Jeffrey T Culp

List of Publications by Year
in descending order

41	1,757	23	39
papers	citations	h-index	g-index

279798

302126

43	43	43	2343
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Enhanced Guest@MOF Interaction via Stepwise Thermal Annealing: TCNQ@Cu₃(BTC)₂. Crystal Growth and Design, 2021, 21, 817-828.	3.0	5
2	Synthesis of High-Quality Mg-MOF-74 Thin Films <i>via</i> Vapor-Assisted Crystallization. ACS Applied Materials & Interfaces, 2021, 13, 35223-35231.	8.0	23
3	Density Functional Theory Study of the Structure of the Pillared Hofmann Compound Ni(3-Methyl-4,4â€²-bipyridine)[Ni(CN)₄] (Ni-BpyMe or PICNIC-21). Journal of Physical Chemistry C, 2021, 125, 15882-15889.	3.1	3
4	Metal-organic framework functionalized polymer coating for fiber optical methane sensors. Sensors and Actuators B: Chemical, 2020, 324, 128627.	7.8	43
5	Quantifying pore scale and matrix interactions of SCCO2 with the Marcellus shale. Fuel, 2020, 266, 116928.	6.4	31
6	State-of-the-art of methane sensing materials: A review and perspectives. TrAC - Trends in Analytical Chemistry, 2020, 125, 115820.	11.4	29
7	Alkylamine-Integrated Metalâ€"Organic Framework-Based Waveguide Sensors for Efficient Detection of Carbon Dioxide from Humid Gas Streams. ACS Applied Materials & Interfaces, 2019, 11, 33489-33496.	8.0	32
8	Structural Basis of CO2 Adsorption in a Flexible Metal-Organic Framework Material. Nanomaterials, 2019, 9, 354.	4.1	10
9	Quantifying dry supercritical CO2-induced changes of the Utica Shale. Fuel, 2018, 226, 54-64.	6.4	61
10	Metalâ€"Organic Framework Thin Film Coated Optical Fiber Sensors: A Novel Waveguide-Based Chemical Sensing Platform. ACS Sensors, 2018, 3, 386-394.	7.8	134
11	Zeolitic imidazolate framework-coated acoustic sensors for room temperature detection of carbon dioxide and methane. Nanoscale, 2018, 10, 8075-8087.	5.6	84
12	Electronic structure, pore size distribution, and sorption characterization of an unusual MOF, {[Ni(dpbz)][Ni(CN)4]}n, dpbz = 1,4-bis(4-pyridyl)benzene. Journal of Applied Physics, 2018, 123, 245105.	2.5	9
13	Simple Fabrication Method for Mixed Matrix Membranes with in Situ MOF Growth for Gas Separation. ACS Applied Materials & Interfaces, 2018, 10, 24784-24790.	8.0	77
14	Active Response of Six-Coordinate Cu²⁺ on CO₂ Uptake in Cu(dpa)₂SiF₆-<i>i</i> from <i>in Situ</i> X-ray Absorption Spectroscopy. Journal of Physical Chemistry C, 2017, 121, 11519-11523.	3.1	3
15	Crystallography of Representative MOFs Based on Pillared Cyanonickelate (PICNIC) Architecture. Crystals, 2016, 6, 108.	2.2	8
16	Synthesis and structural characterization of a flexible metal organic framework Sciences, 2016, 52, 1-9.	3.2	9
17	Flexible Solid Sorbents for CO2 CaptureÂand Separation. , 2015, , 149-176.		2
18	Carbon dioxide (CO2) absorption behavior of mixed matrix polymer composites containing a flexible coordination polymer. Journal of Colloid and Interface Science, 2013, 393, 278-285.	9.4	26

#	Article	IF	Citations
19	Effect of Spinâ€Crossoverâ€Induced Pore Contraction on CO₂â€“Host Interactions in the Porous Coordination Polymers [Fe(pyrazine)M(CN)₄] (M = Ni, Pt). European Journal of Inorganic Chemistry, 2013, 2013, 511-519.	2.0	15
20	Screening Hofmann Compounds as CO₂ Sorbents: Nontraditional Synthetic Route to Over 40 Different Pore-Functionalized and Flexible Pillared Cyanonickelates. Inorganic Chemistry, 2013, 52, 4205-4216.	4.0	61
21	FT-IR Study of CO₂ Adsorption in a Dynamic Copper(II) Benzoateâˆ'Pyrazine Host with CO₂âˆ'CO₂ Interactions in the Adsorbed State. Journal of Physical Chemistry C, 2011, 115, 1857-1866.	3.1	52
22	Selective Adsorption of CO₂ from Light Gas Mixtures by Using a Structurally Dynamic Porous Coordination Polymer. Angewandte Chemie - International Edition, 2011, 50, 10888-10892.	13.8	52
23	Mechanism for the Dynamic Adsorption of CO₂ and CH₄ in a Flexible Linear Chain Coordination Polymer as Determined from In Situ Infrared Spectroscopy. Journal of Physical Chemistry C, 2010, 114, 2184-2191.	3.1	37
24	Hydrogen Storage Properties of Rigid Three-Dimensional Hofmann Clathrate Derivatives:â€‰ The Effects of Pore Size. Journal of Physical Chemistry C, 2008, 112, 7079-7083.	3.1	67
25	Hysteresis in the Physisorption of CO₂ and N₂ in a Flexible Pillared Layer Nickel Cyanide. Journal of the American Chemical Society, 2008, 130, 12427-12434.	13.7	139
26	Adsorption Properties of Hydrogen and Carbon Dioxide in Prussian Blue Analogues M3[Co(CN)6]2, M = Co, Zn. Journal of Physical Chemistry C, 2007, 111, 1055-1060.	3.1	84
27	Experimental and Theoretical Studies of Gas Adsorption in Cu3(BTC)2:â€‰ An Effective Activation Procedure. Journal of Physical Chemistry C, 2007, 111, 9305-9313.	3.1	250
28	Kinetics of desorption of hexane from the microporous metal organic framework RPM-1. Microporous and Mesoporous Materials, 2007, 106, 115-121.	4.4	2
29	Hydrogen Storage Properties of Metal Nitroprussides M[Fe(CN)5NO], (M = Co, Ni). Journal of Physical Chemistry B, 2006, 110, 8325-8328.	2.6	61
30	Magnetism of metal cyanide networks assembled at interfaces. Coordination Chemistry Reviews, 2005, 249, 2642-2648.	18.8	63
31	Two applications of metal cyanide square grid monolayers: studies of evolving magnetic properties in layered films and templating Prussian blue family thin films. Polyhedron, 2003, 22, 2125-2131.	2.2	21
32	Interface directed assembly of cyanide-bridged Feâ€“Co and Feâ€“Mn square grid networks. Polyhedron, 2003, 22, 3059-3064.	2.2	10
33	Monolayer, Bilayer, Multilayers:Â Evolving Magnetic Behavior in Langmuirâˆ'Blodgett Films Containing a Two-Dimensional Ironâˆ'Nickel Cyanide Square Grid Network. Inorganic Chemistry, 2003, 42, 2842-2848.	4.0	53
34	Grazing Incidence Synchrotron X-ray Diffraction of Polymerizing Langmuir Monolayers. Langmuir, 2003, 19, 10514-10522.	3.5	7
35	Sequential Assembly of Homogeneous Magnetic Prussian Blue Films on Templated Surfaces. Chemistry of Materials, 2003, 15, 3431-3436.	6.7	50
36	Assembly of a Two-dimensional Cobalt-iron Cyanide Grid Network at an Air-water Interface. Molecular Crystals and Liquid Crystals, 2002, 376, 383-388.	0.9	0

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37	Structural Characterization of Metal Phosphonate Langmuirâˆ'Blodgett Films by Grazing Incidence X-ray Diffraction. Langmuir, 2002, 18, 8260-8262.	3.5	2
38	Supramolecular Assembly at Interfaces:Â Formation of an Extended Two-Dimensional Coordinate Covalent Square Grid Network at the Airâˆ'Water Interface. Journal of the American Chemical Society, 2002, 124, 10083-10090.	13.7	104
39	Real-Time Grazing Incidence X-ray Diffraction Studies of Polymerizing n-Octadecyltrimethoxysilane Langmuir Monolayers at the Air/Water Interface. Journal of the American Chemical Society, 2001, 123, 767-768.	13.7	23
40	Layered Mixed-Metal Phenylphosphonates, MnxCo1âˆ'x(O3PC6H5)Â·H2O: Structure and Magnetic Properties. Journal of Solid State Chemistry, 2001, 159, 362-370.	2.9	11
41	Metal Cyanide Networks Formed at an Air-Water Interface: Structure and Magnetic Properties. Materials Research Society Symposia Proceedings, 2000, 658, 521.	0.1	0