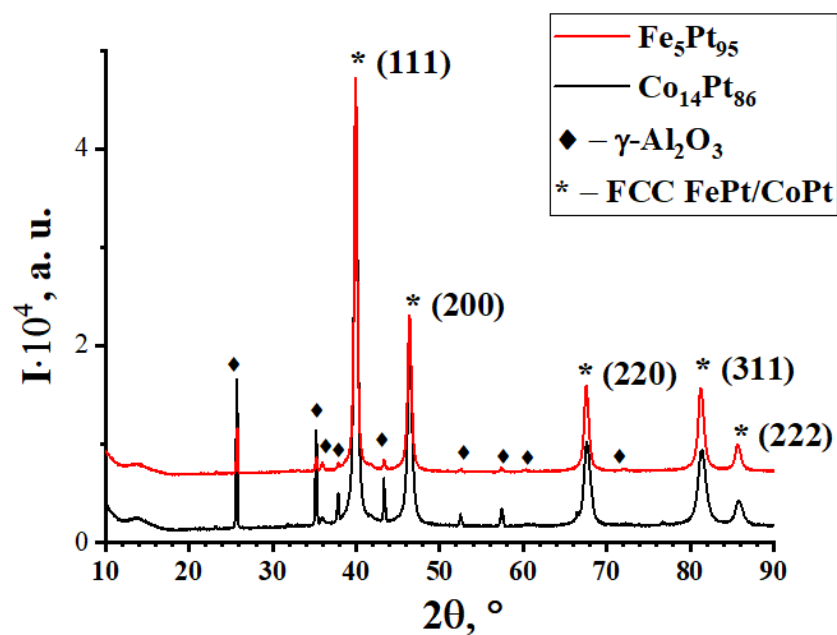
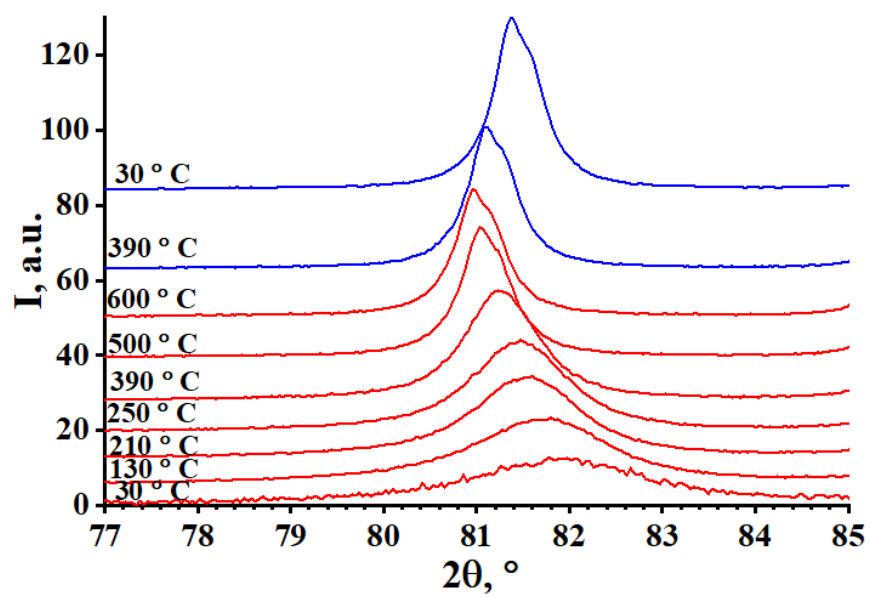


## Supplementary

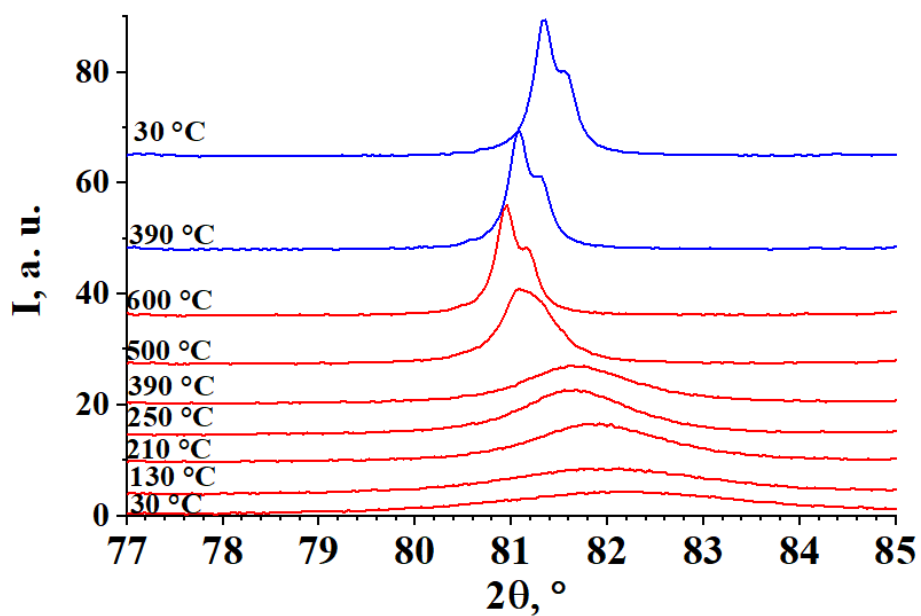


**S1.** XRD patterns of  $\text{Fe}_5\text{Pt}_{95}$  (red) and  $\text{Co}_{14}\text{Pt}_{86}$  (black) when specimens were heated for 2 hours at 390 °C.

$\diamond$  – sample-holder, \* – fcc



(a)



(b)

**S2.** The transformation of (311) peak during heating (red lines) and cooling (blue lines) ( $\text{Fe}_5\text{Pt}_{95}$  (a) and  $\text{Co}_{14}\text{Pt}_{86}$  (b)).