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## Annealing of PrF<sub>3</sub> nanoparticles by microwave irradiation

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### Abstract

The influence of microwave irradiation on the recovery of nanocrystalline PrF<sub>3</sub> powders has been experimentally analyzed by nuclear magnetic resonance (NMR) at T = 1.5 K. It is established that the relaxation times of <sup>141</sup>Pr and <sup>19</sup>F nuclei rise significantly with an increase in the hydrothermal-treatment time, whereas the <sup>141</sup>Pr NMR spectra narrow, which indicates a decrease in the number of defects in the lattices of nanosamples. © 2014 Pleiades Publishing, Ltd.

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