

Nikolay A, Tumanov

List of Publications by Year in descending order

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91
papers

1,642
citations

257450

24
h-index

361022

35
g-index

96
all docs

96
docs citations

96
times ranked

1801
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis of a Bimetallic Dodecaborate $\text{LiNaB}_{12}\text{H}_{12}$ with Outstanding Superionic Conductivity. <i>Chemistry of Materials</i> , 2015, 27, 5483-5486.	6.7	97
2	Pressure-induced phase transitions in α -L-alanine, revisited. <i>Acta Crystallographica Section B: Structural Science</i> , 2010, 66, 458-471.	1.8	73
3	<i>In Situ</i> Diffraction Study of Catalytic Hydrogenation of VO_2 : Stable Phases and Origins of Metallicity. <i>Journal of the American Chemical Society</i> , 2014, 136, 8100-8109.	13.7	67
4	Pushing the Lewis Acidity Boundaries of Boron Compounds With Non-Planar Triarylboranes Derived from Triptycenes. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 16889-16893.	13.8	66
5	Phase Transitions in the Crystals of α - and β -Cysteine on Cooling: The Role of the Hydrogen-Bond Distortions and the Side-Chain Motions. 2. β -Cysteine. <i>Journal of Physical Chemistry B</i> , 2009, 113, 5262-5272.	2.6	52
6	Low temperature/high pressure polymorphism in dl-cysteine. <i>CrystEngComm</i> , 2010, 12, 2551.	2.6	49
7	Anion-induced Ag^+ self-assemblies with electron deficient aromatic ligands: anion- π -system interactions as a driving force for templated coordination networks. <i>Chemical Communications</i> , 2015, 51, 9547-9550.	4.1	48
8	Manganese borohydride; synthesis and characterization. <i>Dalton Transactions</i> , 2015, 44, 3988-3996.	3.3	46
9	Controlled Generation of C_9B oratriptycene by Lewis Adduct Dissociation: Accessing a Non-Planar Triarylborane. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 12402-12406.	13.8	46
10	Opening Pandora's Box: Chirality, Polymorphism, and Stoichiometric Diversity in Flurbiprofen/Proline Cocrystals. <i>Crystal Growth and Design</i> , 2018, 18, 954-961.	3.0	44
11	Hydrazine selective dual signaling chemodosimetric probe in physiological conditions and its application in live cells. <i>Analytica Chimica Acta</i> , 2015, 893, 84-90.	5.4	35
12	Innovative <i>In Situ</i> Ball Mill for X-ray Diffraction. <i>Analytical Chemistry</i> , 2017, 89, 13176-13181.	6.5	35
13	Oxalamide-Functionalized Metal Organic Frameworks for CO_2 Adsorption. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 33188-33198.	8.0	35
14	Complex structures arising from the self-assembly of a simple organic salt. <i>Nature</i> , 2021, 590, 275-278.	27.8	34
15	Structure solution and refinement from powder or single-crystal diffraction data? Pros and cons: An example of the high-pressure β -polymorph of glycine. <i>Powder Diffraction</i> , 2008, 23, 307-316.	0.2	33
16	Taming the Lewis Superacidity of Non-Planar Boranes: C-H Bond Activation and Non-Classical Binding Modes at Boron. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	33
17	Structural insight into cocrystallization with zwitterionic co-formers: cocrystals of S-naproxen. <i>CrystEngComm</i> , 2014, 16, 8185.	2.6	31
18	X-ray diffraction and Raman study of α -L-alanine at high pressure: revision of phase transitions. <i>Acta Crystallographica Section B: Structural Science</i> , 2012, 68, 412-423.	1.8	30

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19	Î ² -Alanine under pressure: towards understanding the nature of phase transitions. <i>CrystEngComm</i> , 2015, 17, 2074-2079.	2.6	30
20	Are meloxicam dimers really the structure-forming units in the "meloxicam" carboxylic acid™ co-crystals family? Relation between crystal structures and dissolution behaviour. <i>CrystEngComm</i> , 2012, 14, 305-313.	2.6	28
21	Copper(II) complexes with tridentate halogen-substituted Schiff base ligands: synthesis, crystal structures and investigating the effect of halogenation, leaving groups and ligand flexibility on antiproliferative activities. <i>Dalton Transactions</i> , 2021, 50, 3990-4007.	3.3	28
22	The role of fluids in high-pressure polymorphism of drugs: different behaviour of Î ² -chlorpropamide in different inert gas and liquid media. <i>RSC Advances</i> , 2016, 6, 92629-92637.	3.6	25
23	Assessing Density Functional Theory Approaches for Predicting the Structure and Relative Energy of Salicylideneaniline Molecular Switches in the Solid State. <i>Journal of Physical Chemistry C</i> , 2017, 121, 6898-6908.	3.1	25
24	Playing with Isomerism: Cocrystallization of Isomeric N-Salicylideneaminopyridines with Perfluorinated Compounds as Halogen Bond Donors and Its Impact on Photochromism. <i>Crystal Growth and Design</i> , 2018, 18, 6833-6842.	3.0	25
25	Pushing the Lewis Acidity Boundaries of Boron Compounds With Non-Planar Triarylboranes Derived from Triptycenes. <i>Angewandte Chemie</i> , 2019, 131, 17045-17049.	2.0	25
26	ZnO/Carbon xerogel photocatalysts by low-pressure plasma treatment, the role of the carbon substrate and its plasma functionalization. <i>Journal of Colloid and Interface Science</i> , 2020, 570, 312-321.	9.4	25
27	Controlled Generation of 9-Boratriptycene by Lewis Adduct Dissociation: Accessing a Non-Planar Triarylborane. <i>Angewandte Chemie</i> , 2020, 132, 12502-12506.	2.0	25
28	Solid Aluminum Borohydrides for Prospective Hydrogen Storage. <i>ChemSusChem</i> , 2017, 10, 4725-4734.	6.8	24
29	Chiral Resolution of Mandelic Acid through Preferential Cocrystallization with Nefiracetam. <i>Crystal Growth and Design</i> , 2020, 20, 7979-7988.	3.0	24
30	Exploring polymorphism and stoichiometric diversity in naproxen/proline cocrystals. <i>CrystEngComm</i> , 2018, 20, 7308-7321.	2.6	23
31	Elucidating the elusive crystal structure of 2,4,6-tris(2-pyrimidyl)-1,3,5-triazine. <i>CrystEngComm</i> , 2015, 17, 2190-2195.	2.6	21
32	Facile synthesis of anhydrous alkaline earth metal dodecaborates MB ₁₂ H ₁₂ (M = Mg, Ca) from M(BH ₄) ₂ . <i>Dalton Transactions</i> , 2015, 44, 15882-15887.	3.3	21
33	Challenges in the synthetic routes to Mn(BH ₄) ₂ : insight into intermediate compounds. <i>Dalton Transactions</i> , 2015, 44, 6571-6580.	3.3	19
34	A Structural Analysis of Spiropyran and Spirooxazine Compounds and Their Polymorphs. <i>Crystals</i> , 2017, 7, 84.	2.2	18
35	Chiral Resolution of RS-Oxiracetam upon Cocrystallization with Pharmaceutically Acceptable Inorganic Salts. <i>Crystal Growth and Design</i> , 2020, 20, 2602-2607.	3.0	18
36	Preparation and studies of the co-crystals of meloxicam with carboxylic acids. <i>Russian Chemical Bulletin</i> , 2012, 61, 1798-1809.	1.5	17

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37	High-Pressure Study of Mn(BH ₄) ₂ Reveals a Stable Polymorph with High Hydrogen Density. <i>Chemistry of Materials</i> , 2016, 28, 274-283.	6.7	17
38	Acidochromic spiropyranâ€™merocyanine stabilisation in the solid state. <i>CrystEngComm</i> , 2018, 20, 3318-3327.	2.6	17
39	Halogen-bonded cocrystals of <i>N</i> -salicylidene Schiff bases and iodoperfluorinated benzenes: hydroxyl oxygen as a halogen bond acceptor. <i>CrystEngComm</i> , 2018, 20, 5332-5339.	2.6	17
40	Synthesis, Characterization, Biological Activity and Molecular Docking Studies of Novel Organotin(IV) Carboxylates. <i>Frontiers in Pharmacology</i> , 2022, 13, 864336.	3.5	17
41	Improving Nefiracetam Dissolution and Solubility Behavior Using a Cocrystallization Approach. <i>Pharmaceutics</i> , 2020, 12, 653.	4.5	16
42	Calix[6]arenes with halogen bond donor groups as selective and efficient anion transporters. <i>Chemical Communications</i> , 2022, 58, 6255-6258.	4.1	16
43	Complementary Synthetic Approaches toward 9-Phosphatriptycene and Structureâ€™Reactivity Investigations of Its Association with Sterically Hindered Lewis Acids. <i>Journal of Organic Chemistry</i> , 2019, 84, 11268-11274.	3.2	15
44	A Simple and Efficient Mechanochemical Route for the Synthesis of Salophen Ligands and of the Corresponding Zn, Ni, and Pd Complexes. <i>Molecules</i> , 2019, 24, 2314.	3.8	15
45	Two new structures in the glycineâ€™oxalic acid system. <i>Acta Crystallographica Section C: Crystal Structure Communications</i> , 2010, 66, o279-o283.	0.4	14
46	Does Chirality Influence the Tendency toward Cocrystal Formation?. <i>Crystal Growth and Design</i> , 2014, 14, 2880-2892.	3.0	14
47	3D-printed jars for ball-milling experiments monitored <i>in situ</i> by X-ray powder diffraction. <i>Journal of Applied Crystallography</i> , 2017, 50, 994-999.	4.5	14
48	Tetraphenylborate Anion Induces Photochromism in <i>N</i> -Salicylideneamino-1-alkylpyridinium Derivatives Through Formation of Tetra-Aryl Boxes. <i>Journal of Physical Chemistry C</i> , 2018, 122, 10999-11007.	3.1	13
49	Synthesis, structures and thermal decomposition of ammine Mx ₂ B ₁₂ H ₁₂ complexes (M = Li, Na, Ca). <i>Dalton Transactions</i> , 2017, 46, 7770-7781.	3.3	11
50	New Insights into Photochromic Properties of <i>N</i> -Salicylideneaniline Derivatives Using a Cocrystal Engineering Approach. <i>Crystal Growth and Design</i> , 2019, 19, 5544-5556.	3.0	11
51	Structural Analysis of <i>D</i> -Phenylglycinamide Salts Uncovers Potential Pitfalls in Chiral Resolution via Diastereomeric Salt Formation. <i>Crystal Growth and Design</i> , 2019, 19, 3652-3659.	3.0	11
52	Balancing fluorescence and singlet oxygen formation in pushâ€™pull type near-infrared BODIPY photosensitizers. <i>Journal of Materials Chemistry C</i> , 2022, 10, 9344-9355.	5.5	11
53	Merocyanines in a Halogen-Bonded Network Involving Inorganic Building Blocks. <i>Crystal Growth and Design</i> , 2020, 20, 608-616.	3.0	10
54	The Use of Switchable Polarity Solvents for the Synthesis of 16â€™Arylidene Steroids via Claisenâ€™Schmidt Condensation. <i>European Journal of Organic Chemistry</i> , 2018, 2018, 3236-3244.	2.4	9

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55	A coloring tool for spiropyrans: solid state metal-organic complexation versus salification. <i>CrystEngComm</i> , 2019, 21, 4925-4933.	2.6	9
56	Heteroleptic enantiopure Pd(<i>scp</i>)-complexes derived from halogen-substituted Schiff bases and 2-picolyamine: synthesis, experimental and computational characterization and investigation of the influence of chirality and halogen atoms on the anticancer activity. <i>New Journal of Chemistry</i> , 2021, 45, 9163-9180.	2.8	9
57	Photochemical Synthesis and Characterization of Xenon(VI) Hexafluoridomanganates(IV). <i>European Journal of Inorganic Chemistry</i> , 2017, 2017, 2130-2137.	2.0	8
58	Design and Synthesis of a New Soluble Natural \hat{I}^2 -Carboline Derivative for Preclinical Study by Intravenous Injection. <i>International Journal of Molecular Sciences</i> , 2019, 20, 1491.	4.1	8
59	Combining API in a dual-drug ternary cocrystal approach. <i>Chemical Communications</i> , 2020, 56, 13229-13232.	4.1	8
60	Taking advantage of solvate formation to modulate drug-drug ratio in clofaziminium diclofenac salts. <i>CrystEngComm</i> , 2021, 23, 185-201.	2.6	8
61	A new structure of a serotonin salt: comparison and conformational analysis of all known serotonin complexes. <i>Acta Crystallographica Section C: Crystal Structure Communications</i> , 2013, 69, 1055-1061.	0.4	7
62	Direct Access by Mechanochemistry or Sonochemistry to Protonated Merocyanines: Components of a Four-State Molecular Switch. <i>ChemistryOpen</i> , 2018, 7, 520-526.	1.9	7
63	Sterically hindered <i>ortho</i> -substituted phosphatriptycenes as configurationally stable <i>P</i> -chirogenic triarylphosphines. <i>Dalton Transactions</i> , 2021, 50, 4772-4777.	3.3	7
64	Synthesis of Azolium-dithiocarboxylate Zwitterions under Mild, Aerobic Conditions. <i>European Journal of Organic Chemistry</i> , 2021, 2021, 2025-2033.	2.4	7
65	First structurally characterized self-assembly of bipodal N-thiophosphorylated bis-thiourea with Coll: magnetic properties and thermal decomposition. <i>Dalton Transactions</i> , 2013, 42, 5532.	3.3	6
66	Experimental and theoretical study of hydrogen desorption process from Mn(BH ₄) ₂ . <i>Journal of Alloys and Compounds</i> , 2018, 735, 277-284.	5.5	6
67	Tribenzoatobismuth(III): a new polymorph. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2010, 66, m1248-m1248.	0.2	4
68	Using ammonia for reactive magnetron sputtering, a possible alternative to HiPIMS?. <i>Applied Surface Science</i> , 2020, 502, 144176.	6.1	4
69	Combining Two Antitubercular Drugs, Clofazimine and 4-Aminosalicylic Acid, in Order to Improve Clofazimine Aqueous Solubility and 4-Aminosalicylic Acid Thermal Stability. <i>Journal of Pharmaceutical Sciences</i> , 2020, 109, 3645-3652.	3.3	4
70	[6]-[9]Metacyclophanes: Synthesis, Crystal Structures, and NMR and UV Spectroscopy. <i>European Journal of Organic Chemistry</i> , 2017, 2017, 5410-5416.	2.4	3
71	Structural variety of clofaziminium salts: effect of the counter-ion on clofaziminium conformation and crystal packing. <i>Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials</i> , 2019, 75, 674-686.	1.1	3
72	Identifying, Characterizing, and Understanding Nefiracetam in Its Solid State Forms: A Potential Antidementia Drug. <i>Journal of Pharmaceutical Sciences</i> , 2019, 108, 3616-3622.	3.3	3

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73	Molecular Recognition of Strong Acids by Using a π -Ureido- π -Ferrocenyl Pyrimidine Receptor. <i>European Journal of Inorganic Chemistry</i> , 2019, 2019, 4095-4104.	2.0	2
74	A new method for obtaining fine powders of paracetamol for compression without excipients. <i>Doklady Physical Chemistry</i> , 2011, 437, 78-81.	0.9	1
75	Nanoporous solvate of N,N-phthaloyl-glycine. <i>Journal of Structural Chemistry</i> , 2012, 53, 606-609.	1.0	1
76	Methylene Bridging Effect on the Structures, Lewis Acidities and Optical Properties of Semi-planar Triarylboranes. <i>Chemistry - A European Journal</i> , 2021, 27, 1736-1743.	3.3	1
77	Synthesis, crystal structure and conformational analysis of an unexpected [1,5]dithiocine product of aminopyridine and thiovanillin. <i>Acta Crystallographica Section C, Structural Chemistry</i> , 2020, 76, 205-211.	0.5	1
78	High-pressure study of Mn(BH ₄) ₂ : new polymorphs with high hydrogen density. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2015, 71, s349-s350.	0.1	0
79	A kaleidoscope of hypercoordinated alkali metal imidazolates: single source precursors for hybrid borohydrides. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2015, 71, s312-s312.	0.1	0
80	Adsorption of hydrocarbons in the porous borohydride framework $\text{Mg}(\text{BH}_4)_2$. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2015, 71, s275-s275.	0.1	0
81	Role of pressure transmitting media in structural transformations of molecular crystals at high pressures. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2016, 72, s134-s134.	0.1	0
82	Innenteilbild: Controlled Generation of π -Boratriptycene by Lewis Adduct Dissociation: Accessing a Non-planar Triarylborane (<i>Angew. Chem.</i> 30/2020). <i>Angewandte Chemie</i> , 2020, 132, 12322-12322.	2.0	0
83	Ethoxycarbonyl functionalized Tröger's base alongside its congener dihydroquinazoline: A trick with crystallization. <i>Chemical Data Collections</i> , 2020, 25, 100339.	2.3	0
84	Triptycene Boronates, Boranes, and Boron Ate-complexes: Toward Sterically Hindered Triarylboranes and Trifluoroborates. <i>European Journal of Organic Chemistry</i> , 2021, 2021, 1440-1445.	2.4	0
85	Crystal structures of two alanyl piperidine analogues. <i>Acta Crystallographica Section E: Crystallographic Communications</i> , 2021, 77, 1095-1098.	0.5	0
86	Pressure-induced phase transitions in L-alanine, revisited. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2010, 66, s89-s89.	0.3	0
87	Acidochromic spiropyran-merocyanine stabilisation in the solid state. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2018, 74, a29-a29.	0.1	0
88	Study of thermo- and photochromic behaviour of a hydrazone system obtained by mechanosynthesis. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2018, 74, e399-e399.	0.1	0
89	Altering the solid-state photochromic behaviour of N-salicylideneaniline molecular switches by co-crystallization. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2018, 74, e356-e356.	0.1	0
90	(Mechano)synthesis, structure characterization and pharmacological evaluation of harmine derivatives as new anticancer compounds. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2018, 74, e399-e399.	0.1	0

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91	Structural study of bioisosteric derivatives of 5-(1 <i>H</i> -indol-3-yl)-benzotriazole and their ability to form chalcogen bonds. Acta Crystallographica Section E: Crystallographic Communications, 2022, 78, 418-424.	0.5	0