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The magnetoelastic effect in permalloy particles

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Abstract

© 2016, Pleiades Publishing, Ltd.Two independent methods—ferromagnetic resonance and magnetic-force microscopy—have been used to study the magnetoelastic effect in permalloy microparticles. The values of effective magnetic-anisotropy fields that are induced by mechanical compression of microparticles have been obtained from the analysis of ferromagnetic-resonance data. These data have been used to model magnetic-force images of stressed and unstressed particles. The images coincide well with experimentally observed ones.

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