

Vladislav A Blatov

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4334323/publications.pdf>

Version: 2024-02-01

216
papers

13,086
citations

44069

48
h-index

23533

111
g-index

226
all docs

226
docs citations

226
times ranked

7456
citing authors

#	ARTICLE	IF	CITATIONS
1	Applied Topological Analysis of Crystal Structures with the Program Package ToposPro. <i>Crystal Growth and Design</i> , 2014, 14, 3576-3586.	3.0	2,448
2	Interpenetrating metal-organic and inorganic 3D networks: a computer-aided systematic investigation. Part I. Analysis of the Cambridge structural database. <i>CrystEngComm</i> , 2004, 6, 377-395.	2.6	1,116
3	TOPOS3.2: a new version of the program package for multipurpose crystal-chemical analysis. <i>Journal of Applied Crystallography</i> , 2000, 33, 1193-1193.	4.5	964
4	Vertex-, face-, point-, Schläfli-, and Delaney-symbols in nets, polyhedra and tilings: recommended terminology. <i>CrystEngComm</i> , 2010, 12, 44-48.	2.6	694
5	Underlying nets in three-periodic coordination polymers: topology, taxonomy and prediction from a computer-aided analysis of the Cambridge Structural Database. <i>CrystEngComm</i> , 2011, 13, 3947.	2.6	626
6	Nanocluster analysis of intermetallic structures with the program package TOPOS. <i>Structural Chemistry</i> , 2012, 23, 955-963.	2.0	488
7	Interpenetrating metal-organic and inorganic 3D networks: a computer-aided systematic investigation. Part II [1]. Analysis of the Inorganic Crystal Structure Database (ICSD). <i>Journal of Solid State Chemistry</i> , 2005, 178, 2452-2474.	2.9	335
8	Entangled Two-Dimensional Coordination Networks: A General Survey. <i>Chemical Reviews</i> , 2014, 114, 7557-7580.	47.7	253
9	Voronoi-dirichlet polyhedra in crystal chemistry: theory and applications. <i>Crystallography Reviews</i> , 2004, 10, 249-318.	1.5	236
10	Interpenetrated Three-Dimensional Networks of Hydrogen-Bonded Organic Species: A Systematic Analysis of the Cambridge Structural Database. <i>Crystal Growth and Design</i> , 2008, 8, 519-539.	3.0	232
11	High-nuclearity cobalt coordination clusters: Synthetic, topological and magnetic aspects. <i>Coordination Chemistry Reviews</i> , 2012, 256, 1246-1278.	18.8	204
12	Two metal-organic frameworks with unique high-connected binodal network topologies: synthesis, structures, and catalytic properties. <i>CrystEngComm</i> , 2012, 14, 4210.	2.6	196
13	Three-periodic nets and tilings: natural tilings for nets. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2007, 63, 418-425.	0.3	188
14	Topological relations between three-periodic nets. II. Binodal nets. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2009, 65, 202-212.	0.3	172
15	Interpenetrated three-dimensional hydrogen-bonded networks from metal-organic molecular and one- or two-dimensional polymeric motifs. <i>CrystEngComm</i> , 2008, 10, 1822.	2.6	160
16	The Aluminum-Ion Battery: A Sustainable and Seminal Concept?. <i>Frontiers in Chemistry</i> , 2019, 7, 268.	3.6	155
17	A luminescent zinc(II) coordination polymer with unusual (3,4,4)-coordinated self-catenated 3D network for selective detection of nitroaromatics and ferric and chromate ions: a versatile luminescent sensor. <i>Dalton Transactions</i> , 2018, 47, 6189-6198.	3.3	147
18	Syntheses, Topological Structures, and Photoluminescences of Six New Zn(II) Coordination Polymers Based on Mixed Tripodal Imidazole Ligand and Varied Polycarboxylates. <i>Crystal Growth and Design</i> , 2013, 13, 1277-1289.	3.0	143

#	ARTICLE	IF	CITATIONS
19	Topological Motifs in Cyanometallates: From Building Units to Three-Periodic Frameworks. <i>Chemical Reviews</i> , 2015, 115, 12286-12319.	47.7	128
20	Crystal space analysis by means of Voronoi–Dirichlet polyhedra. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 1995, 51, 909-916.	0.3	123
21	Topology of 2-Periodic Coordination Networks: Toward Expert Systems in Crystal Design. <i>Crystal Growth and Design</i> , 2013, 13, 1655-1664.	3.0	119
22	Topological relations between three-dimensional periodic nets. I. Uninodal nets. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2007, 63, 329-343.	0.3	109
23	The Zeolite Conundrum: Why Are There so Many Hypothetical Zeolites and so Few Observed? A Possible Answer from the Zeolite-Type Frameworks Perceived As Packings of Tiles. <i>Chemistry of Materials</i> , 2013, 25, 412-424.	6.7	90
24	Predicting crystal growth via a unified kinetic three-dimensional partition model. <i>Nature</i> , 2017, 544, 456-459.	27.8	88
25	Structures and Properties of Spherical 90°-Vertex Fullerene-Like Nanoballs. <i>Chemistry - A European Journal</i> , 2010, 16, 2092-2107.	3.3	87
26	An unprecedented –strongly–self-catenated MOF containing inclined catenated honeycomb-like units. <i>Dalton Transactions</i> , 2016, 45, 2426-2429.	3.3	87
27	Crystal chemistry of zirconosilicates and their analogs: topological classification of MT frameworks and suprapolyhedral invariants. <i>Acta Crystallographica Section B: Structural Science</i> , 2002, 58, 198-218.	1.8	83
28	Topology of molecular packings in organic crystals. <i>Acta Crystallographica Section B: Structural Science</i> , 2000, 56, 1035-1045.	1.8	82
29	Natural Tilings for Zeolite-Type Frameworks. <i>Journal of Physical Chemistry C</i> , 2010, 114, 10160-10170.	3.1	82
30	A method for topological analysis of high nuclearity coordination clusters and its application to Mn coordination compounds. <i>Dalton Transactions</i> , 2012, 41, 4634.	3.3	80
31	Migration maps of Li ⁺ cations in oxygen-containing compounds. <i>Solid State Ionics</i> , 2008, 179, 2248-2254.	2.7	79
32	Three-dimensional hydrogen-bonded frameworks in organic crystals: a topological study. <i>Acta Crystallographica Section B: Structural Science</i> , 2007, 63, 791-802.	1.8	72
33	Topological Databases: Why Do We Need Them for Design of Coordination Polymers?. <i>Crystal Growth and Design</i> , 2019, 19, 2604-2614.	3.0	72
34	A comparative crystallochemical analysis of binary compounds and simple anhydrous salts containing pyramidal anions LO ₃ (L = S, Se, Te, Cl, Br, I). <i>Acta Crystallographica Section B: Structural Science</i> , 2006, 62, 457-466.	1.8	71
35	Analysis of migration paths in fast-ion conductors with Voronoi–Dirichlet partition. <i>Acta Crystallographica Section B: Structural Science</i> , 2006, 62, 1010-1018.	1.8	68
36	Nanocluster Model of Intermetallic Compounds with Giant Unit Cells: $\hat{1}^2$, $\hat{1}^2\hat{2}$ –Mg ₂ Al ₃ Polymorphs. <i>Inorganic Chemistry</i> , 2010, 49, 1811-1818.	4.0	68

#	ARTICLE	IF	CITATIONS
37	Molecular coordination numbers in crystal structures of organic compounds. <i>Acta Crystallographica Section B: Structural Science</i> , 2000, 56, 501-511.	1.8	67
38	Topology-based crystal structure generator. <i>Computer Physics Communications</i> , 2019, 236, 1-7.	7.5	67
39	Analysis of voids in crystal structures: the methods of 'dual' crystal chemistry. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2003, 59, 34-44.	0.3	66
40	A topological method for the classification of entanglements in crystal networks A preliminary account of this work was presented at the workshop 'Topological dynamics in physics and biology' held in Pisa, 12-13 July 2011.. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2012, 68, 484-493.	0.3	66
41	Deconstruction of Crystalline Networks into Underlying Nets: Relevance for Terminology Guidelines and Crystallographic Databases. <i>Crystal Growth and Design</i> , 2018, 18, 3411-3418.	3.0	65
42	Search for isotypism in crystal structures by means of the graph theory. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2000, 56, 178-188.	0.3	63
43	A Water-Stable Cl@Ag ₁₄ Cluster Based Metal-Organic Open Framework for Dichromate Trapping and Bacterial Inhibition. <i>Inorganic Chemistry</i> , 2017, 56, 11891-11899.	4.0	60
44	Intermetallic compounds of the NaCd ₂ family perceived as assemblies of nanoclusters. <i>Structural Chemistry</i> , 2009, 20, 975-982.	2.0	57
45	β ³ -Brass Polyhedral Core in Intermetallics: The Nanocluster Model. <i>Inorganic Chemistry</i> , 2013, 52, 13094-13107.	4.0	57
46	A method for hierarchical comparative analysis of crystal structures. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2006, 62, 356-364.	0.3	54
47	How 2-periodic coordination networks are interweaved: entanglement isomerism and polymorphism. <i>CrystEngComm</i> , 2017, 19, 1993-2006.	2.6	51
48	Crystallochemical tools in the search for cathode materials of rechargeable Na-ion batteries and analysis of their transport properties. <i>Solid State Ionics</i> , 2018, 314, 129-140.	2.7	51
49	Multilevel topological description of molecular packings in 1,2-benzothiazines. <i>CrystEngComm</i> , 2014, 16, 1963-1970.	2.6	44
50	A Possible Route toward Expert Systems in Supramolecular Chemistry: 2-Periodic H-Bond Patterns in Molecular Crystals. <i>Crystal Growth and Design</i> , 2014, 14, 1938-1949.	3.0	44
51	Synthesis, structure, topology and magnetic properties of cobalt(ii) coordination polymers with 2-nitrophenyl-4,4'-dicarboxylic acid and bis(pyridyl) ligands. <i>Dalton Transactions</i> , 2012, 41, 14316.	3.3	43
52	A method for topological analysis of rod packings. <i>Structural Chemistry</i> , 2016, 27, 1605-1611.	2.0	43
53	New Types of Multishell Nanoclusters with a Frank-Kasper Polyhedral Core in Intermetallics. <i>Inorganic Chemistry</i> , 2011, 50, 5714-5724.	4.0	39
54	Simplify to understand: how to elucidate crystal structures?. <i>Structural Chemistry</i> , 2021, 32, 507-519.	2.0	39

#	ARTICLE	IF	CITATIONS
55	Structures of the $ZrZn_{22}$ family: suprapolyhedral nanoclusters, methods of self-assembly and superstructural ordering. <i>Acta Crystallographica Section B: Structural Science</i> , 2009, 65, 300-307.	1.8	37
56	On the Way to New Possible Na κ -ion Conductors: The Voronoi–Dirichlet Approach, Data Mining and Symmetry Considerations in Ternary Na Oxides. <i>Chemistry - A European Journal</i> , 2015, 21, 16601-16608.	3.3	37
57	Crystal Structure and Li-Ion Transport in Li_2CoPO_4F High-Voltage Cathode Material for Li-Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2017, 121, 3194-3202.	3.1	37
58	High-throughput search for potential potassium ion conductors: A combination of geometrical-topological and density functional theory approaches. <i>Solid State Ionics</i> , 2018, 326, 188-199.	2.7	37
59	Sonochemical synthesis and characterization of four nanostructural nickel coordination polymers and photocatalytic degradation of methylene blue. <i>Ultrasonics Sonochemistry</i> , 2019, 56, 213-228.	8.2	36
60	A Collection of Topological Types of Nanoclusters and Its Application to Icosahedron-Based Intermetallics. <i>Inorganic Chemistry</i> , 2015, 54, 6616-6630.	4.0	35
61	A series of Cd(κ) coordination polymers based on flexible bis(triazole) and multicarboxylate ligands: topological diversity, entanglement and properties. <i>CrystEngComm</i> , 2017, 19, 5797-5808.	2.6	34
62	Topology versus porosity: what can reticular chemistry tell us about free space in metal–organic frameworks?. <i>Chemical Communications</i> , 2020, 56, 9616-9619.	4.1	34
63	Analysis of ion-migration paths in inorganic frameworks by means of tilings and Voronoi–Dirichlet partition: a comparison. <i>Acta Crystallographica Section B: Structural Science</i> , 2009, 65, 426-434.	1.8	32
64	From clusters to crystals: scale chemistry of intermetallics. <i>Structural Chemistry</i> , 2019, 30, 2015-2027.	2.0	32
65	Packing topology in crystals of proteins and small molecules: a comparison. <i>Scientific Reports</i> , 2017, 7, 13209.	3.3	31
66	Discovery of intrinsic two-dimensional antiferromagnets from transition-metal borides. <i>Nanoscale</i> , 2021, 13, 8254-8263.	5.6	31
67	Lithium-cation conductivity and crystal structure of lithium diphosphate. <i>Journal of Solid State Chemistry</i> , 2014, 211, 170-175.	2.9	30
68	Topology of Intermetallic Structures: From Statistics to Rational Design. <i>Accounts of Chemical Research</i> , 2018, 51, 21-30.	15.6	30
69	Crystal chemistry of orthosilicates and their analogs: the classification by topological types of suprapolyhedral structural units. <i>Acta Crystallographica Section B: Structural Science</i> , 2002, 58, 948-964.	1.8	27
70	New knowledge and tools for crystal design: local coordination versus overall network topology and much more. <i>CrystEngComm</i> , 2015, 17, 2913-2924.	2.6	27
71	Two d10 metal coordination polymers as dual functional luminescent probes for sensing of Fe ³⁺ ions and acetylacetone with high selectivity and sensitivity. <i>Journal of Solid State Chemistry</i> , 2020, 289, 121460.	2.9	27
72	Crystal Structures of Inorganic Oxoacid Salts Perceived as Cation Arrays: A Periodic-Graph Approach. <i>Structure and Bonding</i> , 2011, , 31-66.	1.0	25

#	ARTICLE	IF	CITATIONS
73	Analysis of environment of alkali atoms in oxygen-containing compounds with Voronoi-Dirichlet polyhedra. <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 1998, 213, 202-209.	0.8	23
74	Methods for topological analysis of atomic nets. <i>Journal of Structural Chemistry</i> , 2009, 50, 160-167.	1.0	23
75	A Strongly Self-Catenated Metal-Organic Framework with the Highest Topological Density among 3,4-Coordinated Nets. <i>Inorganic Chemistry</i> , 2013, 52, 10732-10734.	4.0	23
76	An unusual (3,10)-coordinated 3D network coordination polymer as a potential luminescent sensor for detection of nitroaromatics and ferric ion. <i>Journal of Luminescence</i> , 2018, 199, 126-132.	3.1	23
77	Topology: ToposPro. , 2021, , 389-412.		23
78	Orthotetrahedral crystal structures $My(TO_4)_z$ (T = Si, Ge, P, As, S, Se, Cl, Br, I): geometrical-topological analysis, quasi-binary representation, and comparison with the AyX_z compounds by the method of coordination sequences. <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 2004, 219, 468-478.	0.8	21
79	Predicting New Zeolites: A Combination of Thermodynamic and Kinetic Factors. <i>Chemistry of Materials</i> , 2018, 30, 2829-2837.	6.7	21
80	Network topological model of reconstructive solid-state transformations. <i>Scientific Reports</i> , 2019, 9, 6007.	3.3	21
81	Comparative topological analysis of simple anhydrous borates, carbonates and nitrates. <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 2002, 217, .	0.8	20
82	Sizes of molecules in organic crystals: the Voronoi-Dirichlet approach. <i>Acta Crystallographica Section B: Structural Science</i> , 2004, 60, 447-452.	1.8	20
83	Structural chemistry of metal microclusters: Questions and answers. <i>Glass Physics and Chemistry</i> , 2009, 35, 1-12.	0.7	20
84	New method for computer analysis of complex intermetallic compounds and nanocluster model of the samson phase Cd_3Cu_4 . <i>Crystallography Reports</i> , 2010, 55, 1100-1105.	0.6	20
85	A Database of Topological Representations of Polynuclear Nickel Compounds. <i>European Journal of Inorganic Chemistry</i> , 2013, 2013, 520-526.	2.0	20
86	Computer-Aided Modeling of Aluminophosphate Zeolites As Packings of Building Units. <i>Journal of Physical Chemistry C</i> , 2012, 116, 6734-6744.	3.1	19
87	Topological analysis of ionic packings in crystal structures of inorganic sulfides: the method of coordination sequences. <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 2001, 216, 165-171.	0.8	19
88	Conduction mechanism in the low-temperature phase of $KAlO_2$. <i>Inorganic Materials</i> , 2010, 46, 1234-1241.	0.8	18
89	Anisotropy of Elastic Properties of Metal-Organic Frameworks and the Breathing Phenomenon. <i>Journal of Physical Chemistry C</i> , 2019, 123, 24651-24658.	3.1	18
90	The <i>CSD</i> and knowledge databases: from answers to questions. <i>CrystEngComm</i> , 2020, 22, 7298-7307.	2.6	18

#	ARTICLE	IF	CITATIONS
91	<i>CrystalGrower</i> : a generic computer program for Monte Carlo modelling of crystal growth. <i>Chemical Science</i> , 2021, 12, 1126-1146.	7.4	18
92	B ₅ N ₃ and B ₇ N ₅ Monolayers with High Carrier Mobility and Excellent Optical Performance. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 4823-4832.	4.6	18
93	Order and Topology in Systems with Many Particles. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 1997, 53, 144-160.	0.3	17
94	The natural tiling approach to cation conductivity in KAlO ₂ polymorphs. <i>Acta Crystallographica Section B: Structural Science</i> , 2012, 68, 356-363.	1.8	17
95	Combined DFT and geometrical “topological analysis of Li-ion conductivity in complex hydrides. <i>Inorganic Chemistry Frontiers</i> , 2020, 7, 3115-3125.	6.0	17
96	Topological methods for analysis and design of coordination polymers. <i>Russian Chemical Reviews</i> , 2022, 91, .	6.5	17
97	Analysis of Lanthanide f Complexes in Terms of Voronoi “Dirichlet Polyhedra. <i>Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya</i> , 2000, 26, 847-856.	1.0	16
98	Local Coordination versus Overall Topology in Crystal Structures: Deriving Knowledge from Crystallographic Databases. <i>Crystal Growth and Design</i> , 2017, 17, 774-785.	3.0	16
99	Ionic Conductivity in Ti-Doped KFeO ₂ : Experiment and Mathematical Modeling. <i>Journal of Physical Chemistry C</i> , 2017, 121, 21128-21135.	3.1	16
100	Identification of solid oxygen-containing Na electrolytes: An assessment based on crystallographic and economic parameters. <i>Crystal Research and Technology</i> , 2017, 52, 1600223.	1.3	16
101	Unique self-catenated 3D Cd(II)-MOF with a rare (3,3,9)-connected underlying network exhibiting high photocatalytic activities. <i>Inorganic Chemistry Communication</i> , 2019, 102, 126-129.	3.9	16
102	Topological representations of crystal structures: generation, analysis and implementation in the <i>TopCryst</i> system. <i>Science and Technology of Advanced Materials Methods</i> , 2022, 2, 250-265.	1.3	16
103	Computer simulation of the self-assembly of paulingite crystal structure from suprapolyhedral nanocluster precursors K6, K16, and K20. <i>Crystallography Reports</i> , 2011, 56, 75-83.	0.6	15
104	Nanoporous materials with predicted zeolite topologies. <i>RSC Advances</i> , 2020, 10, 17760-17767.	3.6	15
105	Study of rare-earth f-complexes by means of Voronoi “Dirichlet polyhedra. <i>Acta Crystallographica Section B: Structural Science</i> , 2001, 57, 261-270.	1.8	14
106	Symmetry and topology codes of cluster self-assembly for icosahedral structures of the NaZn ₁₃ -cF112 and TRB66-cF1944 family. <i>Glass Physics and Chemistry</i> , 2015, 41, 341-351.	0.7	14
107	Knowledge-Based Approaches to H-Bonding Patterns in Heterocycle-1-Carbohydrazoneamides. <i>Crystal Growth and Design</i> , 2016, 16, 6354-6362.	3.0	14
108	Natural tilings and free space in zeolites: models, statistics, correlations, prediction. <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 2019, 234, 421-436.	0.8	14

#	ARTICLE	IF	CITATIONS
109	High-throughput systematic topological generation of low-energy carbon allotropes. <i>Npj Computational Materials</i> , 2021, 7, .	8.7	14
110	Theoretical crystal chemistry of phosphates: Topological analysis and classification of suprapolyhedral ensembles of orthophosphates and their analogues $M_x(PO_4)_y$. <i>Crystallography Reports</i> , 2004, 49, 327-342.	0.6	13
111	Vacancy Ordering as a Driving Factor for Structural Changes in Ternary Germanides: The New $R_2Zn_{1-x}Ge_6$ Series of Polar Intermetallics (R = Rare-Earth Metal). <i>Inorganic Chemistry</i> , 2015, 54, 2411-2424.	4.0	13
112	Molecular coordination numbers and crystal structure of simple substances. <i>Computational and Theoretical Chemistry</i> , 1999, 489, 225-236.	1.5	12
113	An unusual (4,6)-coordinated copper(II) coordination polymer: High efficient degradation of organic dyes under visible light irradiation and electrochemical properties. <i>Polyhedron</i> , 2018, 148, 81-87.	2.2	12
114	Computational Search for Novel Zn-Ion Conductors – A Crystallochemical, Bond Valence, and Density Functional Study. <i>Journal of Physical Chemistry C</i> , 2021, 125, 17590-17599.	3.1	12
115	Analysis of the environment of beryllium, magnesium and alkaline earth atoms in oxygen-containing compounds. <i>Acta Crystallographica Section B: Structural Science</i> , 1999, 55, 139-146.	1.8	11
116	Structure-forming components in crystals of ternary and quaternary 3d-metal complex fluorides. <i>Acta Crystallographica Section B: Structural Science</i> , 2003, 59, 361-377.	1.8	11
117	Structure of a new high-pressure – high-temperature modification of antimony(III) oxide, β - Sb_2O_3 , from high-resolution synchrotron powder diffraction data. <i>Acta Crystallographica Section B: Structural Science</i> , 2012, 68, 1-7.	1.8	11
118	New types of two-layer nanoclusters with an icosahedral core. <i>Glass Physics and Chemistry</i> , 2013, 39, 229-234.	0.7	11
119	Molecular packings and specific-bonding patterns in sulfonamides. <i>New Journal of Chemistry</i> , 2014, 38, 4099-4106.	2.8	11
120	Topological methods for complex intermetallics. <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 2017, 232, 497-506.	0.8	11
121	A fascinating building unit: Mackay cluster in intermetallics. <i>Structural Chemistry</i> , 2017, 28, 133-140.	2.0	11
122	Crystal and electronic structure engineering of tin monoxide by external pressure. <i>Journal of Advanced Ceramics</i> , 2021, 10, 565-577.	17.4	11
123	Visualization and Quantification of Geometric Diversity in Metal – Organic Frameworks. <i>Chemistry of Materials</i> , 0, , .	6.7	11
124	Methods of crystallochemical analysis of supramolecular complexes by means of Voronoi – Dirichlet polyhedra: a study of cucurbituril host – guest compounds. <i>Acta Crystallographica Section B: Structural Science</i> , 2004, 60, 350-357.	1.8	10
125	Assembly models for zeolite crystal structures according to the data of topological analysis by the tiling method. <i>Crystallography Reports</i> , 2012, 57, 875-884.	0.6	10
126	Specific features of the crystal structure of polymorphous modifications of $KFeO_2$ and their correlation with ionic conductivity. <i>Physics of the Solid State</i> , 2013, 55, 1050-1056.	0.6	10

#	ARTICLE	IF	CITATIONS
127	Construction of five zinc coordination polymers with 4-substituted bis(trizole) and multicarboxylate ligands: Syntheses, structures and properties. <i>Polyhedron</i> , 2018, 155, 223-231.	2.2	10
128	Cluster self-organization of intermetallic systems: Quasi-spherical nanocluster precursors with internal Friauf polyhedra (A-172) and icosahedra (B-137) in the Li ₁₉ Na ₈ Ba ₁₅ (hP842) crystal structure. <i>Crystallography Reports</i> , 2010, 55, 1093-1099.	0.6	9
129	Structure and chemical composition of the new zeolite ISC-1 from the data of nanocluster modeling. <i>Glass Physics and Chemistry</i> , 2010, 36, 663-672.	0.7	9
130	Interpenetration of three-periodic networks in crystal structures: Description and classification methods, geometrical-topological conditions of implementation. <i>Journal of Structural Chemistry</i> , 2014, 55, 1308-1325.	1.0	9
131	Topos: Program package for topological analysis of crystal structures. <i>Journal of Structural Chemistry</i> , 1994, 34, 820-822.	1.0	8
132	A new set of molecular descriptors. <i>Acta Crystallographica Section B: Structural Science</i> , 2002, 58, 219-226.	1.8	8
133	Theoretical crystal chemistry of M _x (TO ₄) _y sulfates and selenates: Topological analysis and classification of suprapolyhedral invariants. <i>Crystallography Reports</i> , 2006, 51, 366-378.	0.6	8
134	Intentional selection of coordination compounds with the required thermochemical properties on the basis of the cambridge bank of structural data. <i>Russian Journal of Physical Chemistry A</i> , 2012, 86, 1340-1351.	0.6	8
135	Two new zinc(ii) coordination complexes with helix characteristics showing both interpenetration and self-catenation features: a platform for the synthesis of chiral and catenated structures assembled by length-modulated dicarboxylates. <i>Dalton Transactions</i> , 2014, 43, 15151-15158.	3.3	8
136	Combinatorial and topological modeling of cluster self-assembly of the crystal structure of zeolites. <i>Crystallography Reports</i> , 2015, 60, 453-465.	0.6	8
137	The role of local heteropolyhedral substitutions in the stoichiometry, topological characteristics and ion-migration paths in the eudialyte-related structures: a quantitative analysis. <i>Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials</i> , 2022, 78, 80-90.	1.1	8
138	Discovery of Electrides in Electron-Rich Non-Electride Materials via Energy Modification of Interstitial Electrons. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	8
139	Metal-organic frameworks as the basis for new-generation functional materials. <i>Russian Chemical Reviews</i> , 2022, 91, .	6.5	8
140	Analysis of Li ⁺ cation migration paths in oxygen-containing compounds. <i>Russian Journal of Electrochemistry</i> , 2009, 45, 417-428.	0.9	7
141	Cluster self-organization of crystal-forming systems: Suprapolyhedral cluster precursors and self-assembly of the icosahedral structure of ZrZn ₂₂ (cF184). <i>Crystallography Reports</i> , 2009, 54, 548-554.	0.6	7
142	Geometric and topological analysis of icosahedral structures of samson Mg ₂ Zn ₁₁ (cP39) Phases, K ₆ Na ₁₅ Tl ₁₈ H (cP40), and Tm ₃ In ₇ Co ₉ (cP46): Nanocluster precursors, self-assembly mechanism, and superstructure ordering. <i>Russian Journal of Inorganic Chemistry</i> , 2011, 56, 729-737.	1.3	7
143	Modeling of self-organization processes in crystal-forming systems: Symmetry and topological codes of cluster self-assembly of a 2D layered icosahedral structure of Sc ₁₈ B ₂₃ 8 (Pbam, oP514). <i>Glass Physics and Chemistry</i> , 2016, 42, 221-229.	0.7	7
144	An Unprecedented 3D Self-catenated Four-coordinated Dense Net of Silver-Organic Framework. <i>Bulletin of the Korean Chemical Society</i> , 2013, 34, 1891-1894.	1.9	7

#	ARTICLE	IF	CITATIONS
145	Vaporization of Molecular Coordination Organotitanium Compounds: Development of the Structure-Thermochemical Approach with Programmed Use of the Cambridge Structural Database. Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya, 2004, 30, 679-684.	1.0	5
146	Nanoclusters based on pentagondodecahedra with shells in the form of D32, D42, and D50 deltahedra in crystal structures of intermetallic compounds. Crystallography Reports, 2012, 57, 1-9.	0.6	5
147	On similarity of structure of icosahedral viral capsids and shells of metallic nanoclusters. Glass Physics and Chemistry, 2013, 39, 101-104.	0.7	5
148	Bergman, Bergman-based and 63-atom nanoclusters in intermetallics. Structural Chemistry, 2016, 27, 1685-1692.	2.0	5
149	Perceiving Zeolite Self-Assembly: A Combined Top-Down and Bottom-Up Approach within the Tiling Model. Journal of Physical Chemistry C, 2020, 124, 1523-1528.	3.1	5
150	A Comparative Analysis of Crystal Lattice Topology in Molybdates and Binary Compounds. Journal of Structural Chemistry, 2001, 42, 436-445.	1.0	4
151	Hierarchical crystal-chemical analysis of binary intermetallic compounds. Russian Journal of Inorganic Chemistry, 2007, 52, 1577-1585.	1.3	4
152	Computer modeling of self-assembly of the crystal structure of zeolite Na ₃₈₄ [Al ₃₈₄ Si ₃₈₄ O ₁₅₃₆](H ₂ O) ₄₂₂ (LTN, cF4080) from suprapolyhedral cluster precursors AB 2 (A-K 48, B-K 24). Crystallography Reports, 2012, 57, 360-368.	0.6	4
153	Computer simulation of the self-assembly of crystal structures of zeolites Ca ₆₄ (Sr,K,Ba) ₄₈ (Cu ₁₂ (O,Cl)) ₄ [Si ₁₉₂ Al ₁₉₂ O ₇₈₆](H ₂ O) _n (tschoertnerite, TSC, V = 31 614 Å ³) and Ca ₂ K ₂ [Al ₆ Si ₆ O ₂₄](H ₂ O) ₁₀ (willhendersonite, cha, V = 804 Å ³) from template nanocluster precursors K48 and K12. Crystallography Reports, 2013, 58, 531-540.	0.6	4
154	Modeling of self-organization processes in crystal-forming systems: Templated precursor nanoclusters T48 and the self-assembly of crystal structures of 15-crown-5, Na-FAU, 18-crown-6, Na-EMT, and Ca,Ba-TSC zeolites. Russian Journal of Inorganic Chemistry, 2015, 60, 469-482.	1.3	4
155	Symmetry and topology code of the cluster self-assembly of framework MT structures of alumophosphates AlPO ₄ (H ₂ O) ₂ (metavariscite and variscite) and Al ₂ (PO ₄) ₂ (H ₂ O) ₃ (APC). Crystallography Reports, 2017, 62, 174-184.	0.6	4
156	Sulfur- and Selenium-Containing Compounds Potentially Exhibiting Al Ion Conductivity. Chemistry - A European Journal, 2019, 25, 8623-8629.	3.3	4
157	Computational design of materials for metal-ion batteries. , 2023, , 404-429.		4
158	Mining Knowledge from Crystal Structures: Oxidation States of Oxygen-Coordinated Metal Atoms in Ionic and Coordination Compounds. Journal of Chemical Information and Modeling, 2022, 62, 2332-2340.	5.4	4
159	Analysis of microporous mineral phases with Voronoi-Dirichlet polyhedra. European Journal of Mineralogy, 2006, 17, 819-827.	1.3	3
160	Comparative crystal-chemical analysis of d-metal sulfides, selenides, and tellurides and binary compounds. Russian Journal of Inorganic Chemistry, 2006, 51, 590-598.	1.3	3
161	Cluster self-organization of intermetallic systems: Nanocluster precursors (i-K8, i-K6, K4) and self-assembly of crystal structures Ir ₈ Mg ₅₈ (cF396), Ir ₇ Mg ₄₄ (cF408), and Ir ₆ Mg ₂₆ (hR96). Russian Journal of Inorganic Chemistry, 2010, 55, 1909-1918.	1.3	3
162	Cluster self-organization of germanate systems: Suprapolyhedral precursor nanoclusters and crystal structures re]20100419. Russian Journal of Inorganic Chemistry, 2011, 56, 1572-1578.	1.3	3

#	ARTICLE	IF	CITATIONS
163	Totally unimodular nets. Acta Crystallographica Section A: Foundations and Advances, 2012, 68, 286-294.	0.3	3
164	Structural chemistry of organo-siloxanes: Composition and structure of Si _n (O,C) _m (n = 2â€“21) clusters with Si-O-Si bridging bonds. Glass Physics and Chemistry, 2014, 40, 180-189.	0.7	3
165	Combinatorial-topological modeling of the cluster self-assembly of crystal structures of zeolites of the GME, AFX, AFT, and ISC-2 family. Glass Physics and Chemistry, 2015, 41, 443-452.	0.7	3
166	A universal algorithm for finding the shortest distance between systems of points. Acta Crystallographica Section A: Foundations and Advances, 2019, 75, 827-832.	0.1	3
167	Polymorphism and topological features of compounds with the general formula $A_xB_yC_z$	2.9	3
168	Generating triply periodic surfaces from crystal structures: the tiling approach and its application to zeolites. Acta Crystallographica Section A: Foundations and Advances, 2022, 78, 327-336.	0.1	3
169	Topology of the structure of metal sublattices in inorganic compounds. Journal of Structural Chemistry, 1996, 37, 99-105.	1.0	2
170	Title is missing!. Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya, 2002, 28, 510-520.	1.0	2
171	Comparative crystal-chemical analysis of simple sulfites and selenites and binary compounds. Russian Journal of Inorganic Chemistry, 2006, 51, 581-589.	1.3	2
172	Comparative crystal-chemical analysis of anhydrous salts My(TQ4) _z (T = Si, Ge, P, As; Q = S, Se, Te) and binary compounds. Russian Journal of Inorganic Chemistry, 2006, 51, 759-768.	1.3	2
173	Periodic nets and tilings: possibilities for analysis and design of porous materials. Studies in Surface Science and Catalysis, 2007, 170, 1637-1645.	1.5	2
174	An analysis of migration paths of Li ⁺ cations in ternary oxygen-containing compounds Li _p X _q O _r . Crystallography Reports, 2008, 53, 930-936.	0.6	2
175	Topological systematization of the framework coordination polymers formed by iron, cobalt, or nickel complexes. Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya, 2011, 37, 81-94.	1.0	2
176	Geometric and topological analysis of zeolite crystal structures by the tiling method: The model of structure of Na,K-paulingite (PAU) Na ₈ 2K ₇ 2[Al ₁₅ Si ₅ 18O ₁₃₄₄] · wH ₂ O. Russian Journal of Inorganic Chemistry, 2011, 56, 1782-1787.	1.3	2
177	New icosahedral nanoclusters in crystal structures of intermetallic compounds: Topological types of 50-atom deltahedra D ₅₀ in samson phases Î ² -Mg ₂ Al ₃ and Ê-Mg ₂₃ Al ₃₀ . Crystallography Reports, 2012, 57, 885-891.	0.6	2
178	Mechanism of structural phase transitions in the Li ₄ GeO ₄ -ZnGeO ₄ system: Computer modeling and identification of invariant nanocluster structures in Li ₄ GeO ₄ , LISICON Li ₆ Zn(GeO ₄) ₂ , and Li ₄ Zn ₂ (GeO ₄) ₂ (Î ³ phase). Russian Journal of Inorganic Chemistry, 2012, 57, 846-853.	1.3	2
179	Synthesis, Structures, and Properties of Cadmium(II) and Nickel(II) Coordination Polymers Based on a 4,4â€“Biphenyl-Containing Ligand and Aliphatic Carboxylic Acids. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2016, 642, 1184-1190.	1.2	2
180	Combinatorial-topological modeling of the cluster self-assembly of zeolite crystal structures: computer search for molecular templates for new zeolite ISC-2. Russian Chemical Bulletin, 2016, 65, 29-39.	1.5	2

#	ARTICLE	IF	CITATIONS
181	Construction of (3,8)-connected three-dimensional cobalt(II) and copper(II) coordination polymers with 1,3-bis[(1,2,4-triazol-4-yl)methyl]benzene and benzene-1,3,5-tricarboxylate ligands. <i>Acta Crystallographica Section C, Structural Chemistry</i> , 2019, 75, 960-968.	0.5	2
182	A 1D $\hat{=}$ 3D Two-Fold Interpenetration Array Formed by Hydrogen-Bonding Interactions. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2012, 638, 992-995.	1.2	1
183	Topological systematization of layered coordination compounds of Cu, Ag, Zn, and Cd. <i>Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya</i> , 2012, 38, 309-314.	1.0	1
184	From Simple to Complex: Design of Inorganic Crystal Structures with a Topologically Extended Zintl-Klemm Concept. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 8114-8120.	4.6	1
185	Monolayer self-organization of cyclodextrins on carbon surface. <i>Journal of the Chinese Chemical Society</i> , 2020, 67, 1778-1782.	1.4	1
186	Local and global topology of two-dimensional structural groups. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2009, 65, s306-s306.	0.3	1
187	The taxonomy of rod-packing coordination networks (CNs). <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2016, 72, s435-s435.	0.1	1
188	Topological transformations in metal-organic frameworks: a prospective design route?. <i>CrystEngComm</i> , 2022, 24, 2914-2924.	2.6	1
189	Crystal structure of $\text{UO}_2\text{SO}_4 \cdot 2\text{CH}_3\text{CONH}_2 \cdot 2\text{H}_2\text{O}$. <i>Journal of Structural Chemistry</i> , 1990, 31, 345-348.	1.0	0
190	Crystal structure of $\text{UO}_2\text{SO}_4 \cdot \frac{1}{2}\text{CH}_3\text{CON}(\text{CH}_3)_2$, a new type of coordination of sulfato groups in uranyl complexes. <i>Journal of Structural Chemistry</i> , 1991, 31, 804-806.	1.0	0
191	Analysis of Lanthanide f^0 -Complexes Containing N, P, and As Atoms. <i>Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya</i> , 2003, 29, 38-45.	1.0	0
192	Topological analysis of MOFs with entanglements of 2-periodic structural groups. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2009, 65, s306-s306.	0.3	0
193	Icosahedral nanoclusters-precursors and self-assembly of crystal structures of the WAl_{12} (Im-3, cl26) family and sillenite $\text{Bi}_{12}\text{SiO}_{20}$ (I23, cl66). <i>Glass Physics and Chemistry</i> , 2014, 40, 591-599.	0.7	0
194	SACADA - the database of three periodic carbon allotropes. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2015, 71, s356-s356.	0.1	0
195	On the relation between topology of halogen-bonded molecular crystals and type of halogen-halogen contacts. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2015, 71, s454-s454.	0.1	0
196	A knowledge database for intermetallics: the collection of Topological Types of Nanoclusters. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2015, 71, s357-s357.	0.1	0
197	Rod packing nets in 3-periodic metal-organic frameworks. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2015, 71, s357-s357.	0.1	0
198	Structural chemistry of metal inorganic 3D MT frameworks. Templated nanoclusters-precursors $\text{Ga}_2(\text{PO}_4)_2\text{F}_2$ and $\text{Ga}_2(\text{PO}_4)_2(\text{HF})\text{F}_2$ and self-assembly of crystalline gallophosphate structures $(\text{NH}_4)_2[\text{Ga}_2(\text{PO}_4)_2\text{F}_2]$ (KTP-Type) and $(\text{NH}_4)_2[\text{Ga}_2(\text{PO}_4)_2(\text{HF})\text{F}_2]$ (p-KTP-Type). <i>Glass Physics and Chemistry</i> , 2015, 41, 561-571.	0.7	0

#	ARTICLE	IF	CITATIONS
199	Two-shell nanoclusters in intermetallic compounds: beyond the icosahedral core. Acta Crystallographica Section A: Foundations and Advances, 2016, 72, s316-s316.	0.1	0
200	Topological collections and knowledge bases for applications in crystal engineering of coordination compounds. Acta Crystallographica Section A: Foundations and Advances, 2016, 72, s165-s165.	0.1	0
201	Topological analysis of self-catenated motifs in coordination networks. Acta Crystallographica Section A: Foundations and Advances, 2016, 72, s434-s434.	0.1	0
202	Can we predict Al ion conductors? A combination of crystallographic and energetic evaluation tools. Acta Crystallographica Section A: Foundations and Advances, 2016, 72, s291-s291.	0.1	0
203	Crystal structure, microstructure and ionic conductivity of the cost-efficient sodium solid electrolyte Na ₅ YSi ₄ O ₁₂ . Acta Crystallographica Section A: Foundations and Advances, 2016, 72, s288-s288.	0.1	0
204	Modeling of self-organization in crystal-forming systems: Symmetry and topology codes of cluster self-assembly of icosahedral structure Sc ₁₂ B ₁₈ S ₉ (P6/mmm, hP212). Glass Physics and Chemistry, 2017, 43, 115-124.	0.7	0
205	Topological approach for the design of new materials. Acta Crystallographica Section A: Foundations and Advances, 2017, 73, C21-C21.	0.1	0
206	Multilevel topological analysis in application to design of coordination networks. Acta Crystallographica Section A: Foundations and Advances, 2017, 73, C73-C73.	0.1	0
207	4. Battery Materials. , 2018, , 75-260.		0
208	A topological study of three-dimensional hydrogen-bonded frameworks. Acta Crystallographica Section A: Foundations and Advances, 2013, 69, s484-s484.	0.3	0
209	4-150-atom Lennard-Jones clusters in intermetallics. Acta Crystallographica Section A: Foundations and Advances, 2013, 69, s457-s457.	0.3	0
210	Topological properties of crystal structures: from description to prediction. Acta Crystallographica Section A: Foundations and Advances, 2015, 71, s74-s74.	0.1	0
211	The nanocluster approach to elucidate complex intermetallics. Acta Crystallographica Section A: Foundations and Advances, 2015, 71, s54-s54.	0.1	0
212	Crystallochemical analysis of ion conductivity in K ⁺ -oxygen containing inorganic compounds. Acta Crystallographica Section A: Foundations and Advances, 2016, 72, s292-s293.	0.1	0
213	Assessment of potential Al ion conductors from large crystallographic databases. Acta Crystallographica Section A: Foundations and Advances, 2017, 73, C328-C328.	0.1	0
214	Nanocluster model and its application for crystal structure prediction of complex intermetallics. Acta Crystallographica Section A: Foundations and Advances, 2018, 74, e54-e54.	0.1	0
215	Rules for designing rod metal-organic frameworks: a topological approach. Acta Crystallographica Section A: Foundations and Advances, 2019, 75, e513-e513.	0.1	0
216	Crystallochemical computational tools, web services, databases, and approaches for joining researchers over the world. Acta Crystallographica Section A: Foundations and Advances, 2019, 75, e722-e722.	0.1	0