Yaroslav Khimyak

List of Publications by Year in descending order

124 papers	11,406 citations	61687 45 h-index	31191 106 g-index
130 all docs	130 docs citations	130 times ranked	12875 citing authors

#	Article	IF	Citations
1	Self-assembling, supramolecular chemistry and pharmacology of amphotericin B: Poly-aggregates, oligomers and monomers. Journal of Controlled Release, 2022, 341, 716-732.	4.8	24
2	Directing Crystallization Outcomes of Conformationally Flexible Molecules: Polymorphs, Solvates, and Desolvation Pathways of Fluconazole. Molecular Pharmaceutics, 2022, 19, 456-471.	2.3	13
3	Starch hydrogels as targeted colonic drug delivery vehicles. Carbohydrate Polymers, 2022, 289, 119413.	5.1	21
4	Octylamine-Modified Cellulose Nanocrystal-Enhanced Stabilization of Pickering Emulsions for Self-Healing Composite Coatings. ACS Applied Materials & Interfaces, 2022, 14, 12722-12733.	4.0	18
5	Molecular Level Characterisation of the Surface of Carbohydrate-Functionalised Mesoporous silica Nanoparticles (MSN) as a Potential Targeted Drug Delivery System via High Resolution Magic Angle Spinning (HR-MAS) NMR Spectroscopy. International Journal of Molecular Sciences, 2022, 23, 5906.	1.8	0
6	Chemoenzymatic Synthesis of Fluorinated Cellodextrins Identifies a New Allomorph for Celluloseâ€Like Materials**. Chemistry - A European Journal, 2021, 27, 1374-1382.	1.7	18
7	Monovalent Salt and pH-Induced Gelation of Oxidised Cellulose Nanofibrils and Starch Networks: Combining Rheology and Small-Angle X-ray Scattering. Polymers, 2021, 13, 951.	2.0	3
8	Spin diffusion transfer difference (SDTD) NMR: An advanced method for the characterisation of water structuration within particle networks. Journal of Colloid and Interface Science, 2021, 594, 217-227.	5.0	6
9	Molecular recognition of natural and nonâ€natural substrates by cellodextrin phosphorylase from Ruminiclostridium thermocellum investigated by NMR spectroscopy. Chemistry - A European Journal, 2021, 27, 15688-15698.	1.7	6
10	Structural heterogeneities in starch hydrogels. Carbohydrate Polymers, 2020, 249, 116834.	5.1	25
11	A natural mutation in Pisum sativum L. (pea) alters starch assembly and improves glucose homeostasis in humans. Nature Food, 2020, 1, 693-704.	6.2	37
12	Rapid Determination of the Acidity, Alkalinity and Carboxyl Content of Aqueous Samples by ¹H NMR with Minimal Sample Quantity. Analytical Chemistry, 2020, 92, 12789-12794.	3.2	4
13	Fulvic acid increases forage legume growth inducing preferential up-regulation of nodulation and signalling-related genes. Journal of Experimental Botany, 2020, 71, 5689-5704.	2.4	19
14	Hydrophobization of Cellulose Nanocrystals for Aqueous Colloidal Suspensions and Gels. Biomacromolecules, 2020, 21, 1812-1823.	2.6	38
15	NMR of soft matter systems. Nuclear Magnetic Resonance, 2020, , 220-249.	0.1	0
16	Self-Correcting Method for the Measurement of Free Calcium and Magnesium Concentrations by ¹H NMR. Analytical Chemistry, 2019, 91, 14442-14450.	3.2	5
17	High Molecular Weight Mixed-Linkage Glucan as a Mechanical and Hydration Modulator of Bacterial Cellulose: Characterization by Advanced NMR Spectroscopy. Biomacromolecules, 2019, 20, 4180-4190.	2.6	10
18	Solvent driven phase transitions of acyclovir â€“ the role of water and solvent polarity. CrystEngComm, 2019, 21, 2180-2192.	1.3	8

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19	Mesoporous Aluminosilicate Nanofibers with a Low Si/Al Ratio as Acidic Catalyst for Hydrodeoxygenation of Phenol. ChemCatChem, 2019, 11, 4054-4063.	1.8	8
20	Tunable Supramolecular Gel Properties by Varying Thermal History. Chemistry - A European Journal, 2019, 25, 7881-7887.	1.7	32
21	Spatially Resolved STD-NMR Applied to the Study of Solute Transport in Biphasic Systems: Application to Protein-Ligand Interactions. Natural Product Communications, 2019, 14, 1934578X1984978.	0.2	3
22	Thermosensitive supramolecular and colloidal hydrogels via self-assembly modulated by hydrophobized cellulose nanocrystals. Cellulose, 2019, 26, 529-542.	2.4	30
23	Understanding heat driven gelation of anionic cellulose nanofibrils: Combining saturation transfer difference (STD) NMR, small angle X-ray scattering (SAXS) and rheology. Journal of Colloid and Interface Science, 2019, 535, 205-213.	5.0	32
24	Understanding the role of molecular mobility in phase transitions of bulk and confined pharmaceuticals. Acta Crystallographica Section A: Foundations and Advances, 2019, 75, e612-e612.	0.0	0
25	Understanding self-assembly of molecular organic solids using NMR crystallography: from multicomponent solids to supramolecular hydrogels. Acta Crystallographica Section A: Foundations and Advances, 2019, 75, e609-e609.	0.0	0
26	Expanding the solid-state landscape of fluconazole: combined application of solid-state NMR, X-ray diffraction and computational methods to uncover polymorphism in fluconazole solvates. Acta Crystallographica Section A: Foundations and Advances, 2019, 75, e613-e613.	0.0	0
27	Luminescent SiO2 nanoparticles for cell labelling: Combined water dispersion polymerization and 3D condensation controlled by oligoperoxide surfactant-initiator. European Polymer Journal, 2018, 103, 282-292.	2.6	4
28	Unravelling cationic cellulose nanofibril hydrogel structure: NMR spectroscopy and small angle neutron scattering analyses. Soft Matter, 2018, 14, 255-263.	1.2	27
29	Nanocrystallization of Rare Tolbutamide Form V in Mesoporous MCM-41 Silica. Molecular Pharmaceutics, 2018, 15, 4926-4932.	2.3	16
30	Mechanically Robust Gels Formed from Hydrophobized Cellulose Nanocrystals. ACS Applied Materials & Interfaces, 2018, 10, 19318-19322.	4.0	30
31	Surfactant controlled zwitterionic cellulose nanofibril dispersions. Soft Matter, 2018, 14, 7793-7800.	1.2	16
32	INCORPORATION OF ALUMINIUM INTO â€“CH2CH2â€“/â€“CH=CHâ€“PMOS. Proceedings of the Shevchenko Scientific Society Series Ð¡hemical Sciences, 2018, 2018, 31-46.	0.2	0
33	Supramolecular Amino Acid Based Hydrogels: Probing the Contribution of Additive Molecules using NMR Spectroscopy. Chemistry - A European Journal, 2017, 23, 8014-8024.	1.7	49
34	Halogen effects on the solid-state packing of phenylalanine derivatives and the resultant gelation properties. Faraday Discussions, 2017, 203, 423-439.	1.6	9
35	The Plot Thickens: Gelation by Phenylalanine in Water and Dimethyl Sulfoxide. Crystal Growth and Design, 2017, 17, 4100-4109.	1.4	22
36	¹⁹Fâ€…NMR Spectroscopy as a Highly Sensitive Method for the Direct Monitoring of Confined Crystallization within Nanoporous Materials. Angewandte Chemie, 2016, 128, 9050-9054.	1.6	9

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37	¹⁹Fâ€…NMR Spectroscopy as a Highly Sensitive Method for the Direct Monitoring of Confined Crystallization within Nanoporous Materials. Angewandte Chemie - International Edition, 2016, 55, 8904-8908.	7.2	30
38	Correction: Substituent interference on supramolecular assembly in urea gelators: synthesis, structure prediction and NMR. Soft Matter, 2016, 12, 5489-5489.	1.2	1
39	Substituent interference on supramolecular assembly in urea gelators: synthesis, structure prediction and NMR. Soft Matter, 2016, 12, 4034-4043.	1.2	29
40	Structure and Mobility of Lactose in Lactose/Sodium Montmorillonite Nanocomposites. Langmuir, 2016, 32, 13214-13225.	1.6	12
41	Assembly of Î±-Glucan by GlgE and GlgB in Mycobacteria and Streptomycetes. Biochemistry, 2016, 55, 3270-3284.	1.2	33
42	Tuning the spontaneous formation kinetics of caffeineâ€‰:â€‰malonic acid co-crystals. CrystEngComm, 2016, 18, 2617-2620.	1.3	14
43	Structural Properties, Orderâ€“Disorder Phenomena, and Phase Stability of Orotic Acid Crystal Forms. Molecular Pharmaceutics, 2016, 13, 1012-1029.	2.3	31
44	Prediction of Hydrate and Solvate Formation Using Statistical Models. Crystal Growth and Design, 2016, 16, 70-81.	1.4	51
45	Molecular dynamics of supersaturated indometacin-nicotinamide solutions. Acta Crystallographica Section A: Foundations and Advances, 2015, 71, s458-s458.	0.0	0
46	Mechanistic and Kinetic Insight into Spontaneous Cocrystallization of Isoniazid and Benzoic Acid. Molecular Pharmaceutics, 2015, 12, 2981-2992.	2.3	31
47	Building solids inside nano-space: from confined amorphous through confined solvate to confined â€˜metastableâ€™ polymorph. Physical Chemistry Chemical Physics, 2015, 17, 24761-24773.	1.3	26
48	Frontispiece: Triazine-Based Graphitic Carbon Nitride: a Two-Dimensional Semiconductor. Angewandte Chemie - International Edition, 2014, 53, n/a-n/a.	7.2	0
49	Frontispiz: Triazine-Based Graphitic Carbon Nitride: a Two-Dimensional Semiconductor. Angewandte Chemie, 2014, 126, n/a-n/a.	1.6	0
50	Side-chain control of porosity closure in single- and multiple-peptide-based porous materials by cooperative folding. Nature Chemistry, 2014, 6, 343-351.	6.6	124
51	Triazineâ€Based Graphitic Carbon Nitride: a Twoâ€Dimensional Semiconductor. Angewandte Chemie - International Edition, 2014, 53, 7450-7455.	7.2	523
52	Network formation mechanisms in conjugated microporous polymers. Polymer Chemistry, 2014, 5, 6325-6333.	1.9	61
53	Post-synthetic modification of conjugated microporous polymers. Polymer, 2014, 55, 321-325.	1.8	100
54	Tuning of gallery heights in a crystalline 2D carbon nitride network. Journal of Materials Chemistry A, 2013, 1, 1102-1107.	5.2	98

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55	Dimensionality Transformation through Paddlewheel Reconfiguration in a Flexible and Porous Zn-Based Metalâ€“Organic Framework. Journal of the American Chemical Society, 2012, 134, 20466-20478.	6.6	85
56	Functional conjugated microporous polymers: from 1,3,5-benzene to 1,3,5-triazine. Polymer Chemistry, 2012, 3, 928.	1.9	191
57	Hydrogenation of nitrobenzene over Pd/C catalysts prepared from molecular carbonylâ€“phosphine palladium clusters. Journal of Molecular Catalysis A, 2012, 365, 172-180.	4.8	12
58	Branching out with aminals: microporous organic polymers from difunctional monomers. Polymer Chemistry, 2012, 3, 533-537.	1.9	92
59	Microporous copolymers for increased gas selectivity. Polymer Chemistry, 2012, 3, 2034.	1.9	140
60	Porous, Fluorescent, Covalent Triazineâ€Based Frameworks Via Romaâ€Temperature and Microwaveâ€Assisted Synthesis. Advanced Materials, 2012, 24, 2357-2361.	11.1	636
61	A Waterâ€Stable Porphyrinâ€Based Metalâ€“Organic Framework Active for Visibleâ€Light Photocatalysis. Angewandte Chemie - International Edition, 2012, 51, 7440-7444.	7.2	680
62	The coordinatively saturated vanadium MIL-47 as a low leaching heterogeneous catalyst in the oxidation of cyclohexene. Journal of Catalysis, 2012, 285, 196-207.	3.1	100
63	Metalâ€“Organic Conjugated Microporous Polymers. Angewandte Chemie - International Edition, 2011, 50, 1072-1075.	7.2	318
64	A Guest-Responsive Fluorescent 3D Microporous Metalâ”Organic Framework Derived from a Long-Lifetime Pyrene Core. Journal of the American Chemical Society, 2010, 132, 4119-4130.	6.6	456
65	Solid acid catalysts based on H3PW12O40 heteropoly acid: Acid and catalytic properties at a gasâ€“solid interface. Journal of Catalysis, 2010, 276, 181-189.	3.1	138
66	Chemical Bonding Assembly of Multifunctional Oxide Nanocomposites. Advanced Functional Materials, 2010, 20, 231-238.	7.8	30
67	Effect of Encapsulating Arginine Containing Molecules on PLGA: A Solid-State NMR Study. Journal of Pharmaceutical Sciences, 2010, 99, 2697-2710.	1.6	8
68	Effect of Encapsulating a Pseudo-Decapeptide Containing Arginine on PLGA: A Solid-State NMR Study. Journal of Pharmaceutical Sciences, 2010, 99, 2681-2696.	1.6	4
69	High Surface Area Conjugated Microporous Polymers: The Importance of Reaction Solvent Choice. Macromolecules, 2010, 43, 8524-8530.	2.2	195
70	High Surface Area Contorted Conjugated Microporous Polymers Based on Spiro-Bipropylenedioxythiophene. Macromolecules, 2010, 43, 7577-7582.	2.2	112
71	An Adaptable Peptide-Based Porous Material. Science, 2010, 329, 1053-1057.	6.0	356
72	Palladium Nanoparticle Incorporation in Conjugated Microporous Polymers by Supercritical Fluid Processing. Chemistry of Materials, 2010, 22, 557-564.	3.2	128

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73	A Metalâ^'Organic Framework with a Covalently Prefabricated Porous Organic Linker. Journal of the American Chemical Society, 2010, 132, 12773-12775.	6.6	88
74	A homochiral three-dimensional zinc aspartate framework that displays multiple coordination modes and geometries. Chemical Communications, 2010, 46, 2793.	2.2	33
75	Reversible Hydrogen Storage in Hydrogel Clathrate Hydrates. Advanced Materials, 2009, 21, 2382-2386.	11.1	60
76	Amorphous Drug-PVP Dispersions: Application of Theoretical, Thermal and Spectroscopic Analytical Techniques to the Study of a Molecule With Intermolecular Bonds in Both the Crystalline and Pure Amorphous State. Journal of Pharmaceutical Sciences, 2009, 98, 3456-3468.	1.6	83
77	Magnesium Borohydride Confined in a Metalâ€"Organic Framework: A Preorganized System for Facile Arene Hydroboration. Angewandte Chemie - International Edition, 2009, 48, 2012-2016.	7.2	39
78	Reversible Methane Storage in a Polymer-Supported Semi-Clathrate Hydrate at Ambient Temperature and Pressure. Chemistry of Materials, 2009, 21, 3810-3815.	3.2	45
79	Ethenylene-Bridged Periodic Mesoporous Organosilicas: From E to Z. Chemistry of Materials, 2009, 21, 5792-5800.	3.2	31
80	Functionalized Conjugated Microporous Polymers. Macromolecules, 2009, 42, 8809-8816.	2.2	352
81	Microporous Poly(tri(4-ethynylphenyl)amine) Networks: Synthesis, Properties, and Atomistic Simulation. Macromolecules, 2009, 42, 2658-2666.	2.2	166
82	High surface area amorphous microporous poly(aryleneethynylene) networks using tetrahedral carbon- and silicon-centred monomers. Chemical Communications, 2009, , 212-214.	2.2	152
83	Conjugated Microporous Poly(aryleneethynylene) Networks. Angewandte Chemie - International Edition, 2008, 47, 1167-1167.	7.2	16
84	Framework functionalisation triggers metal complex binding. Chemical Communications, 2008, , 2680.	2.2	280
85	Bulk superconductivity at 38â€‰K in a molecular system. Nature Materials, 2008, 7, 367-371.	13.3	276
86	Heteropoly compounds as catalysts for hydrogenation of propanoic acid. Journal of Catalysis, 2008, 253, 244-252.	3.1	38
87	One-step conversion of acetone to methyl isobutyl ketone over Pd-mixed oxide catalysts prepared from novel layered double hydroxides. Journal of Catalysis, 2008, 258, 250-255.	3.1	49
88	Conjugated microporous poly(phenylene butadiynylene)s. Chemical Communications, 2008, , 486-488.	2.2	252
89	Synthetic Control of the Pore Dimension and Surface Area in Conjugated Microporous Polymer and Copolymer Networks. Journal of the American Chemical Society, 2008, 130, 7710-7720.	6.6	802
90	Spectroscopic evidence of thermally induced metamorphosis in ethenylene-bridged periodic mesoporous organosilicas. Physical Chemistry Chemical Physics, 2008, 10, 5349.	1.3	16

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91	Mesoporous Poly(phenylenevinylene) Networks. Macromolecules, 2008, 41, 1591-1593.	2.2	68
92	Periodic Mesoporous Organosilicas with Domain Functionality: Synthesis and Advanced Characterization. Chemistry of Materials, 2008, 20, 3385-3397.	3.2	23
93	Lessons from a â€œFailedâ€•Experiment: Zinc Silicates with Complex Morphology by Reaction of Zinc Acetate, the Ionic Liquid Precursor (ILP) Tetrabutylammonium Hydroxide (TBAH), and Glass. Materials, 2008, 1, 3-24.	1.3	56
94	Encapsulation of Indomethacin in PVP: Solid-State NMR Studies. Macromolecular Symposia, 2007, 251, 41-46.	0.4	9
95	The N-donor stabilised cyclotriphosphazene hexacation [P3N3(DMAP)6]6+. Chemical Communications, 2007, , 5152.	2.2	45
96	Hydrogen Storage in Microporous Hypercrosslinked Organic Polymer Networks. Chemistry of Materials, 2007, 19, 2034-2048.	3.2	618
97	Conjugated Microporous Poly(aryleneethynylene) Networks. Angewandte Chemie - International Edition, 2007, 46, 8574-8578.	7.2	1,278
98	Periodic bifunctional organosilicas synthesised using cationic supramolecular templating. Microporous and Mesoporous Materials, 2007, 106, 236-245.	2.2	9
99	Methylaminated Potassium Fulleride, (CH3NH2)K3C60:Â Towards Hyperexpanded Fulleride Lattices. Journal of the American Chemical Society, 2006, 128, 14784-14785.	6.6	18
100	Initial stages of propane activation over Zn/MFI catalyst studied by in situ NMR and IR spectroscopic techniques. Journal of Catalysis, 2006, 238, 122-133.	3.1	168
101	Synthesis of periodic mesoporous organosilicas with incorporated aluminium. Journal of Materials Chemistry, 2005, 15, 4728.	6.7	16
102	Cross-Linked Polymers in Ionic Liquids: Ionic Liquids as Porogens. ACS Symposium Series, 2005, , 133-147.	0.5	7
103	Effect of the Acid Activation Levels of Montmorillonite Clay on the Cetyltrimethylammonium Cations Adsorption. Langmuir, 2005, 21, 8717-8723.	1.6	58
104	13C and 2D WISE NMR Studies of the Host Mobility in Two Aromatic Complexes of p-Tert-Butyl-Calixarene. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 2004, 49, 211-218.	1.6	4
105	Synthesis of Hierarchically Porous Silica and Metal Oxide Beads Using Emulsion-Templated Polymer Scaffolds. Chemistry of Materials, 2004, 16, 4245-4256.	3.2	145
106	Solid-State NMR Studies of Novel Porous Solids: Structure and Dynamics. , 2004, , 261-272.		0
107	Bis(4,4â€²-bipyridine)tetraaquacobalt(II) 2,6-naphathalenedicarboxylate dihydrate. Acta Crystallographica Section E: Structure Reports Online, 2003, 59, m8-m10.	0.2	3
108	4-[2-(4-Pyridyl)ethyl]pyridinium nitrate trihydrate. Acta Crystallographica Section E: Structure Reports Online, 2003, 59, o132-o134.	0.2	2

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109	Phase Segregation in Silicon Carbideâ^'Carbon Solid Solutions from XRD and NMR Studies. Chemistry of Materials, 2002, 14, 1348-1353.	3.2	2
110	Synthesis and characterisation of mesoporous aluminophosphates containing boronElectronic supplementary information (ESI) available: thermogravimetric analysis of mesostructured BAPO,XRD patterns of Hex-2 BAPO,27Al MAS NMR spectra of intermediate products formed during the synthesis of Hex-1 BAPO, 11B MAS NMR spectra of Hex-2 BAPO. See http://www.rsc.org/suppdata/jm/b1/b106911j/. Journal of Materials Chemistry, 2002, 12, 1079-1085.	6.7	19
111	Synthesis and characterization of a new layered compound of trimesic acidElectronic supplementary information (ESI) available: top view of the HxBTC anionic network (Fig. S1) and detailed hydrogen bond graph sets present in the interactions linking the two HxBTC sheets within a double layer (Fig.) Tj ETQq1 1 0.784314 rgBT /Over	1.4	41
112	Synthesis and Characterization of a Novel Modular Cadmium-Organic Framework with Biphenyl-4,4â€²-dicarboxylate. European Journal of Inorganic Chemistry, 2002, 2002, 2823-2828.	1.0	25
113	Solid-State NMR Studies of MCM-41 Supported with a Highly Catalytically Active Cluster. Angewandte Chemie - International Edition, 2002, 41, 4726-4729.	7.2	27
114	A novel one-dimensional coordination polymer with Cd2+and diethylenetriaminepentaacetic acid. Acta Crystallographica Section C: Crystal Structure Communications, 2002, 58, m608-m610.	0.4	11
115	A one-dimensional Collcoordination polymer exhibiting an unusual conformation for 1,2-bis(4-pyridyl)ethane. Acta Crystallographica Section E: Structure Reports Online, 2002, 58, m691-m693.	0.2	9
116	catena-Poly[[[diaquacadmium(II)]-di-Î¼-4,4â€²-trimethylenedipyridine-Îº2N:Nâ€²] dinitrate 4,4â€²-trimethylenedipyridine monohydrate]. Acta Crystallographica Section E: Structure Reports Online, 2002, 58, m730-m732.	0.2	5
117	Solid-State NMR Studies of Mesostructured Alumino-Phosphates: Structure and Dynamics of the Inorganic Network and of the Organic Component. , 2002, , 545-551.		0
118	Solid-state NMR studies of the organic template in mesostructured aluminophosphates. Physical Chemistry Chemical Physics, 2001, 3, 616-626.	1.3	50
119	Incorporation of magnesium in mesostructured and mesoporous aluminophosphates. Physical Chemistry Chemical Physics, 2001, 3, 1544-1551.	1.3	15
120	1Hâ€“31P CP/MAS NMR studies of mesostructured aluminophosphates. Physical Chemistry Chemical Physics, 2001, 3, 2544-2551.	1.3	16
121	Synthesis of mesostructured aluminophosphates using cationic templating. Physical Chemistry Chemical Physics, 2000, 2, 5275-5285.	1.3	42
122	Formation of mesoporous silicates using Triton XN surfactants in the presence of concentrated mineral acids. Journal of Materials Chemistry, 2000, 10, 1847-1855.	6.7	17
123	Synthesis and Characterization of Two Novel Mesolamellar Aluminophosphates. Chemistry of Materials, 1998, 10, 2258-2265.	3.2	31
124	Synthesis of new mesostructured aluminophosphates. Journal of the Chemical Society, Faraday Transactions, 1998, 94, 2241-2247.	1.7	44