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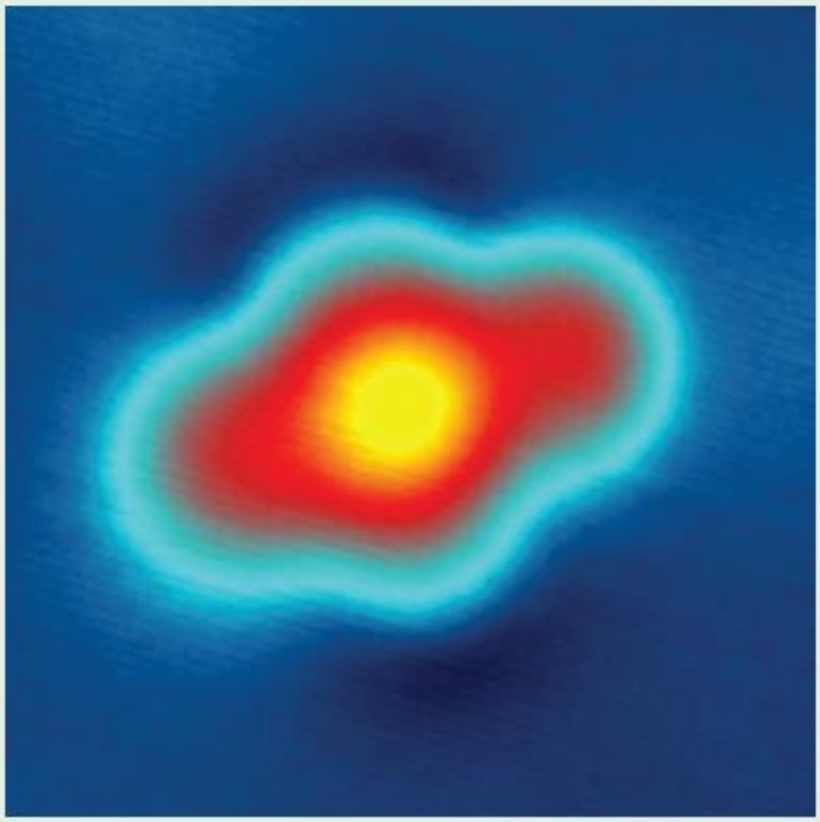
PHYSICAL REVIEW LETTERS

Articles published week ending 27 MARCH 2015



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Volume 114, Number 12

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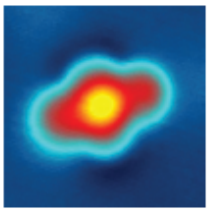

Topographic image of dehydrogenated MnPc molecule obtained using a scanning tunneling microscope. Selected for an Editors' Suggestion. [Liwei Liu *et al.*, Phys. Rev. Lett. **114**, 126601 (2015)]

NEWSPAPER

PHYSICAL REVIEW LETTERS™

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Selected for a Viewpoint in *Physics*. Please visit http://physics.aps.org/.
By suggesting a few manuscripts each week, we hope to promote reading across fields. Please see our Announcement Phys. Rev. Lett. 98, 010001 (2007).

0031-9007(20150327)114:12;1-B

Editors' Suggestion

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Lattice QCD Evidence that the $\Lambda(1405)$ Resonance is an Antikaon-Nucleon Molecule

Jonathan M.M. Hall, Waseem Kamleh, Derek B. Leinweber, Benjamin J. Menadue,

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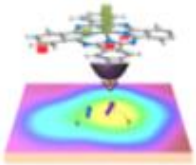
Revealing the Atomic Site-Dependent g Factor within a Single Magnetic Molecule via the Extended Kondo Effect

Liwei Liu, Kai Yang, Yuhang Jiang, Boqun Song, Wende Xiao, Shiru Song, Shixuan Du, Min Ouyang, Werner A. Hofer, Antonio H. Castro Neto, and Hong-Jun Gao

Phys. Rev. Lett. **114**, 126601 (2015) – Published 24 March 2015



The magnetic structure of a magnetic metal-organic complex on a gold surface can be mapped by exploring the field dependence of the extended Kondo effect.

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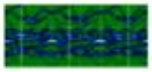
Transitions in $IrTe_2$

Kyoo Kim, Sooran Kim, K.-T. Ko, Hwangho Lee, J.-H. Park, J. J. Yang, S.-W. Cheong, and B. I. Min

Phys. Rev. Lett. **114**, 136401 (2015) – Published 31 March 2015



The microscopic origin of the first order electronic and structural transitions in $IrTe_2$, a candidate for a new topological superconductor, have been elucidated providing insight into its intriguing structural properties.

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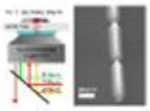
Efficient Readout of a Single Spin State in Diamond via Spin-to-Charge Conversion

B. J. Shields, Q. P. Unterrathmeier, N. P. de Leon, H. Park, and M. D. Lukin

Phys. Rev. Lett. **114**, 136402 (2015) – Published 31 March 2015



A scheme to read single electron spin states at nitrogen vacancy centers in diamond achieves a threefold reduction in noise for room temperature measurements.

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Proposed Parametric Cooling of Bilayer Cuprate Superconductors by Terahertz Excitation

S. J. Denny, S. R. Clark, Y. Laplace, A. Cavalleri, and D. Jaksch

Phys. Rev. Lett. **114**, 137001 (2015) – Published 31 March 2015

Terahertz radiation could reduce thermal noise in superconducting cuprates and potentially increase their critical temperature.