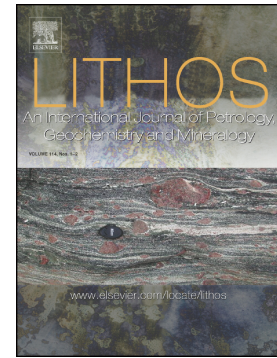


## Accepted Manuscript

Petrogenesis of the Pulang porphyry complex, southwestern China: Implications for porphyry copper metallogenesis and subduction of the Paleo-Tethys Oceanic lithosphere

Peng Wang, Guo-Chen Dong, Guo-Chun Zhao, Yi-Gui Han, Yong-Ping Li



PII: S0024-4937(18)30051-3  
DOI: doi:[10.1016/j.lithos.2018.02.009](https://doi.org/10.1016/j.lithos.2018.02.009)  
Reference: LITHOS 4568

To appear in:

Received date: 15 November 2017  
Accepted date: 11 February 2018

Please cite this article as: Peng Wang, Guo-Chen Dong, Guo-Chun Zhao, Yi-Gui Han, Yong-Ping Li , Petrogenesis of the Pulang porphyry complex, southwestern China: Implications for porphyry copper metallogenesis and subduction of the Paleo-Tethys Oceanic lithosphere. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Lithos(2018), doi:[10.1016/j.lithos.2018.02.009](https://doi.org/10.1016/j.lithos.2018.02.009)

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.

# **Petrogenesis of the Pulang porphyry complex, southwestern China: Implications for porphyry copper metallogenesis and subduction of the Paleo-Tethys Oceanic lithosphere**

Peng Wang<sup>a, b</sup>, Guo-Chen Dong<sup>a</sup>, Guo-Chun Zhao<sup>b</sup>, Yi-Gui Han<sup>b</sup>, Yong-Ping Li<sup>c</sup>

<sup>a</sup> *School of Earth Sciences and Resources, China University of Geosciences, Beijing*

*100083, China*

<sup>b</sup> *Department of Earth Sciences, The University of Hong Kong, Pokfulam Road, Hong*

*Kong, China*

<sup>c</sup> *Institute of Geology Yunnan, Yunnan 650051, China*

**Abstract:** The Pulang complex is located in the southern segment of the Yidun Arc in the Sanjiang Tethys belt, southwestern China. It is composed of quartz diorite, quartz monzonite and granodiorite porphyries, and hosts the super-large Pulang deposit. This study presents new U-Pb geochronological, major-trace elemental and Sr-Nd-Hf isotopic data to constrain the petrogenesis of the Pulang complex and to evaluate its significances for porphyric mineralization and tectonic evolution of the Paleo-Tethys Ocean. The zircon U-Pb dating yields ages ranging from 208 Ma to 214 Ma. Geochemically, the Pulang complex has high Sr and MgO contents, and high Sr/Y and La/Yb ratios, but low Yb and Y contents, displaying adakitic affinities. However, it has moderate Sr/Y and La/Yb ratios, and high Rb contents (32 to 202 ppm). The Pulang samples plot into the transitional field between adakites and normal arc rocks,

Download English Version:

<https://daneshyari.com/en/article/8911694>

Download Persian Version:

<https://daneshyari.com/article/8911694>

[Daneshyari.com](https://daneshyari.com)