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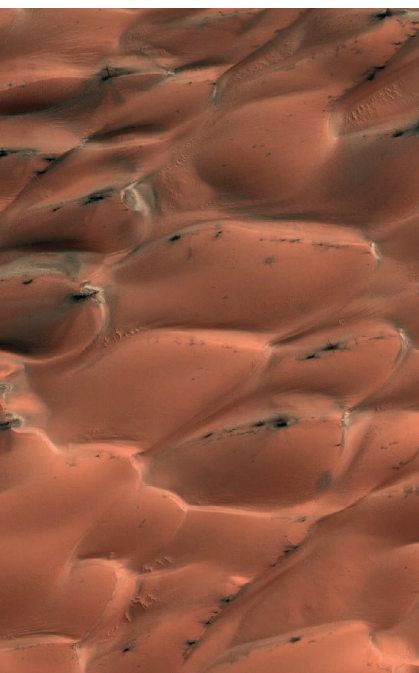
COVER

False-colored scanning electron micrograph of aligned zinc oxide nanowires. Nanowires, each 10 to 50 nanometers in diameter and 0.5 to 1 micrometers long, have a variety of potential applications from medical diagnostics to miniature electronics. The Gordon Research Conference on Cancer Nanotechnology will be held 17 to 22 July 2011 at Colby College in Waterville, Maine. See page 602 for the conference schedule and preliminary programs.

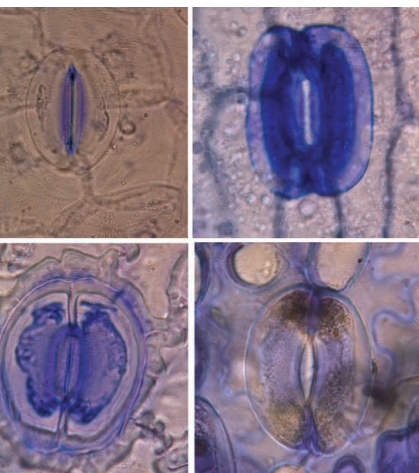
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Suppression of Collisional Shifts in a Strongly Interacting Lattice Clock

M. D. Swallows et al.

Increasing atomic interactions improved the accuracy and precision of a clock formed from atoms trapped in an optical lattice.

10.1126/science.1196442

The Formation and Fragmentation of Disks Around Primordial Protostars

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10.1126/science.1198027

Vibrationally Quantum-State-Specific Reaction Dynamics of H Atom Abstraction by CN Radical in Solution

S. J. Greaves et al.

Molecular vibrations in a solution-phase reaction are detected at a level of detail rivaling that of gas-phase studies.

10.1126/science.1197796

Cascading Effects of Bird Functional Extinction Reduce Pollination and Plant Density

S. H. Anderson et al.

Loss of pollinator services is reducing the population density of a New Zealand shrub.

10.1126/science.1199092

A Sorting Platform Determines the Order of Protein Secretion in Bacterial Type III Systems

M. Lara-Tejero et al.

The bacterial enteropathogen *Salmonella* sorts its effector protein substrates prior to secretion.

10.1126/science.1201476

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Regulates Hepatic Metabolism

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Nutrient deprivation triggers β -catenin-dependent expression of genes encoding gluconeogenic enzymes.

RESEARCH ARTICLE: Mitochondrial Membrane

Potential Is Required for MAVS-Mediated

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The contribution of mitochondria to antiviral immune responses extends beyond their role as a platform for antiviral signaling molecules.

PERSPECTIVE: To Be or Not to Be a T_{reg} Cell—

Lineage Decisions Controlled by

Epigenetic Mechanisms

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Differentiation of natural regulatory T cells is restricted by the SUMO ligase PIAS1.

NETWATCH: ModuLand

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Mice—Preclinical Testing of Antibodies Promoting Immune Tolerance

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A Key to Autoimmune Diabetes Treatment

D. Bressan and M. von Herrath

A new humanized mouse model can be used to predict the clinical behavior of therapeutic antibodies for the treatment of Type 1 diabetes.

RESEARCH ARTICLE: Readily Available

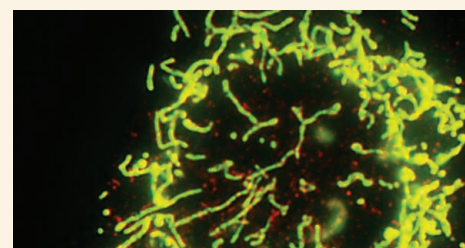
Tissue-Engineered Vascular Grafts

S. L. M. Dahl et al.

PODCAST

S. L. M. Dahl and O. M. Smith

Nonimmunogenic, tissue-engineered vascular grafts stored long-term maintain their patency, strength, and function after transplant in large-animal models.



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