PHASR CONSTITUTION AND MAGNETOCALORIC PROPERTIES OF THE LaFe_{11.0}Co_{0.8}Si_{1.1}Ga_{0.1}

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Phase constitution and magnetocaloric properties of the $LaFe_{11.0}Co_{0.8}Si_{1.1}Ga_{0.1}$ alloy ribbons were investigated. Sample was obtained by arc - melting followed by melt spinning to ribbon. All process was carried out under the low pressure Ar atmosphere. Subsequently the ribbon samples were annealed at 1323K for 24 hours. X-ray diffraction studies carried out on annealed samples and revealed coexistence two crystalline phases: dominant cubic $NaZn_{13}$ - type and minor bcc α -Fe phase. Furthermore, the magnetic measurements at various temperatures allowed to study the magnetic entropy changes for investigated samples.

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– 13.4 cm –

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 $9.7~\mathrm{cm}$