Lithosphere focuses on processes that affect the crust, upper mantle, landscapes, and/or sedimentary systems at all spatial and temporal scales. This peer-reviewed journal particularly welcomes, but is not limited to, submissions that document the feedback relationships among geomorphic, lithospheric, and upper mantle processes.

Contents

335  Tectonics, hydrothermalism, and paleoclimate recorded by Quaternary travertines and their spatio-temporal distribution in the Albegna basin, central Italy: Insights on Tyrrhenian margin neotectonics
Gianluca Vignaroli, Gabriele Berardi, Andrea Billi, Sándor Kele, Federico Rossetti, Michele Soligo, and Stefano M. Bernasconi

359  Upper-crustal cooling of the Wrangellia composite terrane in the northern St. Elias Mountains, western Canada
Sarah Falkowski and Eva Enkelmann

379  Record of paleofluid circulation in faults revealed by hematite (U-Th)/He and apatite fission-track dating: An example from Gower Peninsula fault fissures, Wales
Alexis K. Ault, Max Frenzel, Peter W. Reiners, Nigel H. Woodcock, and Stuart N. Thomson

386  Proto-Japan and tectonic erosion: Evidence from zircon geochronology of blueschist and serpentinite
Qiong-Yan Yang, M. Santosh, S. Maruyama, and M. Nakagawa

396  Early Jurassic monzogranite-tonalite association from the southern Zhangguangcai Range: Implications for paleo-Pacific plate subduction along northeastern China
Jiang-Feng Qin, Shao-Cong Lai, Yong-Fei Li, Yin-Juan Ju, Ren-Zhi Zhu, and Shao-Wei Zhao

412  Corrugated architecture of the Okanagan Valley shear zone and the Shuswap metamorphic complex, Canadian Cordillera
Sarah R. Brown, Graham D.M. Andrews, and H. Daniel Gibson
See “Upper crustal cooling of the Wrangellia composite terrane in the northern St. Elias orogenic syntaxis on rock exhumation processes and the role of speculated and unknown structures. Thermochronologic dating of glacially derived sediments provides information on rock exhumation processes and the role of speculated and unknown structures. See “Upper crustal cooling of the Wrangellia composite terrane in the northern St. Elias orogenic syntaxis on rock exhumation processes and the role of speculated and unknown structures. Thermochronologic dating of glacially derived sediments provides information on rock exhumation processes and the role of speculated and unknown structures. See “Upper crustal cooling of the Wrangellia composite terrane in the northern St. Elias orogenic syntaxis on rock exhumation processes and the role of speculated and unknown structures. Thermochronologic dating of glacially derived sediments provides information on rock exhumation processes and the role of speculated and unknown structures. See “Upper crustal cooling of the Wrangellia composite terrane in the northern St. Elias orogenic syntaxis on rock exhumation processes and the role of speculated and unknown structures. Thermochronologic dating of glacially derived sediments provides information on rock exhumation processes and the role of speculated and unknown structures. See “Upper crustal cooling of the Wrangellia composite terrane in the northern St. Elias orogenic syntaxis on rock exhumation processes and the role of speculated and unknown structures. Thermochronologic dating of glacially derived sediments provides information on rock exhumation processes and the role of speculated and unknown structures. See “Upper crustal cooling of the Wrangellia composite terrane in the northern St. Elias orogenic syntaxis on rock exhumation processes and the role of speculated and unknown structures. Thermochronologic dating of glacially derived sediments provides information on rock exhumation processes and the role of speculated and unknown structures. See “Upper crustal cooling of the Wrangellia composite terrane in the northern St. Elias orogenic syntaxis on rock exhumation processes and the role of speculated and unknown structures. Thermochronologic dating of glacially derived sediments provides information on rock exhumation processes and the role of speculated and unknown structures. See “Upper crustal cooling of the Wrangellia composite terrane in the northern St. Elias orogenic syntaxis on rock exhumation processes and the role of speculated and unknown structures. Thermochronologic dating of glacially derived sediments provides information on rock exhumation processes and the role of speculated and unknown structures. See “Upper crustal cooling of the Wrangellia composite terrane in the northern St. Elias orogenic syntaxis on rock exhumation processes and the role of speculated and unknown structures. Thermochronologic dating of glacially derived sediments provides information on rock exhumation processes and the role of speculated and unknown structures. See “Upper crustal cooling of the Wrangellia composite terrane in the northern St. Elias orogenic syntaxis on rock exhumation processes and the role of speculated and unknown structures. Thermochronologic dating of glacially derived sediments provides information on rock exhumation processes and the role of speculated and unknown structures. See “Upper crustal cooling of the Wrangellia composite terrane in the northern St. Elias orogenic syntaxis on rock exhumation processes and the role of speculated and unknown structures. Thermochronologic dating of glacially derived sediments provides information on rock exhumation processes and the role of speculated and unknown structures. See “Upper crustal cooling of the Wrangellia composite terrane in the northern St. Elias orogenic syntaxis on rock exhumation processes and the role of speculated and unknown structures. Thermochronologic dating of glacially derived sediments provides information on rock exhumation processes and the role of speculated and unknown structures. See “Upper crustal cooling of the Wrangellia composite terrane in the northern St. Elias orogenic syntaxis on rock exhumation processes and the role of speculated and unknown structures. Thermochronologic dating of glacially derived sediments provides information on rock exhumation processes and the role of speculated and unknown structures. See “Upper crustal cooling of the Wrangellia composite terrane in the northern St. Elias orogenic syntaxis on rock exhumation processes and the role of speculated and unknown structures. Thermochronologic dating of glacially derived sediments provides information on rock exhumation processes and the role of speculated and unknown structures. See “Upper crustal cooling of the Wrangellia composite terrane in the northern St. Elias orogenic syntaxis on rock exhumation processes and the role of speculated and unknown structures. Thermochronologic dating of glacially derived sediments provides information on rock exhumation processes and the role of speculated and unknown structures. See “Upper crustal cooling of the Wrangellia composite terrane in the northern St. Elias orogenic syntaxis on rock exhumation processes and the role of speculated and unknown structures. Thermochronologic dating of glacially derived sediments provides information on rock exhumation processes and the role of speculated and unknown structures. See “Upper crustal cooling of the Wrangellia composite terrane in the northern St. Elias orogenic syntaxis on rock exhumation processes and the role of speculated and unknown structures. Thermochronologic dating of glacially derived sediments provides information on rock exhumation processes and the role of speculated and unknown structures. See “Upper crustal cooling of the Wrangellia composite terrane in the northern St. Elias orogenic syntaxis on rock exhumation processes and the role of speculated and unknown structures. Thermochronologic dating of glacially derived sediments provides information on rock exhumation processes and the role of speculated and unknown structures. See “Upper crustal cooling of the Wrangellia composite terrane in the northern St. Elias orogenic syntaxis on rock exhumation processes and the role of speculated and unknown structures. Thermochronologic dating of glacially derived sediments provides information on rock exhumation processes and the role of speculated and unknown structures. See “Upper crustal cooling of the Wrangellia composite terrane in the northern St. Elias orogenic syntaxis on rock exhumation processes and the role of speculated and unknown structures. Thermochronologic dating of glacially derived sediments provides information on rock exhumation processes and the role of speculated and unknown structures. See “Upper crustal cooling of the Wrangellia composite terrane in the northern St. Elias orogenic syntaxis on rock exhumation processes and the role of speculated and unknown structures. Thermochronologic dating of glacially derived sediments provides information on rock exhumation processes and the role of speculated and unknown structures. See “Upper crustal cooling of the Wrangellia composite terrane in the northern St. Elias orogenic syntaxis on rock exhumation processes and the role of speculated and unknown structures. Thermochronologic dating of glacially derived sediments provides information on rock exhumation processes and the role of speculated and unknown structures. See “Upper crustal cooling of the Wrangellia composite terrane in the northern St. Elias orogenic syntaxis on rock exhumation processes and the role of speculated and unknown structures. Thermochronologic dating of glacially derived sediments provides information on rock exhumation processes and the role of speculated and unknown structures. See “Upper crustal cooling of the Wrangellia composite terrane in the northern St. Elias orogenic syntaxis on rock exhumation processes and the role of speculated and unknown structures. Thermochronologic dating of glacially derived sediments provides information on rock exhumation processes and the role of speculated and unknown structures.

COVER: The Seward Ice Field surrounded by the tallest peaks of the St. Elias Mountains at the border of SE Alaska and SW Yukon. On the left is Mount St. Elias (5489 m) and Mount Logan (5959 m) on the right, separated by large fault zones. Investigating geologic processes at this heavily glaciated orogenic syntaxis is complicated due to the remoteness and ice cover. Thermochronologic dating of glacially derived sediments provides information on rock exhumation processes and the role of speculated and unknown structures. See “Upper crustal cooling of the Wrangellia composite terrane in the northern St. Elias Mountains, western Canada” by Sarah Falkowski and Eva Enkelmann, doi:10.1130/L508.1.

PHOTO BY: Eva Enkelmann

COVER DESIGN BY: Heather L. Sutphin