

# Rob Ameloot

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8702578/publications.pdf>

Version: 2024-02-01

110  
papers

10,654  
citations

46918

47  
h-index

31759

101  
g-index

137  
all docs

137  
docs citations

137  
times ranked

12184  
citing authors

#	ARTICLE	IF	CITATIONS
1	Flexible Metal Halide Perovskite Photodetector Arrays via Photolithography and Dry Lift-Off Patterning. <i>Advanced Engineering Materials</i> , 2022, 24, 2100930.	1.6	19
2	2022 roadmap on 3D printing for energy. <i>JPhys Energy</i> , 2022, 4, 011501.	2.3	17
3	Influence of Precursor Density and Conversion Time on the Orientation of Vapor-Deposited ZIF-8 Crystals, 2022, 12, 217.	1.0	8
4	A Gas Sensor Based on Zif-8-Coated Coupled Resonators With Enhanced Sensitivity and Reversible Detection Ability. , 2022, , .		1
5	Multiscale modelling of capillary imbibition in 3D-printed porous microfluidic channels. <i>Microfluidics and Nanofluidics</i> , 2022, 26, 1.	1.0	2
6	Parts-per-Million Detection of Volatile Organic Compounds via Surface Plasmon Polaritons and Nanometer-Thick Metal-Organic Framework Films. <i>ACS Applied Nano Materials</i> , 2022, 5, 5006-5016.	2.4	9
7	Photocurable resin-silica composites with low thermal expansion for 3D printing microfluidic components onto printed circuit boards. <i>Materials Today Communications</i> , 2022, 31, 103482.	0.9	7
8	Vapor-Phase Processing of Metal-Organic Frameworks. <i>Accounts of Chemical Research</i> , 2022, 55, 186-196.	7.6	29
9	CCIQS-1: A Dynamic Metal-Organic Framework with Selective Guest-Triggered Porosity Switching. <i>Chemistry of Materials</i> , 2022, 34, 669-677.	3.2	6
10	Template-Mediated Control over Polymorphism in the Vapor-Assisted Formation of Zeolitic Imidazolate Framework Powders and Films. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 7553-7558.	7.2	20
11	Direct X-ray and electron-beam lithography of halogenated zeolitic imidazolate frameworks. <i>Nature Materials</i> , 2021, 20, 93-99.	13.3	112
12	Surfactant-assisted synthesis of titanium nanoMOFs for thin film fabrication. <i>Chemical Communications</i> , 2021, 57, 9040-9043.	2.2	4
13	Template-Mediated Control over Polymorphism in the Vapor-Assisted Formation of Zeolitic Imidazolate Framework Powders and Films. <i>Angewandte Chemie</i> , 2021, 133, 7631-7636.	1.6	2
14	Porosimetry for Thin Films of Metal-Organic Frameworks: A Comparison of Positron Annihilation Lifetime Spectroscopy and Adsorption-Based Methods. <i>Advanced Materials</i> , 2021, 33, e2006993.	11.1	40
15	Porosimetry: Porosimetry for Thin Films of Metal-Organic Frameworks: A Comparison of Positron Annihilation Lifetime Spectroscopy and Adsorption-Based Methods (Adv. Mater. 17/2021). <i>Advanced Materials</i> , 2021, 33, 2170133.	11.1	3
16	3D Printing of Monolithic Capillarity-Driven Microfluidic Devices for Diagnostics. <i>Advanced Materials</i> , 2021, 33, e2008712.	11.1	36
17	Benchtop <i>In Situ</i> Measurement of Full Adsorption Isotherms by NMR. <i>Journal of the American Chemical Society</i> , 2021, 143, 8249-8254.	6.6	18
18	Microfluidic Devices: 3D Printing of Monolithic Capillarity-Driven Microfluidic Devices for Diagnostics (Adv. Mater. 25/2021). <i>Advanced Materials</i> , 2021, 33, 2170192.	11.1	0

#	ARTICLE	IF	CITATIONS
19	Cyclic Plasma Halogenation of Amorphous Carbon for Defect-Free Area-Selective Atomic Layer Deposition of Titanium Oxide. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 32381-32392.	4.0	8
20	Der derzeitige Stand von MOF- und COF-Anwendungen. <i>Angewandte Chemie</i> , 2021, 133, 24174-24202.	1.6	18
21	Fluorescence Photoswitching in a Series of Metal-Organic Frameworks Loaded with Different Anthracenes. <i>European Journal of Inorganic Chemistry</i> , 2021, 2021, 2986-2992.	1.0	4
22	The Current Status of MOF and COF Applications. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 23975-24001.	7.2	450
23	Direct Electrocatalytic N-H Aziridination of Aromatic Alkenes Using Ammonia. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 11596-11603.	3.2	12
24	Chlorine-Resistant Epoxide-Based Membranes for Sustainable Water Desalination. <i>Environmental Science and Technology Letters</i> , 2021, 8, 818-824.	3.9	12
25	Chemical Vapor Deposition of Ionic Liquids for the Fabrication of Ionogel Films and Patterns. <i>Angewandte Chemie</i> , 2021, 133, 25872.	1.6	0
26	Chemical Vapor Deposition of Ionic Liquids for the Fabrication of Ionogel Films and Patterns. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 25668-25673.	7.2	12
27	Effect of different oxide and hybrid precursors on MOF-CVD of ZIF-8 films. <i>Dalton Transactions</i> , 2021, 50, 6784-6788.	1.6	13
28	Topochemical Engineering of Cellulose-Carboxymethyl Cellulose Beads: A Low-Field NMR Relaxometry Study. <i>Molecules</i> , 2021, 26, 14.	1.7	12
29	Scattering Model for Composite Stereolithography to Enable Resin-Filler Selection and Cure Depth Control. <i>ACS Applied Polymer Materials</i> , 2021, 3, 6705-6712.	2.0	16
30	Frontispiece: Chemical Vapor Deposition of Ionic Liquids for the Fabrication of Ionogel Films and Patterns. <i>Angewandte Chemie - International Edition</i> , 2021, 60, .	7.2	0
31	Frontispiz: Chemical Vapor Deposition of Ionic Liquids for the Fabrication of Ionogel Films and Patterns. <i>Angewandte Chemie</i> , 2021, 133, .	1.6	0
32	Binder-jetting 3D printer capable of voxel-based control over deposited ink volume, adaptive layer thickness, and selective multi-pass printing. <i>Review of Scientific Instruments</i> , 2021, 92, 125106.	0.6	6
33	Solvent-Free Powder Synthesis and Thin Film Chemical Vapor Deposition of a Zinc Bipyridyl-Triazolate Framework. <i>European Journal of Inorganic Chemistry</i> , 2020, 2020, 71-74.	1.0	15
34	Templated Solvent-Free Powder Synthesis and MOF-CVD Films of the Ultramicroporous Metal-Organic Framework Mg-Magnesium Formate. <i>Chemistry of Materials</i> , 2020, 32, 10469-10475.	3.2	16
35	Hierarchical Metal-Organic Framework Films with Controllable Meso/Macroporosity. <i>Advanced Science</i> , 2020, 7, 2002368.	5.6	32
36	Aqueous Flow Reactor and Vapour-Assisted Synthesis of Aluminium Dicarboxylate Metal-Organic Frameworks with Tuneable Water Sorption Properties. <i>Chemistry - A European Journal</i> , 2020, 26, 10841-10848.	1.7	13

#	ARTICLE	IF	CITATIONS
37	4D synchrotron microtomography and pore-network modelling for direct <i>in situ</i> capillary flow visualization in 3D printed microfluidic channels. <i>Lab on A Chip</i> , 2020, 20, 2403-2411.	3.1	7
38	Solid-phase microextraction coatings based on the metal-organic framework ZIF-8: Ensuring stable and reusable fibers. <i>Talanta</i> , 2020, 215, 120910.	2.9	36
39	Solvent-Free Powder Synthesis and MOF-CVD Thin Films of the Large-Pore Metal-Organic Framework MAF-6. <i>Chemistry of Materials</i> , 2020, 32, 1784-1793.	3.2	62
40	Plasma halogenated a-C:H as growth inhibiting layer for ASD of titanium oxide. , 2020, , .		2
41	Vapor-deposited zeolitic imidazolate frameworks as gap-filling ultra-low-k dielectrics. <i>Nature Communications</i> , 2019, 10, 3729.	5.8	106
42	Vapour-phase deposition of oriented copper dicarboxylate metal-organic framework thin films. <i>Chemical Communications</i> , 2019, 55, 10056-10059.	2.2	64
43	Vapor-Phase Linker Exchange of the Metal-Organic Framework ZIF-8: A Solvent-Free Approach to Post-synthetic Modification. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 18471-18475.	7.2	42
44	Vapor-Phase Linker Exchange of the Metal-Organic Framework ZIF-8: A Solvent-Free Approach to Post-synthetic Modification. <i>Angewandte Chemie</i> , 2019, 131, 18642-18646.	1.6	14
45	Integrated Cleanroom Process for the Vapor-Phase Deposition of Large-Area Zeolitic Imidazolate Framework Thin Films. <i>Chemistry of Materials</i> , 2019, 31, 9462-9471.	3.2	52
46	Role of Structural Defects in the Adsorption and Separation of C3 Hydrocarbons in Zr-Fumarate-MOF (MOF-801). <i>Chemistry of Materials</i> , 2019, 31, 8413-8423.	3.2	87
47	Sodium-coupled electron transfer reactivity of metal-organic frameworks containing titanium clusters: the importance of cations in redox chemistry. <i>Chemical Science</i> , 2019, 10, 1322-1331.	3.7	20
48	Pore network model for permeability characterization of three-dimensionally-printed porous materials for passive microfluidics. <i>Physical Review E</i> , 2019, 99, 033107.	0.8	28
49	Active Role of Methanol in Post-Synthetic Linker Exchange in the Metal-Organic Framework UiO-66. <i>Chemistry of Materials</i> , 2019, 31, 1359-1369.	3.2	43
50	Reversible Optical Writing and Data Storage in an Anthracene-Loaded Metal-Organic Framework. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 2423-2427.	7.2	102
51	(Invited) Vapor-Deposited MOFs As Gap-Filling Low-k Dielectrics. <i>ECS Meeting Abstracts</i> , 2019, , .	0.0	0
52	3D printing in chemical engineering and catalytic technology: structured catalysts, mixers and reactors. <i>Chemical Society Reviews</i> , 2018, 47, 209-230.	18.7	351
53	Reversible Optical Writing and Data Storage in an Anthracene-Loaded Metal-Organic Framework. <i>Angewandte Chemie</i> , 2018, 131, 2445.	1.6	24
54	Bulk-to-Surface Proton-Coupled Electron Transfer Reactivity of the Metal-Organic Framework MIL-125. <i>Journal of the American Chemical Society</i> , 2018, 140, 16184-16189.	6.6	41

#	ARTICLE	IF	CITATIONS
55	Bringing Porous Organic and Carbon-Based Materials toward Thin-Film Applications. <i>Advanced Functional Materials</i> , 2018, 28, 1801545.	7.8	53
56	An in situ investigation of the water-induced phase transformation of UTSA-74 to MOF-74(Zn). <i>CrystEngComm</i> , 2017, 19, 4152-4156.	1.3	20
57	Photopatterning of fluorescent host-guest carriers through pore activation of metal-organic framework single crystals. <i>Chemical Communications</i> , 2017, 53, 7222-7225.	2.2	12
58	An updated roadmap for the integration of metal-organic frameworks with electronic devices and chemical sensors. <i>Chemical Society Reviews</i> , 2017, 46, 3185-3241.	18.7	987
59	Adsorption and Reactive Desorption on Metal-Organic Frameworks: A Direct Strategy for Lactic Acid Recovery. <i>ChemSusChem</i> , 2017, 10, 643-650.	3.6	17
60	Correction: An updated roadmap for the integration of metal-organic frameworks with electronic devices and chemical sensors. <i>Chemical Society Reviews</i> , 2017, 46, 3853-3853.	18.7	30
61	Gel-based morphological design of zirconium metal-organic frameworks. <i>Chemical Science</i> , 2017, 8, 3939-3948.	3.7	177
62	Parts per Million Detection of Alcohol Vapors via Metal Organic Framework Functionalized Surface Plasmon Resonance Sensors. <i>Analytical Chemistry</i> , 2017, 89, 4480-4487.	3.2	40
63	Stabilising Ni catalysts for the dehydration-decarboxylation-hydrogenation of citric acid to methylsuccinic acid. <i>Green Chemistry</i> , 2017, 19, 4642-4650.	4.6	9
64	Silver-induced reconstruction of an adeninate-based metal-organic framework for encapsulation of luminescent adenine-stabilized silver clusters. <i>Journal of Materials Chemistry C</i> , 2016, 4, 4259-4268.	2.7	22
65	Towards metal-organic framework based field effect chemical sensors: UiO-66-NH <sub>2</sub> for nerve agent detection. <i>Chemical Science</i> , 2016, 7, 5827-5832.	3.7	108
66	Waste PET (bottles) as a resource or substrate for MOF synthesis. <i>Journal of Materials Chemistry A</i> , 2016, 4, 9519-9525.	5.2	100
67	Biobased Ionic Liquids: Solvents for a Green Processing Industry?. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 2917-2931.	3.2	195
68	Vapor-Phase Deposition and Modification of Metal-Organic Frameworks: State-of-the-Art and Future Directions. <i>Chemistry - A European Journal</i> , 2016, 22, 14452-14460.	1.7	81
69	Chemical vapour deposition of zeolitic imidazolate framework thin-films. <i>Nature Materials</i> , 2016, 15, 304-310.	13.3	528
70	Sequential Pore Wall Modification in a Covalent Organic Framework for Application in Lactic Acid Adsorption. <i>Chemistry of Materials</i> , 2016, 28, 626-631.	3.2	189
71	Application of metal and metal oxide nanoparticles@MOFs. <i>Coordination Chemistry Reviews</i> , 2016, 307, 237-254.	9.5	479
72	A Flexible Photoactive Titanium Metal-Organic Framework Based on a [Ti <sup>IV</sup> <sub>3</sub> (1/4 <sub>3</sub> â€œO)(O) <sub>2</sub> (COO) <sub>6</sub> ] Cluster. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 13912-13917.	7.2	103

#	ARTICLE	IF	CITATIONS
73	Electrochemical Film Deposition of the Zirconium Metal-Organic Framework UiO-66 and Application in a Miniaturized Sorbent Trap. <i>Chemistry of Materials</i> , 2015, 27, 1801-1807.	3.2	159
74	Tetraarylborate polymer networks as single-ion conducting solid electrolytes. <i>Chemical Science</i> , 2015, 6, 5499-5505.	3.7	123
75	Improving the mechanical stability of zirconium-based metal-organic frameworks by incorporation of acidic modulators. <i>Journal of Materials Chemistry A</i> , 2015, 3, 1737-1742.	5.2	116
76	Cellulose Amorphization by Swelling in Ionic Liquid/Water Mixtures: A Combined Macroscopic and Second-Harmonic Microscopy Study. <i>ChemSusChem</i> , 2015, 8, 82-86.	3.6	13
77	Counteranion effects on the catalytic activity of copper salts immobilized on the 2,2'-bipyridine-functionalized metal-organic framework MOF-253. <i>Catalysis Today</i> , 2015, 246, 55-59.	2.2	27
78	First examples of aliphatic zirconium MOFs and the influence of inorganic anions on their crystal structures. <i>CrystEngComm</i> , 2015, 17, 331-337.	1.3	44
79	Lithographic Deposition of Patterned Metal-Organic Framework Coatings Using a Photobase Generator. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 5561-5565.	7.2	41
80	Metal-organic frameworks as solid magnesium electrolytes. <i>Energy and Environmental Science</i> , 2014, 7, 667.	15.6	150
81	A zirconium squarate metal-organic framework with modulator-dependent molecular sieving properties. <i>Chemical Communications</i> , 2014, 50, 10055-10058.	2.2	64
82	Lithographic Deposition of Patterned Metal-Organic Framework Coatings Using a Photobase Generator. <i>Angewandte Chemie</i> , 2014, 126, 5667-5671.	1.6	5
83	Iron(III)-Based Metal-Organic Frameworks As Visible Light Photocatalysts. <i>Journal of the American Chemical Society</i> , 2013, 135, 14488-14491.	6.6	502
84	Mechanical properties of electrochemically synthesised metal-organic framework thin films. <i>Journal of Materials Chemistry C</i> , 2013, 1, 7716.	2.7	53
85	Solvent-free synthesis of supported ZIF-8 films and patterns through transformation of deposited zinc oxide precursors. <i>CrystEngComm</i> , 2013, 15, 9308.	1.3	124
86	Three-Dimensional Visualization of Defects Formed during the Synthesis of Metal-Organic Frameworks: A Fluorescence Microscopy Study. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 401-405.	7.2	121
87	Zn-Co Double Metal Cyanides as Heterogeneous Catalysts for Hydroamination: A Structure-Activity Relationship. <i>ACS Catalysis</i> , 2013, 3, 597-607.	5.5	67
88	Miniaturized Layer-by-Layer Deposition of Metal-Organic Framework Coatings through Digital Microfluidics. <i>Chemistry of Materials</i> , 2013, 25, 1021-1023.	3.2	28
89	Carbon dioxide as a reversible amine-protecting agent in selective Michael additions and acylations. <i>Green Chemistry</i> , 2013, 15, 1550.	4.6	46
90	Ionic Conductivity in the Metal-Organic Framework UiO-66 by Dehydration and Insertion of Lithium tert-Butoxide. <i>Chemistry - A European Journal</i> , 2013, 19, 5533-5536.	1.7	182

#	ARTICLE	IF	CITATIONS
91	In situ synthesis of Cu <sup>II</sup> -BTC (HKUST-1) in macro-/mesoporous silica monoliths for continuous flow catalysis. <i>Chemical Communications</i> , 2012, 48, 4749.	2.2	151
92	Tuning the catalytic performance of metal <sup>II</sup> -organic frameworks in fine chemistry by active site engineering. <i>Journal of Materials Chemistry</i> , 2012, 22, 10313.	6.7	176
93	Electronic Effects of Linker Substitution on Lewis Acid Catalysis with Metal <sup>II</sup> -Organic Frameworks. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 4887-4890.	7.2	384
94	Enthalpic effects in the adsorption of alkylaromatics on the metal-organic frameworks MIL-47 and MIL-53. <i>Microporous and Mesoporous Materials</i> , 2012, 157, 82-88.	2.2	33
95	Electrochemical synthesis of thin HKUST-1 layers on copper mesh. <i>Microporous and Mesoporous Materials</i> , 2012, 158, 209-213.	2.2	126
96	Digital Microfluidic High-Throughput Printing of Single Metal <sup>II</sup> -Organic Framework Crystals. <i>Advanced Materials</i> , 2012, 24, 1316-1320.	11.1	88
97	Lewis acid double metal cyanide catalysts for hydroamination of phenylacetylene. <i>Chemical Communications</i> , 2011, 47, 4114.	2.2	36
98	Interfacial synthesis of hollow metal <sup>II</sup> -organic framework capsules demonstrating selective permeability. <i>Nature Chemistry</i> , 2011, 3, 382-387.	6.6	483
99	An amino-modified Zr-terephthalate metal <sup>II</sup> -organic framework as an acid <sup>II</sup> -base catalyst for cross-aldol condensation. <i>Chemical Communications</i> , 2011, 47, 1521-1523.	2.2	392
100	Metal <sup>II</sup> -Organic Framework Single Crystals as Photoactive Matrices for the Generation of Metallic Microstructures. <i>Advanced Materials</i> , 2011, 23, 1788-1791.	11.1	100
101	Silica <sup>II</sup> -MOF Composites as a Stationary Phase in Liquid Chromatography. <i>European Journal of Inorganic Chemistry</i> , 2010, 2010, 3735-3738.	1.0	120
102	Direct Patterning of Oriented Metal <sup>II</sup> -Organic Framework Crystals via Control over Crystallization Kinetics in Clear Precursor Solutions. <i>Advanced Materials</i> , 2010, 22, 2685-2688.	11.1	224
103	Patterned film growth of metal <sup>II</sup> -organic frameworks based on galvanic displacement. <i>Chemical Communications</i> , 2010, 46, 3735.	2.2	86
104	Separation of C <sub>5</sub> -Hydrocarbons on Microporous Materials: Complementary Performance of MOFs and Zeolites. <i>Journal of the American Chemical Society</i> , 2010, 132, 2284-2292.	6.6	173
105	Super-Resolution Reactivity Mapping of Nanostructured Catalyst Particles. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 9285-9289.	7.2	175
106	Patterned Growth of Metal-Organic Framework Coatings by Electrochemical Synthesis. <i>Chemistry of Materials</i> , 2009, 21, 2580-2582.	3.2	428
107	Towards direct monitoring of discrete events in a catalytic cycle at the single molecule level. <i>Photochemical and Photobiological Sciences</i> , 2009, 8, 453-456.	1.6	40
108	Morphology of Large ZSM-5 Crystals Unraveled by Fluorescence Microscopy. <i>Journal of the American Chemical Society</i> , 2008, 130, 5763-5772.	6.6	147

#	ARTICLE	IF	CITATIONS
109	Relating Pore Structure to Activity at the Subcrystal Level for ZSM-5: An Electron Backscattering Diffraction and Fluorescence Microscopy Study. <i>Journal of the American Chemical Society</i> , 2008, 130, 13516-13517.	6.6	62
110	Single-Crystal Capacitive Sensors with Micropatterned Electrodes via Space-Confined Growth of the Metal-Organic Framework HKUST-1. <i>Advanced Functional Materials</i> , 0, , 2204065.	7.8	4