Study on Dispersion of Nanoparticle Agglomerates for Artificial Pinning Centers

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We have investigated dispersion of nanoparticle agglomerates for artificial pinning centers. Nanoparticles aggregate each other because of their large surface area, so dispersion process is required for them to be pinning centers. For this purpose, we have attempted several methods using RF plasma, gas flow and impaction. We have used commercial CeO_2 nanopowder whose primary size is $10\sim20$ nm in diameter. The samples prepared by these methods were observed by SEM.

Keywords: nanoparticle, pinning center