

Публикации Аксенова С.М. по теме диссертации:

Обзоры в журналах Q1-Q2, опубликованные за последние 10 лет:

1. Chukanov N.V., **Aksenov S.M.**, Rastsvetaeva R.K. Structural chemistry, IR spectroscopy, properties, and genesis of natural and synthetic microporous cancrinite- and sodalite-related materials: a review // *Microporous and Mesoporous Materials*. – 2021. – V. 323. – 111098.
<https://dx.doi.org/10.1016/j.micromeso.2021.111098> (Q1)
2. Chukanov N.V., Pasero M., **Aksenov S.M.**, Britvin S.N., Zubkova N.V., Yike L., Witzke T. Columbite supergroup of minerals: nomenclature and classification // *Mineralogical Magazine*. – 2022.
<https://dx.doi.org/10.1180/mgm.2022.105> (Q2)
3. Krivovichev S.V., Krivovichev V.G., Hazen R.M., **Aksenov S.M.**, Avdontceva M.S., Banaru A.M., Gorelova L.A., Ismagilova R.M., Korniyakov I.V., Kuporev I.V., Morrison S.M., Panikorovskii T.L., Starova G.L. Structural and chemical complexity of minerals: an update // *Mineralogical Magazine*. – 2022. – V. 86. – P. 183–204.
<https://dx.doi.org/10.1180/mgm.2022.23> (Q2)

Статьи в журналах Q1-Q2, опубликованные за последние 10 лет:

4. Chukanov N.V., **Aksenov S.M.**, Pekov, I.V. Infrared spectroscopy as a tool for the analysis of framework topology and extra-framework components in microporous cancrinite- and sodalite-related aluminosilicates // *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*. – 2023. – V. 287. – № 1. – 121993.
<https://dx.doi.org/10.1016/j.saa.2022.121993> (Q1)
5. Chukanov N.V., **Aksenov S.M.**, Pekov I.V., Chervonnaya N.A., Varlamov D.A., Ermolaeva V.N., Britvin, S.N. Ion exchange properties of natural titanium silicate caryochroite $(\text{Na,Sr})_3\{(\text{Fe,Mg})^{2+}_{10}(\text{OH})_6[\text{TiO}(\text{Si}_6\text{O}_{17})(\text{OH})_{0.5}]_2\} \cdot 8\text{H}_2\text{O}$ with a 1D system of parallel wide channels: Experimental study and theoretical analysis of the topochemical mechanisms. *Microporous and Mesoporous Materials*. – 2021. – V. 312. – 110776.
<https://dx.doi.org/10.1016/j.micromeso.2020.110776> (Q1)
6. Topnikova A.P., Eremina T.A., Belokoneva E.L., Dimitrova O.V., Volkov A.S., **Aksenov S.M.** Synthesis, crystal structure and topological features of microporous “anti-zeolite” $\text{Yb}_3(\text{BO}_3)(\text{OH})_6 \cdot 2.1\text{H}_2\text{O}$, a new cubic borate with isolated BO_3 -groups // *Microporous and Mesoporous Materials*. – 2020. – V. 300. – 110147.
<https://dx.doi.org/10.1016/j.micromeso.2020.110147> (Q1)
7. Zhang L., **Aksenov S.M.**, Kokot A.M., Perry S.N., Olds T.A., Burns P.C. Crystal chemistry and structural complexity of uranium(IV) sulfates: synthesis of $\text{U}_3\text{H}_2(\text{SO}_4)_7 \cdot 8\text{H}_2\text{O}$ and $\text{U}_3(\text{UO}_2)_{0.2}(\text{SO}_4)_6(\text{OH})_{0.4} \cdot 2.3\text{H}_2\text{O}$ with framework structures by photochemical reduction of uranyl // *Inorganic Chemistry*. – 2020. – V. 59. – P. 5813–5817.
<https://dx.doi.org/10.1021/acs.inorgchem.0c00385> (Q1)
8. Traustason H., **Aksenov S.M.**, Burns P.C. The lithium water configuration encapsulated by uranyl peroxide cage cluster U_{24} // *CrystEngComm*. – 2019. – V. 21. – P. 390–393.
<https://dx.doi.org/10.1039/C8CE01774C> (Q1)
9. **Aksenov S.M.**, Chukanov N.V., Pekov I.V., Rastsvetaeva R.K., Hixon, A.E. Crystal

structure and topological features of manganonaujakasite, a mineral with microporous heteropolyhedral framework related to AlPO-25 (ATV) // *Microporous and Mesoporous Materials*. – 2019. – V. 279. – P. 128–132.

<https://dx.doi.org/10.1016/j.micromeso.2018.12.019> (Q1)

10. Hickam S., **Aksenov S.M.**, Dembowski M., Perry S.N., Trastasson H., Russell M., Burns P.C. Complexity of uranyl peroxide cluster speciation from alkali-directed oxidative dissolution of uranium dioxide. *Inorganic Chemistry*. – 2018. – V. 57. – P. 9296-9305.

<https://dx.doi.org/10.1021/acs.inorgchem.8b01299> (Q1)

11. Dal Bo F., Kohlgruber T. Szymanowski J.E.S., **Aksenov S.M.**, Burns P.C. Rb₂[Ca(NpO₂)₂(PO₄)₂], the first mixed alkali-alkaline earth metals neptunyl(V) phosphate: crystal chemistry and sheet stereoisomerism // *Crystal Growth and Design*. – 2018. – V. 18. P. 7254–7258.

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12. **Aksenov S.M.**, Mackley S.A., Deyneko D.V., Taroev V.K., Tauson V.L., Rastsvetaeva R.K., Burns P.C. Crystal chemistry of compounds with lanthanide based microporous heteropolyhedral frameworks: synthesis, crystal structures, and luminescence properties of novel potassium cerium and erbium silicates // *Microporous and Mesoporous Materials*. – 2019. – V. 284. – P. 25–35.

<https://dx.doi.org/10.1016/j.micromeso.2019.04.006> (Q1)

13. Lazoryak B.I., **Aksenov S.M.**, Stefanovich S.Yu., Dorbakov N.G., Belov D.A., Baryshnikova O.V., Morozov V.A., Manylov M.S., Lin Z. Ferroelectric crystal Ca₉Yb(VO₄)₇ in the series of Ca₉R(VO₄)₇ nonlinear optical materials (R = REE, Bi, Y) // *Journal of Material Chemistry C*. – 2017. – № 5. – P. 2301–2310.

<https://dx.doi.org/10.1039/C7TC00124J> (Q1)

14. Kosmyna M.B., Matejchenko P.V., Nazarenko B.P., Shekhvotsov A.N., **Aksenov S.M.**, Spassky D., Mosunov A.V., Stefanovich S.Yu. Novel laser crystals in Ca₉Y(VO₄)_{7-x}(PO₄)_x mixed system // *Journal of Alloys and Compounds*. 2017. – V. 708. – P. 285–293.

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15. **Aksenov S.M.**, Rastsvetaeva R.K., Rassylov V.A., Bolotina N.B., Taroev V.K., Tauson V.L. Synthesis, crystal structure and luminescence properties of novel microporous europium silicate HK₆Eu³⁺[Si₁₀O₂₅] with a framework formed of nano-scale tubes. *Microporous and Mesoporous Materials*. 2013. – V. 182. – P. 95–101.

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16. Charkin D.O., Dolgikh V.A., Omelchenko T.A., Vaitieva Yu.A., Volkov S.N., Deyneko D.V., **Aksenov S.M.** Symmetry description of the complex polytypism of layered rare-earth tellurites and related selenites: the case of introducing magnetically active transition metal cations // *Symmetry*. – 2022. – V. 14. – № 10. – 2087.

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17. Charkin D.O., Volkov S.N., Dolgikh V.A., **Aksenov S.M.** Potassium rare-earth tellurite chlorides: a new branch from the old root // *Solid State Sciences*. – 2022. – V. 129. – 106895.

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18. Chukanov N.V., Vigasina M.F., Rastsvetaeva R.K., **Aksenov S.M.**, Mikhailova J.A.,

Pekov I.V. The evidence of hydrated proton in eudialyte-group minerals based on Raman spectroscopy data // *Journal of Raman spectroscopy*. – 2022. – V. 53. – P. 1188–1203.

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19. **Aksenov S.M.**, Chukanov N.V., Pekov I.V., Nelyubina Yu.V., Varlamov D.A., Kogarko L.N. On the isomorphism of sodium at the $M2$ site in the eudialyte-group minerals: The crystal structure of Mn-deficient mangano-eudialyte and the problem of the existence of the $M^2\text{Na}$ -dominant analogue of eudialyte // *Minerals*. – 2022. – V. 12. – № 8. – 949.

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21. **Aksenov S.M.**, Antonov A.A., Deyneko D.V., Krivovichev S.V., Merlino S. Polymorphism, polytypism, and modular aspect of compounds with the general formula $A_2M_3(\text{TO}_4)_4$ ($A = \text{Na}, \text{Rb}, \text{Cs}, \text{Ca}$; $M = \text{Mg}, \text{Mn}, \text{Fe}^{3+}, \text{Cu}^{2+}$; $T = \text{S}^{6+}, \text{P}^{5+}$): OD (order-disorder), topological description, and DFT-calculations // *Acta Crystallographica B*. – 2022. – V. 78. – P. 61–69.

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25. **Aksenov S.M.**, Ryanskaya A.D., Shchapova Yu. V., Chukanov N.V., Vladykin N.V., Votyakov S.L., Rastsvetaeva R.K. Crystal chemistry of lamprophyllite-group minerals from the Murun alkaline complex (Russia) and pegmatites of Rocky Boy and Gordon Butte (USA): Single crystal X-ray diffraction and Raman spectroscopy study // *Acta Crystallographica B*. – 2021. – V. 77. – P. 287–298.

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27. Kohlgruber T.A., Mackley S.A., Dal Bo F., **Aksenov S.M.**, Burns P.C. The role of 1-ethyl-3-methylimidazolium diethyl phosphate ionic liquids in uranyl phosphate compounds // *J. Solid State Chemistry*. – 2019. – V. 279. – 120939.

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37. Menezes Filho L.A.D., Chukanov N.V., Rastsvetaeva R.K., **Aksenov S.M.**, Pekov I.V., Chaves M.L.S.C., Richards R.P., Atencio D., Brandão P.R.G., Scholz R., Krambrock K., Moreira R.L., Guimarães F.S., Romano A.W., Persiano A.C., de Oliveira L.C.A., Ardisson J.D. Almeidaite, $\text{PbZn}_2(\text{Mn},\text{Y})(\text{Ti},\text{Fe}^{3+})_{18}\text{O}_{37}(\text{OH},\text{O})$, a new crichtonite-group mineral, from Novo Horizonte, Bahia, Brazil // *Mineralogical Magazine*. – 2015. – V. 79. – № 2. – P. 269–283 <https://dx.doi.org/10.1180/minmag.2015.079.2.06> (Q2)

38. **Aksenov S.M.**, Rastsvetaeva R.K., Chukanov N.V., Kolitsch U. The crystal structure of calcinaksite $\text{KNa}[\text{Ca}(\text{H}_2\text{O})][\text{Si}_4\text{O}_{10}]$, the first hydrous member of the litidionite group of silicates with $[\text{Si}_8\text{O}_{20}]^{8-}$ tubes // *Acta Crystallographica B*. – 2014. – V. 70. – P. 768–775. <https://dx.doi.org/10.1107/S2052520614012992> (Q2)