

Recent developments on soft magnetic ferrites (invited)

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MnZn- and NiZn- ferrites are well known material families that form the magnetic polycrystalline cores of components used for a wide variety of applications in diversified technological fields such as automotive, telecommunications, industry or solar energy. Consequently, the demands imposed on the specific magnetic performance of the material are widely different. In this presentation the developments in the applications fields will be discussed in relation with the different material requirements and the specific material developments that are in progress in the laboratory and produced by large scale operations. These may include high frequency or high temperature operation, high saturation induction or as possible temperature independent power losses. To this end, some case studies will be also presented that illustrate unexpected scientific gaps one has to tackle when a research material result is transferred to industrial production.