陈明论文被 SCIENCE 亮 点评价 Highlighted

Rath

could have been averted with available ART had there been more comprehensive testing coverage among men at risk of transmission. These findings support broader, more frequent testing followed by immediate ART as a strategy to decrease transmission rates. - ACC

Sci. Transl. Med.8, 320ra2 (2016)

PROTEIN AGGREGATES

Location, location, location

Aggregates of certain diseaseassociated proteins are involved in neurodegeneration. Woerner et al. now show that the exact location of these aggregates in the cell may be the key to their pathology (see the Perspective

f tree demography and growth data from a forest plot in Panama, Farrior et al. show that the power-law size structure emerges after natural local disturbances such as the gaps formed by falling trees. A model of forest dynamics identifies the structural parameter governing the power-law distribution. A mechanistic understanding of tropical forest structural dynamics will benefit forest carbon cycling studies. - AMS

Science, this issue p. 155

rral-Lugo

common

a quo-

ture quorum-

Sci. Signal. 9, ra1 (2016).

this compound

ets a

OUORUM SENSING Plants send out a

bacterial mimic

Bacteria use the quorum-sensing pathway to regulate community-

acid stimulated the activity of

a transcriptional regulator in

the quorum-sensing pathway

of the plant and human patho-

gen Pseudomonas aeruginosa,

may strategically disrupt pacterial communication. - NRG

increasing biofilm formation.

by Da Cruped Oliver and An artificia 对陈明等发表在Sci Rep 5, 15043 sthe protein ca (2015)关于湖泊湿地污染与营养物 expressed but not w 的成果的亮点评价 rum-sensing signal. Rosmarinic

the nucleus. Cytoplasmic aggregates interfered with nucleocytoplasmic import and export. Perhaps if we can shunt pathological aggregates to the nucleus in the future, we will be able to ameliorate some of degenerative disease Sci Rep 5, 15043 c acid could

Science, this is (2015) see

of

tropical trees

科学

The distribution of tree siz tropical forests follows a p law regardless of location. This pattern has largely eluded mechanistic explanation. Using 30



Tropical rainforest in Panama with a fresh treefall gap

power boost

2016年1月8日351卷

Thermoelectric materials conver waste heat into electricity, but often achieve high conversion efficiencies only at high temperatures. Zhao et al. tackle this problem by introducing small amounts of sodium to the thermoelectric SnSe (see the Perspective by Behnia). This boosts the power factor, allowing the material to generate more energy while maintaining good conversion efficiency. The effect holds across a wide temperature range, which is attractive for developing new applications. - BG

Science, this issue p. 141; see also p. 124

IN OTHER JOURNALS

Edited by Sacha Vignieri and Jesse Smith



BIOGEOCHEMISTRY

Aglobal census of lake nutrients

kes of all sizes are sensitive to local water and pollution management strategies. Excess nutrients in lakes can induce a series of unexpected consequences for water quality or greenhouse gas emissions. Based on previously collected data from over 8000 lakes across six continents, Chen et al. compiled a global estimate of carbon, nitrogen, and phosphorus in lakes. These trace nutrients have intertwined fates in lakes, often related to morphological and climatic factors that change over time. Perturbations of climate or land use by humans will therefore have wide-ranging effects on biogeochemical cycling of nutrients within lakes across the globe. - NW

Sci. Rep. 10.1038/srep15043 (2015).