



## IMA Commission on New Minerals, Nomenclature and Classification (CNMNC) – Newsletter 63

Ritsuro Miyawaki<sup>1</sup>, Frédéric Hatert<sup>2</sup>, Marco Pasero<sup>3</sup>, and Stuart J. Mills<sup>4</sup>

<sup>1</sup>Chairman, CNMNC | Department of Geology, National Museum of Nature and Science,  
4-1-1 Amakubo, Tsukuba 305-0005, Japan

<sup>2</sup>Vice-Chairman, CNMNC | Laboratoire de Minéralogie, Université de Liège,  
Bâtiment B18, Sart Tilman, 4000 Liège, Belgium

<sup>3</sup>Vice-Chairman, CNMNC | Dipartimento di Scienze della Terra, Università di Pisa,  
Via Santa Maria 53, 56126 Pisa, Italy

<sup>4</sup>Secretary, CNMNC | Geosciences, Museum Victoria, P.O. Box 666, Melbourne, Victoria 3001, Australia

**Correspondence:** Marco Pasero (marco.pasero@unipi.it)

Received: 23 September 2021 – Published: 25 October 2021

The information given here is provided by the IMA Commission on New Minerals, Nomenclature and Classification for comparative purposes and as a service to mineralogists working on new species.

Each mineral is described in the following format:

- mineral name, if the authors agree on its release prior to the full description appearing in press;
- chemical formula (ideal formula);
- mineral symbol;
- type locality;
- full authorship of proposal;
- e-mail address of corresponding author;
- relationship to other minerals;
- crystal system, space group, structure determined (yes or no);
- unit-cell parameters;
- strongest lines in the X-ray powder diffraction pattern;
- type specimen repository and specimen number;
- citation details for the mineral prior to publication of full description.

Citation details concern the fact that this information will be published in the *European Journal of Mineralogy* on a routine basis, as well as being added month by month to the commission's website.

It is still a requirement for the authors to publish a full description of the new mineral.

No other information will be released by the commission.

### 1 New mineral proposals approved in August 2021

#### IMA no. 2021-041

Kiryuite

$\text{NaMnAl}(\text{PO}_4)\text{F}_3$

Kyu

Tsukubara, city of Kiryu, Gunma Prefecture, Japan  
(36°30'41" N, 139°25'26" E)

Daisuke Nishio-Hamane\*, Issei Ikari, and Yoshihiro Ohara

\*E-mail: hamane@issp.u-tokyo.ac.jp

The Mn analogue of viitaniemiite

Monoclinic:  $P2_1/m$ ; structure determined

$a = 5.425(4)$ ,  $b = 7.128(4)$ ,  $c = 6.817(6)$  Å,  $\beta = 109.41(7)^\circ$   
3.213(57), 3.124(26), 2.923(53), 2.877(100), 2.560(57),  
2.305(27), 2.263(43), 2.155(76)

Type material is deposited in the mineralogical collections of the National Museum of Nature and Science, Amakubo 4-1-1, Tsukuba, Japan, specimen number NSM-M48724

How to cite: Nishio-Hamane, D., Ikari, I., and Ohara, Y.: Kiryuite, IMA 2021-041, in: CNMNC Newsletter 63, Eur. J. Mineral., 33, <https://doi.org/10.5194/ejm-33-639-2021>, 2021.

#### IMA no. 2021-042

Håleniusite-(Ce)

CeOF

Hål-Ce

Água de Pau volcano (Fogo volcano), São Miguel Island, Azores District, Portugal (37°46'31" N, 25°27'31" W)

Anthony R. Kampf\*, Chi Ma, and Luigi Chiappino

\*E-mail: akampf@nhm.org

The Ce analogue of håleniusite-(La)

Cubic:  $Fm\bar{3}m$

$a = 5.6597(10)$

3.247(100), 2.840(31), 2.004(46), 1.705(30), 1.628(5), 1.413(4), 1.295(11), 1.266(10)

Cotype material is deposited in the mineralogical collections of the Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007, USA, catalogue numbers 76144, 76145, and 76146

How to cite: Kampf, A. R., Ma, C., and Chiappino, L.: Håleniusite-(Ce), IMA 2021-042, in: CNMNC Newsletter 63, Eur. J. Mineral., 33, <https://doi.org/10.5194/ejm-33-639-2021>, 2021.

#### IMA no. 2021-044

Flaggite

$Pb_4Cu_4^{2+}Te_2^{6+}(SO_4)_2O_{11}(OH)_2(H_2O)$

Flg

Grand Central mine, Tombstone District, Cochise Co., Arizona, USA (31°42'09" N, 110°03'43" W)

Anthony R. Kampf\*, Stuart J. Mills, Aaron J. Celestian, Chi Ma, Hexiong Yang, and Brent Thorne

\*E-mail: akampf@nhm.org

Structurally and chemically related to bairdite

Triclinic:  $P1$ ; structure determined

$a = 9.5610(2)$ ,  $b = 9.9755(2)$ ,  $c = 10.4449(3)$  Å,  
 $\alpha = 74.884(1)$ ,  $\beta = 89.994(1)$ ,  $\gamma = 78.219(1)^\circ$

9.41(65), 4.59(93), 4.34(49), 3.519(53), 3.070(99), 3.023(87), 2.724(100), 2.167(41)

Type material is deposited in the mineralogical collections of the Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007, USA, catalogue numbers 64499, 64500, and 76143

How to cite: Kampf, A. R., Mills, S. J., Celestian, A. J., Ma, C., Yang, H., and Thorne, B.: Flaggite, IMA 2021-044, in: CNMNC Newsletter 63, Eur. J. Mineral., 33, <https://doi.org/10.5194/ejm-33-639-2021>, 2021.

#### IMA no. 2021-046

Ferri-taramite

$Na(NaCa)(Mg_3Fe_2^{3+})(Si_6Al_2)O_{22}(OH)_2$

Fi-trm

Jakobsberg mine, Filipstad, Värmland, Sweden (59°49'40" N, 14°06'25" E)

Dan Holtstam\*, Fernando Cámara, Andreas Karlsson, Henrik Skogby, and Thomas Zack

\*E-mail: dan.holtstam@nrm.se

Amphibole supergroup

Monoclinic:  $C2/m$ ; structure determined

$a = 9.8960(1)$ ,  $b = 18.015(2)$ ,  $c = 5.32164(7)$  Å,  
 $\beta = 105.00(1)^\circ$

8.44(60), 3.392(25), 3.281(39), 3.140(100), 2.816(45), 2.710(38), 1.654(26), 1.445(33)

Type material is deposited in the mineralogical collections of the Department of Geosciences, Swedish Museum of Natural History, Box 50007, SE-10405 Stockholm, Sweden, collection number GEO-NRM 19221254

How to cite: Holtstam, D., Cámara, F., Karlsson, A., Skogby, H., and Zack, T.: Ferri-taramite, IMA 2021-046, in: CNMNC Newsletter 63, Eur. J. Mineral., 33, <https://doi.org/10.5194/ejm-33-639-2021>, 2021.

#### IMA no. 2021-047

Alicewilsonite-(YLa)

$Na_2Sr_2YLa(CO_3)_6 \cdot 3H_2O$

Aws-YLa

Paratoo copper mine, Yunta, Olary Province, South Australia, Australia (32°40'40" S, 139°19'50" E)

Inna Lykova\*, Ralph Rowe, Glenn Poirier, Kate Helwig, and Henrik Friis

\*E-mail: ilykova@nature.ca

The La analogue of alicewilsonite-(YCe)

Triclinic:  $P1$ ; structure determined

$a = 8.9793(3)$ ,  $b = 8.9734(2)$ ,  $c = 6.7404(2)$  Å,  
 $\alpha = 102.829(2)$ ,  $\beta = 116.382(3)$ ,  $\gamma = 60.109(3)^\circ$

6.03(43), 4.355(100), 4.020(30), 2.819(96), 2.592(40), 2.228(33), 2.011(36), 1.967(32)

Type material is deposited in the mineralogical collections of the Canadian Museum of Nature, P.O. Box 3443, Station "D", Ottawa, Ontario, Canada, catalogue number CMNMC 89063, and the Natural History Museum, University of Oslo, P.O. Box 1172, Blindern, Oslo, Norway, catalogue number KNR 44330

How to cite: Lykova, I., Rowe, R., Poirier, G., Helwig, K., and Friis, H.: Alicewilsonite-(YLa), IMA 2021-047, in: CNMNC Newsletter 63, Eur. J. Mineral., 33, <https://doi.org/10.5194/ejm-33-639-2021>, 2021.

**IMA no. 2021-048**

Dondoellite



Ddl

Grizzly Bear Peak, Stoneman Camp (Area B; Area 2), Rapid Creek, Dawson mining district, Yukon, Canada (68° N, 137° W, estimated)

Hexiong Yang\*, Ronald B. Gibbs, James A. McGlasson, Robert A. Jenkins, and Robert T. Downs

\*E-mail: [hyang@arizona.edu](mailto:hyang@arizona.edu)

A dimorph of messelite

Triclinic:  $P\bar{1}$ ; structure determined

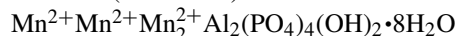
$a = 5.4830(2)$ ,  $b = 5.7431(2)$ ,  $c = 13.0107(5)$  Å,  
 $\alpha = 98.772(2)$ ,  $\beta = 96.209(2)$ ,  $\gamma = 108.452(2)^\circ$   
 6.316(35), 3.149(100), 3.023(63), 2.669(100), 2.574(30),  
 2.628(26), 1.782(25), 1.701(25)

Type material is deposited in the mineralogical collections of the University of Arizona Mineral Museum, 1040 E 4th Street, Tucson, AZ 85721-0077, USA, catalogue no. 22710 (holotype), and the RRUFF project, deposition no. R210003 (cotype)

How to cite: Yang, H., Gibbs, R. B., McGlasson, J. A., Jenkins, R. A., and Downs, R. T.: Dondoellite, IMA 2021-048, in: CNMNC Newsletter 63, Eur. J. Mineral., 33, <https://doi.org/10.5194/ejm-33-639-2021>, 2021.

**IMA no. 2021-049**

Whiteite-(MnMnMn)



Wt-MnMnMn

Foote Lithium Company mine (east dump), Kings Mountain District, Cleveland Co., North Carolina, USA (35°12'40" N, 81°21'20" W)

Ian E. Grey\*, Jason B. Smith, Anthony R. Kampf, W. Gus Mumme, Colin M. Macrae, Alan Riboldi-Tunnicliffe, Stephanie Boer, and Alexander M. Glenn

\*E-mail: [ian.grey@csiro.au](mailto:ian.grey@csiro.au)

Jahnsite group

Monoclinic:  $P2_1/a$ ; structure determined

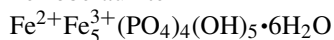
$a = 15.024(3)$ ,  $b = 6.947(1)$ ,  $c = 9.999(2)$  Å,  $\beta = 110.71(3)^\circ$   
 9.40(49), 4.92(66), 4.70(37), 3.513(42), 2.801(100),  
 1.950(26), 1.884(26), 1.568(28)

Cotype material is deposited in the mineralogical collections of the Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007, USA, catalogue numbers 74374, 76149, 76150 and 76151

How to cite: Grey, I. E., Smith, J. B., Kampf, A. R., Mumme, W. G., Macrae, C. M., Riboldi-Tunnicliffe, A., Boer, S., and Glenn, A. M.: Whiteite-(MnMnMn), IMA 2021-049, in: CNMNC Newsletter 63, Eur. J. Mineral., 33, <https://doi.org/10.5194/ejm-33-639-2021>, 2021.

**2 New mineral proposals approved in September 2021****IMA no. 2021-036**

Ferroberaunite



Fbru

Gravel Hill mine, Perranzabuloe, Cornwall, England, United Kingdom (50°22'27.0" N, 5°08'42.0" W)

Jaromír Tvrdý\*, Jakub Plášil, Jiří Sejkora, Radek Škoda, Luboš Vrtiška, Zdeněk Dolníček, Martin Petr, and František Veselovský

\*E-mail: [jt.geologie@gmail.com](mailto:jt.geologie@gmail.com)

The Fe<sup>2+</sup> analogue of zincberauniteMonoclinic:  $C2/c$ ; structure determined

$a = 20.8729(6)$ ,  $b = 5.1581(2)$ ,  $c = 19.2294(5)$  Å,  
 $\beta = 93.396(2)^\circ$

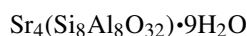
10.410(100), 9.606(14), 7.271(11), 5.203(4), 3.467(12),  
 3.325(6), 3.201(6), 2.600(4)

Type material is deposited in the collections of the Department of Mineralogy and Petrology, National Museum in Prague, Cirkusová 1740, Prague 9, Czech Republic, catalogue number P1P 11/2021

How to cite: Tvrdý, J., Plášil, J., Sejkora, J., Škoda, R., Vrtiška, L., Dolníček, Z., Petr, M., and Veselovský, F.: Ferroberaunite, IMA 2021-036, in: CNMNC Newsletter 63, Eur. J. Mineral., 33, <https://doi.org/10.5194/ejm-33-639-2021>, 2021.

**IMA no. 2021-043**

Gismondine-Sr



Gis-Sr

Halamish, Hatrurim Basin, Negev Desert, Israel (31°09'42" N, 35°17'29" E)

Katarzyna Nowak\*, Georgia Cametti, Irina O. Galuskina, Yevgeny Vapnik, and Evgeny V. Galuskin

\*E-mail: [katarzyna.k.nowak@us.edu.pl](mailto:katarzyna.k.nowak@us.edu.pl)

Zeolite group (GIS-type framework)

Orthorhombic:  $B22_12$ ; structure determined

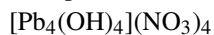
$a = 14.0256(2)$ ,  $b = 10.4590(1)$ ,  $c = 13.7936(1)$  Å  
 7.165(34), 4.917(100), 4.192(88), 4.167(46), 3.128(47),  
 2.683(34), 2.663(25), 2.615(29)

Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Leninskiy Prospekt 18-2, Moscow 119071, Russia, registration number 5708/1

How to cite: Nowak, K., Cametti, G., Galuskina, I. O., Vapnik, Y., and Galuskin, E. V.: Gismondine-Sr, IMA 2021-043, in: CNMNC Newsletter 63, Eur. J. Mineral., 33, <https://doi.org/10.5194/ejm-33-639-2021>, 2021.

**IMA no. 2021-045a**

Nitroplumbite



Npb

Burro mine, Slick Rock District, San Miguel Co., Colorado, USA (38°02'42" N, 108°53'22" W)

Anthony R. Kampf\*, John M. Hughes, Barbara P. Nash, and Joe Marty

\*E-mail: akampf@nhm.org

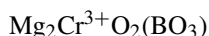
Known synthetic analogue

Monoclinic: *Ia*; structure determined $a = 18.3471(7)$ ,  $b = 17.3057(4)$ ,  $c = 18.6698(8)$  Å,  
 $\beta = 91.872(3)^\circ$ 6.34(100), 4.849(27), 3.595(37), 3.302(36), 3.172(29),  
2.997(35), 2.922(28), 2.755(29)

Type material is deposited in the mineralogical collections of the Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007, USA, catalogue numbers 76147 (holotype) and 76148 (cotype)

How to cite: Kampf, A. R., Hughes, J. M., Nash, B. P., and Marty, J.: Nitroplumbite, IMA 2021-045a, in: CNMNC Newsletter 63, Eur. J. Mineral., 33, <https://doi.org/10.5194/ejm-33-639-2021>, 2021.**IMA no. 2021-051**

Savelievaite



Svlv

Left bank of the Malaya Kharamatalou river valley, northern part of the Voikar-Syninskiy ultrabasite complex, Shuryshkarskiy District, Yamalo-Nenets Autonomous Okrug, Polar Urals, Russia (66°39'57" N, 64°41'50" E)

Igor V. Pekov\*, Nadezhda V. Vakhrusheva, Natalia V. Zubkova, Vasilij O. Yapaskurt, Yulia S. Shelukhina, Yuriy V. Erokhin, Maria O. Bulakh, Sergey N. Britvin, and Dmitry Y. Pushcharovsky

\*E-mail: igorpekov@mail.ru

Ludwigite group

Orthorhombic: *Pbam*; structure determined $a = 9.2631(6)$ ,  $b = 12.2298(8)$ ,  $c = 3.0104(2)$  Å  
5.101(100), 3.008(24), 2.551(90), 2.524(88), 2.163(36),  
2.033(55), 1.906(29), 1.574(25)

Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Leninskiy Prospekt 18-2, Moscow 119071, Russia, registration number 5720/1

How to cite: Pekov, I. V., Vakhrusheva, N. V., Zubkova, N. V., Yapaskurt, V. O., Shelukhina, Y. S., Erokhin, Y. V., Bulakh, M. O., Britvin, S. N., and Pushcharovsky, D. Y.: Savelievaite, IMA 2021-051, in: CNMNC Newsletter 63, Eur. J. Mineral., 33, <https://doi.org/10.5194/ejm-33-639-2021>, 2021.**IMA no. 2021-052**

Radvaniceite



Rad

Kateřina mine, eastern part of the village of Radvanice, about 12 km east of the town of Trutnov, northern Bohemia, Czech Republic (50°33'39.0" N 16°03'56.2" E)

Jiří Sejkora\*, Vladimír Žáček, Radek Škoda, František Laufek, and Zdeněk Dolníček

\*E-mail: jiri.sejkora@nm.cz

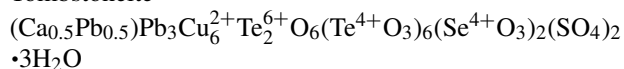
Known synthetic analogue

Monoclinic: *Pc* $a = 6.883(1)$ ,  $b = 22.501(3)$ ,  $c = 6.808(1)$  Å,  
 $\beta = 120.365(9)^\circ$ 5.739(5), 5.207(16), 3.365(32), 2.842(33), 2.824(16),  
2.813(20), 2.626(19), 2.327(13)

Type material is deposited in the collections of the Department of Mineralogy and Petrology, National Museum in Prague, Cirkusová 1740, Prague 9, Czech Republic, catalogue number P1P 9/2021

How to cite: Sejkora, J., Žáček, V., Škoda, R., Laufek, F., and Dolníček, Z.: Radvaniceite, IMA 2021-052, in: CNMNC Newsletter 63, Eur. J. Mineral., 33, <https://doi.org/10.5194/ejm-33-639-2021>, 2021.**IMA no. 2021-053**

Tombstoneite



Tbs

Grand Central mine, Tombstone District, Cochise Co., Arizona, USA (31°42'09" N, 110°03'43" W)

Anthony R. Kampf\*, Stuart J. Mills, Robert M. Housley, Chi Ma, and Brent Thorne

\*E-mail: akampf@nhm.org

New structure type

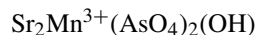
Trigonal: *P321*; structure determined $a = 9.1377(9)$ ,  $c = 12.2797(9)$  Å  
12.36(50), 3.056(100), 2.912(42), 2.867(27), 2.691(34),  
2.639(31), 1.792(31), 1.664(23)

Type material is deposited in the mineralogical collections of the Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007, USA, catalogue number 76150

How to cite: Kampf, A. R., Mills, S. J., Housley, R. M., Ma, C., and Thorne, B.: Tombstoneite, IMA 2021-053, in: CNMNC Newsletter 63, Eur. J. Mineral., 33, <https://doi.org/10.5194/ejm-33-639-2021>, 2021.

**IMA no. 2021-054**

Aldomarinnoite



Aldm

Grand Central mine, Tombstone District, Cochise Co., Arizona, USA (31°42'09" N, 110°03'43" W)

Fernando Cámara\*, Lisa Baratelli, Marco E. Ciriotti, Fabrizio Nestola, and Gian Carlo Piccoli

\*E-mail: fernando.camara@unimi.it

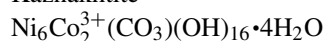
Brackebuschite supergroup

Monoclinic:  $P2_1/m$ ; structure determined $a = 7.5577(4)$ ,  $b = 5.9978(3)$ ,  $c = 8.7387(4)$  Å,  
 $\beta = 111.938(6)^\circ$ 3.191(89), 2.997(45), 2.914(47), 2.715(100), 2.087(39),  
1.833(32), 1.761(29), 1.689(36)

Type material is deposited in the collections of the Museo di Mineralogia, Gemmologia, Petrologia e Giacimentologia, Dipartimento di Scienze della Terra "Ardito Desio", Università di Milano, Italy, catalogue number MCMGPG-H2021-001

How to cite: Cámara, F., Baratelli, L., Ciriotti, M. E., Nestola, F., and Piccoli, G. C.: Aldomarinnoite, IMA 2021-054, in: CNMNC Newsletter 63, Eur. J. Mineral., 33, <https://doi.org/10.5194/ejm-33-639-2021>, 2021.**IMA no. 2021-056**

Kaznakhtite



Kzt

Kaznakhtinskiy ultrabasic massif, ca. 2 km west of the headwaters of the Kyzyl-Uyuk creek, Ust'-Koksinskiy District, Altai Republic, SW Siberia, Russia (50°14'22" N, 86°30'25" E)

Anatoly V. Kasatkin\*, Sergey N. Britvin, Maria G. Krzhizhanovskaya, Nikita V. Chukanov, Radek Škoda, Jörg Göttlicher, Dmitry I. Belakovskiy, Igor V. Pekov, and Victor V. Levitskiy

\*E-mail: anatoly.kasatkin@gmail.com

Hydrotalcite supergroup

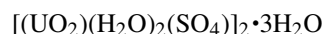
Trigonal:  $R\bar{3}$ ; structure determined $a = 3.0514(3)$ ,  $c = 23.179(2)$  Å  
7.72(100), 3.863(24), 2.630(4), 2.576(10), 2.294(6),  
1.950(4), 1.526(4), 1.497(4)

Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Leninskiy Prospekt 18-2, Moscow 119071, Russia, registration number 5727/1

How to cite: Kasatkin, A. V., Britvin, S. N., Krzhizhanovskaya, M. G., Chukanov, N. V., Škoda, R., Göttlicher, J., Belakovskiy, D. I., Pekov, I. V., and Levitskiy, V. V.: Kaznakhtite, IMA 2021-056, in: CNMNC Newsletter

63, Eur. J. Mineral., 33, <https://doi.org/10.5194/ejm-33-639-2021>, 2021.**IMA no. 2021-057**

Scenicite



Sce

Scenic mine, Fry Mesa, White Canyon District, San Juan Co., Utah, USA (37°38'43" N, 110°07'10" W) – holotype; Green Lizard mine, Red Canyon, White Canyon District, San Juan Co., Utah, USA (37°34'37.10" N, 110°17'52.80" W) – cototype

Anthony R. Kampf\*, Jakub Plášil, Travis A. Olds, Chi Ma, and Joe Marty

\*E-mail: akampf@nhm.org

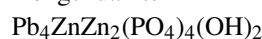
Structurally related to shumwayite

Orthorhombic:  $Pca2_1$ ; structure determined $a = 21.214(1)$ ,  $b = 6.8188(3)$ ,  $c = 11.2554(6)$  Å  
7.69(70), 5.63(100), 4.92(84), 4.80(93), 3.699(48),  
3.398(55), 2.791(43), 2.590(51)

Type material is deposited in the mineralogical collections of the Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007, USA, catalogue numbers 76153 (holotype) and 76154 (cototype)

How to cite: Kampf, A. R., Plášil, J., Olds, T. A., Ma, C., and Marty, J.: Scenicite, IMA 2021-057, in: CNMNC Newsletter 63, Eur. J. Mineral., 33, <https://doi.org/10.5194/ejm-33-639-2021>, 2021.**IMA no. 2021-058**

Dongchuanite



Dc

Village of Sanguozhuang, town of Tangdan, Dongchuan District, city of Kunming, Yunnan Province, China (26°07'36" N, 103°00'19" E)

Guowu Li\*, Hongtao Shen, Ningyue Sun, Yuan Xue, and Jinhua Hao

\*E-mail: liguowu@cugb.edu.cn

New structure type

Triclinic:  $P\bar{1}$ ; structure determined $a = 4.762(1)$ ,  $b = 8.507(2)$ ,  $c = 10.364(2)$  Å,  $\alpha = 97.11(2)$ ,  
 $\beta = 101.46(2)$ ,  $\gamma = 92.27(2)^\circ$   
4.634(50), 3.428(100), 3.122(50), 3.052(60), 2.918(45),  
2.816(50), 2.381(65), 1.853(50)

Type material is deposited in the mineralogical collections of the Geological Museum of China, Xisi, Yangrou Hutong no. 15, Xisi, Beijing 100031, People's Republic of China, catalogue no. M16123 (holotype) and the Crystal Structure Laboratory, China University of Geosciences, Beijing

100083, People's Republic of China, catalogue no. DC-1 (co-type)

How to cite: Li, G., Shen, H., Sun, N., Xue, Y., and Hao, J.: Dongchuanite, IMA 2021-058, in: CNMNC Newsletter 63, Eur. J. Mineral., 33, <https://doi.org/10.5194/ejm-33-639-2021>, 2021.

#### IMA no. 2021-059

Ozernovskite



Ozn

Orebody no. 5, Ozernovskoe gold deposit, 115 km north of the town of Klyuchi, Kamchatka peninsula, Far-Eastern Region, Russia (57°35'31" N, 160°38'13" E)

Igor V. Pekov\*, Sergey N. Britvin, Petr A. Pletnev, Nikita V. Chukanov, Dmitry I. Belakovskiy, and Vasilij O. Yapaskurt

\*E-mail: igorpekov@mail.ru

New structure type

Monoclinic:  $C2/c$ ; structure determined

$a = 25.923(3)$ ,  $b = 10.419(1)$ ,  $c = 7.902(1)$  Å,  
 $\beta = 93.415(4)^\circ$

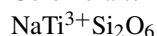
12.92(78), 9.67(200), 5.206(24), 3.481(31), 3.329(26), 3.151(25), 3.007(27), 2.885(26)

Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Leninskiy Prospekt 18-2, Moscow 119071, Russia, registration number 5728/1

How to cite: Pekov, I. V., Britvin, S. N., Pletnev, P. A., Chukanov, N. V., Belakovskiy, D. I., and Yapaskurt, V. O.: Ozernovskite, IMA 2021-059, in: CNMNC Newsletter 63, Eur. J. Mineral., 33, <https://doi.org/10.5194/ejm-33-639-2021>, 2021.

#### IMA no. 2021-061

Colomeraite



Colo

Colomera iron meteorite, fall in 1912 at Colomera, Benalúa de las Villas, Granada, Andalusia, Spain (37°25'59" N, 3°38'59" W)

Chi Ma\*

\*E-mail: chima@caltech.edu

Pyroxene group

Monoclinic:  $C2/c$ ; structure determined

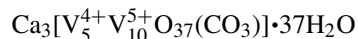
$a = 9.70(1)$ ,  $b = 8.88(1)$ ,  $c = 5.30(1)$  Å,  $\beta = 106.8(1)^\circ$   
2.996(100), 2.923(43), 2.562(21), 2.537(40), 2.496(37), 1.637(20), 1.619(19), 1.408(22)

Type material is deposited in the mineralogical collections of the Smithsonian National Museum of Natural History, 10th St. & Constitution Ave. NW, Washington, DC 20560, USA, catalogue number USNM 7928

How to cite: Ma, C.: Colomeraite, IMA 2021-061, in: CNMNC Newsletter 63, Eur. J. Mineral., 33, <https://doi.org/10.5194/ejm-33-639-2021>, 2021.

#### IMA no. 2021-063

Pomite



Pom

Blue Streak mine, about 13 km west of the town of Naturita, Bull Canyon, Montrose Co., Colorado, USA (38°11'58" N, 108°50'24" W)

Anthony R. Kampf\*, John M. Hughes, Chi Ma, Joe Marty, and Timothy P. Rose

\*E-mail: akampf@nhm.org

Closely related to pseudopomite (IMA no. 2021-064; this newsletter)

Triclinic:  $P\bar{1}$ ; structure determined

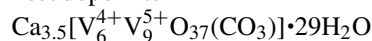
$a = 12.367(1)$ ,  $b = 12.969(1)$ ,  $c = 22.068(2)$  Å,  
 $\alpha = 99.038(7)$ ,  $\beta = 95.689(7)$ ,  $\gamma = 103.249(7)^\circ$   
11.87(100), 10.62(98), 10.04(30), 9.06(37), 5.21(14), 3.921(18), 3.075(19), 2.632(14)

Type material is deposited in the mineralogical collections of the Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007, USA, catalogue numbers 76155

How to cite: Kampf, A. R., Hughes, J. M., Ma, C., Marty, J., and Rose, T. P.: Pomite, IMA 2021-063, in: CNMNC Newsletter 63, Eur. J. Mineral., 33, <https://doi.org/10.5194/ejm-33-639-2021>, 2021.

#### IMA no. 2021-064

Pseudopomite



Ppom

Blue Streak mine, about 13 km west of the town of Naturita, Bull Canyon, Montrose Co., Colorado, USA (38°11'58" N, 108°50'24" W)

Anthony R. Kampf\*, John M. Hughes, Chi Ma, Joe Marty, and Timothy P. Rose

\*E-mail: akampf@nhm.org

Closely related to pomite (IMA no. 2021-063; this newsletter)

Triclinic:  $P\bar{1}$ ; structure determined

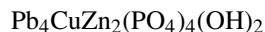
$a = 12.291(2)$ ,  $b = 12.620(1)$ ,  $c = 20.917(3)$  Å,  
 $\alpha = 77.381(6)$ ,  $\beta = 85.965(5)$ ,  $\gamma = 64.367(7)^\circ$   
10.94(100), 10.00(73), 8.86(31), 5.32(16), 4.42(11), 3.074(22), 2.953(19), 2.890(18)

Type material is deposited in the mineralogical collections of the Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007, USA, catalogue numbers 76155

How to cite: Kampf, A. R., Hughes, J. M., Ma, C., Marty, J., and Rose, T. P.: Pseudopomite, IMA 2021-064, in: CNMNC Newsletter 63, Eur. J. Mineral., 33, <https://doi.org/10.5194/ejm-33-639-2021>, 2021.

#### IMA no. 2021-065

Cuprodongchuanite



Cdc

Village of Sanguozhuang, town of Tangdan, Dongchuan District, city of Kunming, Yunnan Province, China (26°07'36" N, 103°00'19" E)

Ningyue Sun, Guowu Li\*, Yuan Xue, Hongtao Shen, and Jinhua Hao

\*E-mail: [liguowu@cugb.edu.cn](mailto:liguowu@cugb.edu.cn)

The Cu analogue of dongchuanite (IMA no. 2021-058; this newsletter)

Triclinic:  $P\bar{1}$ ; structure determined

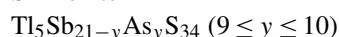
$a = 4.7359(5)$ ,  $b = 8.4995(9)$ ,  $c = 10.292(1) \text{ \AA}$ ,  
 $\alpha = 97.25(1)$ ,  $\beta = 102.06(1)$ ,  $\gamma = 91.758(8)^\circ$   
 4.641(90), 3.434(100), 3.253(80), 2.919(60), 2.809(70),  
 2.761(90), 2.613(70), 2.219(80)

Type material is deposited in the mineralogical collections of the Geological Museum of China, Xisi, Yangrou Hutong no. 15, Xisi, Beijing 100031, People's Republic of China, catalogue no. M16124 (holotype), and the Crystal Structure Laboratory, China University of Geosciences, Beijing 100083, People's Republic of China, catalogue no. DC-2 (co-type)

How to cite: Sun, N., Li, G., Xue, Y., Shen, H., and Hao, J.: Cuprodongchuanite, IMA 2021-065, in: CNMNC Newsletter 63, Eur. J. Mineral., 33, <https://doi.org/10.5194/ejm-33-639-2021>, 2021.

#### IMA no. 2019-069/20-F

Shimenite



Shmn

Jiepaiyu mine, Shimen, Changde, Hunan, China (29°34'24" N, 111°17'10" E)

Dan Topa\*, Frank N. Keutsch, Uwe Kolitsch, Christian Lengauer, Gerald Giester, and Chris Stanley

\*E-mail: [dan.topa@nhm-wien.ac.at](mailto:dan.topa@nhm-wien.ac.at)

Chabournéite group

Triclinic:  $P\bar{1}$ ; structure determined

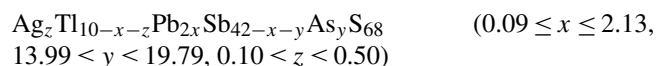
$a = 8.1137(5)$ ,  $b = 8.6488(6)$ ,  $c = 21.258(1) \text{ \AA}$ ,  
 $\alpha = 84.181(4)$ ,  $\beta = 83.378(4)$ ,  $\gamma = 89.951(4)^\circ$   
 4.032(47), 3.993(85), 3.625(84), 3.563(100), 3.033(72),  
 2.855(52), 2.830(70), 2.737(68)

Type material is deposited in the mineralogical collections of the Naturhistorisches Museum Wien, Burgring 7, 1010 Vienna, Austria, catalogue number O1197

How to cite: Topa, D., Keutsch, F. N., Kolitsch, U., Lengauer, C., Giester, G., and Stanley, C.: Shimenite, IMA 2019-069, in: CNMNC Newsletter 63, Eur. J. Mineral., 33, <https://doi.org/10.5194/ejm-33-639-2021>, 2021.

#### IMA no. 2019-098/20-F

Dewitite



Dwt

Jas Roux, La Chapelle-en-Valgaudemar, Hautes-Alpes, Provence-Alpes-Côte d'Azur, France (44°48'45" N, 6°19'18" E)

Dan Topa\*, Uwe Kolitsch, Berthold Stoeger, Frank Keutsch, and Chris Stanley

\*E-mail: [dan.topa@nhm-wien.ac.at](mailto:dan.topa@nhm-wien.ac.at)

Chabournéite group

Triclinic:  $P\bar{1}$ ; structure determined

$a = 8.626(2)$ ,  $b = 16.351(3)$ ,  $c = 21.892(4) \text{ \AA}$ ,  $\alpha = 74.96(3)$ ,  
 $\beta = 83.59(3)$ ,  $\gamma = 88.91(3)^\circ$   
 3.948(50), 3.590(50), 3.561(100), 3.341(48), 2.872(61),  
 2.813(62), 2.732(48), 2.156(63)

Type material is deposited in the mineralogical collections of the Naturhistorisches Museum, Burgring 7, 1010 Vienna, Austria, catalogue number O1787

How to cite: Topa, D., Kolitsch, U., Stoeger, B., Keutsch, F., and Stanley, C.: Dewitite, IMA 2019-098, in: CNMNC Newsletter 63, Eur. J. Mineral., 33, <https://doi.org/10.5194/ejm-33-639-2021>, 2021.

### 3 Nomenclature/classification proposals approved in September 2021

#### 3.1 An end-member formula for humite, $\text{Mg}_7(\text{SiO}_4)_3\text{F}_2$

The humite polysomatic series consists of a set of minerals with the general formula  $n[\text{Mg}_2(\text{SiO}_4)] \cdot \text{Mg}(\text{OH},\text{F})_2$ , with  $n = 1, 2, 3$ , or 4. The valid species and their corresponding chemical formulae, taken from the current IMA List of Minerals, are as follows.

( $n = 1$ )

Norbergite,  $\text{Mg}_3(\text{SiO}_4)\text{F}_2$

( $n = 2$ )

Chondrodite,  $\text{Mg}_5(\text{SiO}_4)_2\text{F}_2$

Hydroxylchondrodite,  $\text{Mg}_5(\text{SiO}_4)_2(\text{OH})_2$

( $n = 3$ )

Humite,  $\text{Mg}_7(\text{SiO}_4)_3(\text{F},\text{OH})_2$

( $n = 4$ )

Clinohumite,  $\text{Mg}_9(\text{SiO}_4)_4\text{F}_2$

Hydroxylclinohumite,  $\text{Mg}_9(\text{SiO}_4)_4(\text{OH})_2$ .

The only species without an end-member formula is humite,  $\text{Mg}_7(\text{SiO}_4)_3(\text{F},\text{OH})_2$ , which has both fluorine and hydroxyl within the same brackets. As in the whole series a root name without a prefix is used for the fluorine end-member, whereas the same root name with the prefix “hydroxyl-” is used for the hydroxyl end-member; the formula  $\text{Mg}_7(\text{SiO}_4)_3\text{F}_2$  has to be assigned to the mineral humite. This is an executive decision taken by the officers of the IMA-CNMNC.

### 3.2 Renaming of gismondine

Following the report of the zeolite subcommittee, after the approval of the new mineral IMA 2021-043 – gismondine-Sr (see this Newsletter), “gismondine” becomes a series name. Accordingly the mineral previously known as gismondine is renamed gismondine-Ca.

### 3.3 IMA 20-F: chabournéite group

Proposal 20-F is accepted, and the chabournéite group is established. The group includes the minerals chabournéite, protochabournéite, dalnegroite, shimenite, and dewitite. All members of this group are triclinic, space group  $P\bar{1}$ , with the exception of dalnegroite, which has space group  $P1$ .

The ideal formulae of protochabournéite and chabournéite are revised as follows:

protochabournéite –  $\text{Tl}_{4-x}\text{Pb}_{2+2x}\text{Sb}_{20-x-y}\text{As}_y\text{S}_{34}$  (with  $0.02 \leq x \leq 0.34$ ,  $5.71 \leq y \leq 6.69$ ).

chabournéite –  $\text{Ag}_z\text{Tl}_{8-x-z}\text{Pb}_{4+2x}\text{Sb}_{40-x-y}\text{As}_y\text{S}_{68}$  (with  $0.00 \leq x \leq 0.40$ ,  $16.15 \leq y \leq 19.11$ ,  $0.04 \leq z \leq 0.11$ ).

### 3.4 IMA 21-D: redefinition of beraunite and discreditation of eleonorite

Proposal 21-D is accepted. The formula of beraunite is revised as  $\text{Fe}_6^{3+}(\text{PO}_4)_4\text{O}(\text{OH})_4 \cdot 6\text{H}_2\text{O}$ , based on new EMPA, Mössbauer, and SCXRD data obtained on type material. Eleonorite is discredited, as it is identical to beraunite.

### 3.5 IMA 21-E: redefinition of minyulite

Proposal 21-E is accepted, and the formula of minyulite is redefined as  $\text{KAl}_2(\text{PO}_4)_2\text{F} \cdot 4\text{H}_2\text{O}$ , based on new EMPA data obtained on holotype material, which confirmed that the mineral is (OH)-free and has F as a species-forming constituent.