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Title:A Simplified Theoretical Analysis of the Performance of Antenna Array Based on Carbon Nanotubes (CNT)
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Abstract:In this paper, different performance parameters like the electric field, the Poynting vector, the radiation intensity, the total radiated power, radiation resistance etc. for an N-element thin wire dipole antenna array made of carbon nanotube in the terahertz range has been studied in view of to assess its performance in comparison to wire antenna. The capabilities of these antenna arrays have been also predicted. These results could be used in the design of carbon nanotube antenna arrays in the terahertz range.
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