

## Accepted Manuscript

Genesis of the Dianfang breccia-hosted gold deposit, western Henan Province, China: constraints from geology, geochronology and geochemistry

Yongfei Tian, Jia Sun, Huishou Ye, Jingwen Mao, Xiaoxia Wang, Minfeng Bi, Xiaoping Xia

PII: S0169-1368(17)30141-5

DOI: <http://dx.doi.org/10.1016/j.oregeorev.2017.08.011>

Reference: OREGEO 2308

To appear in: *Ore Geology Reviews*

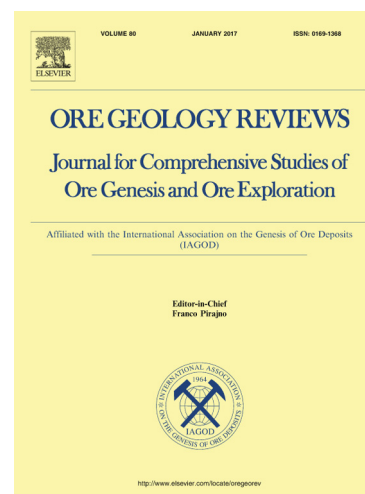
Received Date: 21 February 2017

Revised Date: 31 July 2017

Accepted Date: 7 August 2017

Please cite this article as: Y. Tian, J. Sun, H. Ye, J. Mao, X. Wang, M. Bi, X. Xia, Genesis of the Dianfang breccia-hosted gold deposit, western Henan Province, China: constraints from geology, geochronology and geochemistry, *Ore Geology Reviews* (2017), doi: <http://dx.doi.org/10.1016/j.oregeorev.2017.08.011>

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.



**Genesis of the Dianfang breccia-hosted gold deposit, western Henan Province, China: constraints from geology, geochronology and geochemistry**

**Yongfei Tian<sup>a</sup>, Jia Sun<sup>a\*</sup>, Huishou Ye<sup>a</sup>, Jingwen Mao<sup>a</sup>, Xiaoxia Wang<sup>a</sup>, Minfeng Bi<sup>a</sup>, Xiaoping Xia<sup>b</sup>**

*a MLR Key Laboratory of Metallogeny and Mineral Assessment, Institute of Mineral Resources, Chinese Academy of Geological Sciences, Beijing 100037, China*

*b State Key Laboratory of Isotope Geochemistry, Guangzhou Institute of Geochemistry, Chinese Academy of Sciences, Wushan, Guangzhou, 510460, China*

\*Corresponding author: Jia Sun

Address: Institute of Mineral Resources, Chinese Academy of Geological Sciences, No.26 Baiwanzhuang Road, Beijing 100037, China.

E-mail address: sunjia.china@yahoo.com (J. Sun)

**Abstract:** The Dianfang gold deposit, located in Songxian, western Henan province, China, is one of two breccia-hosted gold deposits in the Xiong'er-shan–Waifangshan region. Previous studies suggest that the breccia and host volcanic rocks of the Xiong'er Group formed coevally. The deposit consists of seven vein-type orebodies, occurring within the southern and hanging wall margins of the breccia pipe, as well as in fractures in the rhyolites of the Jidanping Formation, and are structurally controlled by ENE-trending faults. Their mineral assemblage includes K-feldspar, quartz, sericite, chlorite, epidote, carbonate, adularia, and sulfides formed from hydrothermal alteration related to mineralization. Pyrite is the dominant ore mineral, and is associated with minor galena, sphalerite, and chalcopyrite. The trace minerals include magnetite, rutile, cervelleite, matildite, and bismuthinite. Gold occurs as native gold, and electrum inclusions in pyrite, or along microfractures in sulfides and quartz. Four stages of hydrothermal mineralization have been identified: quartz–K-feldspar (I),

Download English Version:

<https://daneshyari.com/en/article/8910046>

Download Persian Version:

<https://daneshyari.com/article/8910046>

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