

Miguel I Gonzalez

List of Publications by Year in descending order

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48
papers

5,135
citations

126907

33
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214800

47
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49
docs citations

49
times ranked

6250
citing authors

#	ARTICLE	IF	CITATIONS
1	Methane storage in flexible metal-organic frameworks with intrinsic thermal management. <i>Nature</i> , 2015, 527, 357-361.	27.8	817
2	Comprehensive study of carbon dioxide adsorption in the metal-organic frameworks $M_2(dobdc)$ ($M = \text{Mg, Mn, Fe, Co, Ni, Cu, Zn}$). <i>Chemical Science</i> , 2014, 5, 4569-4581.	7.4	342
3	Electronic Conductivity, Ferrimagnetic Ordering, and Reductive Insertion Mediated by Organic Mixed-Valence in a Ferric Semiquinoid Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2015, 137, 15703-15711.	13.7	329
4	Giant coercivity and high magnetic blocking temperatures for N_2 radical-bridged lanthanide complexes upon ligand dissociation. <i>Nature Communications</i> , 2017, 8, 2144.	12.8	273
5	A Diaminopropane-Appended Metal-Organic Framework Enabling Efficient CO_2 Capture from Coal Flue Gas via a Mixed Adsorption Mechanism. <i>Journal of the American Chemical Society</i> , 2017, 139, 13541-13553.	13.7	206
6	Controlling Cooperative CO_2 Adsorption in Diamine-Appended $Mg_2(dobpdc)$ Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2017, 139, 10526-10538.	13.7	205
7	Tristability in a Light-Actuated Single-Molecule Magnet. <i>Journal of the American Chemical Society</i> , 2013, 135, 15880-15884.	13.7	178
8	$M_2(im-dobdc)$ ($M = \text{Mn, Fe, Co, Ni}$) Metal-Organic Frameworks as Highly Selective, High-Capacity Adsorbents for Olefin/Paraffin Separations. <i>Journal of the American Chemical Society</i> , 2017, 139, 15363-15370.	13.7	178
9	Hydrogen Storage in the Expanded Pore Metal-Organic Frameworks $M_2(dobpdc)$ ($M = \text{Mg, Tl}$). <i>Journal of the American Chemical Society</i> , 2017, 139, 10526-10538.	13.7	171
10	Single-Crystal-to-Single-Crystal Metalation of a Metal-Organic Framework: A Route toward Structurally Well-Defined Catalysts. <i>Inorganic Chemistry</i> , 2015, 54, 2995-3005.	4.0	161
11	Exchange coupling and magnetic blocking in lanthanide complexes bridged by the multi-electron redox-active ligand 2,3,5,6-tetra(2-pyridyl)pyrazine. <i>Chemical Science</i> , 2014, 5, 4701-4711.	7.4	151
12	Separation of Xylene Isomers through Multiple Metal Site Interactions in Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2018, 140, 3412-3422.	13.7	150
13	Reversible CO Scavenging via Adsorbate-Dependent Spin State Transitions in an Iron(II)-Triazolate Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2016, 138, 5594-5602.	13.7	141
14	Recent Progress Towards Light Hydrocarbon Separations Using Metal-Organic Frameworks. <i>Trends in Chemistry</i> , 2019, 1, 159-171.	8.5	141
15	A Trinuclear Radical-Bridged Lanthanide Single-Molecule Magnet. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 10103-10107.	13.8	127
16	Tuning the Adsorption-Induced Phase Change in the Flexible Metal-Organic Framework $Co(bdp)$. <i>Journal of the American Chemical Society</i> , 2016, 138, 15019-15026.	13.7	123
17	Elucidating CO_2 Chemisorption in Diamine-Appended Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2018, 140, 18016-18031.	13.7	107
18	Selective, Tunable O_2 Binding in Cobalt(II)-Triazolate/Pyrazolate Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2016, 138, 7161-7170.	13.7	101

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19	Force Field Development from Periodic Density Functional Theory Calculations for Gas Separation Applications Using Metal-Organic Frameworks. <i>Journal of Physical Chemistry C</i> , 2016, 120, 12590-12604.	3.1	95
20	Substituent Effects on Exchange Coupling and Magnetic Relaxation in 2,2'-Bipyrimidine Radical-Bridged Lanthanide Complexes. <i>Journal of the American Chemical Society</i> , 2020, 142, 21197-21209.	13.7	86
21	Confinement of atomically defined metal halide sheets in a metal-organic framework. <i>Nature</i> , 2020, 577, 64-68.	27.8	84
22	Enantioselective Recognition of Ammonium Carbamates in a Chiral Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2017, 139, 16000-16012.	13.7	82
23	Structural characterization of framework-gas interactions in the metal-organic framework Co ₂ (dobdc) by in situ single-crystal X-ray diffraction. <i>Chemical Science</i> , 2017, 8, 4387-4398.	7.4	80
24	A Terminal Fluoride Ligand Generates Axial Magnetic Anisotropy in Dysprosium Complexes. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 1933-1938.	13.8	78
25	Ruthenium Metal-Organic Frameworks with Different Defect Types: Influence on Porosity, Sorption, and Catalytic Properties. <i>Chemistry - A European Journal</i> , 2016, 22, 14297-14307.	3.3	72
26	Unexpected Diffusion Anisotropy of Carbon Dioxide in the Metal-Organic Framework Zn ₂ (dobpdc). <i>Journal of the American Chemical Society</i> , 2018, 140, 1663-1673.	13.7	64
27	Taming the Chlorine Radical: Enforcing Steric Control over Chlorine-Radical-Mediated C-H Activation. <i>Journal of the American Chemical Society</i> , 2022, 144, 1464-1472.	13.7	62
28	Network-Forming Liquids from Metal-Bis(acetamide) Frameworks with Low Melting Temperatures. <i>Journal of the American Chemical Society</i> , 2021, 143, 2801-2811.	13.7	60
29	How Radical Are α -Radical-Photocatalysts? A Closed-Shell Meisenheimer Complex Is Identified as a Super-Reducing Photoreagent. <i>Journal of the American Chemical Society</i> , 2021, 143, 14352-14359.	13.7	53
30	Metal-Organic Phase-Change Materials for Thermal Energy Storage. <i>Journal of the American Chemical Society</i> , 2020, 142, 19170-19180.	13.7	42
31	Double Hangman Iron Porphyrin and the Effect of Electrostatic Nonbonding Interactions on Carbon Dioxide Reduction. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 1890-1895.	4.6	42
32	Thermodynamic Separation of 1-Butene from 2-Butene in Metal-Organic Frameworks with Open Metal Sites. <i>Journal of the American Chemical Society</i> , 2019, 141, 18325-18333.	13.7	39
33	Ethylene oligomerization in metal-organic frameworks bearing nickel(ii) 2,2'-bipyridine complexes. <i>Faraday Discussions</i> , 2017, 201, 351-367.	3.2	35
34	Slow Magnetic Relaxation in a Dysprosium Ammonia Metallocene Complex. <i>Inorganic Chemistry</i> , 2017, 56, 15049-15056.	4.0	35
35	A Trinuclear Radical-Bridged Lanthanide Single-Molecule Magnet. <i>Angewandte Chemie</i> , 2017, 129, 10237-10241.	2.0	31
36	Influence of Pore Size on Carbon Dioxide Diffusion in Two Isostructural Metal-Organic Frameworks. <i>Chemistry of Materials</i> , 2020, 32, 3570-3576.	6.7	29

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37	Cooperative adsorption of carbon disulfide in diamine-appended metal-organic frameworks. <i>Nature Communications</i> , 2018, 9, 5133.	12.8	28
38	A Terminal Fluoride Ligand Generates Axial Magnetic Anisotropy in Dysprosium Complexes. <i>Angewandte Chemie</i> , 2018, 130, 1951-1956.	2.0	23
39	A computational study of CH ₄ storage in porous framework materials with metalated linkers: connecting the atomistic character of CH ₄ binding sites to usable capacity. <i>Chemical Science</i> , 2016, 7, 4503-4518.	7.4	21
40	Capturing the Complete Reaction Profile of a C-H Bond Activation. <i>Journal of the American Chemical Society</i> , 2021, 143, 6060-6064.	13.7	21
41	Separation of Xenon and Krypton in the Metal-Organic Frameworks M ₂ (dobdc) (M=Co, Ni) by EtO_2 and Et_2O . <i>Journal of the American Chemical Society</i> , 2017, 139, 10784-10791.	2.3	16
42	Fluoroarene Separations in Metal-Organic Frameworks with Two Proximal Mg ²⁺ Coordination Sites. <i>Journal of the American Chemical Society</i> , 2021, 143, 1948-1958.	13.7	15
43	Multielectron C-H photoactivation with an Sb(v) oxo corrole. <i>Chemical Communications</i> , 2020, 56, 5247-5250.	4.1	14
44	Metal Insertion in a Methylamine-Functionalized Zirconium Metal-Organic Framework for Enhanced Carbon Dioxide Capture. <i>Inorganic Chemistry</i> , 2017, 56, 4308-4316.	4.0	11
45	Crystallographic characterization of the metal-organic framework Fe ₂ (bdp) ₃ upon reductive cation insertion. <i>Chemical Science</i> , 2020, 11, 9173-9180.	7.4	7
46	Calcium Coordination Solids for pH-Triggered Release of Olsalazine. <i>ChemMedChem</i> , 2017, 12, 1739-1742.	3.2	5
47	Synthesis and Characterization of a Tetrapodal NO ₄ ⁴⁻ Ligand and Its Transition Metal Complexes. <i>Inorganic Chemistry</i> , 2016, 55, 7527-7534.	4.0	4
48	Templated Growth of a Spin-Frustrated Cluster Fragment of MnBr ₂ in a Metal-Organic Framework. <i>Inorganic Chemistry</i> , 2021, 60, 16103-16110.	4.0	0