Accepted Manuscript

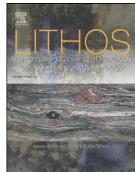
Genesis of post-collisional calc-alkaline and alkaline granitoids in Qiman Tagh, East Kunlun, China

Yu Miao, Feng Chengyou, Zhao Yiming, Li Daxin

PII:	\$0024-4937(15)00334-5
DOI:	doi: 10.1016/j.lithos.2015.08.022
Reference:	LITHOS 3696

To appear in: *LITHOS*

Received date:24 March 2015Accepted date:29 August 2015



Please cite this article as: Miao, Yu, Chengyou, Feng, Yiming, Zhao, Daxin, Li, Genesis of post-collisional calc-alkaline and alkaline granitoids in Qiman Tagh, East Kunlun, China, *LITHOS* (2015), doi: 10.1016/j.lithos.2015.08.022

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Genesis of post-collisional calc-alkaline and alkaline granitoids in Qiman Tagh,

East Kunlun, China

Yu Miao^{a,b}, Feng Chengyou^{a,*}, Zhao Yiming^a, Li Daxin^a ^aInstitute of Mineral Resources, CAGS, Beijing 100037, China School of the Earth Sciences and Resources, ^bSchool of Earth and Space Sciences, Peking University, Beijing 100871, China

Abstract

The post-collisional magmatism of Qiman Tagh is characterized by the intrusion of voluminous intermediate to felsic granitoids, including syenogranite, monzogranite, granodiorite, tonalite and diorite. The granitoids can be divided into two magmatic suites: Calc-alkaline (CA) and alkaline (Alk), which were emplaced from ~236 Ma to ~204 Ma. The CA suite contains metaluminous granodiorites and monzogranites. Typical Qiman Tagh CA granodiorites show moderately fractionated REE patterns $((La/Yb)_N = 4.35 \sim 25.11)$ with significant negative Eu anomalies (Eu/Eu* = 0.54 ~ 1.34), and the primitive mantle-normalized spidergrams show strong depletion of Nb and Sr. The Qiman Tagh CA monzogranites show similar fractionated REE patterns $((La/Yb)_N = 2.70 \sim 13.5)$ with less prominent negative Eu anomalies, and the chondrite-normalized spidergrams show strongly depleted Ba, Nb and Sr. The Alk suite, including syenogranite, is highly potassic ($K_2O/Na_2O = 1.09 \sim 3.56$) and peraluminous (A/CNK = $0.91 \sim 1.06$). Compared to typical Qiman Tagh CA granodiorites, the Qiman Tagh Alk granitoids can be distinguished by their higher Rb, Nb, Ga/Al, FeO*/MgO, Y/Sr and Rb/Sr, as well as their lower Mg[#], MgO, CaO, Al₂O₃, Sr, Co, V, Eu/Eu^{*}, Ba/Nb, La/Nb, Ba/La and Ce/Nb. The Qiman Tagh CA

^{*} Corresponding author. Feng C.Y., No 26 Baiwanzhuang Street, Xicheng District, Beijing 100037. E-mail: fengchy@cags.ac.cn.

Download English Version:

https://daneshyari.com/en/article/6440554

Download Persian Version:

https://daneshyari.com/article/6440554

Daneshyari.com