Rob Ameloot

List of Publications by Year
in descending order

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110 papers	10,654 citations	46984 47 h-index	31818 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 Liftâ€Off Patterning. Advanced Engineering Materials, 2022, 24, 2100930.	1.6	19
2	2022 roadmap on 3D printing for energy. JPhys Energy, 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. Microfluidics and Nanofluidics, 2022, 26, 1.	1.0	2
6	Parts-per-Million Detection of Volatile Organic Compounds via Surface Plasmon Polaritons and Nanometer-Thick Metalâ€“Organic Framework Films. ACS Applied Nano Materials, 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. Materials Today Communications, 2022, 31, 103482.	0.9	7
8	Vapor-Phase Processing of Metalâ€“Organic Frameworks. Accounts of Chemical Research, 2022, 55, 186-196.	7.6	29
9	CCIQS-1: A Dynamic Metalâ€“Organic Framework with Selective Guest-Triggered Porosity Switching. Chemistry of Materials, 2022, 34, 669-677.	3.2	6
10	Templateâ€Mediated Control over Polymorphism in the Vaporâ€Assisted Formation of Zeolitic Imidazolate Framework Powders and Films. Angewandte Chemie - International Edition, 2021, 60, 7553-7558.	7.2	20
11	Direct X-ray and electron-beam lithography of halogenated zeolitic imidazolate frameworks. Nature Materials, 2021, 20, 93-99.	13.3	112
12	Surfactant-assisted synthesis of titanium nanoMOFs for thin film fabrication. Chemical Communications, 2021, 57, 9040-9043.	2.2	4
13	Templateâ€Mediated Control over Polymorphism in the Vaporâ€Assisted Formation of Zeolitic Imidazolate Framework Powders and Films. Angewandte Chemie, 2021, 133, 7631-7636.	1.6	2
14	Porosimetry for Thin Films of Metalâ€“Organic Frameworks: A Comparison of Positron Annihilation Lifetime Spectroscopy and Adsorptionâ€Based Methods. Advanced Materials, 2021, 33, e2006993.	11.1	40
15	Porosimetry: Porosimetry for Thin Films of Metalâ€“Organic Frameworks: A Comparison of Positron Annihilation Lifetime Spectroscopy and Adsorptionâ€Based Methods (Adv. Mater. 17/2021). Advanced Materials, 2021, 33, 2170133.	11.1	3
16	3D Printing of Monolithic Capillarityâ€Driven Microfluidic Devices for Diagnostics. Advanced Materials, 2021, 33, e2008712.	11.1	36
17	Benchtop In Situ Measurement of Full Adsorption Isotherms by NMR. Journal of the American Chemical Society, 2021, 143, 8249-8254.	6.6	18
18	Microfluidic Devices: 3D Printing of Monolithic Capillarityâ€Driven Microfluidic Devices for Diagnostics (Adv. Mater. 25/2021). Advanced Materials, 2021, 33, 2170192.	11.1	0

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

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37	4D synchrotron microtomography and pore-network modelling for direct in situ capillary flow visualization in 3D printed microfluidic channels. Lab on A Chip, 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. Talanta, 2020, 215, 120910.	2.9	36
39	Solvent-Free Powder Synthesis and MOF-CVD Thin Films of the Large-Pore Metalâ€“Organic Framework MAF-6. Chemistry of Materials, 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. Nature Communications, 2019, 10, 3729.	5.8	106
42	Vapour-phase deposition of oriented copper dicarboxylate metalâ€“organic framework thin films. Chemical Communications, 2019, 55, 10056-10059.	2.2	64
43	Vaporâ€Phase Linker Exchange of the Metalâ€“Organic Framework ZIFâ€8: A Solventâ€Free Approach to Postâ€synthetic Modification. Angewandte Chemie - International Edition, 2019, 58, 18471-18475.	7.2	42
44	Vaporâ€Phase Linker Exchange of the Metalâ€“Organic Framework ZIFâ€8: A Solventâ€Free Approach to Postâ€synthetic Modification. Angewandte Chemie, 2019, 131, 18642-18646.	1.6	14
45	Integrated Cleanroom Process for the Vapor-Phase Deposition of Large-Area Zeolitic Imidazolate Framework Thin Films. Chemistry of Materials, 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). Chemistry of Materials, 2019, 31, 8413-8423.	3.2	87
47	Sodium-coupled electron transfer reactivity of metalâ€“organic frameworks containing titanium clusters: the importance of cations in redox chemistry. Chemical Science, 2019, 10, 1322-1331.	3.7	20
48	Pore network model for permeability characterization of three-dimensionally-printed porous materials for passive microfluidics. Physical Review E, 2019, 99, 033107.	0.8	28
49	Active Role of Methanol in Post-Synthetic Linker Exchange in the Metalâ€“Organic Framework UiO-66. Chemistry of Materials, 2019, 31, 1359-1369.	3.2	43
50	Reversible Optical Writing and Data Storage in an Anthraceneâ€Loaded Metalâ€“Organic Framework. Angewandte Chemie - International Edition, 2019, 58, 2423-2427.	7.2	102
51	(Invited) Vapor-Deposited MOFs As Gap-Filling Low-k Dielectrics. ECS Meeting Abstracts, 2019, , .	0.0	0
52	3D printing in chemical engineering and catalytic technology: structured catalysts, mixers and reactors. Chemical Society Reviews, 2018, 47, 209-230.	18.7	351
53	Reversible Optical Writing and Data Storage in an Anthraceneâ€Loaded Metalâ€Organic Framework. Angewandte Chemie, 2018, 131, 2445.	1.6	24
54	Bulk-to-Surface Proton-Coupled Electron Transfer Reactivity of the Metalâ€“Organic Framework MIL-125. Journal of the American Chemical Society, 2018, 140, 16184-16189.	6.6	41

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55	Bringing Porous Organic and Carbonâ€Based Materials toward Thinâ€Film Applications. Advanced Functional Materials, 2018, 28, 1801545.	7.8	53
56	An in situ investigation of the water-induced phase transformation of UTSA-74 to MOF-74(Zn). CrystEngComm, 2017, 19, 4152-4156.	1.3	20
57	Photopatterning of fluorescent hostâ€“guest carriers through pore activation of metalâ€“organic framework single crystals. Chemical Communications, 2017, 53, 7222-7225.	2.2	12
58	An updated roadmap for the integration of metalâ€“organic frameworks with electronic devices and chemical sensors. Chemical Society Reviews, 2017, 46, 3185-3241.	18.7	987
59	Adsorption and Reactive Desorption on Metalâ€“Organic Frameworks: A Direct Strategy for Lactic Acid Recovery. ChemSusChem, 2017, 10, 643-650.	3.6	17
60	Correction: An updated roadmap for the integration of metalâ€“organic frameworks with electronic devices and chemical sensors. Chemical Society Reviews, 2017, 46, 3853-3853.	18.7	30
61	Gel-based morphological design of zirconium metalâ€“organic frameworks. Chemical Science, 2017, 8, 3939-3948.	3.7	177
62	Parts per Million Detection of Alcohol Vapors via Metal Organic Framework Functionalized Surface Plasmon Resonance Sensors. Analytical Chemistry, 2017, 89, 4480-4487.	3.2	40
63	Stabilising Ni catalysts for the dehydrationâ€“decarboxylationâ€“hydrogenation of citric acid to methylsuccinic acid. Green Chemistry, 2017, 19, 4642-4650.	4.6	9
64	Silver-induced reconstruction of an adeninate-based metalâ€“organic framework for encapsulation of luminescent adenine-stabilized silver clusters. Journal of Materials Chemistry C, 2016, 4, 4259-4268.	2.7	22
65	Towards metalâ€“organic framework based field effect chemical sensors: UiO-66-NH₂ for nerve agent detection. Chemical Science, 2016, 7, 5827-5832.	3.7	108
66	Waste PET (bottles) as a resource or substrate for MOF synthesis. Journal of Materials Chemistry A, 2016, 4, 9519-9525.	5.2	100
67	Biobased Ionic Liquids: Solvents for a Green Processing Industry?. ACS Sustainable Chemistry and Engineering, 2016, 4, 2917-2931.	3.2	195
68	Vaporâ€Phase Deposition and Modification of Metalâ€“Organic Frameworks: Stateâ€ofâ€theâ€Art and Future Directions. Chemistry - A European Journal, 2016, 22, 14452-14460.	1.7	81
69	Chemical vapour deposition of zeolitic imidazolate framework thinÂfilms. Nature Materials, 2016, 15, 304-310.	13.3	528
70	Sequential Pore Wall Modification in a Covalent Organic Framework for Application in Lactic Acid Adsorption. Chemistry of Materials, 2016, 28, 626-631.	3.2	189
71	Application of metal and metal oxide nanoparticles@MOFs. Coordination Chemistry Reviews, 2016, 307, 237-254.	9.5	479
72	A Flexible Photoactive Titanium Metalâ€“Organic Framework Based on a [Ti^{IV}₃(μ₃â€O)(O)₂(COO)₆] Cluster. Angewandte Chemie - International Edition, 2015, 54, 13912-13917.	7.2	103

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

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91	In situ synthesis of Cuâ€“BTC (HKUST-1) in macro-/mesoporous silica monoliths for continuous flow catalysis. Chemical Communications, 2012, 48, 4749.	2.2	151
92	Tuning the catalytic performance of metalâ€“organic frameworks in fine chemistry by active site engineering. Journal of Materials Chemistry, 2012, 22, 10313.	6.7	176
93	Electronic Effects of Linker Substitution on Lewis Acid Catalysis with Metalâ€“Organic Frameworks. Angewandte Chemie - International Edition, 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. Microporous and Mesoporous Materials, 2012, 157, 82-88.	2.2	33
95	Electrochemical synthesis of thin HKUST-1 layers on copper mesh. Microporous and Mesoporous Materials, 2012, 158, 209-213.	2.2	126
96	Digital Microfluidic Highâ€Throughput Printing of Single Metalâ€Organic Framework Crystals. Advanced Materials, 2012, 24, 1316-1320.	11.1	88
97	Lewis acid double metal cyanide catalysts for hydroamination of phenylacetylene. Chemical Communications, 2011, 47, 4114.	2.2	36
98	Interfacial synthesis of hollow metalâ€“organic framework capsules demonstrating selective permeability. Nature Chemistry, 2011, 3, 382-387.	6.6	483
99	An amino-modified Zr-terephthalate metalâ€“organic framework as an acidâ€“base catalyst for cross-aldol condensation. Chemical Communications, 2011, 47, 1521-1523.	2.2	392
100	Metalâ€“Organic Framework Single Crystals as Photoactive Matrices for the Generation of Metallic Microstructures. Advanced Materials, 2011, 23, 1788-1791.	11.1	100
101	Silicaâ€“MOF Composites as a Stationary Phase in Liquid Chromatography. European Journal of Inorganic Chemistry, 2010, 2010, 3735-3738.	1.0	120
102	Direct Patterning of Oriented Metalâ€“Organic Framework Crystals via Control over Crystallization Kinetics in Clear Precursor Solutions. Advanced Materials, 2010, 22, 2685-2688.	11.1	224
103	Patterned film growth of metalâ€“organic frameworks based on galvanic displacement. Chemical Communications, 2010, 46, 3735.	2.2	86
104	Separation of C₅-Hydrocarbons on Microporous Materials: Complementary Performance of MOFs and Zeolites. Journal of the American Chemical Society, 2010, 132, 2284-2292.	6.6	173
105	Superâ€Resolution Reactivity Mapping of Nanostructured Catalyst Particles. Angewandte Chemie - International Edition, 2009, 48, 9285-9289.	7.2	175
106	Patterned Growth of Metal-Organic Framework Coatings by Electrochemical Synthesis. Chemistry of Materials, 2009, 21, 2580-2582.	3.2	428
107	Towards direct monitoring of discrete events in a catalytic cycle at the single molecule level. Photochemical and Photobiological Sciences, 2009, 8, 453-456.	1.6	40
108	Morphology of Large ZSM-5 Crystals Unraveled by Fluorescence Microscopy. Journal of the American Chemical Society, 2008, 130, 5763-5772.	6.6	147

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109	Relating Pore Structure to Activity at the Subcrystal Level for ZSM-5: An Electron Backscattering Diffraction and Fluorescence Microscopy Study. Journal of the American Chemical Society, 2008, 130, 13516-13517.	6.6	62
110	Singleâ€Crystal Capacitive Sensors with Micropatterned Electrodes via Spaceâ€Confined Growth of the Metalâ€“Organic Framework HKUSTâ€1. Advanced Functional Materials, 0, , 2204065.	7.8	4