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COVER
Tens of thousands of books appear in this photograph of the interior of the sculpture Idiom, by Matej Krén. On page 176, Michel et al. describe an even larger collection: a 5.2-million-book corpus containing 4% of all books ever published. Statistical analysis of this corpus makes it possible to study cultural trends quantitatively.

Original sculpture (Municipal Library of Prague): Matej Krén/
Photograph: Zdeněk Urbánek

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O. Levy et al.
Rhythmically expressed genes in reef-building corals may be required to deal with oxidative stress and the coral-algal symbiosis.

Quantitative Analysis of Culture Using Millions of Digitized Books
J.-B. Michel et al.
Linguistic and cultural changes are revealed through the analyses of words appearing in books.

Observation of Half-Height Magnetization Steps in Sr$_2$RuO$_4$
J. Jang et al.
The magnetic response of an exotic superconductor suggests that vortices with half a quantum of flux are present.

Light-Induced Superconductivity in a Stripe-Ordered Cuprate
D. Fausti et al.
Laser pulses are used to enable coherent transport between the copper oxide planes of a cuprate superconductor.

Electron Vortex Beams with High Quanta of Orbital Angular Momentum
B. J. McMorran et al.
Diffraction holograms are used to create electron vortex beams that should enable higher-resolution imaging.

Solvent-Free Oxidation of Primary Carbon-Hydrogen Bonds in Toluene Using Au-Pd Alloy Nanoparticles
L. Kesavan et al.
A gold- and palladium-based catalyst can be used to oxidize toluene and form a commercially useful ester.

Supracolloidal Reaction Kinetics of Janus Spheres
Q. Chen et al.
Colloidal particles that are charged on one side, and hydrophobic on the other, can form chiral helices in salt solutions.

The Deglacial Evolution of North Atlantic Deep Convection
D. J. R. Thornalley
Radiocarbon data reveal changes in the timing and strength of deep ocean convection during the last glacial termination.

A Basal Dinosaur from the Dawn of the Dinosaur Era in Southwestern Pangaea
R. N. Martinez et al.
Two hundred thirty million years ago, in what is now Argentina, dinosaurs could be found as the dominant carnivores or as small herbivores.

Writing About Testing Worries Boosts Exam Performance in the Classroom
G. Ramirez and S. L. Beilock
A brief classroom intervention helps remove anxiety from the testing situation.

Genomic Signatures Predict Migration and Spawning Failure in Wild Canadian Salmon
K. M. Miller et al.
High mortality of sockeye salmon in the Fraser River is associated with signals of metabolic and immune stress.

The Structure of Human 5-Lipoxygenase
N. C. Gilbert
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Light-Driven Changes in Energy Metabolism Directly Entrain the Cyanobacterial Circadian Oscillator
M. J. Rust et al.
Cyanobacterial circadian clock components are directly coupled to the metabolic status of the cell through interactions with adenine nucleotides.

Suppression of Avian Influenza Transmission in Genetically Modified Chickens
J. Lyall et al.
Transgenic birds expressing a short hairpin RNA that blocks viral polymerase hinder influenza transmission.

Human Tears Contain a Chemosignal
S. Gelstein et al.
Merely sniffing women’s negative emotional tears reduces sexual arousal in men.
Proteome Half-Life Dynamics in Living Human Cells
E. Eden et al.
In times of stress, long-lived proteins increase their durability.
10.1126/science.1199784

Aberrant Overexpression of Satellite Repeats in Pancreatic and Other Epithelial Cancers
D. J. Ting et al.
Noncoding RNAs transcribed from DNA repeats in heterochromatin are expressed at surprisingly high levels in tumors.
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KOI-126: A Triply Eclipsing Hierarchical Triple with Two Low-Mass Stars
J. A. Carter et al.
The Kepler telescope detected a triple stellar system and reveals details of the structure of low-mass stars.
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2500 Years of European Climate Variability and Human Susceptibility
U. Büntgen et al.
Variability of central European temperature and precipitation shows correlations with some major historical changes.
10.1126/science.1197175

Mysterious Green Blob
Hubble Confirms Nature of 'Manny's Voorwerp' has been an enigma since its discovery in 2007.
http://scim.ag/la3RAV

Discovery of Unseen African-American Chemists
Open New Clinical Genetic Vistas
L. Jackson and R. E. Pyeritz
Podcast to hear about genetically modifying chickens to curb the spread of influenza, reducing testing anxiety through writing, the science of loneliness, and more.
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RESEARCH ARTICLE: Carrier Testing for Severe Childhood Recessive Diseases by Next-Generation Sequencing
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