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doi:10.1038/432681a

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doi:10.1038/432684a

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Richard K. Wilson, Daniel G. Peterson, Andrew H. Paterson, and Robert Ivarie Genome Res. published 8 December 2004, 10.1101/gr.2438004
<http://www.genome.org/cgi/content/abstract/gr.2438004v2?ct>

RADON HAZARD AND RISK IN SUSSEX, ENGLAND AND THE FACTORS AFFECTING RADON LEVELS IN DWELLINGS IN CHALK TERRAIN I. R. Killip Radiat. Prot. Dosimetry published 7 December 2004, 10.1093/rpd/nch436
<http://rpd.oupjournals.org/cgi/content/abstract/nch436v1?ct>

Laura R Croal, Jeffrey A Gralnick, Davin Malasarn, and Dianne K Newman THE GENETICS OF GEOCHEMISTRY. Annu Rev Genet 1 Dec 2004 38: p. 175.
<http://highwire.stanford.edu/cgi/medline/pmid:15568975>

EY Zeng, D Tsukada, and DW Diehl Development of a solid-phase microextraction-based method for sampling of persistent chlorinated hydrocarbons in an urbanized coastal environment. Environ Sci Technol 1 Nov 2004 38(21): p. 5737.
<http://highwire.stanford.edu/cgi/medline/pmid:15575294>

EM Galimov Phenomenon of life: between equilibrium and non-linearity. Orig Life Evol Biosph 1 Dec 2004 34(6): p. 599.
<http://highwire.stanford.edu/cgi/medline/pmid:15570710>

PR Christensen, MB Wyatt, TD Glotch, AD Rogers, S Anwar, RE Arvidson, JL Bandfield, DL Blaney, C Budney, WM Calvin, A Fallacaro, RL Fergason, N Gorelick, TG Graff, VE Hamilton, AG Hayes, JR Johnson, AT Knudson, HY McSween Jr, GL Mehall, LK Mehall, JE Moersch, RV Morris, MD Smith, SW Squyres, SW Ruff, and MJ Wolff Mineralogy at Meridiani Planum from the Mini-TES Experiment on the Opportunity Rover. Science 3 Dec 2004 306(5702): p. 1733. <http://highwire.stanford.edu/cgi/medline/pmid:15576609>

T Boonfueng, L Axe, and Y Xu Properties and structure of manganese oxide-coated clay. J Colloid Interface Sci 1 Jan 2005 281(1): p. 80.
<http://highwire.stanford.edu/cgi/medline/pmid:15567383>

K Mashal, JB Harsh, M Flury, AR Felmy, and H Zhao Colloid formation in Hanford sediments reacted with simulated tank waste. Environ Sci Technol 1 Nov 2004 38(21): p. 5750. <http://highwire.stanford.edu/cgi/medline/pmid:15575296>

N Kantiranis Re-cycling of sugar-ash: a raw feed material for rotary kilns. Waste Manag 1 Jan 2004 24(10): p. 999. <http://highwire.stanford.edu/cgi/medline/pmid:15567665>

J Parnell Mineral radioactivity in sands as a mechanism for fixation of organic carbon on the early Earth. Orig Life Evol Biosph 1 Dec 2004 34(6): p. 533.
<http://highwire.stanford.edu/cgi/medline/pmid:15570707>

YP Chin, PL Miller, L Zeng, K Cawley, and LK Weavers Photosensitized degradation of bisphenol A by dissolved organic matter. Environ Sci Technol 15 Nov 2004 38(22): p. 5888. <http://highwire.stanford.edu/cgi/medline/pmid:15573586>

X Li, TD Scheibe, and WP Johnson Apparent decreases in colloid deposition rate coefficients with distance of transport under unfavorable deposition conditions: a general phenomenon. Environ Sci Technol 1 Nov 2004 38(21): p. 5616.
<http://highwire.stanford.edu/cgi/medline/pmid:15575280>

A Gerst and MK Savage Seismic anisotropy beneath Ruapehu volcano: a possible eruption forecasting tool. Science 26 Nov 2004 306(5701): p. 1543.
<http://highwire.stanford.edu/cgi/medline/pmid:15567860>

Recep Avci, Mary Schweitzer, Robert D Boyd, Jennifer Wittmeyer, Andrew Steele, Jan Toporski, Iwona Beech, Fernando Teran Arce, Brenda Spangler, Kelly M Cole, and David S McKay Comparison of Antibody-Antigen Interactions on Collagen Measured by Conventional Immunological Techniques and Atomic Force Microscopy. Langmuir 7 Dec 2004 20(25): p. 11053. <http://highwire.stanford.edu/cgi/medline/pmid:15568858>

E Stokstad Society of Vertebrate Paleontology meeting. Snapshots from the meeting. Science 26 Nov 2004 306(5701): p. 1467. <http://highwire.stanford.edu/cgi/medline/pmid:15567834>

E Stokstad Society of Vertebrate Paleontology meeting. Timing complicates history of horses. Science 26 Nov 2004 306(5701): p. 1467. <http://highwire.stanford.edu/cgi/medline/pmid:15567833>

E Stokstad Society of Vertebrate Paleontology meeting. Antiextinction tip: eat to live. Science 26 Nov 2004 306(5701): p. 1466. <http://highwire.stanford.edu/cgi/medline/pmid:15567832>

E Stokstad Society of Vertebrate Paleontology meeting. Head games show whether dinos went on two legs or four. Science 26 Nov 2004 306(5701): p. 1466. <http://highwire.stanford.edu/cgi/medline/pmid:15567831>

LM Chiappe, L Codorniu, G Grellet-Tinner, and D Rivarola Palaeobiology: Argentinian unhatched pterosaur fossil. Nature 2 Dec 2004 432(7017): p. 571. <http://highwire.stanford.edu/cgi/medline/pmid:15577899>

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