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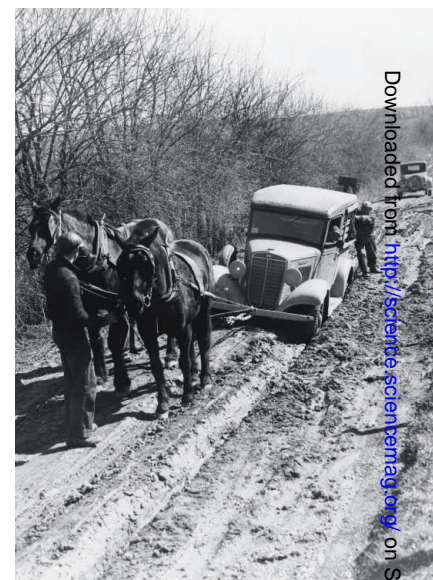
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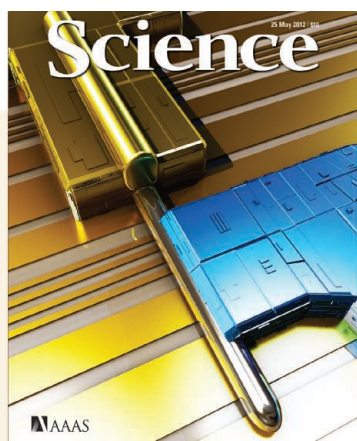


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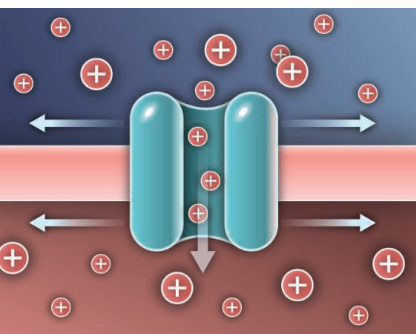
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Artist's rendering of an electronic device hosting Majorana fermions. The semiconducting nanowire (cylindrical structure) has a diameter of 100 nanometers and lies atop a gate structure consisting of many metallic stripes. The nanowire is contacted at the top with a gold electrode and at the bottom with a superconducting electrode (shown in blue). See page 1003.

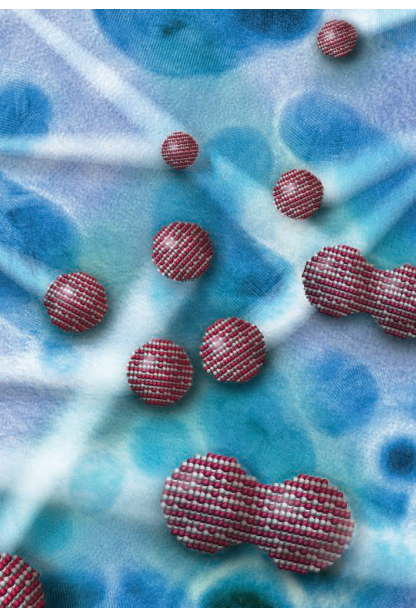
Image: V. Mourik, K. Zuo, S. M. Frolov, S. R. Plissard, E. P. A. M. Bakkers, L. P. Kouwenhoven, with assistance from www.avalondesigns.nl

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A Mitochondrial Pyruvate Carrier Required for Pyruvate Uptake in Yeast, *Drosophila*, and Humans
D. K. Bricker et al.

The genes encoding two components of the pyruvate transporter in mitochondria have been identified.
10.1126/science.1218099

Identification and Functional Expression of the Mitochondrial Pyruvate Carrier
S. Herzig et al.

Two components of the mitochondrial pyruvate transporter confer transport activity when expressed in bacteria.
10.1126/science.1218530

Recurrent Hemizygous Deletions in Cancers May Optimize Proliferative Potential
N. L. Solimini et al.

The genomes of cancer cells have preferentially lost genes that inhibit cell growth.
10.1126/science.1219580

The Structures of COPI-Coated Vesicles Reveal Alternate Coatmer Conformations and Interactions

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The flexible coatmer complex makes contact with a variable number of neighbors and coats vesicles of variable size.
10.1126/science.1221443

Structural Basis for Preceptor Modulation of Plant Hormones by GH3 Proteins
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Crystal structures of plant GH3 proteins reveal how these enzymes accommodate jasmonates, auxins, and benzoates.
10.1126/science.1221863

A Reduced Organic Carbon Component in Martian Basalts

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10.1126/science.1221094

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Life at the Top Can Be Good for Your Health
A study suggests that high-ranking baboons have stronger immune systems.
http://scim.ag/Immune_Systems

Just a Spoonful of Castor Oil

A study reveals the molecular mechanism of castor oil.
http://scim.ag/Castor_Oil

Barely Breathing Microbes Still Living in 86-Million-Year-Old Clay

Organisms deep beneath the sea floor survive on minuscule amounts of oxygen.
<http://scim.ag/Microbes-Oxygen>

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22 May issue: <http://scim.ag/ss052212>

RESEARCH ARTICLE: Interferon- β Therapy Against EAE Is Effective Only When Development of the Disease Depends on the NLRP3 Inflammasome

M. Inoue et al.

PODCAST

M. L. Shinohara and A. M. VanHook

Characterization of an animal model may explain why not all patients with multiple sclerosis respond to interferon- β .

PERSPECTIVE: Structure of the First Sphingosine 1-Phosphate Receptor

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The lipid sphingosine 1-phosphate may laterally diffuse through the membrane to bind a receptor.

PERSPECTIVE: Revisiting Channel Allostery—A Coherent Mechanism in IP₃ and Ryanodine Receptors

K. Hamada and K. Mikoshiba

Structural analyses suggest a similar gating mechanism in the IP₃ and ryanodine receptors.

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FOCUS: Clinician-Investigators as Translational Bioscientists—Shaping a Seamless Identity

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COMMENTARY: Risk and Return for the Clinician-Investigator

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E. R. Edelman and K. LaMarco

In this first of a series, senior scientists counsel early-career clinician-investigators on molding a successful research career.

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Anti-inflammatory drugs based on host defense peptides ameliorate malaria in mice.

RESEARCH ARTICLE: Adenosine A_{2A} Receptor Activation Prevents Wear Particle-Induced Osteolysis

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Bone damage caused by particles from orthopedic implants is prevented by an adenosine receptor agonist in mice.

RESEARCH ARTICLE: PTH/PTHrP and Vitamin D Control Antimicrobial Peptide Expression and Susceptibility to Bacterial Skin Infection

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RESEARCH ARTICLE: Modeling the Dynamic Relationship Between HIV and the Risk of Drug-Resistant Tuberculosis

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FOCUS: TB and HIV—Deadly Liaison or Manageable Threat?

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LETTERS: Comments and Response on “The Predictive Capacity of Personal Genome Sequencing”

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D. Golan and S. Rosset; E. J. Topol

Response: B. Vogelstein et al.

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Experimental Error: The Unwritten Rules of Journalism

A. Ruben

The key to understanding the way the media covers science is to know the rules to which science journalists adhere.

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N. Lubick

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