

ERRATUM

Erratum to: Structural, Thermal and Magnetic Properties of Nanocrystalline Co₈₀Ni₂₀ Alloy Prepared by Mechanical Alloying

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Notice of Redundant Publication

There is significant overlap between N. Loudjani, M. Benchiheb, M. Bououdina, “Structural, Thermal and Magnetic Properties of Nanocrystalline Co₈₀Ni₂₀ Alloy Prepared by Mechanical Alloying”, Journal of Superconductivity and Novel Magnetism (2016), DOI [10.1007/s10948-016-3541-z](https://doi.org/10.1007/s10948-016-3541-z) and the previously published N. Bensebaa, N. Loudjani, S. Alleg, L. Dekhilb, J.J. Suñol, M. Al Sae,

M. Bououdina, “XRD Analysis and Magnetic Properties of Nanocrystalline Ni₂₀Co₈₀ Alloys”, Journal of Magnetism and Magnetic Materials (2014) 349: 51–56 DOI [10.1016/j.jmmm.2013.08.045](https://doi.org/10.1016/j.jmmm.2013.08.045).

The results presented in the paper, “Structural, Thermal and Magnetic Properties of Nanocrystalline Co₈₀Ni₂₀ Alloy Prepared by Mechanical Alloying” (Journal of Superconductivity and Novel Magnetism), were part of Dr. Loudjani’s PhD thesis. It contains data and analysis not presented in the paper, “XRD Analysis and Magnetic properties of Nanocrystalline Ni₂₀Co₈₀ Alloys” (Journal of Magnetism and Magnetic Materials). Dr. Loudjani sincerely apologizes for not citing the paper published in the Journal of Magnetism and Magnetic Materials.

The interpretation of results between the two papers is not similar, and new results have been added. The main differences are detailed below:

1. New SEM images and the evolution of the particle size distribution of Co₈₀Ni₂₀ powder mixture during milling was added and discussed, which was not presented in the previous paper.
2. XRD interpretation: a new phase was introduced which gives better fit of the XRD data. In the previous paper, the end product is a mixture of four phases: a highly disordered structure; fcc-Ni(Co); fcc-Co(Ni); and hcp-Co (Ni). In the new paper, the end product is a mixture of five phases: a highly disordered structure HCP-Co(Ni); FCC-Co(Ni); FCC-Ni(Co); and a pure HCP-Co.
3. DSC analysis: The new paper includes a section on thermal analysis. The DSC characterization reveals the allotropic transformation of pure cobalt.

The online version of the original articles can be found at <http://dx.doi.org/10.1007/s10948-016-3541-z>.

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