

# Drawings

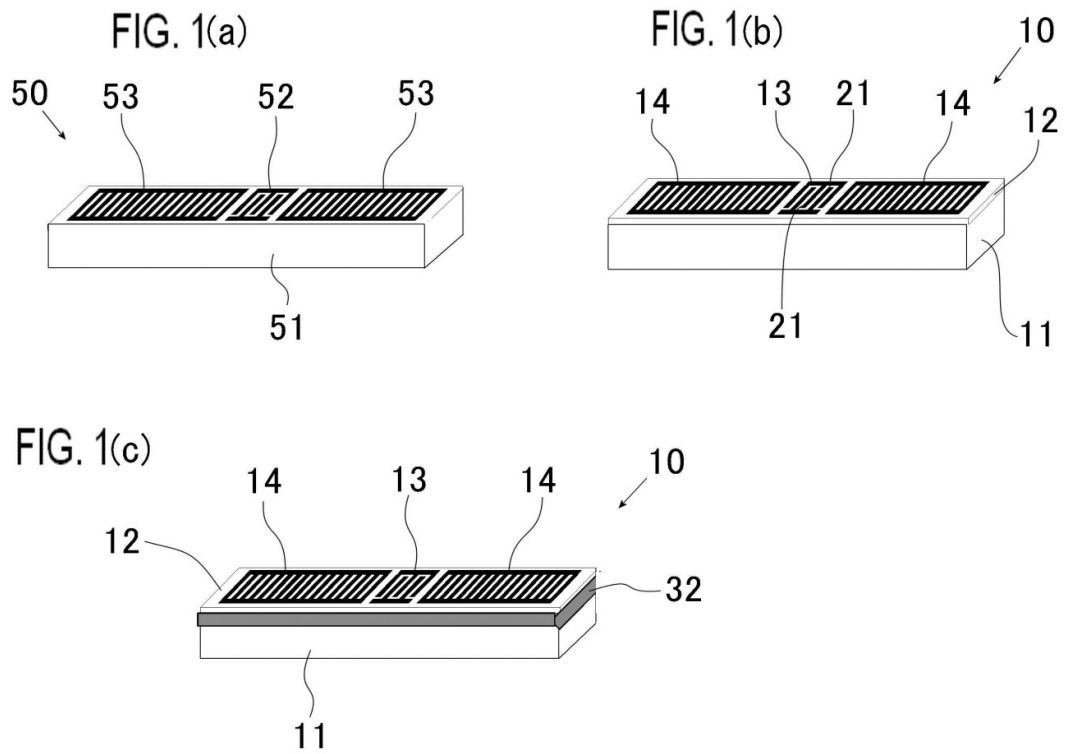


FIG. 2(a)  $(0^\circ, 110^\circ, 0^\circ)$  LT

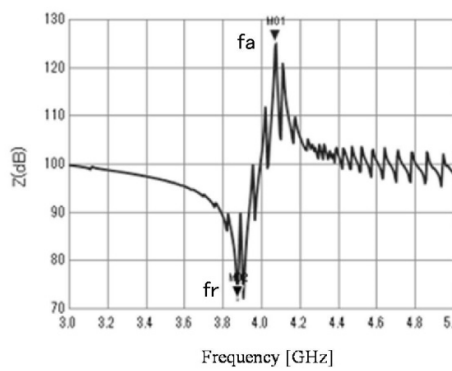


FIG. 2(b)  $(0^\circ, 132^\circ, 0^\circ)$  LT

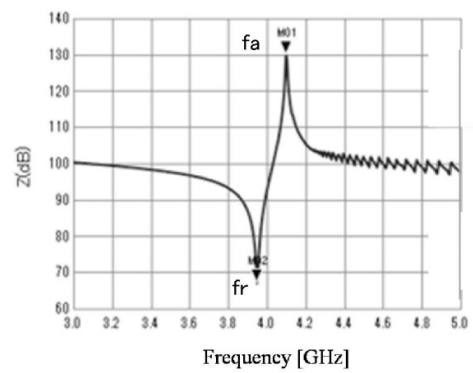


FIG. 3(a)  $(0^\circ, 110^\circ, 0^\circ)$ LT/ $(0^\circ, 130^\circ, 90^\circ)$  quartz

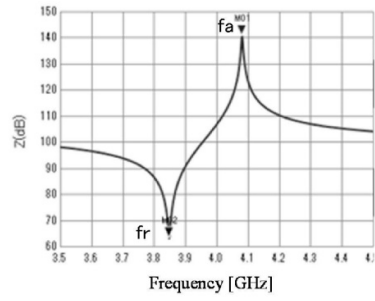


FIG. 3(b)  $(0^\circ, 120^\circ, 0^\circ)$ LT/ $(0^\circ, 130^\circ, 0^\circ)$  quartz

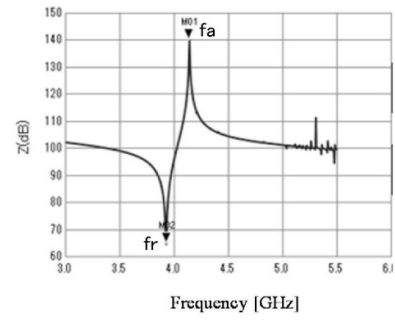


FIG. 4(a)  $(0^\circ, 110^\circ, 0^\circ)$ LT/ $(0^\circ, 130^\circ, 30^\circ)$  quartz

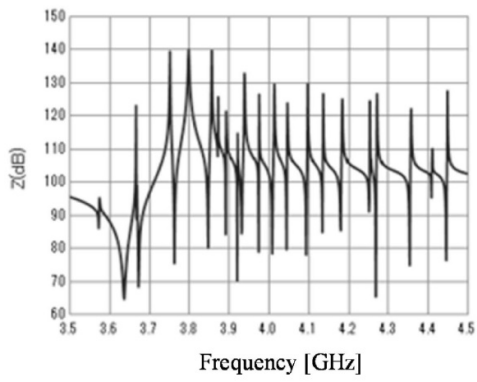


FIG. 4(b)  $(0^\circ, 110^\circ, 0^\circ)$ LT/ $(0^\circ, 130^\circ, 60^\circ)$  quartz

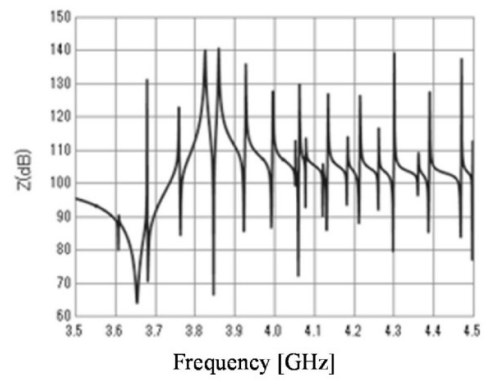


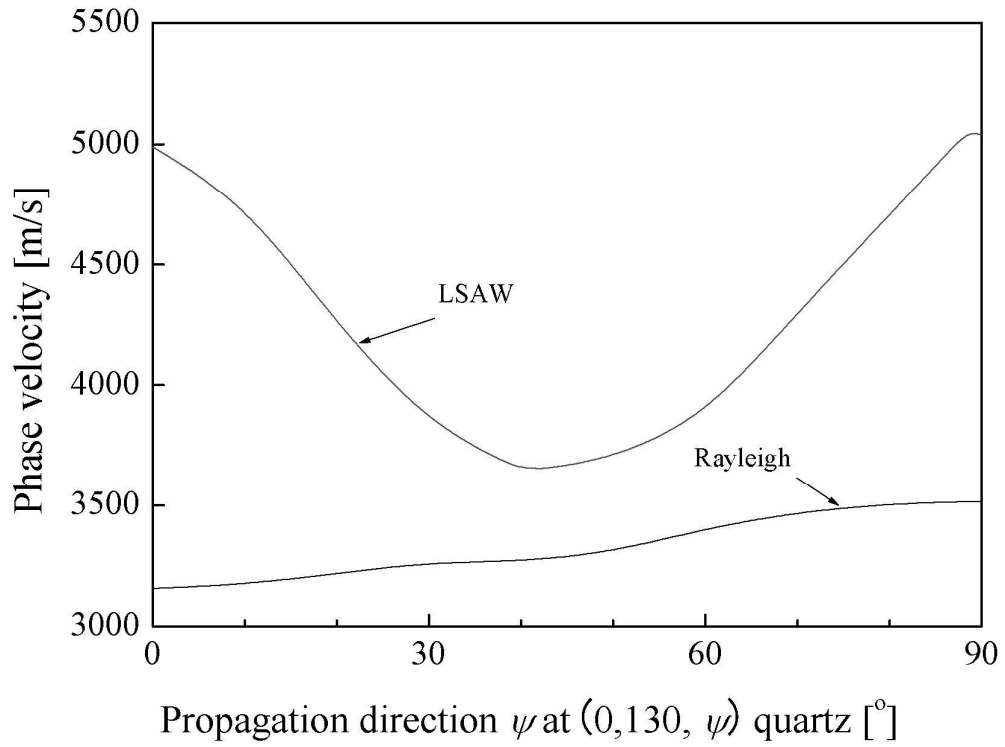
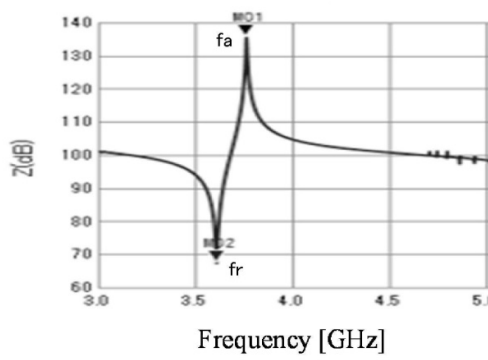
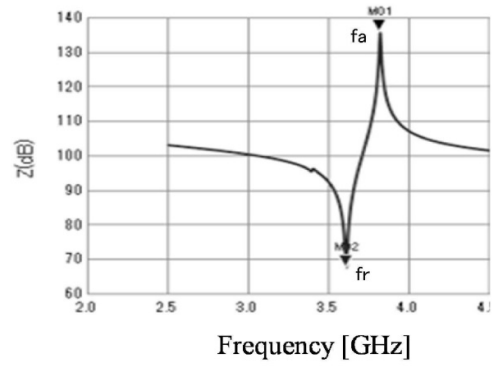
FIG. 5  $(0^\circ, 130^\circ, \psi)$  quartzFIG. 6(a)  $(0^\circ, 132^\circ, 0^\circ)$  LT/(110) Si substrateFIG. 6(b)  $(0^\circ, 132^\circ, 0^\circ)$  LT/c-sapphire substrate

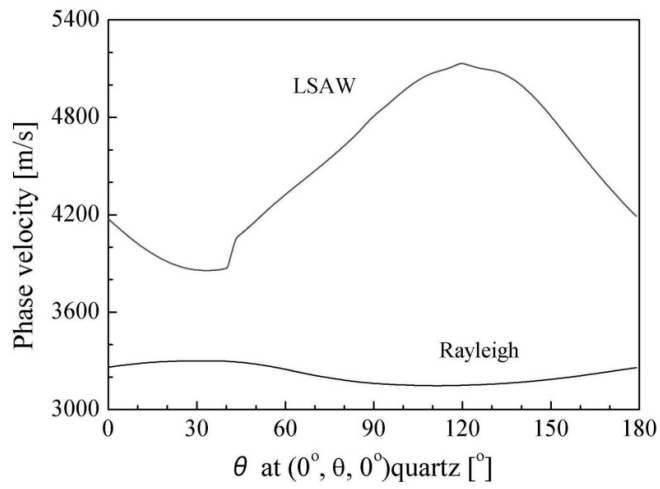
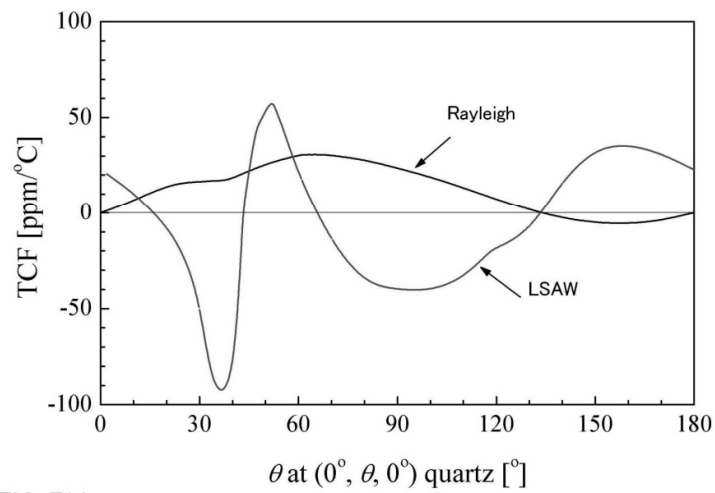
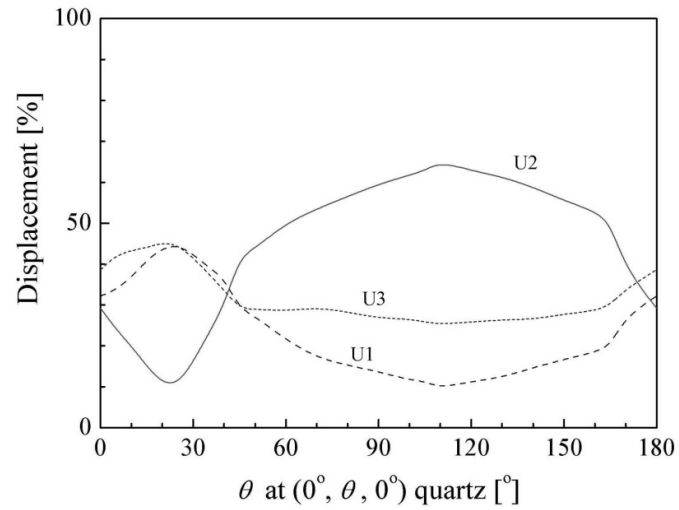
FIG. 7(a)  $(0^\circ, \theta, 0^\circ)$  quartzFIG. 7(b)  $(0^\circ, \theta, 0^\circ)$  quartzFIG. 7(c)  $(0^\circ, \theta, 0^\circ)$  quartz

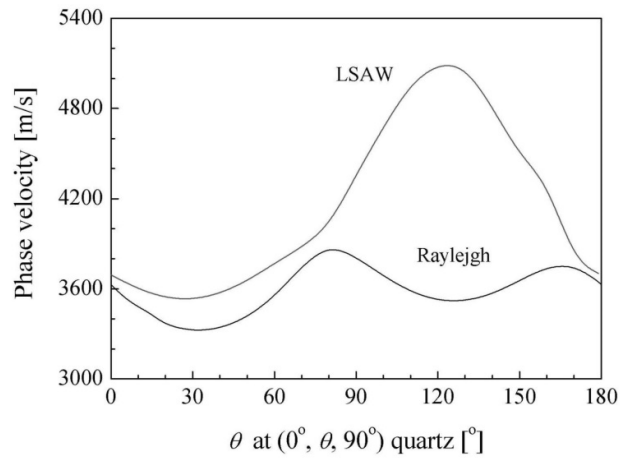
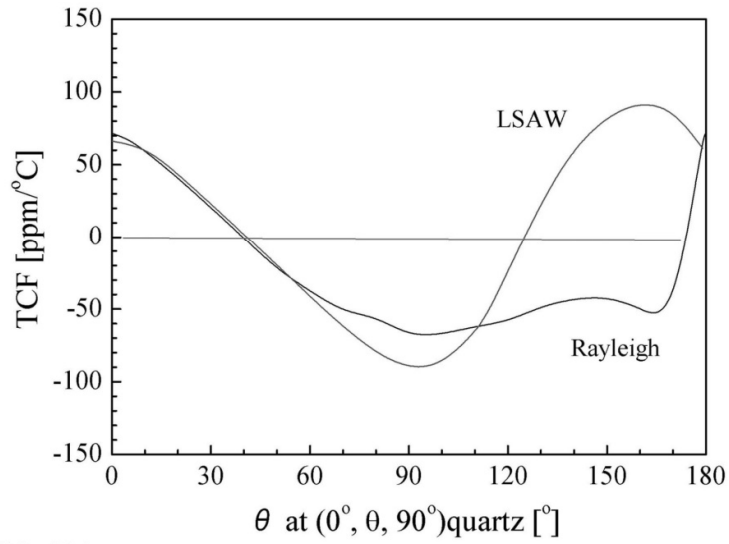
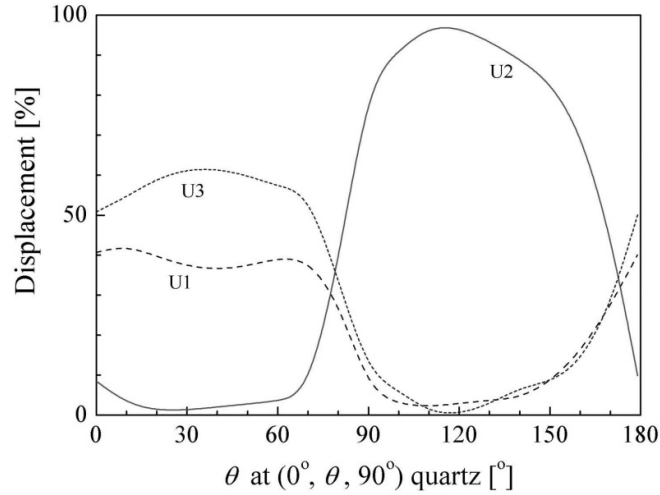
FIG. 8(a)  $(0^\circ, \theta, 90^\circ)$  quartzFIG. 8(b)  $(0^\circ, \theta, 90^\circ)$  quartzFIG. 8(c)  $(0^\circ, \theta, 90^\circ)$  quartz

FIG. 9

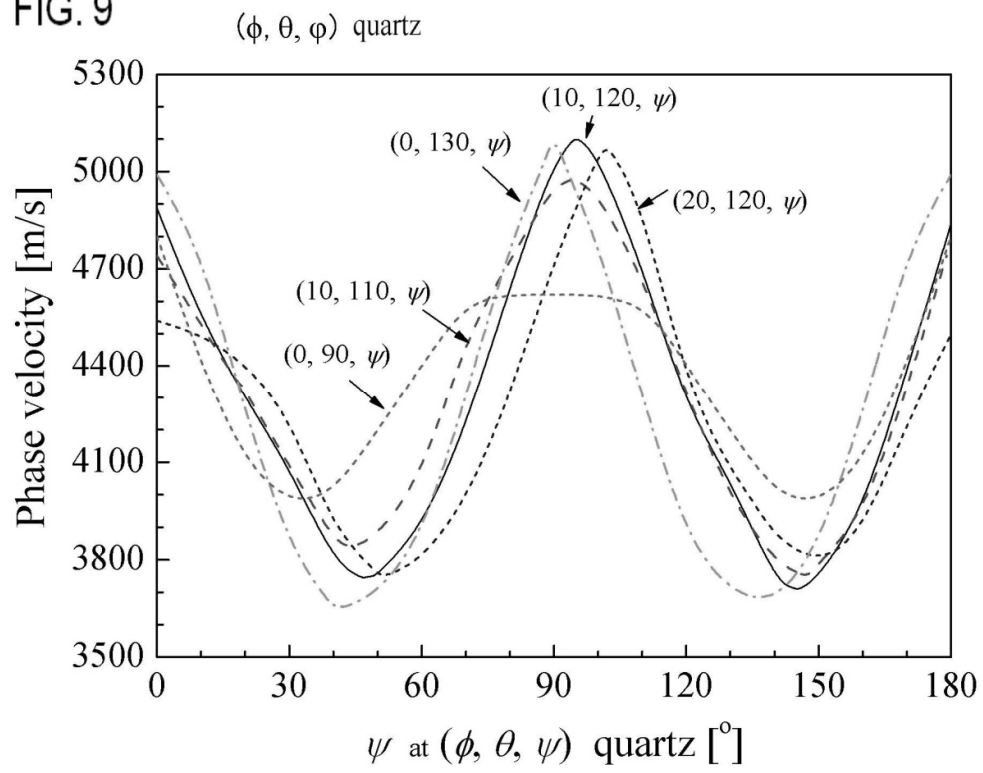


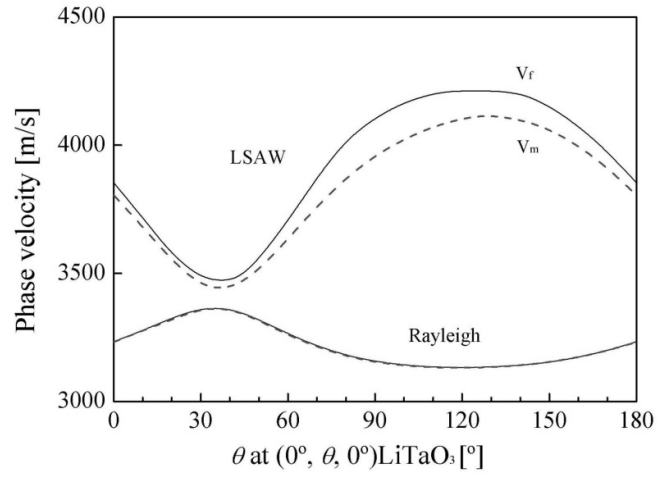
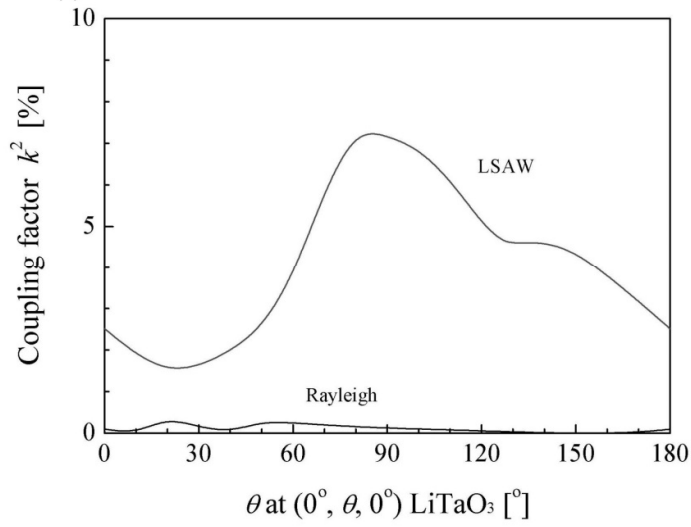
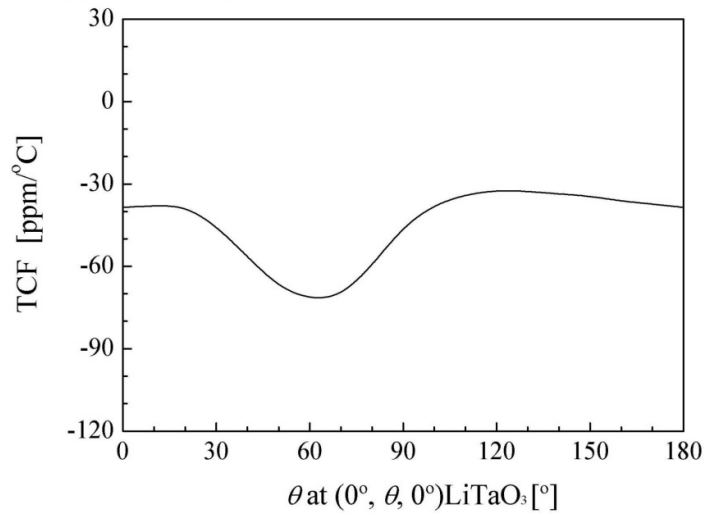
FIG. 10(a)  $(0^\circ, \theta, 0^\circ)$  LTFIG. 10(b)  $(0^\circ, \theta, 0^\circ)$  LTFIG. 10(c)  $(0^\circ, \theta, 0^\circ)$  LT

FIG. 11(a)

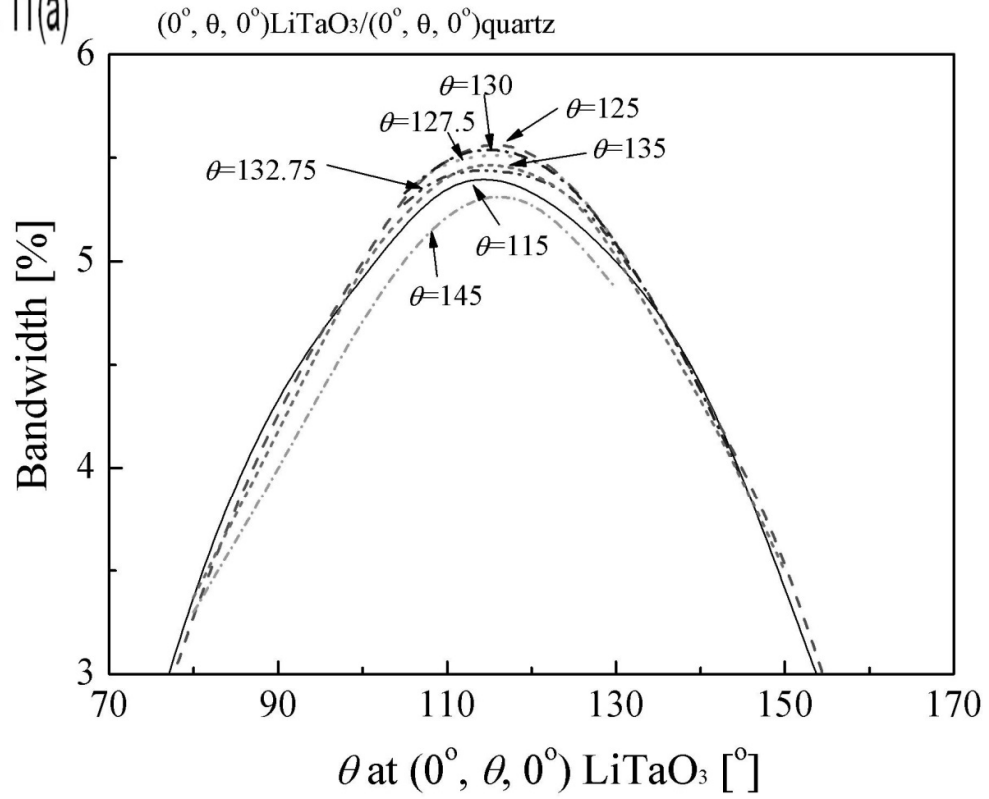


FIG. 11(b)

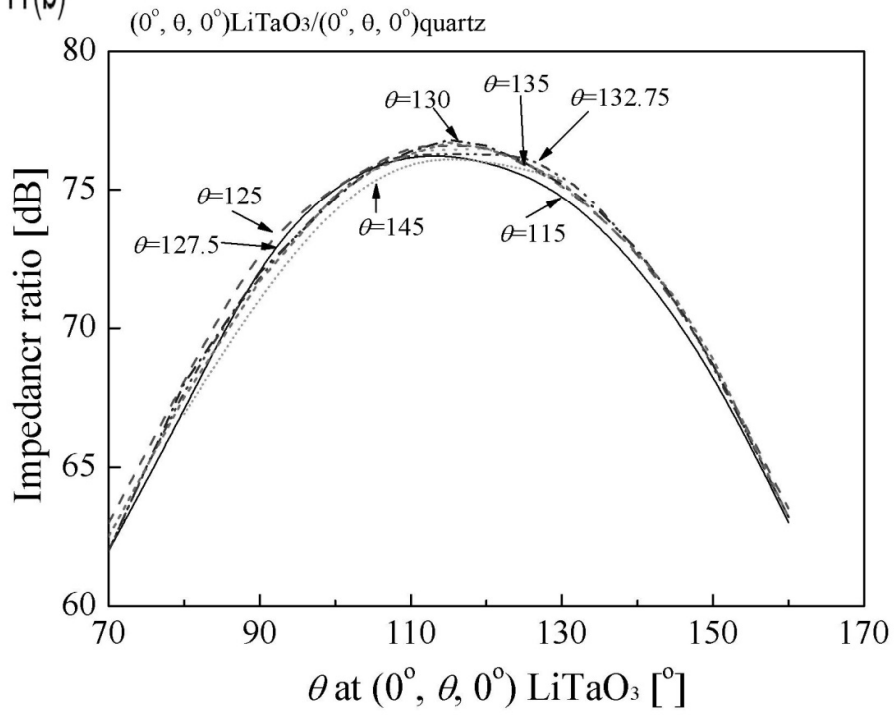


FIG. 12(a)

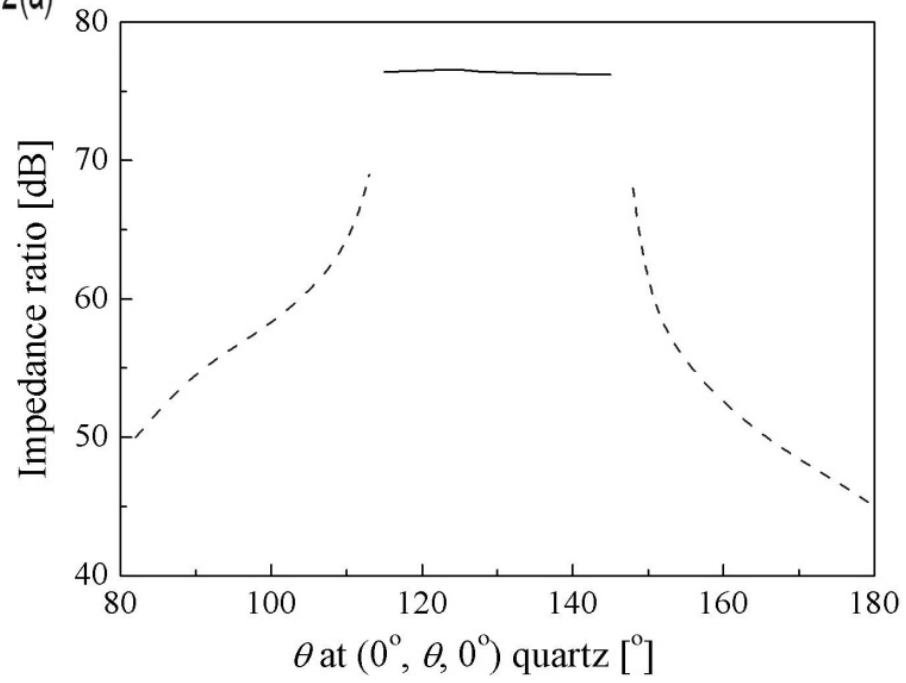


FIG. 12(b)

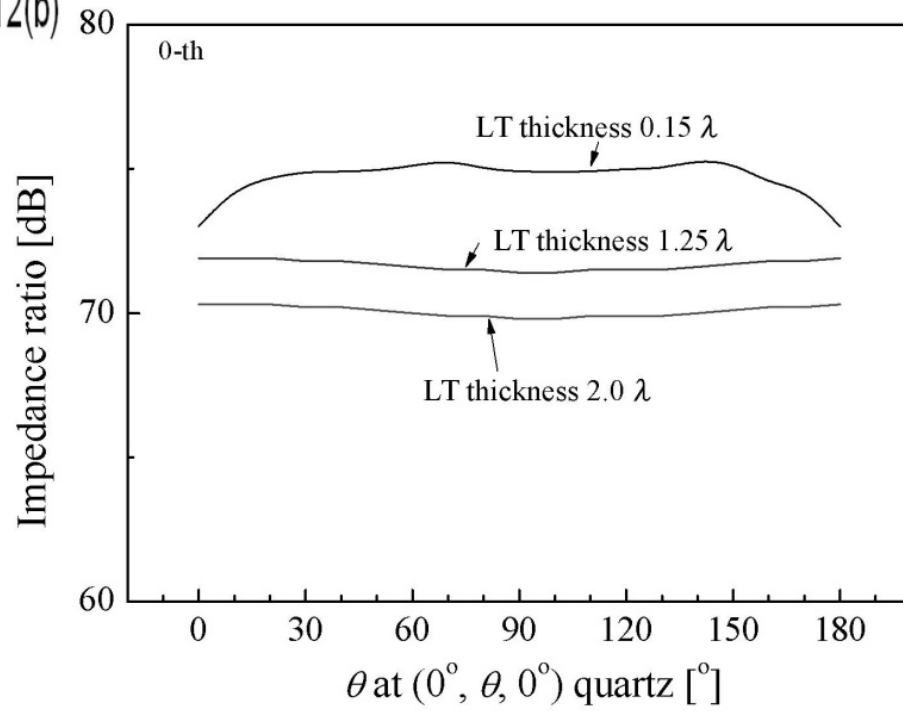


FIG. 13(a)

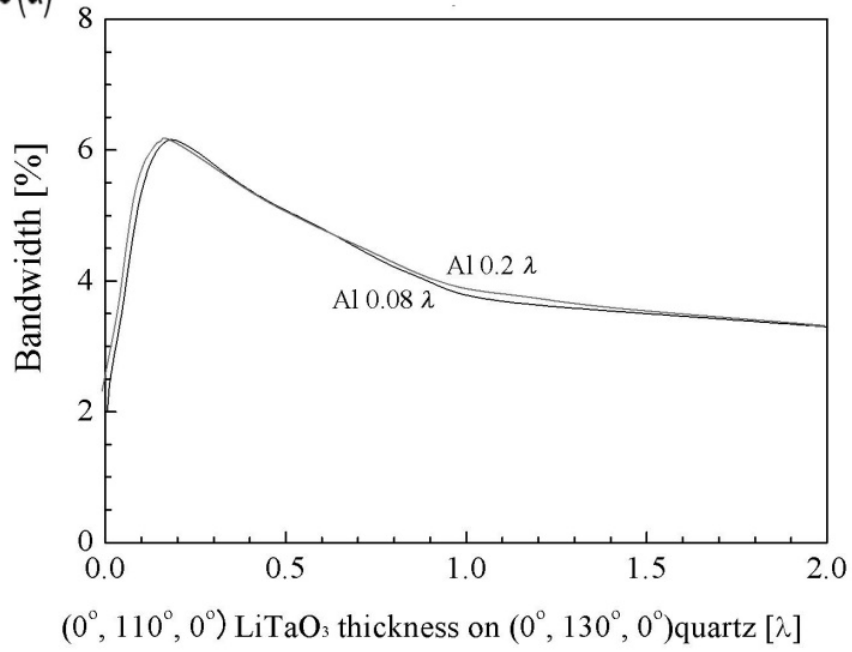


FIG. 13(b)

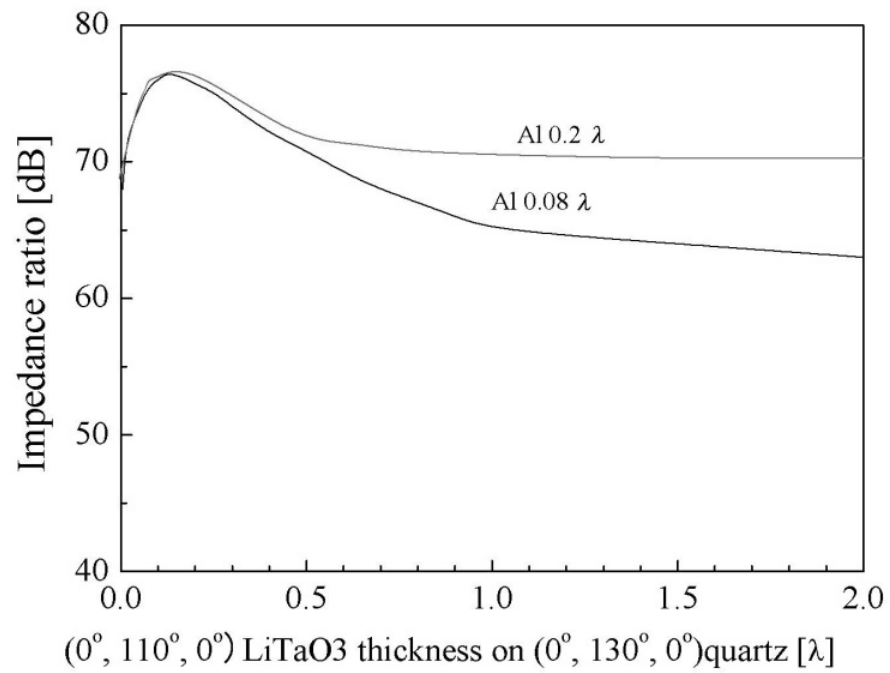


FIG. 14(a)  $(0^\circ, \theta, 0^\circ)$  LiTaO<sub>3</sub>/  $(0^\circ, \theta, 90^\circ)$  Quartz

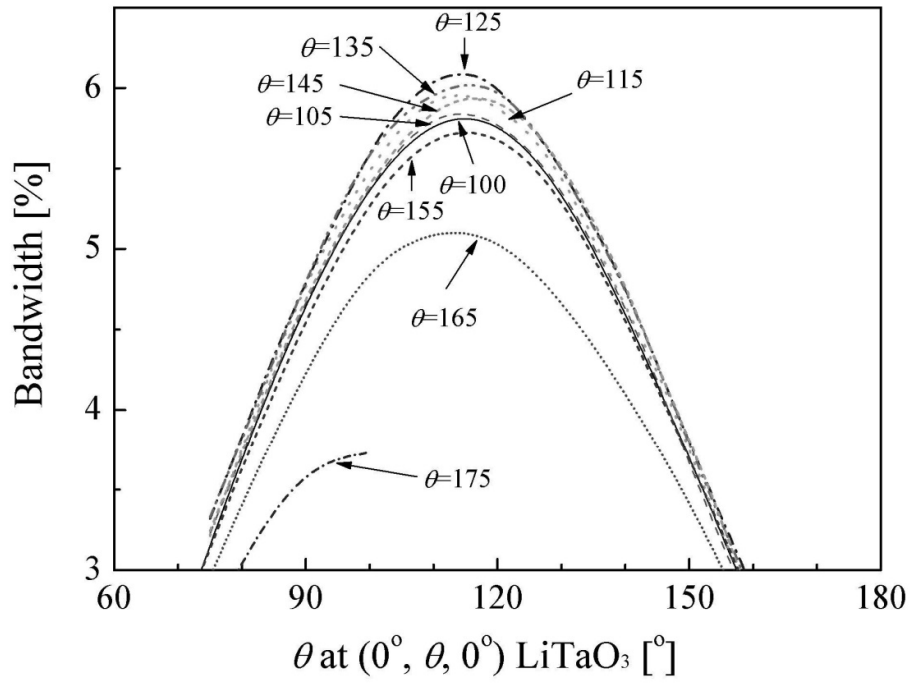
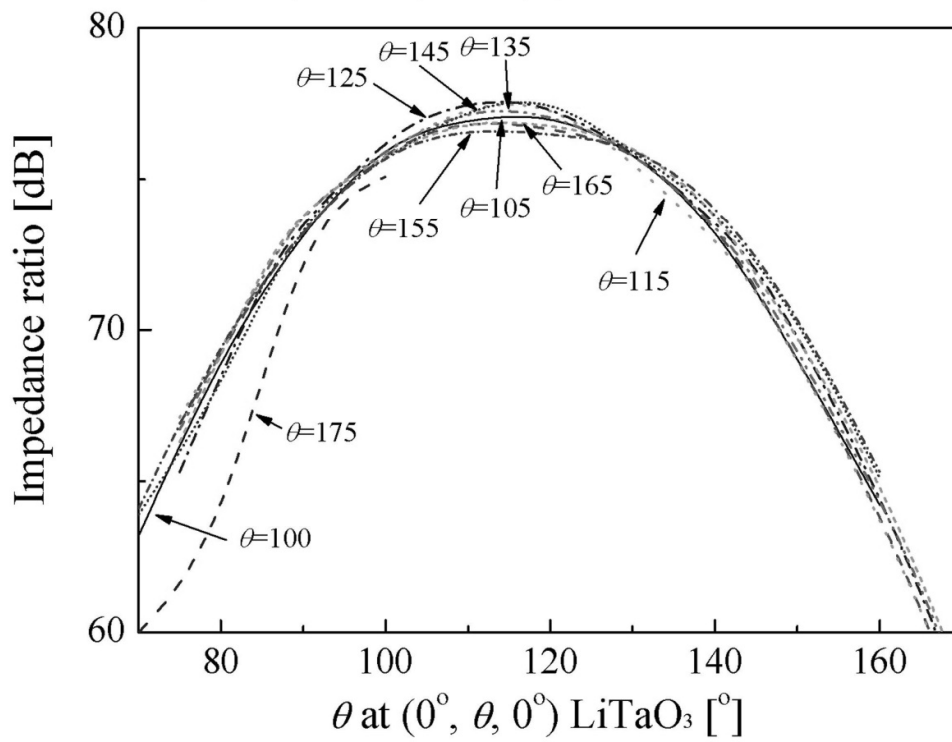


FIG. 14(b)  $(0^\circ, \theta, 0^\circ)$  LiTaO<sub>3</sub>/  $(0^\circ, \theta, 90^\circ)$  Quartz



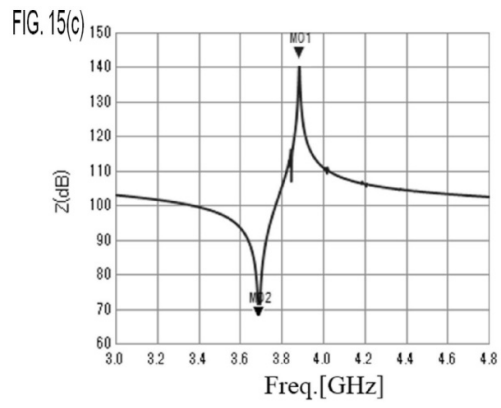
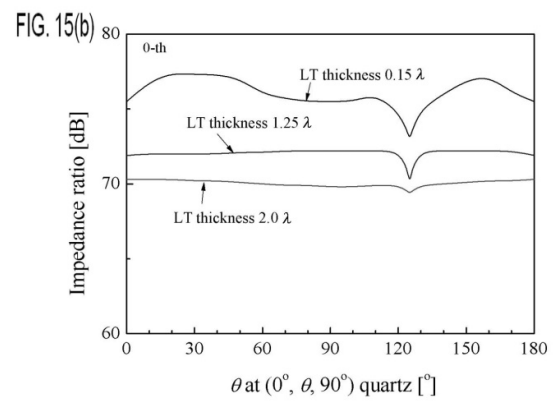
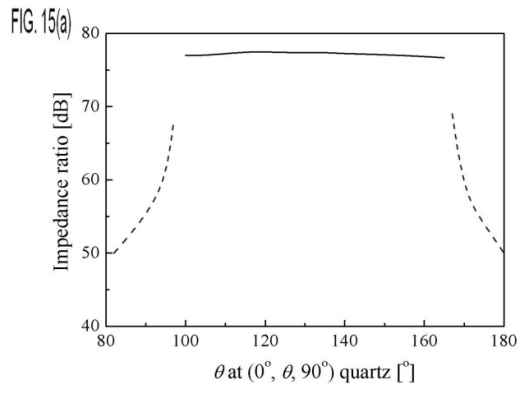


FIG. 16(a)

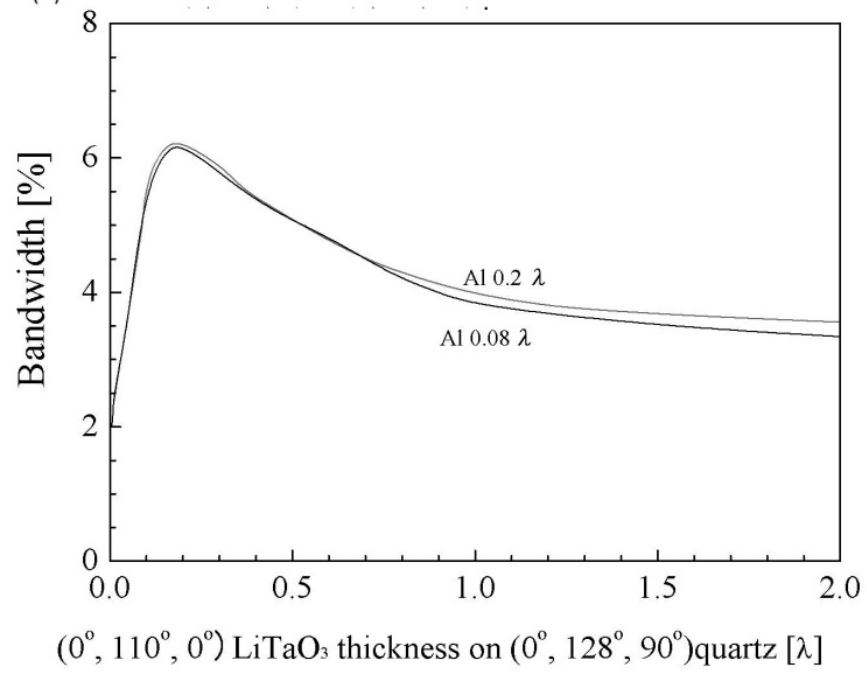


FIG. 16(b)

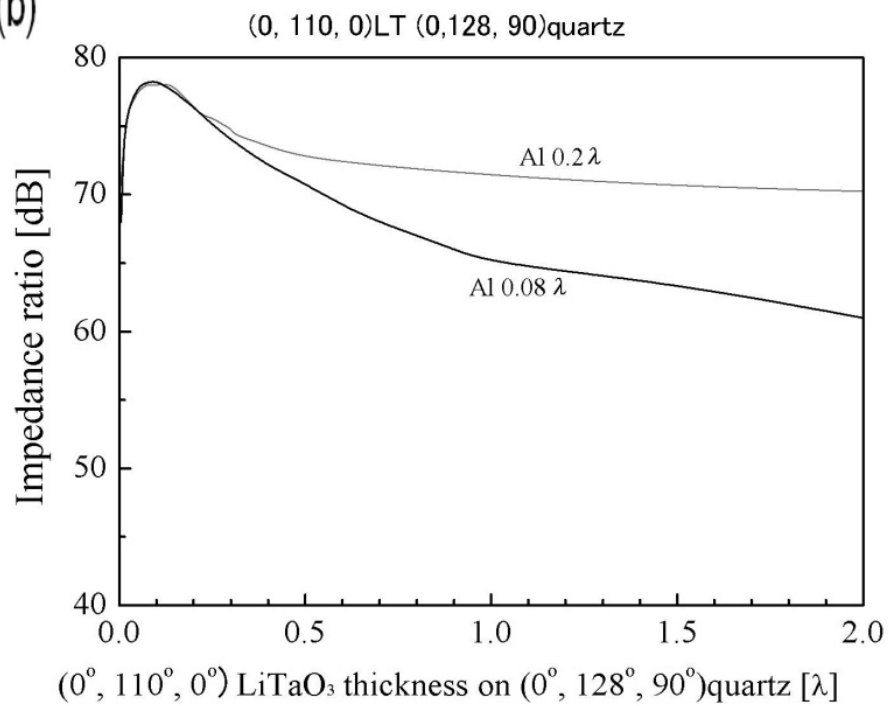


FIG. 17(a)

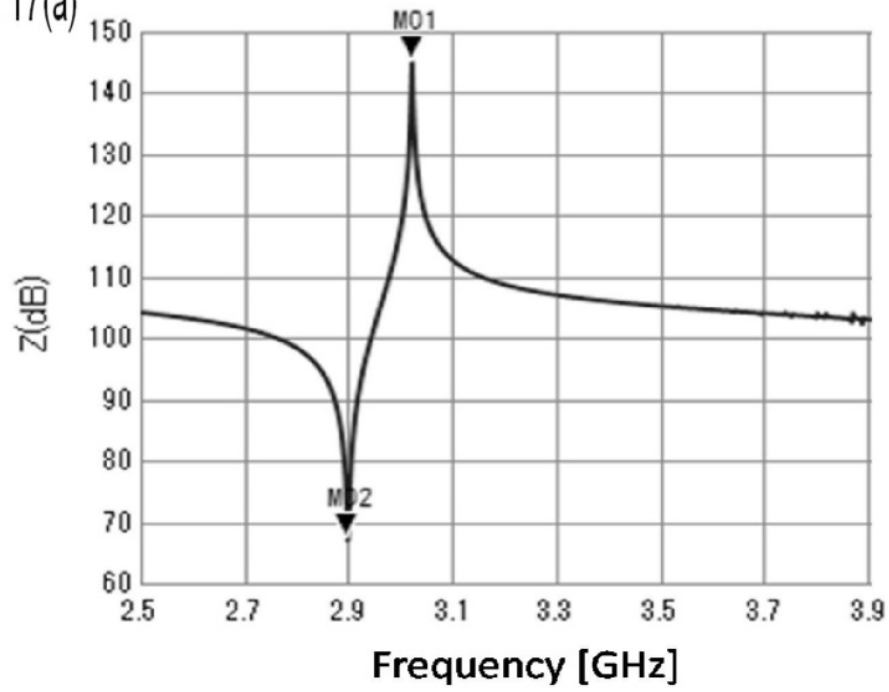


FIG. 17(b)

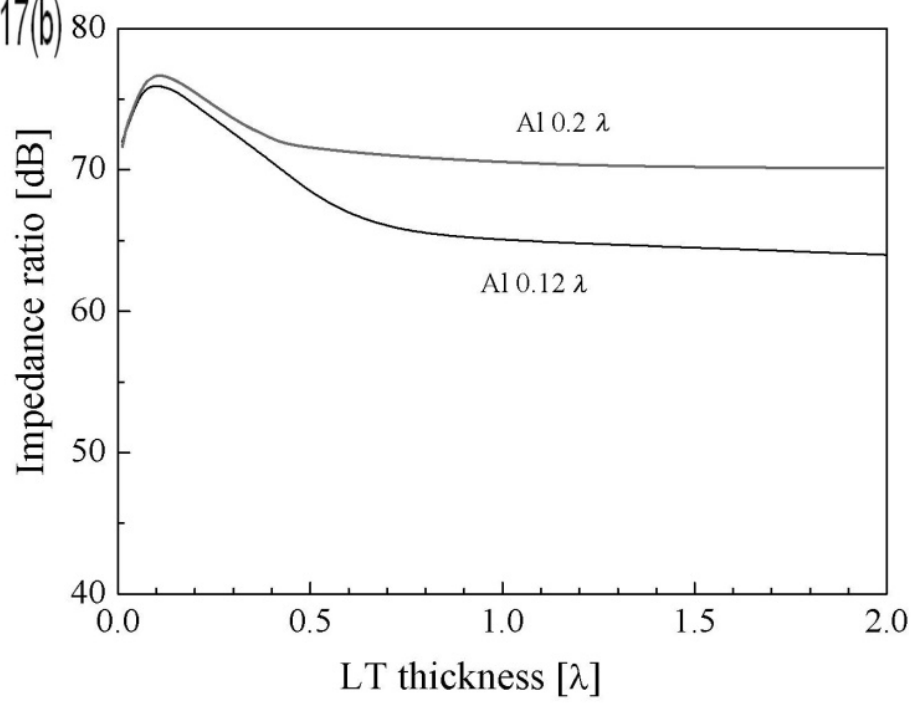
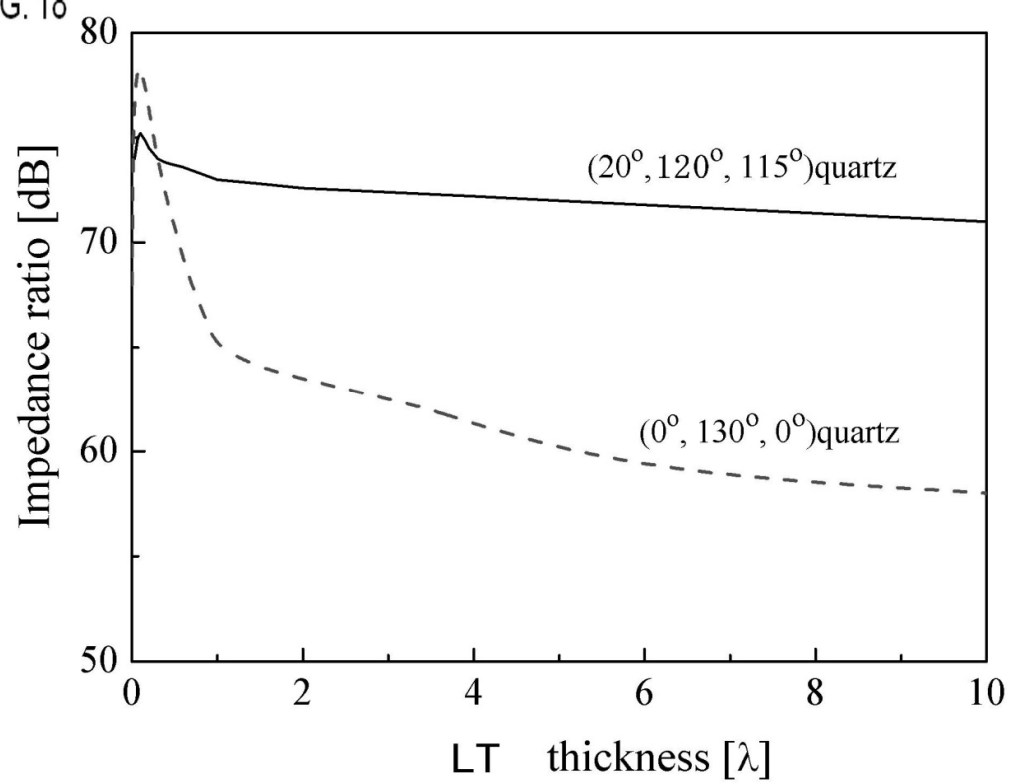


FIG. 18



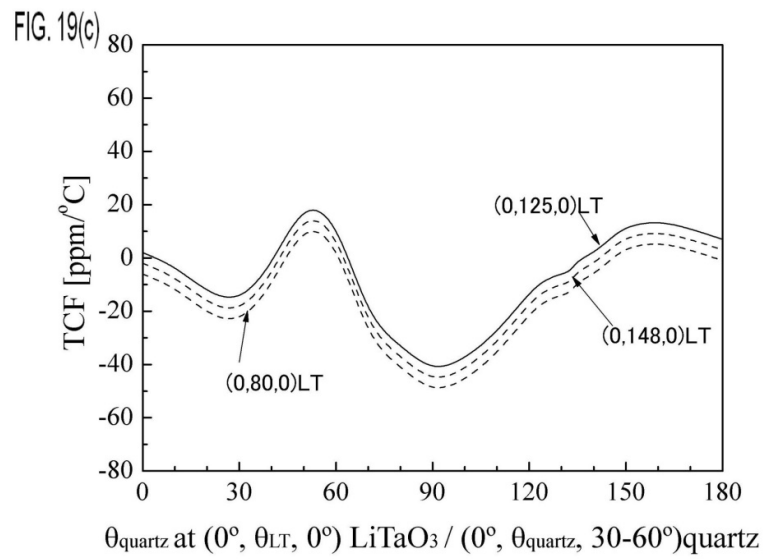
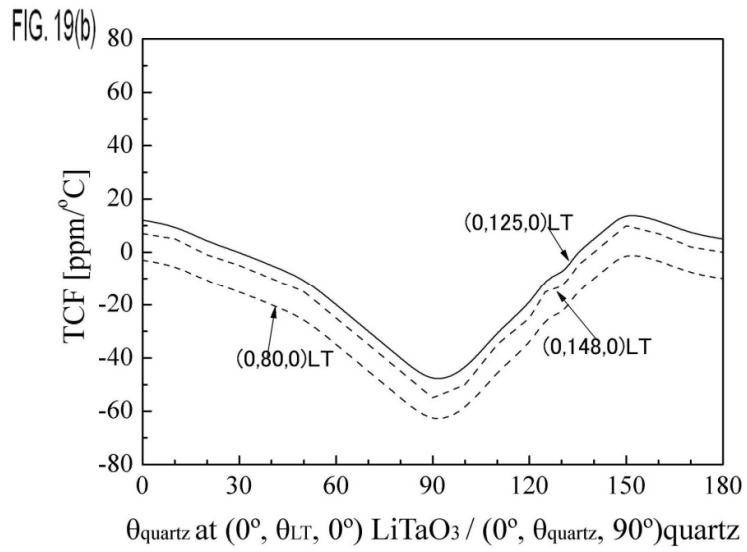
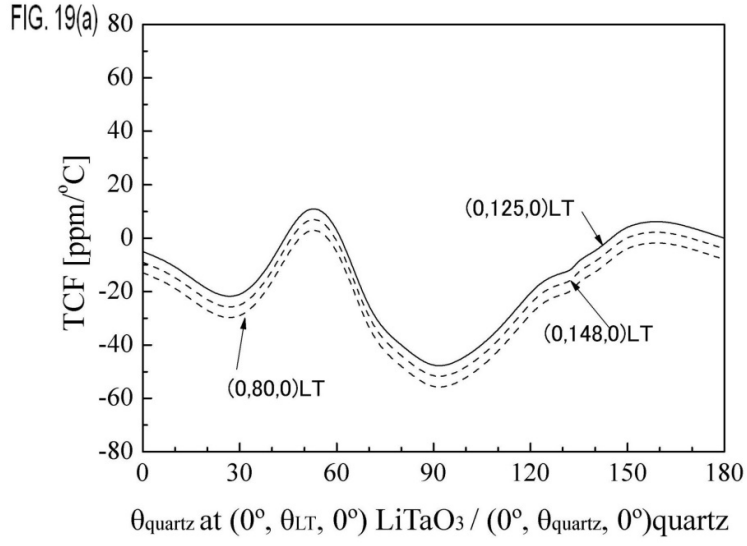


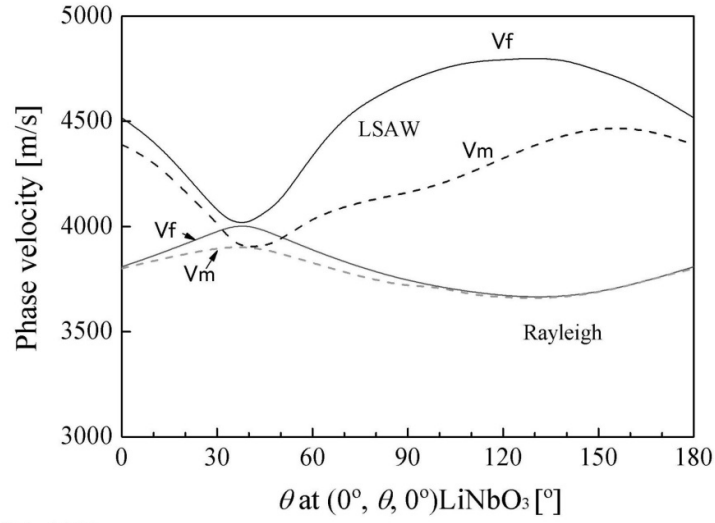
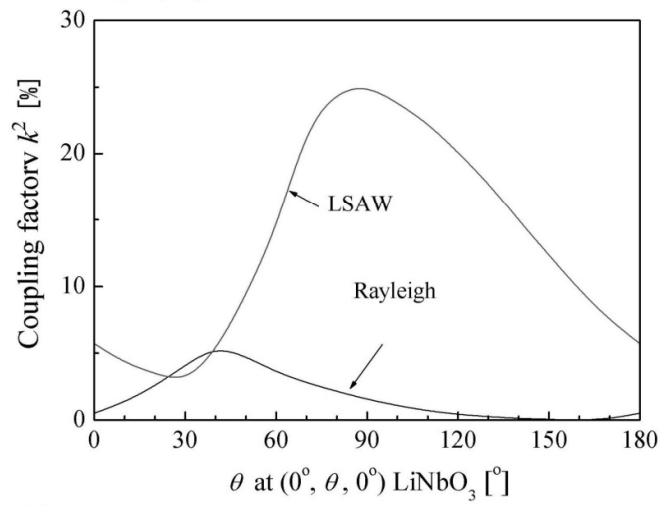
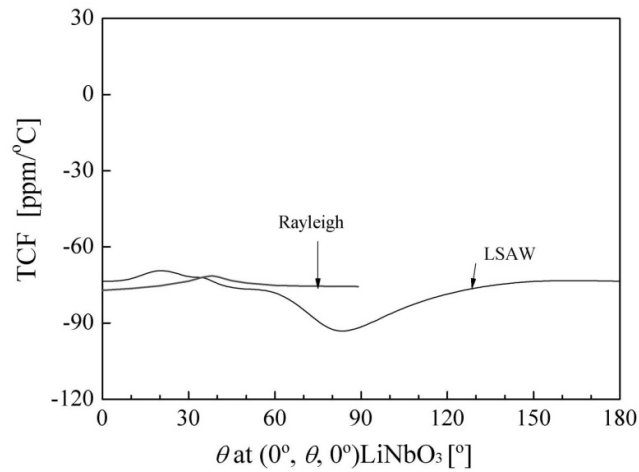
FIG. 20(a)  $(0^\circ, \theta, 0^\circ)$  LNFIG. 20(b)  $(0^\circ, \theta, 0^\circ)$  LNFIG. 20(c)  $(0^\circ, \theta, 0^\circ)$  LN

FIG. 21  $(0^\circ, 131^\circ, 0^\circ)$  LN  $\diagup$   $(0^\circ, 115^\circ, 90^\circ)$  quartz

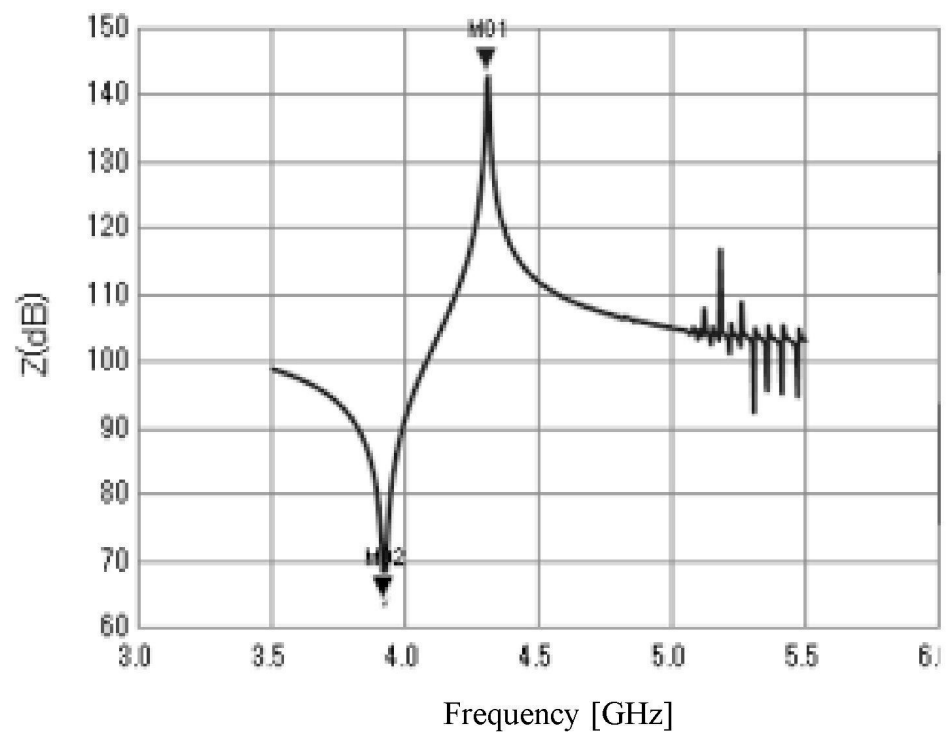


FIG. 22(a)

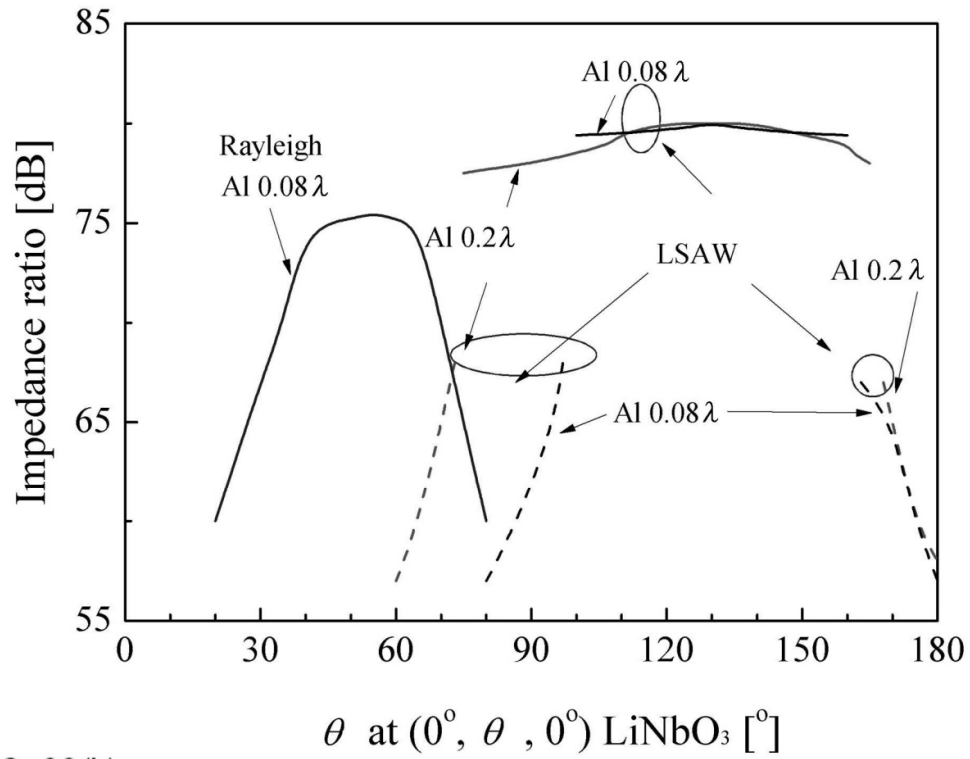
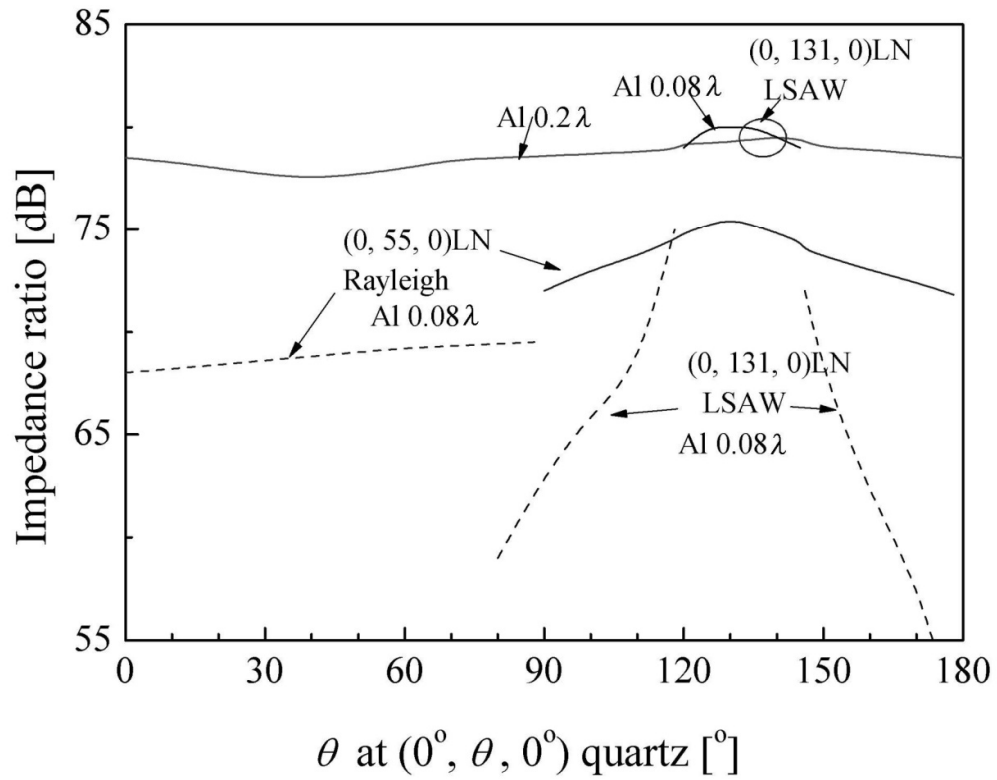


FIG. 22(b)



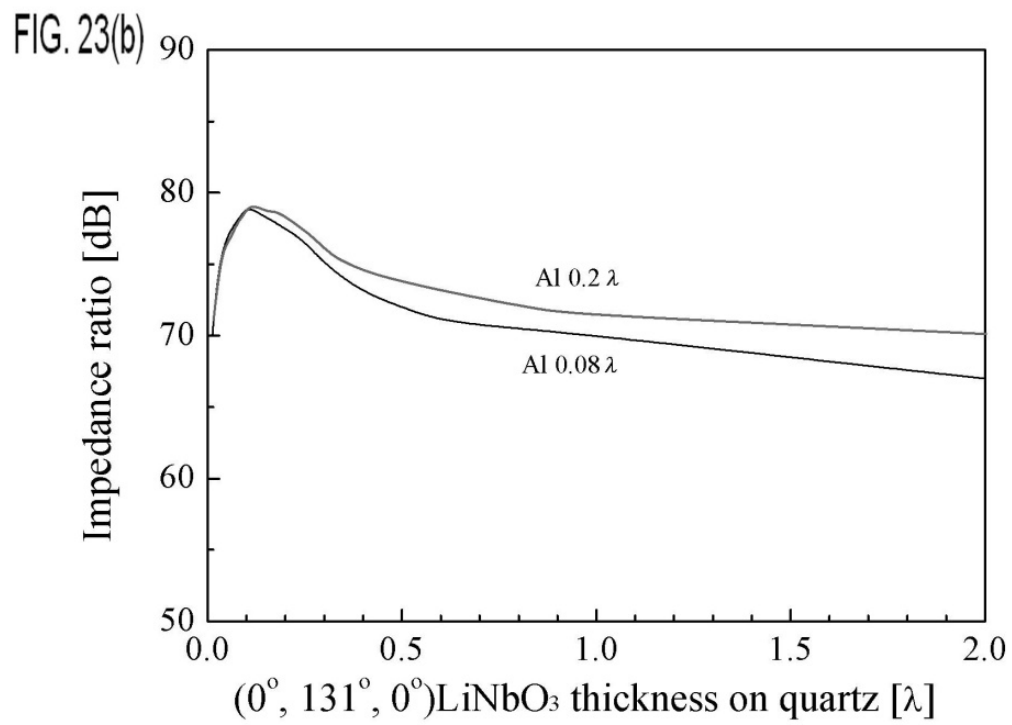
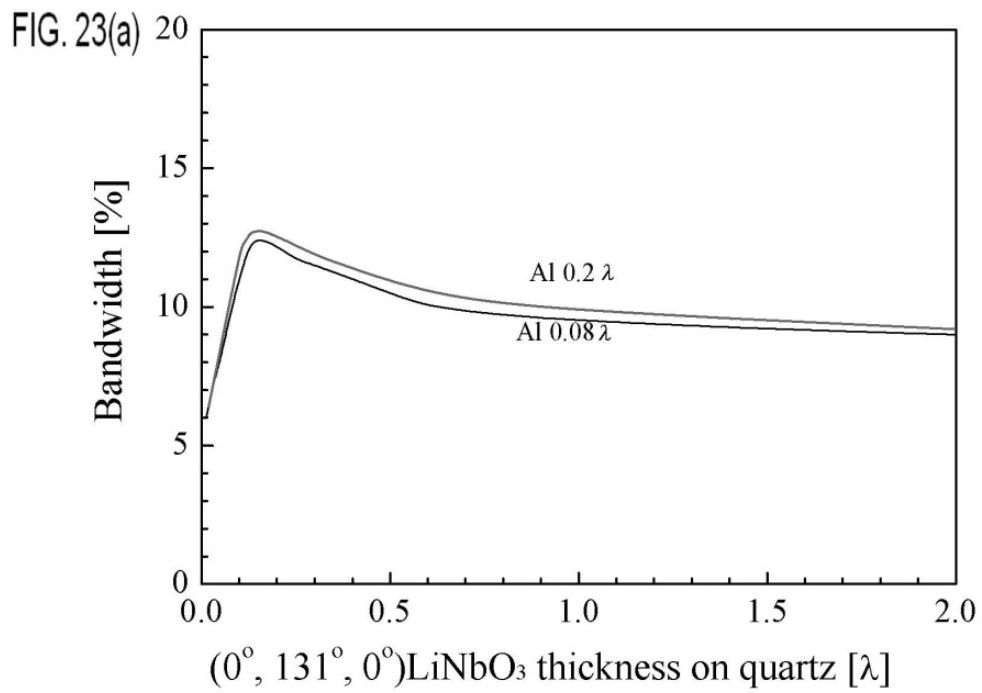


FIG. 24(a)

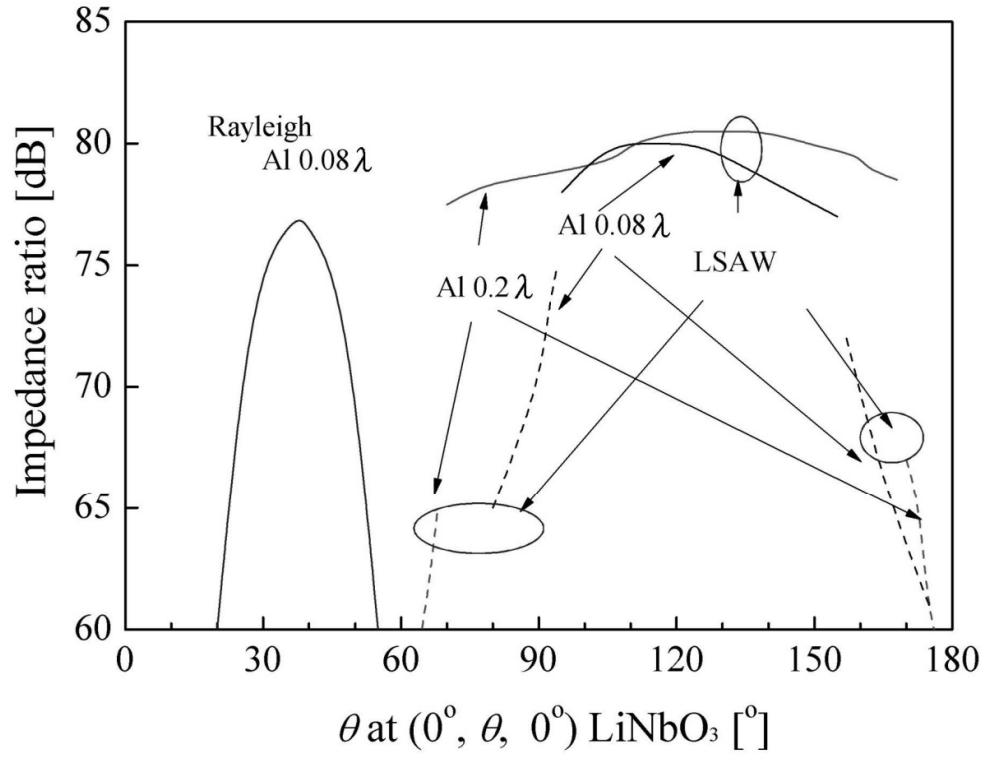
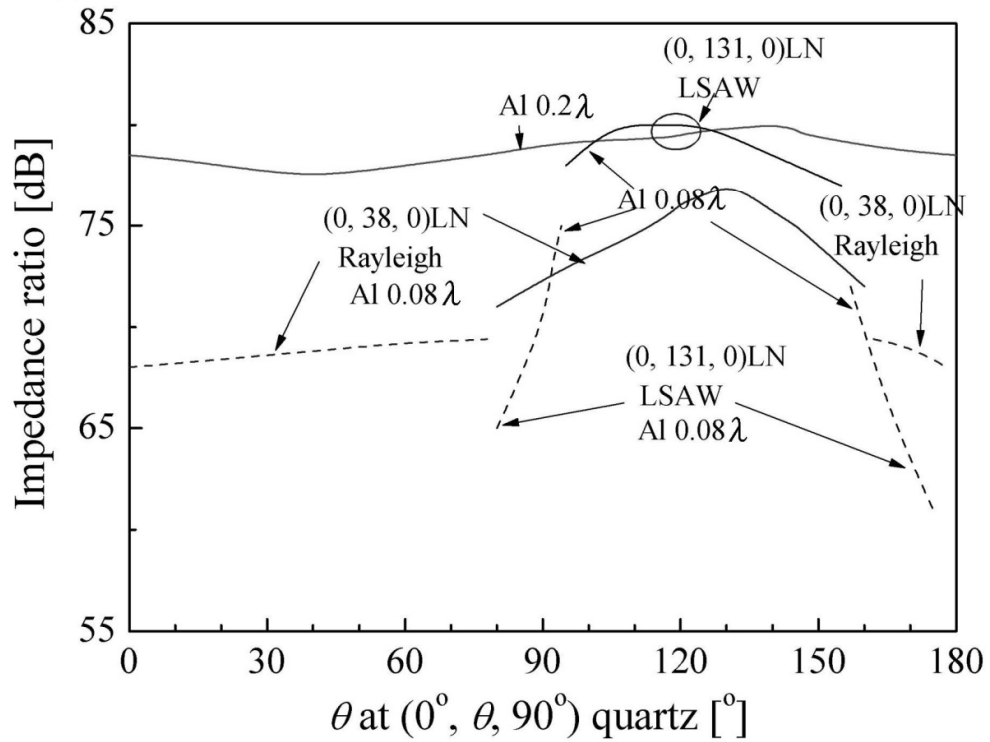
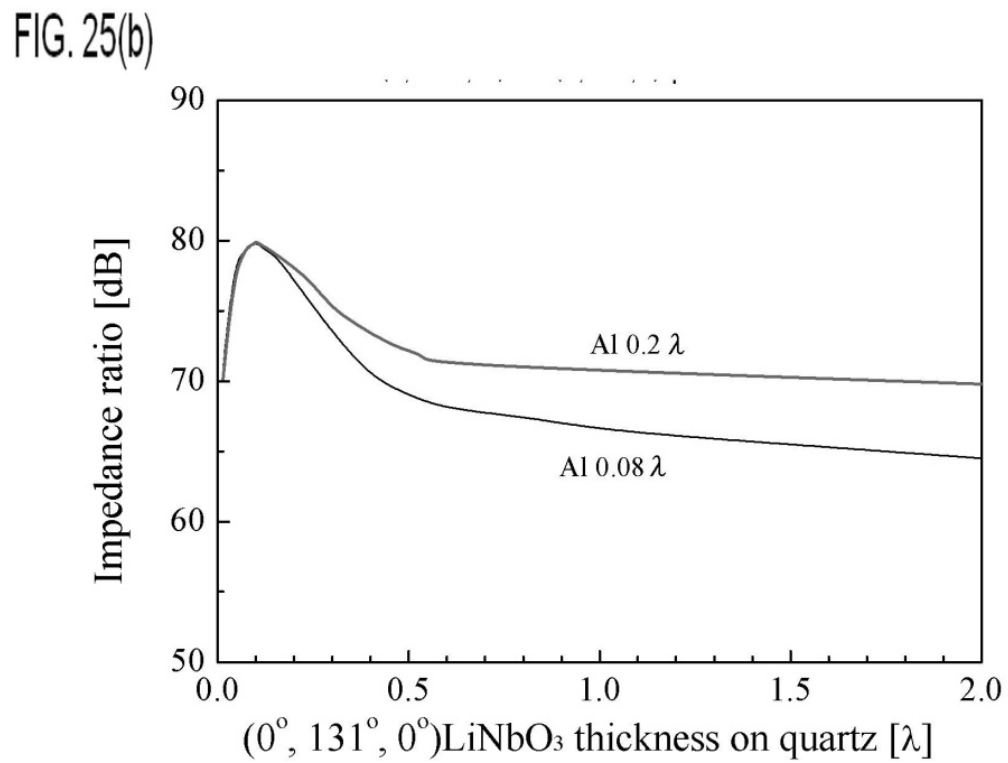
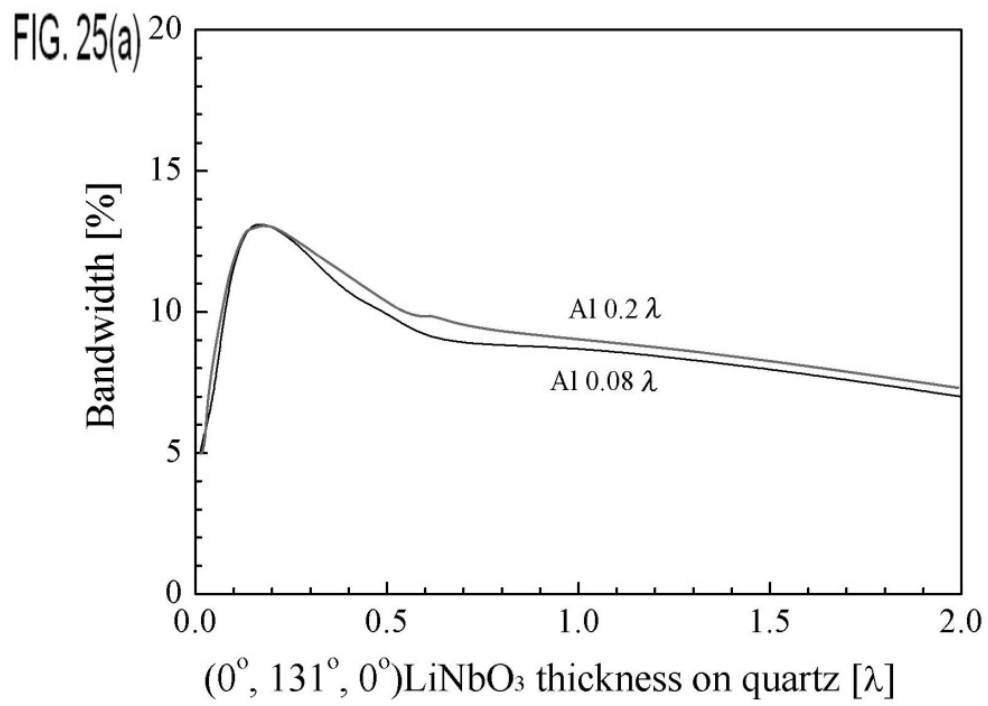


FIG. 24(b)





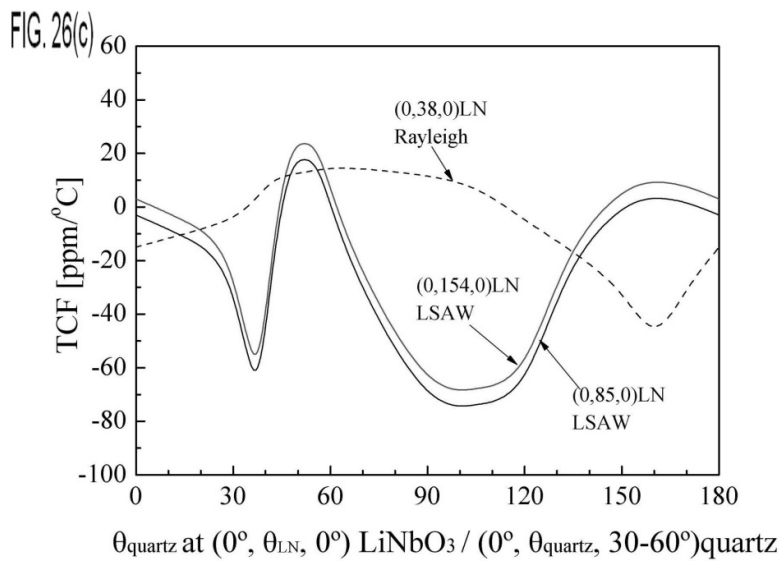
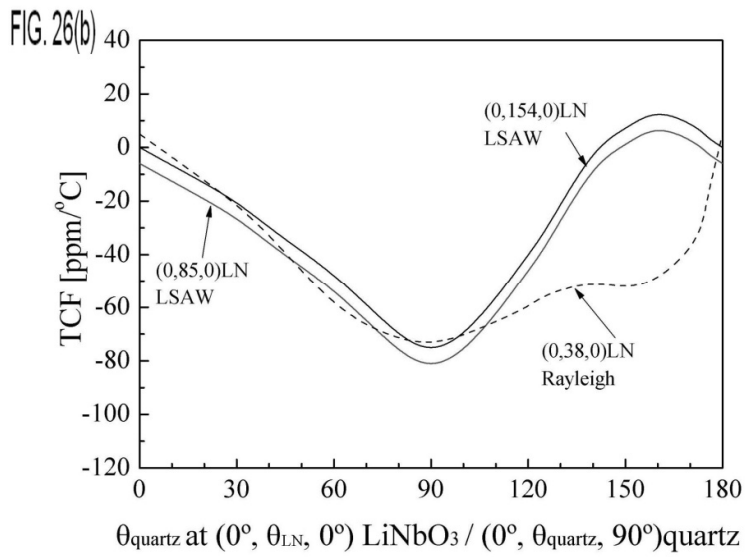
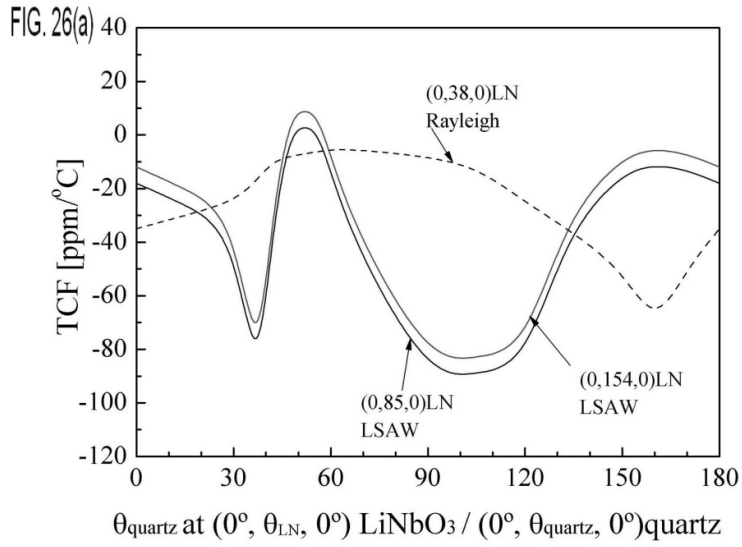


FIG. 27

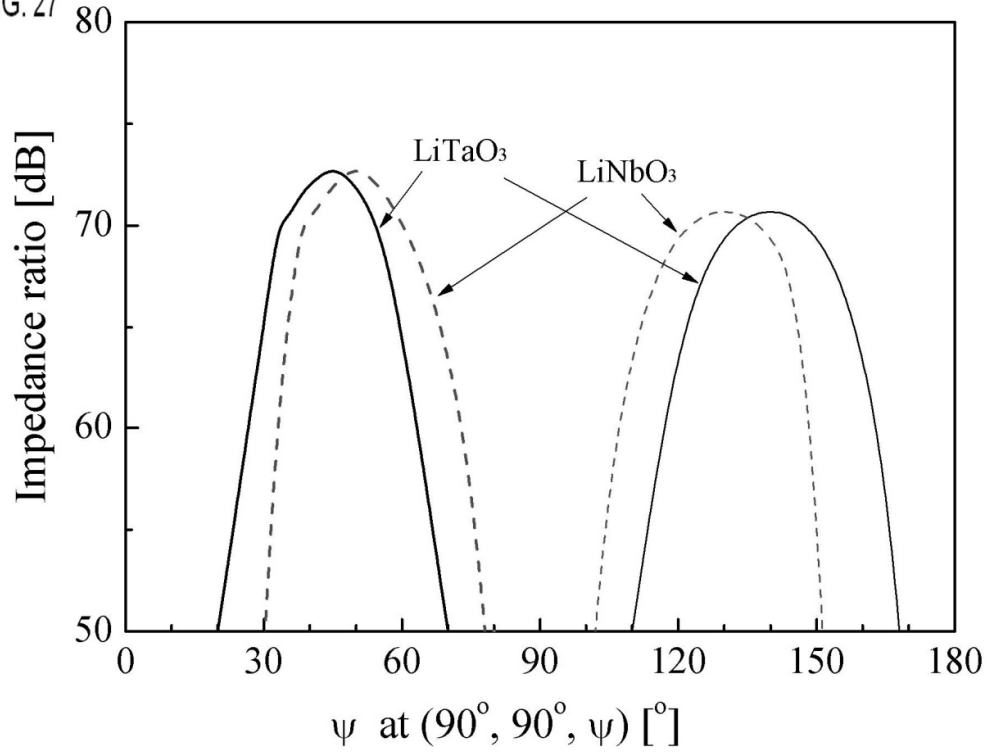


FIG. 28

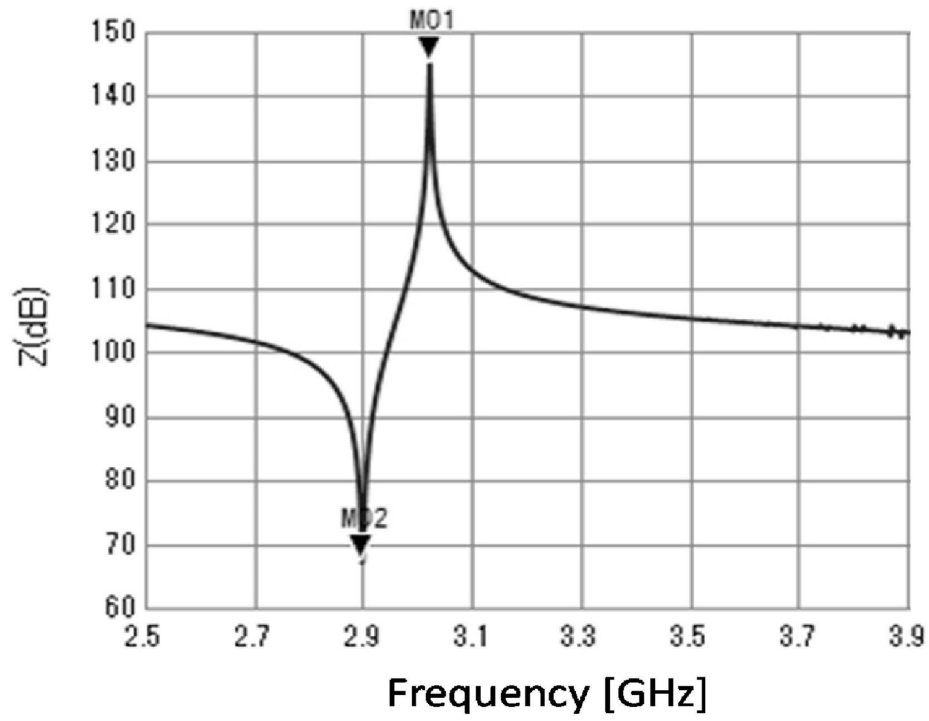


FIG. 29

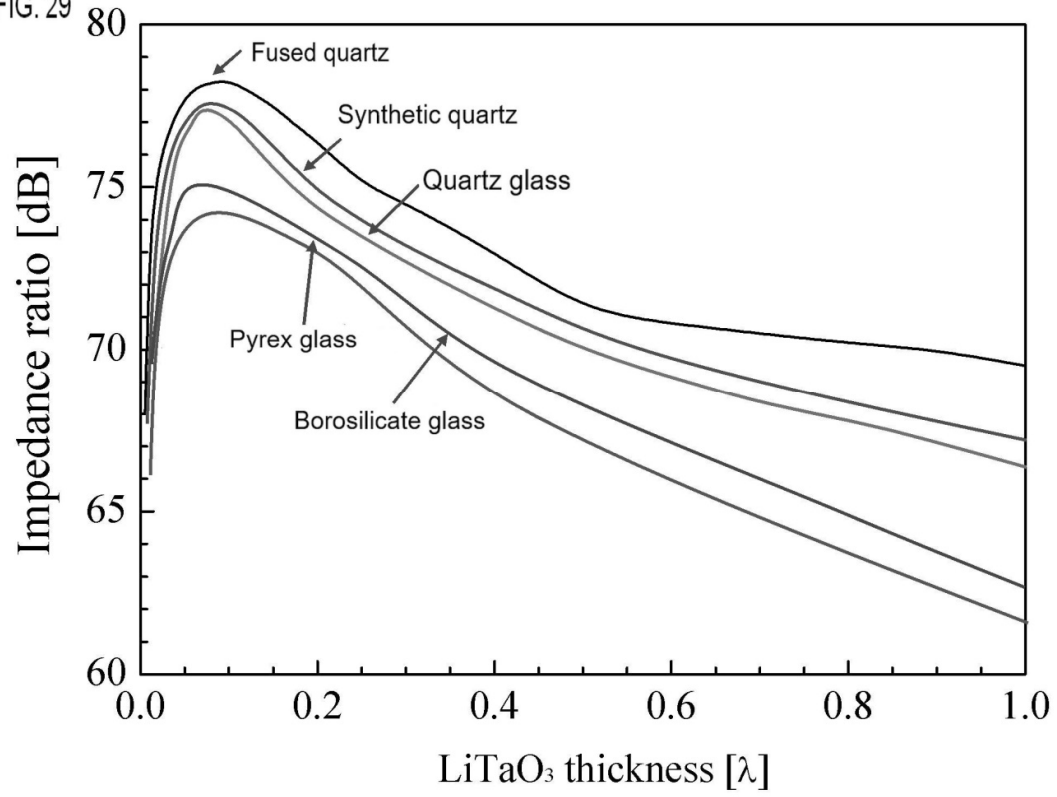


FIG. 30

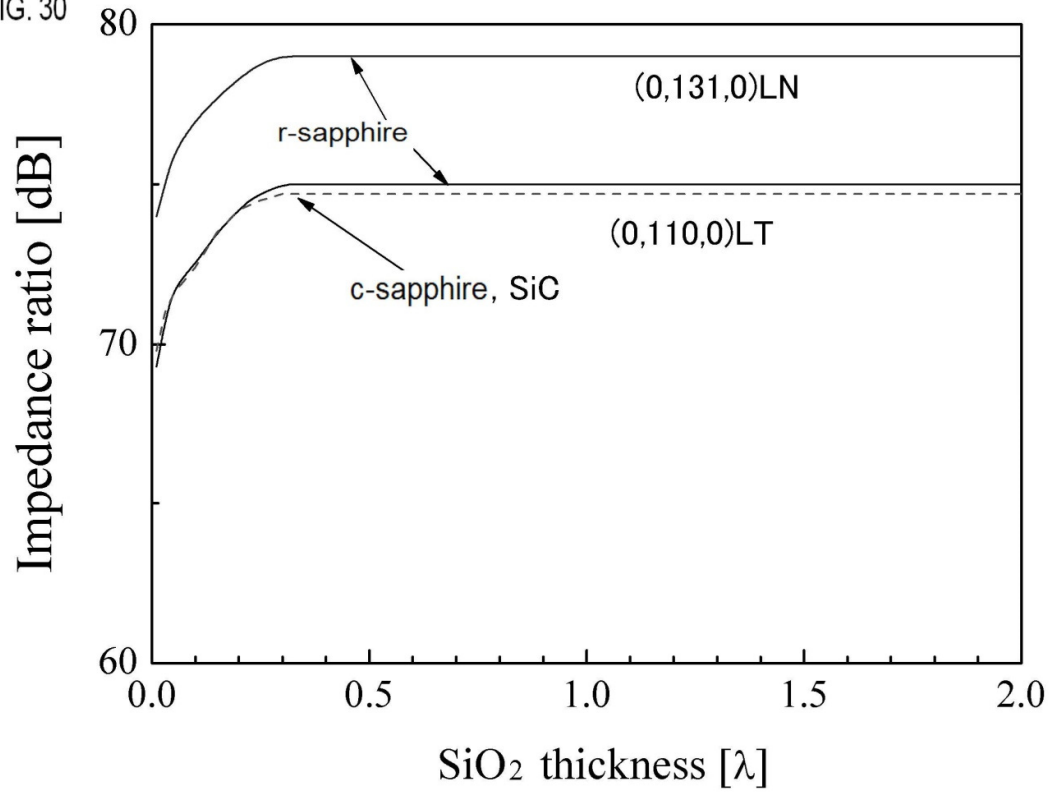


FIG. 31(a)  $(0^\circ, 110^\circ, 0^\circ)$ LT/ $(0^\circ, 132.75^\circ, 90^\circ)$  quartz

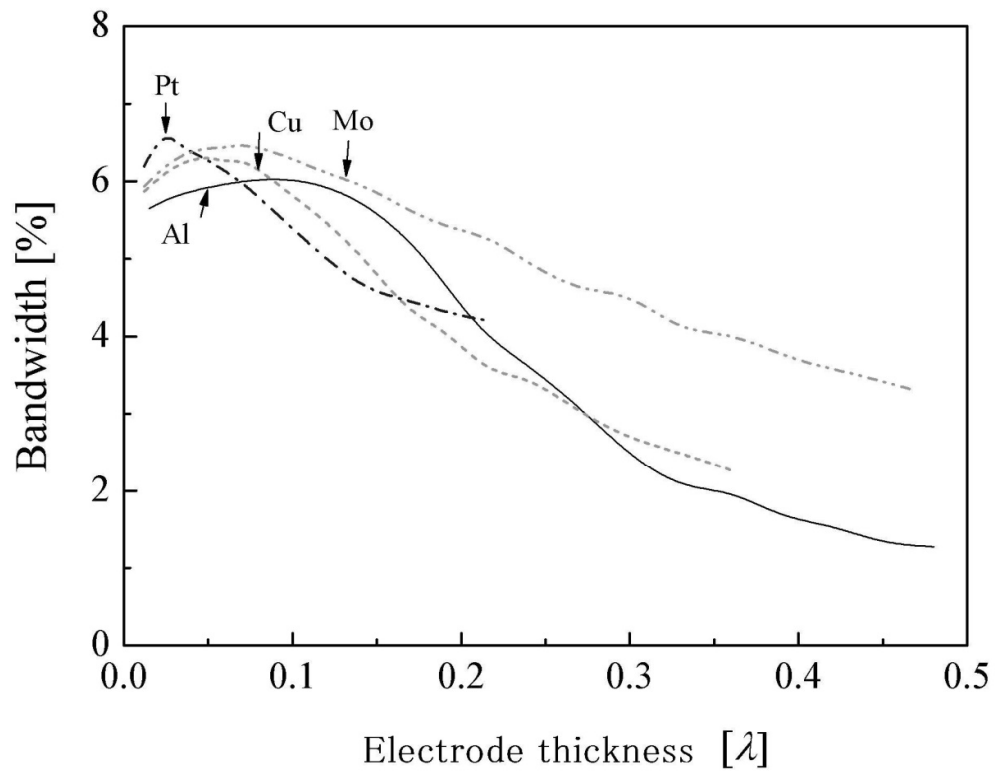


FIG. 31(b)  $(0^\circ, 110^\circ, 0^\circ)$ LT/ $(0^\circ, 132.75^\circ, 90^\circ)$  quartz

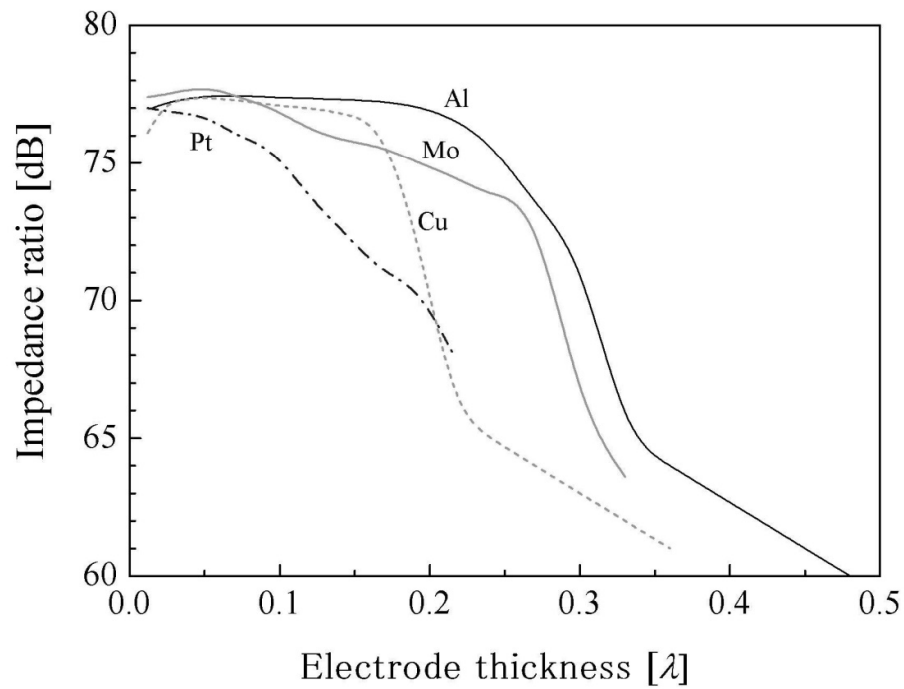


FIG. 32(a)  $(0^\circ, 110^\circ, 0^\circ)$  LT /  $(0^\circ, 132.75^\circ, 90^\circ)$  quartz

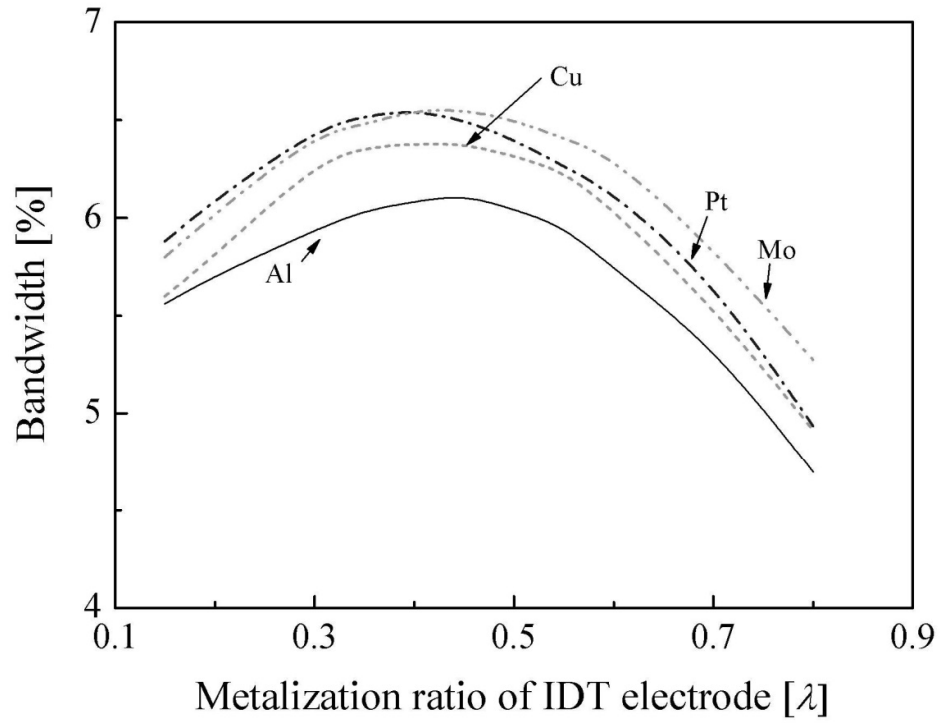
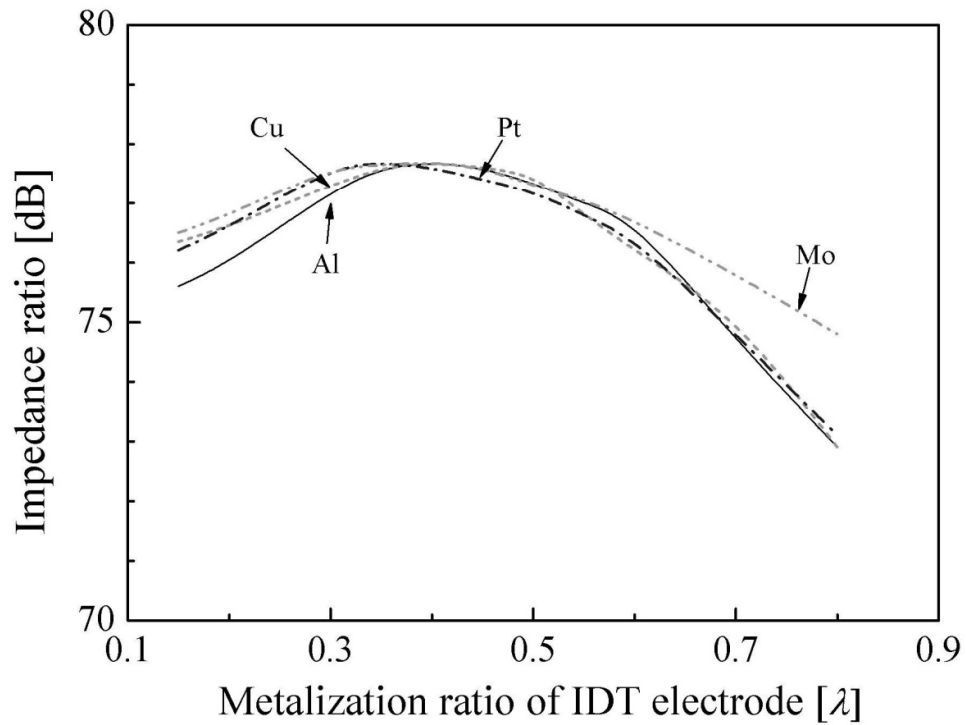


FIG. 32(b)  $(0^\circ, 110^\circ, 0^\circ)$  LT /  $(0^\circ, 132.75^\circ, 90^\circ)$  quartz



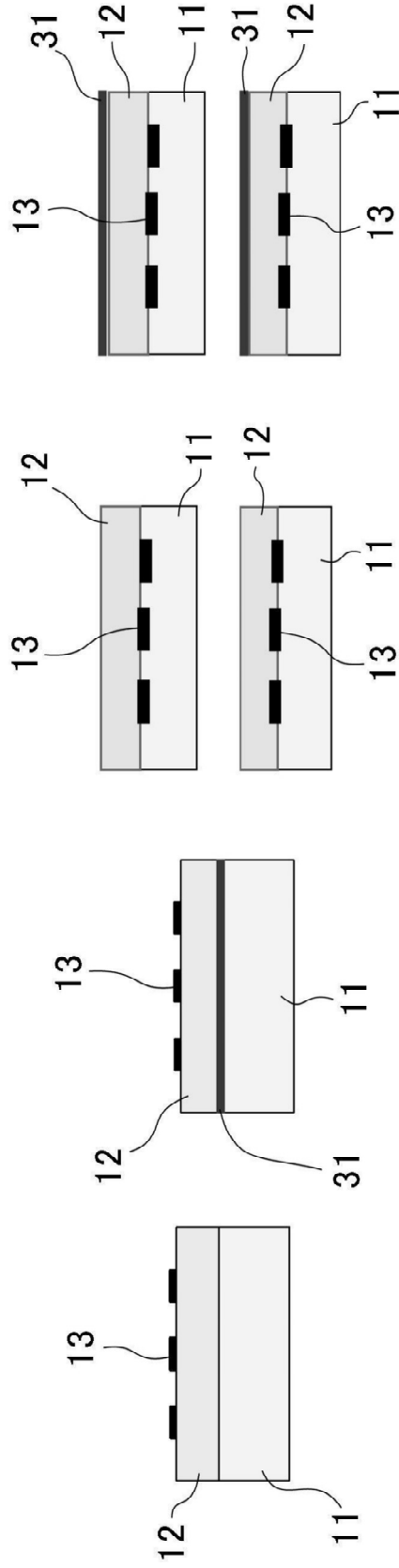


FIG. 33(a) IDT/LT/quartz

FIG. 33(b) IDT/LT/shunt electrode/quartz

FIG. 33(c) LT/IDT/quartz

FIG. 33(d) Shunt electrode / LT/IDT/quartz

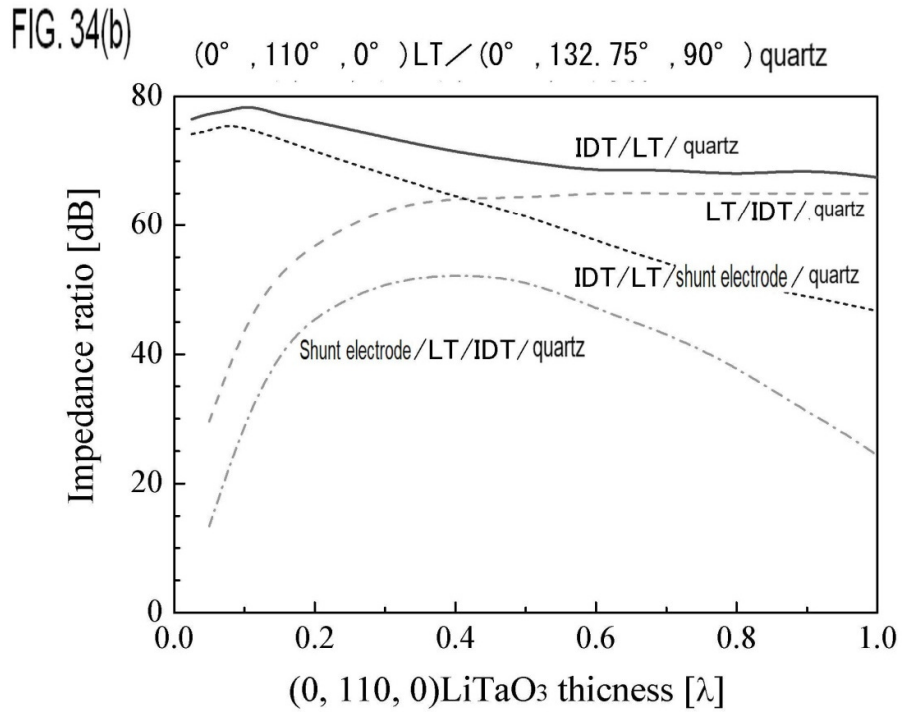
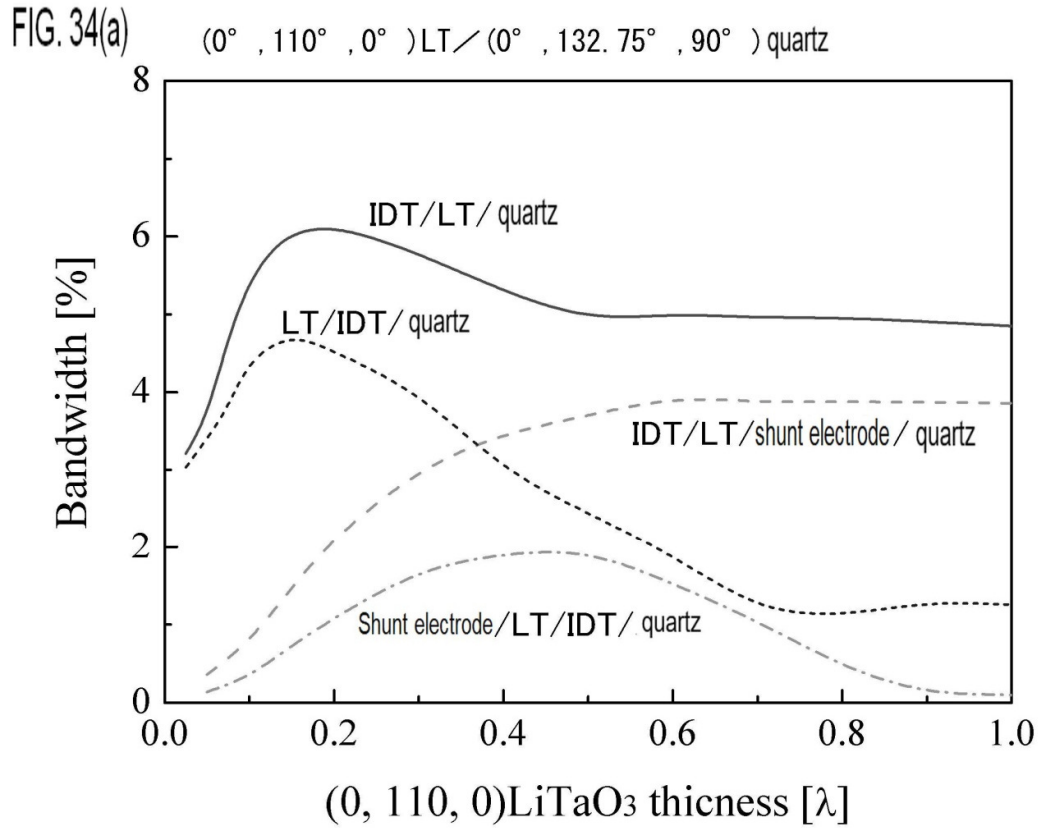


FIG. 35

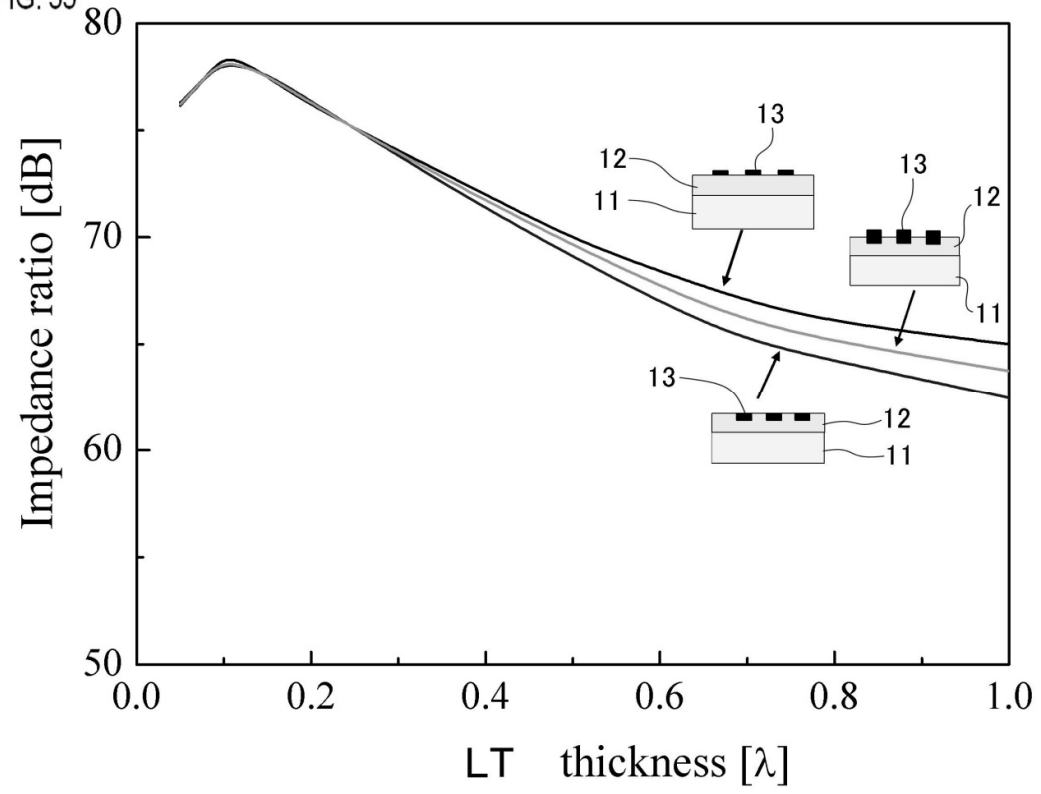


FIG. 36(a)  $(0^\circ, 110^\circ, 0^\circ)$  LT / Boundary film /  $(0^\circ, 132.75^\circ, 90^\circ)$  quartz

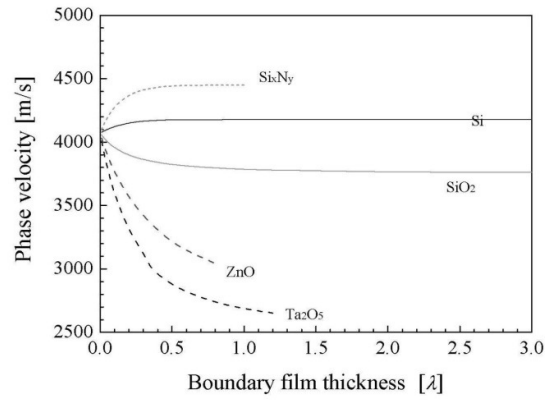


FIG. 36(b)  $(0^\circ, 110^\circ, 0^\circ)$  LT / Boundary film /  $(0^\circ, 132.75^\circ, 90^\circ)$  quartz

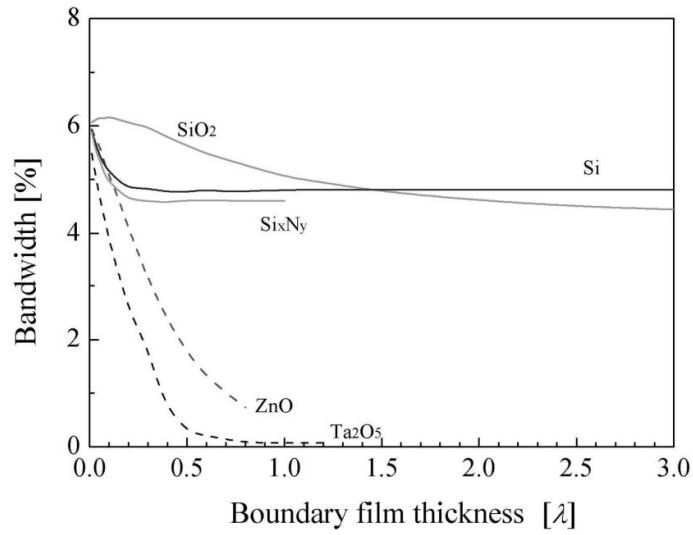
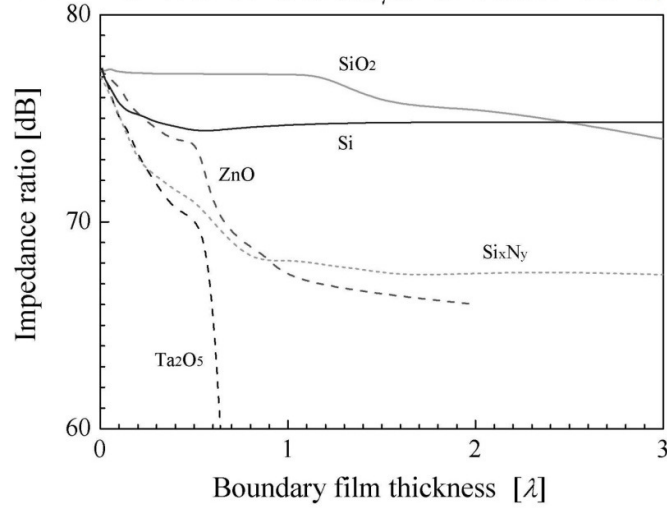


FIG. 36(c)  $(0^\circ, 110^\circ, 0^\circ)$  LT / Boundary film /  $(0^\circ, 132.75^\circ, 90^\circ)$  quartz



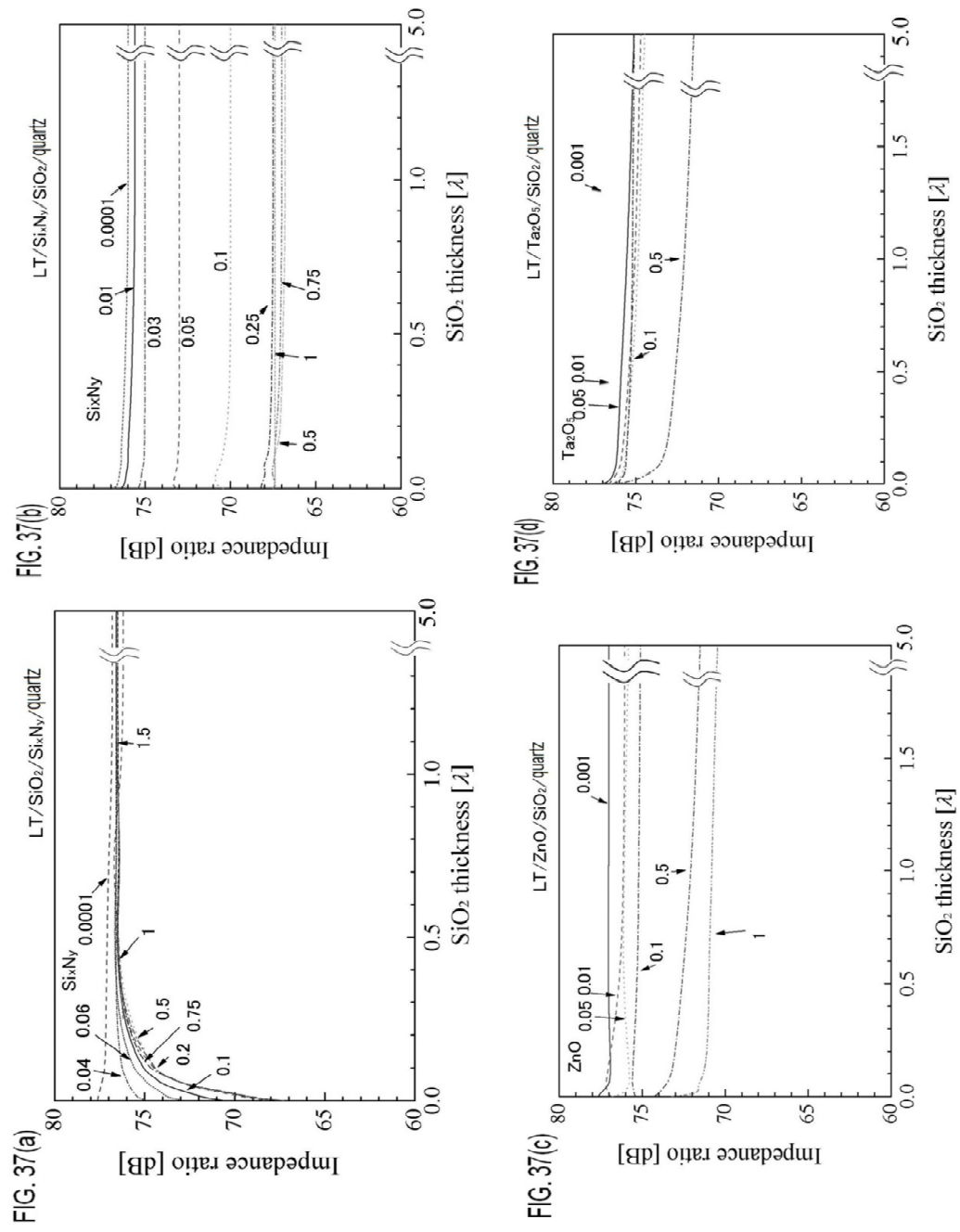


FIG. 38(a)

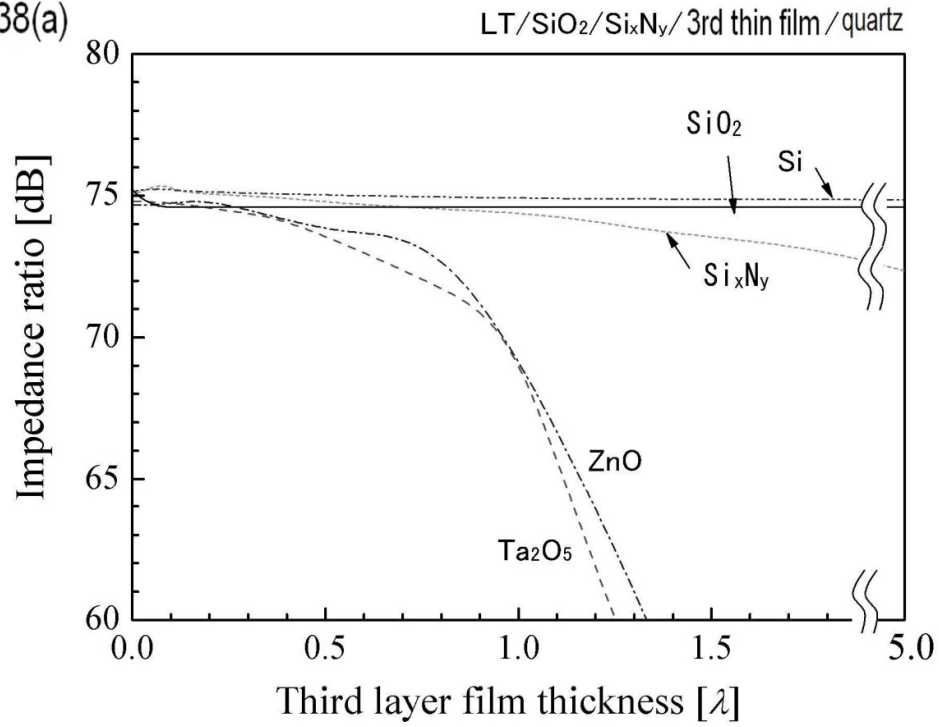


FIG. 38(b)

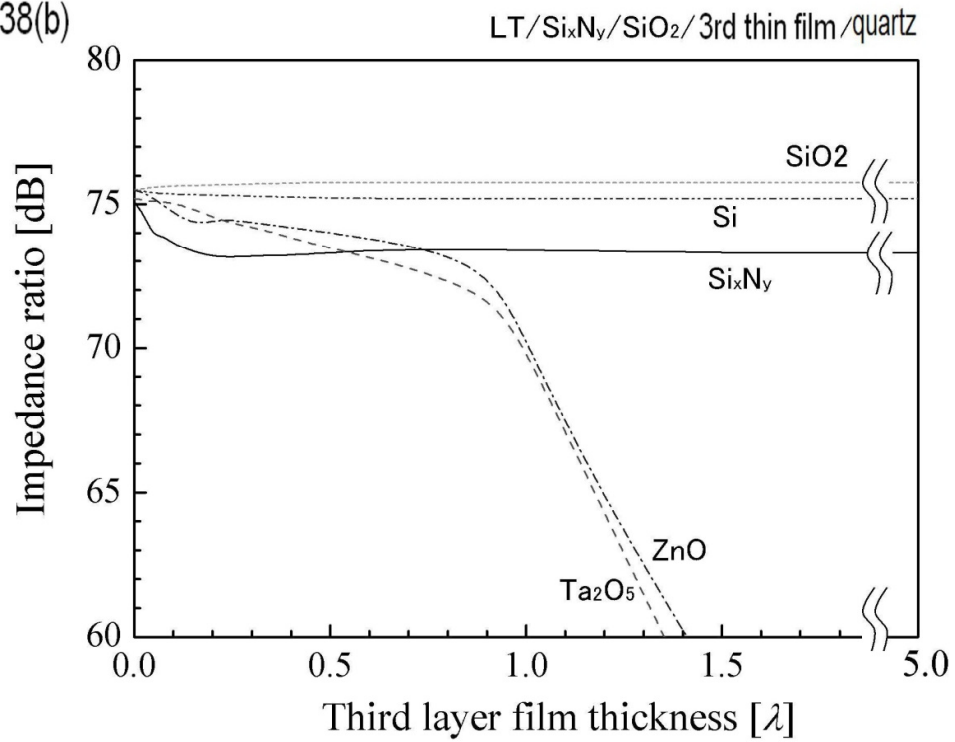


FIG. 39

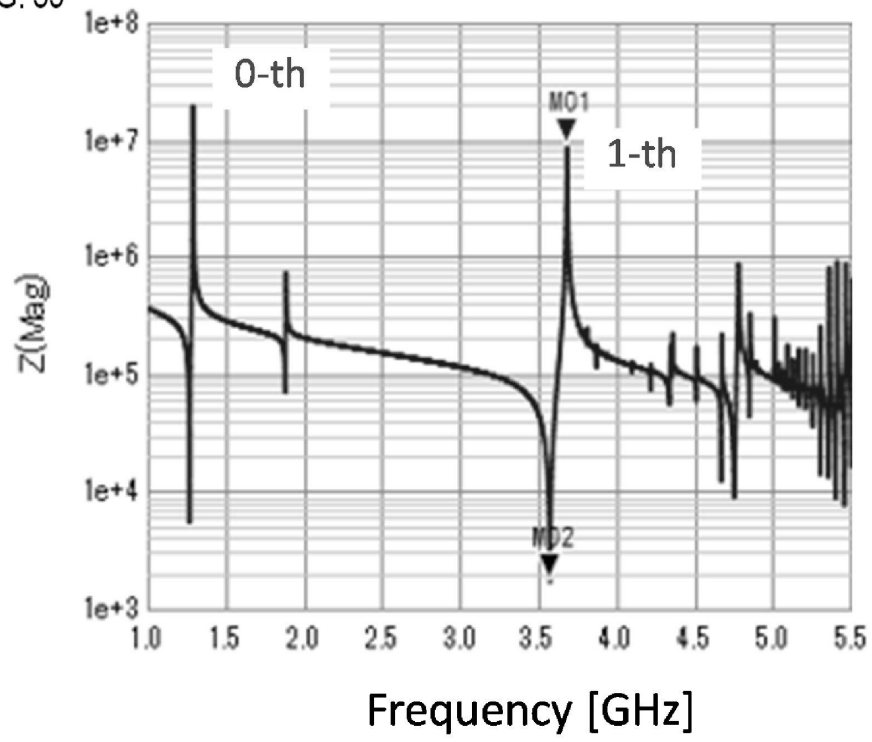
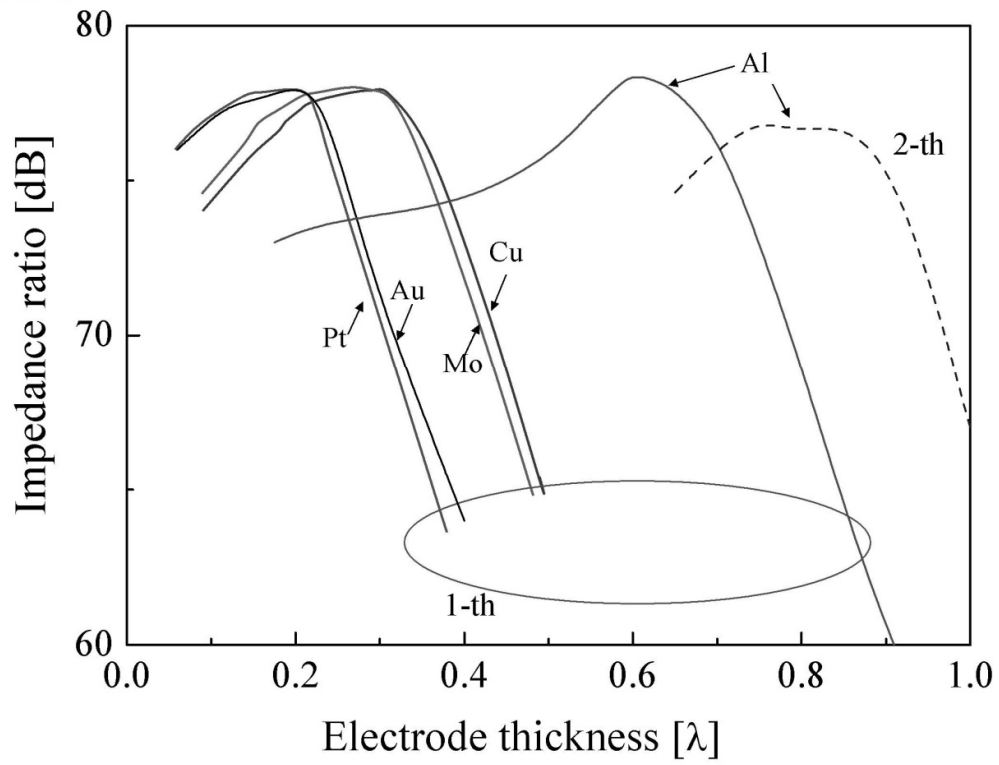


FIG. 40



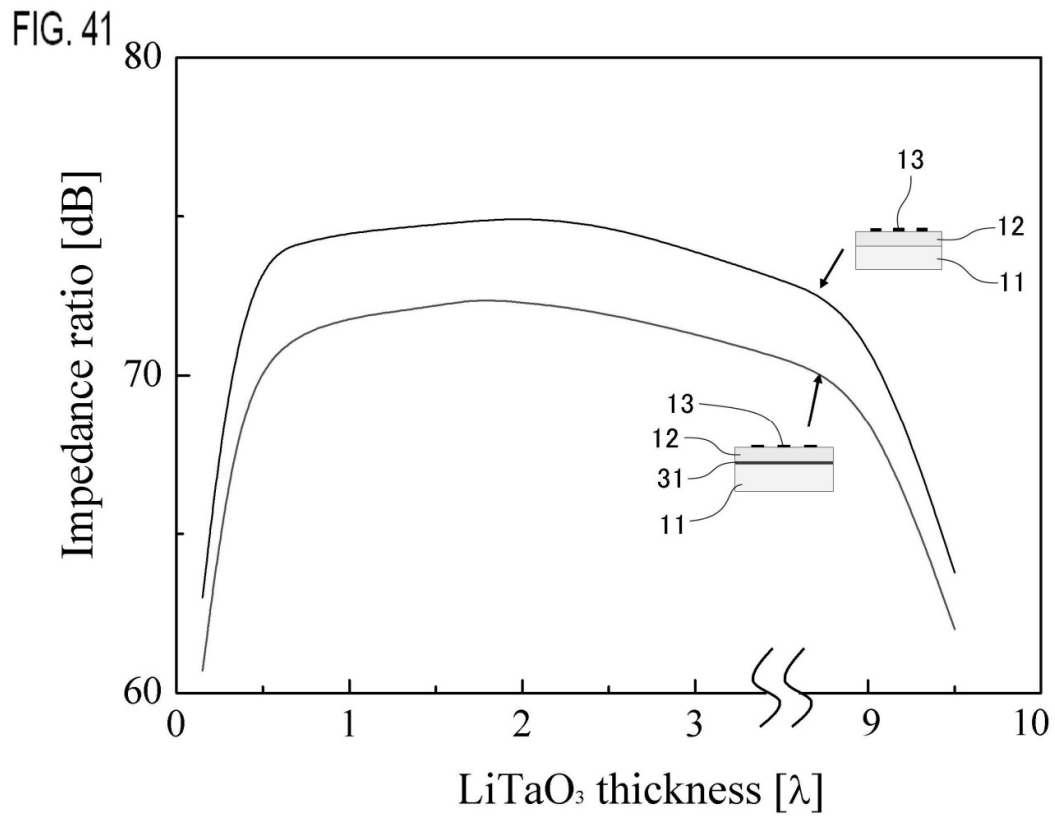


FIG. 42(a)

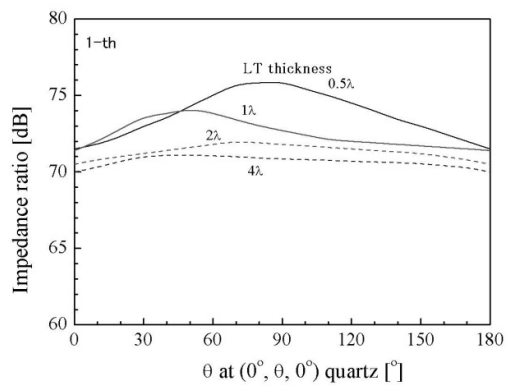


FIG. 42(b)

