Electronic Supplementary Material (ESI) for Journal of Materials Chemistry C.

Supporting Information

SiC_xN_y:Fe films as a tunable ferromagnetic material with tailored conductivity

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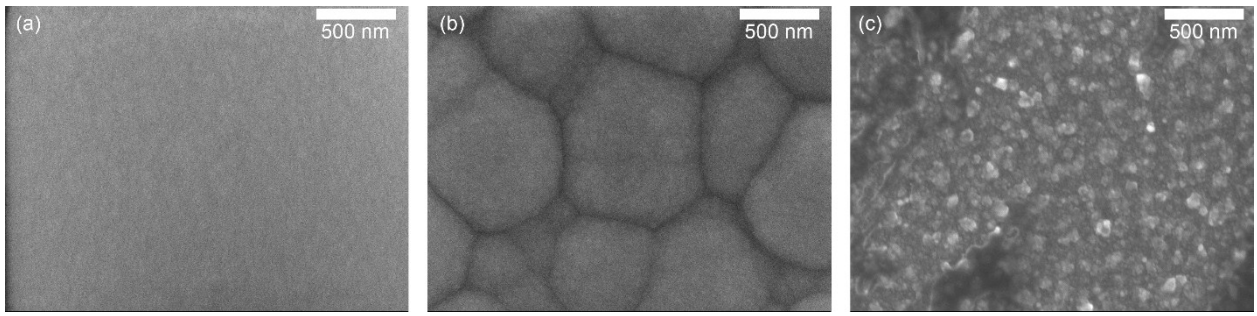

Fig. S1. Surface morphology of SiC_xN_y:Fe films deposited from gaseous mixture of TDEAS, ferrocene and hydrogen at (a) – 800°C, (b) – 900°C, (c) – 1000°C

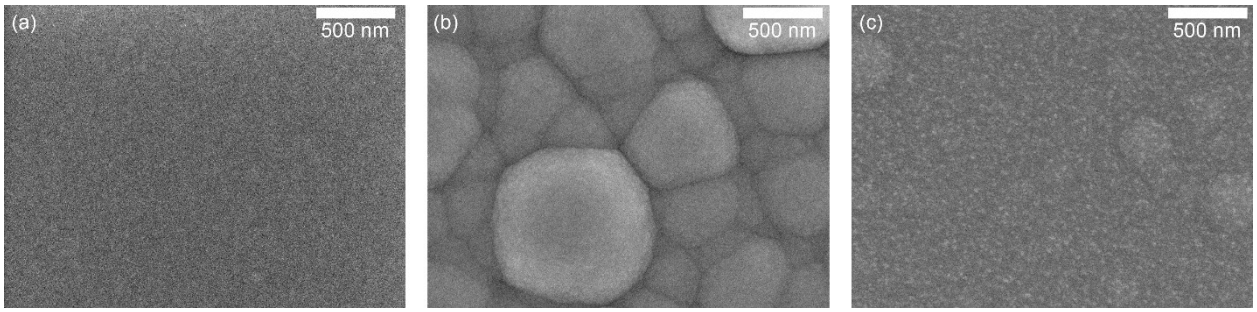

Fig. S2. Surface morphology of SiC_xN_y:Fe films deposited from gaseous mixture of TDEAS, ferrocene and ammonia at (a) – 800°C, (b) – 900°C, (c) – 1000°C

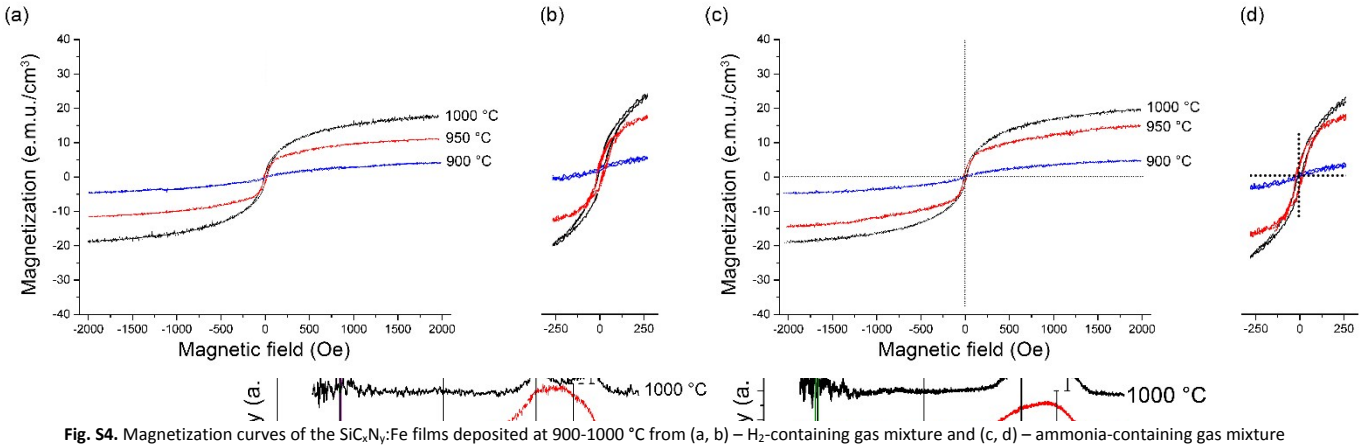

Fig. S4. Magnetization curves of the SiC_xN_y:Fe films deposited at 900-1000 °C from (a, b) – H_2-containing gas mixture and (c, d) – ammonia-containing gas mixture

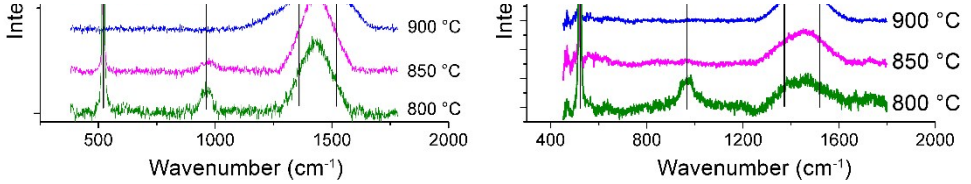

Fig. S3. Raman spectra of SiC_xN_y:Fe films deposited from gaseous mixture of (a) - TDEAS, ferrocene and hydrogen and (b) – TDEAS, ferrocene and ammonia

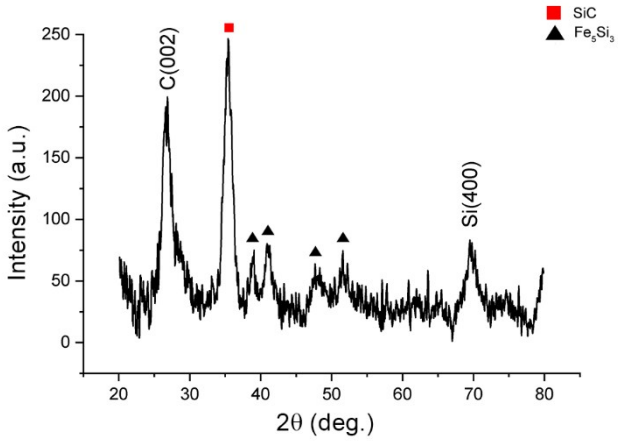

Fig. S5. XRD pattern of the SiC_xN_y:Fe film deposited at 1000 °C from ammonia-containing gas mixture