

GEOLOGY

NOVEMBER 2009 № VOLUME 37 NUMBER 11

- 963 **First in situ observation of crystallization processes in a basaltic-andesitic melt with the moissanite cell**
FEDERICA SCHIAVI, NICOLAS WALTE, AND HANS KEPPLER
- 967 **An Upper Cretaceous sag pond deposit: Implications for recognition of local seismicity and surface rupture along the Kaibab monocline, Utah**
E.L. SIMPSON, M.C. WIZEVICH, H.L. HILBERT-WOLF, S.E. TINDALL, J.J. BERNARD, AND W.S. SIMPSON
- 971 **Holocene ooids of Aitutaki Atoll, Cook Islands, South Pacific**
EUGENE C. RANKEY AND STACY LYNN REEDER
- 975 **Climate-driven processes of hillslope weathering**
JEAN L. DIXON, ARJUN M. HEIMSATH, JAMES KASTE, AND RONALD AMUNDSON
- 979 **Multiple inflation and deflation events at Kenyan volcanoes, East African Rift**
J. BIGGS, E.Y. ANTHONY, AND C.J. EBINGER
- 983 **Satellite remote sensing of thermal activity at Bezymianny and Kliuchevskoi from 1993 to 1998**
SASKIA M. VAN MANEN AND JON DEHN
- 987 **Lawsonite Lu-Hf geochronology: A new geochronometer for subduction zone processes**
SEAN R. MULCAHY, ROBERT L. KING, AND JEFFREY D. VERVOORT
- 991 **Deposits of flows transitional between turbidity current and debris flow**
ESTHER J. SUMNER, PETER J. TALLING, AND LAWRENCE A. AMY
- 995 **Tsunami geomorphology: Erosion and deposition from the 15 November 2006 Kuril Island tsunami**
BREANNYN T. MACINNES, JOANNE BOURGEOIS, TATIANA K. PINEGINA, AND EKATERINA A. KRAVCHUNOVSKAYA
- 999 **Direct calculation of rupture depth for an exhumed paleoseismogenic fault from mylonitic pseudotachylite**
D.P. MOECHER AND M.G. STELTENPOHL
- 1003 **The combined effect of sea level and supply during Milankovitch cyclicity: Evidence from shallow-marine $\delta^{18}\text{O}$ records and sequence architecture (Adriatic margin)**
D. RIDENTE, F. TRINCARDI, A. PIVA, AND A. ASIOLI
- 1007 **Timing and structure of the 8.2 kyr B.P. event inferred from $\delta^{18}\text{O}$ records of stalagmites from China, Oman, and Brazil**
HAI CHENG, DOMINIK FLEITMANN, R. LAWRENCE EDWARDS, XIANFENG WANG, FRANCISCO W. CRUZ, AUGUSTO S. AULER, AUGUSTO MANGINI, YONGJIN WANG, XINGGONG KONG, STEPHEN J. BURNS, AND ALBERT MATTER
- 1011 **Extraterrestrial demise of banded iron formations 1.85 billion years ago**
JOHN F. SLACK AND WILLIAM F. CANNON
- 1015 **The stable isotope altimeter: Do Quaternary pedogenic carbonates predict modern elevations?**
GREGORY D. HOKE, CARMALA N. GARZIONE, DIEGO C. ARANEO, CLAUDIO LATORRE, MANFRED R. STRECKER, AND KENDRA J. WILLIAMS
- 1019 **Lake-sediment geochemistry reveals 1400 years of evolving extractive metallurgy at Cerro de Pasco, Peruvian Andes**
COLIN A. COOKE, ALEXANDER P. WOLFE, AND WILLIAM O. HOBBS
- 1023 **Strain localization in vesicular magma: Implications for rheology and fragmentation**
HEATHER M.N. WRIGHT AND ROBERTO F. WEINBERG
- 1027 **Cellular energy conservation and the rate of microbial sulfate reduction**
QUSHENG JIN AND CRAIG M. BETHKE
- 1031 **Impacts of late Holocene rapid climate changes as recorded in a macrotidal coastal setting (Mont-Saint-Michel Bay, France)**
I. BILLEAUD, B. TESSIER, AND P. LESUEUR
- 1035 **Timing and magnitude of recent accelerated sea-level rise (North Carolina, United States)**
ANDREW C. KEMP, BENJAMIN P. HORTON, STEPHEN J. CULVER, D. REIDE CORBETT, ORSON VAN DE PLASSCHE, W. ROLAND GEHRELS, BRUCE C. DOUGLAS, AND ANDREW C. PARNELL
- 1039 **Barchan dunes stabilized under recent climate warming on the northern Great Plains**
STEPHEN A. WOLFE AND CHRISTOPHER H. HUGENHOLTZ
- 1043 **Diverse aqueous environments on ancient Mars revealed in the southern highlands**
JAMES J. WRAY, SCOTT L. MURCHIE, STEVEN W. SQUYRES, FRANK P. SEELOS, AND LIVIO L. TORNABENE
- 1047 **A possible link between the geomagnetic field and catastrophic climate at the Paleocene-Eocene thermal maximum**
YOUN SOO LEE AND KAZUTO KODAMA
- 1051 **Magnetostratigraphic data on Neogene growth folding in the foreland basin of the southern Tianshan Mountains**
JIMIN SUN, YANG LI, ZHENQING ZHANG, AND BIHONG FU
- 1055 **Research Focus: Capturing crystal growth**
JULIA EVE HAMMER

