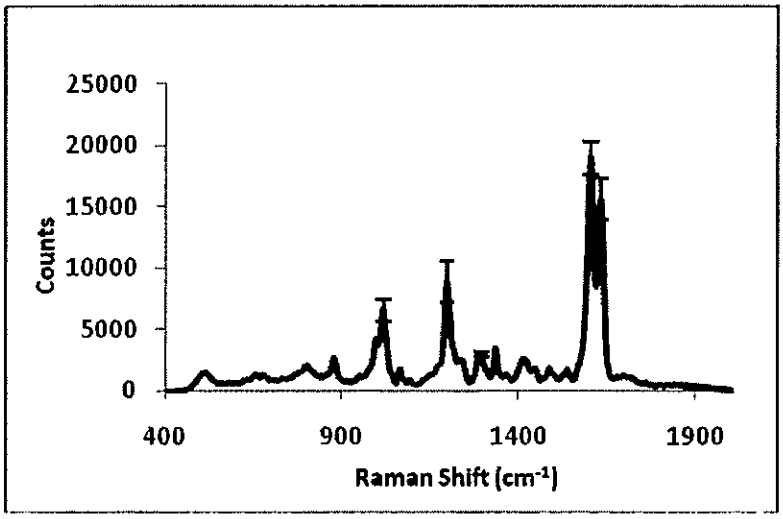


FIG. 12

A)


4000
3500
3000
2500
2000
1500
1000
500
0
Counts
400
900
1400
1900
Raman Shift (cm-1)

B)


25000
20000
15000
10000
5000
0
Counts
400
900
1400
1900
Raman Shift (cm-1)

C)

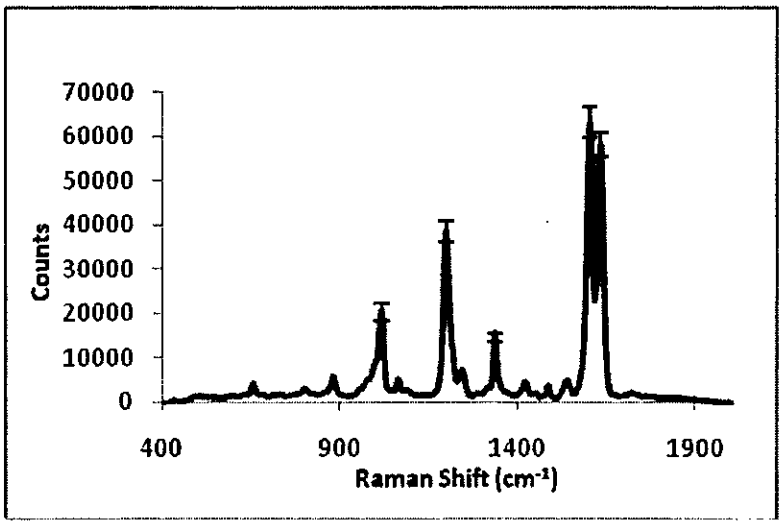
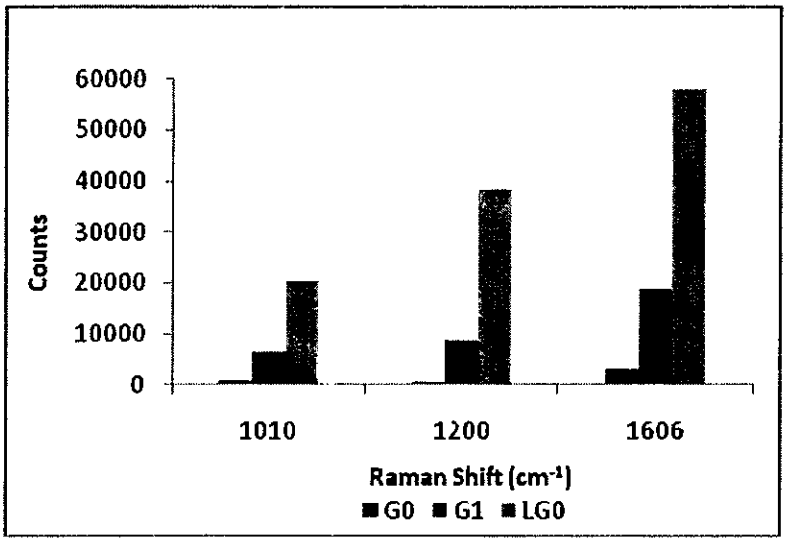

70000
60000
50000
40000
30000
20000
10000
0
Counts
400
900
1400
1900
Raman Shift (cm-1)

FIG. 12 (CONT.)

D)



E)

