Influence of Microwave Power on Nanosized Hydroxyapatite Particles

T.S.Sampath Kumar, A.Siddharthan, D. Siva Rama Krishna[+] and S.K.Seshadri
Department of Metallurgical & Materials Engineering
Indian Institute of Technology Madras
Chennai, 600 036, India
[+]*School of ME, Nanyang Technological University*
Singapore 639798, Singapore
E-mail: tssk@iitm.ac.in

ABSTRACT

Nanosized hydroxyapatite synthesized by co-precipitation process is subjected to microwave irradiation at various powers until precipitate get dried. The particle size characterized by X-ray powder diffractogram and transmission electron microscopy goes through a minimum value with increase in microwave power. This result highlight the importance of microwave power selection in processing for a desired particle size and necessitates the optimization of processing parameters of a material depending on its microwave property. Microwave processing of nanomaterials seem to be superior in its control of particle size.

Keywords: Hydroxyapatite, nanocrystalline and microwave

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