



IMA Commission on New Minerals, Nomenclature and Classification (CNMNC) – Newsletter 86

Ferdinando Bosi^{1,*}, Frédéric Hatert^{2,**}, Marco Pasero^{3,**}, and Stuart J. Mills^{4,***}

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

²Laboratoire de Minéralogie, Université de Liège, Bâtiment B18,
Sart Tilman, 4000 Liège, Belgium

³Dipartimento di Scienze della Terra, Università di Pisa,
Via Santa Maria 53, 56126 Pisa, Italy

⁴Gallery of Natural Art, P.O. Box 830460, Richardson, TX 75083, USA

*Chair, CNMNC

**Vice-Chair, CNMNC

***Secretary, CNMNC

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

Published: 14 August 2025

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 June 2025

IMA no. 2025-007

Leybovite-K

$\text{KCuNa}(\text{MgFe}^{3+})(\text{AsO}_4)_3$

Leb-K

Arsenatnaya fumarole, Second scoria cone of the Northern Breakthrough of the Great Tolbachik Fissure Eruption, Tolbachik volcano, Kamchatka peninsula, Far-Eastern Region, Russia (55°41' N, 160°14' E, 1200 m a.s.l.)

Natalia N. Koshlyakova*, Igor V. Pekov, Atali A. Agakhanov, Emma Bullock, Peter C. Burns, Dmitry I. Belakovskiy, Natalia V. Zubkova, Marina F. Vigasina, Sergey N. Britvin, Robert M. Hazen, and Elena S. Zhitova

* E-mail: nkoshlyakova@gmail.com

Alluaudite supergroup

Monoclinic: $C2/c$; structure determined

$a = 12.504(1)$, $b = 12.7823(5)$, $c = 6.7214(6)$ Å,
 $\beta = 114.01(1)^\circ$

3.59(25), 3.230(57), 3.082(32), 2.857(24), 2.762(100),
 2.708(30), 2.622(19), 2.317(25)

Cotype material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Leninsky Pr. 18-2, 119071 Moscow, Russia, registration numbers 6055/2 and 6240/1

How to cite: Koshlyakova, N. N., Pekov, I. V., Agakhanov, A. A., Bullock, E., Burns, P. C., Belakovskiy, D. I., Zubkova, N. V., Vigasina, M. F., Britvin, S. N., Hazen, R. M., and Zhitova, E. S.: Leybovite-K, IMA 2025-007, in: CNMNC Newsletter 86, Eur. J. Mineral., 37, <https://doi.org/10.5194/ejm-37-549-2025>, 2025.

IMA no. 2025-013

Sunshuite

FeBi_2S_4

Suu

Jiawula-Chaganbulagen ore field, Inner Mongolia, China (48°45'22" N, 116°17'58" E)

Kaixuan Hui, Kezhang Qin*, Guowu Li, Ningyue Sun, Mingjian Cao, Lihui Jia, Ting Li, and Yuan Xue

* E-mail: kzq@mail.iggcas.ac.cn

The Fe analogue of graffianite

Monoclinic: $C2/m$; structure determined

$a = 12.576(2)$, $b = 3.9100(5)$, $c = 14.717(2)$ Å,
 $\beta = 115.04(2)^\circ$

3.637(54), 3.622(59), 3.444(100), 3.333(47), 3.057(63),
 2.842(74), 2.719(87), 2.523(46)

Type material is deposited in the collections of the Geological Museum of China, No. 15, Yangrou Hutong, Xisi, Xicheng District, Beijing 100034, People's Republic of China, catalogue number GMCTM2025003 (holotype), and the Geological Museum of Institute of Geology and Geophysics, Chinese Academy of Sciences, No. 19, Beitucheng Western Road, Chaoyang District, Beijing 100029, People's Republic of China, catalogue number M8242 (cotype)

How to cite: Hui, K., Qin, K., Li, G., Sun, N., Cao, M., Jia, L., Li, T., and Xue, Y.: Sunshuite, IMA 2025-013, in: CNMNC Newsletter 86, Eur. J. Mineral., 37, <https://doi.org/10.5194/ejm-37-549-2025>, 2025.

IMA no. 2025-019

Guixiangite

NiBiS

Gx

Longhua deposit, Jinjiu Yao Autonomous County, Guangxi Zhuang Autonomous Region, China (24°04'11" N, 110°06'49" E)

Xiao Nie, Ningyue Sun, Zixiao Guo, Zhenjie Zhang, Xue Liang, Lihui Jia, Zhen Deng, Kuifeng Mi, Xinmin Yang, Haiyang Xian, Guowu Li, and Yuan Xue*

* E-mail: xue.yuea@163.com

The Bi analogue of ullmannite

Cubic: $P2_13$; structure determined

$a = 5.9875(5)$ Å

4.234(72), 3.457(15), 2.678(100), 2.444(33), 1.893(10),
 1.805(11), 1.661(7), 1.600(6)

Type material is deposited in the collections of the Geological Museum of China, No. 15, Yangrou Hutong, Xisi, Beijing 100031, People's Republic of China, catalogue number GMCTM2025005 (holotype), and the Crystal Structure Laboratory, China University of Geosciences, Beijing 100083, People's Republic of China, catalogue number GX-1 (cotype)

How to cite: Nie, X., Sun, N., Guo, Z., Zhang, Z., Liang, X., Jia, L., Deng, Z., Mi, K., Yang, X., Xian, H., Li, G., and Xue, Y.: Guixiangite, IMA 2025-019, in: CNMNC Newsletter 86, Eur. J. Mineral., 37, <https://doi.org/10.5194/ejm-37-549-2025>, 2025.

IMA no. 2025-021

Thionasilite

$\text{Na}_2\text{Si}_2\text{S}_2\text{O}_3$

Thio

Raja chondrite meteorite, fallen on 23 December 2023, found on 10 February 2024, Al Wusta province, Oman (20°23'44.5" N, 55°17'55.2" E)

Anna Zappatini*, Georgia Cametti, Edwin Gnos, Beda Hofmann, Urs Eggenberger, Daniele Casari, Xavier Maeder, Sarah Degen, and Lili Loth

* E-mail: anna.zappatini@unibe.ch

Structurally related to hydroxyapophyllite-(K)

Orthorhombic: $Aba2$; structure determined

$a = 8.7952(4)$, $b = 8.7897(3)$, $c = 16.0084(7)$ Å

8.00(27), 3.854(5), 3.166(5), 3.109(100), 2.805(5),
 2.668(13), 2.199(7), 2.025(12)

Type material is deposited in the collections of the Naturhistorisches Museum Bern, Bernastrasse 15, 3005 Bern, Switzerland, catalogue number NMBE-54013

How to cite: Zappatini, A., Cametti, G., Gnos, E., Hofmann, B., Eggenberger, U., Casari, D., Maeder, X., Degen, S., and Loth, L.: Thionasilite, IMA 2025-021, in: CNMNC Newsletter 86, Eur. J. Mineral., 37, <https://doi.org/10.5194/ejm-37-549-2025>, 2025.

IMA no. 2025-022

Katanite

$\text{Ba}_3\text{NbFe}_3\text{Si}_2\text{O}_{14}$

Kta

Between the upper reaches of the unnamed tributaries of the Zohar and Halamish wadis, Negev Desert, Hatrurim Complex, Israel (31°11'08.9" N, 35°16'26.5" E)

Irina Galuskina, Yevgeny Vapnik, Krystian Prusik, and Evgeny Galuskin

* E-mail: irina.galuskina@us.edu.pl

Known synthetic analogue

Trigonal: $P321$

$a = 8.539(1)$, $c = 5.241(1)$ Å

8.00(27), 3.854(5), 3.166(5), 3.109(100), 2.805(5), 2.668(13), 2.199(7), 2.025(12)

Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Leninsky Pr. 18-2, 119071 Moscow, Russia, registration number 6242/1

How to cite: Galuskina, I., Vapnik, Y., Prusik, K., and Galuskin, E.: Katanite, IMA 2025-022, in: CNMNC Newsletter 86, Eur. J. Mineral., 37, <https://doi.org/10.5194/ejm-37-549-2025>, 2025.

IMA no. 2025-024

Vakhrushevaite

$\text{Mg}_5\text{Cr}(\text{AlSi}_3\text{O}_{10})(\text{OH})_8$

Vkr

Northern part of the Glavnoe (Main) Saranovskoe deposit, Sarany town, 5 km north of the railway station Laki, Gornozavodskiy district, Perm Krai, Middle Urals, Russia (58°30' N, 58°52' E)

Igor V. Pekov*, Yuriy V. Erokhin, Maria G. Krzhizhanovskaya, Vasiliy O. Yapaskurt, Nikita V. Chukanov, Dmitry I. Belakovskiy, Sergey N. Britvin, and Pavel B. Shiryaev

* E-mail: igorpekov@mail.ru

The Cr analogue of clinocllore

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

$a = 5.3375(3)$, $b = 9.2455(6)$, $c = 14.3313(5)$ Å,
 $\alpha = 90.237(4)$, $\beta = 97.123(6)$, $\gamma = 89.978(4)^\circ$

14.41(44), 7.15(100), 4.756(66), 3.562(66), 2.592(39), 2.550(75), 2.448(48), 2.390(30)

Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Leninsky Pr. 18-2, 119071 Moscow, Russia, registration number 6241/1

How to cite: Pekov, I. V., Erokhin, Y. V., Krzhizhanovskaya, M. G., Yapaskurt, V. O., Chukanov, N. V., Belakovskiy, D. I., Britvin, S. N., and Shiryaev, P. B.: Vakhrushevaite, IMA 2025-024, in: CNMNC Newsletter 86, Eur. J. Mineral., 37, <https://doi.org/10.5194/ejm-37-549-2025>, 2025.

IMA no. 2025-025

Almagreraite

$\text{CuZnMn}_3^{4+}\text{O}_8$

Alma

República Romana mine, Sierra Almagrera, Cuevas del Almanzora, Almería, Andalusia, Spain (37°16'59" N, 1°45'51" W)

Anthony R. Kampf*, Georges Favreau, Chi Ma, and Chris Stanley

* E-mail: akampf@nhm.org

Nolanite supergroup

Orthorhombic: $Pmn2_1$; structure determined

$a = 5.7298(4)$, $b = 4.9715(4)$, $c = 9.3479(7)$ Å

4.670(46), 3.401(45), 2.923(100), 2.733(53), 2.429(44), 2.394(76), 1.49185), 1.433(70)

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 76458 (holotype), and the Natural History Museum, Cromwell Road, London SW7 5BD, United Kingdom, catalogue number BM 2025,2

How to cite: Kampf, A. R., Favreau, G., Ma, C., and Stanley, C.: Almagreraite, IMA 2025-025, in: CNMNC Newsletter 86, Eur. J. Mineral., 37, <https://doi.org/10.5194/ejm-37-549-2025>, 2025.

IMA no. 2025-026

Zoyashlyukovaite

MoC

Zsh

In a xenolith of a silicate metamorphic rock, hosted by nepheline syenites at the Mt. Partomchorr, Khibiny alkaline complex, Kola Peninsula, Russia

Oleg S. Vereshchagin*, Sergey N. Britvin, Natalia S. Vlasenko, Olesya A. Sinichenko, and Julia A. Mikhailova

* E-mail: oleg-vereschagin@yandex.ru

Known synthetic analogue

Hexagonal: $P\bar{6}m2$; structure determined

$a = 2.8994(1)$, $c = 2.8137(1)$ Å

2.814(37), 2.511(94), 1.873(100), 1.450(23), 1.289(22), 1.227(21), 1.147(19), 1.010(13)

Type material is deposited in the collections of the Mineralogical Museum, Department of Mineralogy, St. Petersburg State University, University Emb. 7–9, St. Petersburg 199034, Russia, catalogue number 20187

How to cite: Vereshchagin, O. S., Britvin, S. N., Vlasenko, N. S., Sinichenko, O. A., and Mikhailova, J. A.: Zoyashlyukovaite, IMA 2025-026, in: CNMNC Newsletter 86, Eur. J. Mineral., 37, <https://doi.org/10.5194/ejm-37-549-2025>, 2025.

2 New mineral proposals approved in July 2025

IMA no. 2024-078a

Jonlarsenite

Al_4Cu_9

Jlr

In a micrometeorite collected from the roof of an industrial building, close to the village of Skedsmokorset, Norway (60°01'03.43" N, 11°03'28.41" E)

Luca Bindi*, Jan B. Kihle, Guangming Cheng, Jinping Hu, Nan Yao, Chi Ma, Yunbin Guan, Paul D. Asimow, and Paul J. Steinhardt

* E-mail: luca.bindi@unifi.it

Known synthetic analogue

Cubic: $P\bar{4}3m$

$a = 8.70(1) \text{ \AA}$

3.891(4), 3.552(7), 2.900(9), 2.051(100), 1.776(4), 1.450(9), 1.184(15), 1.071(7)

Type material is deposited in the collections of the Natural History Museum, University of Oslo, Postboks 1172, Blindern, 0318 Oslo, Norway, registration number KNR 44452

How to cite: Bindi, L., Kihle, J. B., Cheng, G., Hu, J., Yao, N., Ma, C., Guan, Y., Asimow, P. D., and Steinhardt, P. D.: Jonlarsenite, IMA 2024-078a, in: CNMNC Newsletter 86, Eur. J. Mineral., 37, <https://doi.org/10.5194/ejm-37-549-2025>, 2025.

IMA no. 2025-008

Qiumingite

$\text{Pb}_3(\text{Zn}_2\text{Fe}^{3+})\text{Sb}^{5+}\text{P}_2\text{O}_{14}$

Qmg

Sanguozhuang Village, Tangdan Town, Dongchuan District, Kunming City, Yunnan Province, China (26°08'14" N, 102°59'36" E)

Ningyue Sun, Yuan Xue, Guowu Li*, Fabrizio Nestola, Jinhua Hao, Hongtao Shen, and Chang Li

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

The P analogue of joëlbругgerite

Trigonal: $P321$; structure determined

$a = 8.4234(8)$, $c = 5.2198(5) \text{ \AA}$

5.26(29), 4.171(33), 3.652(38), 3.276(100), 2.986(90), 2.751(32), 2.431(31), 1.884(34)

Type material is deposited in the collections of the Geological Museum of China, No. 16, Yangrou Hutong, Xisi, Beijing 100031, People's Republic of China, catalogue number GM-CTM2025001

How to cite: Sun, N., Xue, Y., Li, G., Nestola, F., Hao, J., Shen, H., and Li, C.: Qiumingite, IMA 2025-008, in: CNMNC Newsletter 86, Eur. J. Mineral., 37, <https://doi.org/10.5194/ejm-37-549-2025>, 2025.

IMA no. 2025-017

Grahampearsonite

$\text{Ca}_2\text{P}_2\text{O}_7$

Gps

As an inclusion within a diamond, Chapadão plateau, Brazil (11°26'52.37" S, 58°56'12.20" W)

Yanjuan Wang, Fabrizio Nestola*, Maxwell C. Day, Tiago Jalowitzki, Eduardo Novais-Rodrigues, Fernanda Gervasoni, Daniel Grings Cedeño, Sebastião William da Silva, Reinhardt Adolfo Fuck, Jacopo Nava, Lisa Santello, Martha G. Pamato, Davide Novella, Francesca Innocenzi, Andrea Curtolo, Mattia La Fortezza, and Kai Qu

* E-mail: fabrizio.nestola@unipd.it

Known synthetic analogue

Tetragonal: $P4_1$

$a = 6.697(2)$, $c = 24.145(11) \text{ \AA}$

3.348 (78), 3.317(35), 3.227(55), 3.091(54), 3.018(100), 2.995(35), 2.907(29), 2.752(53)

Type material is deposited in the collections of the Museum of Nature and Humankind, University of Padova, Corso Garibaldi 39, 35121 Padova, Italy, catalogue number MMP M23231

How to cite: Wang, Y., Nestola, F., Day, M. C., Jalowitzki, T., Novais-Rodrigues, E., Gervasoni, F., Grings Cedeño, D., William da Silva, S., Fuck, R. A., Nava, J., Santello, L., Pamato, M. G., Novella, D., Innocenzi, F., Curtolo, A., La Fortezza, M., and Qu, K.: Grahampearsonite, IMA 2025-017, in: CNMNC Newsletter 86, Eur. J. Mineral., 37, <https://doi.org/10.5194/ejm-37-549-2025>, 2025.

IMA no. 2025-027

Fluorbritholite-(La)

$\text{Ca}_2\text{La}_3(\text{SiO}_4)_3\text{F}$

Fbri-La

Gejiu intrusion, Honghe Hani and Yi Autonomous Prefecture, Yunnan Province, China (23°29'40" N, 103°04'41" E)

Yanjuan Wang*, Igor V. Pekov, Xiangping Gu, Fabrizio Nestola, Natalia V. Zubkova, Guochen Dong, Guang Fan, Xiangkun Ge, and Kai Qu

* E-mail: wangyanjuan_cugb@foxmail.com

Apatite supergroup

Hexagonal: $P6_3/m$; structure determined

$a = 9.698(2)$, $c = 7.072(1) \text{ \AA}$

4.08(27), 3.191(27), 2.819 (100), 2.793(88), 2.721(65), 1.949(42), 1.850(35), 1.759(30)

Type material is deposited in the collections of the Geological Museum of China, No. 16, Yangrou Hutong, Xisi, Beijing 100031, People's Republic of China, catalogue number GM-CTM2025007

How to cite: Wang, Y., Pekov, I. V., Gu, X., Nestola, F., Zubkova, N. V., Dong, G., Fan, G., Ge, X., and Qu, K.:

Fluorbritholite-(La), IMA 2025-027, in: CNMNC Newsletter 86, Eur. J. Mineral., 37, <https://doi.org/10.5194/ejm-37-549-2025>, 2025.

IMA no. 2025-029

Horiite

$\text{Ba}_2\text{Mn}_2\text{Mn}_4\text{Ti}_2(\text{Si}_2\text{O}_7)_2(\text{PO}_4)_2\text{O}_2(\text{OH})_2$

Hrt

Taguchi mine, Yatsushashi, Shitara Town, Aichi Prefecture, Japan (35°08'31.2" N, 137°35'24.1" E)

Daisuke Nishio-Hamane*, Mariko Nagashima, Yuki Mori, Masayuki Ohnishi, Tomohiro Ishizaka, and Shinji Inoue

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

Seidozerite supergroup

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

$a = 5.3509(1)$, $b = 13.8917(1)$, $c = 14.2777(2)$ Å,
 $\alpha = 98.726(1)$, $\beta = 93.842(1)$, $\gamma = 90.057(1)^\circ$
 4.691(35), 3.222(31), 3.207(33), 2.912(51), 2.871(24),
 2.815(100), 2.772(31), 2.652(36)

Type material is deposited in the collections of the National Museum of Nature and Science, 4-1-1 Amakubo, Tsukuba, Ibaraki 305-0005, Japan, specimen number NSM-M53164

How to cite: Nishio-Hamane, D., Nagashima, M., Mori, Y., Ohnishi, M., Ishizaka, T., and Inoue, S.: Horiite, IMA 2025-029, in: CNMNC Newsletter 86, Eur. J. Mineral., 37, <https://doi.org/10.5194/ejm-37-549-2025>, 2025.

IMA no. 2025-030

Puschridgeite

$\text{Mn}(\text{C}_2\text{H}_3\text{O}_3)_2(\text{H}_2\text{O})_2$

Phd

Pusch Ridge, Santa Catalina Mountains, north of Tucson, Pima Co., Arizona, USA (32°21'42" N, 110°57'30" W, 975 m a.s.l.)

Hexiong Yang*, Anthony R. Kampf, Warren Lazar, Ronald B. Gibbs, and Robert T. Downs

* E-mail: hyang@arizona.edu

The Mn analogue of stanevansite

Monoclinic: $P2_1/c$; structure determined

$a = 11.6137(5)$, $b = 5.9139(3)$, $c = 12.5694(6)$ Å,
 $\beta = 92.112(2)^\circ$
 5.620(43), 5.347(100), 4.832(50), 4.312(20), 3.880(36),
 3.121(59), 2.877(24), 2.037(23)

Type material is deposited in the collections of the University of Arizona Alfie Norville Gem and Mineral Museum, 115 N Church Ave Ste 121, Tucson, AZ 85701, USA, catalogue no. 22743 (holotype), and the RRUFF Project, deposition no. R240015 (cotype)

How to cite: Yan, H., Kampf, A. R., Lazar, W., Gibbs, R. B., and Downs, R. T.: Puschridgeite, IMA 2025-

030, in: CNMNC Newsletter 86, Eur. J. Mineral., 37, <https://doi.org/10.5194/ejm-37-549-2025>, 2025.

IMA no. 2025-032

Babunaite-(Nd)

$\text{Nd}(\text{AsO}_4)$

Bbu-Nd

Near the footpath going to the spring of the Babuna River, 5 km north of the village of Nežilovo, North Macedonia (41°41'06.2" N, 21°25'31.2" E)

Irina Galuskina*, Joachim Kusz, Maria Książek, Simeon Jančev, Petko Petrov, Grzegorz Zieliński, and Evgeny Galuskin

* E-mail: irina.galuskina@us.edu.pl

Known synthetic analogue

Tetragonal: $I4_1/a$; structure determined

$a = 5.1363(2)$, $c = 11.5764(8)$ Å
 3.076(100), 2.894(16), 2.568(20), 1.921(27), 1.816(11),
 1.704(16), 1.564(13), 1.538(10)

Type material is deposited in the collections of the Earth and Man National Museum, Cherni Vrah Blvd. 4, 1421 Sofia, Bulgaria, catalogue number 40478

How to cite: Galuskina, I., Kusz, J., Książek, M., Jančev, S., Petrov, P., Zieliński, H., and Galuskin, E.: Babunaite-(Nd), IMA 2025-032, in: CNMNC Newsletter 86, Eur. J. Mineral., 37, <https://doi.org/10.5194/ejm-37-549-2025>, 2025.