Lake El’gygytgyn, measuring 12 kilometers in diameter and 170 meters in depth, is located in a meteorite impact crater 100 kilometers to the north of the Arctic Circle in northeastern Russia. An international drilling campaign recovered a sediment record from the bottom of the lake, which sheds new light on the climate history of the Arctic over the past 2.8 million years. See page 315.

Photo: Petr Tikhomirov
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A sediment core from a Russian lake provides a high-latitude climate record where prior terrestrial records have been sparse.

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An alternative design for a spin-based transistor proves tolerant to disorder.

327  A Paramagnetic Bonding Mechanism for Diatomics in Strong Magnetic Fields
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334  Rapid Variability of Seawater Chemistry Over the Past 130 Million Years
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S. Dumont et al.
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