



IMA Commission on New Minerals, Nomenclature and Classification (CNMNC) – Newsletter 72

Ferdinando Bosi¹, Frédéric Hatert², Marco Pasero³, and Stuart J. Mills⁴

¹Chairman, CNMNC | Dipartimento di Scienze della Terra, Sapienza Università di Roma,
Piazzale Aldo Moro 5, 00185 Rome, Italy

²Vice-Chairman, CNMNC | Laboratoire de Minéralogie et de Cristallochimie, Université de Liège,
Bâtiment B18, Sart Tilman, 4000 Liège, Belgium

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

⁴Secretary, CNMNC | Geosciences, Museums Victoria, P.O. Box 666, Melbourne, Victoria 3001, Australia

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

Published: 20 April 2023

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 February 2023

IMA no. 2019-016a

Tartarosite

C

T

Within a diamond crystal collected at Ries crater, Nördlingen, Germany

Oliver Tschauner*, Chi Ma, Min Wu, and John Tse

* E-mail: oliver.tschauner@unlv.edu

A polymorph of graphite and diamond

Cubic: $I2_13$; structure determined

$a = 2.872(1)$ Å

2.031(100), 1.436(25), 1.172(19), 1.015(4), 0.908(15), 0.829(3)

Type material is deposited in the collections of the Museum für Naturkunde, Invalidenstrasse 43, 10115 Berlin, Germany, accession number 2017-08721

How to cite: Tschauner, O., Ma, C., Wu, M., and Tse, J.: Tartarosite, IMA 2019-016a, in: CNMNC Newsletter

72, Eur. J. Mineral., 35, <https://doi.org/10.5194/ejm-35-285-2023, 2023>.

IMA no. 2022-108

Beryllocordierite-Na



Bcrd-Na

Szklary granitic pegmatite, Mt. Szklana, near the village of Szklary, about 6 km north of the town of Ząbkowice Śląskie, Poland (50°39' N, 16°50' E)

Adam Pieczka*, Marcin Stachowicz, Sylwia Zelek-Pogudz, Adam Szuszkiewicz, Michaela Vašinová Galiová, Dagmar Galusková, Petr Gadas, Hana Kaňková, Beata Marciniak-Maliszewska, Krzysztof Nejbert, Jakub Kotowski, Grzegorz Kaproń, Eligiusz Szełęg, Iwona Korybska-Sadło, Bożena Gołębiowska, Mateusz Sęk, Katarzyna M. Stadnicka, and Krzysztof Woźniak

* E-mail: pieczka@agh.edu.pl

Chemically and structurally related to cordierite

Orthorhombic: *Cccm*; structure determined

$a = 17.0518(1)$, $b = 9.7892(1)$, $c = 9.30423(9)$ Å

8.530(83), 8.495(74), 4.080(67), 3.379(100), 3.373(58), 3.136(72), 3.045(54), 1.690(63)

Type material is deposited in the collections of the Mineralogical Museum, University of Wrocław, Cybulskiego 30, 50-205 Wrocław, Poland, catalogue numbers MMUWr IV8114 (holotype), MMUWr IV8115, and MMUWr IV8116 (cotype)

How to cite: Pieczka, A., Stachowicz, M., Zelek-Pogudz, S., Szuszkiewicz, A., Vašinová Galiová, M., Galusková, D., Gadas, P., Kaňková, H., Marciniak-Maliszewska, B., Nejbert, K., Kotowski, J., Kaproń, G., Szełęg, E., Korybska-Sadło, I., Gołębiowska, B., Sęk, M., Stadnicka, K. M., and Woźniak, K.: Beryllocordierite-Na, IMA 2022-108, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, <https://doi.org/10.5194/ejm-35-285-2023, 2023>.

IMA no. 2022-109

Beryllosachanbińskiite-Na



Bsns-Na

Szklary granitic pegmatite, Mt. Szklana, near the village of Szklary, about 6 km north of the town of Ząbkowice Śląskie, Poland (50°39' N, 16°50' E)

Adam Szuszkiewicz*, Sylwia Zelek-Pogudz, Marcin Stachowicz, Michaela Vašinová Galiová, Dagmar Galusková, Petr Gadas, Hana Kaňková, Beata Marciniak-Maliszewska, Krzysztof Nejbert, Bożena Gołębiowska, Iwona Korybska-Sadło, Mateusz Sęk, Eligiusz Szełęg, Katarzyna M. Stadnicka, Krzysztof Woźniak, and Adam Pieczka

* E-mail: adam.szuszkiewicz@uwr.edu.pl

Chemically and structurally related to cordierite

Orthorhombic: *Cccm*; structure determined

$a = 17.0641(1)$, $b = 9.8103(2)$, $c = 9.3007(2)$ Å

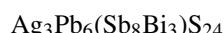
4.080(85), 3.380(100), 3.375(65), 3.138(54), 3.046(51), 3.042(41), 3.036(51), 1.690(31)

Type material is deposited in the collections of the Mineralogical Museum, University of Wrocław, Cybulskiego 30, 50-205 Wrocław, Poland, catalogue number MMUWr IV8026

How to cite: Szuszkiewicz, A., Zelek-Pogudz, S., Stachowicz, M., Vašinová Galiová, M., Galusková, D., Gadas, P., Kaňková, H., Marciniak-Maliszewska, B., Nejbert, K., Gołębiowska, B., Korybska-Sadło, I., Sęk, M., Szełęg, E., Stadnicka, K. M., Woźniak, K., and Pieczka, A.: Beryllosachanbińskiite-Na, IMA 2022-109, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, <https://doi.org/10.5194/ejm-35-285-2023, 2023>.

IMA no. 2022-112

Holubite



Hlb

In the medieval mine dumps of the Old Bohemian Lode, Kutná Hora Ag–Pb–Zn ore district, ca. 60 km east of Prague, Czech Republic (49°58'29" N, 15°16'09" E)

Richard Pažout*, Jakub Plášil, Michal Dušek, Jiří Sejkora, and Zdeněk Dolníček

* E-mail: richard.pazout@vscht.cz

Lillianite group

Monoclinic: *P2₁/n*; structure determined

$a = 19.374(4)$, $b = 13.201(3)$, $c = 8.651(2)$ Å, $\beta = 90.11(2)^\circ$

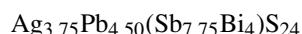
3.471(27), 3.465(33), 3.342(100), 3.300(23), 2.941(37), 2.938(33), 2.782(22), 2.163(27)

Type material is deposited in the collections of the Department of Mineralogy and Petrology, National Museum, Cirkusová 1740, 19300 Prague 9, Czech Republic, catalogue number P1P 10/2022

How to cite: Pažout, R., Plášil, J., Dušek, M., Sejkora, J., and Dolníček, Z.: Holubite, IMA 2022-112, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, <https://doi.org/10.5194/ejm-35-285-2023, 2023>.

IMA no. 2022-113

Lazerckerite



Lze

In the medieval mine dumps of the Old Bohemian Lode, Kutná Hora Ag–Pb–Zn ore district, ca. 60 km east of Prague, Czech Republic (49°58'29" N, 15°16'09" E)

Richard Pažout*, Jakub Plášil, Michal Dušek, Jiří Sejkora, and Gheorghe Ilinca

* E-mail: richard.pazout@vscht.cz

Lillianite group

Monoclinic: $P2_1/n$; structure determined

$a = 13.2083(9)$, $b = 19.4595(8)$, $c = 8.405(1)$ Å,
 $\beta = 90.032(7)^\circ$
 $3.408(32)$, $3.407(34)$, $3.353(100)$, $3.004(22)$, $3.003(25)$,
 $2.902(39)$, $2.901(37)$, $2.101(29)$

Type material is deposited in the collections of the Department of Mineralogy and Petrology, National Museum, Cirkusová 1740, 19300 Prague 9, Czech Republic, catalogue number P1P 11/2022

How to cite: Pažout, R., Plášil, J., Dušek, M., Sejkora, J., and Ilinca, G.: Lazerckerite, IMA 2022-113, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, <https://doi.org/10.5194/ejm-35-285-2023>, 2023.

IMA no. 2022-114

Vrančiceite



Vrc

In the 16th century mine dumps on Vraneč hill, north of the village of Vrančice, Bohemia, Czech Republic ($49^{\circ}37'10.71''$ N, $14^{\circ}02'51.69''$ E)

Jiří Sejkora*, Cristian Biagioni, Pavel Škácha, and Daniela Mauro

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

Chemically related to balkanite, danielsite, and gortdrumite

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

$a = 7.9681(2)$, $b = 9.7452(3)$, $c = 10.0710(3)$ Å,
 $\alpha = 77.759(1)$, $\beta = 76.990(1)$, $\gamma = 79.422(1)^\circ$
 $3.354(76)$, $3.111(68)$, $3.107(60)$, $2.878(63)$, $2.833(100)$,
 $2.733(93)$, $2.705(76)$, $2.647(71)$

Type material is deposited in the collections of the Department of Mineralogy and Petrology, National Museum, Cirkusová 1740, 19300 Prague 9, Czech Republic, catalogue number P1P 42/2022

How to cite: Sejkora, J., Biagioni, C., Škácha, P., and Mauro, D.: Vrančiceite, IMA 2022-114, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, <https://doi.org/10.5194/ejm-35-285-2023>, 2023.

IMA no. 2022-115

Tetrahedrite-(Cd)



Ttr-Cd

S1 vein, seventh and eight level of the Radětice shaft, about 300 m east of the village of Radětice, 5 km south-east of Příbram, Bohemia, Czech Republic ($49^{\circ}38'20.44''$ N, $14^{\circ}05'13.66''$ E)

Jiří Sejkora*, Cristian Biagioni, Pavel Škácha, Silvia Musetti, Anatoly V. Kasatkin, and Fabrizio Nestola

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

Tetrahedrite group

Cubic: $I\bar{4}3m$; structure determined

$a = 10.504(3)$ Å
 $3.714(7)$, $3.032(100)$, $2.807(6)$, $2.626(24)$, $2.476(5)$,
 $1.918(7)$, $1.857(40)$, $1.584(21)$

Type material is deposited in the collections of the Department of Mineralogy and Petrology, National Museum, Cirkusová 1740, 19300 Prague 9, Czech Republic, catalogue number P1P 43/2022, and the Museo di Storia Naturale, Università di Pisa, Via Roma 79, Calci (PI), Italy, catalogue number 20025

How to cite: Sejkora, J., Biagioni, C., Škácha, P., Musetti, S., Kasatkin, A. V., and Nestola, F.: Tetrahedrite-(Cd), IMA 2022-115, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, <https://doi.org/10.5194/ejm-35-285-2023>, 2023.

IMA no. 2022-116

Arsenoústalečite



Aúč

Ústaleč mine, located 500 m northeast of the village of Ústaleč, 15 km west of Horažďovice, Bohemia, Czech Republic

Jiří Sejkora*, Cristian Biagioni, Pavel Škácha, Silvia Musetti, and Daniela Mauro

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

Tetrahedrite group

Cubic: $I\bar{4}3m$; structure determined

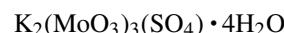
$a = 10.658(2)$ Å
 $3.768(6)$, $3.077(100)$, $2.848(10)$, $2.512(7)$, $1.946(12)$,
 $1.884(52)$, $1.729(7)$, $1.608(21)$

Type material is deposited in the collections of the Department of Mineralogy and Petrology, National Museum, Cirkusová 1740, 19300 Prague 9, Czech Republic, catalogue number P1P 7/2021, and the Museo di Storia Naturale, Università di Pisa, Via Roma 79, Calci (PI), Italy, catalogue number 20026

How to cite: Sejkora, J., Biagioni, C., Škácha, P., Musetti, S., and Mauro, D.: Arsenoústalečite, IMA 2022-116, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, <https://doi.org/10.5194/ejm-35-285-2023>, 2023.

IMA no. 2022-119

Downsite



Dwn

Freedom no. 2 mine, Central Mining Area, about 5.6 km north-northeast of the town of Marysville, Piute Co., Utah, USA (38°29'43" N, 112°12'55" W)

Xiangping Gu, Hexiong Yang*, and Joe Marty

* E-mail: hyang@arizona.edu

Known synthetic analogue

Monoclinic: $C2/m$; structure determined

$a = 17.0556(5)$, $b = 10.7947(3)$, $c = 8.8570(2)$ Å, $\beta = 112.124(3)^\circ$

8.276(85), 7.943(100), 7.273(33), 3.342(53), 3.144(36), 3.018(44), 2.800(29), 2.204(22)

Type material is deposited in the collections of the University of Arizona Alfie Norville Gem & Mineral Museum, 115 N Church Ave Ste 121, Tucson, AZ 85701, USA, catalogue number 22727 (holotype), and the RRUFF Project, deposition number R210048 (cotype)

How to cite: Gu, X., Yang, H., and Marty, J.: Downsite, IMA 2022-119, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, <https://doi.org/10.5194/ejm-35-285-2023>, 2023.

IMA no. 2022-120

Yuchuanite-(Y)

$\text{Y}_2(\text{CO}_3)_3 \cdot \text{H}_2\text{O}$

Ych-Y

Yushui deposit, ca. 16 km northeast of the city of Meizhou, Guangdong Province, China (24°25'18" N, 116°11'48" E)
Wei Yao, Peng Liu*, Guowu Li, Ningyue Sun, Wenqiang Yang, Chengyao Jiang, Wei Du, Chao Zhang, Wenlei Song, Nigel J. Cook, and Jingwen Mao

* E-mail: pengliu@nwu.edu.cn

Chemically close to of tenerite-(Y)

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

$a = 6.2134(3)$, $b = 8.9697(3)$, $c = 19.9045(7)$ Å,
 $\alpha = 91.062(3)$, $\beta = 90.398(3)$, $\gamma = 91.832(3)^\circ$

5.391(26), 5.054(52), 4.557(32), 4.116(38), 3.343(100),
2.995(27), 2.093(29), 2.054(28)

Type material is deposited in the collections of the Geological Museum of China, Yangrou Hutong no. 16, Xisi, Beijing 100031, People's Republic of China, catalogue number M16142

How to cite: Yao, W., Liu, P., Li, G., Sun, N., Yang, W., Jiang, C., Du, W., Zhang, C., Song, W., Cook, N. J., and Mao, J.: Yuchuanite-(Y), IMA 2022-120, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, <https://doi.org/10.5194/ejm-35-285-2023>, 2023.

IMA no. 2022-122

Manganrockbridgeite

$\text{Mn}_2^{2+}\text{Fe}_3^{3+}(\text{PO}_4)_3(\text{OH})_4(\text{H}_2\text{O})$

Mrkb

Hagendorf-Süd pegmatite mine (76 m level), Hagendorf, Upper Palatinate, Bavaria, Germany (49°39'01" N, 12°27'35" E)

Ian E. Grey*, Rupert Hochleitner, Anthony R. Kampf, Stephanie Boer, Colin M. MacRae, John D. Cashion, Christian Rewitzer, and William G. Mumme

* E-mail: ian.grey@csiro.au

Rockbridgeite group

Monoclinic: $P2_1/m$; structure determined

$a = 5.198(4)$, $b = 16.905(6)$, $c = 7.510(12)$ Å,
 $\beta = 110.02(3)^\circ$

4.880(61), 4.734(32), 3.638(32), 3.458(71), 3.404(30),
3.209(100), 2.435(70), 1.596(49)

Type material is deposited in the collections of the Mineralogical State Collection, Theresienstraße 39, 80333 Munich, Germany, catalogue number MSM-38033

How to cite: Grey, I. E., Hochleitner, R., Kampf, A. R., Boer, S., MacRae, C. M., Cashion, J. D., Rewitzer, C., and Mumme, W. G.: Manganrockbridgeite, IMA 2022-122, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, <https://doi.org/10.5194/ejm-35-285-2023>, 2023.

IMA no. 2022-123

Ebnerite

$(\text{NH}_4)\text{Zn}(\text{PO}_4)$

Ebr

Rowley mine (125-foot level), ca. 20 km northwest of Theba, Maricopa Co., Arizona, USA (33°02'57" N, 113°01'49.59" W)

Anthony R. Kampf*, Xiangping Gu, Hexiong Yang, and Joe Marty

* E-mail: akampf@nhm.org

Known synthetic analogue

Hexagonal: $P6_3$; structure determined

$a = 10.6705(2)$, $c = 8.7140(2)$ Å

6.35(50), 4.629(84), 4.364(68), 4.094(52), 3.179(100),
2.673(78), 2.239(45), 1.715(39)

Cotype material is deposited in the collections of the Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007, USA, catalogue numbers 76275 and 76276; the University of Arizona Alfie Norville Gem & Mineral Museum, 115 N Church Ave Ste 121, Tucson, AZ 85701, USA, catalogue number 22729; and the RRUFF Project, deposition number R210032

How to cite: Kampf, A. R., Gu, X., Yang, H., and Marty, J.: Ebnerite, IMA 2022-123, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, <https://doi.org/10.5194/ejm-35-285-2023>, 2023.

IMA no. 2022-124

Guangyuante
 $Pb_3Cl_3(Se^{4+}O_3)(OH)$

Gyn

El Dragón mine, Antonio Quijarro Province, Potosí Department, Bolivia ($19^{\circ}49'15''S, 65^{\circ}55'00''W$)

Hexiong Yang*, Xiangping Gu, James A. McGlasson, and Ronald B. Gibbs

* E-mail: hyang@arizona.edu

New structure type

Orthorhombic: *Pnma*; structure determined

$a = 11.0003(5)$, $b = 10.6460(5)$, $c = 7.7902(3)\text{ \AA}$
 $5.489(64)$, $4.150(62)$, $3.235(84)$, $3.178(83)$, $3.149(100)$,
 $2.787(48)$, $2.523(71)$, $1.957(48)$

Type material is deposited in the collections of the University of Arizona Alfie Norville Gem & Mineral Museum, 115 N Church Ave Ste 121, Tucson, AZ 85701, USA, catalogue number 22714 (holotype), and the RRUFF Project, deposition number R210013 (cotype)

How to cite: Yang, H., Gu, X., McGlasson, J. A., and Gibbs, R. B.: Guangyuante, IMA 2022-124, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, <https://doi.org/10.5194/ejm-35-285-2023>, 2023.

IMA no. 2022-128

Lasmanisite

$Ag_{12}Pb_{13}Mn_{11}Sb_{44}S_{96}$

Lmn

Bear Basin Mines, Buena Vista Mining District, King Co., Washington, USA ($47^{\circ}38'22''N, 121^{\circ}29'10''W$)

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

* E-mail: dan.topa@nhm-wien.ac.at

Structurally related to quatrandorite

Orthorhombic: *P2₁2₁2₁*; structure determined

$a = 13.0507(7)$, $b = 16.2463(9)$, $c = 19.3650(10)\text{ \AA}$
 $3.33(78)$, $3.32(68)$, $2.934(53)$, $2.838(100)$, $2.053(41)$,
 $2.031(38)$, $2.000(37)$, $1.734(34)$

Type material is deposited in the collections of the Mineralogisch-Petrographische Abteilung, Naturhistorisches Museum Wien, Burgring 7, 1010 Vienna, Austria, catalogue number O 2510

How to cite: Topa, D., Stoeger, B., Keutsch, F., Kolitsch, U., and Stanley, C.: Lasmanisite, IMA 2022-128, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, <https://doi.org/10.5194/ejm-35-285-2023>, 2023.

2 New mineral proposals approved in March 2023**IMA no. 2022-129**

Manganoschafarzikite

$MnSb_2O_4$

Msfz

Långban deposit, district of Filipstad, Värmland, Sweden ($59^{\circ}51'19''N, 14^{\circ}15'53''E$; 215 m a.s.l.)

Jörgen Langhof*, Henrik Friis, Dan Holtstam, Andreas Karlsson, and Muriel Erambert

* E-mail: jorgen.langhof@nrm.se

The Mn^{2+} analogue of schafarzikite

Tetragonal: *P4₂/mbc*; structure determined

$a = 8.65159(8)$, $c = 5.97175(8)\text{ \AA}$
 $4.30(22)$, $3.24(100)$, $2.72(26)$, $2.45(20)$, $1.976(28)$,
 $1.767(17)$, $1.680(18)$, $1.441(15)$

Type material is deposited in the collections of the Department of Geosciences, Swedish Museum of Natural History, Box 50007, 10405 Stockholm, Sweden, collection number GEO-NRM 19339699, and the Natural History Museum, University of Oslo, P.O. 1172, Blindern, 0318 Oslo, Norway, collection number KNR 44410

How to cite: Langhof, J., Friis, H., Holtstam, D., Karlsson, A., and Erambert, M.: Manganoschafarzikite, IMA 2022-129, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, <https://doi.org/10.5194/ejm-35-285-2023>, 2023.

IMA no. 2022-130

Natromolybdite

$Na_2MoO_4 \cdot 2H_2O$

Nmyb

Arsenatnaya fumarole, Second scoria cone of the Northern Breakthrough of the Great Tolbachik Fissure Eruption, Tolbachik volcano, Kamchatka Peninsula, Far Eastern Federal District, Russia ($55^{\circ}41'N, 160^{\circ}14'E$; 1200 m a.s.l.)

Igor V. Pekov*, Sergey N. Britvin, Natalia N. Koshlyakova, Atali A. Agakhanov, Dmitry I. Belakovskiy, Nikita V. Chukanov, Dmitry A. Ksenofontov, and Pavel S. Zhegunov

* E-mail: igorpekov@mail.ru

Known synthetic analogue

Orthorhombic: *Pbca*

$a = 8.483(1)$, $b = 10.577(2)$, $c = 13.842(2)\text{ \AA}$
 $6.92(100)$, $4.243(20)$, $4.206(32)$, $3.618(31)$, $3.310(31)$,
 $3.169(49)$, $3.067(21)$, $2.987(30)$

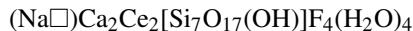
Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Leninskiy Prospekt 18-2, Moscow 119071, Russia, registration number 5948/1

How to cite: Pekov, I. V., Britvin, S. N., Koshlyakova, N. N., Agakhanov, A. A., Belakovskiy, D. I., Chukanov, N. V., Ksenofontov, D. A., and Zhegunov, P. S.: Natromolybdite,

IMA 2022-130, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, <https://doi.org/10.5194/ejm-35-285-2023>, 2023.

IMA no. 2022-132

Letnikovite-(Ce)



Lkv-Ce

Moraine of Darai-Pioz glacier, Alai mountain range, Tien Shan, district of Rashtskiy (formerly Garmskiy), Tajikistan (39°30' N, 70°40' E)

Atali A. Agakhanov*, Elena Sokolova, Fernando Cámara, Vladimir Y. Karpenko, Frank C. Hawthorne, Leonid A. Pautov, Anatoly V. Kasatkin, Igor V. Pekov, and Vitaliya A. Agakhanova

* E-mail: atali99@mail.ru

New structure type

Monoclinic: $C2/m$; structure determined

$a = 7.4726(3)$, $b = 22.9196(9)$, $c = 13.9360(6)$ Å, $\beta = 105.550(5)^\circ$

3.527(67), 3.357(54), 3.221(58), 3.140(100), 3.048(60), 2.896(65), 2.242(50), 1.882(56)

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 5924/1

How to cite: Agakhanov, A. A., Sokolova, E., Cámara, F., Karpenko, V. Y., Hawthorne, F. C., Pautov, L. A., Kasatkin, A. V., Pekov, I. V., and Agakhanova, V. A.: Letnikovite-(Ce), IMA 2022-132, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, <https://doi.org/10.5194/ejm-35-285-2023>, 2023.

IMA no. 2022-133

Kalyuzhnyite-(Ce)



Kalu-Ce

Moraine of Darai-Pioz glacier, Alai mountain range, Tien Shan, district of Rashtskiy (formerly Garmskiy), Tajikistan (39°30' N, 70°40' E)

Atali A. Agakhanov*, Elena Sokolova, Vladimir Y. Karpenko, Frank C. Hawthorne, Leonid A. Pautov, Anatoly V. Kasatkin, Igor V. Pekov, and Vitaliya A. Agakhanova

* E-mail: atali99@mail.ru

New structure type

Monoclinic: $P2/c$; structure determined

$a = 18.647(4)$, $b = 11.214(2)$, $c = 14.642(3)$ Å, $\beta = 129.55(3)^\circ$

3.978(24), 3.423(22), 3.332(33), 3.026(100), 2.963(40), 2.895(24), 2.591(28), 2.344(33)

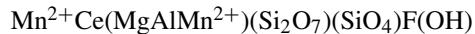
Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences,

Leninskiy Prospekt 18-2, Moscow 119071, Russia, registration number 5923/1

How to cite: Agakhanov, A. A., Sokolova, E., Karpenko, V. Y., Hawthorne, F. C., Pautov, L. A., Kasatkin, A. V., Pekov, I. V., and Agakhanova, V. A.: Kalyuzhnyite-(Ce), IMA 2022-133, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, <https://doi.org/10.5194/ejm-35-285-2023>, 2023.

IMA no. 2022-134

Vielleaureite-(Ce)



Vlr-Ce

Coustou mine, Aure valley, near the village of Vielle-Aure, Hautes Pyrénées, France

Alain Ragu, Luca Bindi, Paola Bonazzi, and Christian Chopin*

* E-mail: chopin@geologie.ens.fr

Epidote supergroup

Monoclinic: $P2_1/m$; structure determined

$a = 8.824(1)$, $b = 5.7131(9)$, $c = 10.003(2)$ Å, $\beta = 112.823(6)^\circ$

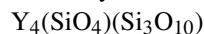
5.18(25), 4.67(20), 3.485(35), 2.881(100), 2.858(40), 2.708(25), 2.693(30), 2.600(55)

Type material is deposited in the collections of the Musée de Minéralogie, École des Mines de Paris, 60 Boulevard Saint-Michel, 75006 Paris, France, catalogue number EN-SMP 83943 (holotype), and the Museum National d'Histoire Naturelle, 61 rue Buffon, 75005 Paris, France, catalogue number MNHN_MIN_223.001 (cotype)

How to cite: Ragu, A., Bindi, L., Bonazzi, P., and Chopin, C.: Vielleaureite-(Ce), IMA 2022-134, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, <https://doi.org/10.5194/ejm-35-285-2023>, 2023.

IMA no. 2022-135

Anorthoyttrialite-(Y)



Aytt-Y

Stetind pegmatite, Tysfjord, Nordland, Norway (68°10'15.20" N, 16°33'10.65" E)

Thomas Malcherek*, Jochen Schlüter, and Tomas Husdal

* E-mail: thomas.malcherek@uni-hamburg.de

Known synthetic analogue

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

$a = 6.6107(4)$, $b = 6.7139(3)$, $c = 12.2034(9)$ Å, $\alpha = 94.819(3)$, $\beta = 90.583(3)$, $\gamma = 91.742(3)^\circ$ 3.053(100), 2.935(41), 2.987(34), 2.752(26), 2.229(26), 2.132(50), 1.829(69), 1.806(29)

Type material is deposited in the collections of the Museum of Nature – Mineralogy, Grindelallee 48, 20146 Hamburg, Germany, catalogue number 007

How to cite: Malcherek, T., Schlüter, J., and Husdal, T.: Anorthoytrialite-(Y), IMA 2022-135, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, <https://doi.org/10.5194/ejm-35-285-2023>, 2023.

IMA no. 2022-137

Montpelvouxite
 $\text{AgPb}_{16}\text{Sb}_{27}\text{As}_{18}\text{S}_{84}$
 Mpv

Jas Roux, La Chapelle-en-Valgaudemar, Gap, Hautes-Alpes, Provence-Alpes-Côte d'Azur, France ($44^{\circ}44'45''\text{N}$, $6^{\circ}19'18''\text{E}$)

Dan Topa*, Berthold Stoeger, Uwe Kolitsch, and Chris Stanley

* E-mail: dan.topa@nhm-wien.ac.at

Related to zinkenite

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

$a = 8.5563(4)$, $b = 21.868(1)$, $c = 22.107(1)\text{ \AA}$,
 $\alpha = 119.106(2)$, $\beta = 100.079(2)$, $\gamma = 91.000(2)^{\circ}$
 $10.94(26)$, $10.93(32)$, $10.88(18)$, $3.41(100)$, $3.39(92)$,
 $3.34(22)$, $2.798(23)$, $2.139(44)$

Type material is deposited in the collections of the Mineralogisch-Petrographische Abteilung, Naturhistorisches Museum Wien, Burgring 7, 1010 Vienna, Austria, catalogue number O 2596

How to cite: Topa, D., Stoeger, B., Kolitsch, U., and Stanley, C.: Montpelvouxite, IMA 2022-137, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, <https://doi.org/10.5194/ejm-35-285-2023>, 2023.

IMA no. 2022-138

Jimkrieghite
 $\text{Ca}(\text{C}_2\text{H}_3\text{O}_3)_2$
 Jkg

Pusch Ridge, Santa Catalina Mountains, north of Tucson, Pima Co., Arizona, USA ($32^{\circ}21'42''\text{N}$, $110^{\circ}57'30''\text{W}$; 975 m a.s.l.)

Hexiong Yang*, Xiangping Gu, Warren Lazar, Ronald B. Gibbs, and Robert T. Downs

* E-mail: hyang@arizona.edu

Chemically related to lazaraskeite and stanevansite

Orthorhombic: $Pbca$; structure determined

$a = 9.0172(1)$, $b = 9.7076(1)$, $c = 15.3554(2)\text{ \AA}$
 $6.063(89)$, $5.839(41)$, $4.851(39)$, $4.115(27)$, $3.883(31)$,
 $3.605(50)$, $3.191(100)$, $2.125(23)$

Type material is deposited in the collections of the University of Arizona Alfie Norville Gem & Mineral Museum, 115 N Church Ave Ste 121, Tucson, AZ 85701, USA, catalogue number 22728 (holotype), and the RRUFF Project, deposition number R220012 (cotype)

How to cite: Yang, H., Gu, X., Lazar, W., Gibbs, R. B., and Downs, R. T.: Jimkrieghite, IMA 2022-138, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, <https://doi.org/10.5194/ejm-35-285-2023>, 2023.

IMA no. 2022-139

Heflikite
 $\text{Ca}_2(\text{Al}_2\text{Sc})(\text{Si}_2\text{O}_7)(\text{SiO}_4)\text{O(OH)}$
 Hfk

In a serpentinite quarry, 1 km west of the village of Jordanów Śląski, near Sobótka, Lower Silesia, Poland ($50^{\circ}52'16''\text{N}$, $16^{\circ}50'18''\text{E}$)

Adam Pieczka*, Roy Kristiansen, Marcin Stachowicz, Magdalena Dumańska-Słowiak, Bożena Gołębiowska, Mateusz Sęk, Krzysztof Nejbert, Jakub Kotowski, Beata Marciniak-Maliszewska, Adam Szuszkiewicz, Eligiusz Szełęg, and Krzysztof Woźniak

* E-mail: pieczka@agh.edu.pl

Epidote supergroup

Monoclinic: $P2_1/m$; structure determined

$a = 8.9383(9)$, $b = 5.6830(5)$, $c = 10.190(1)\text{ \AA}$,
 $\beta = 115.4(1)^{\circ}$
 $3.513(41)$, $2.933(19)$, $2.913(100)$, $2.841(41)$, $2.706(31)$,
 $2.681(23)$, $2.617(46)$, $2.412(22)$

Type material is deposited in the collections of the Mineralogical Museum, University of Wrocław, Cybulskiego 30, 50-205 Wrocław, Poland, catalogue number MMUWr IV8120 (holotype), and the Natural History Museum, University of Oslo, Box 1172, Blindern, Oslo, Norway, catalogue number KNR 44407 (cotype)

How to cite: Pieczka, A., Kristiansen, R., Stachowicz, M., Dumańska-Słowiak, M., Gołębiowska, B., Sęk, M., Nejbert, K., Kotowski, J., Marciniak-Maliszewska, B., Szuszkiewicz, A., Szełęg, E., and Woźniak, K.: Heflikite, IMA 2022-139, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, <https://doi.org/10.5194/ejm-35-285-2023>, 2023.

IMA no. 2022-140

Sardashtite
 $\text{Ag}_9\text{Cu}_{2.5}\text{Pb}_{41}\text{Sb}_{36.5}\text{As}_7\text{S}_{112}$
 Sard

Barika gold deposit, 17 km east of the city of Sardasht, Sardasht County, West Azerbaijan Province, Iran

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

* E-mail: dan.topa@nhm-wien.ac.at

Related to owyheeite

Monoclinic: $P2_1/n$; structure determined

$a = 8.2038(3)$, $b = 27.1002(10)$, $c = 22.7885(9)\text{ \AA}$, $\beta = 90.185(1)^{\circ}$

3.45(100), 3.23(89), 3.20(62), 2.893(53), 2.885(49), 2.822(36), 2.815(59), 2.051(87)

Type material is deposited in the collections of the Mineralogisch-Petrographische Abteilung, Naturhistorisches Museum Wien, Burgring 7, 1010 Vienna, Austria, catalogue number O 2597

How to cite: Topa, D., Stoeger, B., Kolitsch, U., Keutsch, F., and Stanley, C.: Sardashtite, IMA 2022-140, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, <https://doi.org/10.5194/ejm-35-285-2023>, 2023.

IMA no. 2022-141

Hochleitnerite



Hln

Hagendorf-Süd pegmatite mine (64 to 76 m level), Upper Palatinate, Bavaria, Germany (49°39'01" N, 12°27'35" E)

Ian E. Grey*, Erich Keck, Anthony R. Kampf, Colin M. MacRae, Robert W. Gable, William G. Mumme, Alexander M. Glenn, and Cameron Davidson

* E-mail: ian.grey@csiro.au

Isostructural with benyacarite and pleysteinite

Orthorhombic: *Pbca*; structure determined

$a = 10.5513(3)$, $b = 20.6855(7)$, $c = 12.4575(4)$ Å

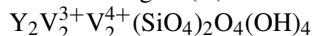
10.32(51), 7.51(55), 6.24(72), 5.23(43), 3.747(52), 3.141(100), 2.881(59), 2.619(60)

Type material is deposited in the collections of the Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007, USA, catalogue number 76277

How to cite: Grey, I. E., Keck, E., Kampf, A. R., MacRae, C. M., Gable, R. W., Mumme, W. G., Glenn, A. M., and Davidson, C.: Hochleitnerite, IMA 2022-141, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, <https://doi.org/10.5194/ejm-35-285-2023>, 2023.

IMA no. 2022-142

Wenlanzhangite-(Y)



Wlz-Y

Yushui deposit, ca. 16 km northeast of the city of Meizhou, Guangdong Province, China (24°25'18" N, 116°11'48" E)

Peng Liu, Guowu Li*, Ningyue Sun, Wei Yao, Hong Yu, Wenqiang Yang and Nigel J. Cook

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

Chemically and structurally related to jingwenite-(Y)

Triclinic: *P*ī; structure determined

$a = 5.9632(7)$, $b = 9.599(1)$, $c = 9.9170(9)$ Å, $\alpha = 90.033(8)$, $\beta = 98.595(9)$, $\gamma = 90.003(9)^\circ$

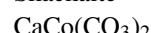
9.806(65), 5.024(63), 4.799(57), 4.310(64), 2.702(100), 2.701(61), 2.611(84), 2.610(89)

Type material is deposited in the collections of the Geological Museum of China, Yangrou Hutong no. 16, Xisi, Beijing 100031, People's Republic of China, catalogue number GM-CTM 2202

How to cite: Liu, P., Li, G., Sun, N., Yao, W., Yu, H., Yang, W., and Cook, N. J.: Wenlanzhangite-(Y), IMA 2022-142, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, <https://doi.org/10.5194/ejm-35-285-2023>, 2023.

IMA no. 2022-143

Škáchaite



Škác

Hydrothermal vein B117, between the fifth and sixth level of shaft no. 6 – Brod, near Příbram, Příbram ore district, Bohemia, Czech Republic (49°40'05" N, 14°01'14" E)

Jiří Sejkora*, Jakub Plášil, Zdeněk Dolníček, and Radek Škoda

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

Dolomite group

Trigonal: *R*3̄; structure determined

$a = 4.818(2)$, $c = 16.093(7)$ Å

3.704(13), 2.896(100), 2.409(15), 2.197(11), 2.019(17), 1.812(19), 1.792(16), 1.391(9)

Type material is deposited in the collections of the Department of Mineralogy and Petrology, National Museum, Cirkusová 1740, 19300 Prague 9, Czech Republic, catalogue number P1P 52/2022

How to cite: Sejkora, J., Plášil, J., Dolníček, Z., and Škoda, R.: Škáchaite, IMA 2022-143, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, <https://doi.org/10.5194/ejm-35-285-2023>, 2023.

IMA no. 2022-144

Interliveingite



Iliv

Lengenbach quarry, Binntal, Wallis, Switzerland (46°21'54" N, 8°13'15" E)

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

* E-mail: dan.topa@nhm-wien.ac.at

Liveingite group

Monoclinic: *P*21; structure determined

$a = 8.4090(4)$, $b = 7.9114(4)$, $c = 70.016(3)$ Å, $\beta = 93.287(2)^\circ$

3.648(66), 3.420(62), 2.983(79), 2.976(100), 2.738(74), 2.735(58), 2.331(64), 2.102(89)

Type material is deposited in the collections of the Mineralogisch-Petrographische Abteilung, Naturhistorisches

Museum Wien, Burgring 7, 1010 Wien, Austria, catalogue number O 1845

How to cite: Topa, D., Stoeger, B., Keutsch, F., Kolitsch, U., and Stanley, C.: Interliveingite, IMA 2022-144, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, <https://doi.org/10.5194/ejm-35-285-2023>, 2023.

3 Nomenclature/classification proposals approved in March 2023

3.1 Voting proposal 23-A: discreditation of platarsite

Proposal 23-A is accepted, and platarsite is discredited since it corresponds to a S-rich variety of sperrylite.