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833 Abrupt Shifts in Horn of Africa Hydroclimate
J. E. Tierney and P. B. deMenocal
The mid-Holocene African Humid Period ended abruptly, within centuries rather than millennia, in the Horn of Africa.
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824 Molecular Architecture of a Eukaryotic Translational Initiation Complex
I. S. Fernández et al.
Cryo-electron microscopy allows the rapid analysis of a yeast ribosome-initiator complex from a tiny data set.
Research Article Summary; for full text: http://dx.doi.org/10.1126/science.1240585
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825 Iron(IV)hydroxide pK, and the Role of Thiolate Ligation in C–H Bond Activation by Cytochrome P450
T. H. Yosca et al.
The basicity of an iron oxo intermediate helps explain what keeps P450 enzymes from oxidizing their own backbone.

826 Donor Incorporation into High-Performance Silicon Photoanodes Passivated with Ultrathin Nickel Films for Water Oxidation
M. J. Kenney et al.
A nickel coating renders silicon stable in alkaline lithium borate electrolyte for solar water-splitting applications.
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827 Changes in Cytoplasmic Volume Are Sufficient to Drive Spindle Scaling
J. Hazel et al.
Cytoplasmic volume modulates spindle size during embryogenesis.

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830 Room-Temperature Quantum Bit Storage Exceeding 39 Minutes Using Ionized Donors in Silicon-28
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J. Kim et al.
A two-step exfoliation process allows multiple transfers of oriented monolayer graphene from a silicon carbide surface.

832 High-Performance Silicon Photoanodes Passivated with Ultrathin Nickel Films for Water Oxidation
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833 Enantioselective Lewis Acid Catalysis of Intramolecular Enone [2+2] Photocycloaddition Reactions
R. Brimioulle and T. Bach
A catalyst attains selectivity in a photochemical reaction by shifting the absorption wavelength of its complexed substrate.

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O. Thalmann et al.
Ancient DNA suggests that dog domestication was complex and likely originated in Europe.
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837 Cytoplasmic Volume Modulates Spindle Size During Embryogenesis
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Microrheological techniques reveal how mitotic spindle size is regulated by titratable cytosolic factors.

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Ancient DNA suggests that dog domestication was complex and likely originated in Europe.
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850 High-Resolution Global Maps of 21st-Century Forest Cover Change
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Landsat data reveals details of forest losses and gains across the globe on an annual basis from 2000 to 2012.

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