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Title:A method to control the polarization of random terahertz lasing in two-dimensional disordered ruby medium
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Abstract:Terahertz (THz) random lasing is studied numerically for two-dimensional disordered media made of ruby grains with a three-level atomic system. A method via the adjustment of the pumping area to control the polarization of the THz wave is proposed. Computed results reveal that transverse electric THz lasing modes could occur if pumping is supplied on the whole medium, while transverse magnetic THz lasing modes could occur if pumping is appropriately supplied on a partial area of the medium.
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