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The question of the stability of solid AsP₃, a simple inorganic molecule, has been settled by its synthesis.

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COVER
Desert locusts, *Schistocerca gregaria*, are normally solitary and avoid each other (green individual, lower right). Forced proximity between them leads to the release of the neurotransmitter serotonin, which changes their behavior to mutual attraction and initiates a cascade of events leading to swarm formation, including a change in appearance (black and yellow group). See page 627.

Image: Tom Fayle, Swidbert Ott, and Stephen Rogers/University of Cambridge

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Revealing the Maximum Strength in Nanotwinned Copper
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Control of Graphene’s Properties by Reversible Hydrogenation: Evidence for Graphane
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Single Nanocrystals of Platinum Prepared by Partial Dissolution of Au-Pt Nanoalloys
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Cascadia Tremor Located Near Plate Interface Constrained by S–Minus P Wave Times
M. La Rocca et al.
A series of microearthquakes near Puget Sound originate near or on the subduction zone fault from a recurrent source.

Divergent Evolution of Duplicate Genes Leads to Genetic Incompatibilities Within A. thaliana
D. Bikard et al.
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Serotonin Mediates Behavioral Gregarization Underlying Swarm Formation in Desert Locusts
M. L. Anstey et al.
Serotonin induces the phenotypic switch from solitary to gregarious behavior in desert locusts.
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Survival from Hypoxia in C. elegans by Inactivation of Aminoacyl-tRNA Synthetases
L. L. Anderson et al.
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A Role for RNAi in the Selective Correction of DNA Methylation Defects

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Comment on ’Arsenic (III) Fuels Anoxygenic Photosynthesis in Hot Spring Biofilms from Mono Lake, California’

B. Schoepf-Cothenet et al.

full text at www.sciencemag.org/cgi/content/full/323/5914/583c

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M. B. Yaffe

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A. Krejci et al.

Identification of the direct target genes of Notch reveals complex input into multiple signaling pathways that goes beyond coordination of transcriptional networks.

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C. Nardella et al.

Conditional inactivation of mTOR has little effect in the adult mouse prostate, but it suppresses tumor initiation and progression.

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An NMR-based assay enables real-time analysis of the GTase activity of Rheb and of the effect of its GTase-activating protein TSC2.

RESEARCH ARTICLE: EGFR Signals to mTOR Through PKC and Independently of Akt in Glioma

Q.-W. Fan et al.

Akt is dispensable for signaling between EGFR and mTOR in glioma cells, whereas PKC is critical.

PERSPECTIVE: Grab Your Partner with Both Hands—Cytoskeletal Remodeling by Arp2/3 Signaling

S. H. Soderling

Dimerization provides an additional layer of regulation to the activity of a family of actin-nucleating factors.

PODCAST

J. F. Foley and A. M. VanHook

Leptin secreted by adipose tissue decreases insulin production through both direct and indirect mechanisms.

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Science 323 (5914), 559-655.

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