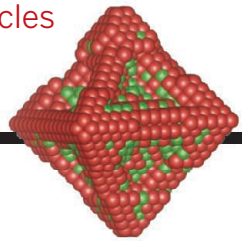
RESEARCH

Platinum-rich edges start the growth of metal-alloy nanoparticles

Gan et al., *p. 1502*



IN *SCIENCE* JOURNALS

Edited by **Melissa McCartney** *and* **Margaret Moerchen**

Education efforts lead to an increase in European brown bear populations

CONSERVATION

Success for Europe's large carnivores?

Despite pessimistic forecasts, Europe's large carnivores are making a comeback. Chapron *et al.* report that sustainable populations of brown bear, Eurasian lynx, gray wolf, and wolverine persist in one-third of mainland Europe. Moreover, many individuals and populations are surviving and increasing outside protected areas set aside for wildlife conservation. Coexistence alongside humans has become possible, argue the authors, because of improved public opinion and protective legislation. — AMS

Science, this issue p. 1517

PHOTOCHEMISTRY

Using ozone below may conserve it above

The accumulation of laughing gas in the atmosphere isn't a laughing matter: Nitrous oxide (N_2O) is a powerful greenhouse gas and a depleter of ozone. The manufacture of nylon releases substantial N_2O as a byproduct during preparation of the precursor adipic acid. Hwang and Sagadevan now demonstrate an alternate route to adipic acid that involves treating cyclohexane with ozone under concurrent ultraviolet irradiation, generating no N_2O. Thus, ironically, the application of ozone as a chemical reagent could ultimately help conserve its concentration in the atmosphere. — JSY

Science, this issue p. 1495

CANCER THERAPY

Drug resistance, up close and personal

Cancer therapies that target specific genetic mutations driving tumor growth have shown promising results in patients; however, the response is often short-lived because the tumors acquire new mutations that render them resistant to these therapies. Complicating matters, the mechanism of resistance can vary from patient to patient. To identify drugs most likely to be effective against resistant tumors, Crystal *et al*. established cell lines from the tumors of individual patients after resistance occurred and performed a drug screen and genetic analysis on the cultured cells. This strategy successfully identified drug combinations that halted the growth of resistant tumor cells both in culture and in mice. In the future, pharmacological profiling of patient-derived cells could be an efficient way to direct therapeutic choices for individual cancer patients. — PAK

Science, this issue p. 1480

PALEOCEANOGRAPHY

A brief hiccup in deep ocean circulation

During the last interglacial period, Antarctic Bottom Water (AABW) formation slowed markedly. This densest ocean water sinks to the bottom of the sea, and its production helps to flush the oceans and eventually to recycle the carbon dioxide (CO_2) that forms from sinking organic matter back into the atmosphere. If the AABW production rate decreases, then CO_2 accumulates at depth, potentially causing a corresponding drop in atmospheric CO_2 concentration. Hayes *et al.* found evidence, in the form of a uranium spike, in deep sea sediments that such a slowdown in AABW formation occurred ~127,000 years ago, which may have caused the atmospheric CO_2 minimum observed at that time. — HJS

Science, this issue p. 1514

IMMUNE TOLERANCE

For the immune system, silence is golden

For the immune system, balance is key. Immune cells must learn to eliminate invading pathogens but tolerate self. A cell type called regulatory T cells (T_{regs}) help to maintain this balance, but how they do so, particularly in humans, is unclear. Maeda *et al*. now report that T_{regs} "silence" T cells with modest reactivity to