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Tuning the Ferrotoroidic Coupling and Magnetic Hysteresis in Double-Triangle Complexes \{Dy$_3$M$^{\text{III}}$Dy$_3$\} via the M$^{\text{III}}$-linker

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The Front Cover shows the “construction” of a double-triangle complex \{\text{Dy}_3\text{M}^{III}\text{Dy}_3\}, where the central \text{M}^{III} linking ion may be Cr, Mn, Fe, Co or Al. Once the molecule is complete, the local magnetic moments on Dy ions (purple arrows) will be coupled ferrotoroidically or antiferrotoroidically, depending on the choice of \text{M}^{III} and counter-anion (NO$_3^-$ or Cl$^-$, not shown).

Theoretical modelling of energy levels, anisotropy, exchange coupling and dynamic magnetisation can identify strategies to optimise the ferrotoroidic coupling or magnetic hysteresis, as shown by the sign on the left. More information can be found in the <url href="http://doi.org/10.1002/ejic.202001082">Full Paper</url>
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