

The case for magnetic molecules as quantum bits

Pros

- Easy large (10^{23}) scale synthesis
- No variability between bits
- Wide range of properties (incl. long coherence), tunable
- Formation of inter- or intra-molecular gates
- Self-assembly of organized 1D, 2D and 3D arrays

Cons

- Lack of robustness (processing issue)
- Need of low temperatures (K to mK range)
- Sensitivity of properties to the environment
- Difficulty in contacting and addressing a unique molecule

Selected references:

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