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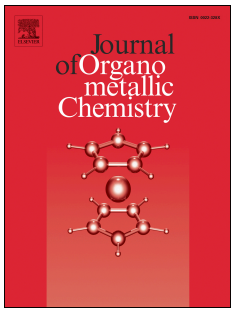

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Development perspectives of silver complexes with antibacterial quinolones: successful or not?

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Abstract
Antibacterial quinolones (QNs) are synthetic compounds with excellent complexation properties due to 4-oxo-1,4-dihydroquinolone structure with a 7-heterocycle containing nitrogen atoms. The metal complexes of these compounds had led to increased bacterial activity or other biological effects in comparison with the free ligand. Silver complexes with quinolone derivatives can offer a promising perspective through potential antibacterial, antiseptic, anti-inflammatory, and cytotoxic effects. In this review the obtaining methods of silver complexes with QNs are compared and discussed; in order to elucidate the chemical structure of reported silver complexes all reported information are reviewed and also the studied biological effects are highlighted and discussed.

Keywords
Silver; Quinolones; Fluoroquinolones; Metalcomplex; Silver complexes; Biological activity