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Low-Magnetic Field Microwave Absorption in Superconductors and Conducting Polymers

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**Abstract:** Low-magnetic field microwave absorption (MA) in superconductors and conducting polymers is analysed in a low-field signal (LFS) version of the MA detecting method. The temperature dependences, hysteretic behavior and other properties of a LFS are compared in superconducting versus non-superconducting systems. Spin selective hopping processes between polarons and bipolarons is proposed to be one of the possible mechanisms of a LFS in non-degenerate conducting polymers.



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