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(57) Abstract:

The present disclosure relates generally to anti-microbial formulations. More specifically, the disclosure is directed to a topical nanocomposite gel formulation for anti-microbial activity comprising: (a) silver nanoparticles; (b) zinc oxide nanoparticles; (c) humic acid and (d) a gelling agent. The present disclosure also provides a process of preparing the formulation. The formulation of the present disclosure provides improved permeability of the nanoparticles, synergistic anti-microbial activity and long term stability.

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