

# Alla Arakcheeva

## List of Publications by Year in descending order

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79  
papers

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citations

394390

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g-index

83  
all docs

83  
docs citations

83  
times ranked

1786  
citing authors

#	ARTICLE	IF	CITATIONS
1	Optically switched magnetism in photovoltaic perovskite CH <sub>3</sub> NH <sub>3</sub> (Mn:Pb)I <sub>3</sub> . Nature Communications, 2016, 7, 13406.	12.8	106
2	Ultrasensitive 3D Aerosol-Jet-Printed Perovskite X-ray Photodetector. ACS Nano, 2021, 15, 4077-4084.	14.6	71
3	The modulated structure of Ba <sub>0.39</sub> Sr <sub>0.61</sub> Nb <sub>2</sub> O <sub>6</sub> . I. Harmonic solution. Acta Crystallographica Section B: Structural Science, 2003, 59, 28-35.	1.8	70
4	The luminescence of Na <sub>x</sub> Eu <sub>3+(2-x)/3</sub> MoO <sub>4</sub> scheelites depends on the number of Eu-clusters occurring in their incommensurately modulated structure. Chemical Science, 2012, 3, 384-390.	7.4	63
5	The self-hosting structure of $\hat{1}^2$ -Ta. Acta Crystallographica Section B: Structural Science, 2002, 58, 1-7.	1.8	57
6	Na <sub>2/7</sub> Gd <sub>4/7</sub> MoO <sub>4</sub> : a Modulated Scheelite-Type Structure and Conductivity Properties. Inorganic Chemistry, 2012, 51, 5313-5324.	4.0	54
7	Application of micro X-ray diffraction to investigate the reaction products formed by the alkali-silica reaction in concrete structures. Cement and Concrete Research, 2016, 79, 49-56.	11.0	52
8	KNd(MoO <sub>4</sub> ) <sub>2</sub> : A New Incommensurate Modulated Structure in the Scheelite Family. Chemistry of Materials, 2006, 18, 4075-4082.	6.7	47
9	The Room-Temperature Superstructure of ZrP <sub>2</sub> O <sub>7</sub> Is Orthorhombic: There Are No Unusual 180° P-O-P Bond Angles. Inorganic Chemistry, 2006, 45, 4346-4351.	4.0	41
10	CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> : precise structural consequences of water absorption at ambient conditions. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2016, 72, 716-722.	1.1	37
11	Preferential out-of-plane conduction and quasi-one-dimensional electronic states in layered 1T-TaS <sub>2</sub> . Npj 2D Materials and Applications, 2020, 4, .	7.9	34
12	Capabilities and limitations of a (3+ <i>d</i> )-dimensional incommensurately modulated structure as a model for the derivation of an extended family of compounds: example of the scheelite-like structures. Acta Crystallographica Section B: Structural Science, 2008, 64, 12-25.	1.8	29
13	KSm(MoO <sub>4</sub> ) <sub>2</sub> , an incommensurately modulated and partially disordered scheelite-like structure. Acta Crystallographica Section B: Structural Science, 2008, 64, 160-171.	1.8	29
14	Crystal Structure and Optical and Magnetic Properties of Pr <sub>2</sub> (MoO <sub>4</sub> ) <sub>3</sub> . Inorganic Chemistry, 2010, 49, 1587-1594.	4.0	29
15	KEu(MoO <sub>4</sub> ) <sub>2</sub> : Polymorphism, Structures, and Luminescent Properties. Chemistry of Materials, 2015, 27, 5519-5530.	6.7	29
16	The role of silver on the stabilization of the incommensurately modulated structure in calaverite, AuTe <sub>2</sub> . American Mineralogist, 2009, 94, 728-736.	1.9	25
17	Incommensurate crystal structure of PbHfO <sub>3</sub> . Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2020, 76, 7-12.	1.1	25
18	The incommensurately modulated structures of natural natrite at 120 and 293 K from synchrotron X-ray data. American Mineralogist, 2010, 95, 574-581.	1.9	23

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19	A reinterpretation of the phase transitions in Na <sub>2</sub> CO <sub>3</sub> . Acta Crystallographica Section B: Structural Science, 2005, 61, 601-607.	1.8	22
20	The commensurate composite $\sqrt{2}$ -structure of $\sqrt{2}$ -tantalum. Acta Crystallographica Section B: Structural Science, 2003, 59, 324-336.	1.8	19
21	Controlling structural and magnetic properties of IONPs by aqueous synthesis for improved hyperthermia. RSC Advances, 2017, 7, 13159-13170.	3.6	19
22	Hexagonal ferrites: a unified model of the (TS) <sub>n</sub> T series in superspace. Acta Crystallographica Section B: Structural Science, 2007, 63, 703-712.	1.8	18
23	Synthesis, growth and characterization of 4-bromo-4-nitrobenzylidene aniline (BNBA): a novel nonlinear optical material with a (3+1)-dimensional incommensurately modulated structure. CrystEngComm, 2013, 15, 2474.	2.6	17
24	New insight into the pectolite $\leftrightarrow$ serandite series: a single crystal diffraction study of Na(Ca <sub>1.73</sub> Mn <sub>0.27</sub> )[HSi <sub>3</sub> O <sub>9</sub> ] at 293 and 100 K. Zeitschrift Fur Kristallographie - Crystalline Materials, 2007, 222, 696-704.	0.8	14
25	Cimetidine, C <sub>10</sub> H <sub>16</sub> N <sub>6</sub> S, form C: crystal structure and modelling of polytypes using the superspace approach. Journal of Applied Crystallography, 2013, 46, 99-107.	4.5	14
26	(BEDT-TTF) <sub>2</sub> Cu <sub>2</sub> (CN) <sub>3</sub> Spin Liquid: Beyond the Average Structure. Crystals, 2018, 8, 158.	2.2	14
27	Crystal structure of loparite. Crystallography Reports, 2000, 45, 210-214.	0.6	12
28	The crystal structure of lewisite, (Ca,Sb <sup>3+</sup> ,Fe <sup>3+</sup> ,Al,Na,Mn, $\hat{\alpha}$ -i) <sub>2</sub> (Sb <sup>5+</sup> ,Ti) <sub>2</sub> O <sub>6</sub> (OH). Journal of Alloys and Compounds, 2000, 296, 75-79.	5.5	11
29	Getting more out of an incommensurately modulated structure: the example of K <sub>5</sub> Yb(MoO <sub>4</sub> ) <sub>4</sub> . Acta Crystallographica Section B: Structural Science, 2006, 62, 52-59.	1.8	11
30	Cyan titania nanowires: Spectroscopic study of the origin of the self-doping enhanced photocatalytic activity. Catalysis Today, 2017, 284, 52-58.	4.4	10
31	New boron-oxygen layer in the structure of barium hydrodecaborate Ba <sub>5</sub> [B <sub>20</sub> O <sub>33</sub> (OH) <sub>4</sub> ] $\cdot$ ... H <sub>2</sub> O. Crystallography Reports, 2000, 45, 405-409.	0.6	9
32	Structure studies of solid solutions of oxygen in electrolytic niobium. Crystallography Reports, 2002, 47, 237-244.	0.6	9
33	LiZnNb <sub>4</sub> O <sub>11.5</sub> : A novel oxygen deficient compound in the Nb-rich part of the Li <sub>2</sub> O $\leftrightarrow$ Zn $\leftrightarrow$ Nb <sub>2</sub> O <sub>5</sub> system. Journal of Solid State Chemistry, 2010, 183, 408-418.	2.9	9
34	A novel perovskite-like Ta-bronze KTa <sub>1+z</sub> O <sub>3</sub> : preparation, stoichiometry, conductivity and crystal structure studies. Acta Crystallographica Section B: Structural Science, 2001, 57, 157-162.	1.8	8
35	The incommensurate structure of K <sub>3</sub> In(PO <sub>4</sub> ) <sub>2</sub> . Acta Crystallographica Section B: Structural Science, 2003, 59, 17-27.	1.8	8
36	Structure type of hexagonal tantalum bronzes with variable composition K <sub>6</sub> Ta <sub>6</sub> + Z O <sub>15</sub> F <sub>6</sub> (F, O) <sub>y</sub> : Ta(5 $\hat{\alpha}$ ) Tj ETQq0,0 0 rgBTg/Overlock	0.6	8

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37	The role of second coordination-sphere interactions in incommensurately modulated structures, using $\text{K}_2\text{Yb}(\text{MoO}_4)_4$ as an example. <i>Acta Crystallographica Section B: Structural Science</i> , 2005, 61, 400-406.	1.8	8
38	Validating the model of a (3 + 1)-dimensional incommensurately modulated structure as generator of a family of compounds for the $\text{Eu}_2(\text{MoO}_4)_3$ scheelite structure. <i>Philosophical Magazine Letters</i> , 2009, 89, 257-266.	1.2	8
39	Crystal Structure, Transport, and Magnetic Properties of an Ir <sup>6+</sup> Compound $\text{Ba}_8\text{Al}_2\text{IrO}_{14}$ . <i>Inorganic Chemistry</i> , 2015, 54, 4371-4376.	4.0	8
40	Defect structure of $\text{TiS}_3$ single crystals of the A-ZrSe <sub>3</sub> type. <i>Crystallography Reports</i> , 2016, 61, 923-930.	0.6	8
41	Perovskite-like modification of $\text{Cs}_3\text{Sb}_2\text{I}_9$ as a member of the OD family $\text{A}_3\text{B}_2\text{X}_9$ . <i>Journal of Structural Chemistry</i> , 1999, 40, 572-579.	1.0	7
42	Magnetic properties and crystal structure of $\text{Ta}$ . <i>Crystallography Reports</i> , 2004, 49, 930-935.	0.6	7
43	Effect of Thermal Cycling on the Structural Evolution of Methylammonium Lead Iodide Monitored around the Phase Transition Temperatures. <i>Solar Rrl</i> , 2019, 3, 1900044.	5.8	7
44	Incommensurate atomic density waves in the high-pressure IVb phase of barium. <i>IUCrJ</i> , 2017, 4, 152-157.	2.2	7
45	Crystal structure of new decaborate $\text{Na}_2\text{Ba}_2[\text{B}_{10}\text{O}_{17}(\text{OH})_2]$ . <i>Crystallography Reports</i> , 2002, 47, 24-28.	0.6	6
46	X-ray mapping in heterocyclic design: IX. X-ray structure investigation of conjugated aminodienes. <i>Crystallography Reports</i> , 2002, 47, 973-978.	0.6	6
47	High-Pressure Synthesis of Rare-Earth Borate-Nitrate Crystals for Second Harmonic Generation. <i>Inorganic Chemistry</i> , 2021, 60, 286-291.	4.0	6
48	Crystal structure and resistivity characteristics of new tantalum bronze $\text{K}_6\text{Ta}_6.5\text{O}_{15} + x\text{F}_6 + y$ . <i>Crystallography Reports</i> , 2001, 46, 182-189.	0.6	5
49	$\text{Sr}_2\text{Pt}_8\text{As}$ : a layered incommensurately modulated metal with saturated resistivity. <i>IUCrJ</i> , 2018, 5, 470-477.	2.2	5
50	Ordering of Ca and Sr atoms in $(\text{Ca}_{0.5}\text{Sr}_{0.5})(\text{Cu}_{0.75}\text{Bi}_{0.25})\text{O}_2$ single crystals of $\text{CaCuO}_2$ -type structure. <i>Journal of Physics and Chemistry of Solids</i> , 1995, 56, 925-933.	4.0	4
51	Cation ordering in Y,Tb-(123)-type structures. <i>Superconductor Science and Technology</i> , 1995, 8, 540-545.	3.5	4
52	Analysis of the structure of an amorphous sediment obtained upon decomposition of potassium oxofluronibate in water. <i>Crystallography Reports</i> , 2002, 47, 555-558.	0.6	4
53	The study of incommensurate structures as a probe to reveal atomic interactions in crystals. <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 2004, 219, .	0.8	4
54	Single crystals of superconducting $\text{SmFeAsOH}_x$ : Structure and properties. <i>Physical Review B</i> , 2016, 94, .	3.2	4

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55	Pressure-induced transformation of $\text{CH}_3\text{NH}_3\text{PbI}_3$ : the role of the noble-gas pressure transmitting media. <i>Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials</i> , 2019, 75, 361-370.	1.1	4
56	Title is missing!. <i>Doklady Chemistry</i> , 2002, 382, 5-8.	0.9	3
57	Atomic clusters and phase transitions in the metastable $\hat{\Gamma}^2$ -Ta phase between 4.2 and 293 K. <i>Europhysics Letters</i> , 2005, 69, 378-384.	2.0	3
58	Influence of the organic cation disorder on photoconductivity in ethylenediammonium lead iodide, $\text{NH}_3\text{CH}_2\text{CH}_2\text{NH}_3\text{PbI}_4$ . <i>CrystEngComm</i> , 2018, 20, 3543-3549.	2.6	3
59	The influence of the incommensurately modulated structure on the physical properties of $\text{Fe}_{1.35}\text{Ge}$ . <i>Journal of Alloys and Compounds</i> , 2019, 794, 108-113.	5.5	3
60	Fast Lead-Free Humidity Sensor Based on Hybrid Halide Perovskite. <i>Crystals</i> , 2022, 12, 547.	2.2	3
61	Electrocrystallization of $\hat{\Gamma}^2$ -tantalum in salt melts. <i>Doklady Chemistry</i> , 2008, 423, 269-272.	0.9	2
62	The aperiodic nature of incommensurately modulated structures. <i>Rendiconti Lincei</i> , 2013, 24, 77-84.	2.2	2
63	High-pressure transformation of $\text{MAPbI}_3$ : role of the noble-gas medium. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2017, 73, C1416-C1416.	0.1	2
64	Fragmentary analysis of crystal structures of the Al, Ca-ferrite phase $(\text{Fe}, \text{Ca})_4(\text{Fe}, \text{Al})_2\text{CaFe}(\text{Al}, \text{Fe})_2\text{O}_{14}$ . <i>Journal of Structural Chemistry</i> , 1994, 35, 647-657.	1.0	1
65	Specific features of the crystal structure and magnetic properties of $\text{KTaO}_3$ produced by electrolysis of melts. <i>Crystallography Reports</i> , 2005, 50, 779-784.	0.6	1
66	Electrochemical synthesis of tantalum monoxide nanoneedles in molten salts. <i>Doklady Chemistry</i> , 2009, 428, 218-221.	0.9	1
67	Influence of the cation sublattice on the growth, structure and properties of single crystals of 123- and 2212-type high-Tc superconductors. <i>Journal of Crystal Growth</i> , 1996, 167, 102-106.	1.5	0
68	Possibility of an unconventional spin state of $\text{Ir}^{4+}$ in $\text{Ba}_2\text{Ir}_9\text{O}_{43}$ single crystal. <i>Physical Review B</i> , 2016, 94, .	3.2	0
69	One-dimensional composite host-guest structure in $\text{BaVS}_3$ . <i>Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials</i> , 2021, 77, 115-122.	1.1	0
70	Superspace approach applied to the Y series of hexagonal ferrites. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2004, 60, s36-s36.	0.3	0
71	Crystallographic aspect of the phase transitions in $\text{Na}_2\text{CO}_3$ . <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2004, 60, s182-s182.	0.3	0
72	Simulation of a polytypic family from an incommensurately modulated member. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2005, 61, c49-c49.	0.3	0

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73	Superspace embedding of scheelite-like structures. Acta Crystallographica Section A: Foundations and Advances, 2006, 62, s46-s46.	0.3	0
74	Can superspace reinvent crystal chemistry?. Acta Crystallographica Section A: Foundations and Advances, 2007, 63, s93-s93.	0.3	0
75	The (3+1)-dimensional scheelite structure type. Acta Crystallographica Section A: Foundations and Advances, 2008, 64, C618-C618.	0.3	0
76	A few applications of the superspace approach in mineralogy. Acta Crystallographica Section A: Foundations and Advances, 2009, 65, s48-s48.	0.3	0
77	Organic-inorganic hybrid perovskite CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> : structural consequences of water absorption. Acta Crystallographica Section A: Foundations and Advances, 2016, 72, s294-s295.	0.1	0
78	Electronic properties of incommensurately modulated novel and complex materials. Acta Crystallographica Section A: Foundations and Advances, 2018, 74, e96-e96.	0.1	0
79	Self-flux-grown Ba <sub>4</sub> Fe <sub>4</sub> ClO <sub>9.5</sub> crystals exhibiting structures with tunable modulation. CrystEngComm, 0, , .	2.6	0