

# Christophe Volkringer

## List of Publications by Year in descending order

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88  
papers

5,871  
citations

76326

40  
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74163

75  
g-index

94  
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94  
docs citations

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times ranked

5353  
citing authors

#	ARTICLE	IF	CITATIONS
1	MIL-96, a Porous Aluminum Trimesate 3D Structure Constructed from a Hexagonal Network of 18-Membered Rings and $\frac{1}{3}$ -Oxo-Centered Trinuclear Units. <i>Journal of the American Chemical Society</i> , 2006, 128, 10223-10230.	13.7	386
2	The crystal chemistry of uranium carboxylates. <i>Coordination Chemistry Reviews</i> , 2014, 266-267, 69-109.	18.8	336
3	Pd Nanoparticles Embedded into a Metal-Organic Framework: Synthesis, Structural Characteristics, and Hydrogen Sorption Properties. <i>Journal of the American Chemical Society</i> , 2010, 132, 2991-2997.	13.7	320
4	Synthesis, Single-Crystal X-ray Microdiffraction, and NMR Characterizations of the Giant Pore Metal-Organic Framework Aluminum Trimesate MIL-100. <i>Chemistry of Materials</i> , 2009, 21, 5695-5697.	6.7	290
5	The Kagomé Topology of the Gallium and Indium Metal-Organic Framework Types with a MIL-68 Structure: Synthesis, XRD, Solid-State NMR Characterizations, and Hydrogen Adsorption. <i>Inorganic Chemistry</i> , 2008, 47, 11892-11901.	4.0	270
6	XRD and IR structural investigations of a particular breathing effect in the MOF-type gallium terephthalate MIL-53(Ga). <i>Dalton Transactions</i> , 2009, , 2241.	3.3	250
7	Capture of iodine in highly stable metal-organic frameworks: a systematic study. <i>Chemical Communications</i> , 2013, 49, 10320.	4.1	249
8	Breathing Transitions in MIL-53(Al) Metal-Organic Framework Upon Xenon Adsorption. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 8314-8317.	13.8	176
9	A microdiffraction set-up for nanoporous metal-organic-framework-type solids. <i>Nature Materials</i> , 2007, 6, 760-764.	27.5	154
10	High-Throughput Aided Synthesis of the Porous Metal-Organic Framework-Type Aluminum Pyromellitate, MIL-121, with Extra Carboxylic Acid Functionalization. <i>Inorganic Chemistry</i> , 2010, 49, 9852-9862.	4.0	139
11	Infrared Spectroscopy Investigation of the Acid Sites in the Metal-Organic Framework Aluminum Trimesate MIL-100(Al). <i>Journal of Physical Chemistry C</i> , 2012, 116, 5710-5719.	3.1	136
12	Thorium Terephthalates Coordination Polymers Synthesized in Solvothermal DMF/H <sub>2</sub> O System. <i>Inorganic Chemistry</i> , 2015, 54, 2235-2242.	4.0	123
13	Uranyl and/or Rare-Earth Mellitates in Extended Organic-Inorganic Networks: A Unique Case of Heterometallic Cation-Cation Interaction with UVI-LnIII Bonding (Ln = Ce, Nd). <i>Journal of the American Chemical Society</i> , 2012, 134, 1275-1283.	13.7	118
14	Generating Reactive MILs: Isocyanate- and Isothiocyanate-Bearing MILs through Postsynthetic Modification. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 4644-4648.	13.8	117
15	Three-Dimensional MOF-type Architectures with Tetravalent Uranium Hexanuclear Motifs (U <sub>6</sub> O <sub>8</sub> ). <i>Chemistry - A European Journal</i> , 2013, 19, 5324-5331.	3.3	115
16	<sup>129</sup> Xe NMR Study of the Framework Flexibility of the Porous Hybrid MIL-53(Al). <i>Journal of the American Chemical Society</i> , 2010, 132, 11599-11607.	13.7	109
17	In Situ NMR, Ex Situ XRD and SEM Study of the Hydrothermal Crystallization of Nanoporous Aluminum Trimesates MIL-96, MIL-100, and MIL-110. <i>Chemistry of Materials</i> , 2012, 24, 2462-2471.	6.7	107
18	Occurrence of Uncommon Infinite Chains Consisting of Edge-Sharing Octahedra in a Porous Metal Organic Framework-Type Aluminum Pyromellitate Al <sub>4</sub> (OH) <sub>8</sub> [C <sub>10</sub> O <sub>8</sub> H <sub>2</sub> ] (MIL-120): Synthesis, Structure, and Gas Sorption Properties. <i>Chemistry of Materials</i> , 2009, 21, 5783-5791.	6.7	102

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19	Structural Transitions and Flexibility during Dehydration~Rehydration Process in the MOF-type Aluminum Pyromellitate $\text{Al}_2(\text{OH})_2[\text{C}_{10}\text{O}_8\text{H}_2]$ (MIL-118). <i>Crystal Growth and Design</i> , 2009, 9, 2927-2936.	3.0	87
20	Series of Mixed Uranyl~Lanthanide (Ce, Nd) Organic Coordination Polymers with Aromatic Polycarboxylates Linkers. <i>Inorganic Chemistry</i> , 2012, 51, 9610-9618.	4.0	84
21	Uranyl~Pyromellitate Coordination Polymers: Toward Three-Dimensional Open Frameworks with Large Channel Systems. <i>Crystal Growth and Design</i> , 2012, 12, 526-535.	3.0	81
22	Isolation of the Large {Actinide} <sub>38</sub> Poly-oxo Cluster with Uranium. <i>Journal of the American Chemical Society</i> , 2013, 135, 15678-15681.	13.7	81
23	Six-Fold Coordinated Uranyl Cations in Extended Coordination Polymers. <i>Crystal Growth and Design</i> , 2012, 12, 4641-4648.	3.0	79
24	A new indium metal-organic 3D framework with 1,3,5-benzenetricarboxylate, MIL-96 (In), containing $\frac{1}{4}$ 3-oxo-centered trinuclear units and a hexagonal 18-ring network. <i>Materials Research Bulletin</i> , 2006, 41, 948-954.	5.2	76
25	Synthesis, crystal structure and <sup>71</sup> Ga solid state NMR of a MOF-type gallium trimesate (MIL-96) with $\frac{1}{4}$ 3-oxo bridged trinuclear units and a hexagonal 18-ring network. <i>Microporous and Mesoporous Materials</i> , 2007, 105, 111-117.	4.4	74
26	Monitoring the Activation Process of the Giant Pore MIL-100(Al) by Solid State NMR. <i>Journal of Physical Chemistry C</i> , 2011, 115, 17934-17944.	3.1	70
27	Probing <sup>27</sup> Al~ <sup>13</sup> C proximities in metal~organic frameworks using dynamic nuclear polarization enhanced NMR spectroscopy. <i>Chemical Communications</i> , 2014, 50, 933-935.	4.1	67
28	Stability of metal~organic frameworks under gamma irradiation. <i>Chemical Communications</i> , 2016, 52, 12502-12505.	4.1	67
29	Structural Observations of Heterometallic Uranyl Copper(II) Carboxylates and Their Solid~State Topotactic Transformation upon Dehydration. <i>Chemistry - A European Journal</i> , 2013, 19, 2012-2022.	3.3	59
30	Mixed Formate-Dicarboxylate Coordination Polymers with Tetravalent Uranium: Occurrence of Tetranuclear $\{\text{U}_4\text{O}_4\}$ and Hexanuclear $\{\text{U}_6\text{O}_4(\text{OH})_4\}$ Motifs. <i>Crystal Growth and Design</i> , 2013, 13, 3225-3231.	3.0	58
31	Syntheses and structures of the MOF-type series of metal 1,4,5,8-naphthalenetetracarboxylates $\text{M}_2(\text{OH})_2[\text{C}_{14}\text{O}_8\text{H}_4]$ (Al, Ga, In) with infinite trans-connected $\text{M}^{\text{OH}}\text{M}$ chains (MIL-122). <i>Solid State Sciences</i> , 2009, 11, 1507-1512.	3.2	56
32	Crystal chemistry of aluminium carboxylates: From molecular species towards porous infinite three-dimensional networks. <i>Comptes Rendus Chimie</i> , 2015, 18, 1350-1369.	0.5	56
33	Iodine sequestration by thiol-modified MIL-53(Al). <i>CrystEngComm</i> , 2016, 18, 8108-8114.	2.6	54
34	A MOF-type magnesium benzene-1,3,5-tribenzoate with two-fold interpenetrated $\text{ReO}_3$ nets. <i>CrystEngComm</i> , 2009, 11, 58-60.	2.6	53
35	<sup>71</sup> Ga Slow-CTMAS NMR and Crystal Structures of MOF-Type Gallium Carboxylates with Infinite Edge-Sharing Octahedra Chains (MIL-120 and MIL-124). <i>Chemistry of Materials</i> , 2011, 23, 39-47.	6.7	53
36	Hydrothermal Crystallization of Three Calcium-Based Hybrid Solids with 2,6-Naphthalene- or 4,4~ <sup>2</sup> -Biphenyl-Dicarboxylates. <i>Crystal Growth and Design</i> , 2008, 8, 685-689.	3.0	51

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37	The Extra-Framework Sub-Lattice of the Metal-Organic Framework MIL-101: A Solid-State NMR Investigation. <i>Chemistry - A European Journal</i> , 2009, 15, 3139-3146.	3.3	51
38	Metal-Organic-Framework-Type 1D-Channel Open Network of a Tetravalent Uranium Trimesate. <i>Inorganic Chemistry</i> , 2011, 50, 11865-11867.	4.0	50
39	Dynamic sorption properties of Metal-Organic Frameworks for the capture of methyl iodide. <i>Microporous and Mesoporous Materials</i> , 2018, 259, 244-254.	4.4	48
40	Synthesis and structural characterization of the first neptunium based metal-organic frameworks incorporating {Np <sub>6</sub> O <sub>8</sub> } hexanuclear clusters. <i>Chemical Communications</i> , 2018, 54, 6979-6982.	4.1	48
41	Capture of actinides (Th <sup>4+</sup> , [UO <sub>2</sub> ] <sup>2+</sup> ) and surrogating lanthanide (Nd <sup>3+</sup> ) in porous metal-organic framework MIL-100(Al) from water: selectivity and imaging of embedded nanoparticles. <i>Dalton Transactions</i> , 2017, 46, 12010-12014.	3.3	44
42	Coordination polymers of uranium( <sup>iv</sup> ) terephthalates. <i>Dalton Transactions</i> , 2015, 44, 2639-2649.	3.3	38
43	Water-Free Neodymium 2,6-Naphthalenedicarboxylates Coordination Complexes and Their Application as Catalysts for Isoprene Polymerization. <i>Inorganic Chemistry</i> , 2012, 51, 483-490.	4.0	35
44	A new series of trivalent lanthanide (Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy) coordination polymers with a 1,2-cyclohexanedicarboxylate ligand: synthesis, crystal structure, luminescence and catalytic properties. <i>CrystEngComm</i> , 2016, 18, 3594-3605.	2.6	35
45	Iodine Uptake by Zr/Hf-Based UiO-66 Materials: The Influence of Metal Substitution on Iodine Evolution. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 29916-29933.	8.0	34
46	Stability and radioactive gaseous iodine-131 retention capacity of binderless UiO-66-NH <sub>2</sub> granules under severe nuclear accidental conditions. <i>Journal of Hazardous Materials</i> , 2021, 416, 125890.	12.4	33
47	Hydrothermal Crystallization of Uranyl Coordination Polymers Involving an Imidazolium Dicarboxylate Ligand: Effect of pH on the Nuclearity of Uranyl-Centered Subunits. <i>Inorganic Chemistry</i> , 2016, 55, 8697-8705.	4.0	32
48	Formation of a new type of uranium( <sup>iv</sup> ) poly-oxo cluster {U <sub>38</sub> } based on a controlled release of water <i>via</i> esterification reaction. <i>Chemical Science</i> , 2018, 9, 5021-5032.	7.4	31
49	A new calcium trimellitate coordination polymer with a chain-like structure. <i>Solid State Sciences</i> , 2007, 9, 455-458.	3.2	30
50	Synthesis and Crystal Structure Characterization of Thorium Trimesate Coordination Polymers. <i>Crystal Growth and Design</i> , 2016, 16, 1667-1678.	3.0	30
51	{Np <sub>38</sub> } clusters: the missing link in the largest poly-oxo cluster series of tetravalent actinides. <i>Chemical Communications</i> , 2018, 54, 10060-10063.	4.1	30
52	Synthesis and structural characterization of metal-organic frameworks with the mellitate linker M <sub>2</sub> (OH) <sub>2</sub> [C <sub>12</sub> O <sub>12</sub> H <sub>2</sub> ] <sub>2</sub> ·2H <sub>2</sub> O (M = Al, Ga, In) MIL-116. <i>Solid State Sciences</i> , 2013, 26, 38-44.	3.2	29
53	Synthesis, Structural Characterization, and Dehydration Analysis of Uranyl Zinc Mellitate, (UO <sub>2</sub> )Zn(H <sub>2</sub> O) <sub>4</sub> (H <sub>2</sub> mel) <sub>2</sub> ·2H <sub>2</sub> O. <i>European Journal of Inorganic Chemistry</i> , 2013, 2013, 2109-2114.	2.0	29
54	Synthesis of Coordination Polymers of Tetravalent Actinides (Uranium and Neptunium) with a Phthalate or Mellitate Ligand in an Aqueous Medium. <i>Inorganic Chemistry</i> , 2017, 56, 2902-2913.	4.0	28

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55	Microwave-Assisted Synthesis of Porous Composites MOF@Textile for the Protection against Chemical and Nuclear Hazards. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 21497-21508.	8.0	28
56	The Surprising Stability of Cu <sub>3</sub> (btc) <sub>2</sub> Metal-Organic Framework under Steam Flow at High Temperature. <i>Crystal Growth and Design</i> , 2018, 18, 6681-6693.	3.0	25
57	Ex-Situ Kinetic Investigations of the Formation of the Poly-Oxo Cluster U38. <i>Chemistry - A European Journal</i> , 2015, 21, 16654-16664.	3.3	24
58	Two metal-organic frameworks with infinite indium hydroxide chains connected through tetradentate carboxylate linkers. <i>Solid State Sciences</i> , 2009, 11, 29-35.	3.2	23
59	Series of Hydrated Heterometallic Uranyl-Cobalt(II) Coordination Polymers with Aromatic Polycarboxylate Ligands: Formation of U-Co Bonding upon Dehydration Process. <i>Inorganic Chemistry</i> , 2016, 55, 10453-10466.	4.0	23
60	Capture of Gaseous Iodine in Isorecticular Zirconium-Based UiO Metal-Organic Frameworks: Influence of Amino Functionalization, DFT Calculations, Raman and EPR Spectroscopic Investigation. <i>Chemistry - A European Journal</i> , 2022, 28, e202104437.	3.3	23
61	NMR crystallography to probe the breathing effect of the MIL-53(Al) metal-organic framework using solid-state NMR measurements of <sup>13</sup> C- <sup>27</sup> Al distances. <i>Acta Crystallographica Section C, Structural Chemistry</i> , 2017, 73, 176-183.	0.5	22
62	A DFT study of RuO <sub>4</sub> interactions with porous materials: metal-organic frameworks (MOFs) and zeolites. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 16770-16776.	2.8	22
63	Solid-State NMR Spectroscopy Proves the Presence of Penta-coordinated Sc Sites in MIL-100(Sc). <i>Chemistry - A European Journal</i> , 2017, 23, 9525-9534.	3.3	19
64	Study of Xenon Mobility in the Two Forms of MIL-53(Al) Using Solid-State NMR Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2017, 121, 19262-19268.	3.1	19
65	A layered coordination polymer based on an azodibenzoate linker connected to aluminium (MIL-129). <i>CrystEngComm</i> , 2010, 12, 3225.	2.6	18
66	Extrusion-Spheronization of UiO-66 and UiO-66_NH <sub>2</sub> into Robust-Shaped Solids and Their Use for Gaseous Molecular Iodine, Xenon, and Krypton Adsorption. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 10669-10680.	8.0	18
67	Room temperature crystallization of trichlorodioxouranate [UO <sub>2</sub> Cl <sub>3</sub> (L)] species in molecular assemblies involving aliphatic dicarboxylate linkers. <i>Inorganic Chemistry Communication</i> , 2014, 44, 63-66.	3.9	17
68	Full spectroscopic characterization of an hydrolytically stable and colored Ti(IV)-precursor in solution. <i>Comptes Rendus Chimie</i> , 2010, 13, 69-96.	0.5	15
69	Optimization of the synthesis of UiO-66(Zr) in ionic liquids. <i>Microporous and Mesoporous Materials</i> , 2019, 288, 109564.	4.4	14
70	Isolation of thorium benzoate polytypes with discrete ThO <sub>8</sub> square antiprismatic units involved in chain-like assemblies. <i>Inorganic Chemistry Communication</i> , 2014, 39, 26-30.	3.9	13
71	Time-controlled synthesis of the 3D coordination polymer U(1,2,3-Hbtc) <sub>2</sub> followed by the formation of molecular poly-oxo cluster {U <sub>14</sub> } containing hemimellitate uranium(IV). <i>RSC Advances</i> , 2019, 9, 22795-22804.	3.6	13
72	Synthesis and crystal structure of a new MOF-type indium pyromellitate (MIL-117) with infinite chains of unusual cis connection of octahedra InO <sub>4</sub> (OH) <sub>2</sub> . <i>Solid State Sciences</i> , 2011, 13, 1488-1493.	3.2	12

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73	Post-synthetic modification of aluminum trimesate and copper trimesate with TiO <sub>2</sub> nanoparticles for photocatalytic applications. <i>Journal of Materials Science</i> , 2022, 57, 4481-4503.	3.7	12
74	Study of the reaction mechanisms involved in the formation of zirconium oxycarbide from Metal-Organic Frameworks (MOFs) precursors. <i>Journal of Alloys and Compounds</i> , 2016, 680, 571-585.	5.5	11
75	Cyclodextrins: a new and effective class of co-modulators for aqueous zirconium-MOF syntheses. <i>CrystEngComm</i> , 2021, 23, 2764-2772.	2.6	11
76	Luminescent Lanthanide Metal Organic Frameworks for cis-Selective Isoprene Polymerization Catalysis. <i>Inorganics</i> , 2015, 3, 467-481.	2.7	10
77	Solvothermal Synthesis of Tetravalent Uranium with Isophthalate or Pyromellitate Ligands. <i>European Journal of Inorganic Chemistry</i> , 2015, 2015, 2813-2821.	2.0	10
78	Synthesis of zirconium oxycarbide powders using metal-organic framework (MOF) compounds as precursors. <i>RSC Advances</i> , 2015, 5, 51650-51661.	3.6	9
79	Molecular Assemblies of a Series of Mixed Tetravalent Uranium and Trivalent Lanthanide Complexes Associated with the Dipicolinate Ligand, in Aqueous Medium. <i>Crystal Growth and Design</i> , 2018, 18, 2165-2179.	3.0	9
80	Influence of Light and Temperature on the Extractability of Cerium(IV) as a Surrogate of Plutonium(IV) and its Effect on the Simulation of an Accidental Fire in the PUREX Process. <i>ACS Omega</i> , 2019, 4, 12896-12904.	3.5	9
81	Crystal structures of tetravalent uranium fluorides obtained in the presence of hydrazine from uranyl source. <i>Journal of Fluorine Chemistry</i> , 2014, 159, 1-7.	1.7	6
82	Structural studies of a series of uranyl alkylacetamides and piracetam complexes obtained in nitric acid aqueous solution. <i>Polyhedron</i> , 2017, 138, 7-12.	2.2	5
83	Direct conversion of uranium dioxide UO <sub>2</sub> to uranium tetrafluoride UF <sub>4</sub> using the fluorinated ionic liquid [Bmim][PF <sub>6</sub> ]. <i>Dalton Transactions</i> , 2020, 49, 274-278.	3.3	4
84	Quantitative Precipitation of Uranyl or Plutonyl Nitrate with N-(1-Adamantyl)acetamide in Nitric Acid Aqueous Solution. <i>Inorganic Chemistry</i> , 2020, 59, 11459-11468.	4.0	4
85	The use of aluminium and other p elements (gallium, indium) for the generation of MOF-type materials. <i>Studies in Surface Science and Catalysis</i> , 2008, , 447-450.	1.5	3
86	Probing adsorption of water and DMF in UiO-66(Zr) using solid-state NMR. <i>Solid State Nuclear Magnetic Resonance</i> , 2022, 120, 101797.	2.3	3
87	IRSN R&D Actions on FP Behaviour for RCS, Containment and FCVS in Severe Accident Conditions. , 2016, , .		1
88	Porous Textile Composites (Ptc) for the Removal and the Decomposition of Chemical Warfare Agents (Cwas) - a Review. <i>SSRN Electronic Journal</i> , 0, , .	0.4	1