



BISMUTH FERRITE: A BRIEF REVIEW ON THIS SINGLE PHASE MULTIFERROIC MATERIAL

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Abstract

Multiferroicity is the property exhibited by a few extraordinary materials which possess atleast two of the three characteristics of ferroelectricity, ferromagnetism and ferroelasticity. These materials play significant roles in developing complex systems because of their unique features which has been described briefly in this review. BFO, a potential candidate for multiferroicity is described elaborately by explaining its structure, properties, and its effect. For the process of photocatalysis, the comparison has been done between the normal condition for the reaction and with the condition with respect to BFO material. This research is focussed on the critical development of the material by changing different parameters. Its potential applications also have been mapped out. The future work of the author especially regarding the synthesis, thin film growth and the characterization of the material has been discussed very briefly.

Keywords: Multiferroicity, ferroelectricity, ferromagnetism, ferroelasticity, BFO, photocatalysis

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