

100

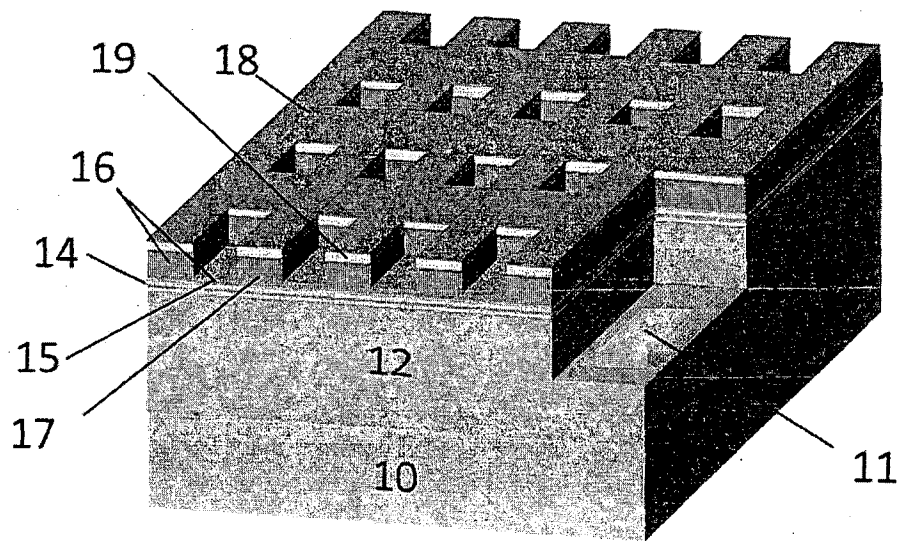


FIG.1

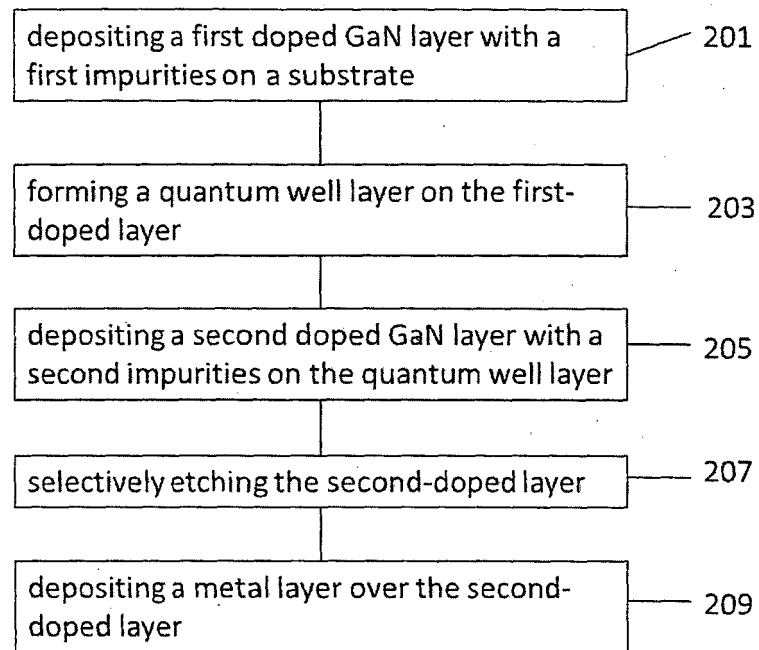
200

FIG.2

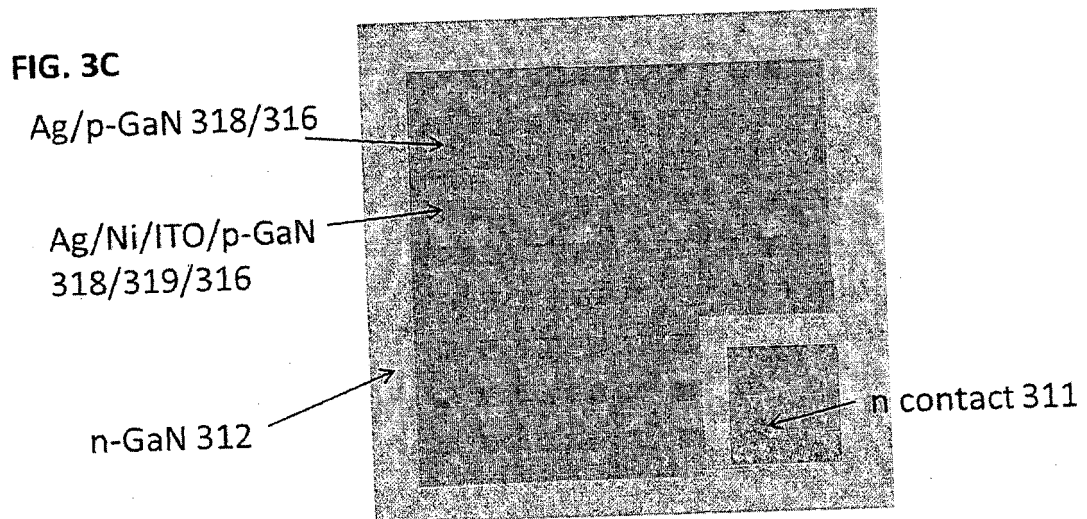
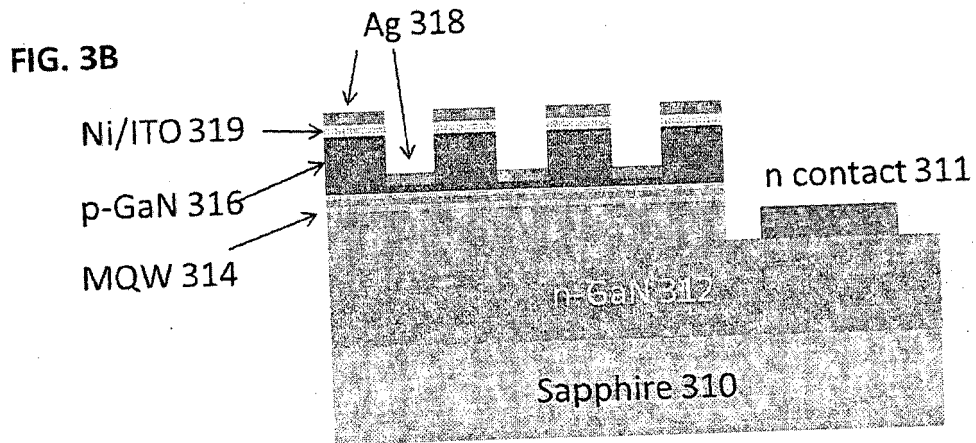
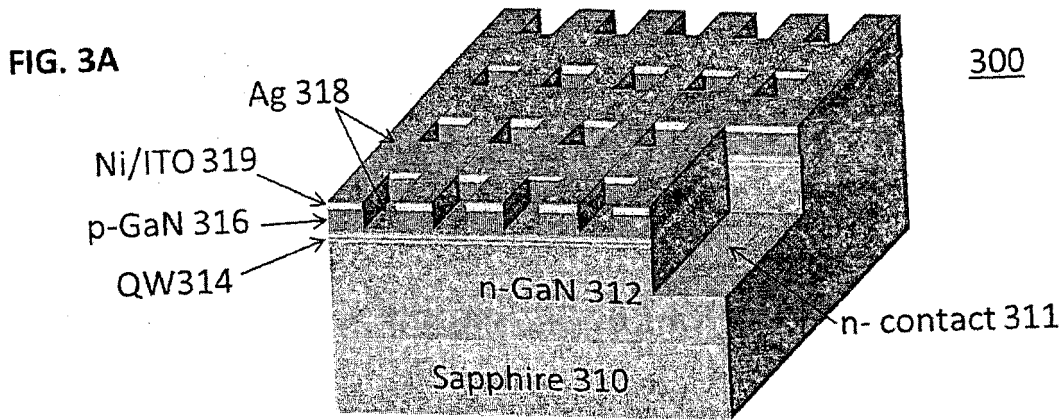


FIG.3

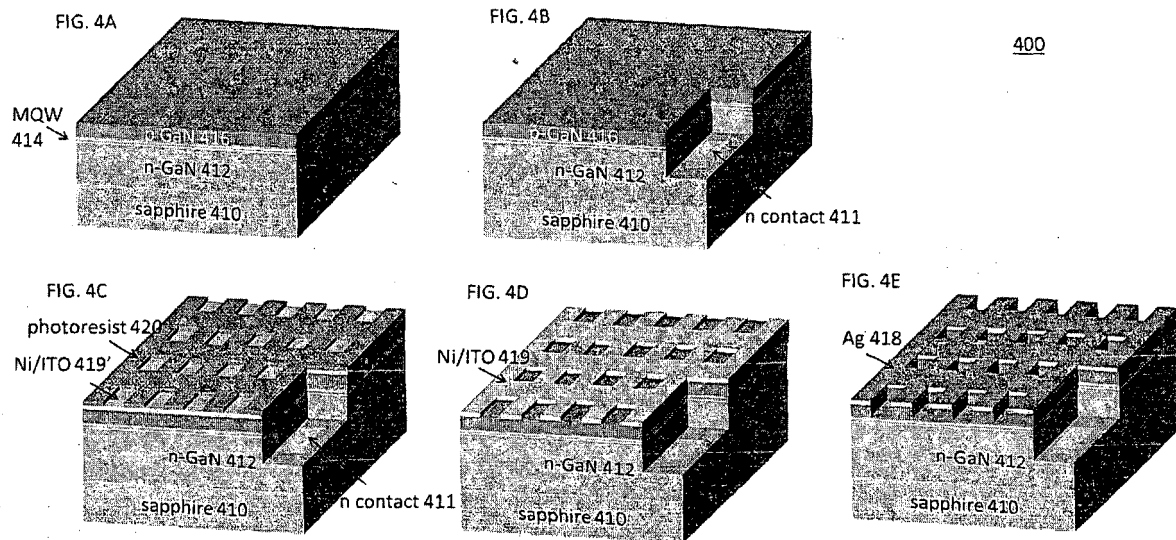


FIG.4

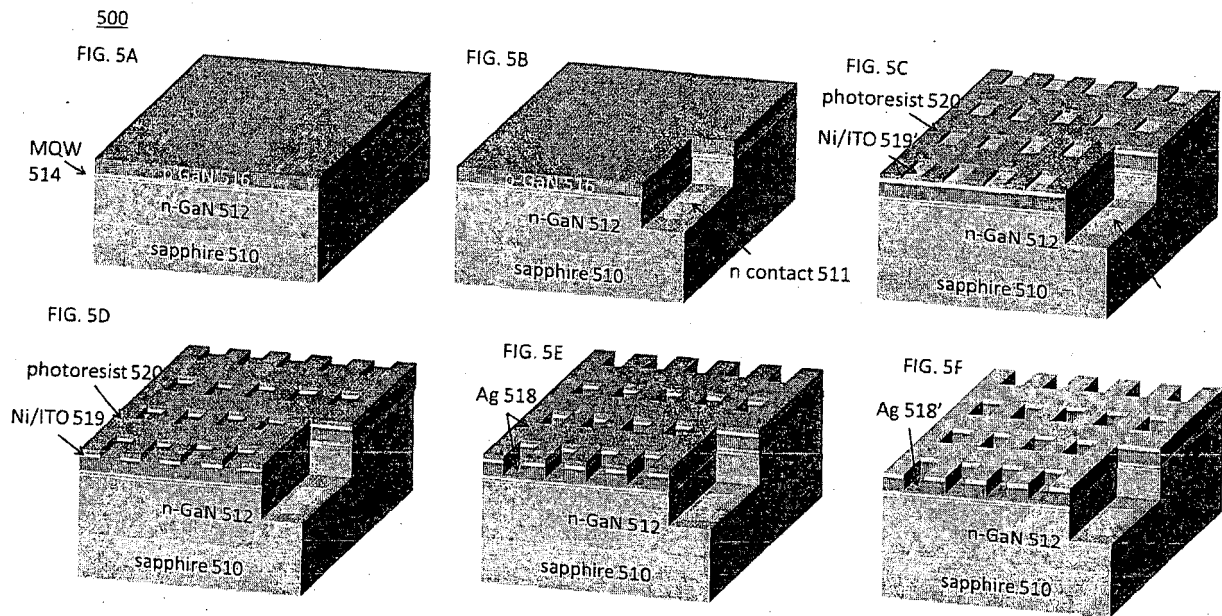


FIG.5

FIG. 6A

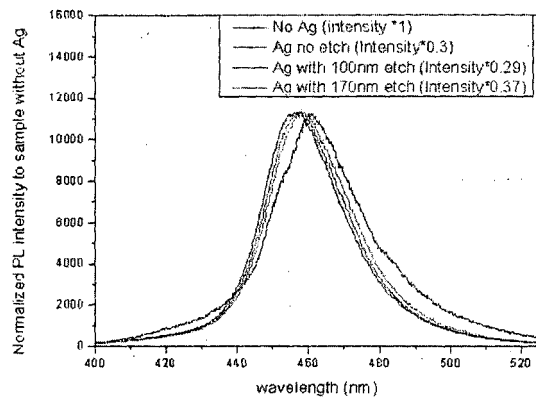


FIG. 6B

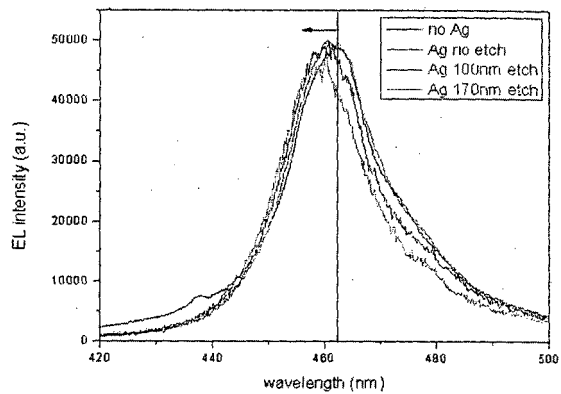


FIG. 6C

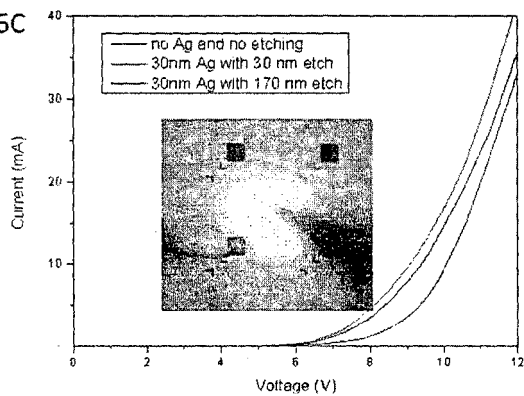


FIG. 6D

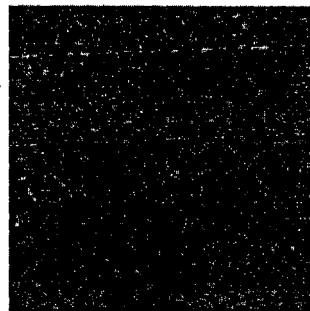


FIG. 6

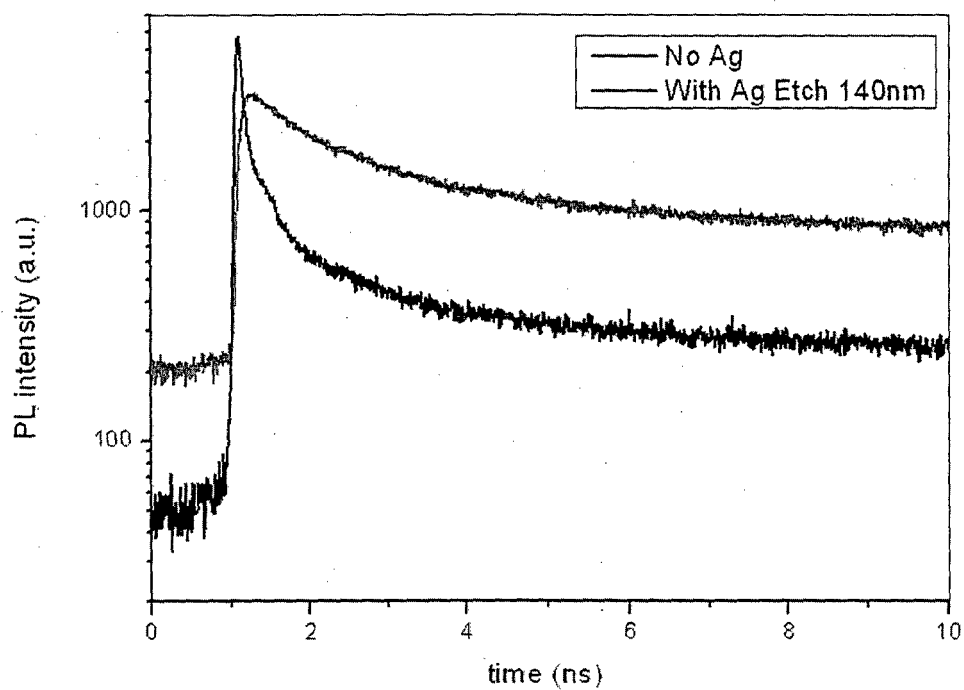


FIG.7

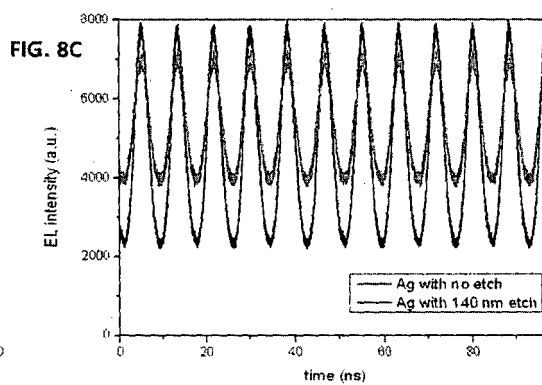
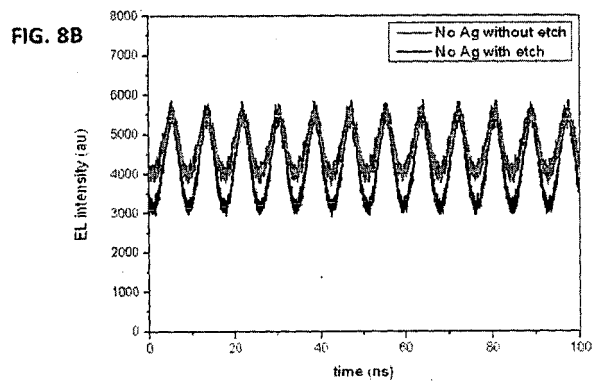
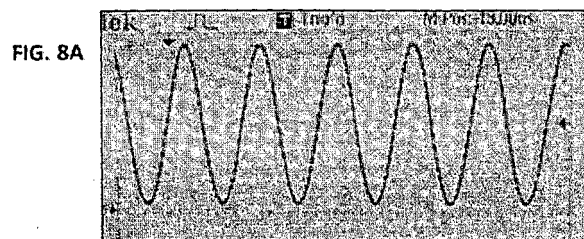


FIG.8

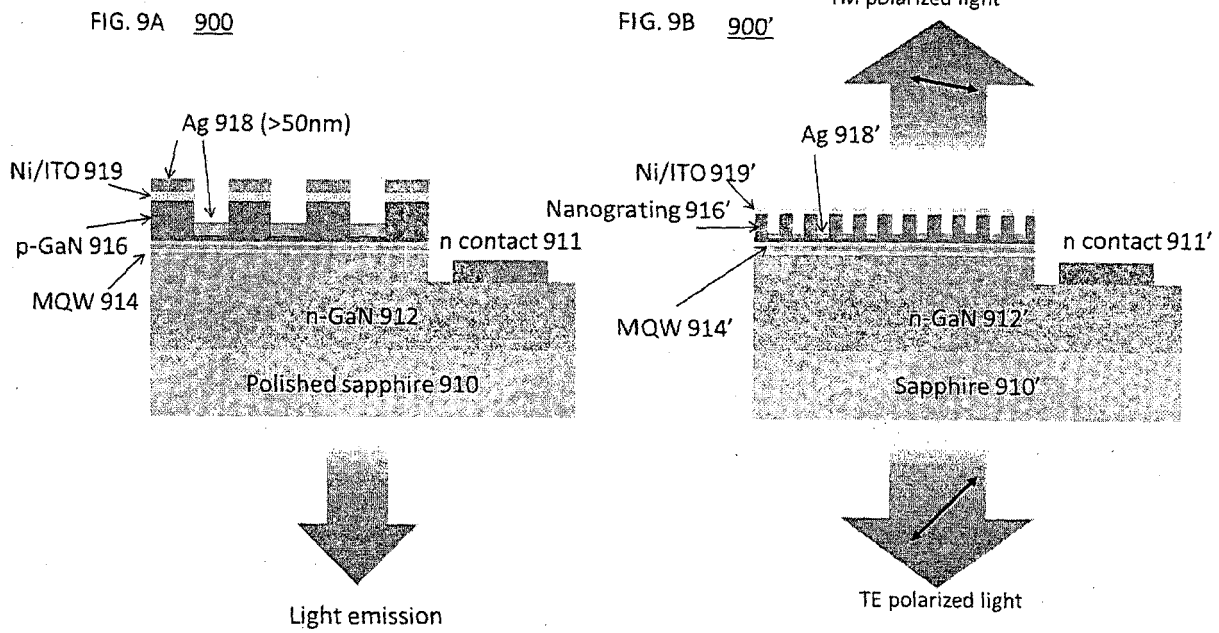


FIG.9

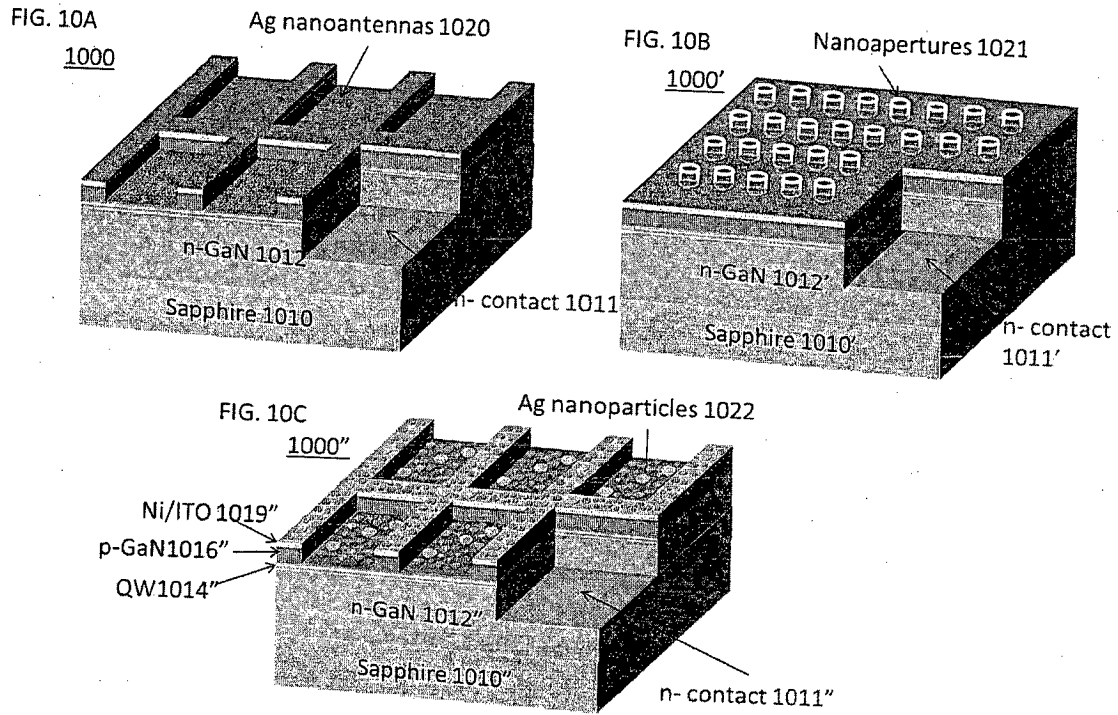


FIG.10

11 / 19

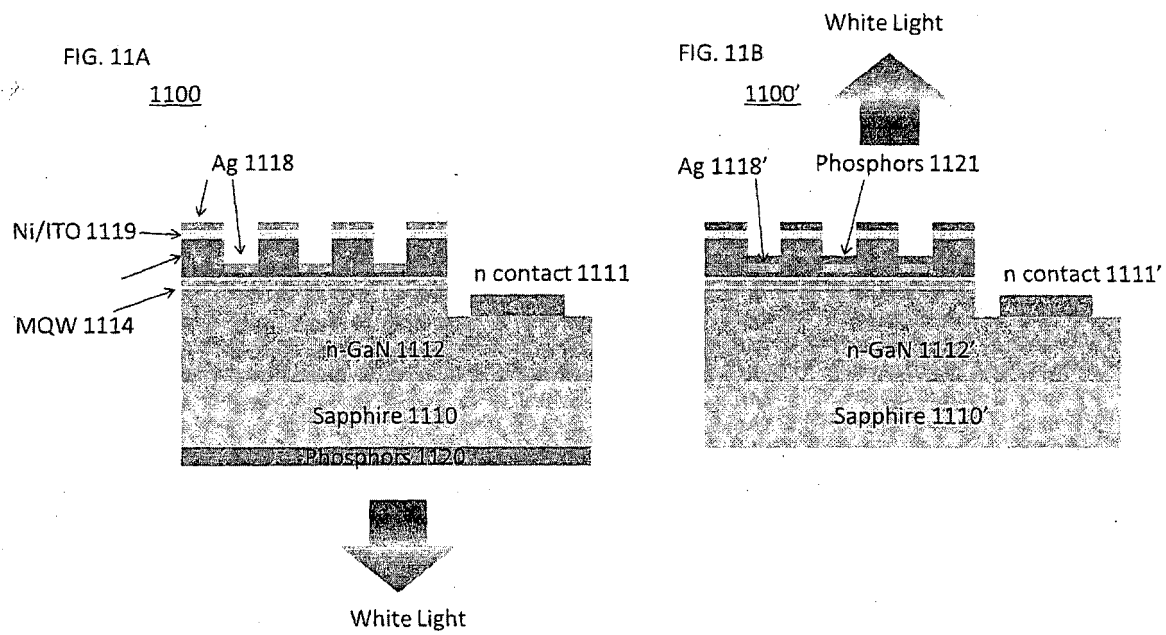
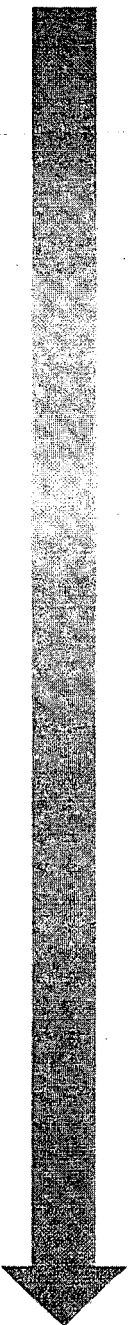


FIG. 11

12 / 19



Infrared $\lambda > 760\text{nm}$	GaAs, AlGaAs
red $610 < \lambda < 760\text{nm}$	AlGaAs, GaAsP, GaP, AlGaInP
orange $590 < \lambda < 610\text{nm}$	GaAsP, GaP, AlGaInP
yellow $570 < \lambda < 590\text{nm}$	GaAsP, GaP, AlGaInP
green $500 < \lambda < 570\text{nm}$	InGaN, GaN, GaP AlGaInP, AlGaP
blue $450 < \lambda < 500\text{nm}$	InGaN, ZnSe, SiC
violet $400 < \lambda < 450\text{nm}$	InGaN
ultraviolet $\lambda < 400\text{nm}$	AlN, AlGaN

FIG.12

13 / 19

1300

FIG. 13A

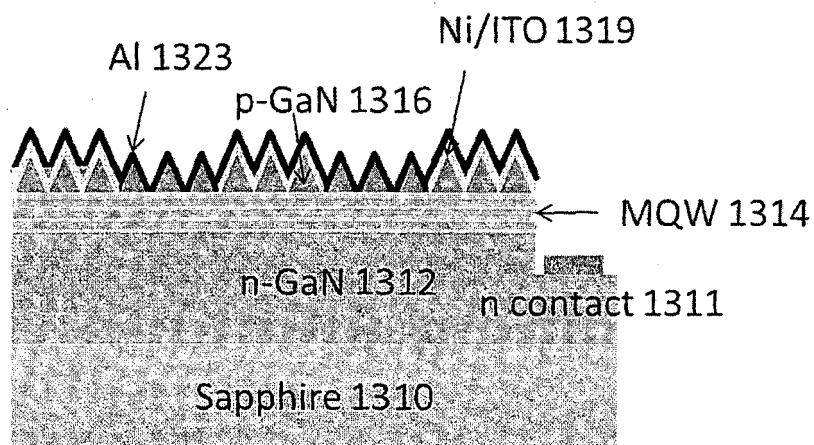


FIG. 13B

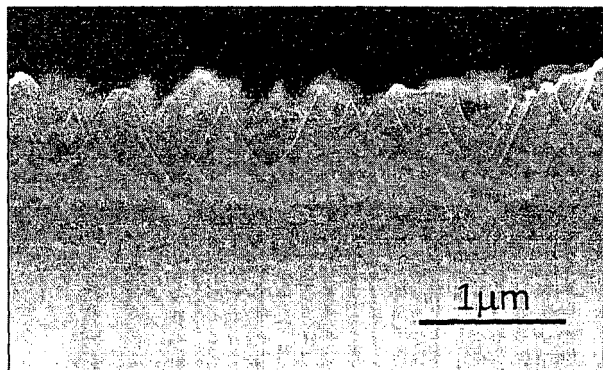


FIG. 13C

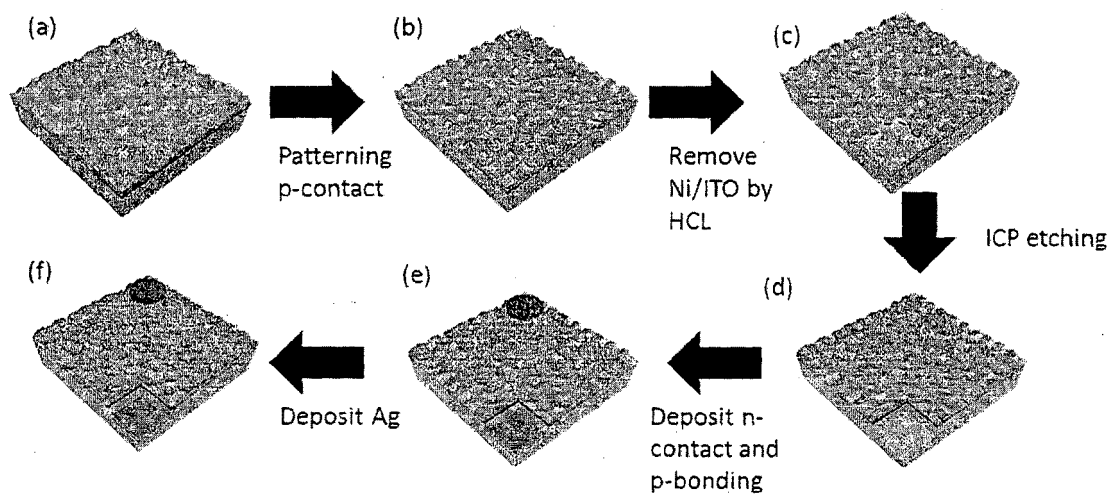


FIG. 13

FIG. 14 A

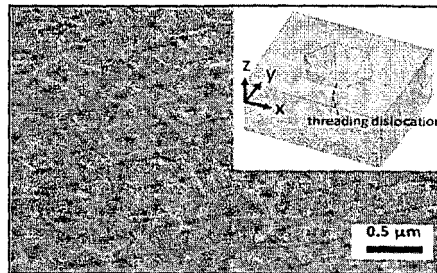


FIG. 14 B

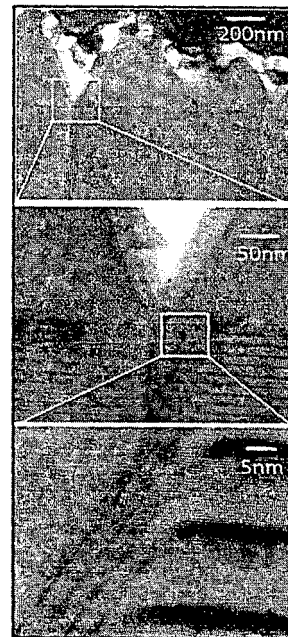


FIG. 14C

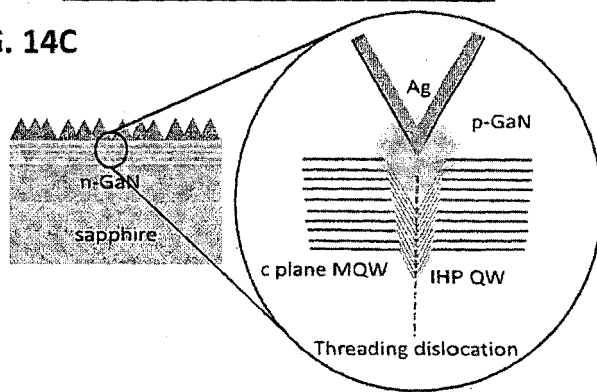


FIG.14

FIG. 15A

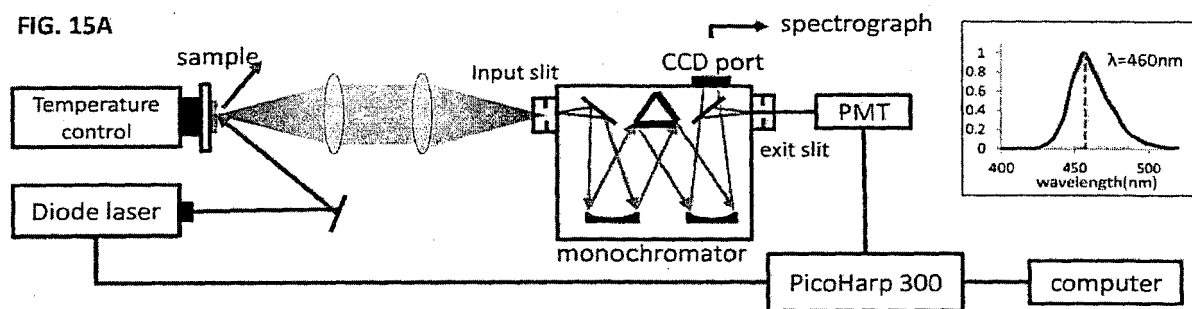


FIG. 15B

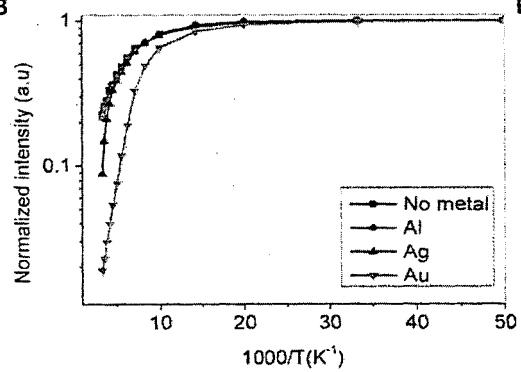


FIG. 15C

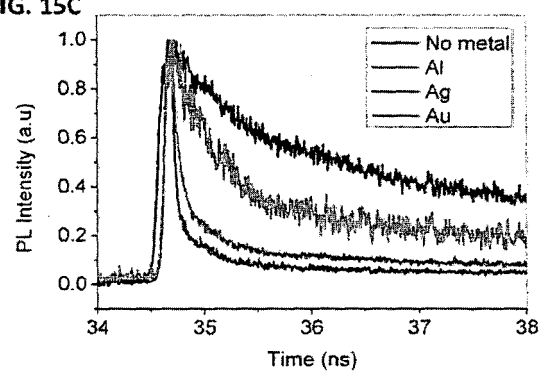
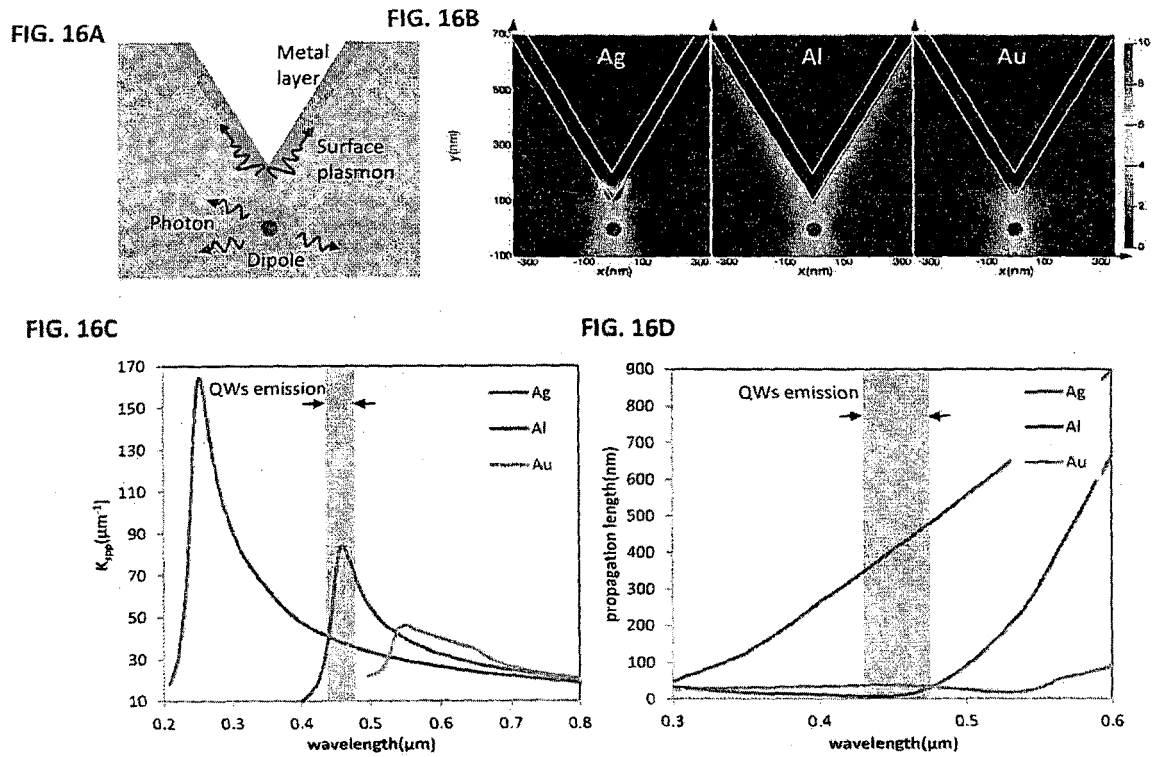


FIG.15



17/19

FIG. 17A

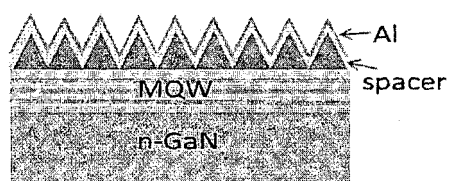


FIG. 17B

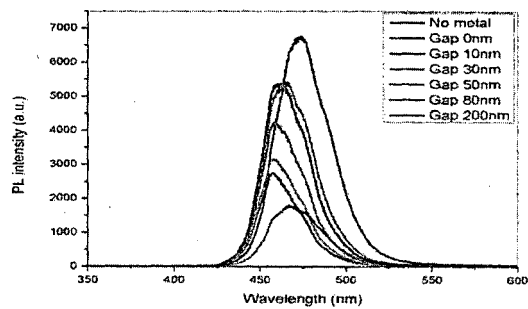


FIG. 17C

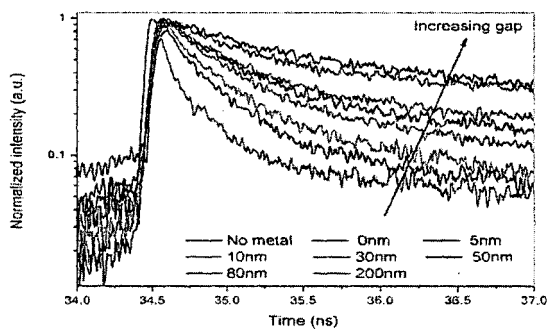


FIG. 17D

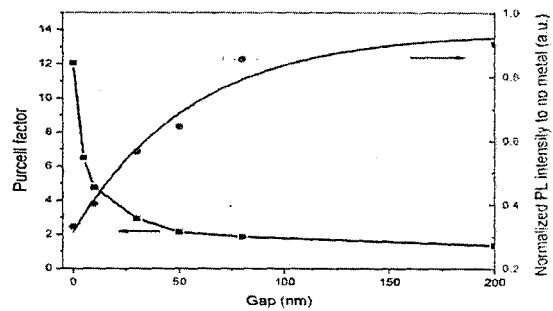


FIG.17

FIG. 18A

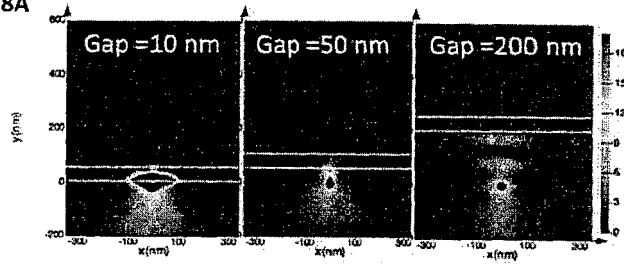


FIG. 18B

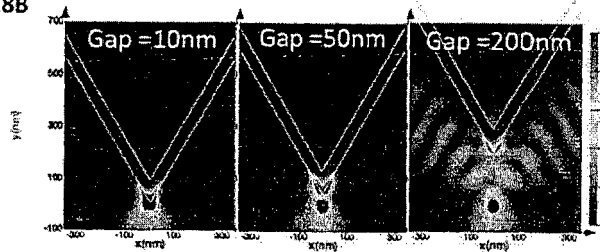


FIG. 18C

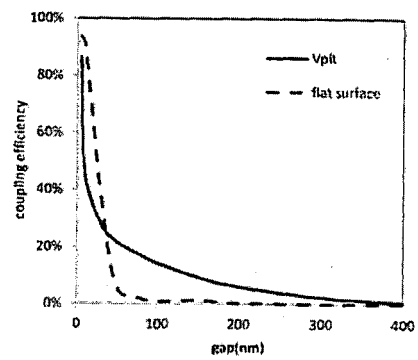


FIG.18

19 / 19

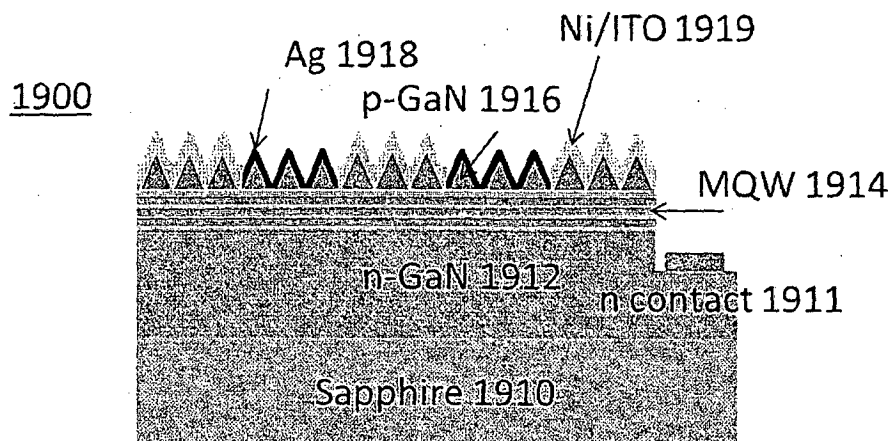


FIG. 19A

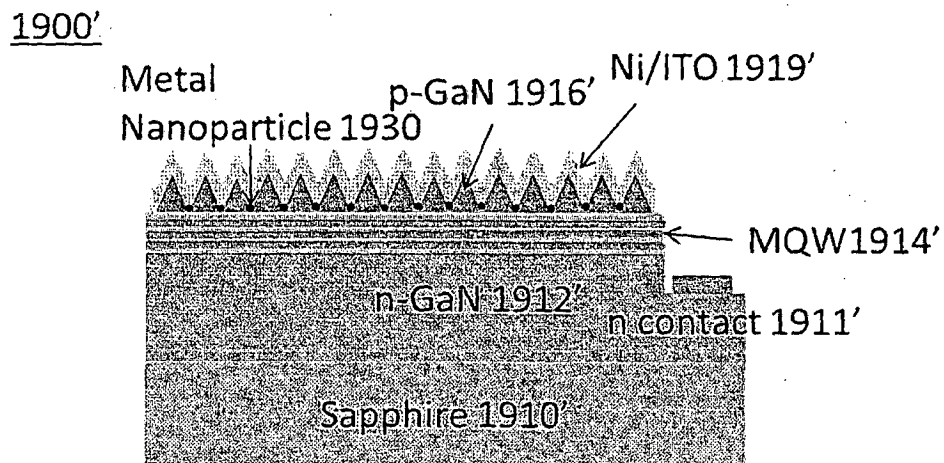


FIG. 19B

FIG. 19