

**INTERNATIONAL MINERALOGICAL ASSOCIATION
COMMISSION ON NEW MINERALS, NOMENCLATURE
AND CLASSIFICATION**

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4 September, 2022

Dear Xiangping,

Congratulations on your new mineral, ZHENRUIITE (2022-050)!

The attached summary will appear in my next memorandum to the members of the Commission on New Minerals, Nomenclature and Classification. You should consider the comments of the members when you write your final description.

Although the Commission has no strict rule dealing with publication, I would ask that you ensure that the first published record of your mineral is in the scientific literature.

The CNMNC has decided to announce new minerals (**with or without their name, depending upon the authors' wishes**) with some data on the CNMNC website, one month after their approval. The text that will appear is attached below.

One of the rules of our Commission is that the description of a new mineral must be published within **two years** of notification of the approval. If publication does not take place during that time, approval of the mineral and its name will be withdrawn.

Proof of receipt of the type specimen(s) by the curator of the collection in which the type specimen(s) have been deposited must be sent to me as soon as possible to ensure approval.

The Commission strongly disapproves of the practice of providing specimens of new species to mineral dealers prior to the full description of the new species being published in the scientific literature.

Please send a copy of this letter with the manuscript of your description when you submit the paper for publication. This will indicate to the editor of the journal that the mineral and its name have been approved by the Commission on New Minerals, Nomenclature and Classification of the International Mineralogical Association.

Please send a reprint of the description to me when it is published.

Best regards,



Ritsuro Miyawaki, Chairman CNMNC

Encl.

**Monthly announcement of new minerals on the CNMNC website and in the
Mineralogical Magazine and the *European Journal of Mineralogy*
with or without their name, with a limited number of data.**

The Commission on New Minerals, Nomenclature and Classification decided in January 2010 (Proposal 09-D: the early publication of new mineral names) that additional data would be published one month after the approval date on the CNMNC website. This data will also be published in the *Mineralogical Magazine* and in the *European Journal of Mineralogy*, under the heading of a CNMNC Newsletter.

For your newly approved mineral, the following data will be published in line with the above, unless you wish the mineral name to remain confidential until the full description is published. If this is the case, the name will be removed from the data listed below. **NOTIFY ME BY E-MAIL IF YOU DO NOT WISH TO HAVE THE NAME OF YOUR MINERAL RELEASED PRIOR TO PUBLICATION.** Please also cross-check the data with your checklist, and inform me if you find any mistakes.

IMA No. **2022-050**

Zhenruite

(MoO₃)₂·H₂O

???

The Freedom #2 mine in the Central Mining Area, the Marysvale volcanic field, Utah, USA
(38°29'43''N, 112°12'55''W)

Xiangping Gu*, Hexiong Yang, Michael M. Scott

*E-mail: guxp2004@163.com

New structure type

Monoclinic: $P2_1/m$; structure determined

$a = 9.6790(6)$, $b = 3.70653(19)$, $c = 7.1029(4)$ Å, $\beta = 102.391(5)^\circ$

6.93(68), 4.73(47), 3.565(24), 3.183(100), 3.139(43), 3.003(31), 2.281(20)

Type material is deposited in the collections of the **University of Arizona Alfie Norville
Gem and Mineral Museum, 15 N Church Ave, Tucson, AZ 85701, USA**, catalogue no.

22720 (holotype), and the RRUFF Project, deposition no. R220010 (cotype)

How to cite: Gu, X., Yang, H. and Scott, M. M. (2022) Zhenruite, IMA 2022-050. CNMNC Newsletter 70; *Mineralogical Magazine*, **86**, <https://doi.org/.....>

2022-050
ZHENRUIE

| | Yes | No | Abstain |
|---------|-----|----|---------|
| Mineral | 17 | 0 | 0 |
| Name | 16 | 1 | 0 |

Consequently, both the mineral and the name have been **approved**.

COMMENTS ON THE MINERAL:

Those who voted **YES** made the following comments:

1. Even if the indices of refraction are too high to measure, it should be possible to determine other optical properties such as the optical character, 2V, dispersion, and birefringences. The solubility in HCl should be tested. It seems much more likely that the {001} form is present rather than the {010} form. A bond-valence analysis is needed.
2. Morphology: the crystal form {010} is a II pinacoid (not to be seen in Fig. 2). The authors probably intend to point to some sort of rhombic prism.
3. Without optical properties, but the information is sufficient to establish a new mineral.
4. Good description.

Those who voted **NO** made the following comments:

Those who **ABSTAINED** made the following comments:

COMMENTS ON THE NAME:

Those who voted **YES** made the following comments:

Those who voted **NO** made the following comments:

1. There is no specific connection of prof. Zhenru with the proposed mineral or type locality.

Those who **ABSTAINED** made the following comments:
