

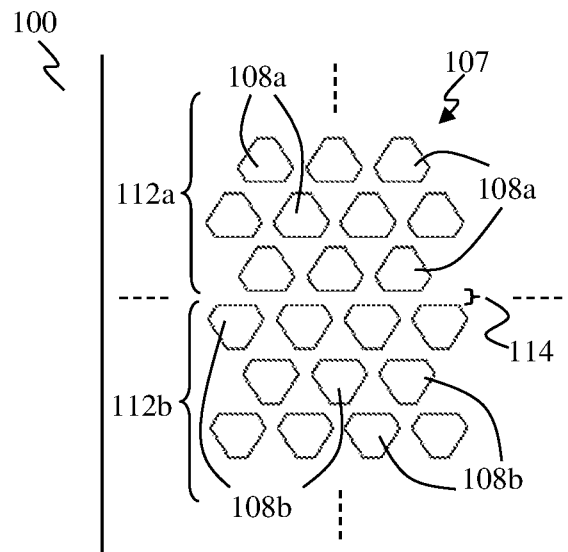


FIG. 1A

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Form a photonic crystal structure having a first domain comprising a plurality of first holes defined therein, the first domain being associated with a first set of Chern numbers, and a second domain comprising a plurality of second holes defined therein, the second domain being associated with a second set of Chern numbers, wherein the plurality of first holes and the plurality of second holes are arranged to define an interface region between the first domain and the second domain, the interface region defining an optical cavity for lasing

FIG. 1B

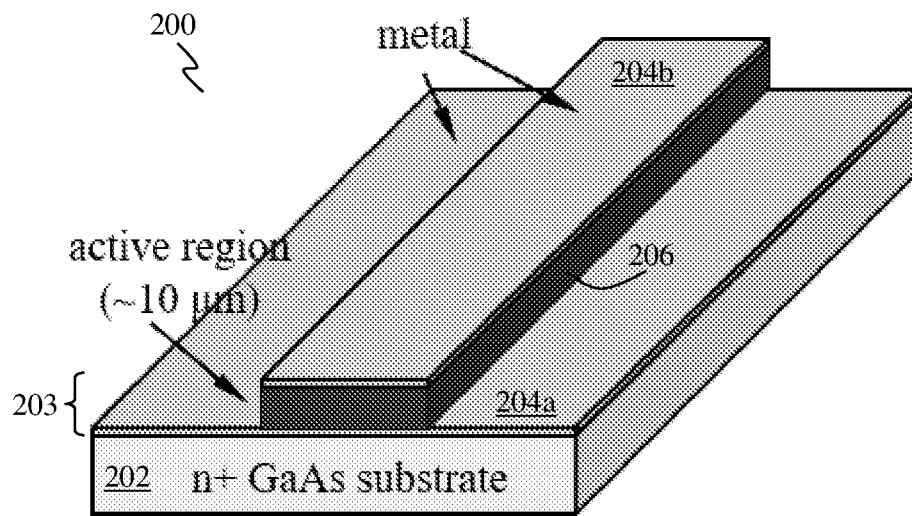


FIG. 2A

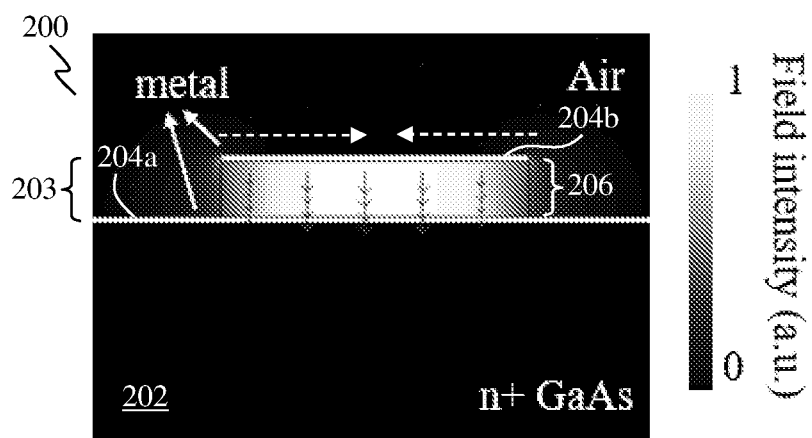


FIG. 2B

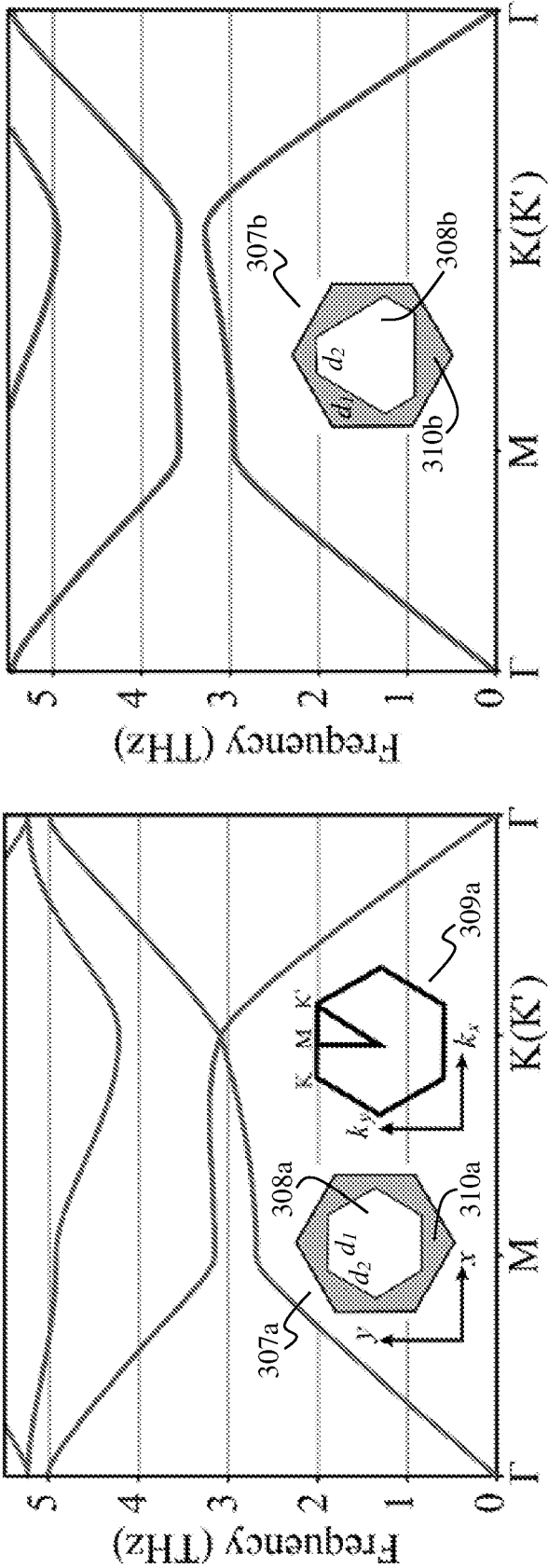


FIG. 3B

FIG. 3A

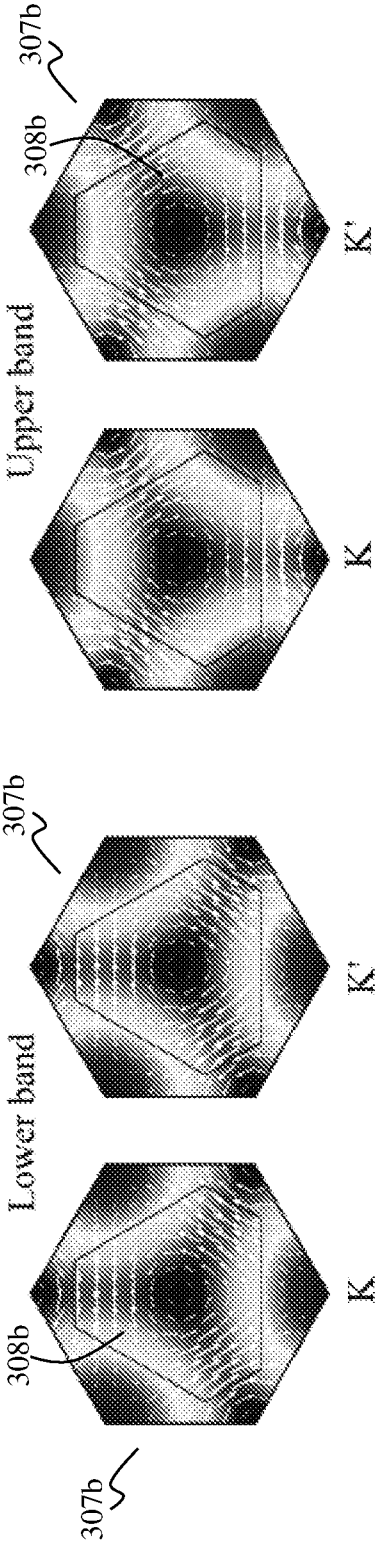


FIG. 3D

FIG. 3C

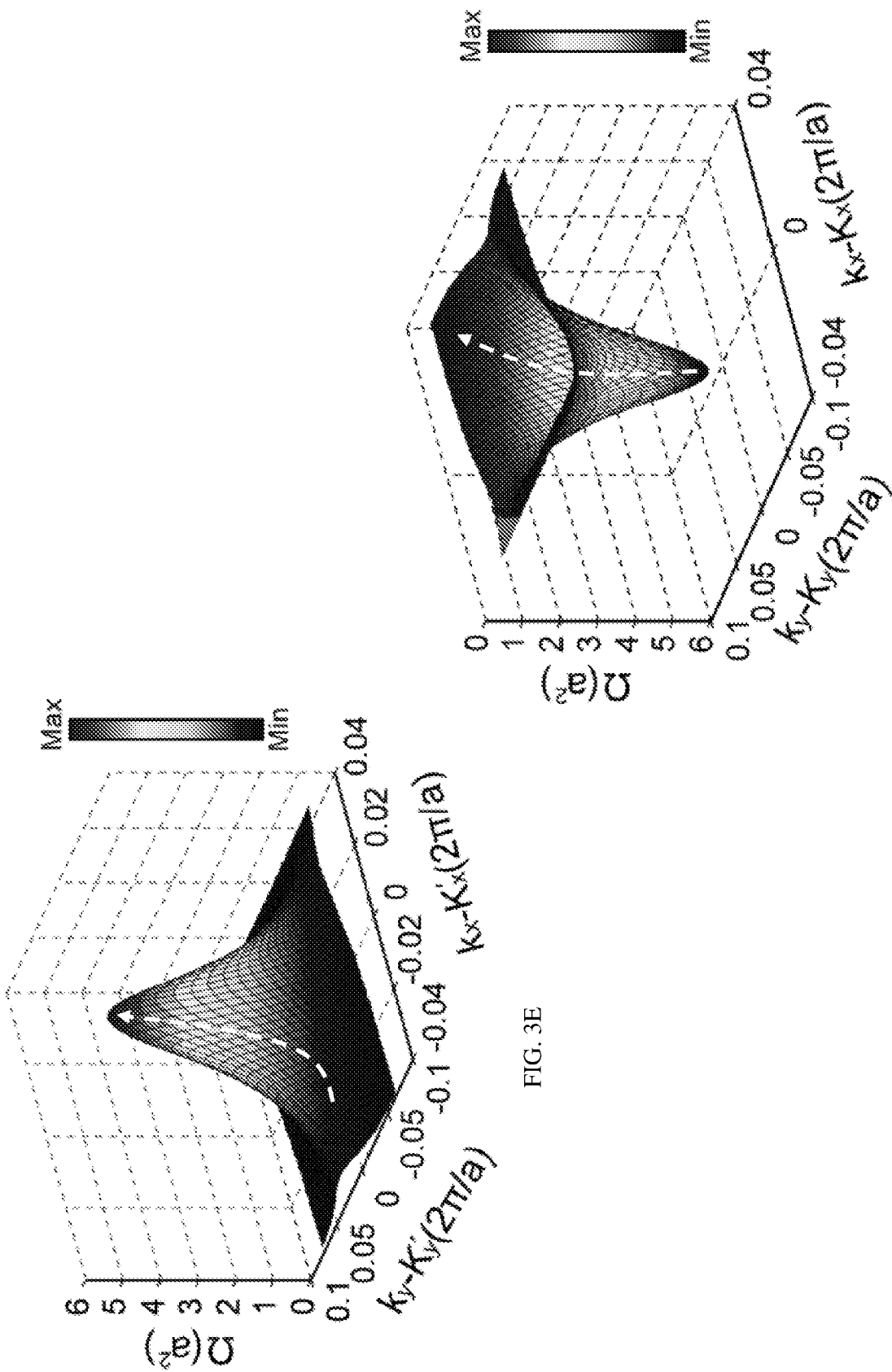


FIG. 3F

FIG. 3E

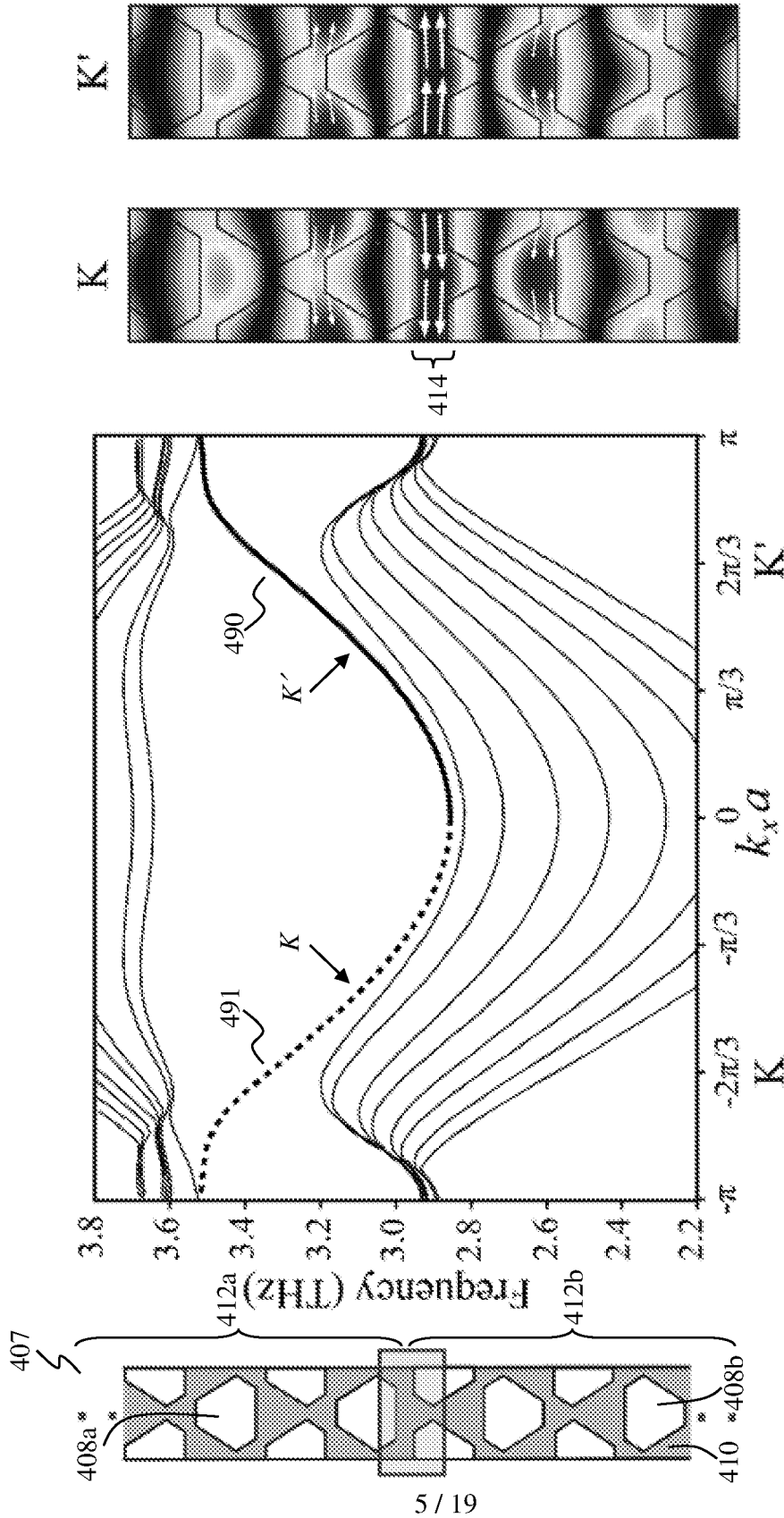


FIG. 4A

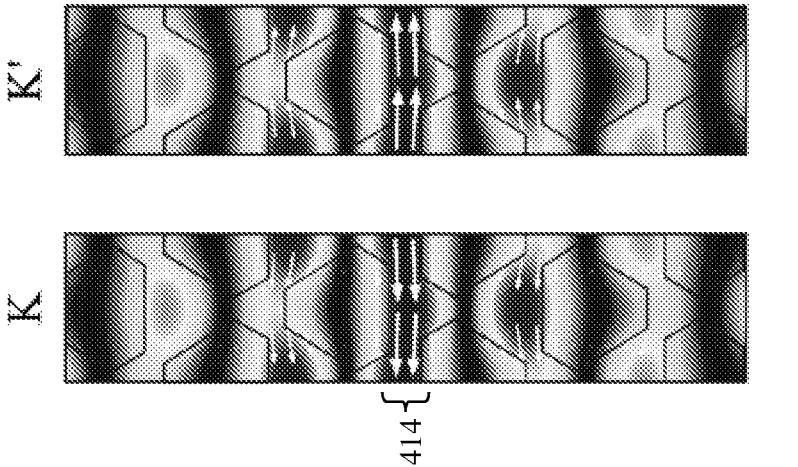


FIG. 4B

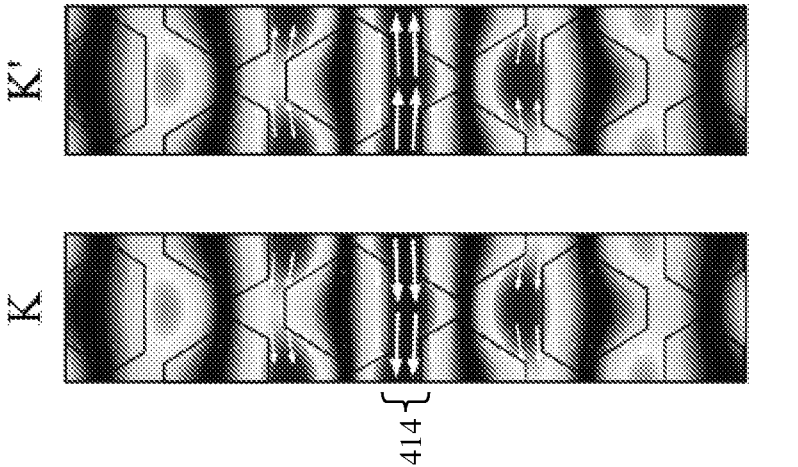


FIG. 4C

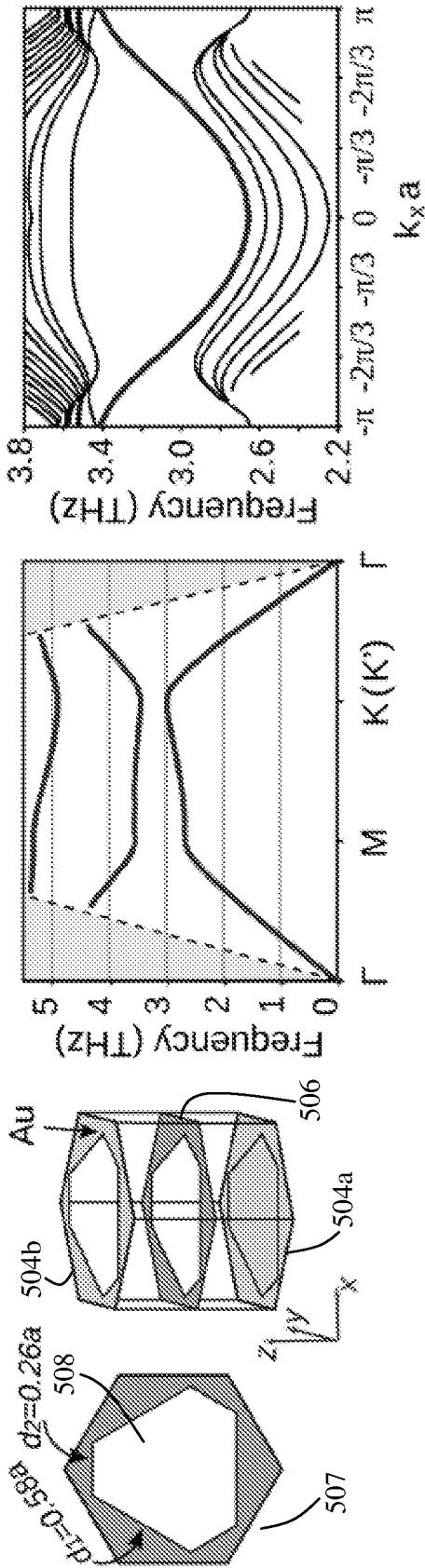


FIG. 5C

FIG. 5B

FIG. 5A

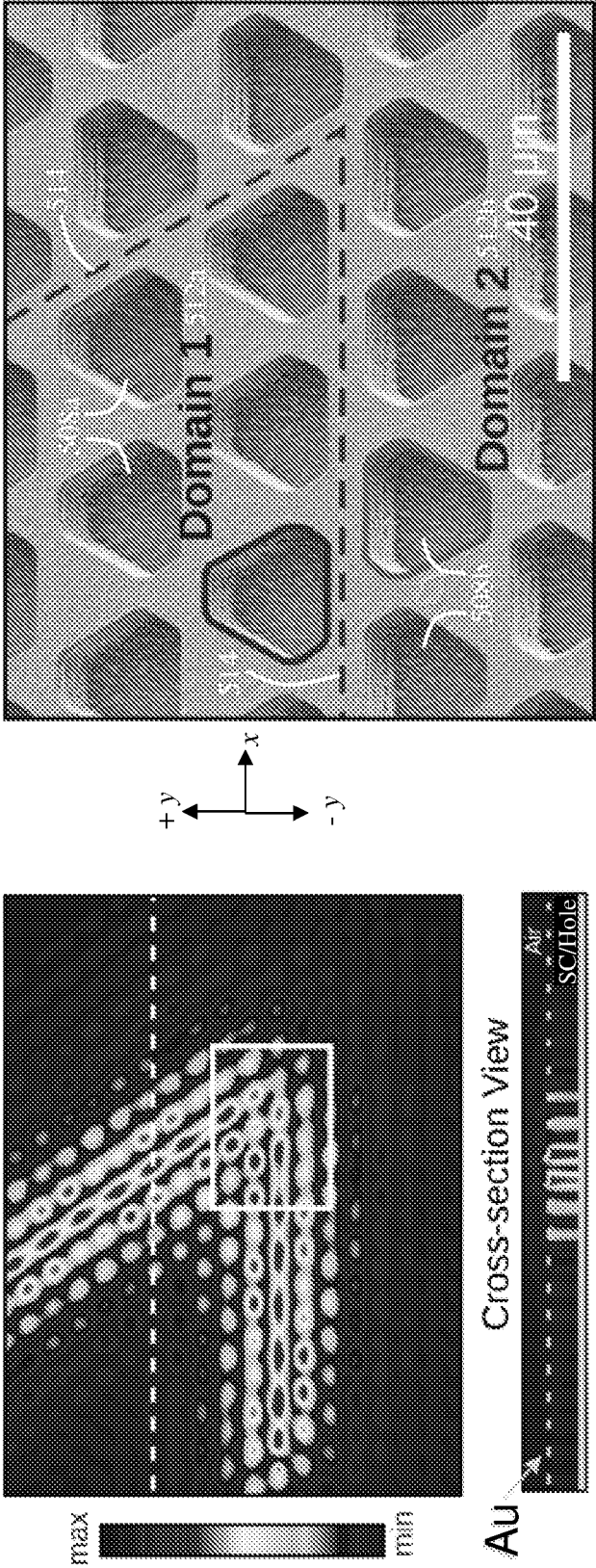


FIG. 5E

FIG. 5D

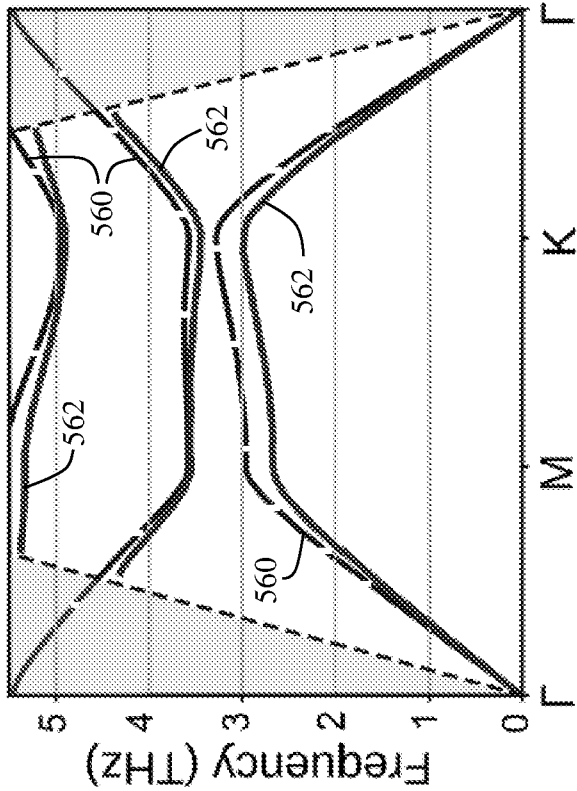


FIG. 5F

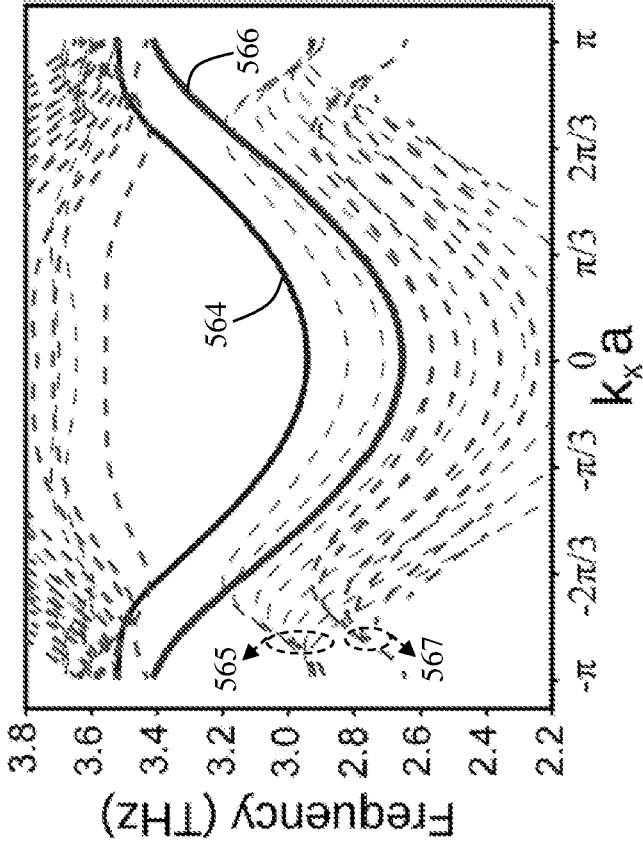


FIG. 5G

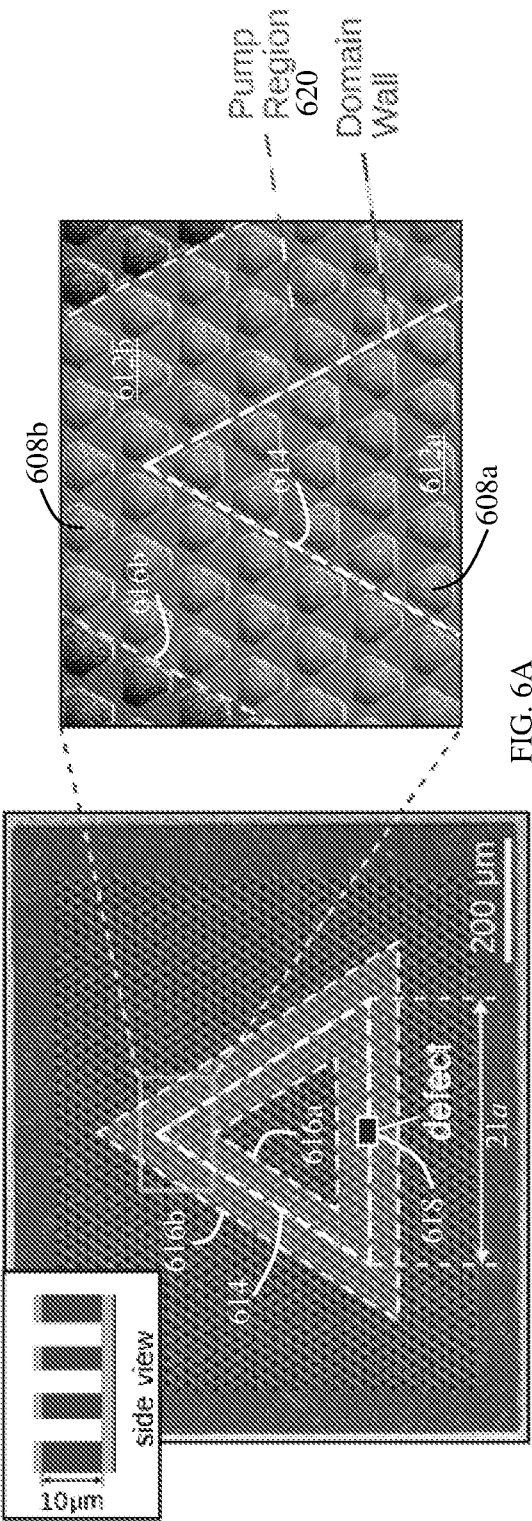


FIG. 6A

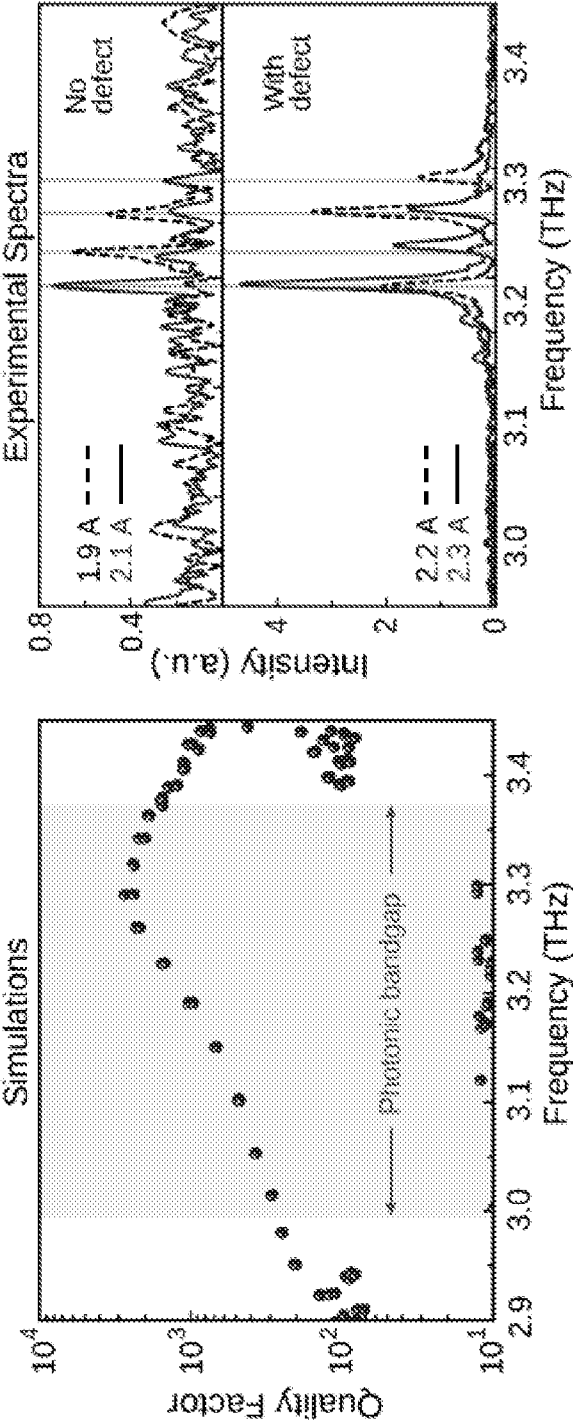


FIG. 6C

FIG. 6B

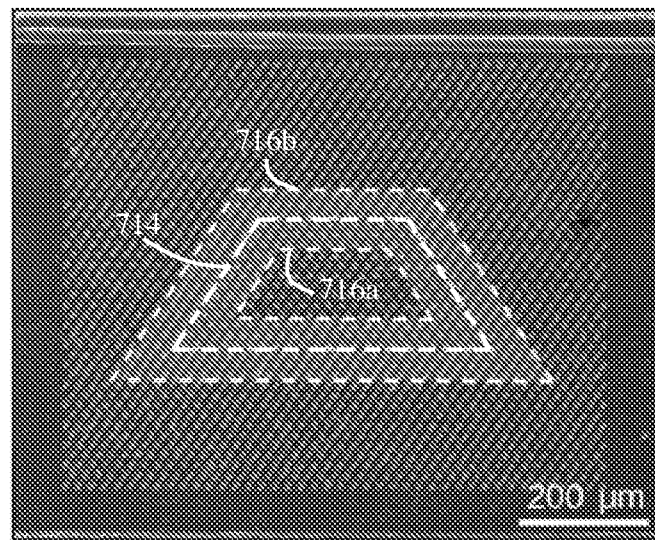


FIG. 7A

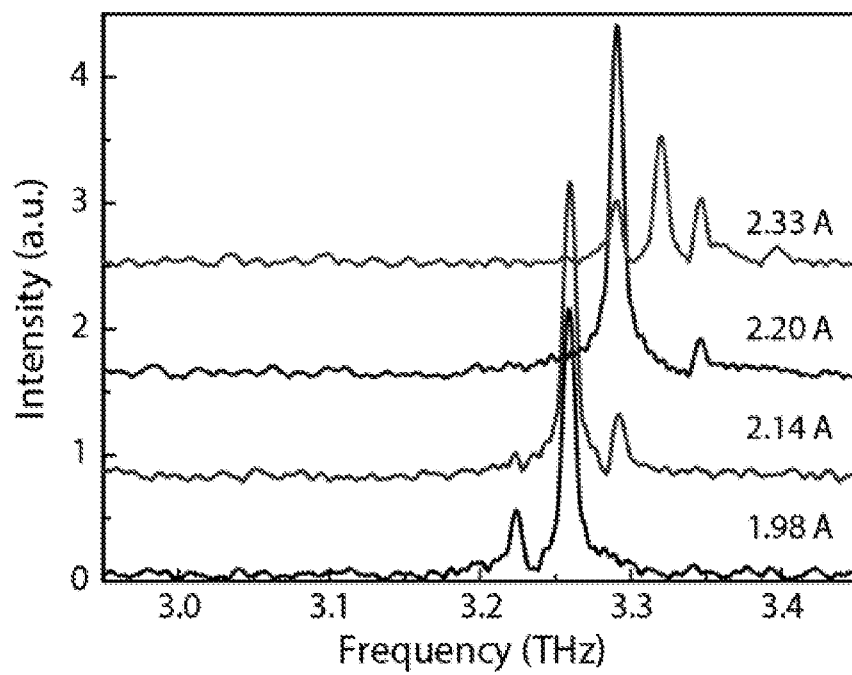


FIG. 7B

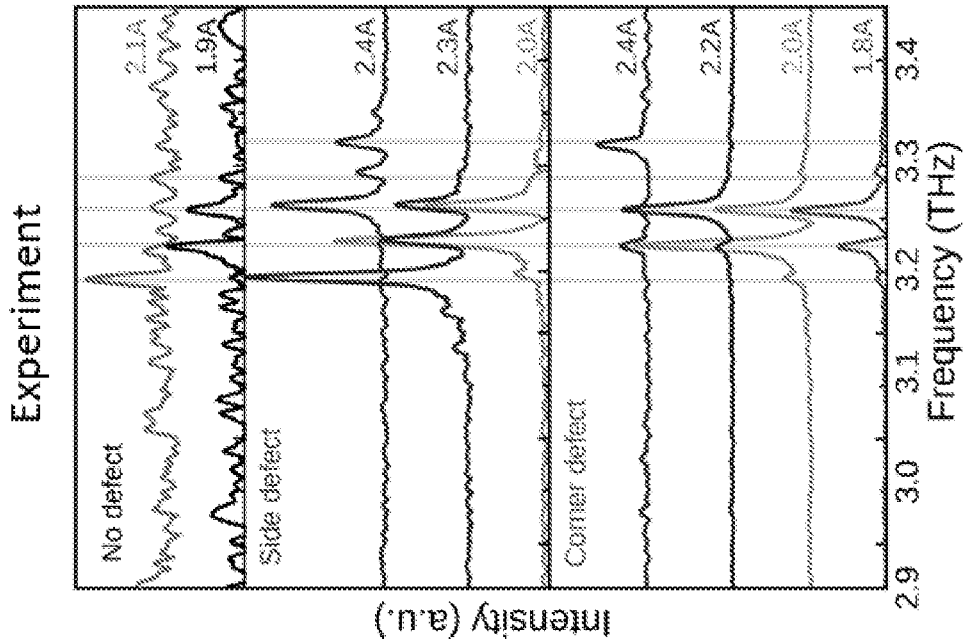


FIG. 8C

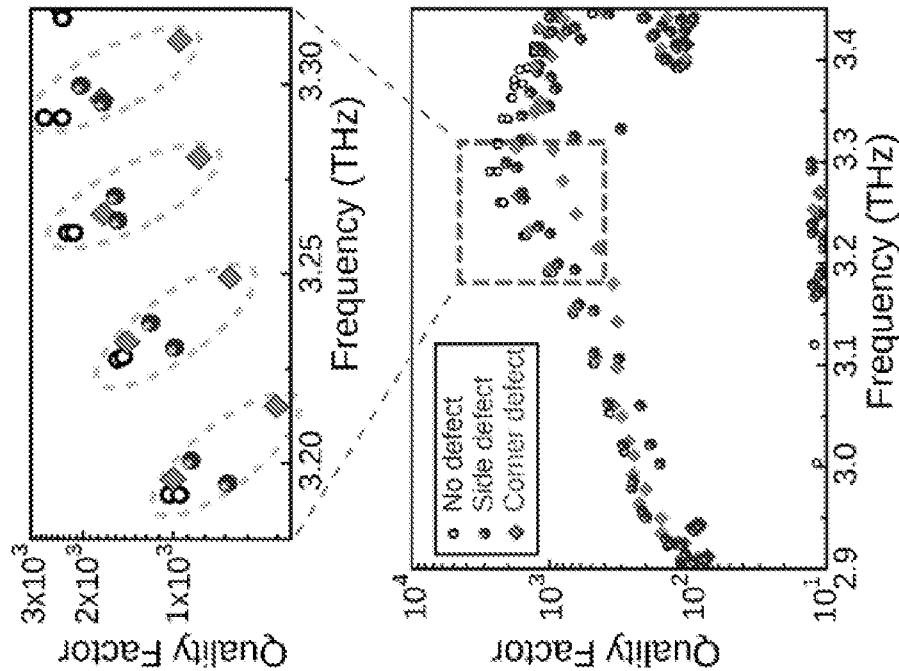


FIG. 8B

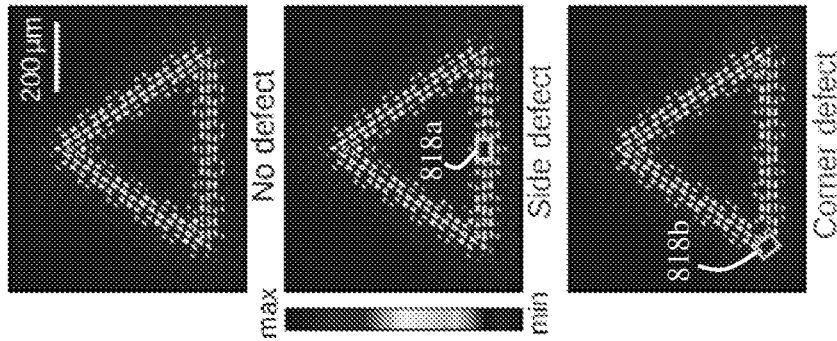


FIG. 8A

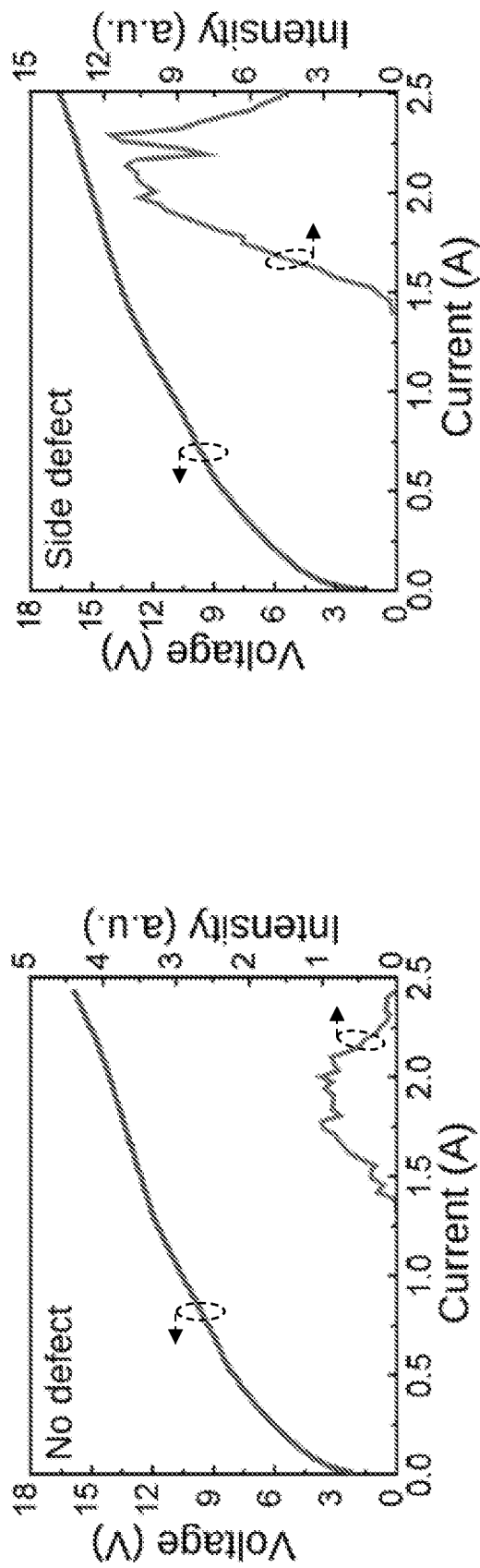


FIG. 8D

FIG. 8E

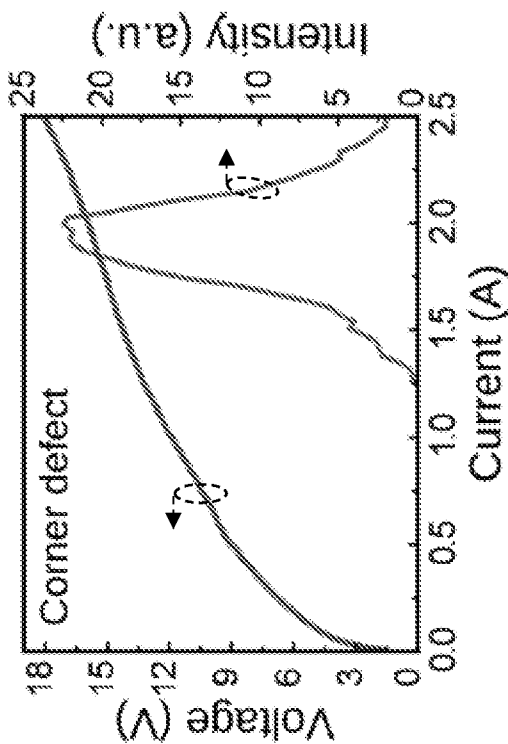


FIG. 8F

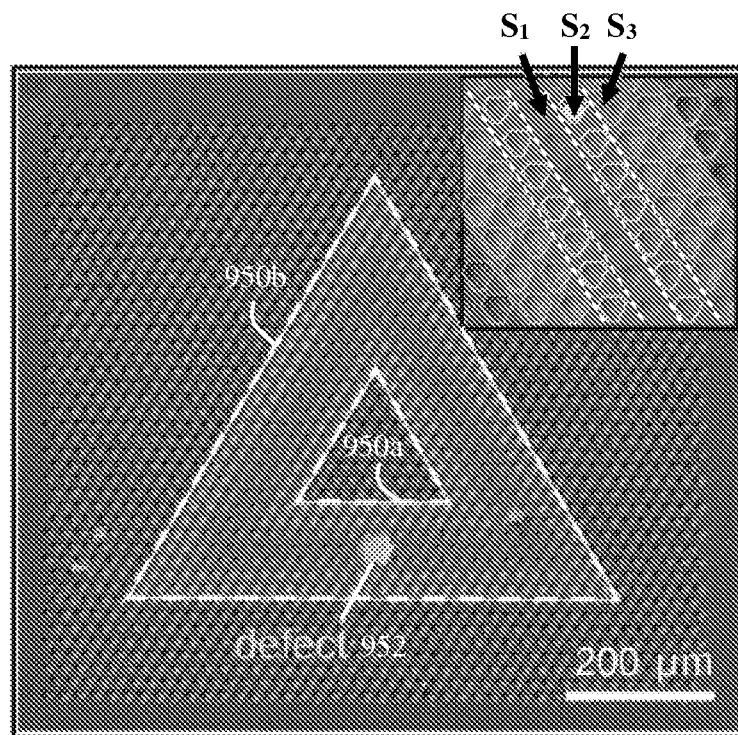


FIG. 9A

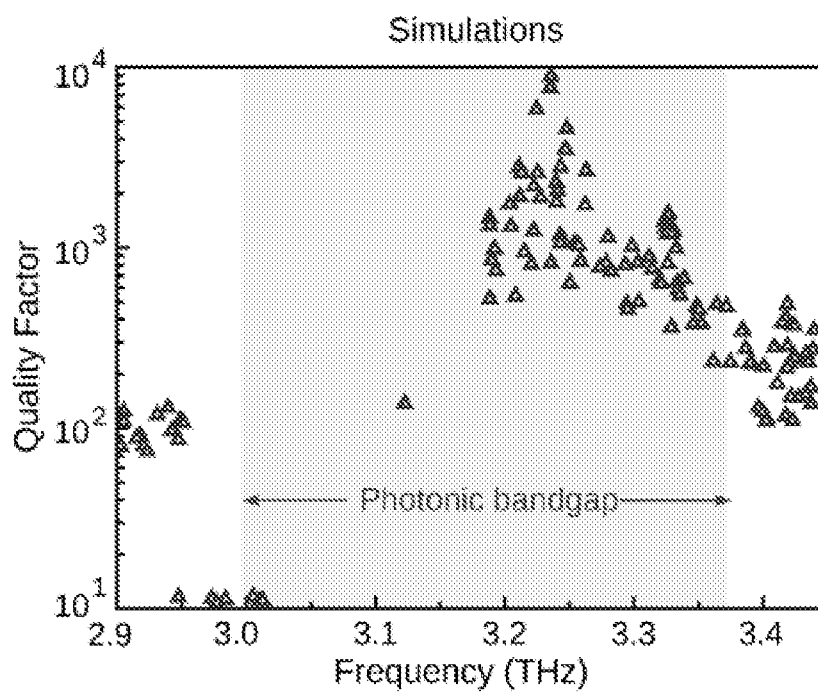


FIG. 9B

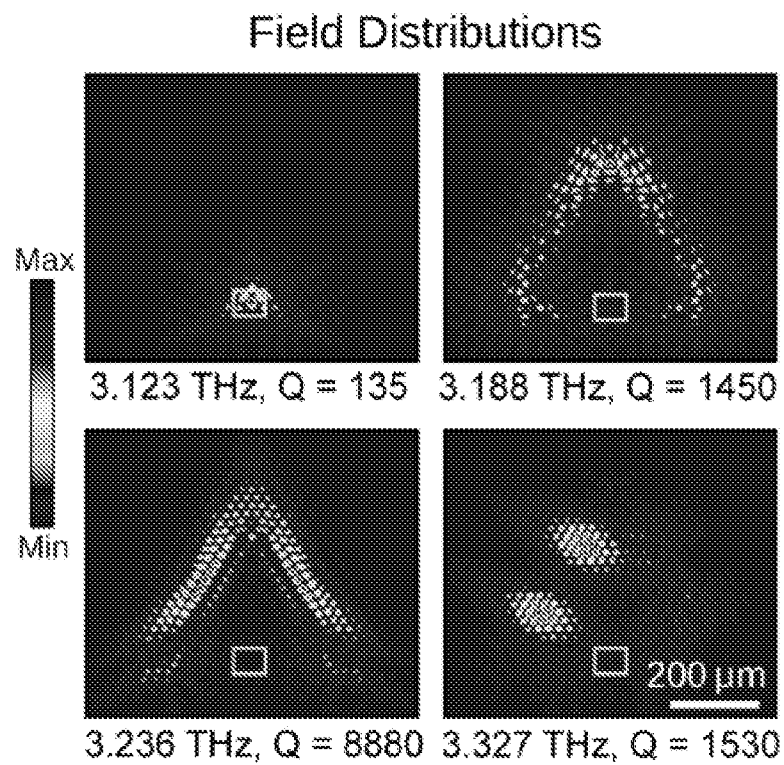


FIG. 9C

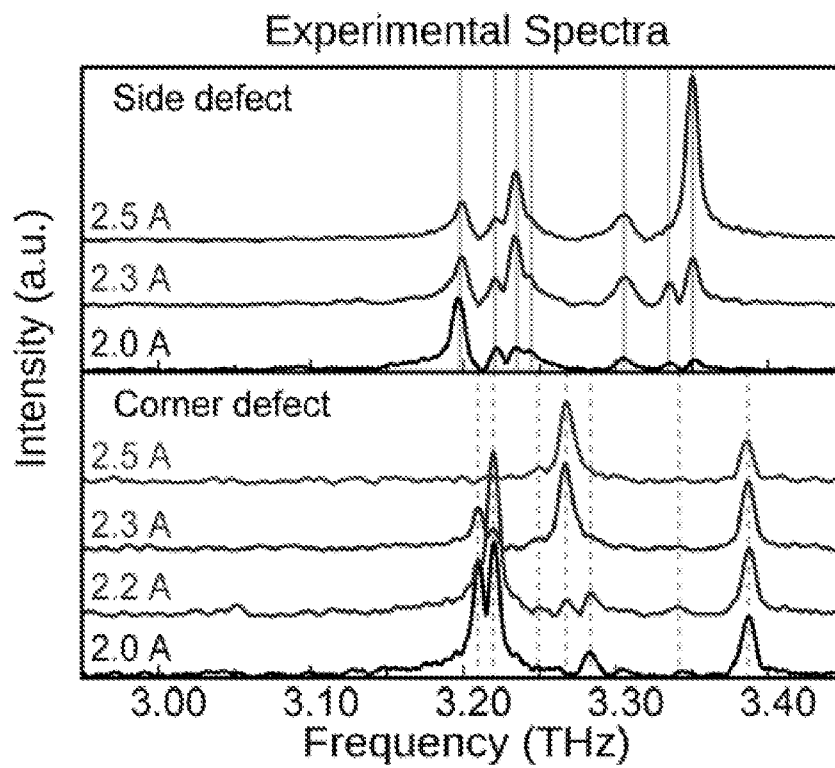


FIG. 9D

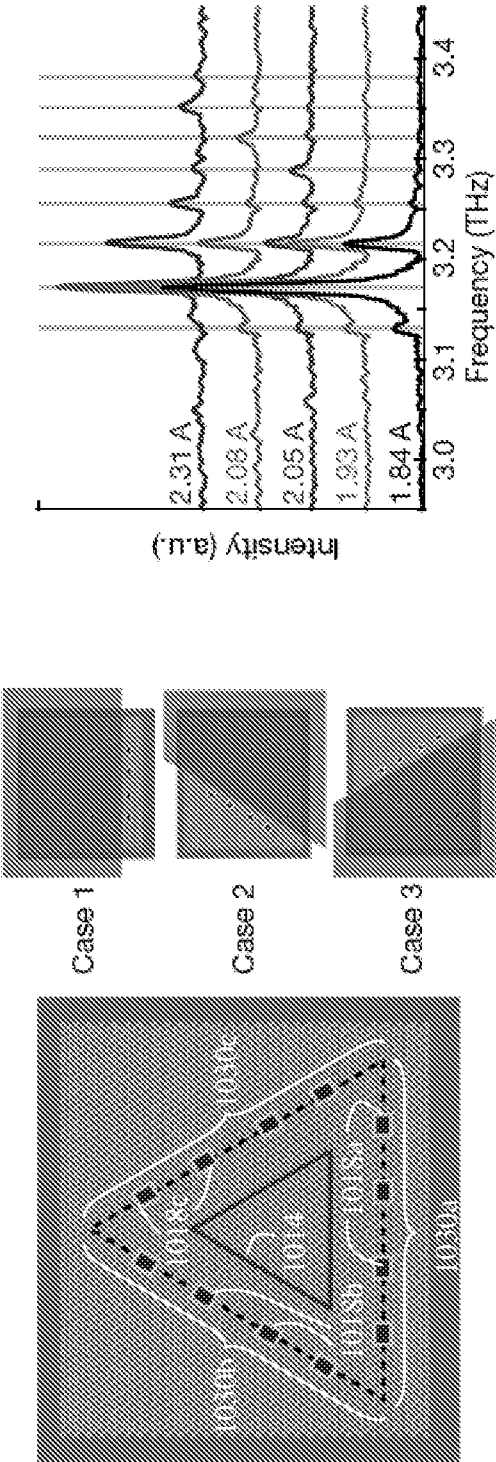


FIG. 10B

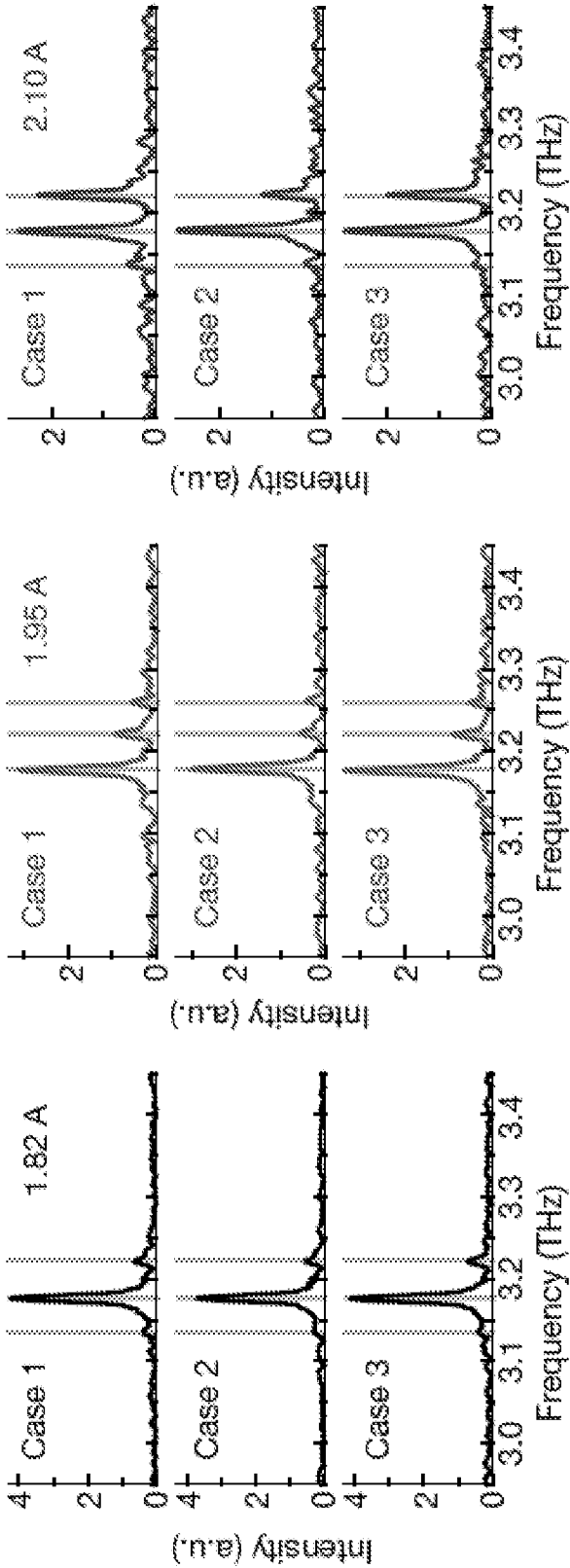


FIG. 10A

FIG. 10E

FIG. 10D

FIG. 10C

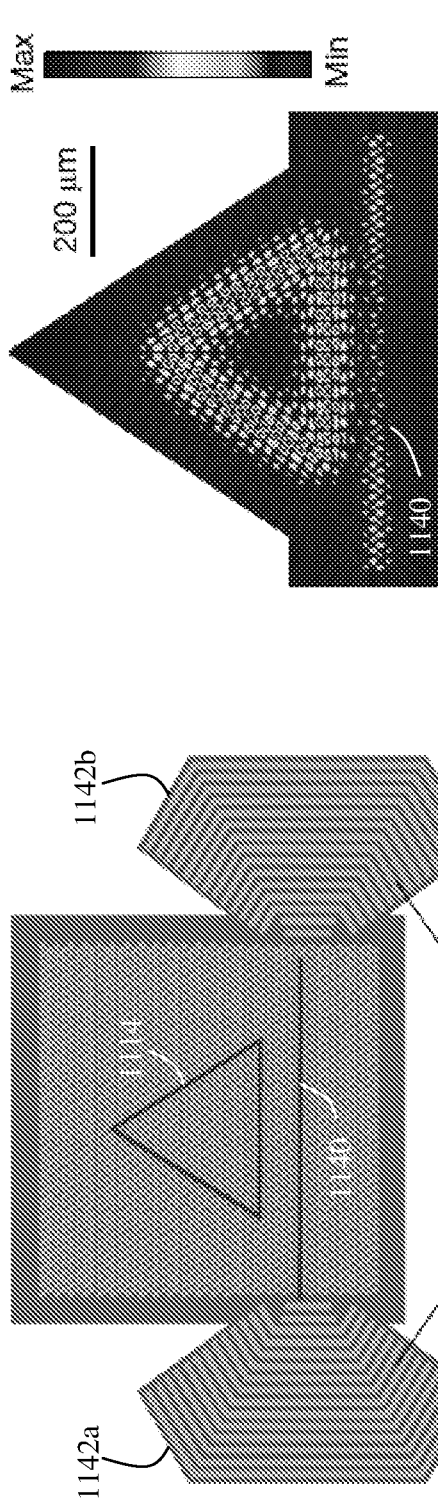


FIG. 11B

FIG. 11A

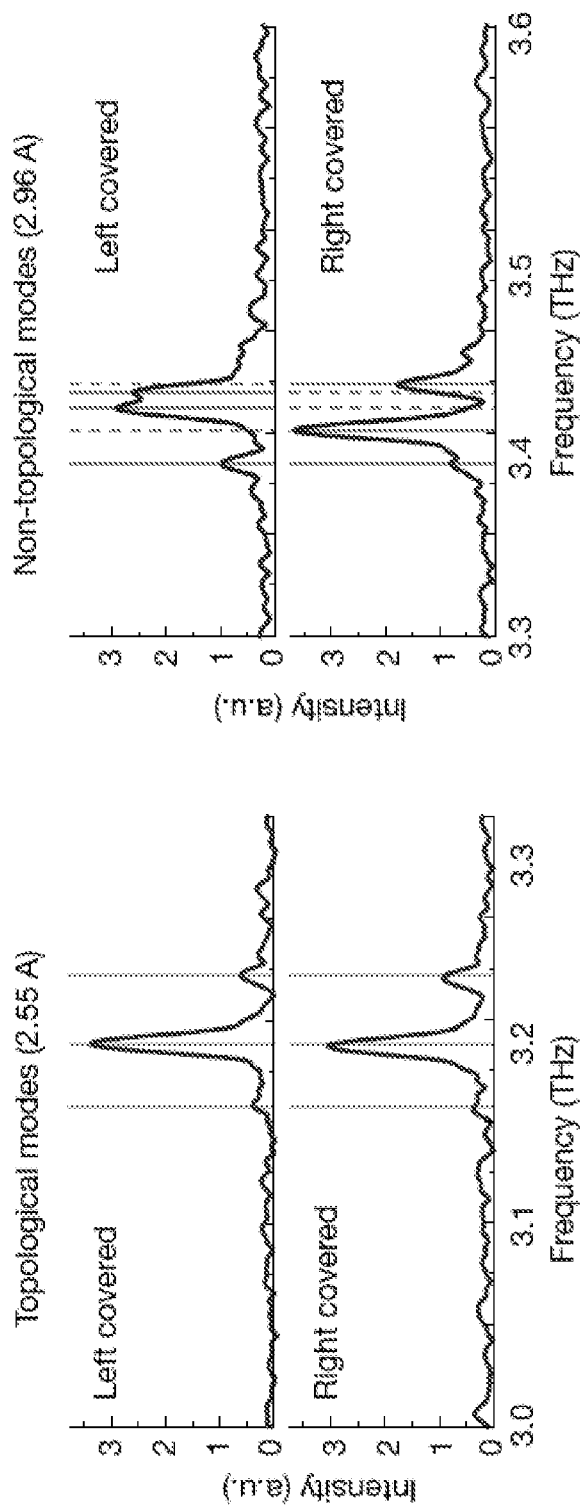


FIG. 11D

FIG. 11C

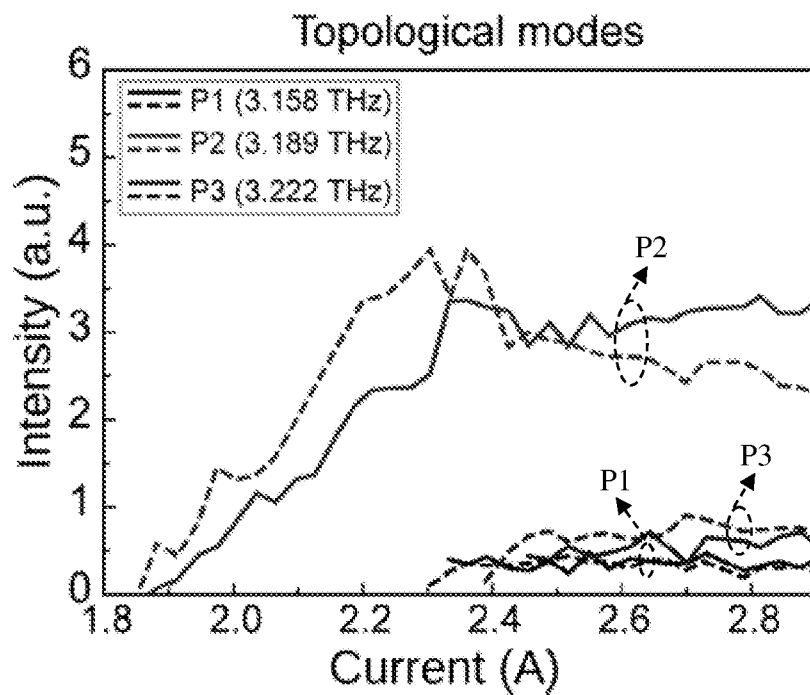


FIG. 11E

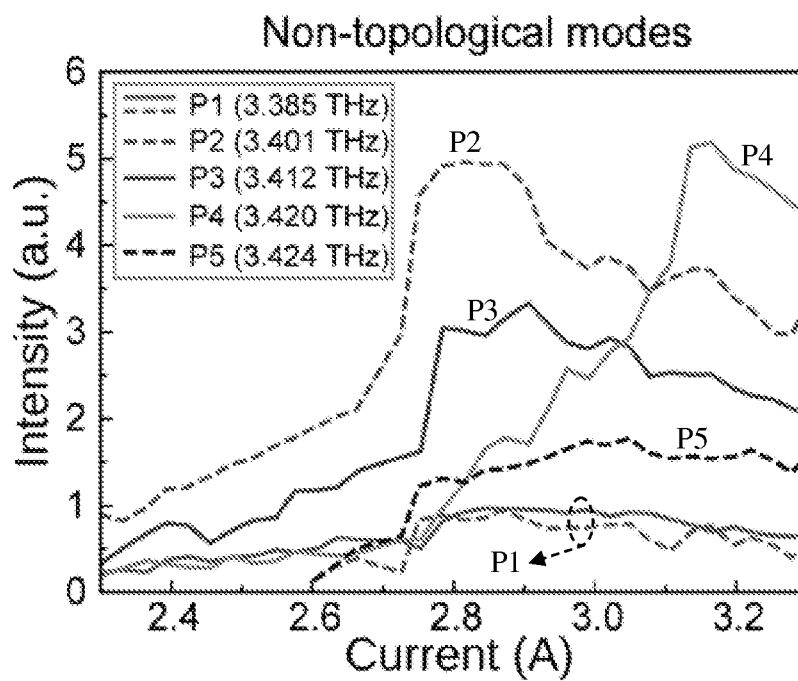


FIG. 11F

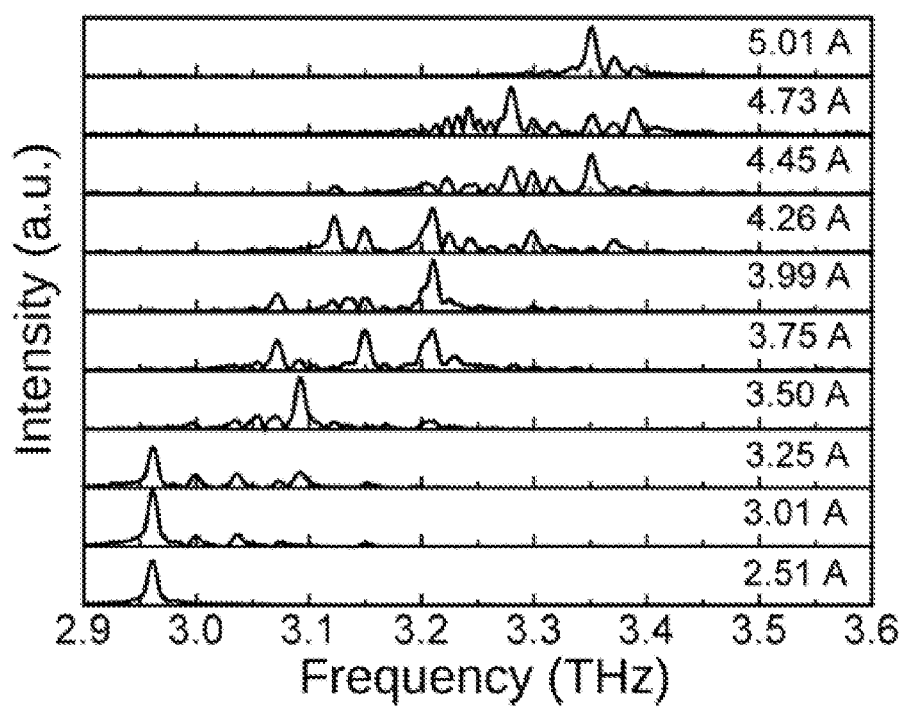


FIG. 12A

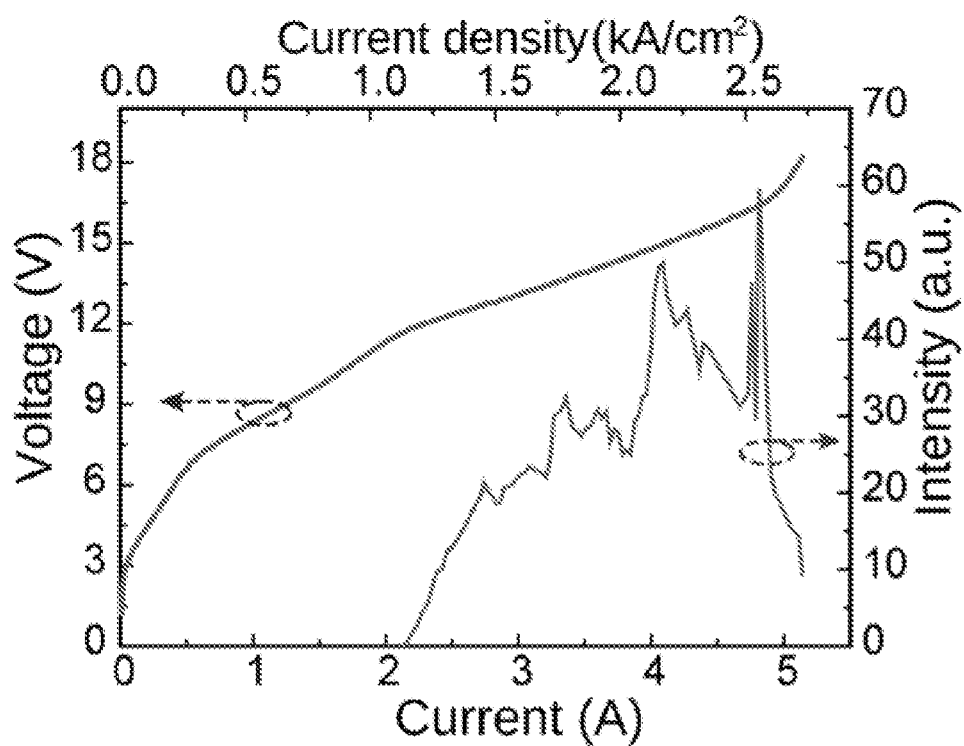


FIG. 12B

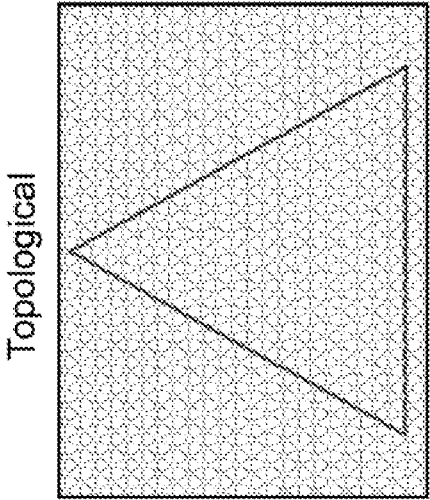


FIG. 13A

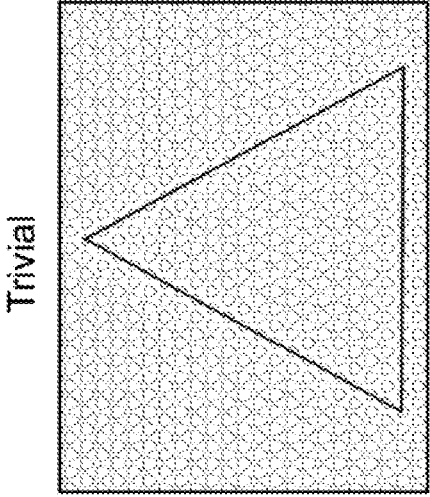


FIG. 13B

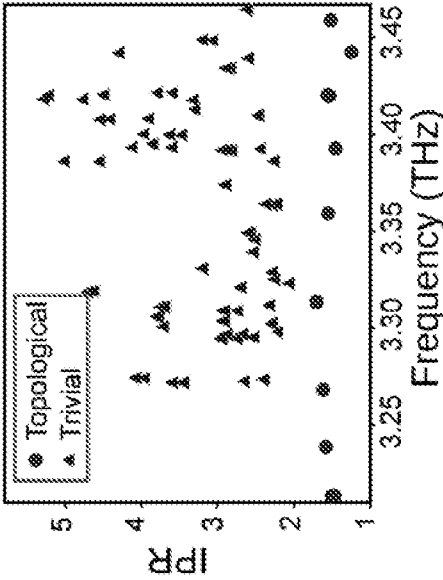


FIG. 13C



FIG. 13D



FIG. 13E

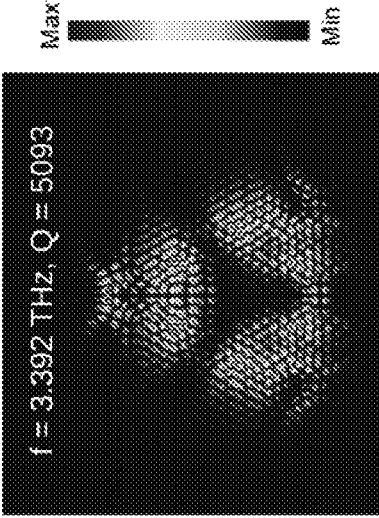


FIG. 13F

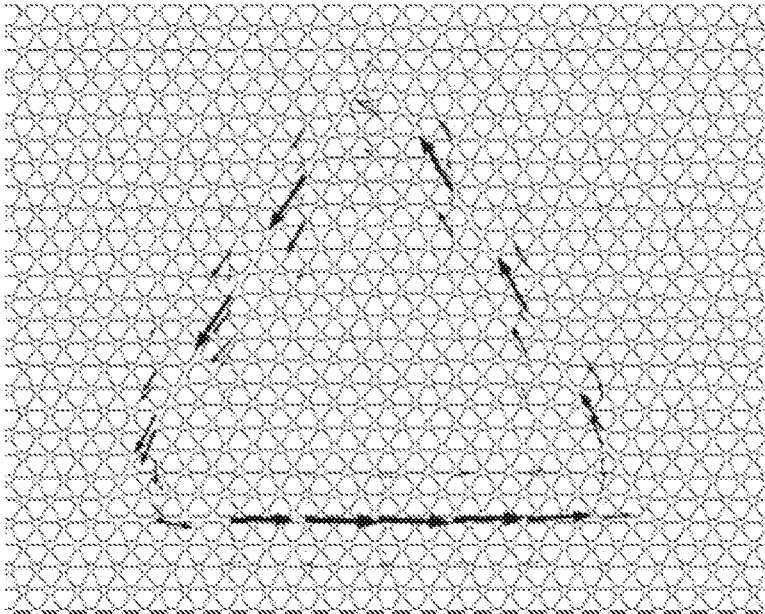


FIG. 14A

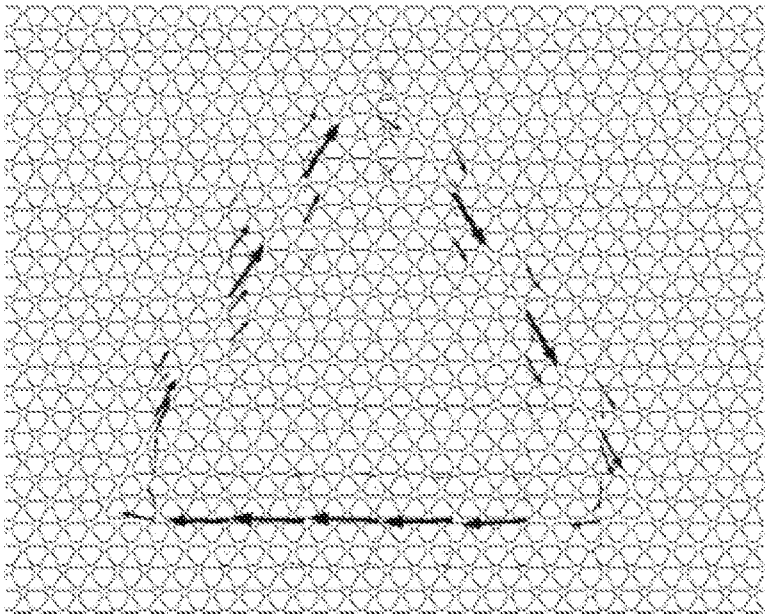


FIG. 14B