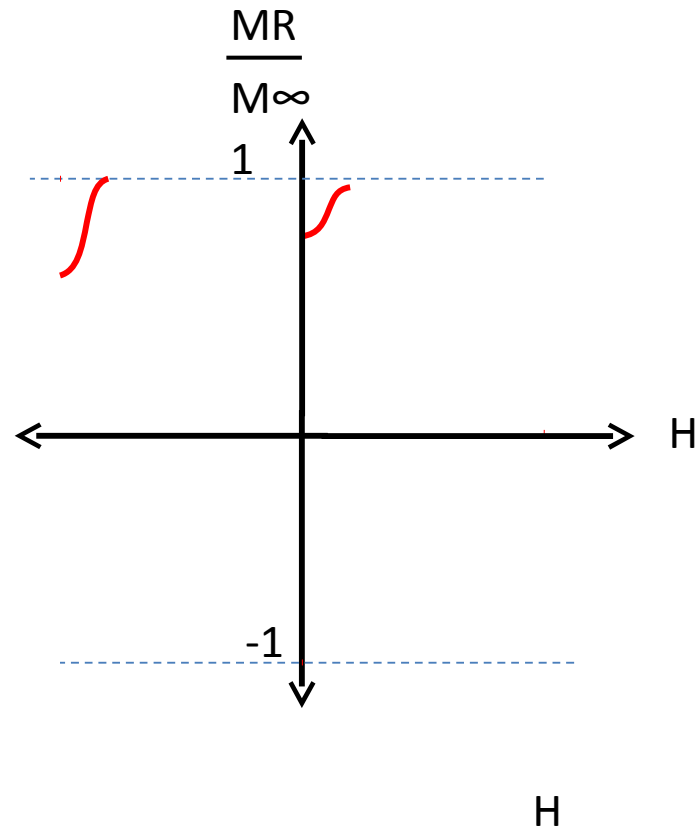
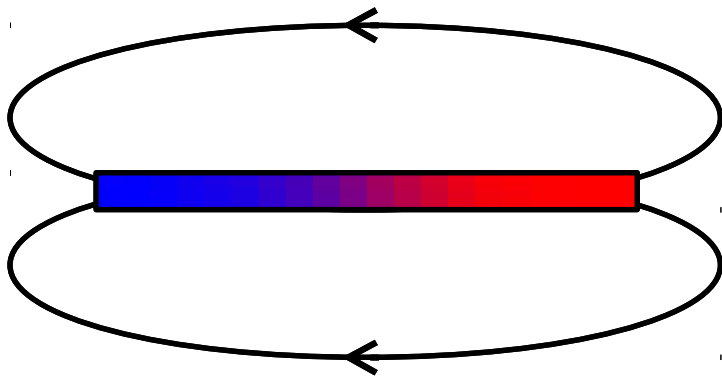
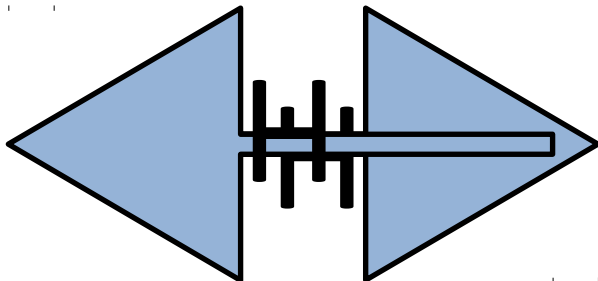
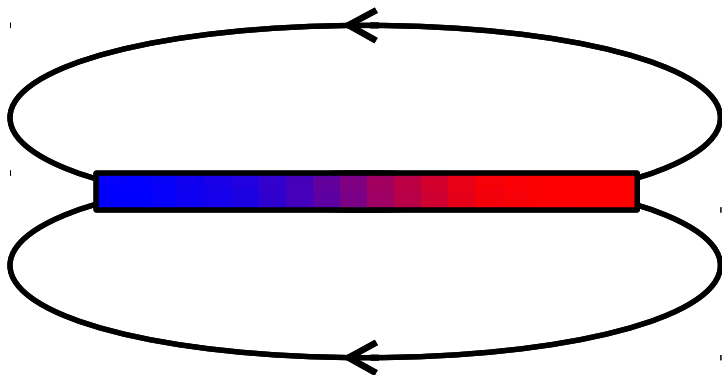
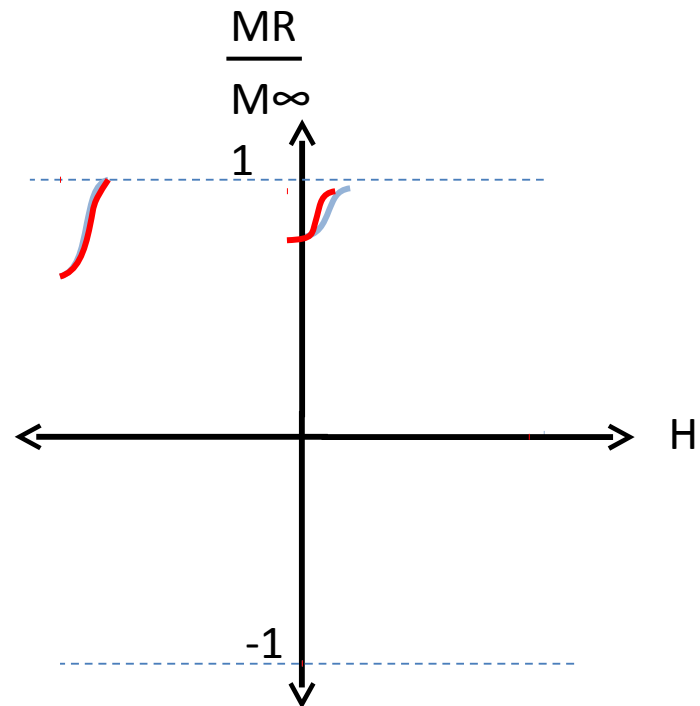
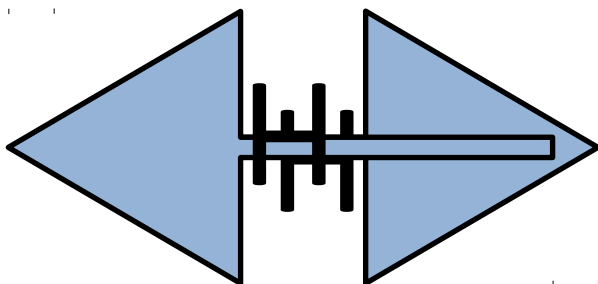
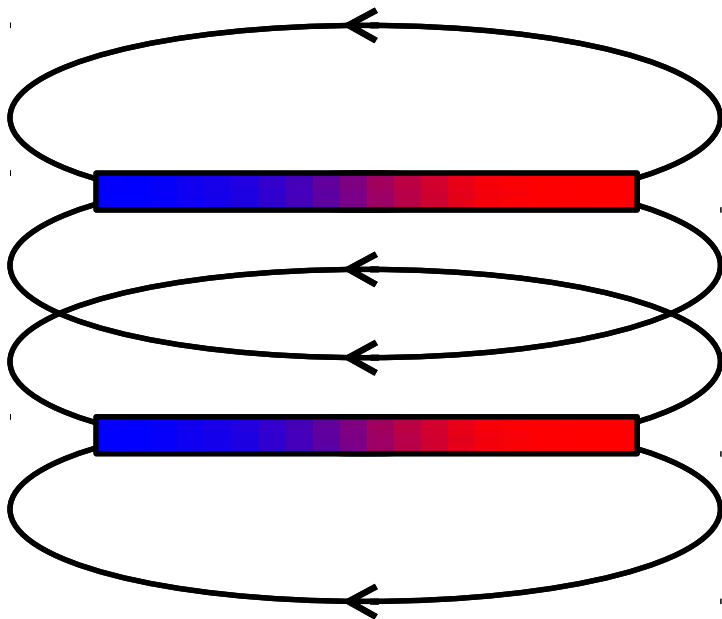


Dipolar coupling – Large separation.



Dipolar coupling – Large separation.



H

Dipolar interactions in arrays of ferromagnetic nanowires: A micromagnetic study

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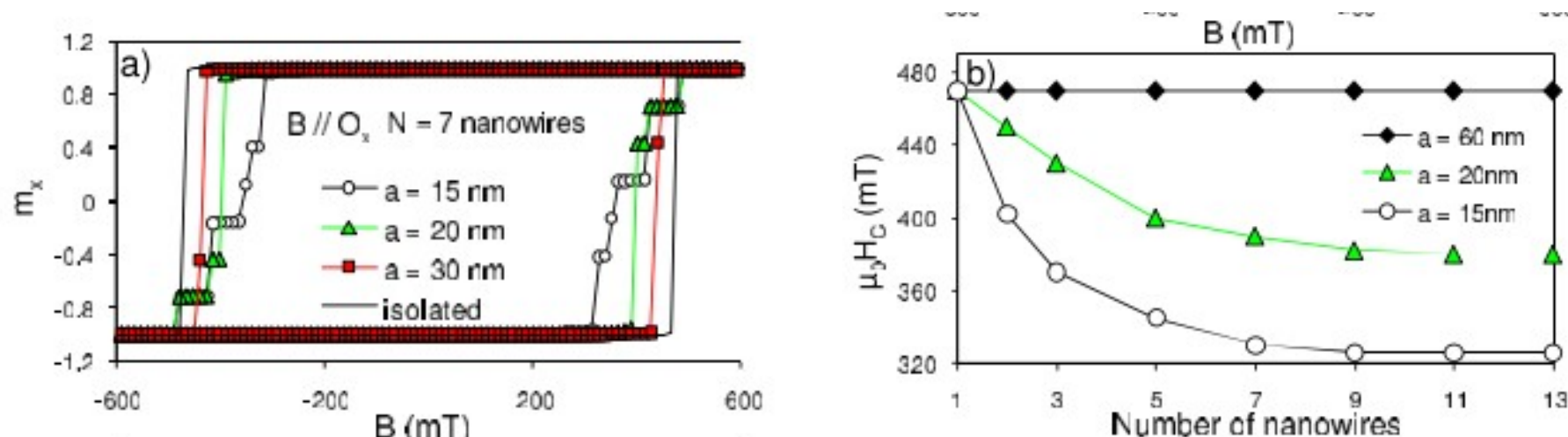


FIG. 2. (Color online) (a) Magnetization curves calculated with $B \parallel O_x$ for different interwire distances in a row formed by $N=7$ nanowires. The solid black line corresponds to the hysteresis cycle of an isolated nanowire. (b) Evolution of the coercive field of the central nanowire as a function of the number of nanowires. Calculated values for three different interwire distances ($a=15, 20, 60$ nm) are shown. Lines are guided for the eyes.

The remanence of a Stoner–Wohlfarth particle ensemble as a function of the demagnetisation process

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Dedicated to Prof. Dr. Christoph Schwink on the occasion of his 70th birthday

$$(\Delta m_H(x))_{\text{exp}} = m_d(x)_{\text{exp}} - (1 - 2m_r^{\text{as,ac}}(x)_{\text{exp}})$$

Investigation of magnetic interactions in large arrays of magnetic nanowires

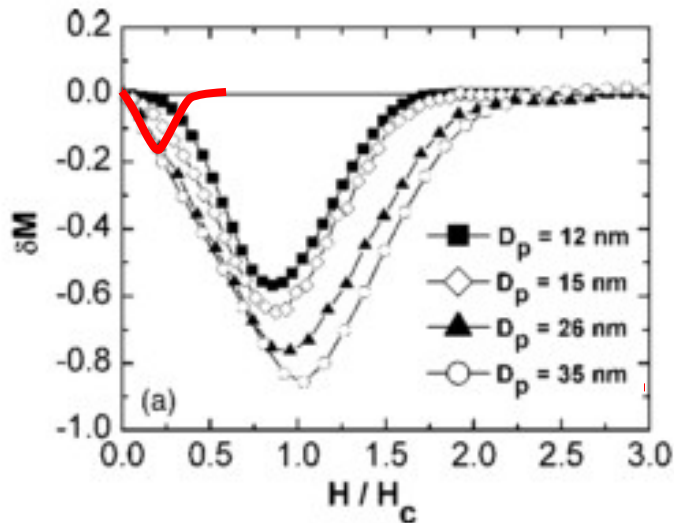
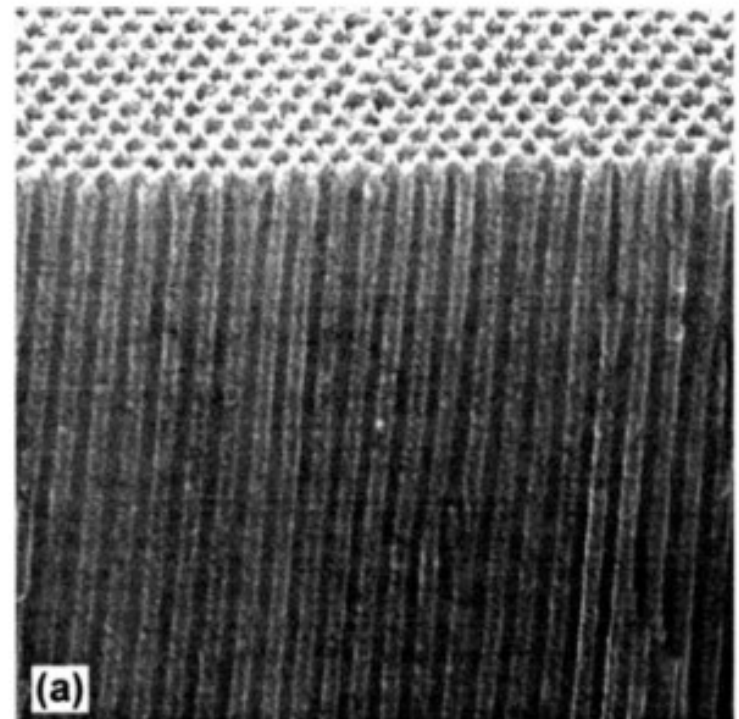
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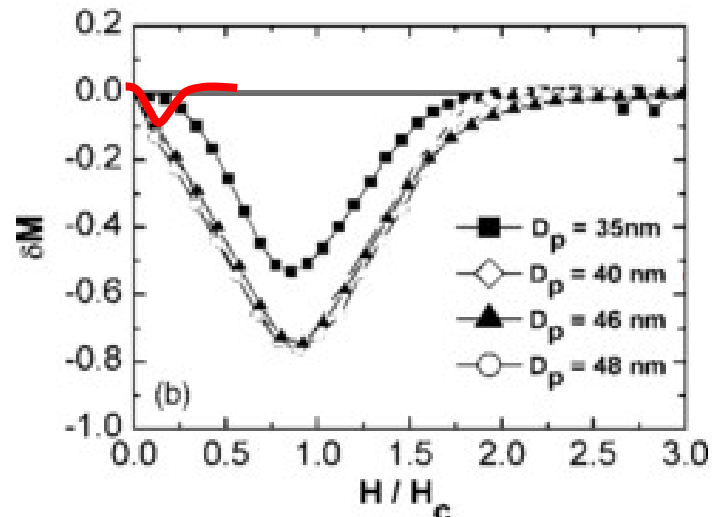
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Separation = 55 nm.

Increasing wire diameter implies
increasing interaction



Separation = 95 nm.

Increasing wire diameter implies
increasing interaction

