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nanocomposite films

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Research highlights

We report the first theoretical investigation of surface plasmon polariton (SPP) waves of a random nanocomposite film, consisting of bulk metal embedded with dielectric inclusions.

We find that the number of SPP modes of the system is twice the number of the corresponding SPP modes of a conventional metallic film.

We show the random nanocomposite films offer high flexibility in the plasmonic system design.

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