

Daniel K Unruh

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Symmetry versus Minimal Pentagonal Adjacencies in Uranium-Based Polyoxometalate Fullerene Topologies. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 2737-2740.	13.8	153
2	Uranyl ^{VI} Peroxide Interactions Favor Nanocluster Self-Assembly. <i>Journal of the American Chemical Society</i> , 2009, 131, 16648-16649.	13.7	118
3	Development of Metal-Organic Nanotubes Exhibiting Low-Temperature, Reversible Exchange of Confined π -Channels. <i>Journal of the American Chemical Society</i> , 2013, 135, 7398-7401.	13.7	89
4	π -Inverse-Frustrated Lewis Pairs Activation of Dihydrogen with Organosuperbases and Moderate to Weak Lewis Acids. <i>Journal of the American Chemical Society</i> , 2016, 138, 3286-3289.	13.7	73
5	Polynuclear lanthanide-diketonato clusters for the catalytic hydroboration of carboxamides and esters. <i>Nature Catalysis</i> , 2020, 3, 154-162.	34.4	65
6	Nickel-Catalyzed Regioselective 1,4-Hydroboration of N-Heteroarenes. <i>ACS Catalysis</i> , 2018, 8, 6186-6191.	11.2	61
7	Crystallization of Keggin-Type Polyaluminum Species by Supramolecular Interactions with Disulfonate Anions. <i>Crystal Growth and Design</i> , 2012, 12, 2044-2051.	3.0	59
8	Cobalt(II)-Catalyzed Stereoselective Olefin Isomerization: Facile Access to Acyclic Trisubstituted Alkenes. <i>Journal of the American Chemical Society</i> , 2020, 142, 8910-8917.	13.7	58
9	Uranyl peroxide closed clusters containing topological squares. <i>Dalton Transactions</i> , 2010, 39, 5807.	3.3	45
10	Complex Nanoscale Cage Clusters Built from Uranyl Polyhedra and Phosphate Tetrahedra. <i>Inorganic Chemistry</i> , 2011, 50, 5509-5516.	4.0	43
11	Triple-Pnictogen Bonding as a Tool for Supramolecular Assembly. <i>Inorganic Chemistry</i> , 2019, 58, 16227-16235.	4.0	42
12	Surface Modification of Al ₃₀ Keggin-Type Polyaluminum Molecular Clusters. <i>Inorganic Chemistry</i> , 2013, 52, 5991-5999.	4.0	39
13	Enantioselective assembly of multi-layer 3D chirality. <i>National Science Review</i> , 2020, 7, 588-599.	9.5	36
14	Use of Charge-Assisted Hydrogen Bonding in the Supramolecular Assembly of Hybrid Uranyl Materials. <i>Crystal Growth and Design</i> , 2014, 14, 1357-1365.	3.0	33
15	Interactions of Verkade's Superbase with Strong Lewis Acids: From Labile Mono- and Binuclear Lewis Acid-Base Complexes to Phosphenium Cations. <i>Inorganic Chemistry</i> , 2017, 56, 10748-10759.	4.0	33
16	Molecular Pedal Motion Influences Thermal Expansion Properties within Isostructural Hydrogen-Bonded Co-crystals. <i>Crystal Growth and Design</i> , 2018, 18, 566-570.	3.0	33
17	Controlling thermal expansion within mixed cocrystals by tuning molecular motion capability. <i>Chemical Science</i> , 2020, 11, 7701-7707.	7.4	33
18	Pnictogen bonding with alkoxide cages: which pnictogen is best?. <i>New Journal of Chemistry</i> , 2019, 43, 14305-14312.	2.8	28

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19	Structural Features in Metal-Organic Nanotube Crystals That Influence Stability and Solvent Uptake. <i>Crystal Growth and Design</i> , 2015, 15, 4062-4070.	3.0	27
20	Multi-layer 3D chirality: new synthesis, AIE and computational studies. <i>Science China Chemistry</i> , 2020, 63, 692-698.	8.2	27
21	Asymmetric [3 + 2] Cycloaddition of Chiral N-Phosphonyl Imines with Methyl Isocynoacetate for Accessing 2-Imidazolines with Switchable Stereoselectivity. <i>Journal of Organic Chemistry</i> , 2017, 82, 2992-2999.	3.2	26
22	Replacing the Al ₂ O ₃ Shell on Al Particles with an Oxidizing Salt, Aluminum Iodate Hexahydrate. Part I: Reactivity. <i>Journal of Physical Chemistry C</i> , 2017, 121, 23184-23191.	3.1	26
23	BIAN-Fe(̄-6 H 6): Synthesis, characterization, and lactide polymerization. <i>Journal of Polymer Science Part A</i> , 2017, 55, 2824-2830.	2.3	26
24	Characterization of Phosphate and Arsenate Adsorption onto Keggin-Type Al ₃₀ Cations by Experimental and Theoretical Methods. <i>Inorganic Chemistry</i> , 2015, 54, 8367-8374.	4.0	23
25	Inverse-Frustrated Lewis Pairs: An Inverse FLP Approach to the Catalytic Metal Free Hydrogenation of Ketones. <i>Chemistry - A European Journal</i> , 2018, 24, 16526-16531.	3.3	23
26	Multilayer 3D Chirality and Its Synthetic Assembly. <i>Research</i> , 2019, 2019, 6717104.	5.7	23
27	Design, Synthesis, and Structural Characterization of a Bisantimony(III) Compound for Anion Binding and the Density Functional Theory Evaluation of Halide Binding through Antimony Secondary Bonding Interactions. <i>Journal of Physical Chemistry A</i> , 2016, 120, 9257-9269.	2.5	22
28	Synthesis and reactive characterization of aluminum iodate hexahydrate crystals [Al(H ₂ O) ₆](IO ₃) ₃ (HIO ₃) ₂ . <i>Combustion and Flame</i> , 2017, 179, 154-156.	5.2	22
29	Self-assembled reversed bilayers directed by pnictogen bonding to form vesicles in solution. <i>Chemical Communications</i> , 2018, 54, 8849-8852.	4.1	22
30	Synthesis and Structural Characterization of Hydrolysis Products within the Uranyl Iminodiacetate and Malate Systems. <i>Inorganic Chemistry</i> , 2013, 52, 10191-10198.	4.0	21
31	Melting behavior of n -alkanes in anodic aluminum oxide (AAO) nanopores using Flash differential scanning calorimetry. <i>Thermochimica Acta</i> , 2018, 663, 157-164.	2.7	21
32	Energetics of Formation and Hydration of a Porous Metal Organic Nanotube. <i>Chemistry of Materials</i> , 2014, 26, 5105-5112.	6.7	20
33	Structural characterization of environmentally relevant ternary uranyl citrate complexes present in aqueous solutions and solid state materials. <i>Dalton Transactions</i> , 2015, 44, 2597-2605.	3.3	20
34	Make room for iodine: systematic pore tuning of multivariate metal-organic frameworks for the catalytic oxidation of hydroquinones using hypervalent iodine. <i>Catalysis Science and Technology</i> , 2018, 8, 4349-4357.	4.1	20
35	Cooling-rate dependent single-crystal-to-single-crystal phase transition in an organic co-crystal. <i>Chemical Communications</i> , 2019, 55, 3258-3261.	4.1	20
36	Uranium(VI) Tetraoxido Core Coordinated by Bidentate Nitrate. <i>Inorganic Chemistry</i> , 2010, 49, 6793-6795.	4.0	19

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37	Precise Steric Control over 2D versus 3D Self-Assembly of Antimony(III) Alkoxide Cages through Strong Secondary Bonding Interactions. <i>Inorganic Chemistry</i> , 2017, 56, 8372-8380.	4.0	19
38	Effects of dynamic pedal motion and static disorder on thermal expansion within halogen-bonded co-crystals. <i>New Journal of Chemistry</i> , 2019, 43, 18433-18436.	2.8	19
39	Cocrystallization of Trimethoprim and Solubility Enhancement via Salt Formation. <i>Crystal Growth and Design</i> , 2021, 21, 1507-1517.	3.0	19
40	Synthesis and characterization of uranyl chromate sheet compounds containing edge-sharing dimers of uranyl pentagonal bipyramids. <i>Journal of Solid State Chemistry</i> , 2012, 186, 158-164.	2.9	18
41	Hydroboration of Alkenes and Alkynes Employing Earth-Abundant Metal Catalysts. <i>Asian Journal of Organic Chemistry</i> , 2020, 9, 416-420.	2.7	18
42	Competitive Pseudopericyclic [3,3]- and [3,5]-Sigmatropic Rearrangements of Trichloroacetimidates. <i>Journal of Organic Chemistry</i> , 2015, 80, 11734-11743.	3.2	17
43	Zirconium and hafnium polyhedral oligosilsesquioxane complexes as green homogeneous catalysts in the formation of bio-derived ethers via a MPV/etherification reaction cascade. <i>Catalysis Science and Technology</i> , 2021, 11, 211-218.	4.1	16
44	Asymmetric Catalytic Approach to Multilayer 3D Chirality. <i>Chemistry - A European Journal</i> , 2021, 27, 8013-8020.	3.3	16
45	Replacing the Al ₂ O ₃ Shell on Al Particles with an Oxidizing Salt, Aluminum Iodate Hexahydrate. Part II: Synthesis. <i>Journal of Physical Chemistry C</i> , 2017, 121, 23192-23199.	3.1	15
46	Permeability and elastic properties assessment of alumina nanofiber (ANF) cementitious composites under simulated wellbore cyclic pressure. <i>Construction and Building Materials</i> , 2020, 239, 117867.	7.2	15
47	Cobalt- and iron-catalyzed regiodivergent alkene hydrosilylations. <i>Organic Chemistry Frontiers</i> , 2021, 8, 2174-2181.	4.5	15
48	An efficient synthesis of 4-substituted coumarin derivatives via a palladium-catalyzed Suzuki cross-coupling reaction. <i>Tetrahedron Letters</i> , 2014, 55, 6627-6630.	1.4	14
49	Synthesis, Structure, and Reactivity of Zwitterionic Divalent Rare-Earth Metal Silanides. <i>Inorganic Chemistry</i> , 2015, 54, 4189-4191.	4.0	14
50	Directing dimensionality in uranyl malate and copper uranyl malate compounds. <i>Polyhedron</i> , 2016, 114, 378-384.	2.2	14
51	Lewis acid base chemistry of Bestmann's ylide, Ph ₃ PCCO, and its bulkier analogue, (cyclohexyl) ₃ PCCO. <i>Chemical Communications</i> , 2019, 55, 3513-3516.	4.1	14
52	Expanding the Crystal Chemistry of Actinyl Peroxides: 1/4-1/2-1 Peroxide Coordination in Trimers of U6+ Polyhedra. <i>Inorganic Chemistry</i> , 2009, 48, 2346-2348.	4.0	13
53	Thermal expansion along one-dimensional chains and two-dimensional sheets within co-crystals based on halogen or hydrogen bonds. <i>CrystEngComm</i> , 2018, 20, 7232-7235.	2.6	13
54	Effects of Solution Conditions on Polymorph Development in 2,4,6-Trinitrotoluene. <i>Crystal Growth and Design</i> , 2020, 20, 568-579.	3.0	13

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55	Controlling Thermal Expansion in Supramolecular Halogen-Bonded Mixed Cocrystals through Synthetic Feed and Dynamic Motion. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	13
56	Synthesis and characterization of homo- and heteronuclear molecular Al ³⁺ and Th ⁴⁺ species chelated by the ethylenediaminetetraacetate (edta) ligand. <i>Dalton Transactions</i> , 2013, 42, 13706.	3.3	12
57	Boronic, diboronic and boric acid esters of 1,8-naphthalenediol – synthesis, structure and formation of boronium salts. <i>Dalton Transactions</i> , 2020, 49, 4834-4842.	3.3	12
58	Self-assembly of reversed bilayer vesicles through pnictogen bonding: water-stable supramolecular nanocontainers for organic solvents. <i>Chemical Science</i> , 2020, 11, 4374-4380.	7.4	12
59	Co-crystallization of anti-inflammatory pharmaceutical contaminants and rare carboxylic acid – pyridine supramolecular synthon breakdown. <i>CrystEngComm</i> , 2018, 20, 6377-6381.	2.6	11
60	Covalent bond formation via a [2+2] cycloaddition reaction as a tool to alter thermal expansion parameters of organic co-crystals. <i>New Journal of Chemistry</i> , 2018, 42, 16460-16463.	2.8	11
61	Co-Crystallization of the Anti-Cholesterol Drug Bezafibrate: Molecular Recognition of a Pharmaceutical Contaminant in the Solid State and Solution via Hydrogen Bonding. <i>Crystal Growth and Design</i> , 2018, 18, 4838-4843.	3.0	11
62	Diffusion and selectivity of water confined within metal-organic nanotubes. <i>Journal of Materials Chemistry A</i> , 2018, 6, 1531-1539.	10.3	10
63	Utilizing Autoxidation of Solvents To Promote the Formation of Uranyl Peroxide Materials. <i>Crystal Growth and Design</i> , 2019, 19, 1756-1766.	3.0	10
64	Study of Physicochemical and Explosive Properties of a 2,4,6-Trinitrotoluene/Aniline Cocrystal Solvate. <i>Crystal Growth and Design</i> , 2020, 20, 116-129.	3.0	10
65	Triple-Columned and Multiple-Layered 3D Polymers: Design, Synthesis, Aggregation-Induced Emission (AIE), and Computational Study. <i>Research</i> , 2021, 2021, 3565791.	5.7	10
66	Asymmetric Catalytic Assembly of Triple-Columned and Multilayered Chiral Folding Polymers Showing Aggregation-Induced Emission (AIE). <i>Chemistry - A European Journal</i> , 2022, 28, .	3.3	10
67	Synthesis and Structural Characterization of Heterometallic Thorium Aluminum Polynuclear Molecular Clusters. <i>Inorganic Chemistry</i> , 2012, 51, 9491-9498.	4.0	9
68	Synthesis and characterization of 1-D uranyl thiodiglycolate coordination polymers. <i>Polyhedron</i> , 2014, 73, 110-117.	2.2	9
69	Interplay of Condensation and Chelation in Binary and Ternary Th(IV) Systems. <i>Inorganic Chemistry</i> , 2015, 54, 1395-1404.	4.0	9
70	Synthesis, characterization, electrochemical properties and theoretical calculations of (BIAN) iron complexes. <i>Polyhedron</i> , 2019, 159, 365-374.	2.2	9
71	Self-Assembly of Complementary Components Using a Tripodal Bismuth Compound: Pnictogen Bonding or Coordination Chemistry?. <i>Inorganic Chemistry</i> , 2021, 60, 11242-11250.	4.0	9
72	Thermal Expansion Properties and Mechanochemical Synthesis of Stoichiometric Cocrystals Containing Tetrabromobenzene as a Hydrogen- and Halogen-Bond Donor. <i>Chemistry - A European Journal</i> , 2021, 27, 16329-16333.	3.3	9

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73	Mechanochemistry as a Tool for Crystallizing Inaccessible Solids from Viscous Liquid Components. <i>Crystal Growth and Design</i> , 2022, 22, 285-292.	3.0	9
74	BPh ₃ -Catalyzed [2+3] Cycloaddition of Ph ₃ PCCO with Aldonitrones: Access to 5-Isoxazolidinones with Exocyclic Phosphonium Ylide Moieties. <i>Organic Letters</i> , 2019, 21, 6305-6309.	4.6	8
75	Synthesis, structures, photophysical properties, and catalytic characteristics of 2,9-dimesityl-1,10-phenanthroline (dmesp) transition metal complexes. <i>Journal of Polymer Science</i> , 2020, 58, 1130-1143.	3.8	8
76	Multilayer 3D Chiral Folding Polymers and Their Asymmetric Catalytic Assembly. <i>Research</i> , 2022, 2022, 9847949.	5.7	8
77	Synthesis, characterization, and crystal structures of uranyl compounds containing mixed chromium oxidation states. <i>Journal of Solid State Chemistry</i> , 2012, 191, 162-166.	2.9	7
78	Synthesis and structure of sterically overloaded tetra-coordinated yttrium and lanthanum disiloxides. <i>Inorganic Chemistry Communication</i> , 2016, 70, 103-106.	3.9	7
79	Zwitterionic Alkali-Metal Silanides of Tripodal Ligand Geometry: Synthesis, Structure, and Lewis Acid-Base Chemistry. <i>Inorganic Chemistry</i> , 2017, 56, 9869-9879.	4.0	7
80	Unique supramolecular complex of diclofenac: structural robustness, crystal-to-crystal solvent exchange, and mechanochemical synthesis. <i>Chemical Communications</i> , 2019, 55, 7639-7642.	4.1	7
81	Influence of Multiple Hydrogen Bonds on Thermal Expansion Within and Between Two-Dimensional Hydrogen-Bonded Sheets. <i>Crystal Growth and Design</i> , 2019, 19, 7380-7384.	3.0	7
82	Hydrogen-Bond Synthons Preferences in Cocrystals of Acetazolamide. <i>Crystal Growth and Design</i> , 2020, 20, 5048-5060.	3.0	7
83	Verkade Base in FLP Chemistry—From Stoichiometric C-H Bond Cleavage to the Catalytic Dimerization of Alkynes. <i>Organometallics</i> , 2020, 39, 4307-4311.	2.3	7
84	Small Molecule Activation with Intramolecular σ -Inverse-Frustrated Lewis Pairs. <i>Chemistry - A European Journal</i> , 2021, 27, 6263-6273.	3.3	7
85	From Center-to-Multilayer Chirality: Asymmetric Synthesis of Multilayer Targets with Electron-Rich Bridges. <i>Journal of Organic Chemistry</i> , 2022, 87, 5976-5986.	3.2	7
86	Experimental and Computational Studies of Phosphine Ligand Displacement in Iridium Pincer Complexes Employing Pyridine or Acetonitrile. <i>Organometallics</i> , 2020, 39, 3461-3468.	2.3	6
87	Differences in thermal expansion and motion ability for herringbone and face-to-face π -stacked solids. <i>IUCr</i> , 2022, 9, 31-42.	2.2	6
88	Iodoperchlorobenzene acts as a dual halogen-bond donor to template a [2 + 2] cycloaddition reaction within an organic co-crystal. <i>CrystEngComm</i> , 2021, 23, 8265-8268.	2.6	6
89	Central-to-Folding Chirality Control: Asymmetric Synthesis of Multilayer 3D Targets With Electron-Deficient Bridges. <i>Frontiers in Chemistry</i> , 2022, 10, 860398.	3.6	6
90	Application of the pK _a rule to synthesize salts of bezafibrate. <i>Supramolecular Chemistry</i> , 2019, 31, 558-564.	1.2	5

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91	Highly reactive energetic films by pre-stressing nano-aluminum particles. <i>RSC Advances</i> , 2019, 9, 40607-40617.	3.6	5
92	Solid-state behaviors of imines: colossal biaxial positive thermal expansion, motion capability, and phase transitions. <i>CrystEngComm</i> , 2021, 23, 4439-4443.	2.6	5
93	Controlling Topology within Halogen-Bonded Networks by Varying the Regiochemistry of the Cyclobutane-Based Nodes. <i>Molecules</i> , 2021, 26, 3152.	3.8	4
94	Asymmetric Catalytic Approach to Multilayer 3D Chirality. <i>Chemistry - A European Journal</i> , 2021, 27, 7977-7977.	3.3	4
95	Carbon monoxide bond cleavage mediated by an intramolecular frustrated Lewis pair: access to new B/N heterocycles <i>via</i> selective incorporation of single carbon atoms. <i>Chemical Communications</i> , 2021, 57, 12528-12531.	4.1	4
96	Asymmetric [4 + 2] cycloaddition synthesis of 4<i>H</i>-chromene derivatives facilitated by group-assisted-purification (GAP) chemistry. <i>RSC Advances</i> , 2021, 11, 39790-39796.	3.6	4
97	Removal of the Micropollutants Propranolol Hydrochloride and 2-Naphthol From Water by Pyridine-Functionalized Polymers. <i>Frontiers in Chemistry</i> , 2021, 9, 793870.	3.6	4
98	Asymmetric Catalytic Assembly of Triple-Columned and Multilayered Chiral Folding Polymers Showing Aggregation-Induced Emission (AIE). <i>Chemistry - A European Journal</i> , 2022, 28, e202200183.	3.3	4
99	Azo or Not: Continuing the Crystallographic Investigations of <i>1</i>-Naphthol Reds. <i>Crystal Growth and Design</i> , 2022, 22, 5168-5175.	3.0	4
100	Batch-screening guided continuous flow synthesis of the metal-organic framework HKUST-1 in a millifluidic droplet reactor. <i>Microporous and Mesoporous Materials</i> , 2022, 339, 112005.	4.4	4
101	Molecular Motion and Ligand Stacking Influence Thermal Expansion Behavior and Argentophilic Forces in Silver Coordination Complexes. <i>Crystal Growth and Design</i> , 2022, 22, 4538-4545.	3.0	4
102	The complicating role of pnictogen bond formation in the solution-phase and solid-state structures of the heavier pnictogen atranes. <i>Dalton Transactions</i> , 0, , .	3.3	4
103	Affects of Hydrogen Peroxide on the Stability of Becquerelite. <i>Materials Research Society Symposia Proceedings</i> , 2005, 893, 1.	0.1	3
104	Tricriticality in generalized Schloegl models for autocatalysis: Lattice-gas realization with particle diffusion. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2012, 391, 633-646.	2.6	3
105	A pseudopericyclic [3,5]-sigmatropic rearrangement of a coumarin trichloroacetimidate derivative. <i>Organic and Biomolecular Chemistry</i> , 2018, 16, 874-879.	2.8	3
106	Honeycomb molecular network based upon a hydrate of 4,6-dichlororesorcinol and the photoproduct <i>tetrakis</i>(pyridin-4-yl)cyclobutane. <i>Acta Crystallographica Section C, Structural Chemistry</i> , 2021, 77, 111-115.	0.5	3
107	Asymmetric synthesis of functionalized 2,3-dihydrobenzofurans using salicyl <i>N</i>-phosphonyl imines facilitated by group-assisted purification (GAP) chemistry. <i>Organic and Biomolecular Chemistry</i> , 2021, 19, 10319-10325.	2.8	3
108	Cooperative non-covalent interactions and synthetic feed as driving forces to structural diversity within organic co-crystals containing isosteric perhalobenzenes. <i>CrystEngComm</i> , 2022, 24, 3841-3845.	2.6	3

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109	Controlling Thermal Expansion in Supramolecular Halogen-Bonded Mixed Cocrystals through Synthetic Feed and Dynamic Motion. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	2
110	Lewis acid-base adducts of zwitterionic alkali metal methanides and silanides with BH ₃ . <i>Tetrahedron</i> , 2019, 75, 1861-1864.	1.9	1
111	Positive thermal expansion facilitates the formation of argentophilic forces following an order-disorder phase transition. <i>New Journal of Chemistry</i> , 2021, 45, 8898-8901.	2.8	1
112	Synthesis, structures and catalytic activity of some BINOL based boronates and boronium salts. <i>Dalton Transactions</i> , 2021, 50, 5044-5049.	3.3	1
113	Influence of heterocyclic N-donors on the structural topologies and vibrational spectra of uranyl selenate phases. <i>Journal of Solid State Chemistry</i> , 2021, 304, 122619.	2.9	1
114	Cocrystallization and Thermal Behaviors of the Micropollutants Gemfibrozil, Aceclofenac, and Bisphenol A. <i>Crystal Growth and Design</i> , 2022, 22, 2208-2217.	3.0	1
115	Improved Synthesis of N-Methylcadaverine. <i>Molecules</i> , 2018, 23, 1216.	3.8	0
116	Synthesis and crystal structure of nonacarbonyltris[(2-thia-1,3,5-triaza-7-phosphatricylco[3.3.1.1]decane-1-yl)] ₃ (C _{25.71} H _{32.57} N _{9.86} O ₁₅ P ₃ S ₃ Ru ₃). <i>Zeitschrift Fur Kristallographie - New Crystal Structures</i> , 2022, 237, 17-21.	0.3	0