



# LITHOS

An International Journal of Petrology,  
Geochemistry and Mineralogy

VOLUMES 180–181  
NOVEMBER 2013  
ISSN 0024-4937

MAGMATIC RESPONSE TO THE POST-ACCRETIONARY  
OROGENESIS WITHIN ALPINE-HIMALAYAN BELT  
*edited by DEJAN PRELEVIĆ, IOAN SEGHEZ*  
*responsible Editor-in-Chief: ANDREW KERF*



[www.elsevier.com/locate/lithos](http://www.elsevier.com/locate/lithos)

# Lithos

**Volumes 180–181, Pages 1-278 (November 2013)**

**Magmatic response to the post-accretionary orogenesis within Alpine–Himalayan belt**

Edited by Dejan Prelević and Ioan Seghedi

## Editorial Board

*Page IFC*

**Magmatic response to the post-accretionary orogenesis within Alpine–Himalayan belt—Preface**

*Pages 1-4*

Dejan Prelević, Ioan Seghedi

**Eocene–Quaternary magmatic activity in the Aegean:  
Implications for mantle metasomatism and magma genesis in  
an evolving orogeny**

Original Research Article

*Pages 5-24*

E. Yalçın Ersoy, Martin R. Palmer

**Miocene–Quaternary volcanism and geodynamic evolution in  
the Pannonian Basin and the Menderes Massif: A comparative  
study**

Review Article

*Pages 25-42*

Ioan Seghedi, Yalçın E. Ersoy, Cahit Helvacı

**Origin of basaltic magmas of Perşani volcanic field, Romania:  
A combined whole rock and mineral scale investigation**

Original Research Article

*Pages 43-57*

Szabolcs Harangi, Tamás Sági, Ioan Seghedi, Theodoros Ntaflos

**Geochemistry and origin of ultramafic enclaves and their  
basanitic host rock from Kula Volcano, Turkey**

Original Research Article  
Pages 58-73  
Tobias Grützner, Dejan Prelević, Cüneyt Akal

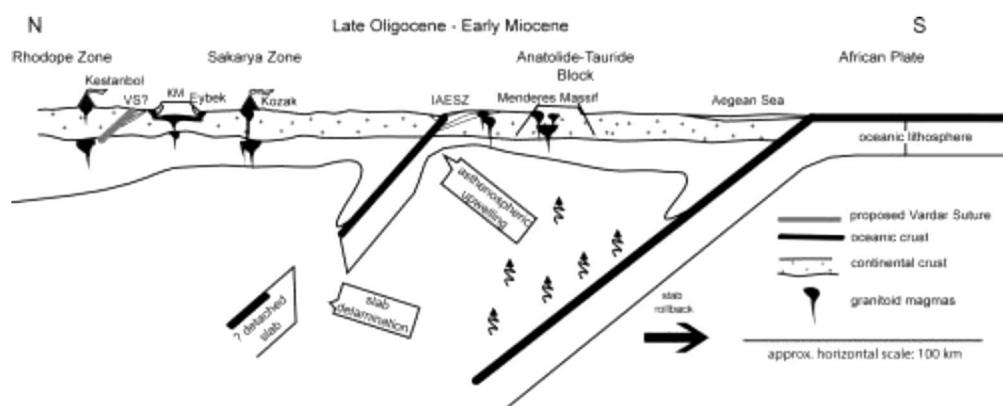
## Petrology, mineral chemistry and Sr–Nd–Pb isotopic compositions of granitoids in the central Menderes metamorphic core complex: Constraints on the evolution of Aegean lithosphere slab

Original Research Article  
Pages 74-91  
Fuat Erkül, Sibel Tatar Erkül, Yalçın Ersøy, İbrahim Uysal, Urs Klötzli

## Timing Aegean extension: Evidence from *in situ* U–Pb geochronology and cathodoluminescence imaging of granitoids from NW Turkey

Original Research Article  
Pages 92-108  
Karen N. Black, Elizabeth J. Catlos, Tolga Oyman, Mehmet Demirbilek

### Graphical abstract



## Late Eocene–Oligocene post-collisional monzonitic intrusions from the Alborz magmatic belt, NW Iran. An example of monzonite magma generation from a metasomatized mantle source

Original Research Article  
Pages 109-127  
Antonio Castro, Mehrab Aghazadeh, Zahra Badrzadeh, Martim Chichorro

## Miocene shoshonite volcanism in Sardinia: Implications for magma sources and geodynamic evolution of the central-

## **western Mediterranean**

Original Research Article

*Pages 128-137*

Luigi Beccaluva, Gianluca Bianchini, Paola Mameli, Claudio Natali

### **Origin and evolution of Cenozoic magmatism of Sardinia (Italy). A combined isotopic (Sr–Nd–Pb–O–Hf–Os) and petrological view**

Original Research Article

*Pages 138-158*

Michele Lustrino, Lorenzo Fedele, Leone Melluso, Vincenzo Morra, Fiorenzo Ronga, Jörg Geldmacher, Svend Duggen, Samuele Agostini, Ciro Cucciniello, Luigi Franciosi, Thomas Meisel

### **Adakitic magmatism in post-collisional setting: An example from the Early–Middle Eocene Magmatic Belt in Southern Bulgaria and Northern Greece**

Original Research Article

*Pages 159-180*

Peter Marchev, Stoyan Georgiev, Raya Raicheva, Irena Peytcheva, Albrecht von Quadt, Maria Ovtcharova, Nikolay Bonev

### **An anorogenic pulse in a typical orogenic setting: The geochemical and geochronological record in the East Serbian latest Cretaceous to Palaeocene alkaline rocks**

Original Research Article

*Pages 181-199*

Vladica Cvetković, Kristina Šarić, Dejan Prelević, Johann Genser, Franz Neubauer, Volker Höck, Albrecht von Quadt

### **Pliocene–Quaternary volcanic rocks of NW Armenia: Magmatism and lithospheric dynamics within an active orogenic plateau**

Original Research Article

*Pages 200-215*

I. Neill, Kh. Meliksetian, M.B. Allen, G. Navarsardyan, S. Karapetyan | Recommended articles | Related reference work articles

### **Geochronology, geochemistry and isotope tracing of the Oligocene magmatism of the Buchim–Damjan–Borov Dol ore district: Implications for timing, duration and source of the**

## **magmatism**

Original Research Article

*Pages 216-233*

St. Lehmann, J. Barcikowski, A. von Quadt, D. Gallhofer, I. Peytcheva,  
C.A. Heinrich, T. Serafimovski

## **Eocene–Oligocene post-collisional magmatism in the Lut–Sistan region, eastern Iran: Magma genesis and tectonic implications**

Original Research Article

*Pages 234-251*

Kwan-Nang Pang, Sun-Lin Chung, Mohammad Hossein Zarrinkoub,  
Mohammad Mahdi Khatib, Seyyed Saeid Mohammadi, Han-Yi Chiu, Chiu-Hong Chu, Hao-Yang Lee, Ching-Hua Lo

## **Age distribution of lamproites along the Socovos Fault (southern Spain) and lithospheric scale tearing**

Original Research Article

*Pages 252-263*

Luis Alfonso Pérez-Valera, Gideon Rosenbaum, Mario Sánchez-Gómez,  
Antonio Azor, Juan Manuel Fernández-Soler, Fernando Pérez-Valera,  
Paulo M. Vasconcelos

## **$^{40}\text{Ar}/^{39}\text{Ar}$ age constraints on the timing of Tertiary crustal extension and its temporal relation to ore-forming and magmatic processes in the Eastern Rhodope Massif, Bulgaria**

Original Research Article

*Pages 264-278*

Nikolay Bonev, Richard Spikings, Robert Moritz, Peter Marchev, David Collings