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(57) Abstract :
 ABSTRACT The present disclosure discloses a conformal ultra-wideband (UWB) antenna (102) for wearable and healthcare monitoring applications, comprising a flexible substrate (104), a coplanar waveguide (CPW) feed arrangement (106) on said flexible substrate, a metamaterial unit cell (108) exhibiting negative permeability integrated on said flexible substrate, said metamaterial unit cell arranged to enhance the gain characteristics of the antenna and an array of metamaterial unit cells (110) serving as a ground plane beneath the UWB antenna, said ground plane configured to enhance bandwidth, radiation characteristics, and gain of the antenna (102). FIG. 1

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