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Abstract:Magnetic resonance driven by the electric field component of terahertz radiation, now referred to as electromagnon, has stimulated interest due to its strong candidate for future spin-electronics. One unique characteristic of electromagnons is the terahertz magnetochromism, a color change by external magnetic field, as recently demonstrated in the hexaferrite. By taking perovskite manganites and hexaferrite as model cases, the current understating of the electromagnon activity is discussed in terms of the symmetric exchange mechanism. (C) 2012 Published by Elsevier B.V.
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