Elisa Barea

List of Publications by Year
in descending order

60 papers	4,577 citations	126858 33 h-index	123376 61 g-index
68 all docs	68 docs citations	68 times ranked	5629 citing authors

#	Article	IF	Citations
1	Toxic gas removal â€“ metalâ€“organic frameworks for the capture and degradation of toxic gases and vapours. Chemical Society Reviews, 2014, 43, 5419-5430.	18.7	838
2	Textile/Metalâ€“Organicâ€Framework Composites as Selfâ€Detoxifying Filters for Chemicalâ€Warfare Agents. Angewandte Chemie - International Edition, 2015, 54, 6790-6794.	7.2	291
3	Capture of Nerve Agents and Mustard Gas Analogues by Hydrophobic Robust MOF-5 Type Metalâ€“Organic Frameworks. Journal of the American Chemical Society, 2011, 133, 11888-11891.	6.6	270
4	Highly Hydrophobic Isoreticular Porous Metalâ€“Organic Frameworks for the Capture of Harmful Volatile Organic Compounds. Angewandte Chemie - International Edition, 2013, 52, 8290-8294.	7.2	264
5	Tuning the Adsorption Properties of Isoreticular Pyrazolate-Based Metalâ€“Organic Frameworks through Ligand Modification. Journal of the American Chemical Society, 2012, 134, 12830-12843.	6.6	184
6	H2, N2, CO, and CO2Sorption Properties of a Series of Robust Sodalite-Type Microporous Coordination Polymers. Inorganic Chemistry, 2006, 45, 2397-2399.	1.9	158
7	Cationâ€Exchange Porosity Tuning in Anionic Metalâ€“Organic Frameworks for the Selective Separation of Gases and Vapors and for Catalysis. Angewandte Chemie - International Edition, 2010, 49, 7308-7311.	7.2	152
8	Guest-Induced Modification of a Magnetically Active Ultramicroporous, Gismondine-like, Copper(II) Coordination Network. Journal of the American Chemical Society, 2008, 130, 3978-3984.	6.6	149
9	Nanoscaled Zinc Pyrazolate Metalâ€“Organic Frameworks as Drug-Delivery Systems. Inorganic Chemistry, 2016, 55, 2650-2663.	1.9	147
10	Adsorption of Harmful Organic Vapors by Flexible Hydrophobic Bis-pyrazolate Based MOFs. Chemistry of Materials, 2010, 22, 1664-1672.	3.2	138
11	Tetranuclear Coordination Assemblies Based on Half-Sandwich Ruthenium(II) Complexes: Noncovalent Binding to DNA and Cytotoxicity. Inorganic Chemistry, 2009, 48, 7413-7420.	1.9	110
12	Functionalisation of MOF open metal sites with pendant amines for CO2 capture. Journal of Materials Chemistry, 2012, 22, 10155.	6.7	110
13	Chemical Warfare Agents Detoxification Properties of Zirconium Metalâ€“Organic Frameworks by Synergistic Incorporation of Nucleophilic and Basic Sites. ACS Applied Materials & Interfaces, 2017, 9, 23967-23973.	4.0	100
14	Adsorptive capturing and storing greenhouse gases such as sulfur hexafluoride and carbon tetrafluoride using metalâ€“organic frameworks. Microporous and Mesoporous Materials, 2012, 156, 115-120.	2.2	92
15	Polymorphic Coordination Networks Responsive to CO₂, Moisture, and Thermal Stimuli: Porous Cobalt(II) and Zinc(II) Fluoropyrimidinolates. Chemistry - A European Journal, 2008, 14, 9890-9901.	1.7	84
16	Mineralomimetic Sodalite- and Muscovite-Type Coordination Frameworks. Dynamic Crystal-to-Crystal Interconversion Processes Sensitive to Ion Pair Recognition. Journal of the American Chemical Society, 2004, 126, 3014-3015.	6.6	76
17	Improved CO₂ Capture from Flue Gas by Basic Sites, Charge Gradients, and Missing Linker Defects on Nickel Face Cubic Centered MOFs. Advanced Functional Materials, 2014, 24, 6130-6135.	7.8	72
18	Chiral Pyrimidine Metallacalixarenes: Synthesis, Structure and Hostâ€“Guest Chemistry. Chemistry - A European Journal, 2003, 9, 4414-4421.	1.7	70

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19	Metalâ€“organic frameworks as potential multi-carriers of drugs. CrystEngComm, 2013, 15, 9364.	1.3	70
20	Soft functional polynuclear coordination compounds containing pyrimidine bridges. Journal of Solid State Chemistry, 2005, 178, 2436-2451.	1.4	69
21	A Soft Copper(II) Porous Coordination Polymer with Unprecedented Aqua Bridge and Selective Adsorption Properties. Chemistry - A European Journal, 2012, 18, 13117-13125.	1.7	69
22	Diamondoid Three-Dimensional Metal-Organic Framework Showing Structural Transformation with Guest Molecules. Crystal Growth and Design, 2009, 9, 4480-4486.	1.4	52
23	Study of the incorporation and release of the non-conventional half-sandwich ruthenium(ii) metallodrug RAPTA-C on a robust MOF. Chemical Communications, 2011, 47, 11751.	2.2	51
24	Borderline microporousâ€“ultramicroporous palladium(ii) coordination polymer networks. Effect of pore functionalisation on gas adsorption properties. Journal of Materials Chemistry, 2007, 17, 1939-1946.	6.7	47
25	A Flexible Proâ€porous Coordination Polymer: Nonâ€conventional Synthesis and Separation Properties Towards CO₂/CH₄ Mixtures. Chemistry - A European Journal, 2010, 16, 931-937.	1.7	45
26	Molecular architecture of redox-active half-sandwich Ru(ii) cyclic assemblies. Interactions with biomolecules and anticancer activity. CrystEngComm, 2010, 12, 2343.	1.3	45
27	Influence of pseudohalide ligands on the structural versatility and properties of novel ternary metal complexes with 1,2,4-triazolo[1,5-a]pyrimidine. CrystEngComm, 2010, 12, 3038.	1.3	44
28	In vitro and in vivo antiparasital activity against Trypanosoma cruzi of three novel 5-methyl-1,2,4-triazolo[1,5-a]pyrimidin-7(4H)-one-based complexes. Journal of Inorganic Biochemistry, 2011, 105, 770-776.	1.5	43
29	Rich Structural and Magnetic Chemistry of Cobalt(II) Pyrimidin-2-olate and Pyrimidin-4-olate Complexes. Synthesis, X-ray Powder Diffraction Studies, and Thermal Behavior. Chemistry of Materials, 2003, 15, 2153-2160.	3.2	39
30	Biophysical characterisation, antitumor activity and MOF encapsulation of a half-sandwich ruthenium(<scp>ii</scp>) mitoxantronato system. Journal of Materials Chemistry B, 2014, 2, 2473-2477.	2.9	36
31	Biological activity of three novel complexes with the ligand 5-methyl-1,2,4-triazolo[1,5-a]pyrimidin-7(4H)-one against Leishmania spp.. Journal of Antimicrobial Chemotherapy, 2011, 66, 813-819.	1.3	35
32	[Cu(4-oxopyrimidinate)2Â·nH2O]â^ž: a robust sodalite type metal-organic framework exhibiting a rich hostâ€“guest chemistry. Polyhedron, 2003, 22, 3051-3057.	1.0	32
33	Cation Exchange Strategy for the Encapsulation of a Photoactive CO-Releasing Organometallic Molecule into Anionic Porous Frameworks. Inorganic Chemistry, 2016, 55, 6525-6531.	1.9	32
34	Tuning the Structural and Magnetic Properties of Thermally Robust Coordination Polymers. Inorganic Chemistry, 2006, 45, 7612-7620.	1.9	31
35	Coordination Modulation Method To Prepare New Metalâ€“Organic Framework-Based CO-Releasing Materials. ACS Applied Materials & Interfaces, 2018, 10, 31158-31167.	4.0	31
36	Selective Oneâ€Pot Twoâ€Step Câ^'C Bond Formation using Metalâ€“Organic Frameworks with Mild Basicity as Heterogeneous Catalysts. ChemCatChem, 2017, 9, 4019-4023.	1.8	30

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37	Thermally Induced Interconversions of Metalâ^'Pyrimidine-4,6-dicarboxylate Polymers: A Structural, Spectroscopic, and Magnetic Study. Inorganic Chemistry, 2009, 48, 3087-3094.	1.9	27
38	Aluminum Doped MCM-41 Nanoparticles as Platforms for the Dual Encapsulation of a CO-Releasing Molecule and Cisplatin. Inorganic Chemistry, 2017, 56, 10474-10480.	1.9	27
39	Structural and magnetic properties of three novel complexes with the versatile ligand 5-methyl-1,2,4-triazolo[1,5-a]pyrimidin-7(4H)-one. Dalton Transactions, 2011, 40, 5180.	1.6	24
40	Metalorganic frameworks based on the 1,4-bis(5-tetrazolyl) benzene ligand: The Ag and Cu derivatives. Inorganica Chimica Acta, 2009, 362, 4340-4346.	1.2	23
41	RAPTA-C incorporation and controlled delivery from MIL-100(Fe) nanoparticles. New Journal of Chemistry, 2016, 40, 5690-5694.	1.4	23
42	Green synthesis of zirconium MOF-808 for simultaneous phosphate recovery and organophosphorus pesticide detoxification in wastewater. Journal of Materials Chemistry A, 2022, 10, 19606-19611.	5.2	23
43	Coordination Frameworks Containing the Pyrimidin-4-olate Ligand. Synthesis, Thermal, Magnetic, and ab Initio XRPD Structural Characterization of Nickel and Zinc Derivatives. Inorganic Chemistry, 2004, 43, 473-481.	1.9	22
44	Quest for Second-Harmonic-Generation-Active Coordination Polymers:Â Synthesis and Properties of Silver(I) Pyrimidinolates. Chemistry of Materials, 2005, 17, 4815-4824.	3.2	22
45	One-pot preparation of a novel CO-releasing material based on a CO-releasing molecule@metalâ€“organic framework system. Chemical Communications, 2017, 53, 6581-6584.	2.2	21
46	Layer-by-Layer Integration of Zirconium Metalâ€“Organic Frameworks onto Activated Carbon Spheres and Fabrics with Model Nerve Agent Detoxification Properties. ACS Applied Materials & Interfaces, 2021, 13, 50491-50496.	4.0	20
47	Inorganic mesoporous silicas as vehicles of two novel anthracene-based ruthenium metalloarenes. Journal of Inorganic Biochemistry, 2017, 166, 87-93.	1.5	18
48	Heteroleptic pyrimidine-2-olate and 4,4â€²-bipyridine copper(ii) layered metalâ€“organic frameworks with swelling properties. Dalton Transactions, 2005, , 1743-1746.	1.6	16
49	Structural and Magnetic Properties of Layered Copper(II) Coordination Polymers Intercalating s and f Metal Ions. Inorganic Chemistry, 2007, 46, 2988-2997.	1.9	16
50	Structure, Spectroscopic Properties, and Reversible Solid-to-Solid Reactions of Metal Complexes of 5-Nitro-pyrimidin-2-olate. Inorganic Chemistry, 2005, 44, 1472-1481.	1.9	14
51	A highly porous interpenetrated MOF-5-type network based on bipyrazolate linkers. CrystEngComm, 2013, 15, 9352.	1.3	9
52	Biomimetic 1-Aminocyclopropane-1-Carboxylic Acid Oxidase Ethylene Production by MIL-100(Fe)-Based Materials. ACS Applied Materials & Interfaces, 2019, 11, 34053-34058.	4.0	9
53	Dual removal and selective recovery of phosphate and an organophosphorus pesticide from water by a Zr-based metal-organic framework. Materials Today Chemistry, 2021, 22, 100596.	1.7	9
54	From 1D homoleptic to 2D heteroleptic pillared coordination polymers containing oxonato bridges. Inorganica Chimica Acta, 2011, 371, 79-87.	1.2	7

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55	[Re2(Âµ-1,2,4-triazolate)2(Âµ-OH)(CO)6]â^': a novel metalloligand for the construction of flexible porous coordination networks. Dalton Transactions, 2008, , 1825.	1.6	6
56	Silk fibroin nanoparticles as biocompatible nanocarriers of a novel light-responsive CO-prodrug. Dalton Transactions, 2018, 47, 10434-10438.	1.6	5
57	Preparation and Characterization of Solid Co(II) Pyrimidinolates in a Multifaceted Undergraduate Laboratory Experiment. Journal of Chemical Education, 2008, 85, 422.	1.1	1
58	Soft Porous Coordination Polymers. , 2013, , 73-102.		1
59	catena-Poly[[[triaquamanganese(II)]-Î¼-4,4â€²-bipyridine-Îº2N:Nâ€²-[triaquamanganese(II)]-Î¼-pyrimidine-4,6-dicarboxylato-Îº4N1,O6:N sulfate trihydrate]. Acta Crystallographica Section E: Structure Reports Online, 2010, 66, m86-m87.	0.2	0
60	Innentitelbild: Textile/Metal-Organic-Framework Composites as Self-Detoxifying Filters for Chemical-Warfare Agents (Angew. Chem. 23/2015). Angewandte Chemie, 2015, 127, 6754-6754.	1.6	0