Matthew A Addicoat

List of Publications by Year
in descending order

125	11,911	44444	30277
papers	citations	50 h-index	107 g-index

131	131	131	11183
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Norbornane-based covalent organic frameworks for gas separation. Nanoscale, 2022, 14, 2475-2481.	2.8	24
2	Moduleâ€Patterned Polymerization towards Crystalline 2D sp²â€Carbon Covalent Organic Framework Semiconductors. Angewandte Chemie - International Edition, 2022, 61, .	7.2	38
3	Moduleâ€Patterned Polymerization towards Crystalline 2D sp²â€Carbon Covalent Organic Framework Semiconductors. Angewandte Chemie, 2022, 134, .	1.6	7
4	Control of Crystallinity of Vinyleneâ€Linked Twoâ€Dimensional Conjugated Polymers by Rational Monomer Design. Chemistry - A European Journal, 2022, 28, .	1.7	5
5	Combination of Knoevenagel Polycondensation and Waterâ€Assisted Dynamic Michaelâ€Additionâ€Elimination for the Synthesis of Vinyleneâ€Linked 2D Covalent Organic Frameworks. Angewandte Chemie - International Edition, 2022, 61, .	7.2	23
6	Combination of Knoevenagel Polycondensation and Waterâ€Assisted Dynamic Michaelâ€Additionâ€Elimination for the Synthesis of Vinyleneâ€Linked 2D Covalent Organic Frameworks. Angewandte Chemie, 2022, 134, .	1.6	4
7	A Nanographeneâ€Based Twoâ€Dimensional Covalent Organic Framework as a Stable and Efficient Photocatalyst. Angewandte Chemie - International Edition, 2022, 61, .	7.2	38
8	A Nanographeneâ€Based Twoâ€Dimensional Covalent Organic Framework as a Stable and Efficient Photocatalyst. Angewandte Chemie, 2022, 134, .	1.6	2
9	Performance of GFN1-xTB for periodic optimization of metal organic frameworks. Physical Chemistry Chemical Physics, 2022, 24, 10906-10914.	1.3	4
10	Outstanding Charge Mobility by Band Transport in Two-Dimensional Semiconducting Covalent Organic Frameworks. Journal of the American Chemical Society, 2022, 144, 7489-7496.	6.6	43
11	Dual Metalation in a Two-Dimensional Covalent Organic Framework for Photocatalytic Câ€“N Cross-Coupling Reactions. Journal of the American Chemical Society, 2022, 144, 7822-7833.	6.6	102
12	Effect of unwanted guest molecules on the stacking configuration of covalent organic frameworks: a periodic energy decomposition analysis. Physical Chemistry Chemical Physics, 2022, 24, 15494-15501.	1.3	4
13	Efficacious and sustained release of an anticancer drug mitoxantrone from new covalent organic frameworks using protein corona. Chemical Science, 2022, 13, 7920-7932.	3.7	15
14	Thermal Conductivity of Two-Dimensional Benzobisoxazole-Linked Covalent Organic Frameworks with Nanopores: Implications for Thermal Management Applications. ACS Applied Nano Materials, 2022, 5, 13787-13793.	2.4	6
15	Thiopheneâ€Bridged Donorâ€“Acceptor sp²â€Carbonâ€Linked 2D Conjugated Polymers as Photocathodes for Water Reduction. Advanced Materials, 2021, 33, e2006274.	11.1	100
16	A supramolecular cavitand for selective chromatographic separation of peptides using LC-MS/MS: a combined in silico and experimental approach. New Journal of Chemistry, 2021, 45, 141-146.	1.4	2
17	Mixed hierarchical local structure in a disordered metalâ€“organic framework. Nature Communications, 2021, 12, 2062.	5.8	44
18	Supramolecular Chromatographic Separation of C60 and C70 Fullerenes: Flash Column Chromatography vs. High Pressure Liquid Chromatography. International Journal of Molecular Sciences, 2021, 22, 5726.	1.8	0

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19	A Dual-Function Highly Crystalline Covalent Organic Framework for HCl Sensing and Visible-Light Heterogeneous Photocatalysis. Macromolecules, 2021, 54, 6595-6604.	2.2	34
20	Role of Host-Guest Interaction in Understanding Polymerisation in Metal-Organic Frameworks. Frontiers in Chemistry, 2021, 9, 716294.	1.8	3
21	Exceptional electron conduction in two-dimensional covalent organic frameworks. CheM, 2021, 7, 3309-3324.	5.8	41
22	Tailored pore size and microporosity of covalent organic framework (COF) membranes for improved molecular separation. , 2021, 1, 100008.		6
23	Silica bound co-pillar[4+1]arene as a novel supramolecular stationary phase. Chemical Communications, 2020, 56, 1792-1794.	2.2	9
24	Synthese von Vinylâ€verknÃ¼pften zweidimensionalen konjugierten Polymeren via Hornerâ€Wadsworthâ€Emmonsâ€Reaktion. Angewandte Chemie, 2020, 132, 23827-23832.	1.6	18
25	Nearâ€“atomic-scale observation of grain boundaries in a layer-stacked two-dimensional polymer. Science Advances, 2020, 6, eabb5976.	4.7	39
26	Synthesis of Vinyleneâ€Linked Twoâ€Dimensional Conjugated Polymers via the Hornerâ€“Wadsworthâ€“Emmons Reaction. Angewandte Chemie - International Edition, 2020, 59, 23620-23625.	7.2	86
27	Luminescent sp²-Carbon-Linked 2D Conjugated Polymers with High Photostability. Chemistry of Materials, 2020, 32, 7985-7991.	3.2	48
28	Morphological Evolution of Two-Dimensional Porous Hexagonal Trimesic Acid Framework. ACS Applied Materials & Interfaces, 2020, 12, 15588-15594.	4.0	12
29	How to functionalise metalâ€“organic frameworks to enable guest nanocluster embedment. Journal of Materials Chemistry A, 2020, 8, 4889-4897.	5.2	6
30	A Thiadiazole-Based Covalent Organic Framework: A Metal-Free Electrocatalyst toward Oxygen Evolution Reaction. ACS Catalysis, 2020, 10, 5623-5630.	5.5	140
31	Pore engineering of ultrathin covalent organic framework membranes for organic solvent nanofiltration and molecular sieving. Chemical Science, 2020, 11, 5434-5440.	3.7	78
32	Catalytic Activity Towards Hydrogen Evolution Dependent of the Degree of Conjugation and Absorption of Six Organic Chromophores. ChemistryOpen, 2020, 9, 405-408.	0.9	1
33	Connecting Microscopic Structures, Mesoscale Assemblies, and Macroscopic Architectures in 3D-Printed Hierarchical Porous Covalent Organic Framework Foams. Journal of the American Chemical Society, 2020, 142, 8252-8261.	6.6	115
34	One step conversion of 1,5-bis(dimethylamino)naphthalene to salts of â€œback to backâ€•bis-acridine derivatives. New Journal of Chemistry, 2020, 44, 9621-9625.	1.4	3
35	Confining H3PO4 network in covalent organic frameworks enables proton super flow. Nature Communications, 2020, 11, 1981.	5.8	114
36	A Nitrogenâ€Rich 2D sp²â€Carbonâ€Linked Conjugated Polymer Framework as a Highâ€Performance Cathode for Lithiumâ€Ion Batteries. Angewandte Chemie, 2019, 131, 859-863.	1.6	71

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37	Weak Intermolecular Interactions in Covalent Organic Framework-Carbon Nanofiber Based Crystalline yet Flexible Devices. ACS Applied Materials & Interfaces, 2019, 11, 30828-30837.	4.0	54
38	Highâ€Precision Size Recognition and Separation in Synthetic 1D Nanochannels. Angewandte Chemie - International Edition, 2019, 58, 15922-15927.	7.2	50
39	Highâ€Precision Size Recognition and Separation in Synthetic 1D Nanochannels. Angewandte Chemie, 2019, 131, 16069-16074.	1.6	13
40	Zinc ion interactions in a two-dimensional covalent organic framework based aqueous zinc ion battery. Chemical Science, 2019, 10, 8889-8894.	3.7	220
41	Azobenzene-Equipped Covalent Organic Framework: Light-Operated Reservoir. Journal of the American Chemical Society, 2019, 141, 19078-19087.	6.6	86
42	Porosity Switching in Polymorphic Porous Organic Cages with Exceptional Chemical Stability. Angewandte Chemie, 2019, 131, 4287-4291.	1.6	10
43	Porosity Switching in Polymorphic Porous Organic Cages with Exceptional Chemical Stability. Angewandte Chemie - International Edition, 2019, 58, 4243-4247.	7.2	39
44	O^(â^')â‹¯C interactions and bond formation in 1-naphtholate anions with peri-located electrophilic carbon centres. CrystEngComm, 2019, 21, 1009-1018.	1.3	7
45	A Crystalline, 2D Polyarylimide Cathode for Ultrastable and Ultrafast Li Storage. Advanced Materials, 2019, 31, e1901478.	11.1	192
46	Redox-Triggered Buoyancy and Size Modulation of a Dynamic Covalent Gel. Chemistry of Materials, 2019, 31, 4148-4155.	3.2	15
47	Fully sp²â€Carbonâ€Linked Crystalline Twoâ€Dimensional Conjugated Polymers: Insight into 2D Poly(phenylenecyanovinylene) Formation and its Optoelectronic Properties. Chemistry - A European Journal, 2019, 25, 6562-6568.	1.7	40
48	Nonlinear Optical Switching in Regioregular Porphyrin Covalent Organic Frameworks. Angewandte Chemie, 2019, 131, 6970-6974.	1.6	43
49	Nonlinear Optical Switching in Regioregular Porphyrin Covalent Organic Frameworks. Angewandte Chemie - International Edition, 2019, 58, 6896-6900.	7.2	135
50	Triazine Functionalized Porous Covalent Organic Framework for Photo-organocatalytic Eâ€“Z Isomerization of Olefins. Journal of the American Chemical Society, 2019, 141, 6152-6156.	6.6	270
51	The SMFA program for quantum chemistry calculations on large molecules. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2019, 9, e1413.	6.2	6
52	On-water surface synthesis of crystalline, few-layer two-dimensional polymers assisted by surfactant monolayers. Nature Chemistry, 2019, 11, 994-1000.	6.6	262
53	A Nitrogenâ€Rich 2D sp²â€Carbonâ€Linked Conjugated Polymer Framework as a Highâ€Performance Cathode for Lithiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2019, 58, 849-853.	7.2	275
54	Ultrastable Imineâ€Based Covalent Organic Frameworks for Sulfuric Acid Recovery: An Effect of Interlayer Hydrogen Bonding. Angewandte Chemie - International Edition, 2018, 57, 5797-5802.	7.2	192

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55	Ultrastable Imineâ€Based Covalent Organic Frameworks for Sulfuric Acid Recovery: An Effect of Interlayer Hydrogen Bonding. Angewandte Chemie, 2018, 130, 5899-5904.	1.6	39
56	Structure and dynamics of ionic liquids: general discussion. Faraday Discussions, 2018, 206, 291-337.	1.6	8
57	Ionic liquids at interfaces: general discussion. Faraday Discussions, 2018, 206, 549-586.	1.6	0
58	Structure searching methods: general discussion. Faraday Discussions, 2018, 211, 133-180.	1.6	3
59	Crystal structure evaluation: calculating relative stabilities and other criteria: general discussion. Faraday Discussions, 2018, 211, 325-381.	1.6	7
60	Probing charge transfer characteristics in a donorâ€“acceptor metalâ€“organic framework by Raman spectroelectrochemistry and pressure-dependence studies. Physical Chemistry Chemical Physics, 2018, 20, 25772-25779.	1.3	28
61	Covalent organic framework based microspheres as an anode material for rechargeable sodium batteries. Journal of Materials Chemistry A, 2018, 6, 16655-16663.	5.2	113
62	Interlayer Hydrogen-Bonded Covalent Organic Frameworks as High-Performance Supercapacitors. Journal of the American Chemical Society, 2018, 140, 10941-10945.	6.6	339
63	Molecular Level Control of the Capacitance of Two-Dimensional Covalent Organic Frameworks: Role of Hydrogen Bonding in Energy Storage Materials. Chemistry of Materials, 2017, 29, 2074-2080.	3.2	277
64	Ionic Covalent Organic Frameworks: Design of a Charged Interface Aligned on 1D Channel Walls and Its Unusual Electrostatic Functions. Angewandte Chemie, 2017, 129, 5064-5068.	1.6	33
65	Ionic Covalent Organic Frameworks: Design of a Charged Interface Aligned on 1D Channel Walls and Its Unusual Electrostatic Functions. Angewandte Chemie - International Edition, 2017, 56, 4982-4986.	7.2	217
66	MOFs modeling and theory: general discussion. Faraday Discussions, 2017, 201, 233-245.	1.6	4
67	New directions in gas sorption and separation with MOFs: general discussion. Faraday Discussions, 2017, 201, 175-194.	1.6	6
68	Highlights from the Faraday Discussion on New Directions in Porous Crystalline Materials, Edinburgh, UK, June 2017. Chemical Communications, 2017, 53, 10750-10756.	2.2	0
69	Explicit treatment of hydrogen bonds in the universal force field: Validation and application for metal-organic frameworks, hydrates, and host-guest complexes. Journal of Chemical Physics, 2017, 147, 161705.	1.2	10
70	Two-dimensional sp ² carbonâ€“conjugated covalent organic frameworks. Science, 2017, 357, 673-676.	6.0	866
71	Electrochemical Stimuli-Driven Facile Metal-Free Hydrogen Evolution from Pyrene-Porphyrin-Based Crystalline Covalent Organic Framework. ACS Applied Materials & Interfaces, 2017, 9, 23843-23851.	4.0	179
72	Decoding the Morphological Diversity in Two Dimensional Crystalline Porous Polymers by Core Planarity Modulation. Angewandte Chemie - International Edition, 2016, 55, 7806-7810.	7.2	168

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73	Highly Emissive Covalent Organic Frameworks. Journal of the American Chemical Society, 2016, 138, 5797-5800.	6.6	501
74	Linear Chains of Magnetic Ions Stacked with Variable Distance: Ferromagnetic Ordering with a Curie Temperature above 20â€…K. Angewandte Chemie - International Edition, 2016, 55, 12683-12687.	7.2	14
75	Extension of the Universal Force Field for Metalâ€“Organic Frameworks. Journal of Chemical Theory and Computation, 2016, 12, 5215-5225.	2.3	126
76	Highly oriented MOF thin film-based electrocatalytic device for the reduction of CO₂ to CO exhibiting high faradaic efficiency. Journal of Materials Chemistry A, 2016, 4, 15320-15326.	5.2	166
77	Multiple-component covalent organic frameworks. Nature Communications, 2016, 7, 12325.	5.8	227
78	Two-dimensional artificial light-harvesting antennae with predesigned high-order structure and robust photosensitising activity. Scientific Reports, 2016, 6, 32944.	1.6	39
79	First spectroscopic observation of gold(<scp>i</scp>) butadiynylide: Photodetachment velocity map imaging of the AuC4H anion. Journal of Chemical Physics, 2016, 145, 044320.	1.2	7
80	Decoding the Morphological Diversity in Two Dimensional Crystalline Porous Polymers by Core Planarity Modulation. Angewandte Chemie, 2016, 128, 7937-7941.	1.6	32
81	Controlling embedment and surface chemistry of nanoclusters in metalâ€“organic frameworks. Chemical Communications, 2016, 52, 5175-5178.	2.2	18
82	Interplaying Intrinsic and Extrinsic Proton Conductivities in Covalent Organic Frameworks. Chemistry of Materials, 2016, 28, 1489-1494.	3.2	310
83	Mixed Matrix Membranes (MMMs) Comprising Exfoliated 2D Covalent Organic Frameworks (COFs) for Efficient CO₂ Separation. Chemistry of Materials, 2016, 28, 1277-1285.	3.2	541
84	Designed synthesis of double-stage two-dimensional covalent organic frameworks. Scientific Reports, 2015, 5, 14650.	1.6	107
85	Covalently Linked Organic Networks. Frontiers in Materials, 2015, 2, .	1.2	6
86	Creation of Superheterojunction Polymers via Direct Polycondensation: Segregated and Bicontinuous Donorâ€“Acceptor Ï€-Columnar Arrays in Covalent Organic Frameworks for Long-Lived Charge Separation. Journal of the American Chemical Society, 2015, 137, 7817-7827.	6.6	213
87	Solid state organic amine detection in a photochromic porous metal organic framework. Chemical Science, 2015, 6, 1420-1425.	3.7	316
88	Locking Covalent Organic Frameworks with Hydrogen Bonds: General and Remarkable Effects on Crystalline Structure, Physical Properties, and Photochemical Activity. Journal of the American Chemical Society, 2015, 137, 3241-3247.	6.6	320
89	Rational design of crystalline supermicroporous covalent organic frameworks with triangular topologies. Nature Communications, 2015, 6, 7786.	5.8	274
90	Photodetachment velocity map imaging of the 1Aâ€² â†2Aâ€² transition in the AuOH anion. Chemical Physics Letters, 2015, 625, 164-167.	1.2	5

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91	Photoinduced Chargeâ€Carrier Generation in Epitaxial MOF Thin Films: High Efficiency as a Result of an Indirect Electronic Band Gap?. Angewandte Chemie - International Edition, 2015, 54, 7441-7445.	7.2	206
92	Chemical sensing in two dimensional porous covalent organic nanosheets. Chemical Science, 2015, 6, 3931-3939.	3.7	504
93	Extension of the Universal Force Field to Metalâ€“Organic Frameworks. Journal of Chemical Theory and Computation, 2014, 10, 880-891.	2.3	200
94	Fabrication of Highly Uniform Gel Coatings by the Conversion of Surface-Anchored Metalâ€“Organic Frameworks. Journal of the American Chemical Society, 2014, 136, 8-11.	6.6	116
95	3-Dimensional atomic scale structure of the ionic liquidâ€“graphite interface elucidated by AM-AFM and quantum chemical simulations. Nanoscale, 2014, 6, 8100-8106.	2.8	78
96	Catalytic covalent organic frameworks via pore surface engineering. Chemical Communications, 2014, 50, 1292-1294.	2.2	292
97	Assessment of the Density Functional Tight Binding Method for Protic Ionic Liquids. Journal of Chemical Theory and Computation, 2014, 10, 4633-4643.	2.3	44
98	AuToGraFS: Automatic Topological Generator for Framework Structures. Journal of Physical Chemistry A, 2014, 118, 9607-9614.	1.1	67
99	Stochastic structure determination for conformationally flexible heterogenous molecular clusters: Application to ionic liquids. Journal of Computational Chemistry, 2013, 34, 2591-2600.	1.5	37
100	Conjugated organic framework with three-dimensionally ordered stable structure and delocalized Ï€ clouds. Nature Communications, 2013, 4, 2736.	5.8	528
101	Large pore donorâ€“acceptor covalent organic frameworks. Chemical Science, 2013, 4, 4505.	3.7	127
102	Control of Crystallinity and Porosity of Covalent Organic Frameworks by Managing Interlayer Interactions Based on Self-Complementary Ï€-Electronic Force. Journal of the American Chemical Society, 2013, 135, 546-549.	6.6	257
103	Charge Dynamics in A Donorâ€“Acceptor Covalent Organic Framework with Periodically Ordered Bicontinuous Heterojunctions. Angewandte Chemie - International Edition, 2013, 52, 2017-2021.	7.2	263
104	Stochastic Search of Molecular Cluster Interaction Energy Surfaces with Coupled Cluster Quality Prediction. The Phenylacetylene Dimer. Journal of Chemical Theory and Computation, 2013, 9, 3848-3854.	2.3	2
105	Spectroscopic observation of gold-dicarbide: Photodetachment and velocity map imaging of the AuC2 anion. Journal of Chemical Physics, 2013, 138, 174310.	1.2	18
106	Reactions of Nb2 and Nb3 with CO, D2, N2, and O2: Reconciling experimental kinetics with density functional theory-calculated reaction profiles. Journal of Chemical Physics, 2012, 137, 034301.	1.2	6
107	Optimization of a Genetic Algorithm for the Functionalization of Fullerenes. Journal of Chemical Theory and Computation, 2012, 8, 1841-1851.	2.3	14
108	The fragment molecular orbital and systematic molecular fragmentation methods applied to water clusters. Physical Chemistry Chemical Physics, 2012, 14, 7752.	1.3	61

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109	Optimization of a genetic algorithm for searching molecular conformer space. Journal of Chemical Physics, 2011, 135, 174106.	1.2	23
110	A Ï€-stacked phenylacetylene dimer. Physical Chemistry Chemical Physics, 2011, 13, 16706.	1.3	33
111	A Density Functional Theory Investigation of the Bimetallic Clusters Nb2Rh and NbRh2 and the Complexes They Form with CO. Australian Journal of Chemistry, 2011, 64, 1554.	0.5	2
112	Density functional theory investigation of Cu(I)â€•and Cu(II)â€curcumin complexes. Journal of Computational Chemistry, 2011, 32, 429-438.	1.5	22
113	Using a Meta-GA for parametric optimization of simple gas in the computational chemistry domain. , 2010, , .		0
114	Photoionization efficiency spectroscopy and density functional theory investigations of RhHo2On (n=0â€“2) clusters. Journal of Chemical Physics, 2009, 130, 164311.	1.2	5
115	Accurate treatment of nonbonded interactions within systematic molecular fragmentation. Journal of Chemical Physics, 2009, 131, .	1.2	66
116	Kick: Constraining a stochastic search procedure with molecular fragments. Journal of Computational Chemistry, 2009, 30, 57-64.	1.5	55
117	Excited states of Nb3N2 and Nb3C2: Density functional theory, CASSCF, and MRCI studies. Journal of Chemical Physics, 2009, 130, 164308.	1.2	5
118	Associative versus dissociative binding of CO to 4d transition metal trimers: A density functional study. Journal of Computational Chemistry, 2008, 29, 1497-1506.	1.5	12
119	Threshold Photoionization and Density Functional Theory Studies of the Niobium Carbide Clusters Nb₃C_n (n = 1â^’4) and Nb₄C_n (n = 1â^’6). Journal of Physical Chemistry A, 2008, 112, 5582-5592.	1.1	31
120	Computational Study of CO Reactivity with Nb3X Heteronuclear Clusters. Australian Journal of Chemistry, 2008, 61, 854.	0.5	1
121	BFW:Â A Density Functional for Transition Metal Clusters. Journal of Physical Chemistry A, 2007, 111, 2625-2628.	1.1	8
122	Ionization Potentials of Tantalumâ^’Carbide Clusters:â€‰ An Experimental and Density Functional Theory Study. Journal of Physical Chemistry A, 2005, 109, 11180-11190.	1.1	27
123	'Perfect Match'â€”Combining Density Functional Calculations with Spectroscopic Characterization of Transition Metal Clusters. Australian Journal of Chemistry, 2005, 58, 564.	0.5	1
124	DFT Calculations on Group 5 Mixed Metal Tetramers: TaxNbyVz (x + y + z = 4). Australian Journal of Chemistry, 2004, 57, 1197.	0.5	8
125	Photoionization of Nb3CO and Nb3(CO)2:Â Is CO Molecularly or Dissociatively Adsorbed on Niobium?. Journal of Physical Chemistry A, 2004, 108, 964-970.	1.1	26