Stefan Wuttke

List of Publications by Year in Descending Order

113 papers	5,978 citations	43 h-index	75 g-index
131 ext. papers	7,454 ext. citations	11.6 avg, IF	6.21 L-index

#	Paper	IF	Citations
113	Toxicity of metal-organic framework nanoparticles: from essential analyses to potential applications.. *Chemical Society Reviews*, **2022**,	58.5	17
112	MOF Synthesis Prediction Enabled by Automatic Data Mining and Machine Learning.. *Angewandte Chemie - International Edition*, **2022**,	16.4	7
111	Metallodrugs in cancer nanomedicine.. *Chemical Society Reviews*, **2022**,	58.5	10
110	Nanoscience versus Viruses: The SARS-CoV-2 Case. *Advanced Functional Materials*, **2022**, 32, 2107826	15.6	2
109	Living Cell Nanoporation and Exosomal RNA Analysis Platform for Real-Time Assessment of Cellular Therapies. *Journal of the American Chemical Society*, **2022**, 144, 9443-9450	16.4	1
108	Single Crystals Heterogeneity Impacts the Intrinsic and Extrinsic Properties of Metal-Organic Frameworks. *Advanced Materials*, **2021**, e2104530	24	2
107	Printed Capacitive Sensors Based on Ionic Liquid/Metal-Organic Framework Composites for Volatile Organic Compounds Detection. *Advanced Functional Materials*, **2021**, 31, 2010703	15.6	4
106	Identification of the Physicochemical Factors Involved in the Dye Separation via Methionine-Functionalized Mesoporous Carbons. *Advanced Sustainable Systems*, **2021**, 5, 2100013	5.9	1
105	Ferromagnetic supramolecular metal-organic frameworks for active capture and magnetic sensing of emerging drug pollutants. *Cell Reports Physical Science*, **2021**, 2, 100421	6.1	3
104	Ionic Liquids: Printed Capacitive Sensors Based on Ionic Liquid/Metal-Organic Framework Composites for Volatile Organic Compounds Detection (Adv. Funct. Mater. 25/2021). *Advanced Functional Materials*, **2021**, 31, 2170182	15.6	
103	Chitin/Metal-Organic Framework Composites as Wide-Range Adsorbent. *ChemSusChem*, **2021**, 14, 2892-2901	8.4	4
102	MRI-Active Metal-Organic Frameworks: Concepts for the Translation from Lab to Clinic. *Advanced Therapeutics*, **2021**, 4, 2100067	4.9	0
101	Der derzeitige Stand von MOF- und COF-Anwendungen. *Angewandte Chemie*, **2021**, 133, 24174	3.6	4
100	25 Jahre retikulre Chemie. *Angewandte Chemie*, **2021**, 133, 24142	3.6	0
99	Linker Exchange via Migration along the Backbone in Metal-Organic Frameworks. *Journal of the American Chemical Society*, **2021**, 143, 10541-10546	16.4	4
98	Modular Assembly of Red Blood Cell Superstructures from Metal-Organic Framework Nanoparticle-Based Building Blocks. *Advanced Functional Materials*, **2021**, 31, 2005935	15.6	12
97	Overcoming the paracetamol dose challenge with wrinkled mesoporous carbon spheres. *Journal of Colloid and Interface Science*, **2021**, 586, 673-682	9.3	7

96	Applications of reticular diversity in metal□organic frameworks: An ever-evolving state of the art. *Coordination Chemistry Reviews*, **2021**, 430, 213655	23.2	17
95	Artificial Bioaugmentation of Biomacromolecules and Living Organisms for Biomedical Applications. *ACS Nano*, **2021**, 15, 3900-3926	16.7	6
94	The Current Status of MOF and COF Applications. *Angewandte Chemie - International Edition*, **2021**, 60, 23975-24001	16.4	75
93	25 Years of Reticular Chemistry. *Angewandte Chemie - International Edition*, **2021**, 60, 23946-23974	16.4	50
92	From Molecules to Frameworks to Superframework Crystals. *Advanced Materials*, **2021**, 33, e2103808	24	1
91	Pore Chemistry of Metal□Organic Frameworks. *Advanced Functional Materials*, **2020**, 30, 2000238	15.6	110
90	Colloidal nanoparticles as pharmaceutical agents. *Frontiers of Nanoscience*, **2020**, 16, 89-115	0.7	1
89	Metal-Organic Framework Nanoparticles Induce Pyroptosis in Cells Controlled by the Extracellular pH. *Advanced Materials*, **2020**, 32, e1907267	24	50
88	Tuning the Morphological Appearance of Iron(III) Fumarate: Impact on Material Characteristics and Biocompatibility. *Chemistry of Materials*, **2020**, 32, 2253-2263	9.6	7
87	Sol□Gel-Based Advanced Porous Silica Materials for Biomedical Applications. *Advanced Functional Materials*, **2020**, 30, 1909539	15.6	59
86	The Chemistry of Reticular Framework Nanoparticles: MOF, ZIF, and COF Materials. *Advanced Functional Materials*, **2020**, 30, 1909062	15.6	79
85	Circumventing Wear and Tear of Adaptive Porous Materials. *Advanced Functional Materials*, **2020**, 30, 1908547	15.6	10
84	Controlling the morphology of metal-organic frameworks and porous carbon materials: metal oxides as primary architecture-directing agents. *Chemical Society Reviews*, **2020**, 49, 3348-3422	58.5	104
83	Clinically Approved MRI Contrast Agents as Imaging Labels for a Porous Iron-Based MOF Nanocarrier: A Systematic Investigation in a Clinical MRI Setting. *Advanced Therapeutics*, **2020**, 3, 1900126	4.9	10
82	Digital Reticular Chemistry. *CheM*, **2020**, 6, 2219-2241	16.2	31
81	Metal□Organic Framework Based PVDF Separators for High Rate Cycling Lithium-Ion Batteries. *ACS Applied Energy Materials*, **2020**, 3, 11907-11919	6.1	15
80	Mehr als nur ein Netzwerk: Strukturierung retikulärer Materialien im Nano-, Meso- und Volumenbereich. *Angewandte Chemie*, **2020**, 132, 22534-22556	3.6	5
79	Beyond Frameworks: Structuring Reticular Materials across Nano-, Meso-, and Bulk Regimes. *Angewandte Chemie - International Edition*, **2020**, 59, 22350-22370	16.4	27

78	Tuning porosity in macroscopic monolithic metal-organic frameworks for exceptional natural gas storage. *Nature Communications*, **2019**, 10, 2345	17.4	100
77	Nanoparticle Characterization: What to Measure?. *Advanced Materials*, **2019**, 31, e1901556	24	107
76	Metal-Organic Framework Nanoparticle-Assisted Cryopreservation of Red Blood Cells. *Journal of the American Chemical Society*, **2019**, 141, 7789-7796	16.4	44
75	SupraCells: Living Mammalian Cells Protected within Functional Modular Nanoparticle-Based Exoskeletons. *Advanced Materials*, **2019**, 31, e1900545	24	56
74	Coordinative Binding of Polymers to Metal-Organic Framework Nanoparticles for Control of Interactions at the Biointerface. *ACS Nano*, **2019**, 13, 3884-3895	16.7	41
73	A Chemiluminescent Metal-Organic Framework. *Chemistry - A European Journal*, **2019**, 25, 6349-6354	4.8	19
72	Nanoparticle Characterization: Nanoparticle Characterization: What to Measure? (Adv. Mater. 32/2019). *Advanced Materials*, **2019**, 31, 1970226	24	21
71	Core-Shell Functionalized Zirconium-Pemetrexed Coordination Nanoparticles as Carriers with a High Drug Content. *Advanced Therapeutics*, **2019**, 2, 1900120	4.9	7
70	Chemical diversity in a metal-organic framework revealed by fluorescence lifetime imaging. *Nature Communications*, **2018**, 9, 1647	17.4	80
69	Metal□rganic framework nanoparticles for magnetic resonance imaging. *Inorganic Chemistry Frontiers*, **2018**, 5, 1760-1779	6.8	74
68	On-Surface Synthesis of Highly Oriented Thin Metal-Organic Framework Films through Vapor-Assisted Conversion. *Journal of the American Chemical Society*, **2018**, 140, 4812-4819	16.4	96
67	Multifunctional Efficiency: Extending the Concept of Atom Economy to Functional Nanomaterials. *ACS Nano*, **2018**, 12, 2094-2105	16.7	165
66	Bringing Porous Organic and Carbon-Based Materials toward Thin-Film Applications. *Advanced Functional Materials*, **2018**, 28, 1801545	15.6	38
65	Highly stable and porous porphyrin-based zirconium and hafnium phosphonates - electron crystallography as an important tool for structure elucidation. *Chemical Science*, **2018**, 9, 5467-5478	9.4	50
64	Mass Measurements Reveal Preferential Sorption of Mixed Solvent Components in Porous Nanoparticles. *Small*, **2018**, 14, e1800826	11	14
63	Multifunctional Nanoparticles by Coordinative Self-Assembly of His-Tagged Units with Metal-Organic Frameworks. *Journal of the American Chemical Society*, **2017**, 139, 2359-2368	16.4	127
62	Positioning metal-organic framework nanoparticles within the context of drug delivery - A comparison with mesoporous silica nanoparticles and dendrimers. *Biomaterials*, **2017**, 123, 172-183	15.6	176
61	Metal-Organic Framework Nanoparticles in Photodynamic Therapy: Current Status and Perspectives. *Advanced Functional Materials*, **2017**, 27, 1606314	15.6	340

60	Adsorption and Reactive Desorption on Metal-Organic Frameworks: A Direct Strategy for Lactic Acid Recovery. *ChemSusChem*, **2017**, 10, 643-650	8.3	13
59	Synthesis, functionalisation and post-synthetic modification of bismuth metal-organic frameworks. *Dalton Transactions*, **2017**, 46, 8658-8663	4.3	36
58	Expanding the Group of Porous Interpenetrated Zr-Organic Frameworks (PIZOFs) with Linkers of Different Lengths. *Inorganic Chemistry*, **2017**, 56, 748-761	5.1	40
57	Exosome-Coated Metal□Organic Framework Nanoparticles: An Efficient Drug Delivery Platform. *Chemistry of Materials*, **2017**, 29, 8042-8046	9.6	134
56	Topology-guided functional multiplicity of iron(III)-based metal□organic frameworks. *Materials Chemistry Frontiers*, **2017**, 1, 1965-1974	7.8	11
55	Impact of plasma protein binding on cargo release by thermosensitive liposomes probed by fluorescence correlation spectroscopy. *European Journal of Pharmaceutics and Biopharmaceutics*, **2017**, 119, 215-223	5.7	16
54	Validating Metal-Organic Framework Nanoparticles for Their Nanosafety in Diverse Biomedical Applications. *Advanced Healthcare Materials*, **2017**, 6, 1600818	10.1	107
53	The chemistry of metal□organic framework nanoparticles. *Acta Crystallographica Section A: Foundations and Advances*, **2017**, 73, C1282-C1283	1.7	
52	Kinetic Analysis of the Uptake and Release of Fluorescein by Metal-Organic Framework Nanoparticles. *Materials*, **2017**, 10,	3.5	23
51	Liposome-Coated Iron Fumarate Metal-Organic Framework Nanoparticles for Combination Therapy. *Nanomaterials*, **2017**, 7,	5.4	56
50	Exploration of MOF nanoparticle sizes using various physical characterization methods □s what you measure what you get?. *CrystEngComm*, **2016**, 18, 4359-4368	3.3	79
49	Sequential Pore Wall Modification in a Covalent Organic Framework for Application in Lactic Acid Adsorption. *Chemistry of Materials*, **2016**, 28, 626-631	9.6	141
48	Investigation of the Co-Dependence of Morphology and Fluorescence Lifetime in a Metal-Organic Framework. *Small*, **2016**, 12, 3651-7	11	17
47	Nanoparticles **2016**, 491-521		2
46	Nanoscale Synthesis of Two Porphyrin-Based MOFs with Gallium and Indium. *Inorganic Chemistry*, **2016**, 55, 5312-9	5.1	24
45	Imparting Functionality to MOF Nanoparticles by External Surface Selective Covalent Attachment of Polymers. *Chemistry of Materials*, **2016**, 28, 3318-3326	9.6	157
44	Functionalized PCN-6 metal-organic frameworks. *Microporous and Mesoporous Materials*, **2015**, 216, 51-55	3.3	14
43	MOF nanoparticles coated by lipid bilayers and their uptake by cancer cells. *Chemical Communications*, **2015**, 51, 15752-5	5.8	152

42	Switch-On Fluorescence of a Perylene-Dye-Functionalized Metal-Organic Framework through Postsynthetic Modification. *Chemistry - A European Journal*, **2015**, 21, 10714-20	4.8	23
41	Turn-on fluorescence triggered by selective internal dye replacement in MOFs. *Chemical Communications*, **2014**, 50, 3599-601	5.8	38
40	Solvent-Free and Time Efficient Postsynthetic Modification of Amino-Tagged Metal□Organic Frameworks with Carboxylic Acid Derivatives. *Chemistry of Materials*, **2014**, 26, 6722-6728	9.6	61
39	Postsynthetic modification of an amino-tagged MOF using peptide coupling reagents: a comparative study. *Chemical Communications*, **2014**, 50, 11472-5	5.8	47
38	Highly sensitive and selective fluoride detection in water through fluorophore release from a metal-organic framework. *Scientific Reports*, **2013**, 3, 2562	4.9	91
37	Nitric Oxide Adsorption and Delivery in Flexible MIL-88(Fe) Metal□Organic Frameworks. *Chemistry of Materials*, **2013**, 25, 1592-1599	9.6	199
36	A rare example of a porous Ca-MOF for the controlled release of biologically active NO. *Chemical Communications*, **2013**, 49, 7773-5	5.8	120
35	Energy-efficient dehumidification over hierachically porous metal-organic frameworks as advanced water adsorbents. *Advanced Materials*, **2012**, 24, 806-10	24	237
34	Porous Materials: Energy-Efficient Dehumidification over Hierachically Porous Metal□Organic Frameworks as Advanced Water Adsorbents (Adv. Mater. 6/2012). *Advanced Materials*, **2012**, 24, 710-710	24	7
33	Highly oriented surface-growth and covalent dye labeling of mesoporous metal-organic frameworks. *Dalton Transactions*, **2012**, 41, 3899-901	4.3	26
32	Discovering the active sites for C3 separation in MIL-100(Fe) by using operando IR spectroscopy. *Chemistry - A European Journal*, **2012**, 18, 11959-67	4.8	77
31	Sn-doped hydroxylated MgF□catalysts for the fast and selective saccharification of cellulose to glucose. *ChemSusChem*, **2012**, 5, 1708-11	8.3	21
30	How Interpenetration Ensures Rigidity and Permanent Porosity in a Highly Flexible Hybrid Solid. *Chemistry of Materials*, **2012**, 24, 2486-2492	9.6	42
29	One-Pot Hydroacetylation of Menadione (Vitamin K3) to Menadiol Diacetate (Vitamin K4) by Heterogeneous Catalysis. *Advanced Synthesis and Catalysis*, **2012**, 354, 1301-1306	5.6	11
28	Novel sol□gel prepared zinc fluoride: synthesis, characterisation and acid□base sites analysis. *Journal of Materials Chemistry*, **2012**, 22, 14587		25
27	Bifunctional Nanoscopic Catalysts for the One-Pot Synthesis of (±)-Menthol from Citral. *Topics in Catalysis*, **2012**, 55, 680-687	2.3	18
26	Replacing benzyl chloride with benzyl alcohol in heterogeneous catalytic benzylation of aromatic compounds. *Pure and Applied Chemistry*, **2012**, 84, 427-437	2.1	10
25	Series of Porous 3-D Coordination Polymers Based on Iron(III) and Porphyrin Derivatives. *Chemistry of Materials*, **2011**, 23, 4641-4651	9.6	66

24	Highly selective metal fluoride catalysts for the dehydrohalogenation of 3-chloro-1,1,1,3-tetrafluorobutane. *Journal of Catalysis*, **2011**, 282, 175-182	7.3	71
23	Hydroxylated magnesium fluorides as environmentally friendly catalysts for glycerol acetylation. *Applied Catalysis B: Environmental*, **2011**, 107, 260-267	21.8	46
22	How linker's modification controls swelling properties of highly flexible iron(III) dicarboxylates MIL-88. *Journal of the American Chemical Society*, **2011**, 133, 17839-47	16.4	307
21	Tailor-Made MgF2-Based Catalysts by Sol–Gel Synthesis. *European Journal of Inorganic Chemistry*, **2011**, 2011, 4773-4794	2.3	64
20	Friedel–Crafts alkylations on nanoscopic inorganic fluorides. *Applied Catalysis A: General*, **2011**, 391, 169-174	3.4	29
19	Infrared Investigation of the Acid and Basic Properties of a Sol–Gel Prepared MgF2. *Journal of Physical Chemistry C*, **2010**, 114, 5113-5120	3.8	37
18	Synthesis of Vitamin K1 and K1-Chromanol by Friedel–Crafts Alkylation in Heterogeneous Catalysis. *ChemCatChem*, **2010**, 2, 92-97	5.2	33
17	Stereoselective Synthesis of Alicylic Amines. *Topics in Catalysis*, **2010**, 53, 1121-1125	2.3	7
16	Controlled Reducibility of a Metal–Organic Framework with Coordinatively Unsaturated Sites for Preferential Gas Sorption. *Angewandte Chemie*, **2010**, 122, 6085-6088	3.6	53
15	Eintopfsynthese von Menthol in Gegenwart eines hoch diastereoselektiven Au/MgF2-Katalysators. *Angewandte Chemie*, **2010**, 122, 8311-8315	3.6	10
14	Controlled reducibility of a metal-organic framework with coordinatively unsaturated sites for preferential gas sorption. *Angewandte Chemie - International Edition*, **2010**, 49, 5949-52	16.4	430
13	One-pot synthesis of menthol catalyzed by a highly diastereoselective Au/MgF2 catalyst. *Angewandte Chemie - International Edition*, **2010**, 49, 8134-8	16.4	47
12	Inside Cover: Controlled Reducibility of a Metal–Organic Framework with Coordinatively Unsaturated Sites for Preferential Gas Sorption (Angew. Chem. Int. Ed. 34/2010). *Angewandte Chemie - International Edition*, **2010**, 49, 5804-5804	16.4	8
11	Sol–gel prepared nanoscopic metal fluorides – a new class of tunable acid–base catalysts. *Catalysis Today*, **2010**, 152, 2-10	5.3	43
10	Investigation of the fluorolysis of magnesium methoxide. *Dalton Transactions*, **2009**, 4729-34	4.3	19
9	Cyclisation of citronellal over heterogeneous inorganic fluorides--highly chemo- and diastereoselective catalysts for (+/-)-isopulegol. *Chemical Communications*, **2009**, 460-2	5.8	42
8	A comparative study of surface acidity in the amorphous, high surface area solids, aluminium fluoride, magnesium fluoride and magnesium fluoride containing iron(III) or aluminium(III) fluorides. *Journal of Fluorine Chemistry*, **2008**, 129, 366-375	2.1	21
7	Novel sol-gel synthesis of acidic MgF(2-x)(OH)(x) materials. *Chemistry - A European Journal*, **2008**, 14, 11488-99	4.8	88

6	Mg6F2(OMe)10(MeOH)14--an alkoxide fluoride of an alkaline earth metal. *Angewandte Chemie - International Edition*, **2008**, 47, 190-2	16.4	18
5	Catalytic Performance of Nanoscopic, Aluminium Trifluoride-Based Catalysts in the Synthesis of (all-rac)-□-Tocopherol. *Advanced Synthesis and Catalysis*, **2008**, 350, 2517-2524	5.6	43
4	Mg6F2(OMe)10(MeOH)14 □ein Alkoxidfluorid eines Erdalkalimetalls. *Angewandte Chemie*, **2008**, 120, 196-198	3.6	3
3	Variation of sol□el synthesis parameters and their consequence for the surface area and structure of magnesium fluoride. *Journal of Materials Chemistry*, **2007**, 17, 4980		43
2	MOF Synthesis Prediction Enabled by Automatic Data Mining and Machine Learning. *Angewandte Chemie*,	3.6	1
1	Multivariate Functionalization of UiO-66 for Photocatalytic Water Remediation. *Advanced Sustainable Systems*,2200024	5.9	0