

Supporting Information

Highly-Tunable Ferromagnetism in Cr-Doped Layered van der Waals NiTe₂ Crystal with High Air Stability

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Table S1. EDX results for different areas of freshly exfoliated 1# and 2# samples

Sample	Selection area	Cr (At%)	Ni (At%)	Te (At%)
1#	1	1.77	33.67	64.55
	2	1.88	33.73	64.39
	3	1.96	33.80	64.24
	average	1.87±0.095	33.73±0.065	64.40±0.155
2#	1	2.14	33.60	64.26
	2	2.14	33.77	64.09
	3	2.15	33.11	64.74
	average	2.14±0.058	33.50±0.342	64.36±0.337

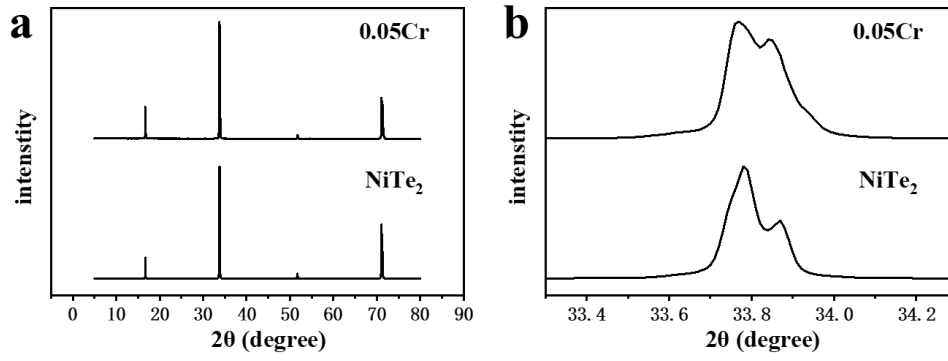


Fig S1 Structural characterization of the NiTe₂ and 0.05Cr crystal, represent the Cr molar ratio in precursor ($n(\text{Cr})/n(\text{Cr})+n(\text{Ni})$) is 0.05. (a)XRD patterns of as exfoliated single crystals. (b) Amplified view of (002) peak.

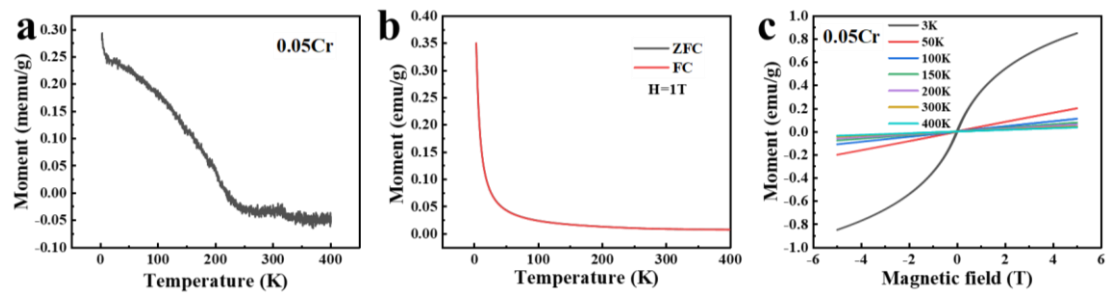


Fig S2 Magnetic properties of 0.05Cr single crystals. (a) Spontaneous magnetization ($B = 0$) curves (b) ZFC-FC curves with 1 T external applied magnetic field. (c) magnetization curves (M-H) with external applied magnetic field range of -5 T to 5 T from 3 K to 300 K.