Optical or electrical pulses can rapidly locate and manipulate the spin of a single electron in a quantum dot or of a nitrogen vacancy in diamond. Such techniques represent progress toward solid-state quantum computing (see pages 349 and 352).

Image: Peter Allen and Jesse Berezovsky

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I. Joughin et al.
Measurements of ice motion from Greenland show that summer melt water accelerates ice sheet flow by 50 to 100% overall but has less effect in the faster outlet glaciers.

>> News story p. 301; Science Express Report by S. B. Das et al.

10.1126/science.1153288

CLIMATE CHANGE
Fracture Propagation to the Base of the Greenland Ice Sheet During Supraglacial Lake Drainage
S. B. Das et al.
A large lake on the surface of the Greenland Ice Sheet drained out through and along the base of the Ice Sheet within 2 hours, revealing an efficient basal hydrological system.

>> News story p. 301; Science Express Report by I. Joughin et al.

10.1126/science.1153360

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M. D. Iglesias-Rodriguez et al.
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>> Science Express Perspective by V. J. Fabry

10.1126/science.1157560

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M. Osawa, D. E. Anderson, H. P. Erickson
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10.1126/science.1154520

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