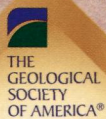


BULLETIN

ISSN 0016-7606 VOL. 125 NO. 11/12 NOVEMBER/DECEMBER 2013

THE
GEOLOGICAL
SOCIETY
OF AMERICA®



1888 **125** 2013
Years

CELEBRATING ADVANCES IN GEOSCIENCE

Invited Review Articles Inside

"Ripple in still water . . ."	p. 1912
Edible stardust?	p. 1865
Life after ice	p. 1851
Stubbing toes in Italy	p. 1820
Super content about super continents	p. 1735

The Geological Society of America Bulletin is a leading international journal for major scholarly research in all branches of the earth sciences. Published continuously since 1890.

T A B L E O F C O N T E N T S

INVITED REVIEW ARTICLES

- 1635 **Environmental changes in the Late Ordovician–early Silurian: Review and new insights from black shales and nitrogen isotopes**
Michael J. Melchin, Charles E. Mitchell, Chris Holmden, and Petr Štorch
- 1671 **On the origin of orogens**
R.A. Jamieson and C. Beaumont
- 1703 **Cyclostratigraphy and its revolutionizing applications in the earth and planetary sciences**
Linda A. Hinnov
- 1735 **Reconstructing pre-Pangean supercontinents**
David A.D. Evans

TECTONICS

- 1752 **Transensional rifting in the proto-Gulf of California near Bahia Kino, Sonora, México**
Scott E.K. Bennett, Michael E. Oskin, and Alexander Iriondo
- 1820 **Early exhumation of underthrust units near the toe of an ancient erosive subduction zone: A case study from the Northern Apennines of Italy**
Francesca Remitti, Maria Laura Balestrieri, Paola Vannucchi, and Giuseppe Bettelli
- 1930 **Geochemistry of Silurian–Devonian volcanic rocks in the Coastal Volcanic belt, Machias-Eastport area, Maine: Evidence for a pre-Acadian arc**
Aránzazu Piñán Llamas and J. Christopher Hepburn
- 1891 **Architecture of the Chugach accretionary complex as revealed by detrital zircon ages and lithologic variations: Evidence for Mesozoic subduction erosion in south-central Alaska**
Jeffrey M. Amato, Terry L. Pavlis, Peter D. Clift, Evan J. Kochelek, Joseph P. Hecker, Caleb M. Worthman, and Erik M. Day

GEOCHRONOLOGY

- 1783 **Likeness among detrital zircon populations—An approach to the comparison of age frequency data in time and space**
Aaron M. Satkoski, Bruce H. Wilkinson, Jack Hietpas, and Scott D. Samson

GEOCHEMISTRY

- 1800 **Geochemistry of Eocene high-Mg# adakitic rocks in the northern Qiangtang terrane, central Tibet: Implications for early uplift of the plateau**
JianLin Chen, JianBin Wu, JiFeng Xu, YanHui Dong, BaoDi Wang, and ZhiQiang Kang

PETROLOGY

- 1833 **Oceanic magmatism in sedimentary basins of the northern Gulf of California rift**
Axel K. Schmitt, Arturo Marín, Bodo Weber, Daniel F. Stockli, Haibo Zou, and Chuan-Chou Shen

QUATERNARY GEOLOGY

- 1851 **Landscape evolution, valley excavation, and terrace development following abrupt postglacial base-level fall**
Karen B. Gran, Noah Finnegan, Andrea L. Johnson, Patrick Belmont, Chad Wittkop, and Tammy Rittenour

PLANETARY GEOLOGY

- 1865 **Biological dissolution and activity of the Allende meteorite**
Javiera Cervini-Silva, Antonio Nieto-Camacho, Hilda Cornejo-Garrido, Paz del Angel, Noel Maya, Eduardo Palacios, José Ascención Montoya, Virginia Gómez-Vidales, and María Teresa Ramírez-Apan
- 1912 **Gravel-mantled megaripples of the Argentinean Puna: A model for their origin and growth with implications for Mars**
S.L. de Silva, M.G. Spagnuolo, N.T. Bridges, and J.R. Zimbelman

STRUCTURAL GEOLOGY

- 1874 **Geometry and controls on the development of igneous sill-related forced folds: A 2-D seismic reflection case study from offshore southern Australia**
Christopher A.L. Jackson, Nick Schofield, and Bogdan Golenkov

COMMENT-REPLY

- 1943 **Origin and lateral migration of linear dunes in the Qaidam Basin of NW China revealed by dune sediments, internal structures, and optically stimulated luminescence ages, with implications for linear dunes on Titan: Discussion**
D.M. Rubin and A.M. Rubin
- 1947 **Origin and lateral migration of linear dunes in the Qaidam Basin of NW China revealed by dune sediments, internal structures, and optically stimulated luminescence ages, with implications for linear dunes on Titan: Reply**
Jianxun Zhou, Ying Zhu, and Chongqian Yuan

AUTHOR INDEX

1950