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Title:Fabrication of left-handed metal microcoil from spiral vessel of vascular plant

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Abstract:Silver microcoil is fabricated through a biotemplating process combined with electroless plating. Spiral vessels in Lotus root are employed as a biotemplate because of their left-handed coil structure. The silver microcoil exhibits a solenoidal microcoil showing self-inductance in the level of picohenry, which could be applied for electromagnetic-responsive materials in the high-frequency region such as millimeter waves or terahertz waves. Copyright Number of references:29