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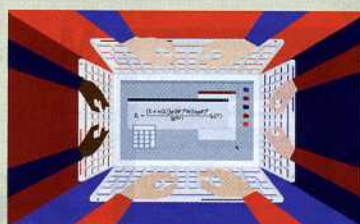
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Stressful genetics in Crohn's disease

Caspase 3 cleaves a risk variant of the autophagy protein ATG16L1
Arthur Kaser & Richard S Blumberg
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442 ATMOSPHERIC SCIENCE

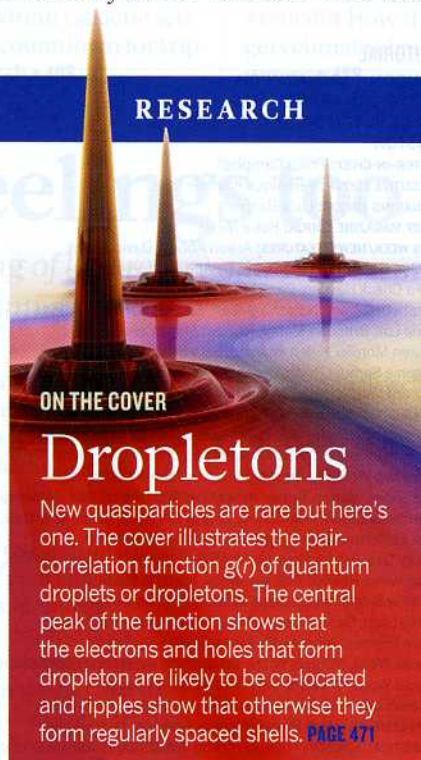
Involatile particles from rapid oxidation

Direct production of highly oxygenated compounds from biogenic emissions
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445 **CANCER** Epigenomic alterations define lethal CIMP-positive ependymomas of infancy
S C Mack et al. SEE N&V P.438

451 **CANCER** C11orf95-RELA fusions drive oncogenic NF- κ B signalling in ependymoma
M Parker et al. SEE N&V P.438



ON THE COVER

Dropletons

New quasiparticles are rare but here's one. The cover illustrates the pair-correlation function $g(r)$ of quantum droplets or dropletons. The central peak of the function shows that the electrons and holes that form dropleton are likely to be co-located and ripples show that otherwise they form regularly spaced shells. **PAGE 471**

456 **CELL BIOLOGY** A Crohn's disease variant in *Atg16l1* enhances its degradation by caspase 3
A Murthy et al. SEE N&V P.441

LETTERS

463 **COSMOLOGY** A single low-energy, iron-poor supernova as the source of metals in the star SMSS J031300.36-670839.3
S C Keller et al.

467 **PARTICLE PHYSICS** High-precision measurement of the atomic mass of the electron
S Sturm et al. SEE N&V P.440

471 **QUANTUM OPTICS** Quantum droplets of electrons and holes
A E Almand-Hunter et al.

476 **ATMOSPHERIC SCIENCE** A large source of low-volatility secondary organic aerosol
M Ehn et al. SEE N&V P.442

480 **GEOCHEMISTRY** Rapid remobilization of magmatic crystals kept in cold storage
K M Cooper & A J R Kent

484 **PALAEONTOLOGY** Skin pigmentation provides evidence of convergent melanism in extinct marine reptiles
J Lindgren et al.

489 **MICROBIOLOGY** Sequential evolution of bacterial morphology by co-option of

a developmental regulator

C Jiang, P J B Brown, A Ducret & Y V Brun

494 **GENE EXPRESSION** Genetics of single-cell protein abundance variation in large yeast populations
F W Albert, S Treusch, A H Shockley, J S Bloom & L Kruglyak

498 **NUTRITION** A discrete genetic locus confers xyloglucan metabolism in select human gut *Bacteroidetes*
J Larsbrink et al.

503 **IMMUNOLOGY** Sessile alveolar macrophages communicate with alveolar epithelium to modulate immunity
K Westphalen et al.

507 **MICROBIOLOGY** A new metabolic cell-wall labelling method reveals peptidoglycan in *Chlamydia trachomatis*
G W Liechti et al.

511 **STEM CELLS** Broadly permissive intestinal chromatin underlies lateral inhibition and cell plasticity
T-H Kim et al.

516 **RETRACTION** The NAD-dependent deacetylase SIRT2 is required for programmed necrosis
N Narayan et al.

516 **ERRATUM** Asymmetric synthesis from terminal alkenes by cascades of diboration and cross-coupling
S N Mlynarski, C H Schuster & J P Morken

516 **ADDENDUM** Enterotypes of the human gut microbiome
M Arumugam et al.



PALAEONTOLOGY

True colours

Melanin traces in fossilized skin are adding convincing colours to our picture of extinct animals. **PAGE 484**