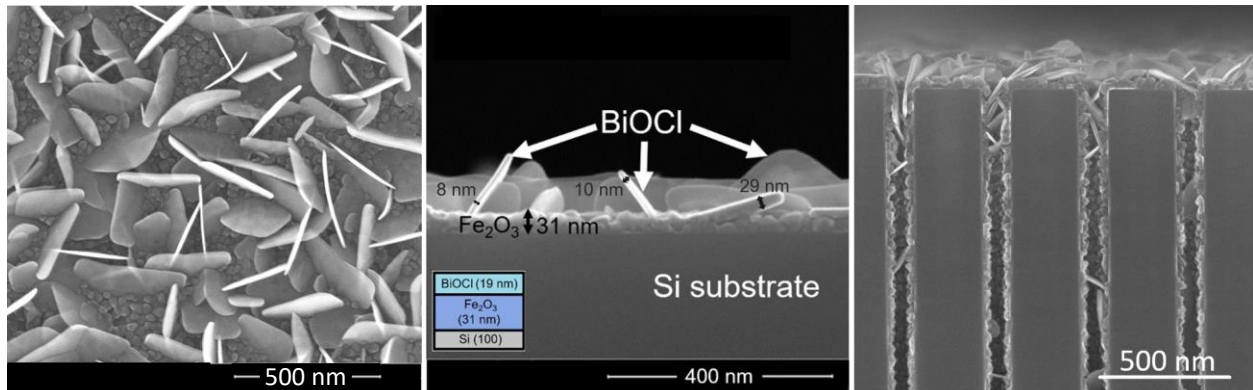
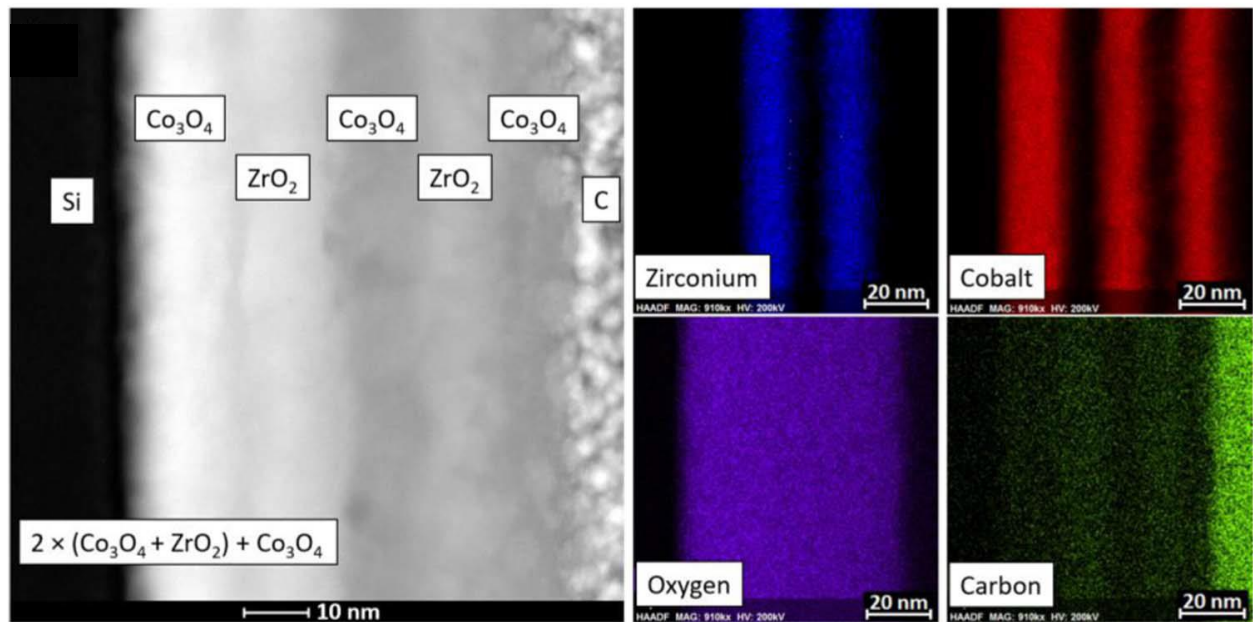


**Table I.** Multilayer structure description (number in front of the compound indicates the number of ALD cycles), their total thicknesses and measured coercivity values

Multilayer structure description	Total thickness (nm)	Thickness per layer (nm)		Coercivity values
		Co <sub>3</sub> O <sub>4</sub>	ZrO <sub>2</sub>	
$2 \times (200 \times \text{Co}_3\text{O}_4 + 100 \times \text{ZrO}_2) + 200 \times \text{Co}_3\text{O}_4$	64.0	14.0	11.1	32 Oe
$2 \times (100 \times \text{ZrO}_2 + 200 \times \text{Co}_3\text{O}_4) + 100 \times \text{ZrO}_2$	59.7	12.8	11.4	21 Oe
		Fe <sub>2</sub> O <sub>3</sub>	BiOCl	
$175 \times \text{Fe}_2\text{O}_3 + 280 \times \text{BiOCl}$	50	31	19	9757 Oe
$80 \times \text{Fe}_2\text{O}_3 + 280 \times \text{BiOCl}$	33	13	20	4230 Oe



**Figure 1.** Bird-eye view (left panel) and cross-section views (middle and right panel) of the same type of multilayer structure, which is  $175 \times \text{Fe}_2\text{O}_3 + 280 \times \text{BiOCl}$ , deposited on a planar (left and middle panel) or 3D-substrate (right panel) [1].



**Figure 2.** STEM image of the site of interest (left panel) and cross-sectional EDX composition profiling images (middle and right panels) of the  $2 \times (\text{Co}_3\text{O}_4 + \text{ZrO}_2) + \text{Co}_3\text{O}_4$  nanolaminate [2].