

Vladislav A Blatov

List of Publications by Year in descending order

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216
papers

13,086
citations

44069

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111
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226
all docs

226
docs citations

226
times ranked

7456
citing authors

#	ARTICLE	IF	CITATIONS
1	Computational design of materials for metal-ion batteries. , 2023, , 404-429.		4
2	Topological methods for analysis and design of coordination polymers. Russian Chemical Reviews, 2022, 91, .	6.5	17
3	The role of local heteropolyhedral substitutions in the stoichiometry, topological characteristics and ion-migration paths in the eudialyte-related structures: a quantitative analysis. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2022, 78, 80-90.	1.1	8
4	Discovery of Electrifies in Electron-Rich Non-Electride Materials via Energy Modification of Interstitial Electrons. Advanced Functional Materials, 2022, 32, .	14.9	8
5	Polymorphism and topological features of compounds with the general formula $A_{x-1}B_xM_{1-x}M'$	2.9	3
6	Topological transformations in metal-organic frameworks: a prospective design route?. CrystEngComm, 2022, 24, 2914-2924.	2.6	1
7	Metal-organic frameworks as the basis for new-generation functional materials. Russian Chemical Reviews, 2022, 91, .	6.5	8
8	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
9	Topological representations of crystal structures: generation, analysis and implementation in the TopCryst system. Science and Technology of Advanced Materials Methods, 2022, 2, 250-265.	1.3	16
10	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
11	Topology: ToposPro. , 2021, , 389-412.		23
12	CrystalGrower: a generic computer program for Monte Carlo modelling of crystal growth. Chemical Science, 2021, 12, 1126-1146.	7.4	18
13	Discovery of intrinsic two-dimensional antiferromagnets from transition-metal borides. Nanoscale, 2021, 13, 8254-8263.	5.6	31
14	Simplify to understand: how to elucidate crystal structures?. Structural Chemistry, 2021, 32, 507-519.	2.0	39
15	Crystal and electronic structure engineering of tin monoxide by external pressure. Journal of Advanced Ceramics, 2021, 10, 565-577.	17.4	11
16	B_{5N_3} and B_7N_5 Monolayers with High Carrier Mobility and Excellent Optical Performance. Journal of Physical Chemistry Letters, 2021, 12, 4823-4832.	4.6	18
17	Computational Search for Novel Zn-Ion Conductors: A Crystallochemical, Bond Valence, and Density Functional Study. Journal of Physical Chemistry C, 2021, 125, 17590-17599.	3.1	12
18	High-throughput systematic topological generation of low-energy carbon allotropes. Npj Computational Materials, 2021, 7, .	8.7	14

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19	Perceiving Zeolite Self-Assembly: A Combined Top-Down and Bottom-Up Approach within the Tiling Model. <i>Journal of Physical Chemistry C</i> , 2020, 124, 1523-1528.	3.1	5
20	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
21	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
22	Two d10 metal coordination polymers as dual functional luminescent probes for sensing of Fe ³⁺ ions and acetylacetonone with high selectivity and sensitivity. <i>Journal of Solid State Chemistry</i> , 2020, 289, 121460.	2.9	27
23	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
24	Monolayer self-organization of cyclodextrins on carbon surface. <i>Journal of the Chinese Chemical Society</i> , 2020, 67, 1778-1782.	1.4	1
25	Nanoporous materials with predicted zeolite topologies. <i>RSC Advances</i> , 2020, 10, 17760-17767.	3.6	15
26	The CSD and knowledge databases: from answers to questions. <i>CrystEngComm</i> , 2020, 22, 7298-7307.	2.6	18
27	From clusters to crystals: scale chemistry of intermetallics. <i>Structural Chemistry</i> , 2019, 30, 2015-2027.	2.0	32
28	A universal algorithm for finding the shortest distance between systems of points. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2019, 75, 827-832.	0.1	3
29	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
30	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
31	Sulfur- and Selenium-Containing Compounds Potentially Exhibiting Al Ion Conductivity. <i>Chemistry - A European Journal</i> , 2019, 25, 8623-8629.	3.3	4
32	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
33	The Aluminum-Ion Battery: A Sustainable and Seminal Concept?. <i>Frontiers in Chemistry</i> , 2019, 7, 268.	3.6	155
34	Network topological model of reconstructive solid-state transformations. <i>Scientific Reports</i> , 2019, 9, 6007.	3.3	21
35	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
36	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

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37	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
38	Topology-based crystal structure generator. <i>Computer Physics Communications</i> , 2019, 236, 1-7.	7.5	67
39	Rules for designing rod metal-organic frameworks: a topological approach. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2019, 75, e513-e513.	0.1	0
40	Crystallochemical computational tools, web services, databases, and approaches for joining researchers over the world. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2019, 75, e722-e722.	0.1	0
41	Predicting New Zeolites: A Combination of Thermodynamic and Kinetic Factors. <i>Chemistry of Materials</i> , 2018, 30, 2829-2837.	6.7	21
42	A luminescent zinc 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
43	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
44	Topology of Intermetallic Structures: From Statistics to Rational Design. <i>Accounts of Chemical Research</i> , 2018, 51, 21-30.	15.6	30
45	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
46	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
47	4. Battery Materials. , 2018, , 75-260.		0
48	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
49	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
50	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
51	Nanocluster model and its application for crystal structure prediction of complex intermetallics. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2018, 74, e54-e54.	0.1	0
52	Crystal Structure and Li-Ion Transport in $\text{Li}_2\text{CoPO}_4\text{F}$ High-Voltage Cathode Material for Li-Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2017, 121, 3194-3202.	3.1	37
53	Modeling of self-organization in crystal-forming systems: Symmetry and topology codes of cluster self-assembly of icosahedral structure $\text{Sc}_{12}\text{B}_{185}\text{C}_9$ (P6/mmm, hP212). <i>Glass Physics and Chemistry</i> , 2017, 43, 115-124.	0.7	0
54	Predicting crystal growth via a unified kinetic three-dimensional partition model. <i>Nature</i> , 2017, 544, 456-459.	27.8	88

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55	Topological methods for complex intermetallics. <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 2017, 232, 497-506.	0.8	11
56	How 2-periodic coordination networks are interweaved: entanglement isomerism and polymorphism. <i>CrystEngComm</i> , 2017, 19, 1993-2006.	2.6	51
57	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
58	Packing topology in crystals of proteins and small molecules: a comparison. <i>Scientific Reports</i> , 2017, 7, 13209.	3.3	31
59	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
60	A series of $\text{Cd}(\text{scp})_2$ 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
61	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
62	Symmetry and topology code of the cluster self-assembly of framework MT structures of alumophosphates $\text{AlPO}_4(\text{H}_2\text{O})_2$ (metavariscite and variscite) and $\text{Al}_2(\text{PO}_4)_2(\text{H}_2\text{O})_3$ (APC). <i>Crystallography Reports</i> , 2017, 62, 174-184.	0.6	4
63	A fascinating building unit: Mackay cluster in intermetallics. <i>Structural Chemistry</i> , 2017, 28, 133-140.	2.0	11
64	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
65	Topological approach for the design of new materials. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2017, 73, C21-C21.	0.1	0
66	Multilevel topological analysis in application to design of coordination networks. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2017, 73, C73-C73.	0.1	0
67	Assessment of potential Al ion conductors from large crystallographic databases. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2017, 73, C328-C328.	0.1	0
68	Two-shell nanoclusters in intermetallic compounds: beyond the icosahedral core. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2016, 72, s316-s316.	0.1	0
69	Bergman, Bergman-based and 63-atom nanoclusters in intermetallics. <i>Structural Chemistry</i> , 2016, 27, 1685-1692.	2.0	5
70	Modeling of self-organization processes in crystal-forming systems: Symmetry and topological codes of cluster self-assembly of a 2D layered icosahedral structure of $\text{Sc}_{18}\text{B}_{238}$ (Pbam, oP514). <i>Glass Physics and Chemistry</i> , 2016, 42, 221-229.	0.7	7
71	Knowledge-Based Approaches to H-Bonding Patterns in Heterocycle-1-Carbohydrazoneamides. <i>Crystal Growth and Design</i> , 2016, 16, 6354-6362.	3.0	14
72	Topological collections and knowledge bases for applications in crystal engineering of coordination compounds. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2016, 72, s165-s165.	0.1	0

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73	Topological analysis of self-catenated motifs in coordination networks. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2016, 72, s434-s434.	0.1	0
74	Can we predict Al ion conductors? A combination of crystallographic and energetic evaluation tools. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2016, 72, s291-s291.	0.1	0
75	Crystal structure, microstructure and ionic conductivity of the cost-efficient sodium solid electrolyte Na ₅ YSi ₄ O ₁₂ . <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2016, 72, s288-s288.	0.1	0
76	Synthesis, Structures, and Properties of Cadmium(II) and Nickel(II) Coordination Polymers Based on a 4,4'-Biphenyl-Containing Ligand and Aliphatic Carboxylic Acids. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2016, 642, 1184-1190.	1.2	2
77	Combinatorial-topological modeling of the cluster self-assembly of zeolite crystal structures: computer search for molecular templates for new zeolite ISC-2. <i>Russian Chemical Bulletin</i> , 2016, 65, 29-39.	1.5	2
78	A method for topological analysis of rod packings. <i>Structural Chemistry</i> , 2016, 27, 1605-1611.	2.0	43
79	An unprecedented 'strongly' self-catenated MOF containing inclined catenated honeycomb-like units. <i>Dalton Transactions</i> , 2016, 45, 2426-2429.	3.3	87
80	The taxonomy of rod-packing coordination networks (CNS). <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2016, 72, s435-s435.	0.1	1
81	Crystallochemical analysis of ion conductivity in K ⁺ -oxygen containing inorganic compounds. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2016, 72, s292-s293.	0.1	0
82	SACADA - the database of three periodic carbon allotropes. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2015, 71, s356-s356.	0.1	0
83	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
84	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
85	On the Way to New Possible Na ⁺ 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
86	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
87	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
88	Structural chemistry of metal inorganic 3D MT frameworks. Templated nanoclusters "precursors Ga ₂ (PO ₄) ₂ F ₂ and Ga ₂ (PO ₄) ₂ (HF) ₂ and self-assembly of crystalline gallophosphate structures (NH ₄) ₂ [Ga ₂ (PO ₄) ₂ F ₂](KTP-Type) and (NH ₄) ₂ [Ga ₂ (PO ₄) ₂ (HF) ₂] (p-KTP-Type). <i>Glass Physics and Chemistry</i> , 2015, 41, 561-571.	0.7	0
89	Vacancy Ordering as a Driving Factor for Structural Changes in Ternary Germanides: The New R ₂ Zn _{1-x} Ge ₆ Series of Polar Intermetallics (R = Rare-Earth Metal). <i>Inorganic Chemistry</i> , 2015, 54, 2411-2424.	4.0	13
90	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. <i>Russian Journal of Inorganic Chemistry</i> , 2015, 60, 469-482.	1.3	4

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91	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
92	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
93	Topological Motifs in Cyanometallates: From Building Units to Three-Periodic Frameworks. <i>Chemical Reviews</i> , 2015, 115, 12286-12319.	47.7	128
94	Combinatorial-topological modeling of the cluster self-assembly of crystal structures of zeolites of the GME, AFX, AFT, and ISC-2 family. <i>Glass Physics and Chemistry</i> , 2015, 41, 443-452.	0.7	3
95	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
96	Topological properties of crystal structures: from description to prediction. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2015, 71, s74-s74.	0.1	0
97	The nanocluster approach to elucidate complex intermetallics. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2015, 71, s54-s54.	0.1	0
98	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
99	Icosahedral nanoclusters-precursors and self-assembly of crystal structures of the WA12 (Im-3, cI26) family and sillenite Bi ₁₂ SiO ₂₀ (I23, cI66). <i>Glass Physics and Chemistry</i> , 2014, 40, 591-599.	0.7	0
100	Multilevel topological description of molecular packings in 1,2-benzothiazines. <i>CrystEngComm</i> , 2014, 16, 1963-1970.	2.6	44
101	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
102	Molecular packings and specific-bonding patterns in sulfonamides. <i>New Journal of Chemistry</i> , 2014, 38, 4099-4106.	2.8	11
103	Lithium-cation conductivity and crystal structure of lithium diphosphate. <i>Journal of Solid State Chemistry</i> , 2014, 211, 170-175.	2.9	30
104	Structural chemistry of organo-siloxanes: Composition and structure of Si _n (O,C) _m (n = 2â€“21) clusters with Si-O-Si bridging bonds. <i>Glass Physics and Chemistry</i> , 2014, 40, 180-189.	0.7	3
105	Entangled Two-Dimensional Coordination Networks: A General Survey. <i>Chemical Reviews</i> , 2014, 114, 7557-7580.	47.7	253
106	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
107	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
108	New types of two-layer nanoclusters with an icosahedral core. <i>Glass Physics and Chemistry</i> , 2013, 39, 229-234.	0.7	11

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109	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
110	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. <i>Crystallography Reports</i> , 2013, 58, 531-540.	0.6	4
111	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
112	β-Brass Polyhedral Core in Intermetallics: The Nanocluster Model. <i>Inorganic Chemistry</i> , 2013, 52, 13094-13107.	4.0	57
113	On similarity of structure of icosahedral viral capsids and shells of metallic nanoclusters. <i>Glass Physics and Chemistry</i> , 2013, 39, 101-104.	0.7	5
114	A Database of Topological Representations of Polynuclear Nickel Compounds. <i>European Journal of Inorganic Chemistry</i> , 2013, 2013, 520-526.	2.0	20
115	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
116	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
117	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
118	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
119	A topological study of three-dimensional hydrogen-bonded frameworks. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2013, 69, s484-s484.	0.3	0
120	4-150-atom Lennard-Jones clusters in intermetallics. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2013, 69, s457-s457.	0.3	0
121	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
122	Synthesis, structure, topology and magnetic properties of cobalt(ii) coordination polymers with 2-nitrobiphenyl-4,4'-dicarboxylic acid and bis(pyridyl) ligands. <i>Dalton Transactions</i> , 2012, 41, 14316.	3.3	43
123	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
124	New icosahedral nanoclusters in crystal structures of intermetallic compounds: Topological types of 50-atom deltahedra D ₅₀ in samson phases β ² -Mg ₂ Al ₃ and β ³ -Mg ₂₃ Al ₃₀ . <i>Crystallography Reports</i> , 2012, 57, 885-891.	0.6	2
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	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

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127	Totally unimodular nets. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2012, 68, 286-294.	0.3	3
128	Structure of a new high-pressure high-temperature modification of antimony(III) oxide, β -Sb ₂ O ₃ , from high-resolution synchrotron powder diffraction data. <i>Acta Crystallographica Section B: Structural Science</i> , 2012, 68, 1-7.	1.8	11
129	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
130	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
131	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
132	Nanocluster analysis of intermetallic structures with the program package TOPOS. <i>Structural Chemistry</i> , 2012, 23, 955-963.	2.0	488
133	High-nuclearity cobalt coordination clusters: Synthetic, topological and magnetic aspects. <i>Coordination Chemistry Reviews</i> , 2012, 256, 1246-1278.	18.8	204
134	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
135	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 (β phase). <i>Russian Journal of Inorganic Chemistry</i> , 2012, 57, 846-853.	1.3	2
136	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
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