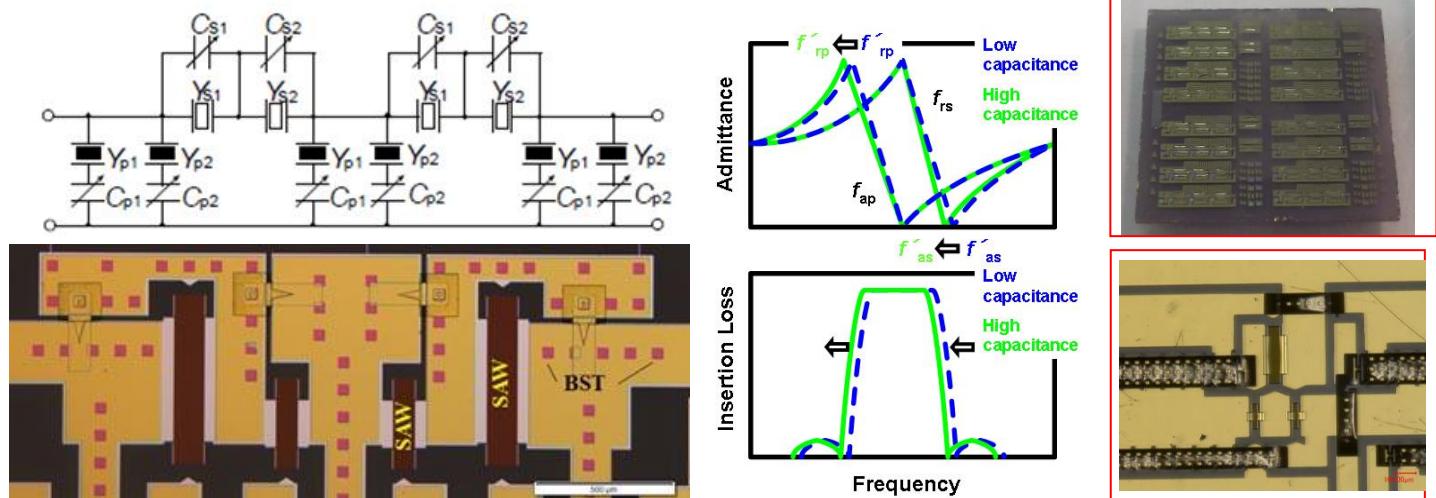
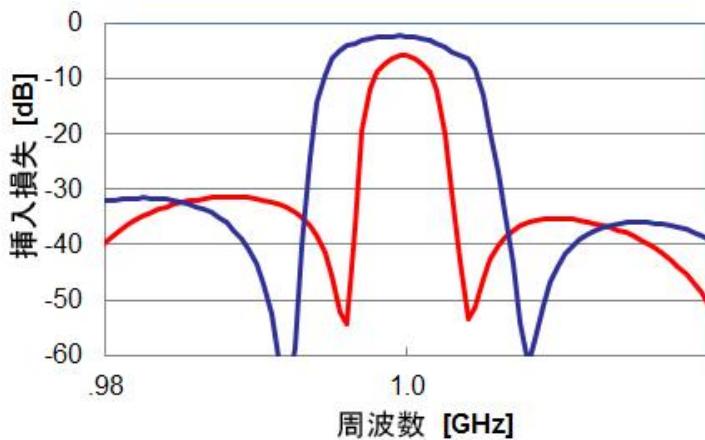


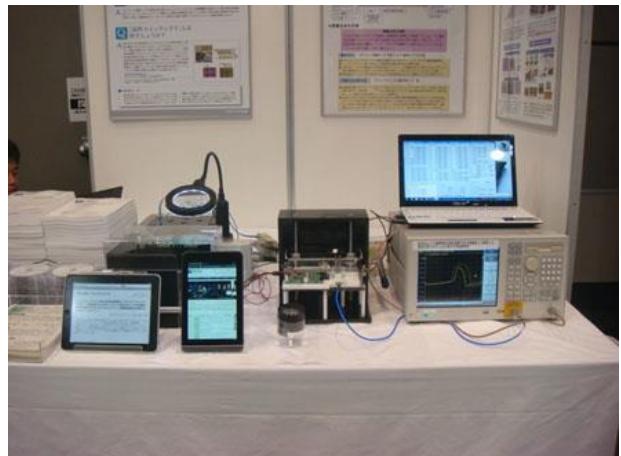
可変容量付帯域可変 SAW フィルタ



原理と写真

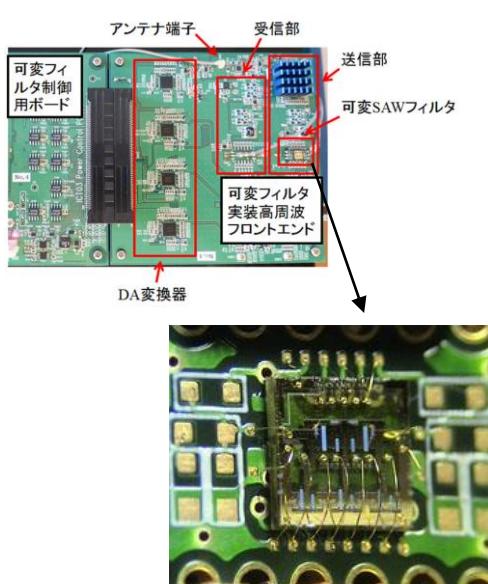


特性

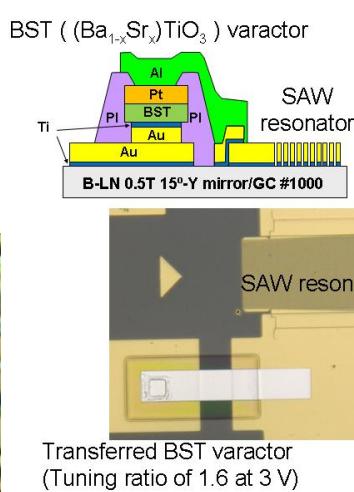


デモ

参考文献 : Hideki Hirano et.al, Bandwidth-tunable SAW Filter Based on Wafer-level Transfer-integration of BaSrTiO₃ Film for Wireless LAN System using TV White Space, IUS2014

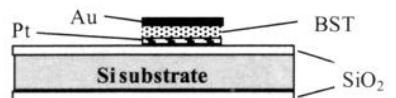


可変フィルタ

Transferred BST varactor
(Tuning ratio of 1.6 at 3 V)

強誘電体(BST)を用いた可変容量

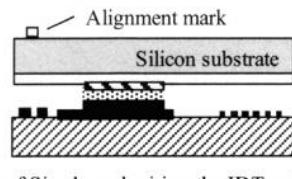
1. Deposition and patterning of Pt, BST and Au on Si



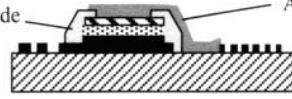
2. Fabrication of IDT and bonding pads



3. Au–Au bonding



4. Etching of Si sub. and wiring the IDT and VCs



参考文献 : H.Hirano, T.Kimura, I.P.Koutsaroff, M.Kodato, K.Hashimoto, M.Esashi and S.Tanaka, Integration of BST Varactors with Surface Acoustic Wave Device by Film Transfer Technology for Tunable RF Filters
J. of Micromech. Microeng., 23, 2 (2013) 025005 (9pp)