

Drawings

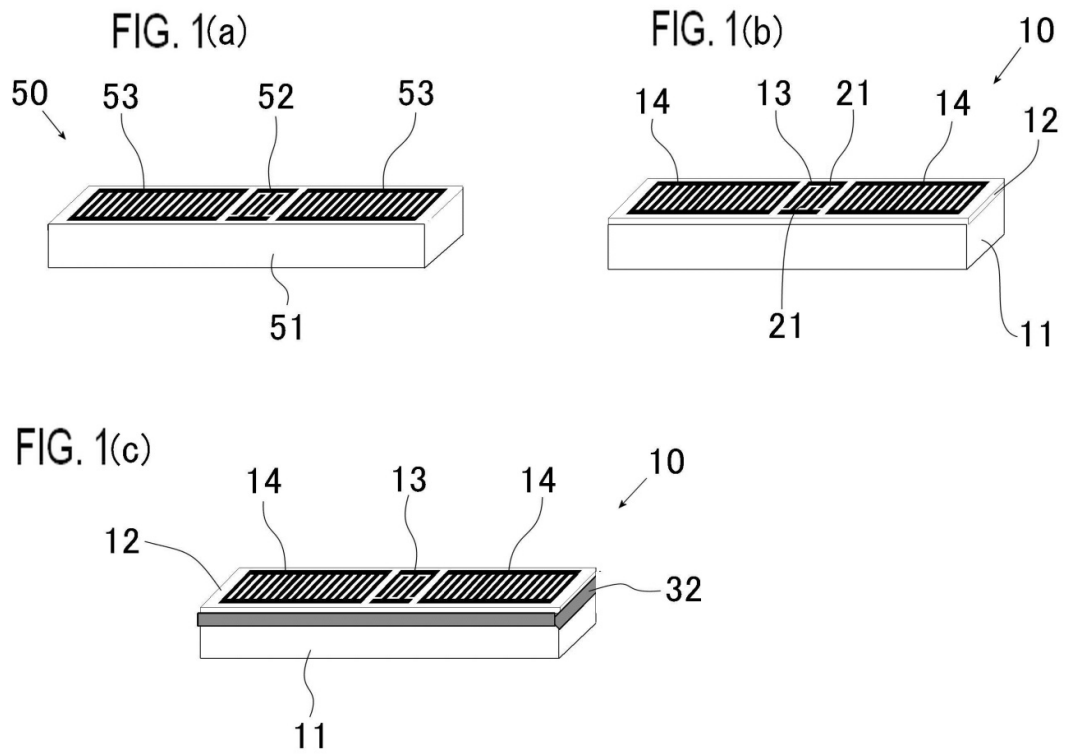


FIG.2(a) (0° , 110° , 0°)LT

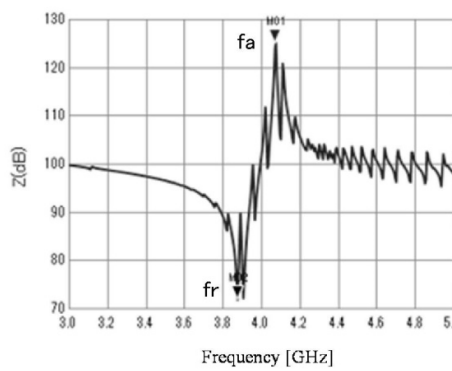


FIG.2(b) (0° , 132° , 0°)LT

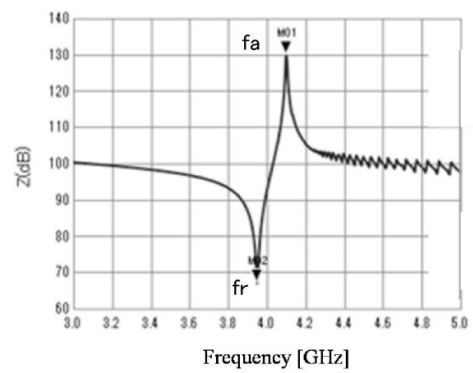


FIG. 3(a) $(0^\circ, 110^\circ, 0^\circ)$ LT/ $(0^\circ, 130^\circ, 90^\circ)$ quartz

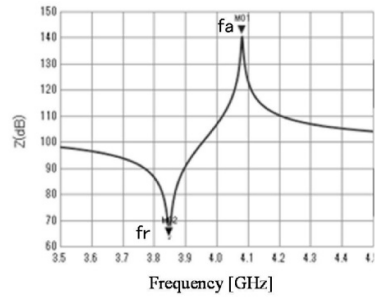


FIG. 3(b) $(0^\circ, 120^\circ, 0^\circ)$ LT/ $(0^\circ, 130^\circ, 0^\circ)$ quartz

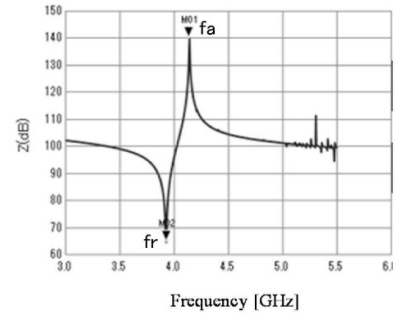


FIG. 4(a) $(0^\circ, 110^\circ, 0^\circ)$ LT/ $(0^\circ, 130^\circ, 30^\circ)$ quartz

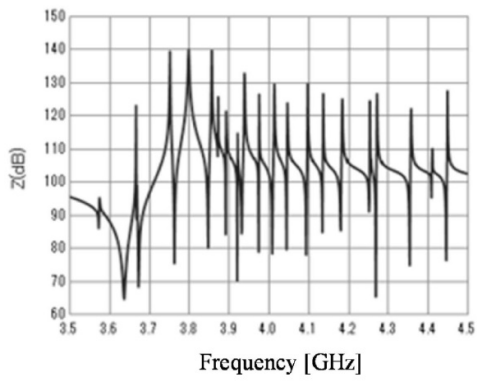


FIG. 4(b) $(0^\circ, 110^\circ, 0^\circ)$ LT/ $(0^\circ, 130^\circ, 60^\circ)$ quartz

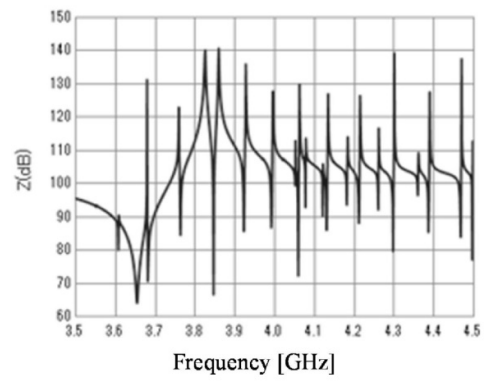


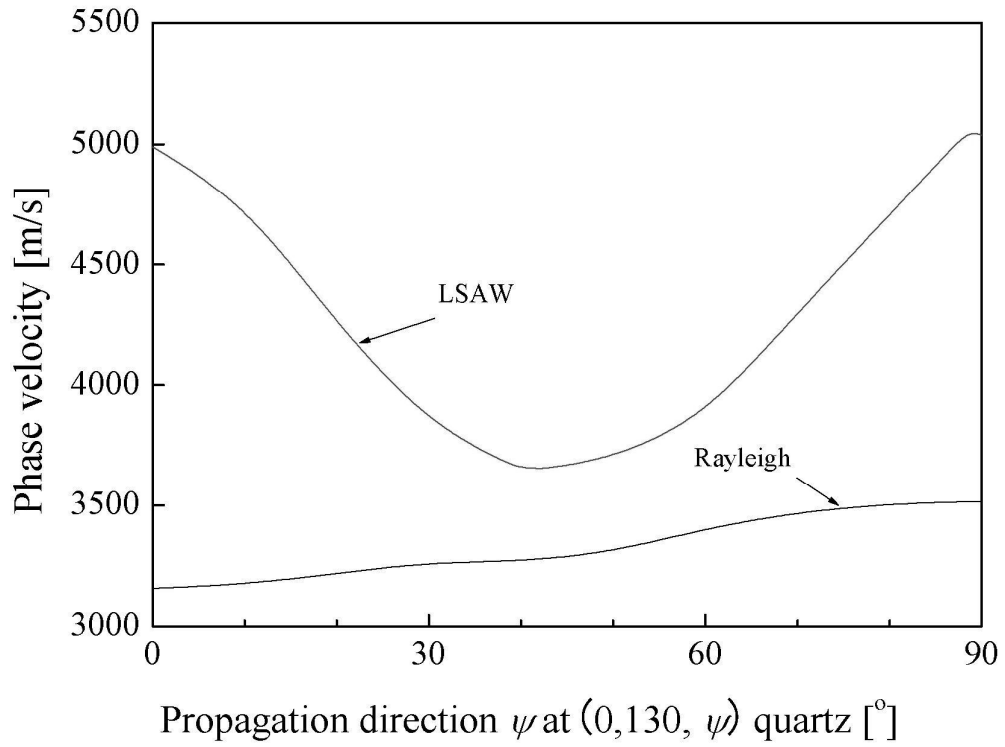
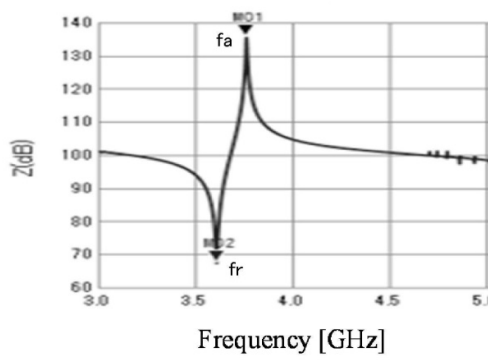
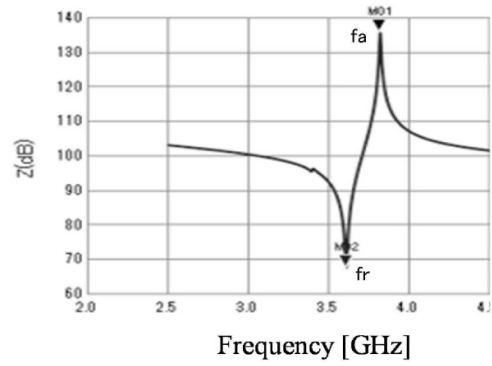
FIG. 5 $(0^\circ, 130^\circ, \psi)$ quartzFIG. 6(a) $(0^\circ, 132^\circ, 0^\circ)$ LT/(110) Si substrateFIG. 6(b) $(0^\circ, 132^\circ, 0^\circ)$ LT/c-sapphire substrate

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

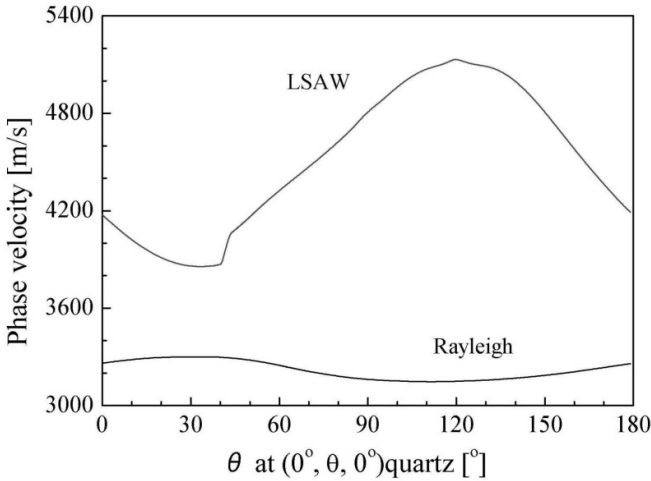


FIG. 7(b) $(0^\circ, \theta, 0^\circ)$ quartz

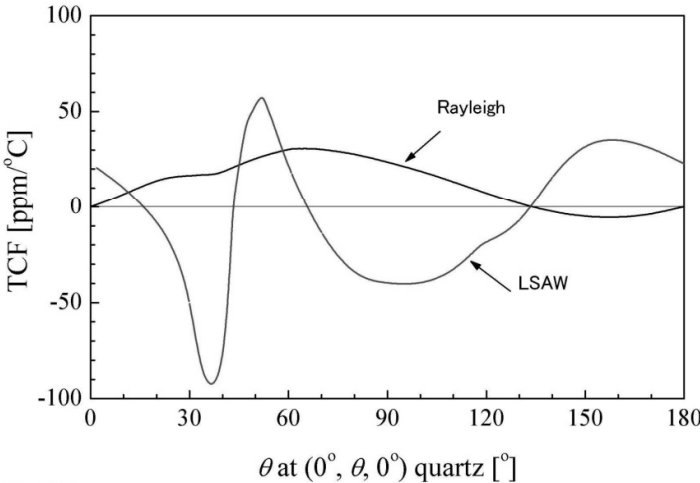


FIG. 7(c) $(0^\circ, \theta, 0^\circ)$ quartz

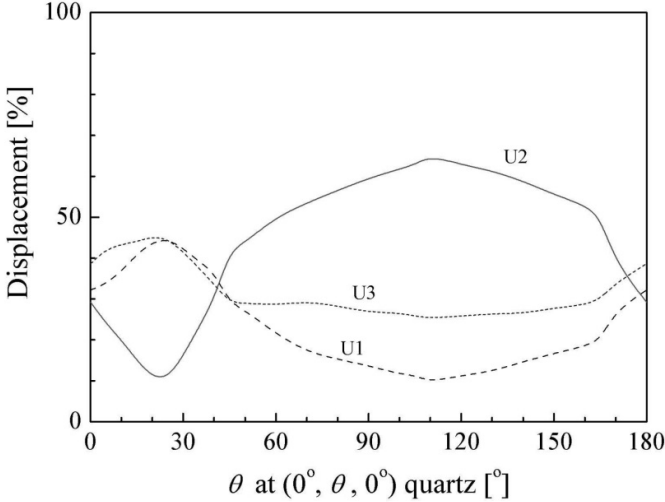


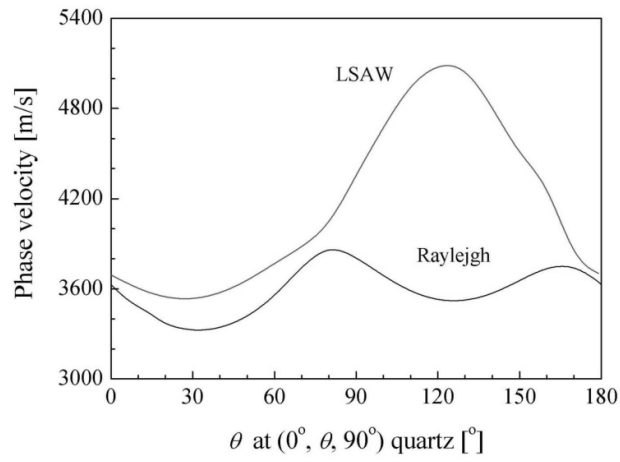
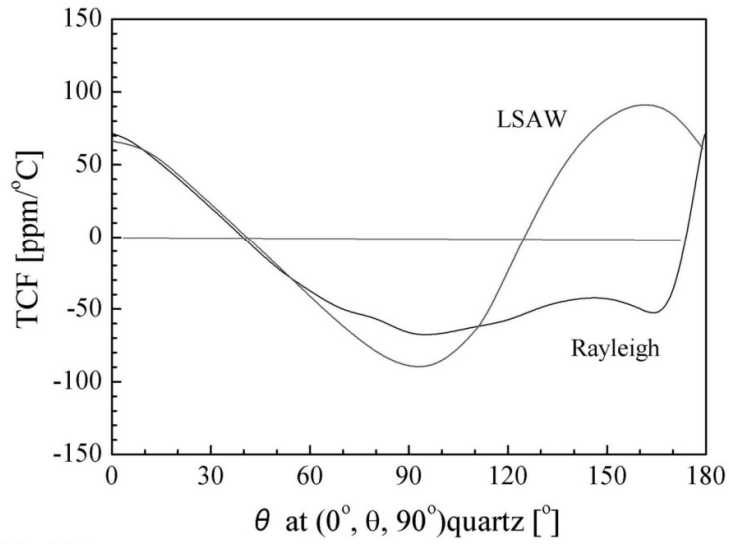
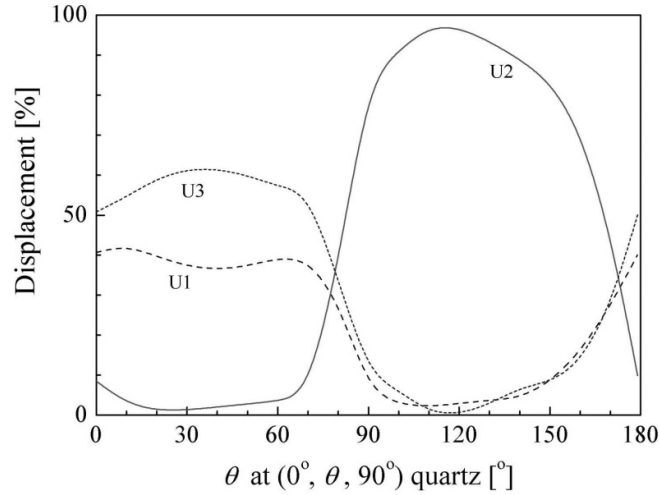
FIG. 8(a) $(0^\circ, \theta, 90^\circ)$ quartzFIG. 8(b) $(0^\circ, \theta, 90^\circ)$ quartzFIG. 8(c) $(0^\circ, \theta, 90^\circ)$ quartz

FIG. 9

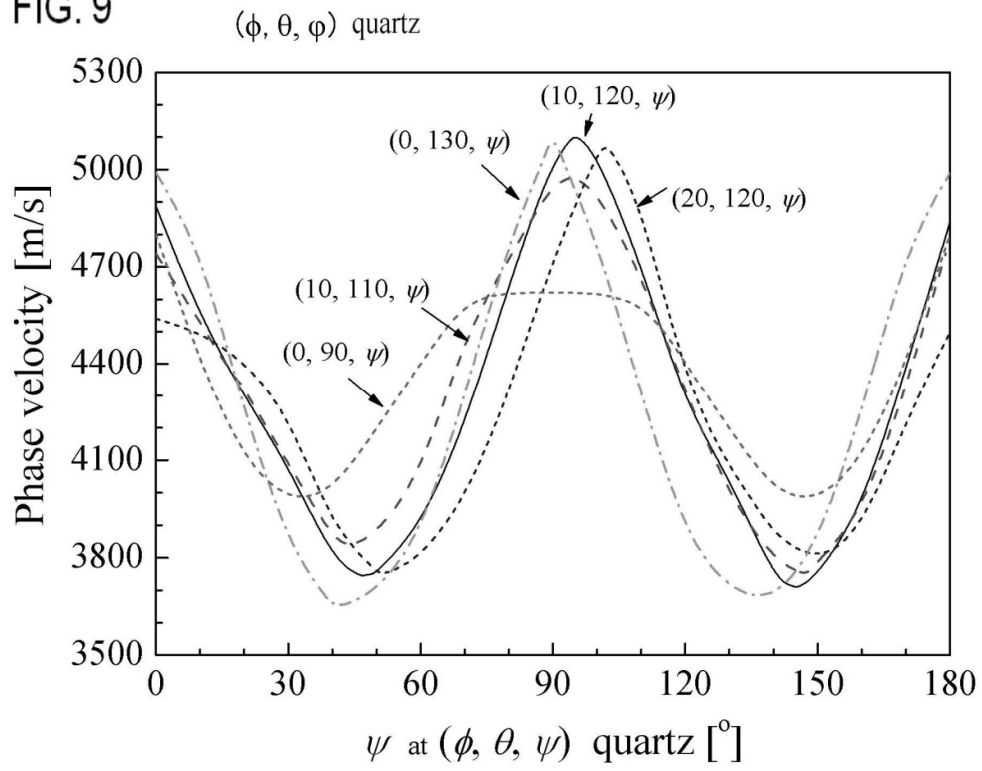


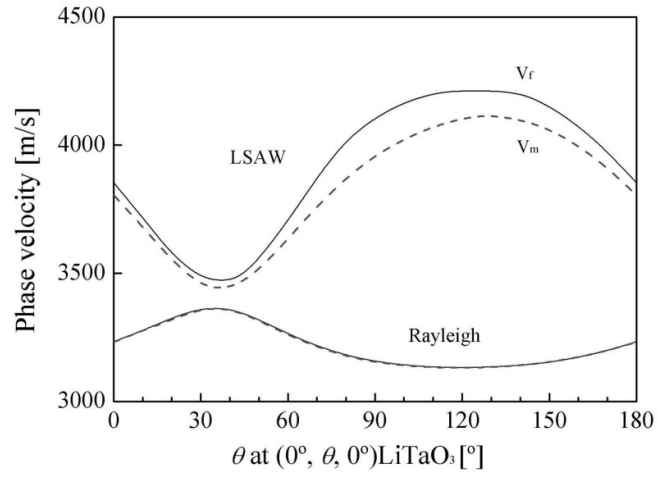
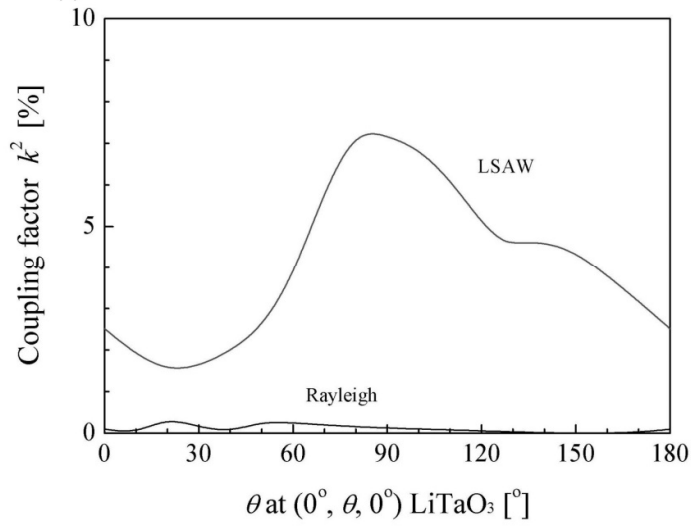
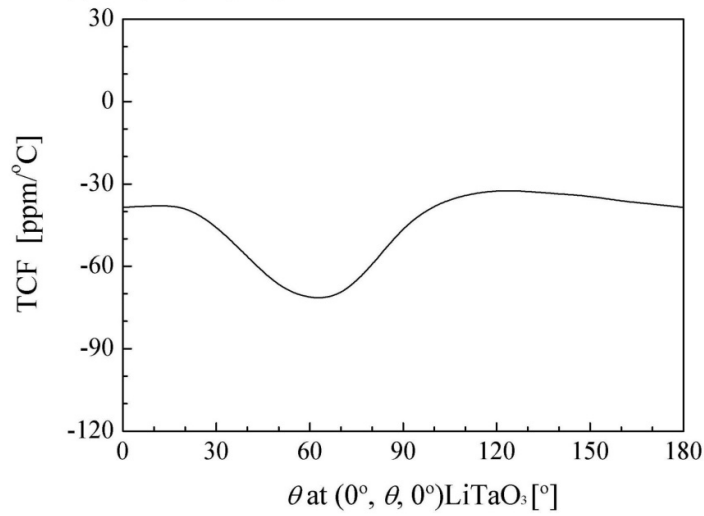
FIG. 10(a) $(0^\circ, \theta, 0^\circ)$ LTFIG. 10(b) $(0^\circ, \theta, 0^\circ)$ LTFIG. 10(c) $(0^\circ, \theta, 0^\circ)$ LT

FIG. 11(a)

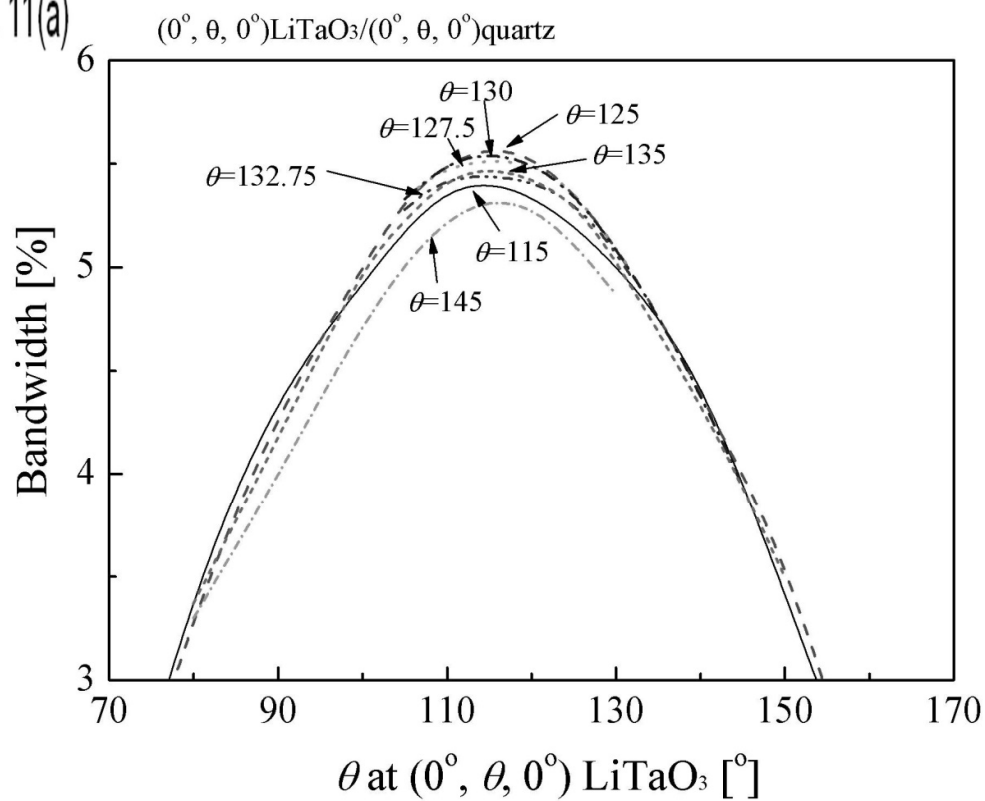


FIG. 11(b)

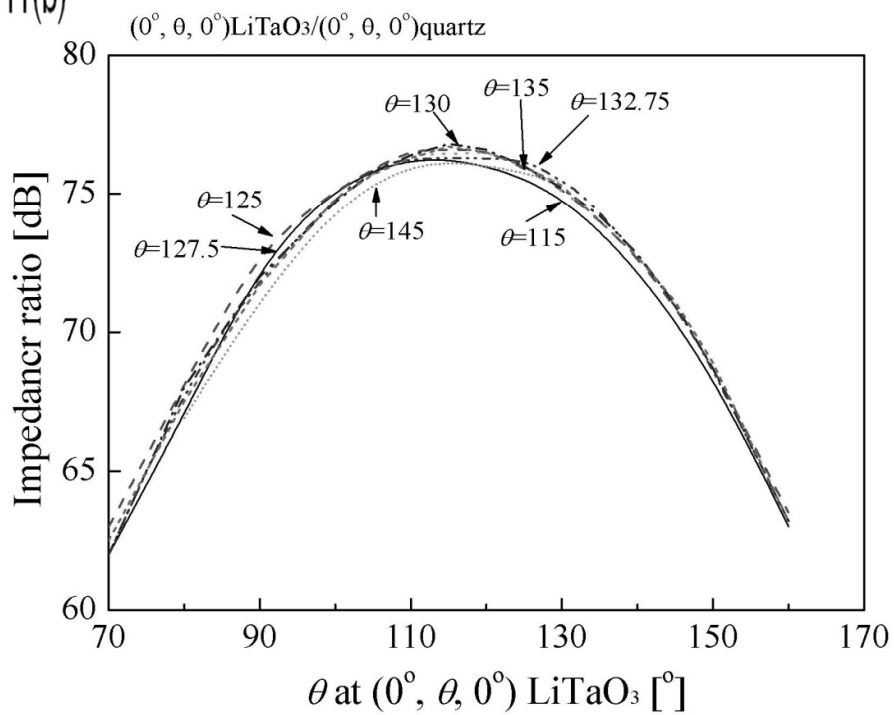


FIG. 12(a)

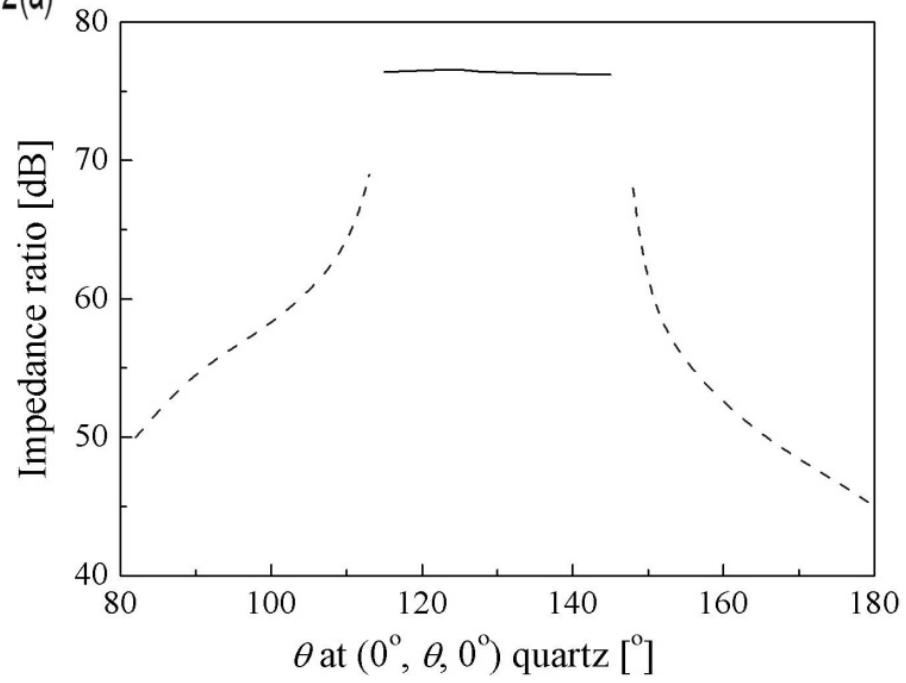


FIG. 12(b)

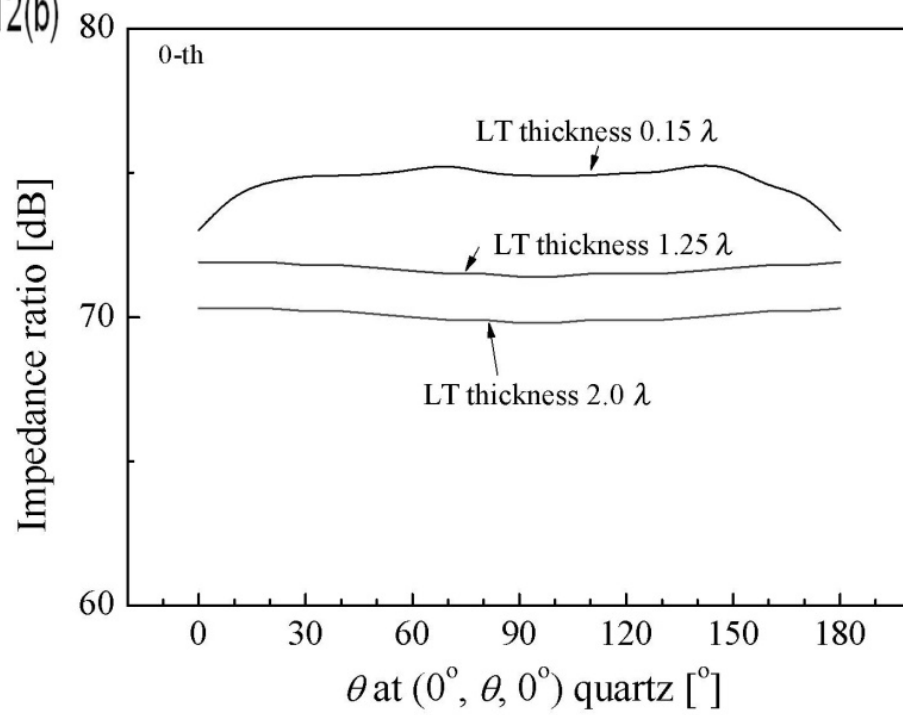


FIG. 13(a)

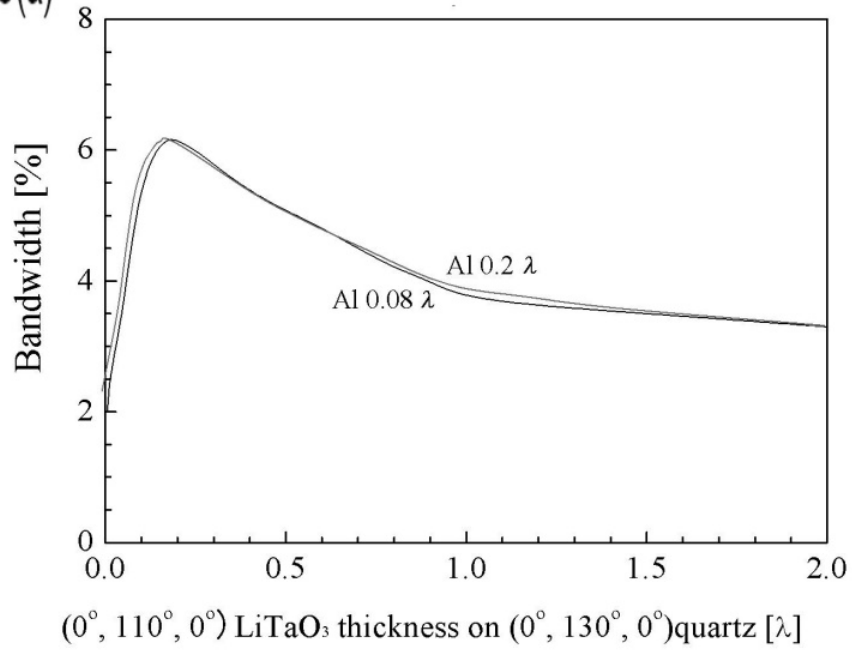


FIG. 13(b)

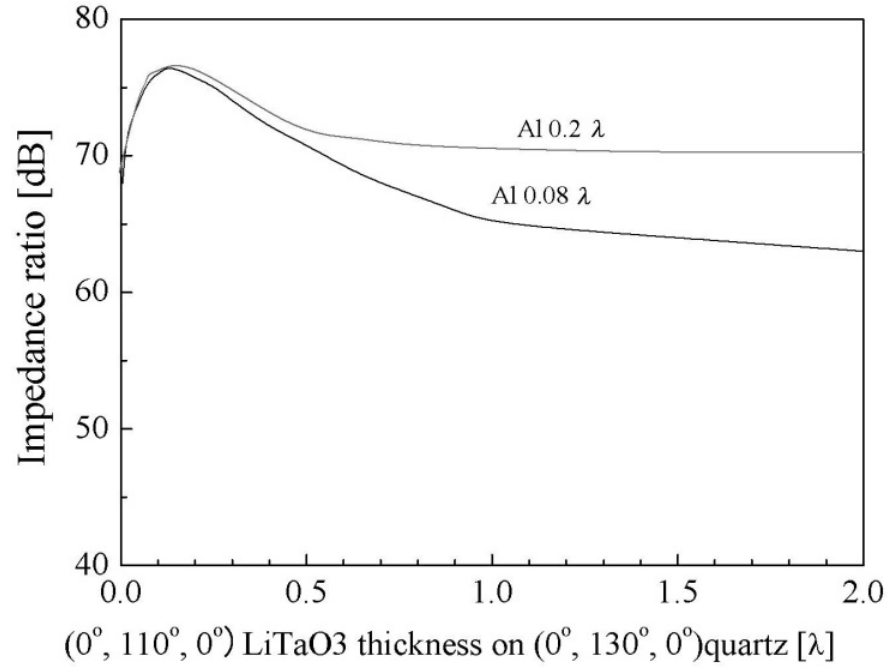


FIG. 14(a) $(0^\circ, \theta, 0^\circ)$ LiTaO₃/ $(0^\circ, \theta, 90^\circ)$ Quartz

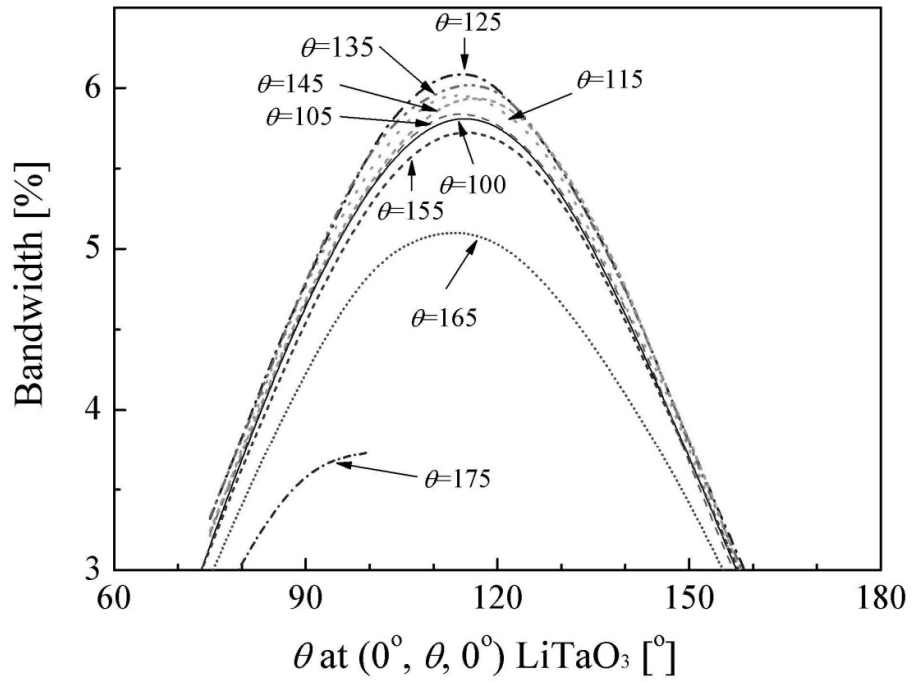
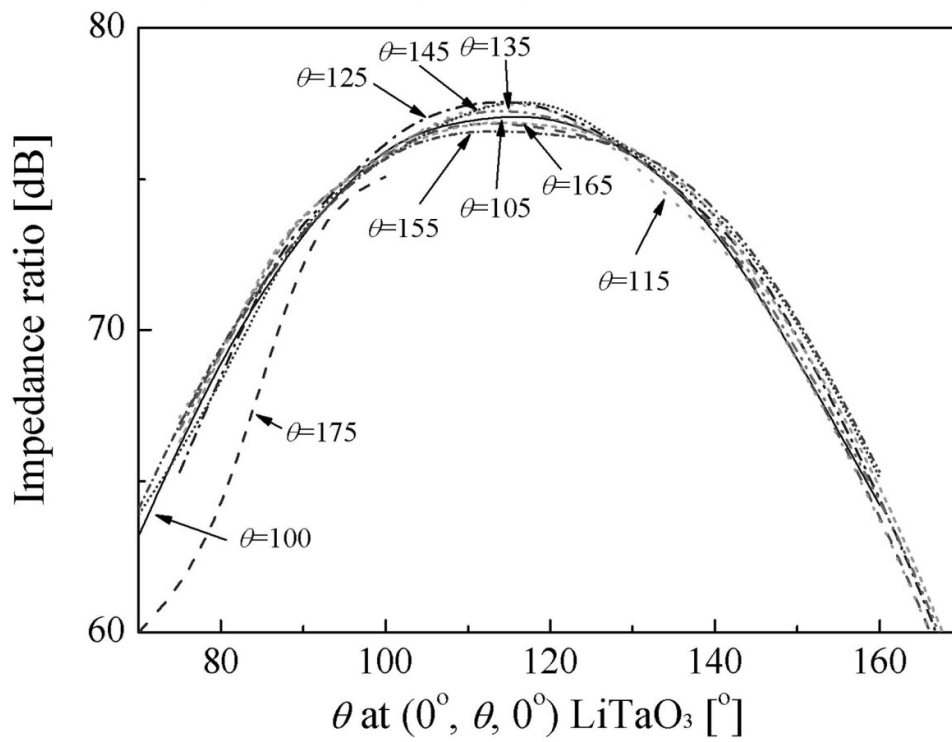


FIG. 14(b) $(0^\circ, \theta, 0^\circ)$ LiTaO₃/ $(0^\circ, \theta, 90^\circ)$ Quartz



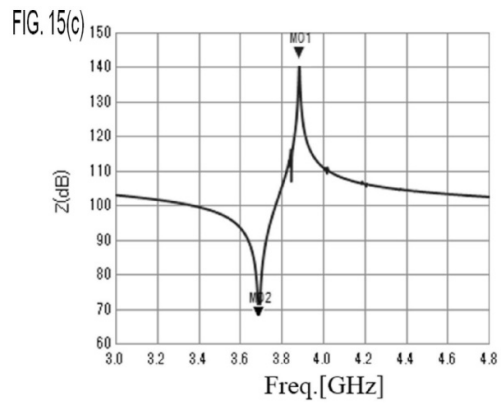
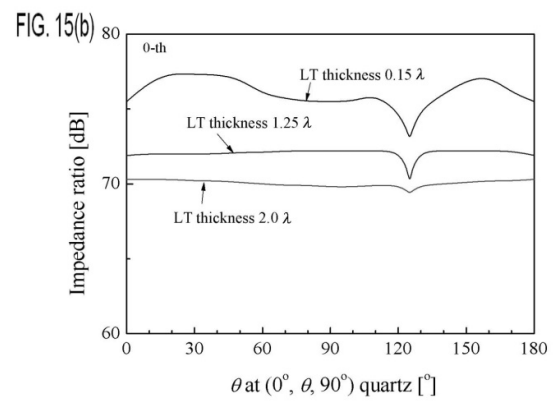
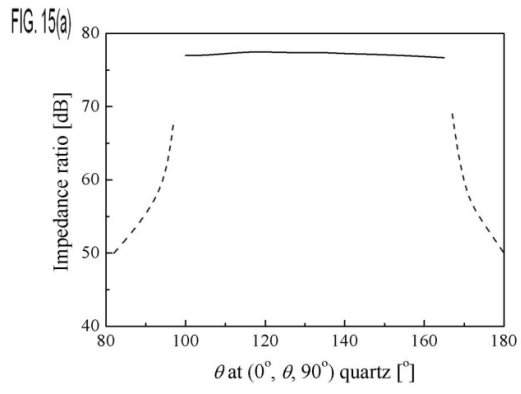


FIG. 16(a)

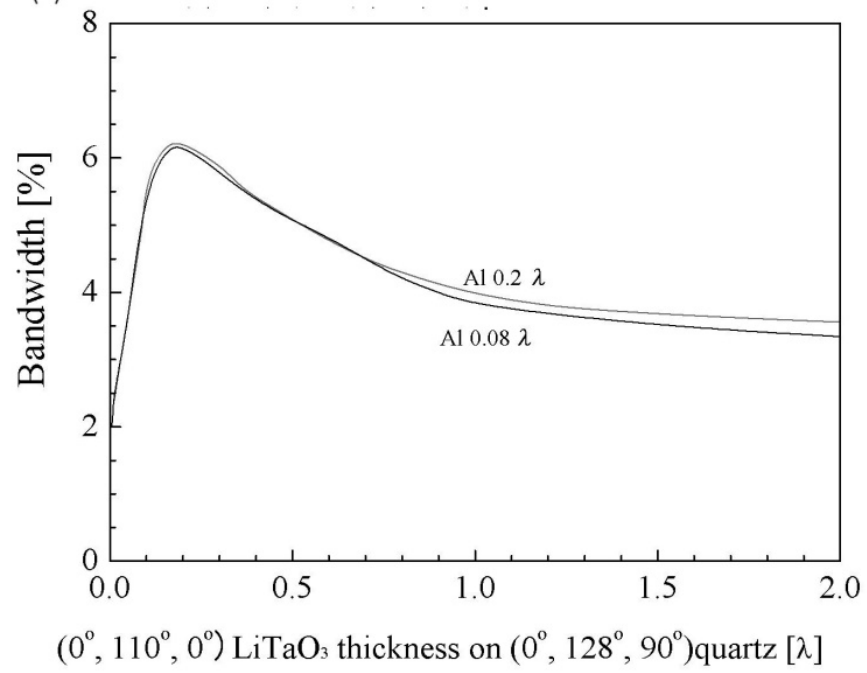


FIG. 16(b)

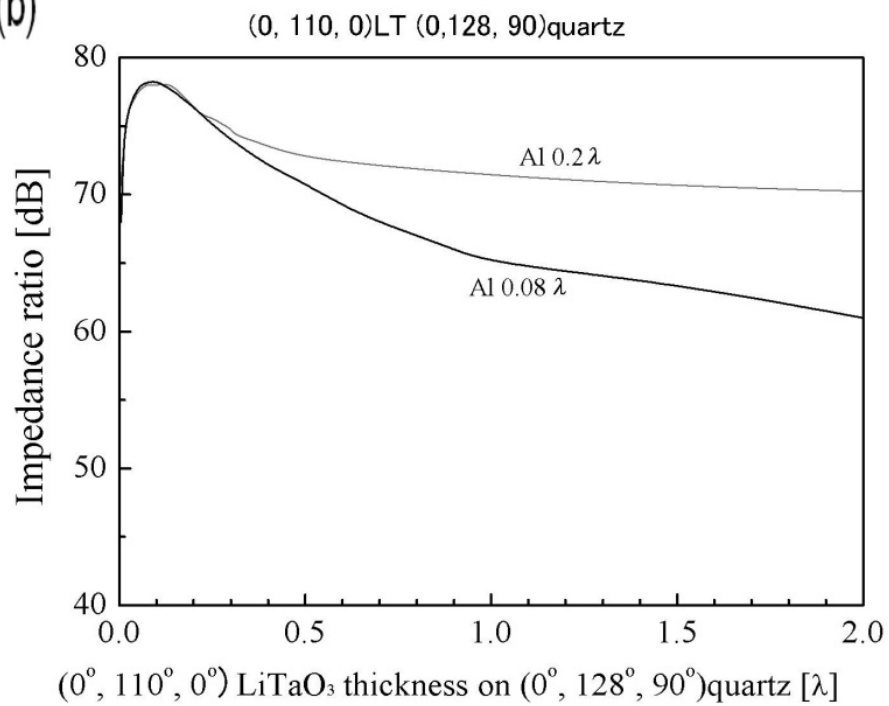


FIG. 17(a)

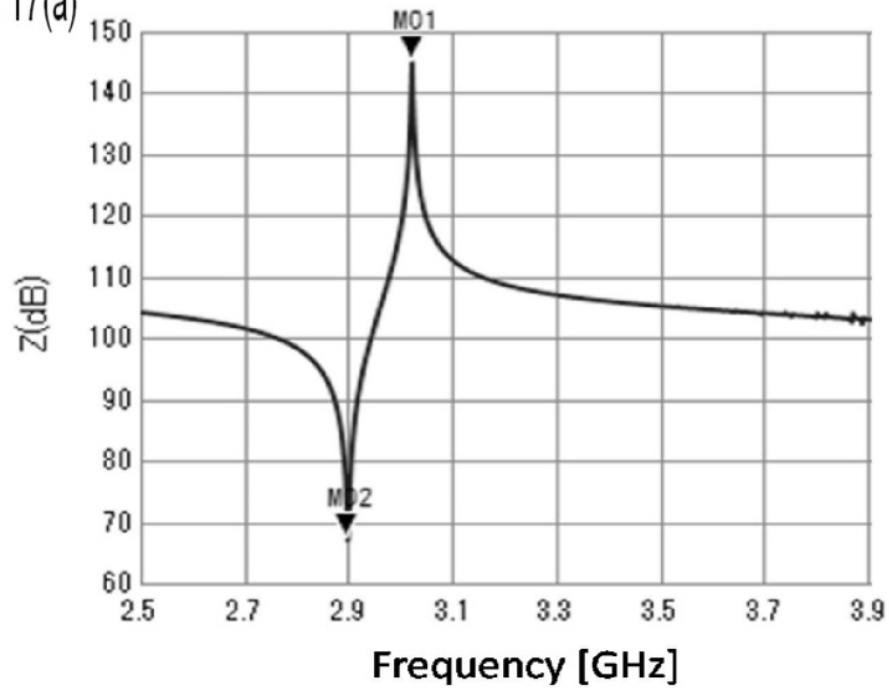


FIG. 17(b)

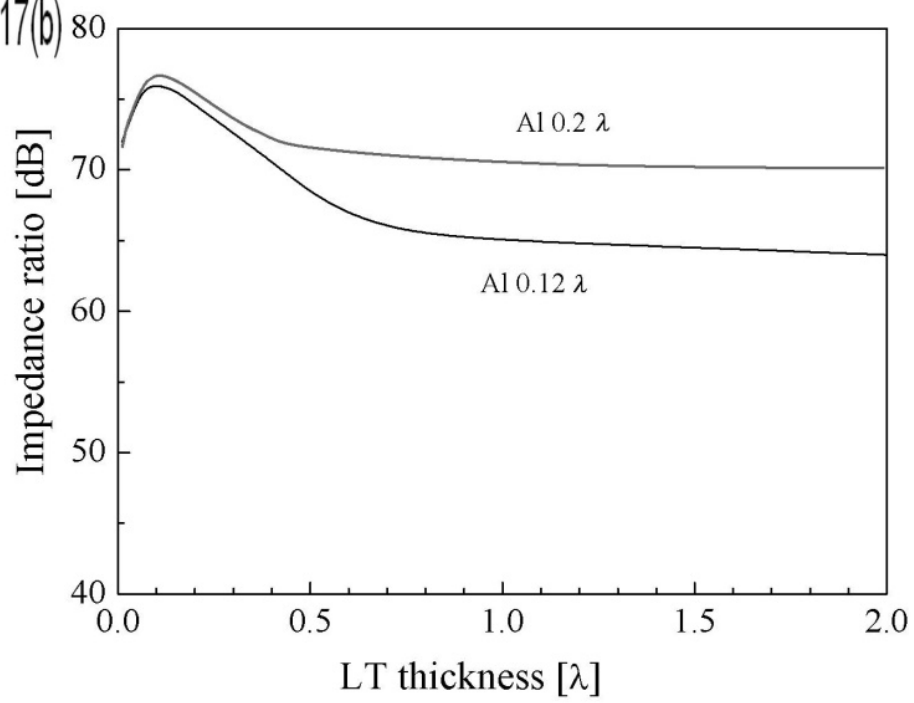
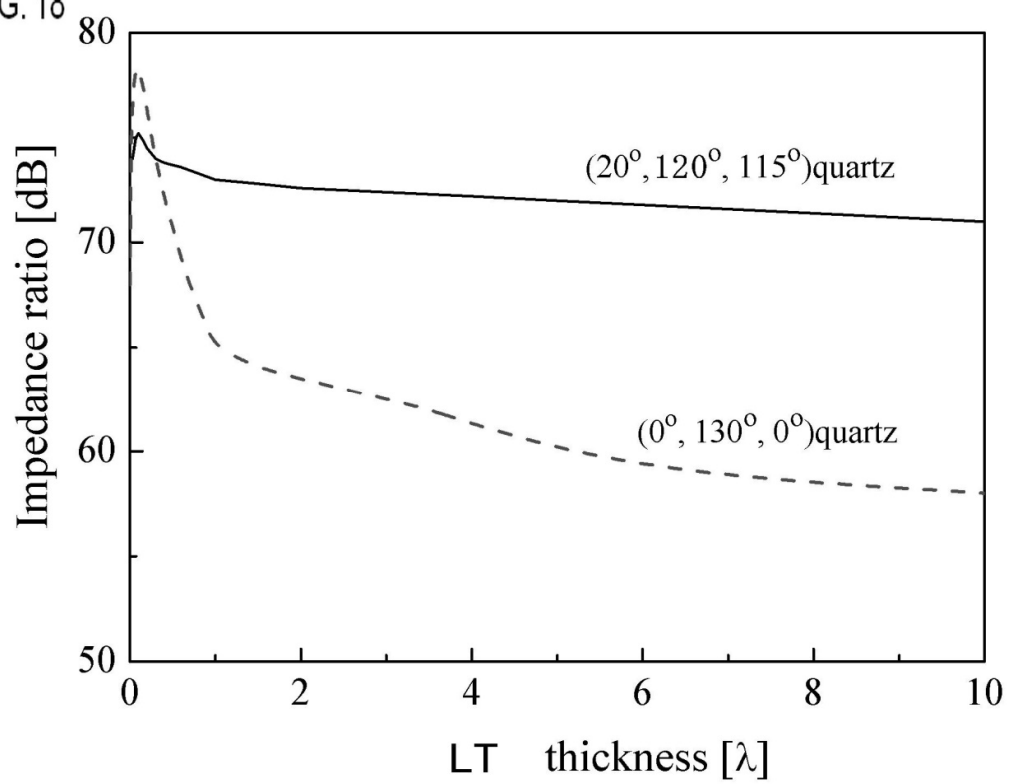


FIG. 18



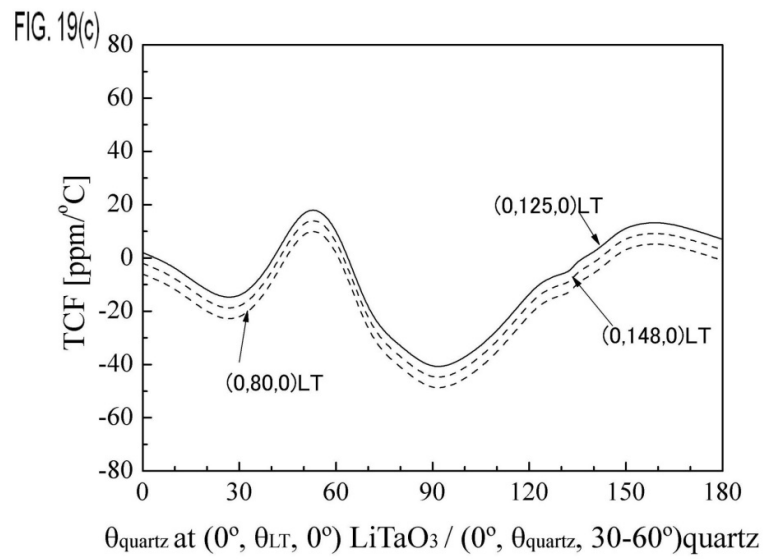
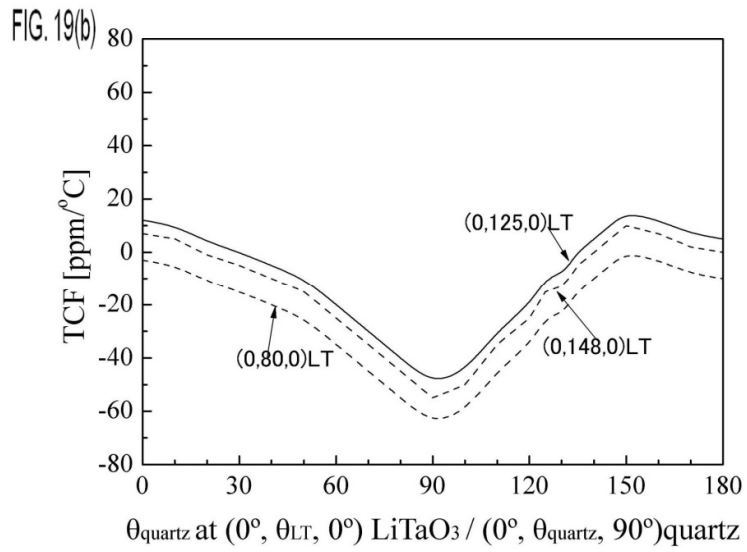
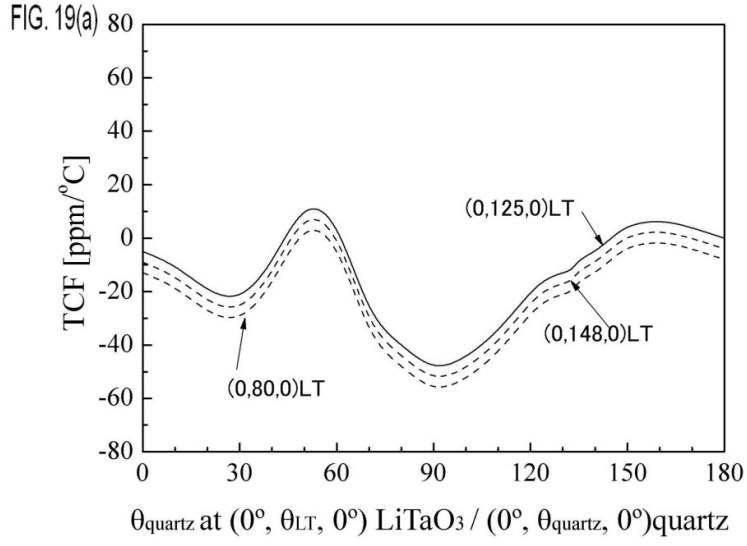


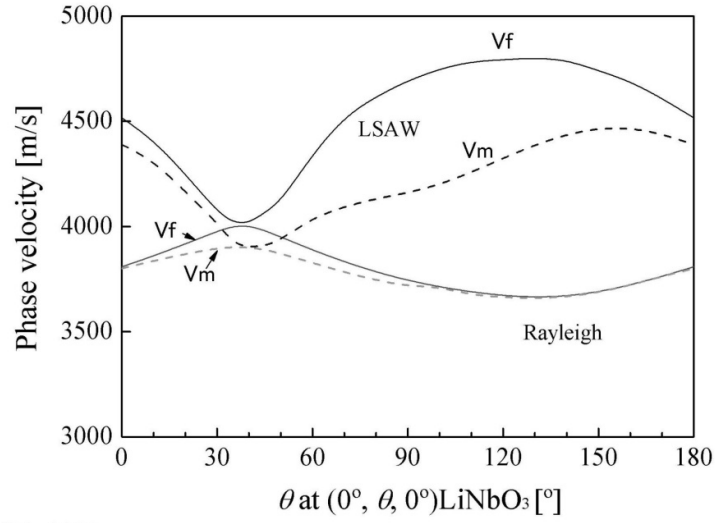
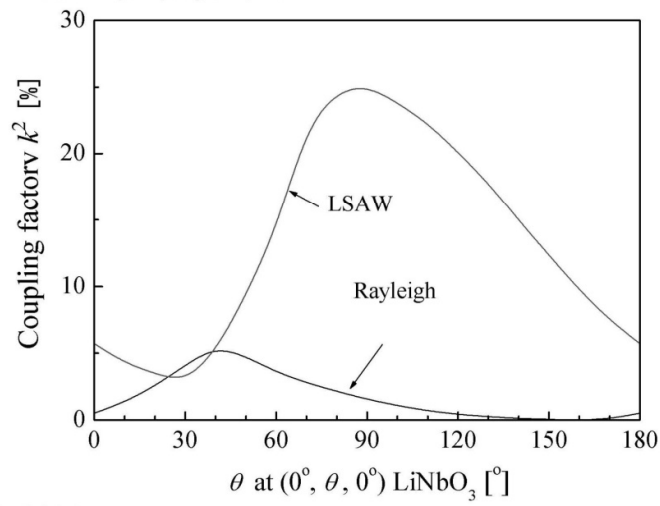
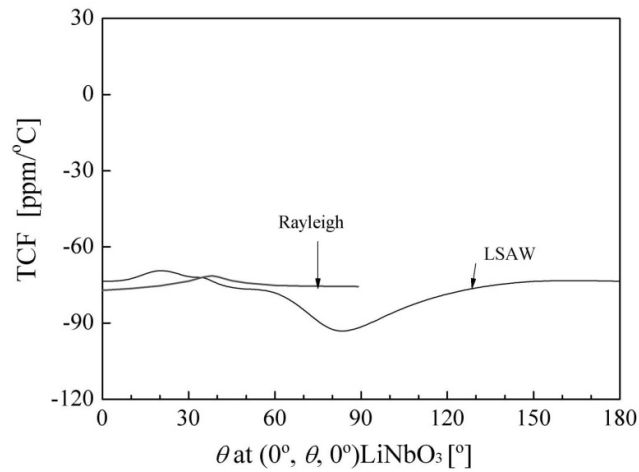
FIG. 20(a) $(0^\circ, \theta, 0^\circ)$ LNFIG. 20(b) $(0^\circ, \theta, 0^\circ)$ LNFIG. 20(c) $(0^\circ, \theta, 0^\circ)$ LN

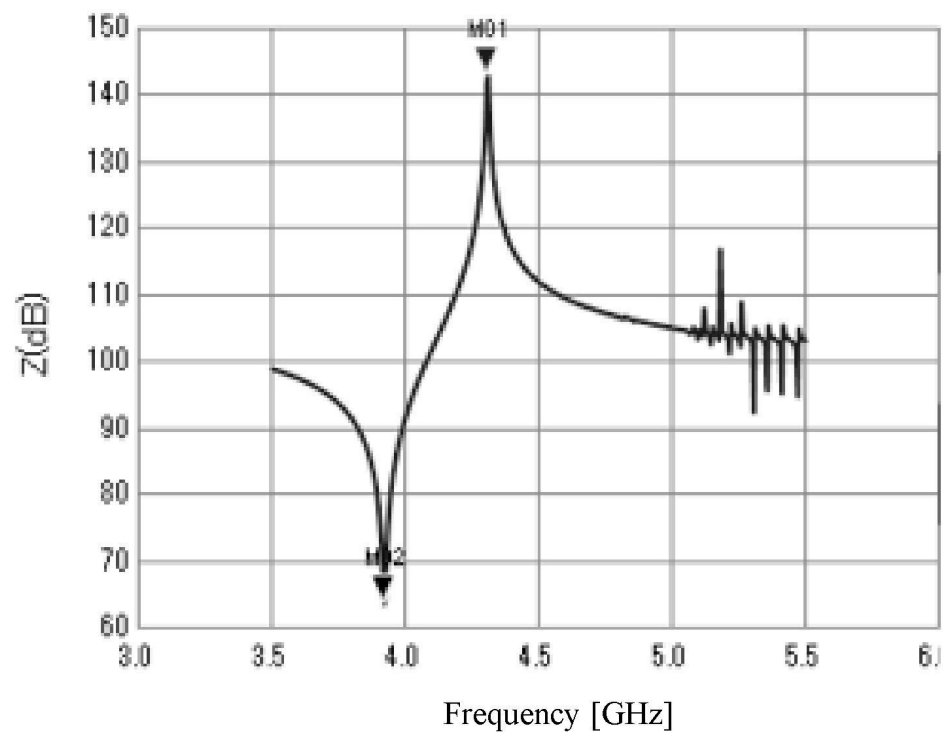
FIG. 21 $(0^\circ, 131^\circ, 0^\circ)$ LN / $(0^\circ, 115^\circ, 90^\circ)$ quartz

FIG. 22(a)

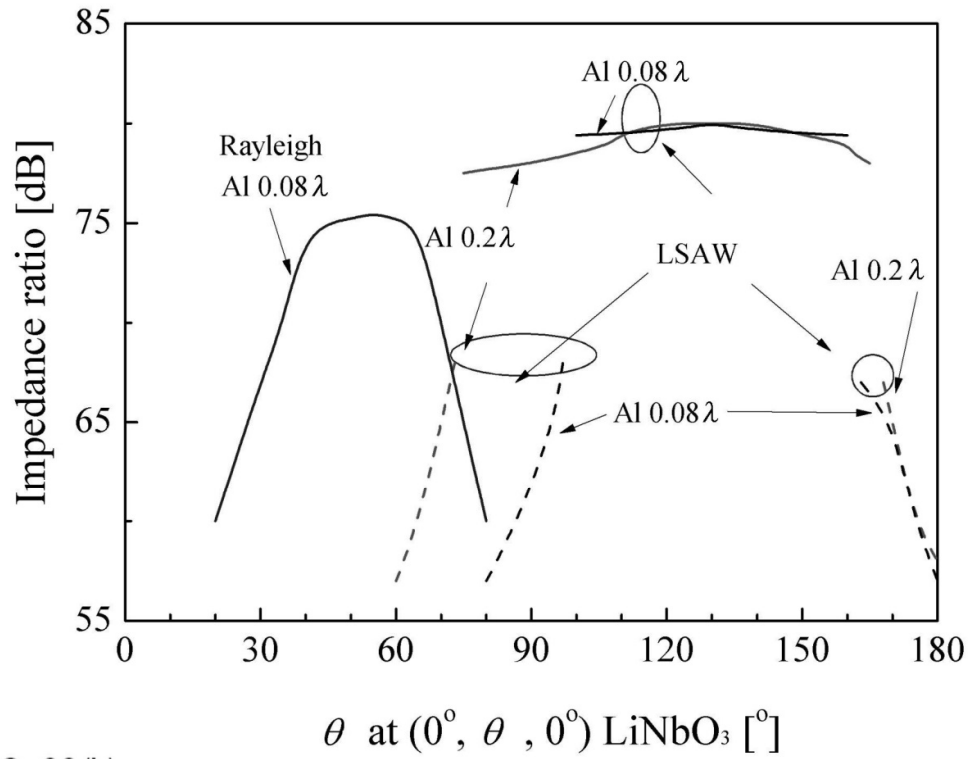
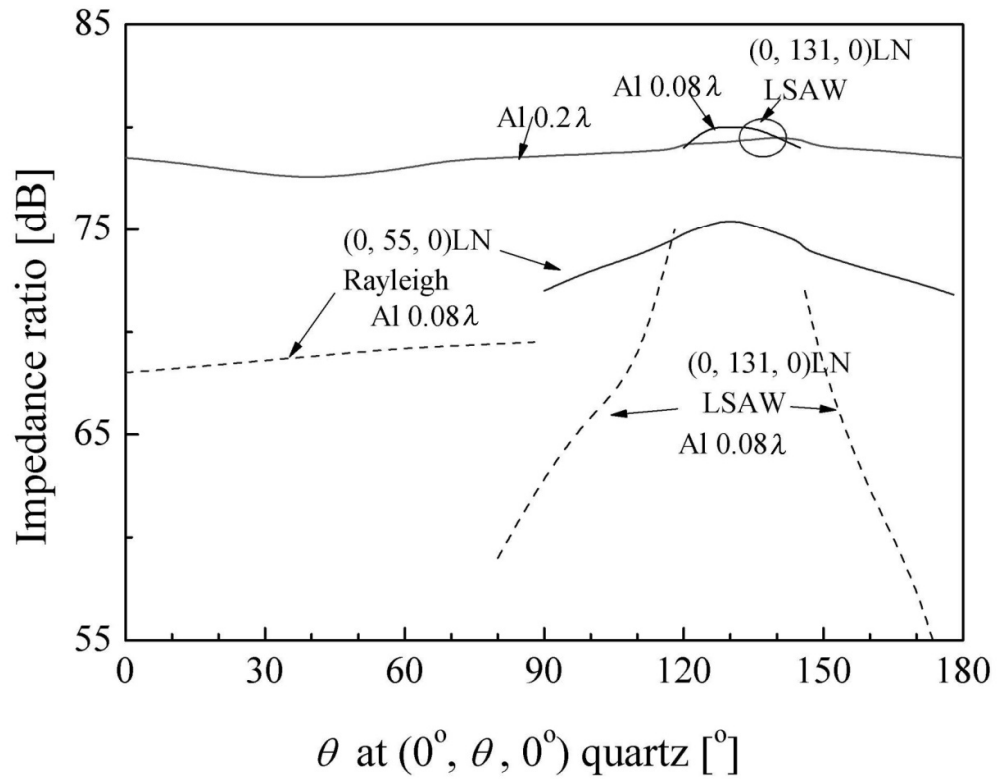


FIG. 22(b)



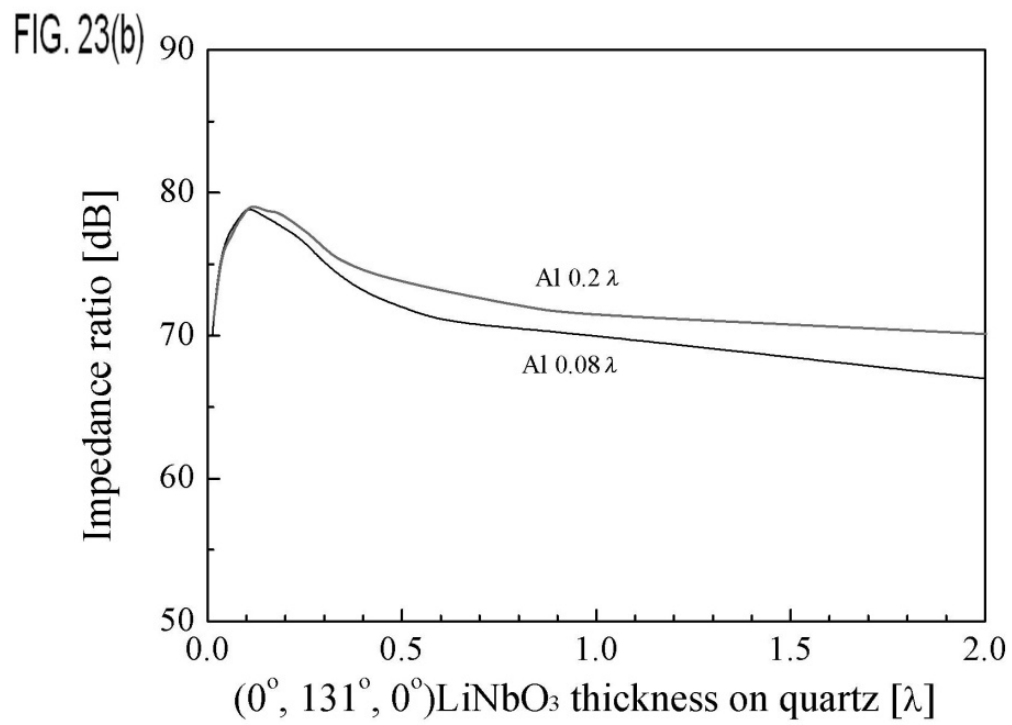
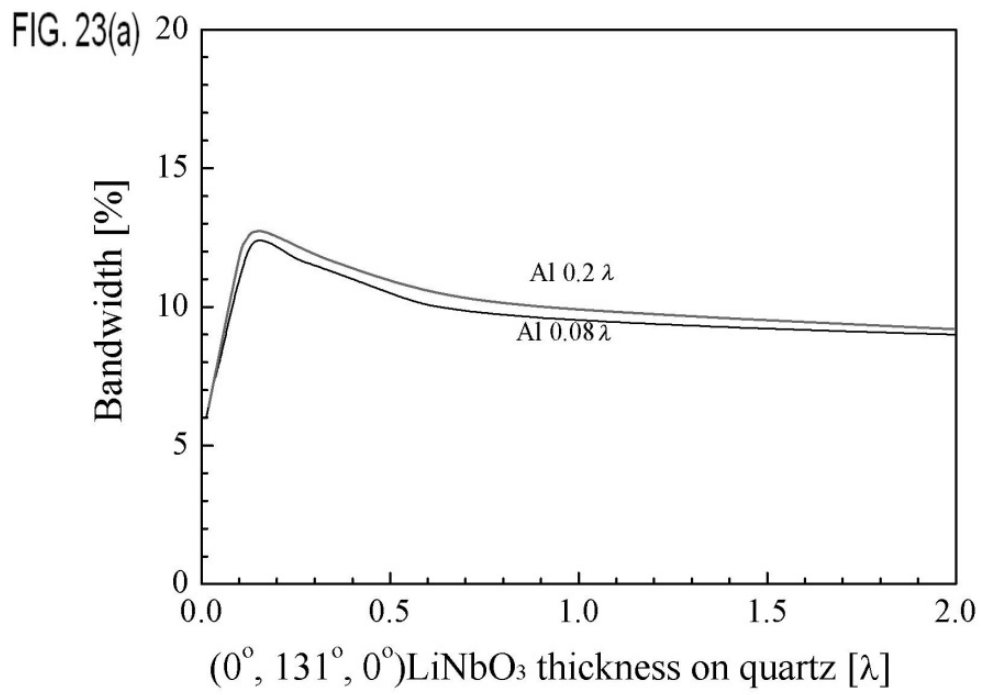


FIG. 24(a)

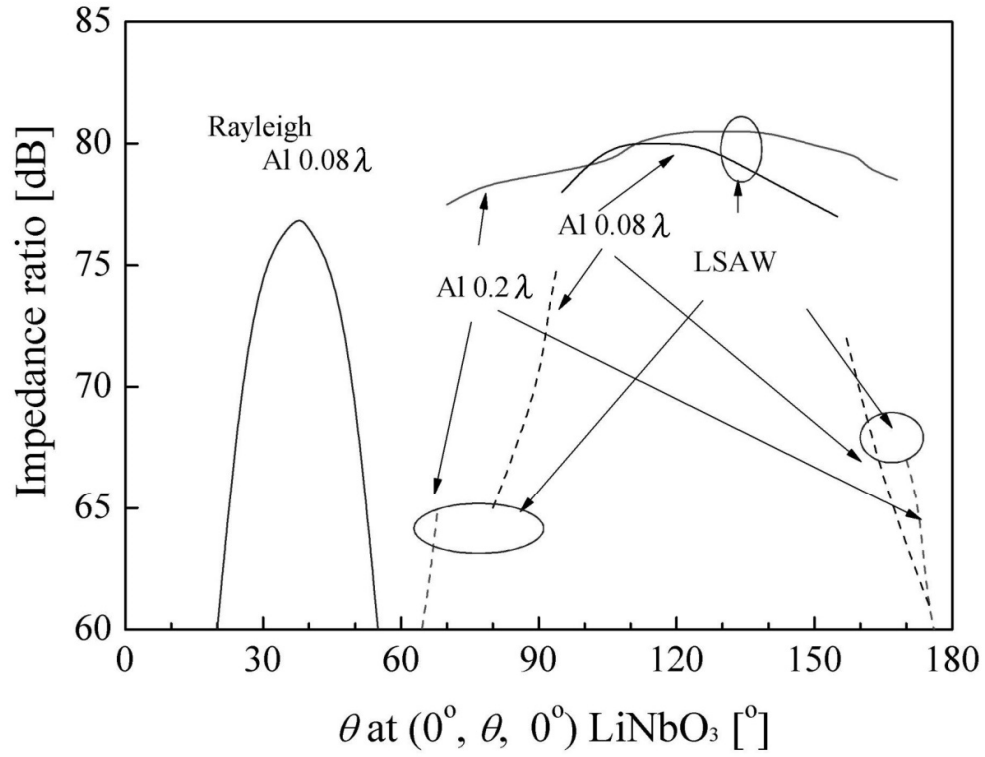
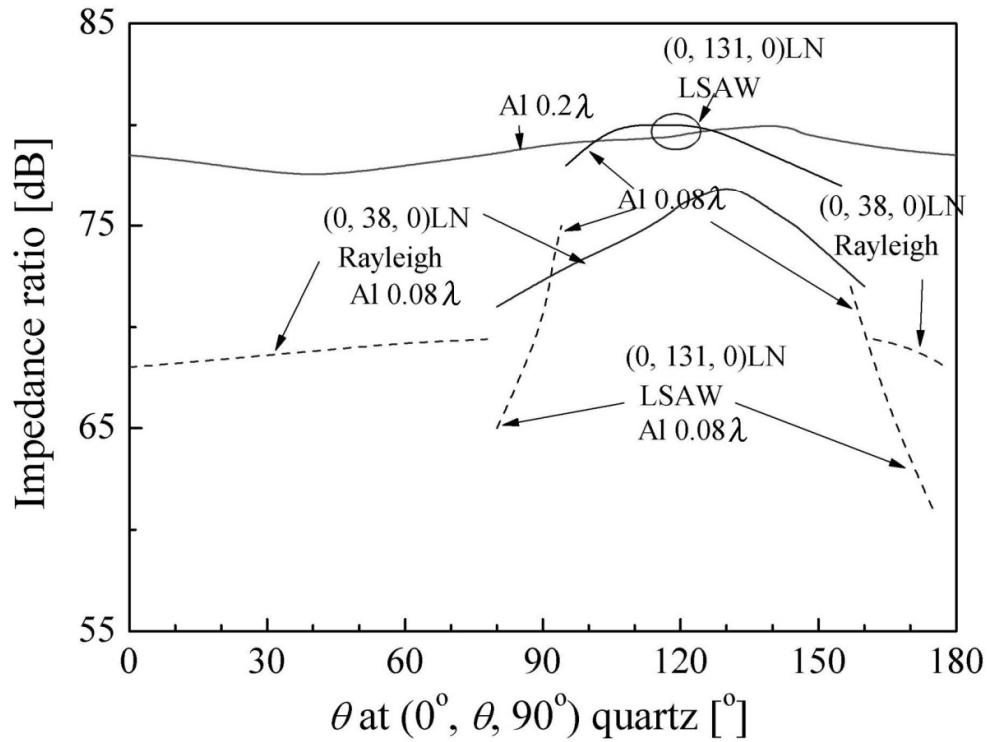
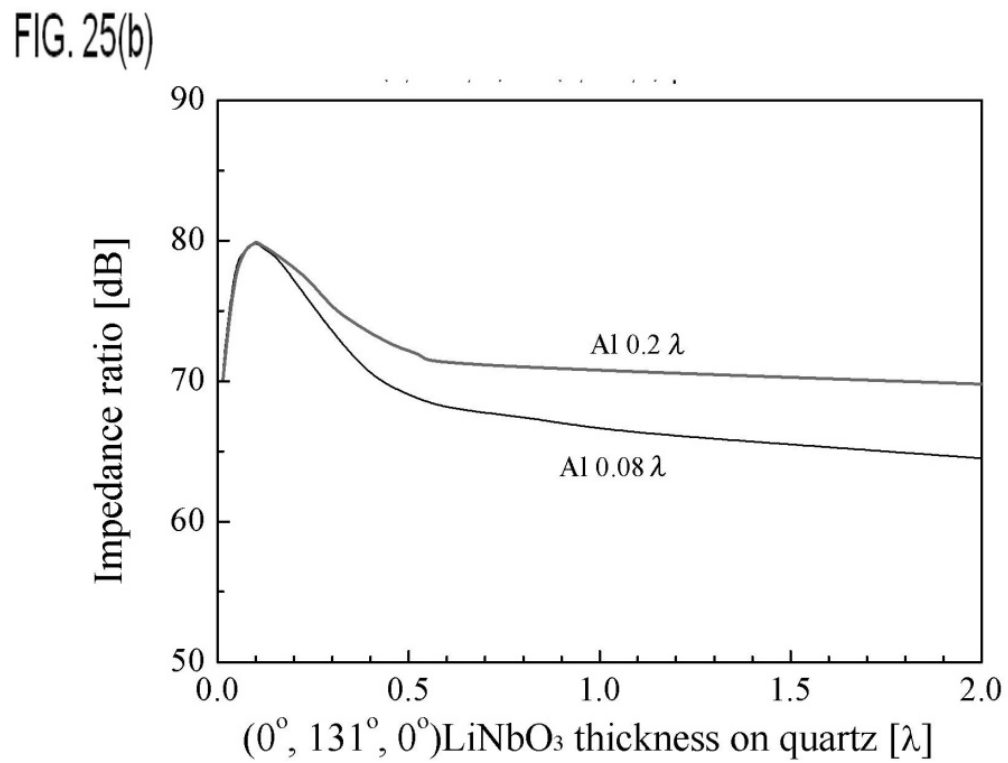
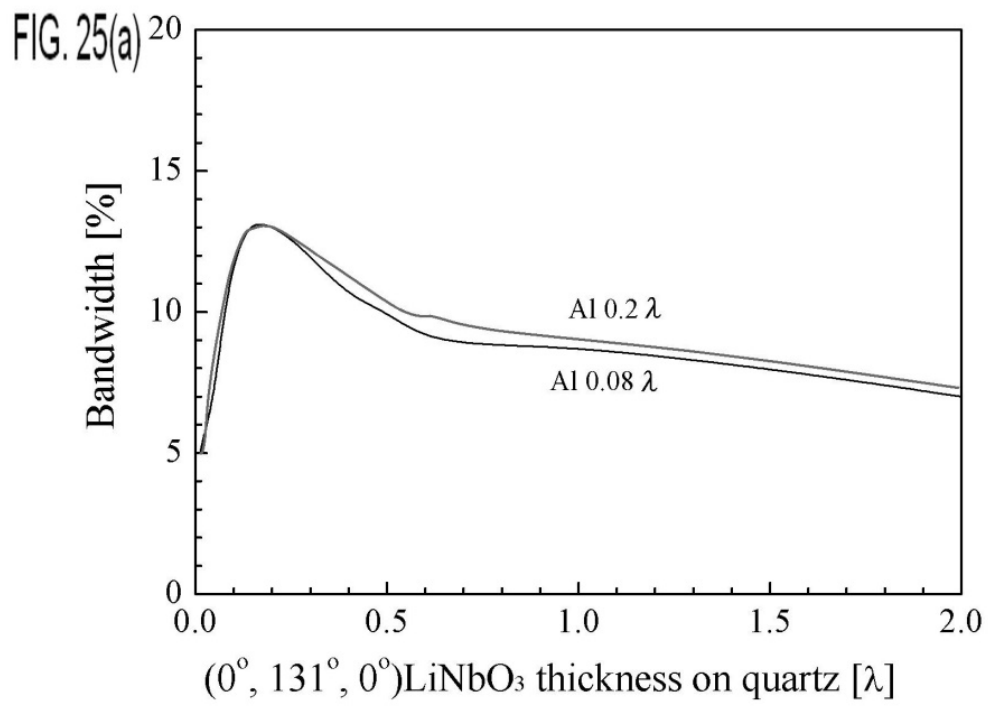


FIG. 24(b)





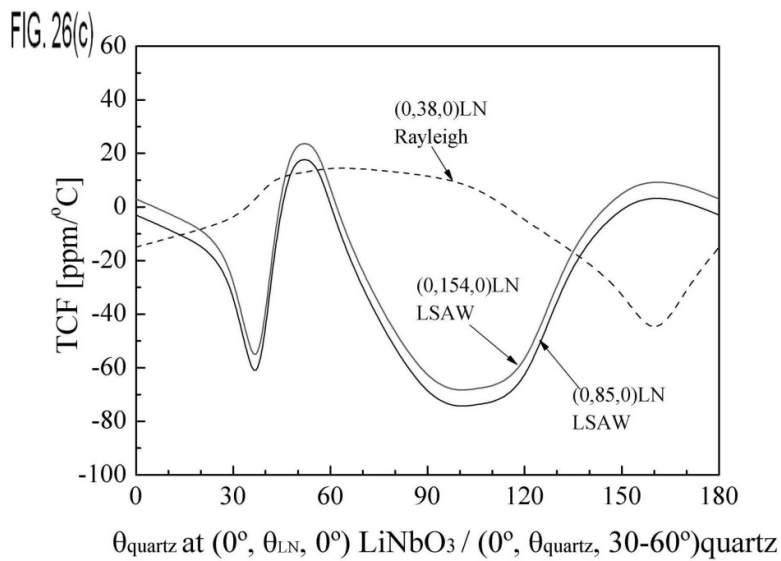
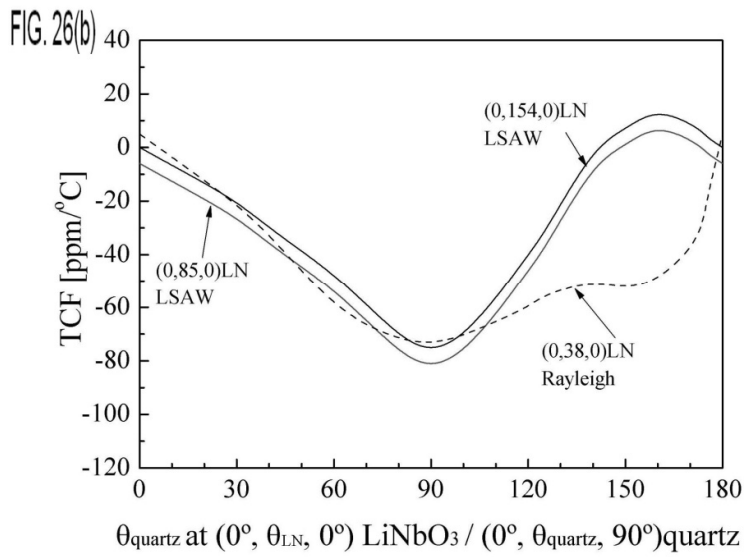
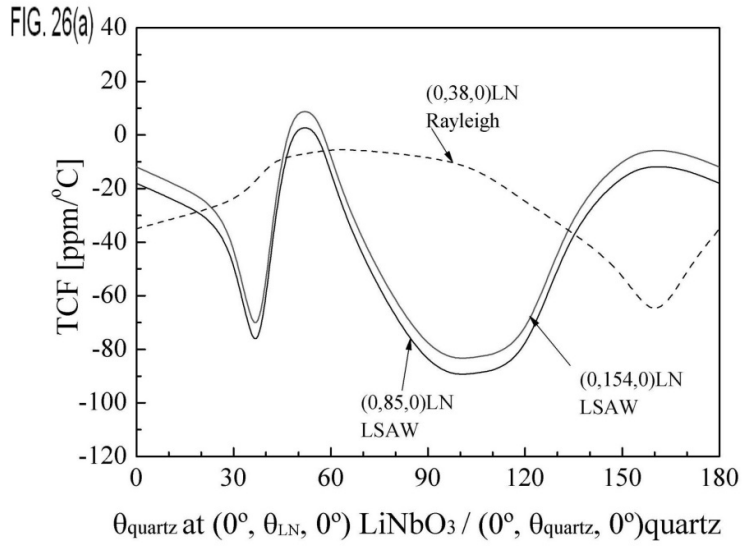


FIG. 27

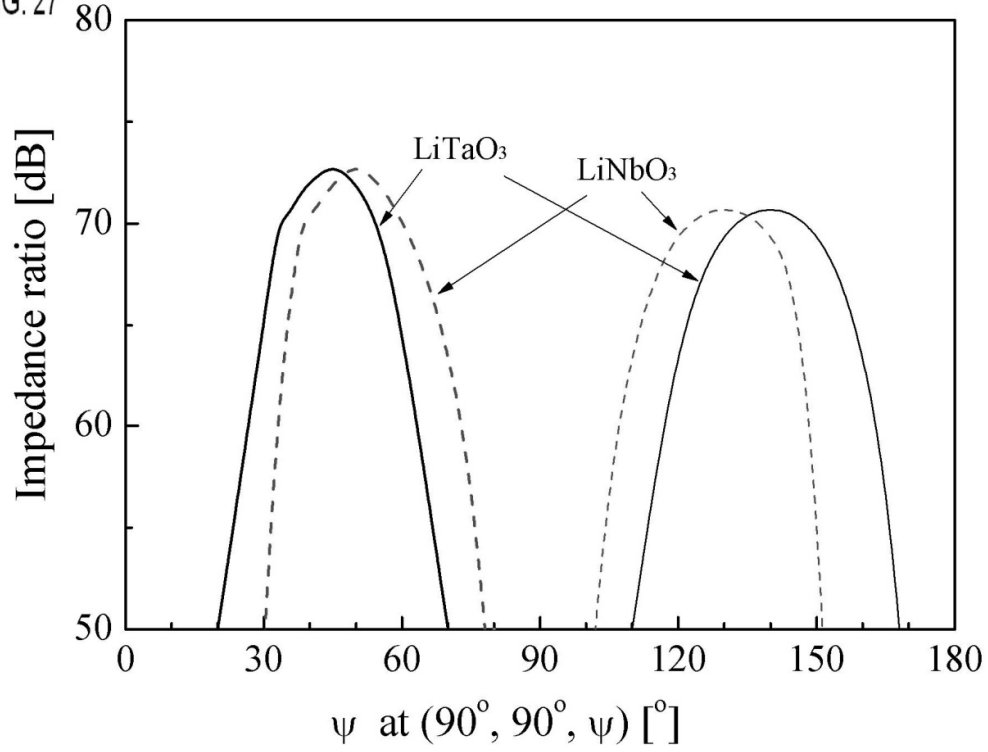


FIG. 28

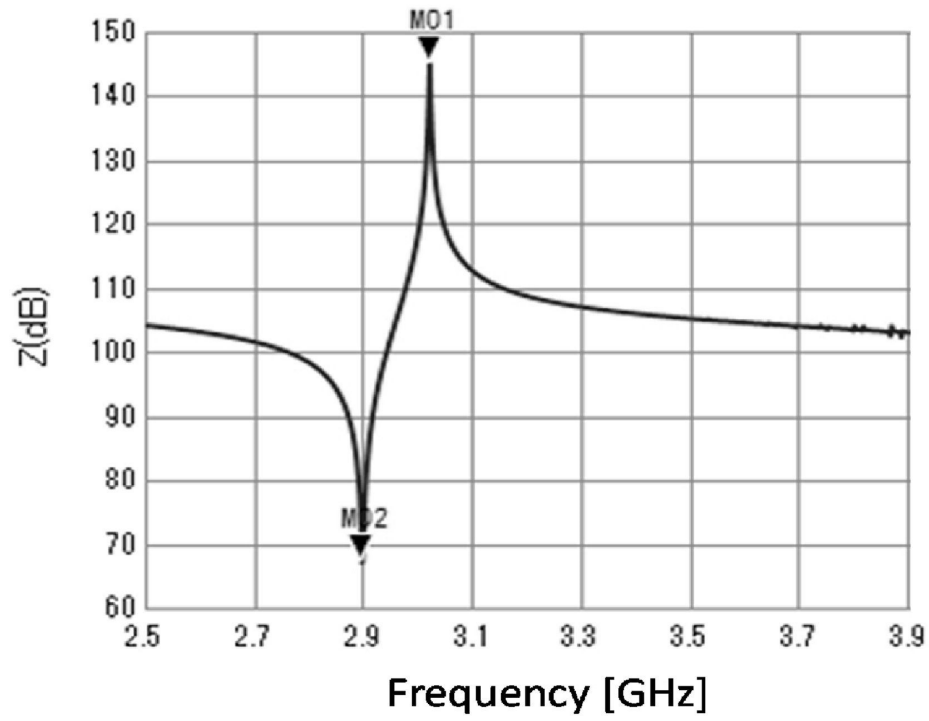


FIG. 29

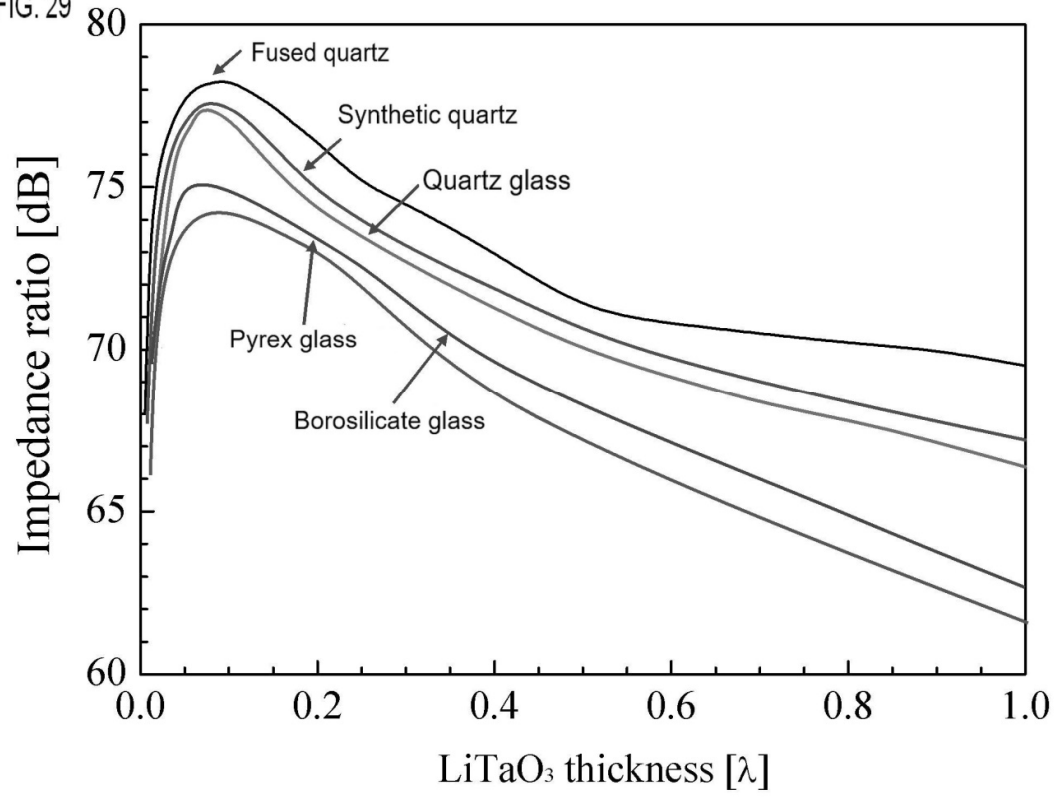


FIG. 30

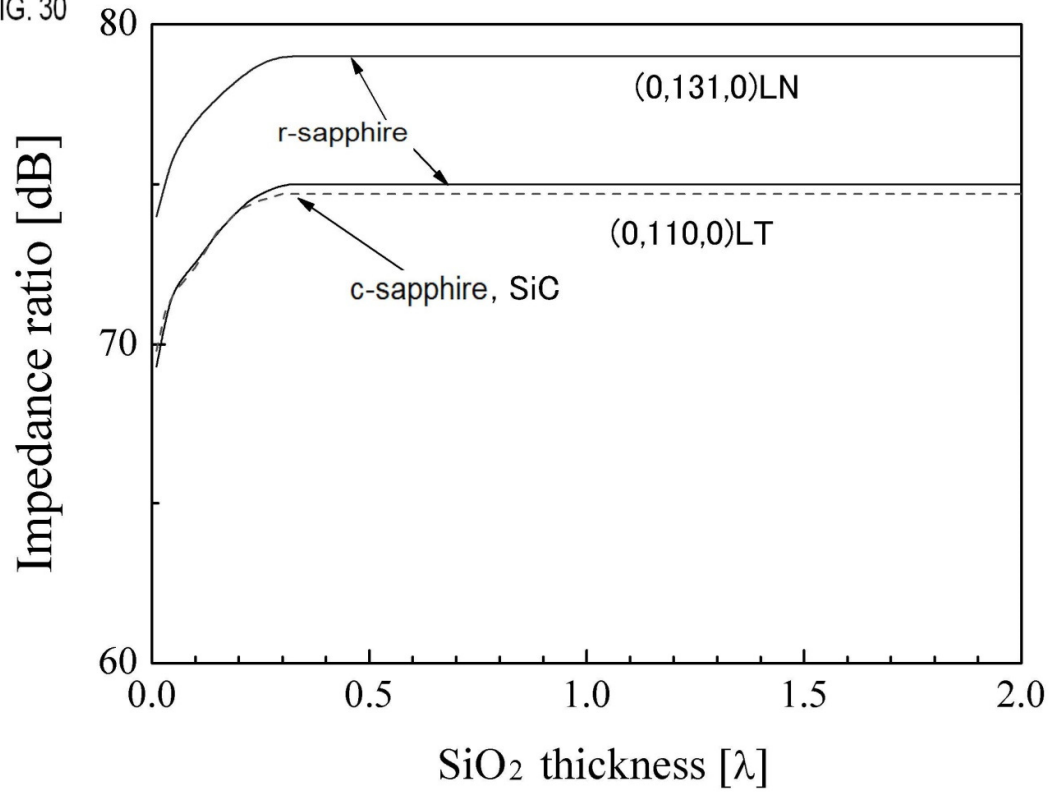


FIG. 31(a) $(0^\circ, 110^\circ, 0^\circ)$ LT/ $(0^\circ, 132.75^\circ, 90^\circ)$ quartz

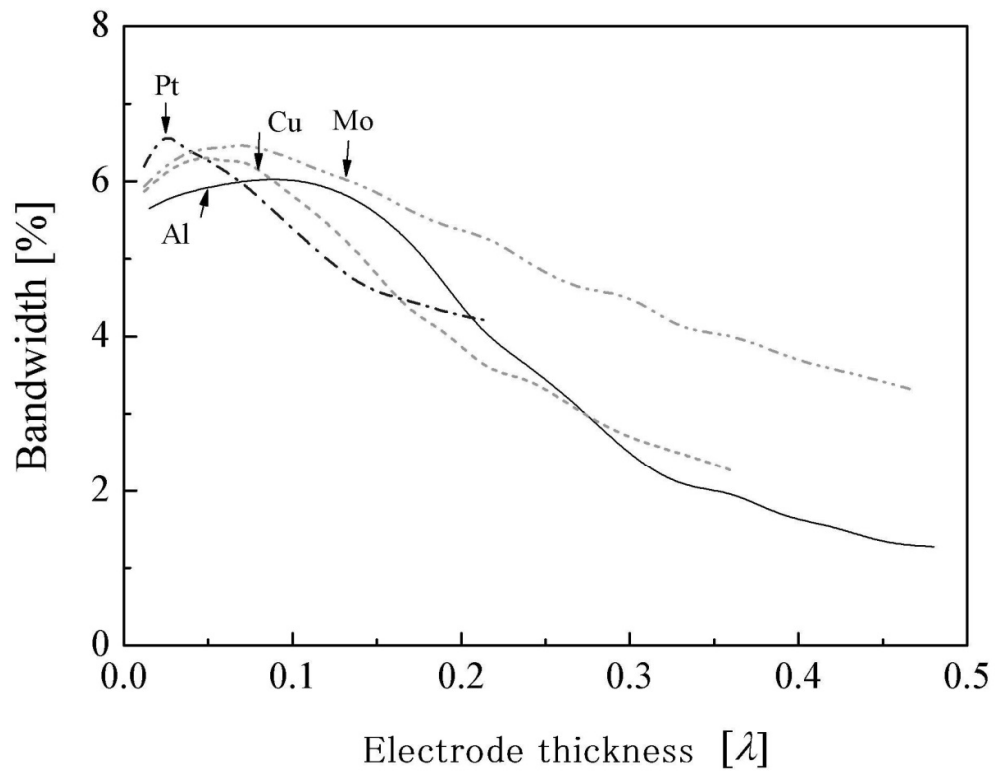


FIG. 31(b) $(0^\circ, 110^\circ, 0^\circ)$ LT/ $(0^\circ, 132.75^\circ, 90^\circ)$ quartz

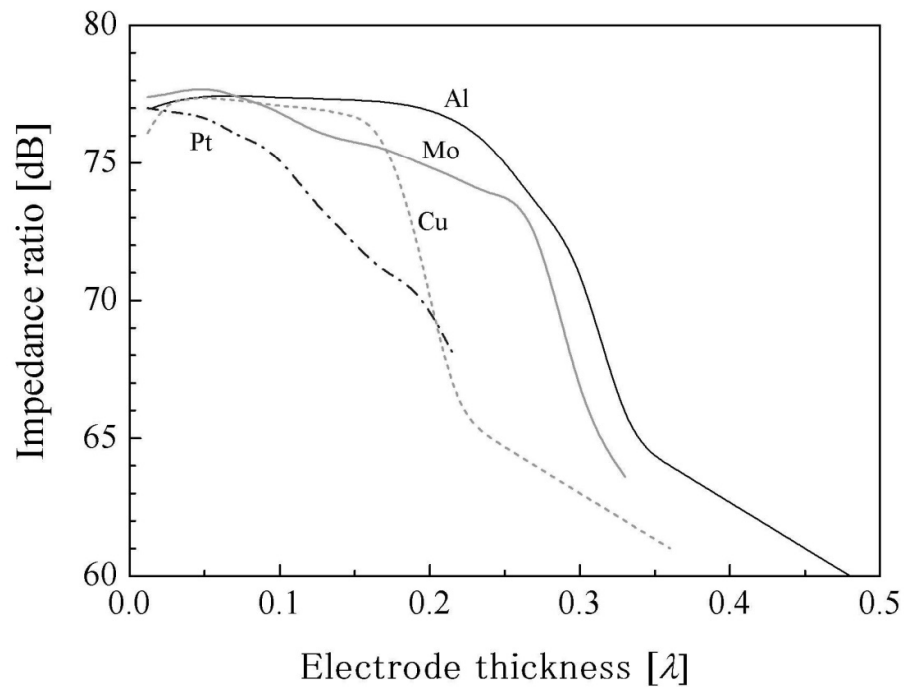


FIG. 32(a) $(0^\circ, 110^\circ, 0^\circ)$ LT / $(0^\circ, 132.75^\circ, 90^\circ)$ quartz

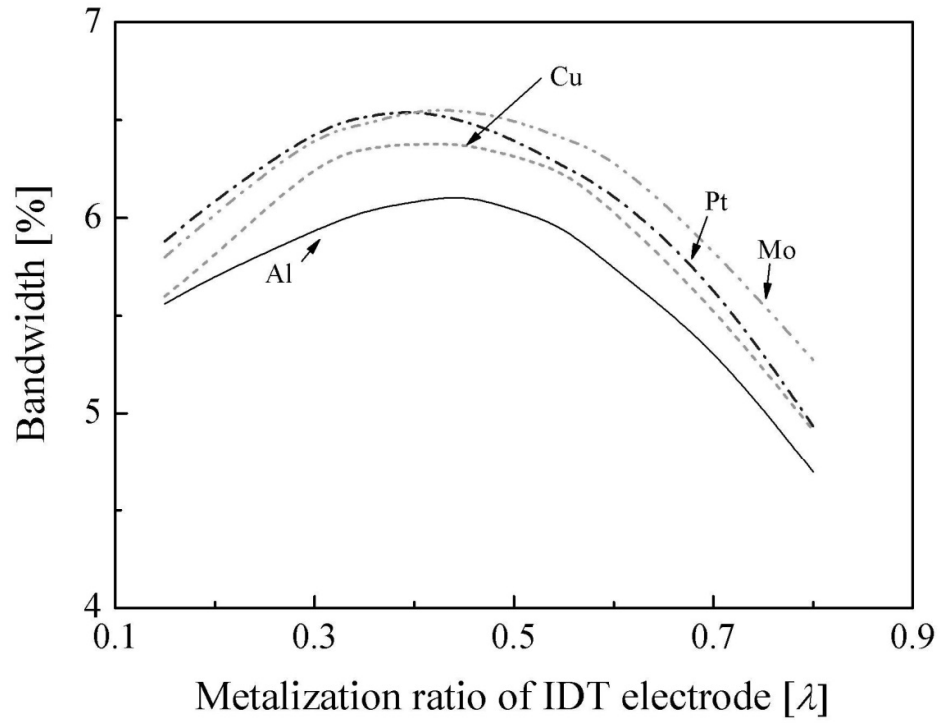
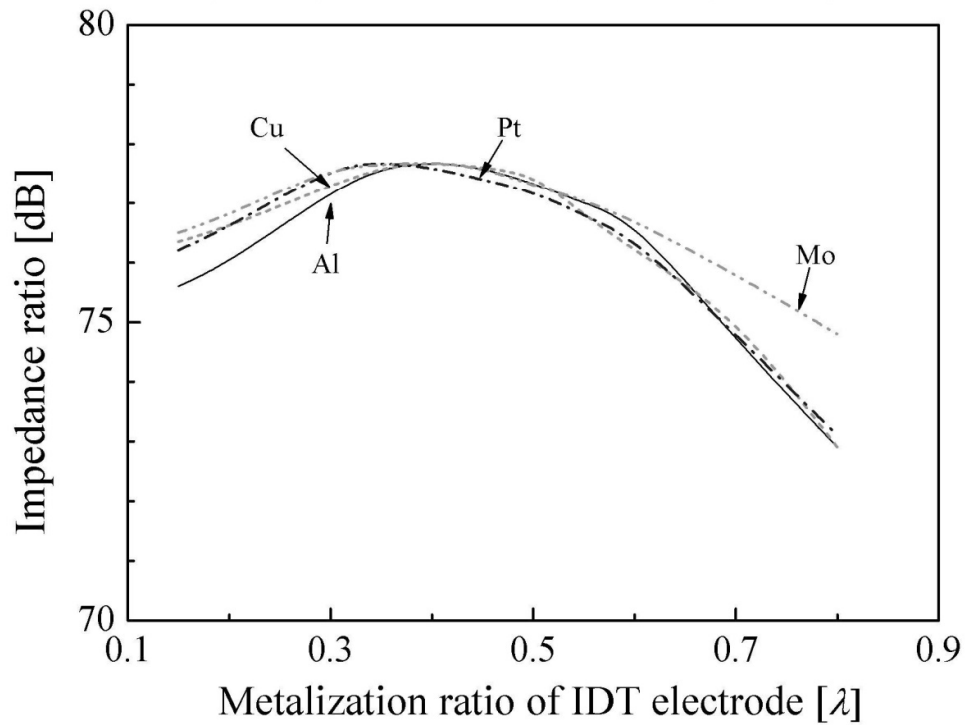


FIG. 32(b) $(0^\circ, 110^\circ, 0^\circ)$ LT / $(0^\circ, 132.75^\circ, 90^\circ)$ quartz



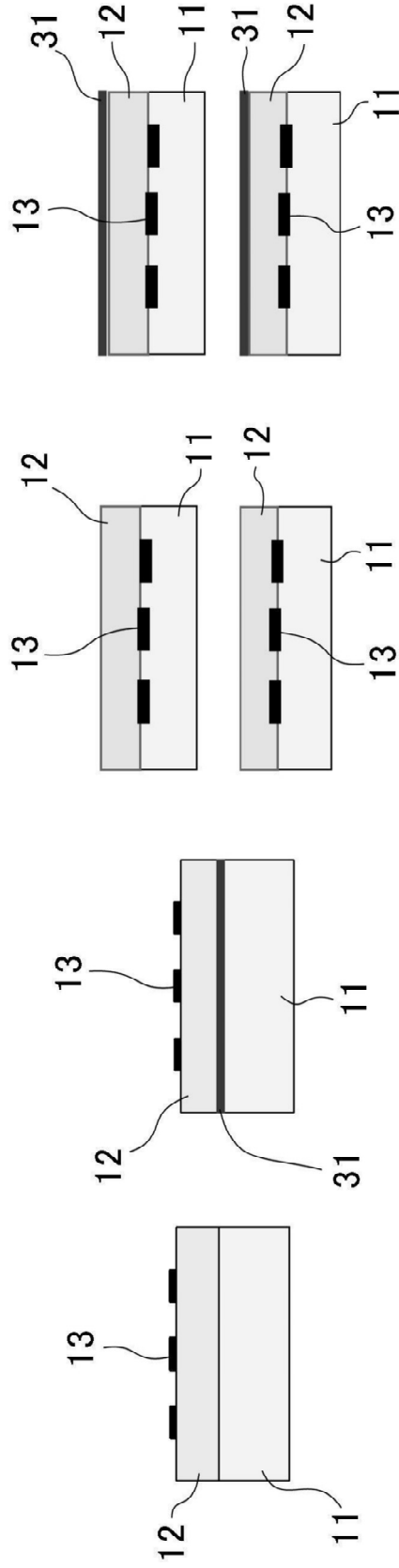


FIG. 33(a) IDT/LT/quartz

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

FIG. 33(c) LT/IDT/quartz

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

FIG. 34(a)

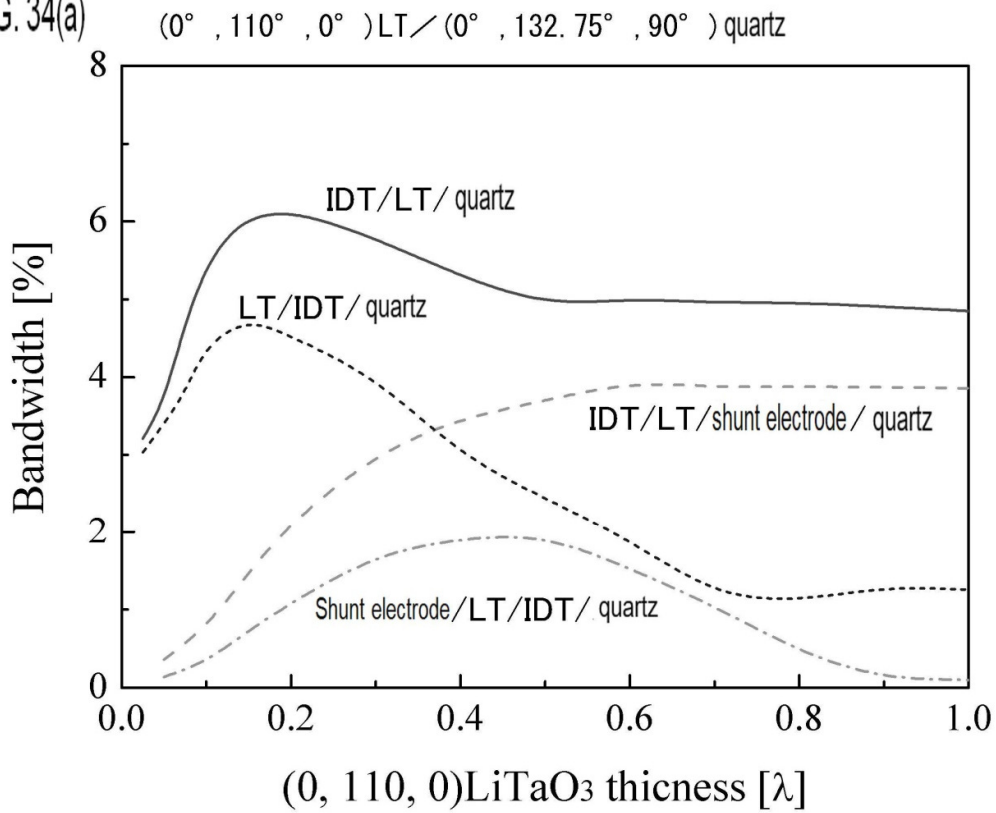


FIG. 34(b)

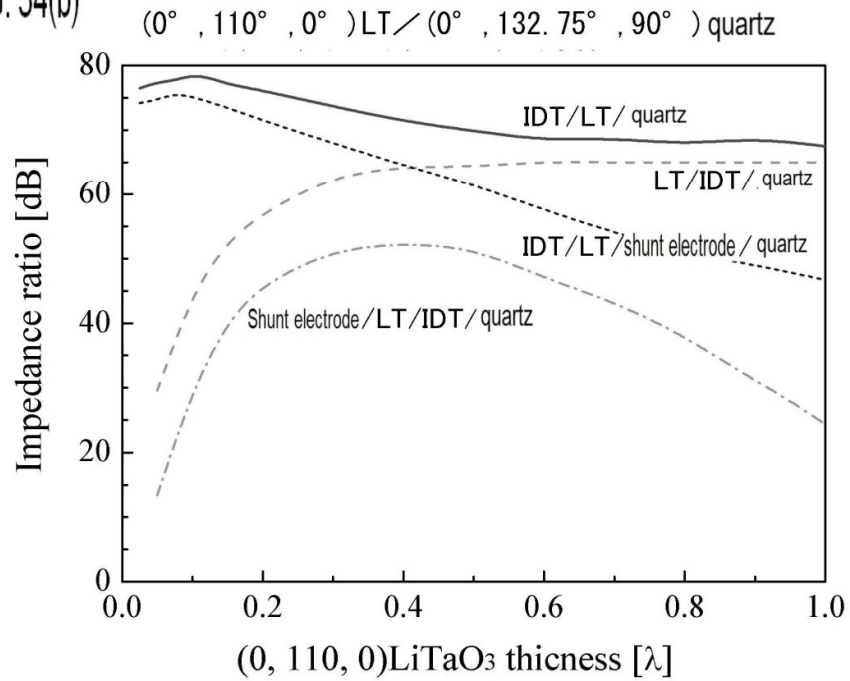


FIG. 35

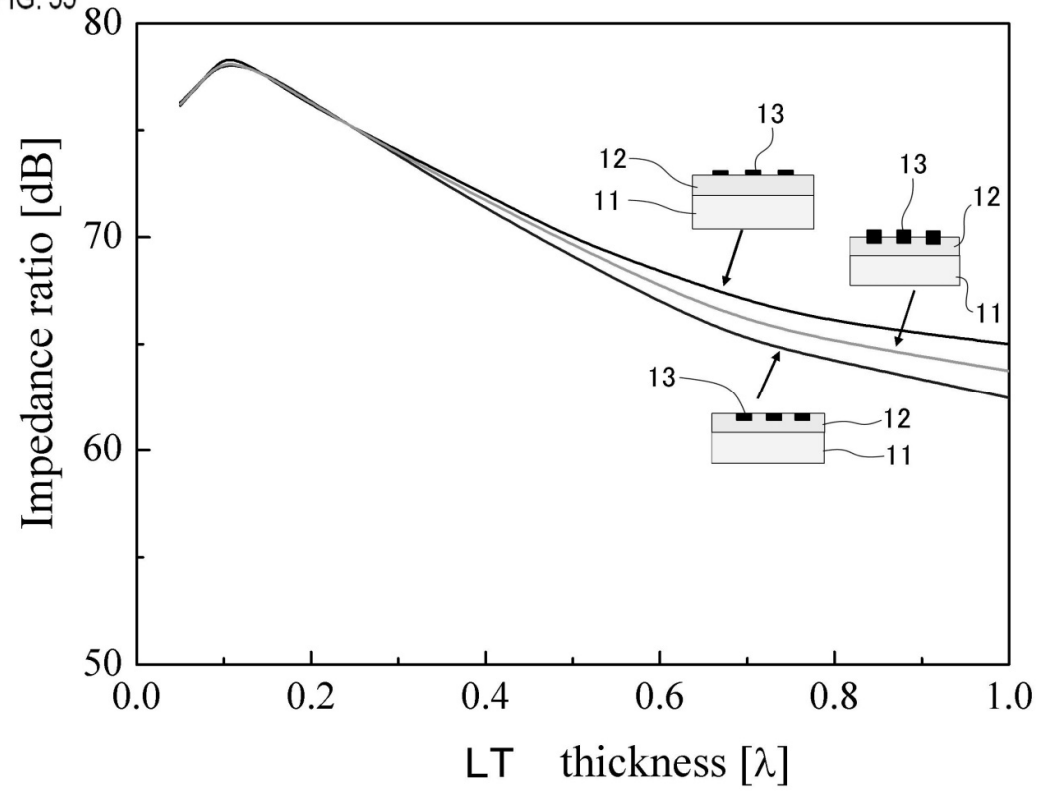


FIG. 36(a) $(0^\circ, 110^\circ, 0^\circ)$ LT/ Boundary film / $(0^\circ, 132.75^\circ, 90^\circ)$ quartz

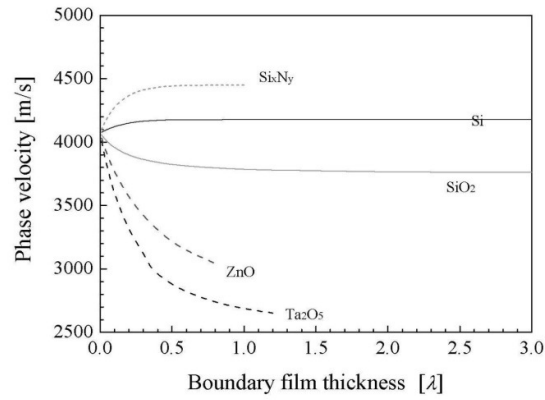


FIG. 36(b) $(0^\circ, 110^\circ, 0^\circ)$ LT/ Boundary film / $(0^\circ, 132.75^\circ, 90^\circ)$ quartz

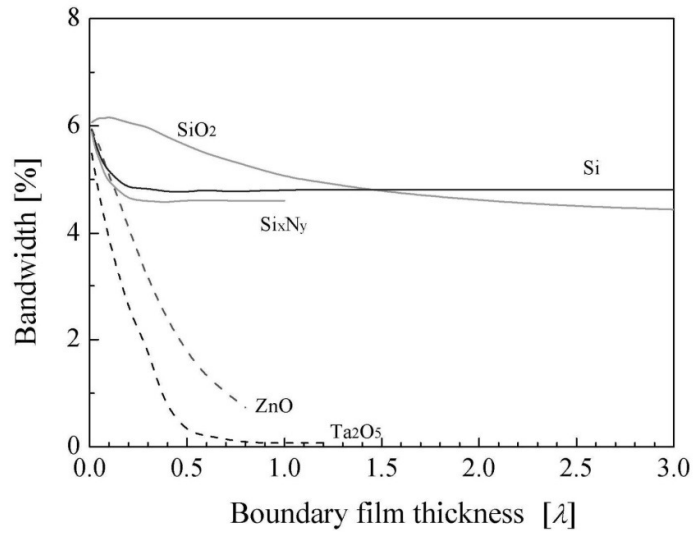
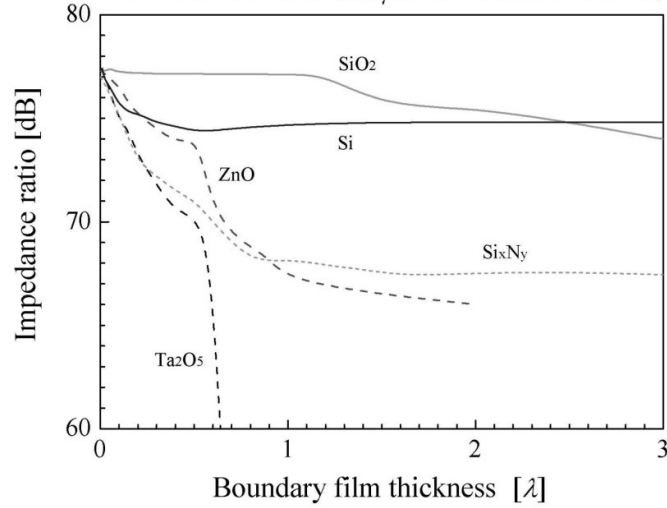
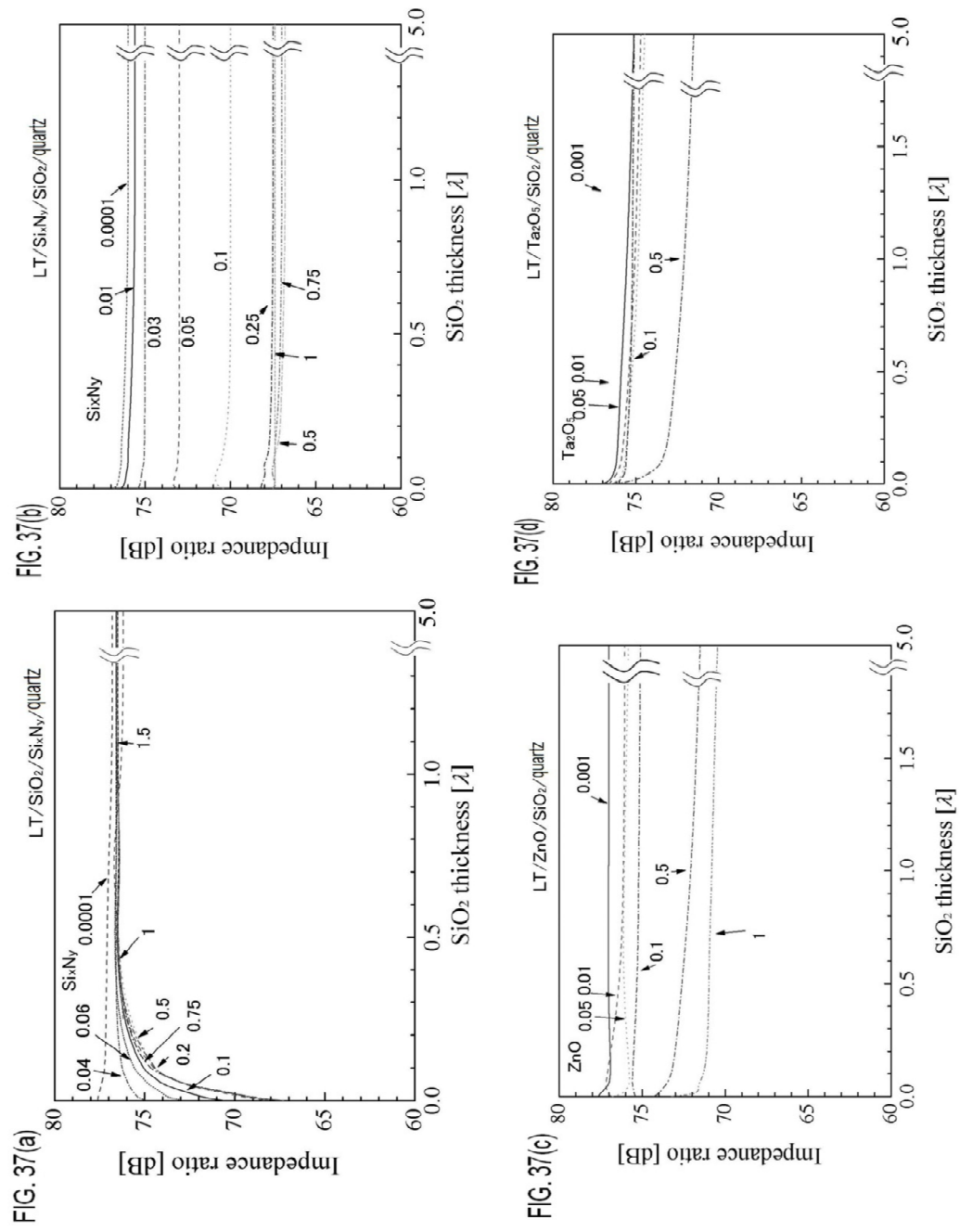


FIG. 36(c) $(0^\circ, 110^\circ, 0^\circ)$ LT/ Boundary film / $(0^\circ, 132.75^\circ, 90^\circ)$ quartz





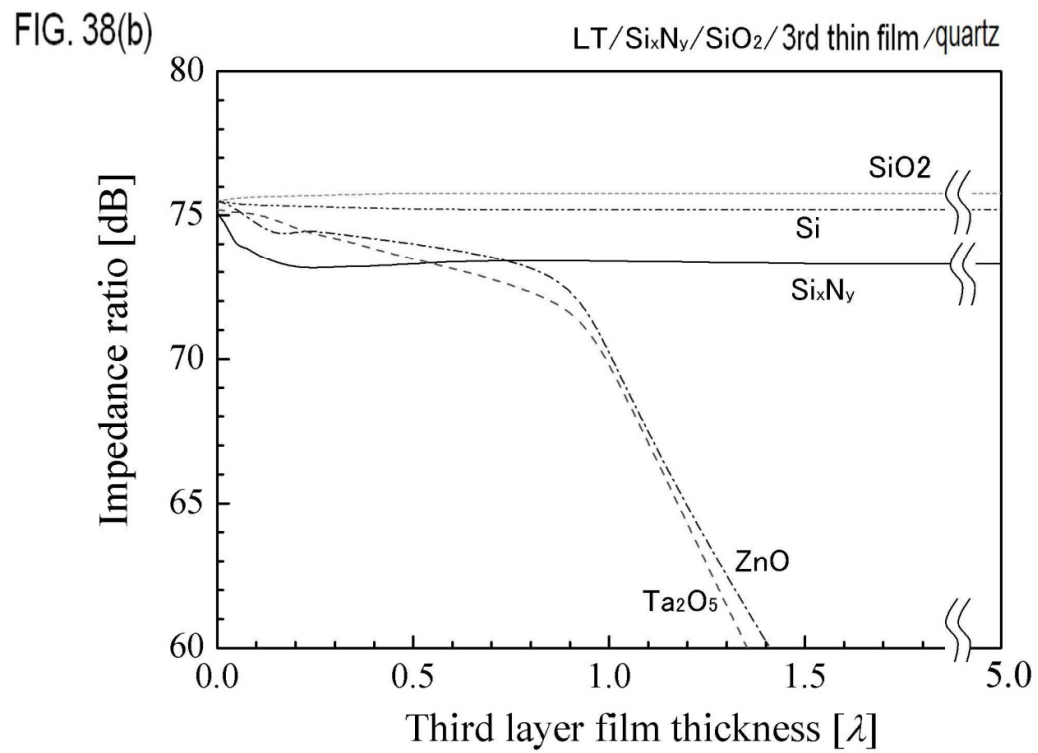
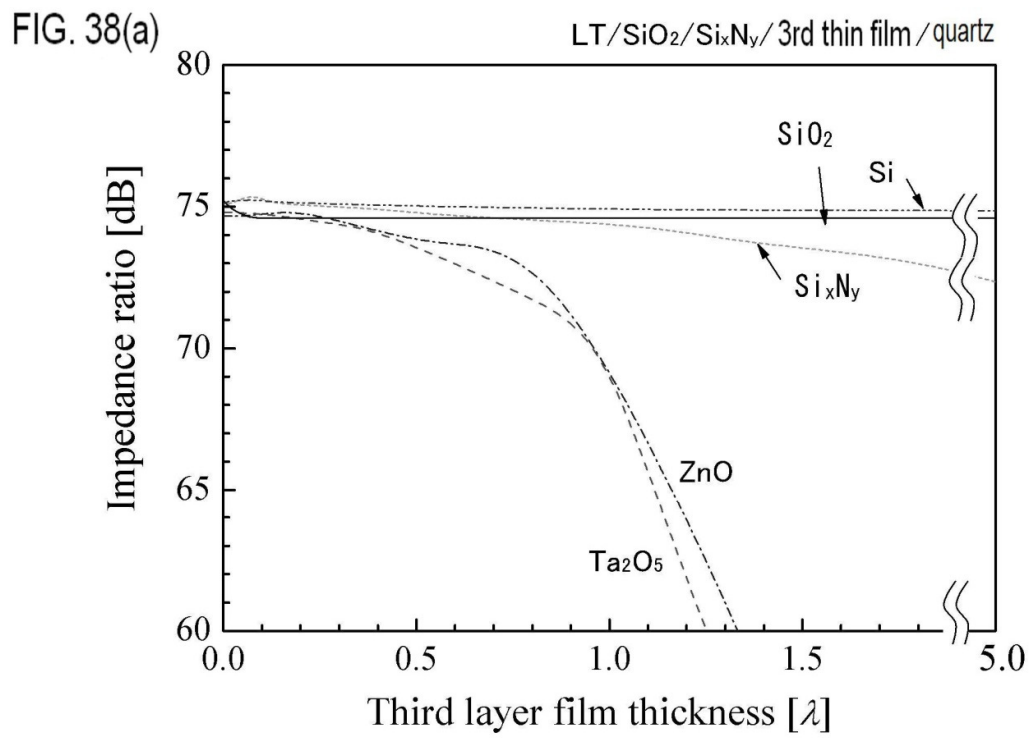


FIG. 39

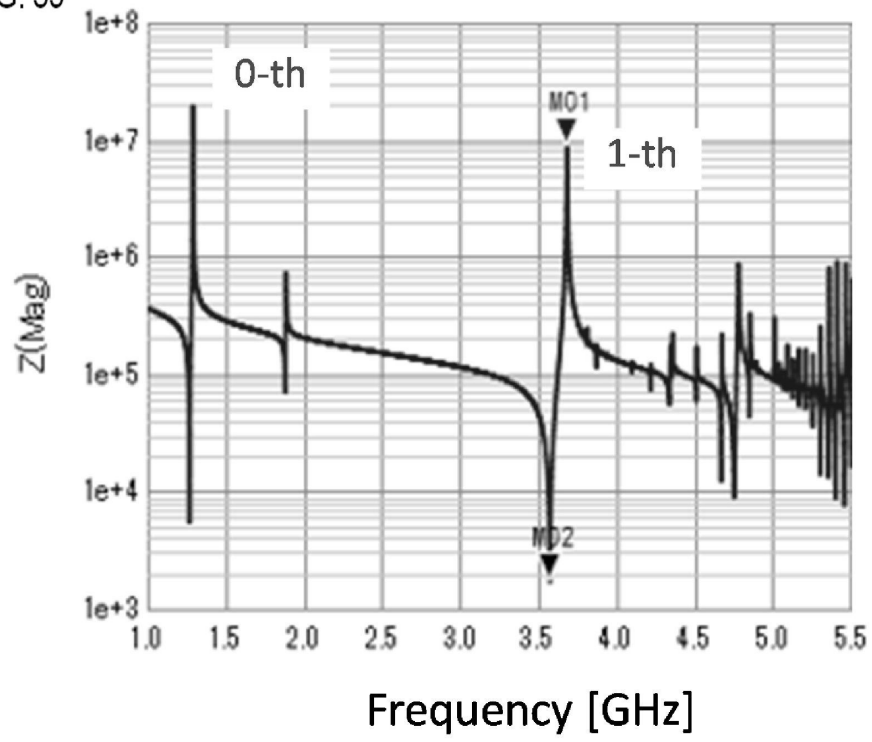


FIG. 40

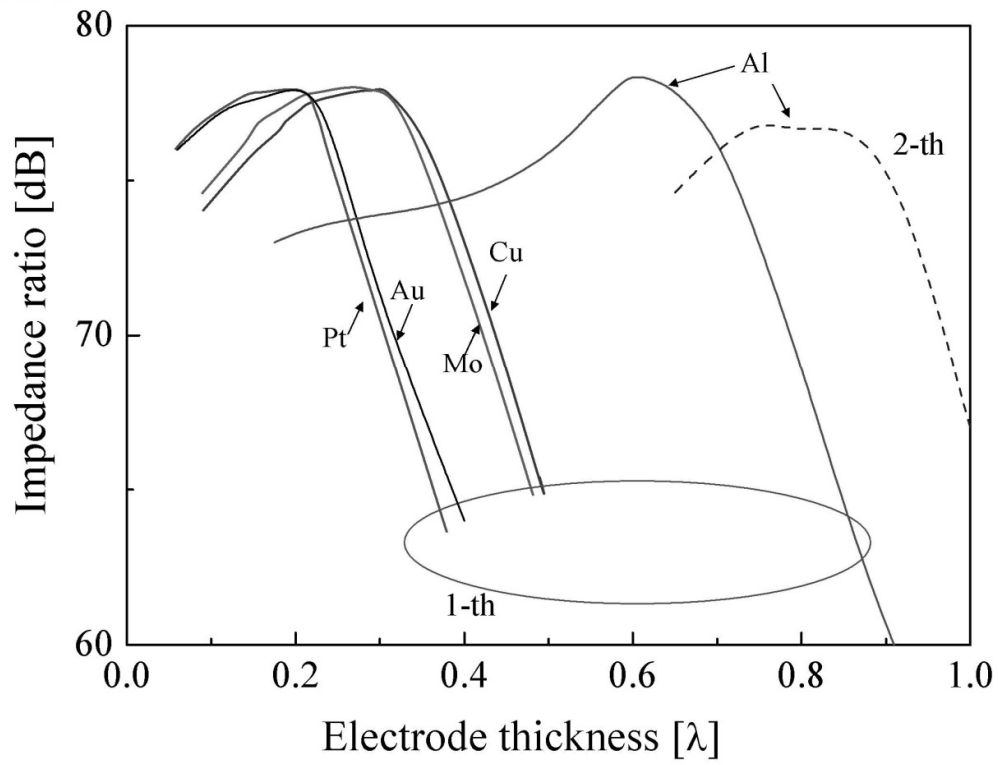


FIG. 41

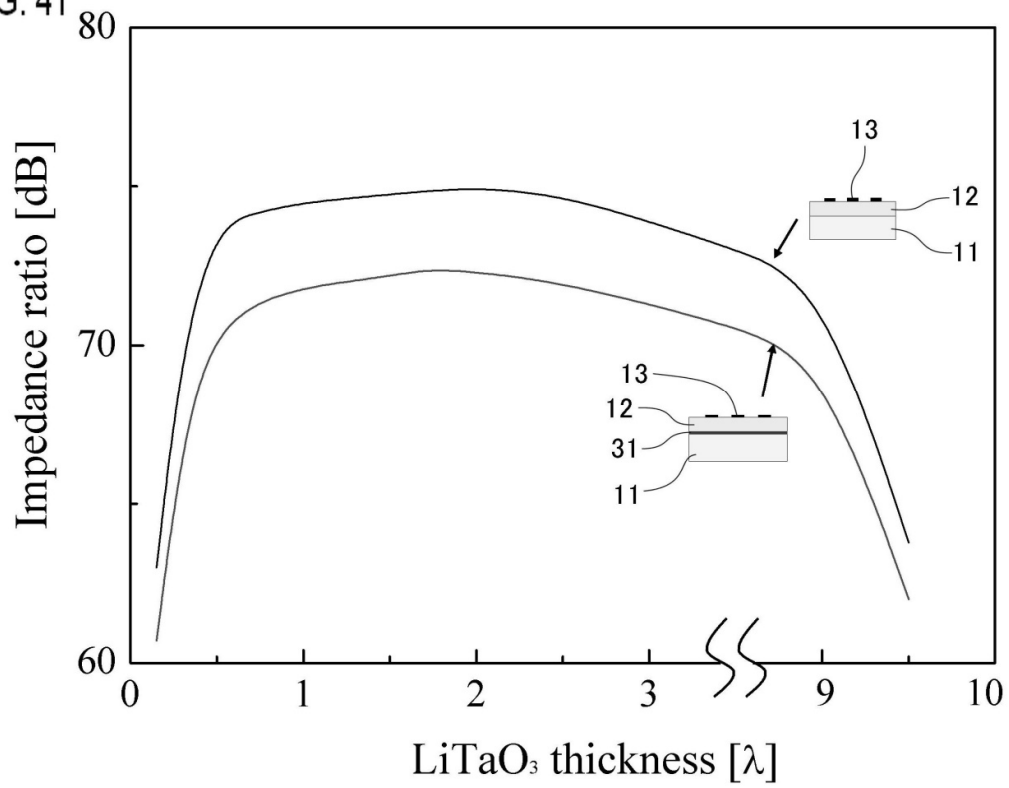


FIG. 42(a)

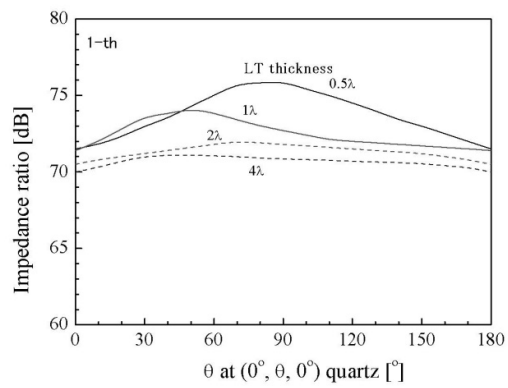
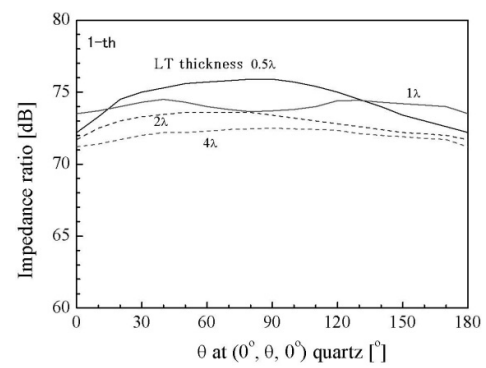


FIG. 42(b)



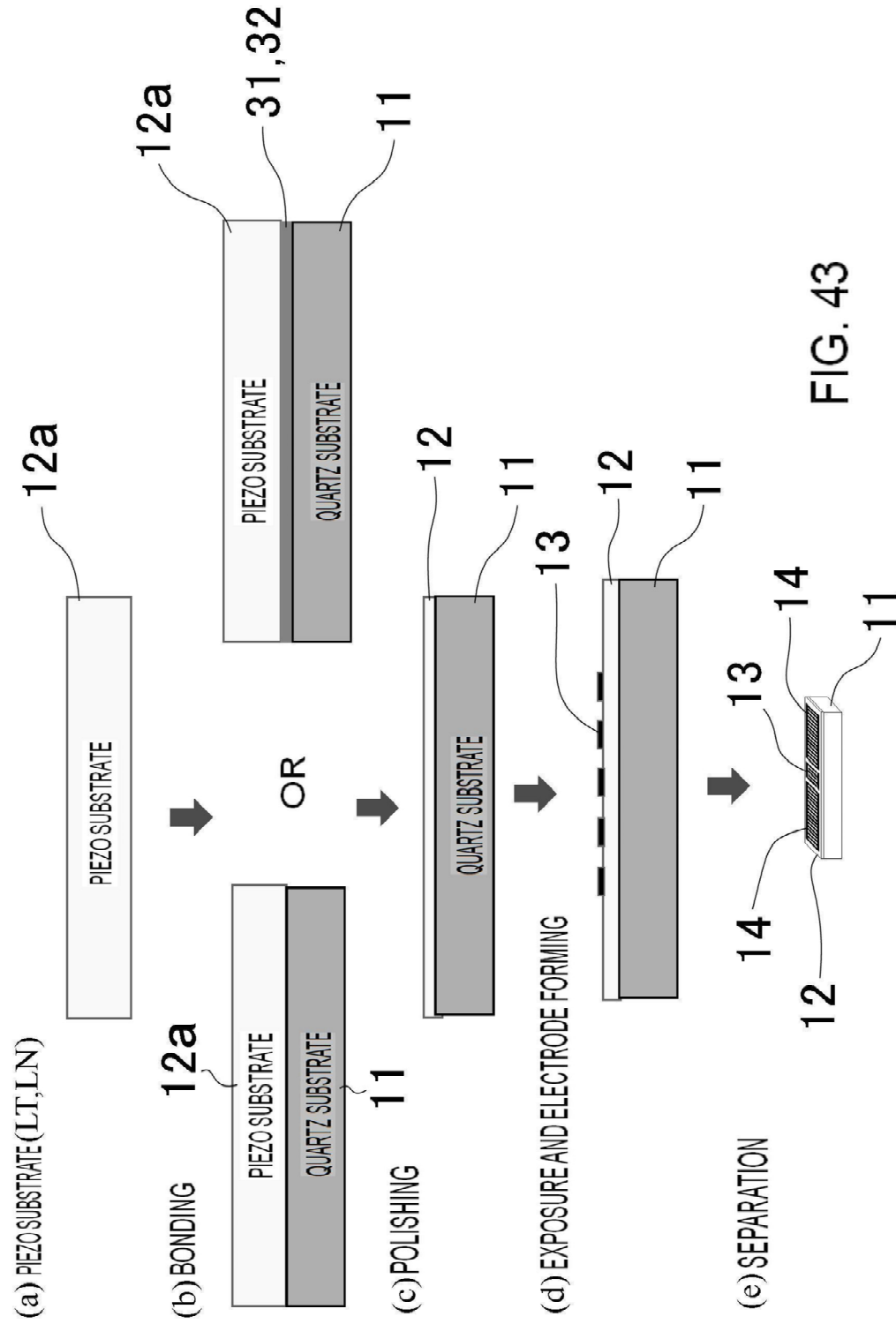


FIG. 43