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ON THE COVER

Ring tones

When a drop of coffee dries, a halo of particles accumulates at its edge. This 'coffee-ring effect', a common occurrence when a solution of suspended colloidal particles evaporates, is suppressed if the particles are ellipses rather than spheres. The effect can be restored by surfactants, and 'designed' mixtures of spheres and ellipsoids can lead to uniform deposition. **PAGES 286 & 308**

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298 CANCER Frequent mutation of histone-modifying genes in non-Hodgkin lymphoma

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308 PHYSICS Suppression of the coffee-ring effect by shape-dependent capillary interactions

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312 CLIMATE SCIENCE Southern Ocean dust-climate coupling over the past four million years

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320 ECOLOGY Using the *Acropora digitifera* genome to understand coral responses to environmental change

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324 EVOLUTION Fossil jawless fish from China foreshadows early jawed vertebrate anatomy

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328 EVOLUTION Collaboration encourages equal sharing in children but not in chimpanzees

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336 CELL PHYSIOLOGY A forty-kilodalton protein of the inner membrane is the mitochondrial calcium uniporter

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341 CELL PHYSIOLOGY Integrative genomics identifies MCU as an essential component of the mitochondrial calcium uniporter

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351 BIOCHEMISTRY Different substrate-dependent transition states in the active site of the ribosome

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355 BIOTECHNOLOGY Engineered reversal of the β -oxidation cycle for the synthesis of fuels and chemicals

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360 CORRIGENDUM Structure and mechanism of human DNA polymerase η

C Biertümpfel et al.

BOX SUBJECT

Jaw maker

New fossil find suggests the jawless-to-jawed vertebrate transition required much trial and error. **PAGE 324**

