

Figure 2

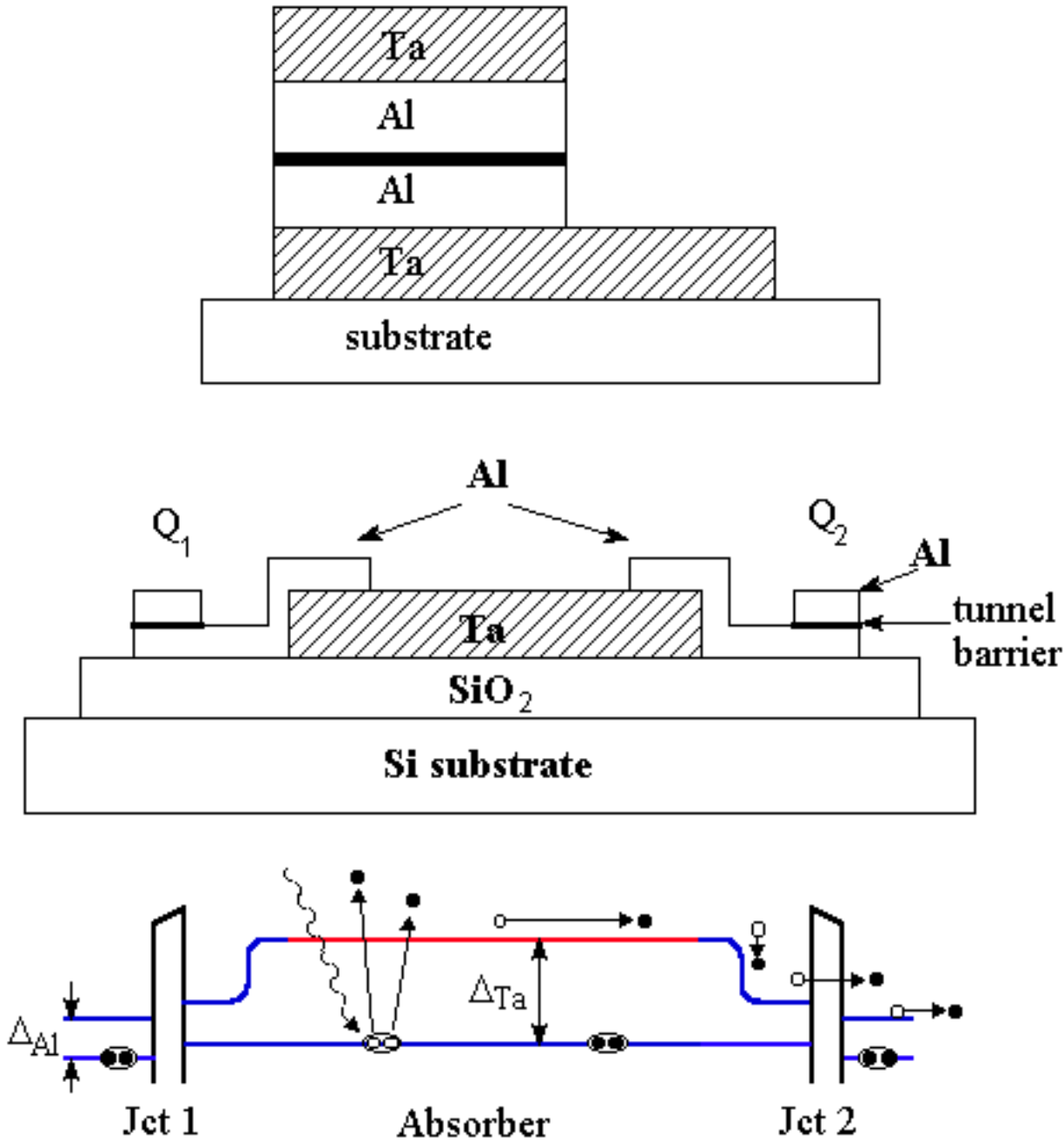


Fig 2 Schematic of sandwich structure of combined absorber and STJ. Photons are absorbed in one of the Ta layers (usually the top layer) and cause a tunneling current. The second diagram shows a lateral device in which the quasiparticle charge divides, diffuses in the absorber, and is trapped in the Al trap and then tunnels. Here,  $Q = Q_1 + Q_2 \approx 0.6 e (E / \Delta_{Ta})$ .