Mark Murrie

List of Publications by Year
in descending order

111 papers	5,809 citations	70961 41 h-index	76769 74 g-index
124 all docs	124 docs citations	124 times ranked	4205 citing authors

#	Article	IF	Citations
1	Importance of an Axial Ln^{III}â€“F Bond across the Lanthanide Series and Single-Molecule Magnet Behavior in the Ce and Nd Analogues. Inorganic Chemistry, 2022, 61, 9906-9917.	1.9	6
2	Magnetic anisotropies of Ho(<scp>iii</scp>) and Dy(<scp>iii</scp>) single-molecule magnets experimentally determined via polarized neutron diffraction. Dalton Transactions, 2021, 50, 14207-14215.	1.6	2
3	From tetranuclear to pentanuclear [Coâ€“Ln] (Ln = Gd, Tb, Dy, Ho) complexes across the lanthanide series: effect of varying sequence of ligand addition. Dalton Transactions, 2021, 50, 11861-11877.	1.6	3
4	Exploiting hostâ€“guest chemistry to manipulate magnetic interactions in metallosupramolecular M₄L₆ tetrahedral cages. Chemical Science, 2021, 12, 5134-5142.	3.7	22
5	Solvent-induced structural transformation from heptanuclear to decanuclear [Coâ€“Ln] coordination clusters: trapping of unique counteranion and understanding of aggregation pathways. Dalton Transactions, 2021, 50, 9574-9588.	1.6	1
6	Synthesis of heptanuclear Ni4Dy3 coordination aggregate using tridentate ligand: X-ray structure, magnetism and theoretical studies. Inorganica Chimica Acta, 2021, 526, 120524.	1.2	0
7	Hydroxido supported and differently networked octanuclear Ni₆Ln₂ [Ln = Gd^{III} and Dy^{III}] complexes: structural variation, magnetic properties and theoretical insights. Dalton Transactions, 2021, 50, 5023-5035.	1.6	6
8	There is nothing wrong with being soft: using sulfur ligands to increase axiality in a Dy(<scp>iii</scp>) single-ion magnet. Chemical Communications, 2020, 56, 1533-1536.	2.2	23
9	Putting the Squeeze on Molecule-Based Magnets: Exploiting Pressure to Develop Magneto-Structural Correlations in Paramagnetic Coordination Compounds. Magnetochemistry, 2020, 6, 32.	1.0	7
10	Engineering macrocyclic high performance pentagonal bipyramidal Dy(<scp>iii</scp>) single-ion magnets. Chemical Communications, 2020, 56, 12037-12040.	2.2	54
11	A large axial magnetic anisotropy in trigonal bipyramidal Fe(ii). Chemical Communications, 2020, 56, 6826-6829.	2.2	5
12	Trigonal to Pentagonal Bipyramidal Coordination Switching in a Co(II) Single-Ion Magnet. Inorganic Chemistry, 2019, 58, 9691-9697.	1.9	18
13	Insight into D 6 h Symmetry: Targeting Strong Axiality in Stable Dysprosium(III) Hexagonal Bipyramidal Singleâ€Ion Magnets. Angewandte Chemie, 2019, 131, 14284-14289.	1.6	33
14	Insight into D_{6h} Symmetry: Targeting Strong Axiality in Stable Dysprosium(III) Hexagonal Bipyramidal Singleâ€Ion Magnets. Angewandte Chemie - International Edition, 2019, 58, 14146-14151.	7.2	166
15	Investigation of the magnetic anisotropy in a series of trigonal bipyramidal Mn(ii) complexes. Dalton Transactions, 2019, 48, 15480-15486.	1.6	10
16	Magnetic Properties of a Family of [Mn^{III}₄Ln^{III}₄] Wheel Complexes: An Experimental and Theoretical Study. Inorganic Chemistry, 2019, 58, 13815-13825.	1.9	13
17	Microwave-assisted synthesis: from a mononuclear {Co^{II}} complex to {CoII9} solvomorphs. Dalton Transactions, 2019, 48, 854-858.	1.6	6
18	In-depth investigation of large axial magnetic anisotropy in monometallic 3d complexes using frequency domain magnetic resonance and abÂinitio methods: a study of trigonal bipyramidal Co(<scp>ii</scp>). Chemical Science, 2019, 10, 6354-6361.	3.7	17

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19	Boosting axiality in stable high-coordinate Dy(<scp>iii</scp>) single-molecule magnets. Chemical Communications, 2019, 55, 5950-5953.	2.2	50
20	Probing the origin of the giant magnetic anisotropy in trigonal bipyramidal Ni(<scp>ii</scp>) under high pressure. Chemical Science, 2018, 9, 1551-1559.	3.7	52
21	Constructing Cr^{III}-centered heterometallic complexes: [NiII6Cr^{III}] and [CoII6Cr^{III}] wheels. Dalton Transactions, 2018, 47, 58-61.	1.6	16
22	Strategic synthesis of [Cu₂], [Cu₄] and [Cu₅] complexes: inhibition and triggering of ligand arm hydrolysis and self-aggregation by chosen ancillary bridges. Dalton Transactions, 2018, 47, 17160-17176.	1.6	4
23	Trapping of a Pseudotetrahedral Co^{II}O₄ Core in Mixed-Valence Mixed-Geometry [Co₅] Coordination Aggregates: Synthetic Marvel, Structures, and Magnetism. Inorganic Chemistry, 2018, 57, 13176-13187.	1.9	14
24	Diazine based ligand supported CoII3 and CoII4 coordination complexes: role of anions. New Journal of Chemistry, 2018, 42, 17587-17596.	1.4	7
25	Bis-tris propane as a flexible ligand for high-nuclearity complexes. Polyhedron, 2018, 150, 1-9.	1.0	12
26	A family of [Cu2], [Cu4] and [Cu5] aggregates: alteration of reaction conditions, ancillary bridges and capping anions. New Journal of Chemistry, 2018, 42, 14349-14364.	1.4	8
27	Chemical andin silicotuning of the magnetisation reversal barrier in pentagonal bipyramidal Dy(<scp>iii</scp>) single-ion magnets. Chemical Communications, 2018, 54, 8273-8276.	2.2	68
28	Heterometallic lanthanide-centred [NiII6Ln^{III}] rings. Dalton Transactions, 2018, 47, 12863-12867.	1.6	11
29	Slow magnetic relaxation in a {Co^{II}CoIII2} complex containing a high magnetic anisotropy trigonal bipyramidal Co^{II} centre. Dalton Transactions, 2018, 47, 9237-9240.	1.6	14
30	Dangling and Hydrolyzed Ligand Arms in [Mn3] and [Mn6] Coordination Assemblies: Synthesis, Characterization, and Functional Activity. Inorganic Chemistry, 2017, 56, 2639-2652.	1.9	18
31	A topologically unique alternating {CoIII3GdIII3} magnetocaloric ring. Chemical Communications, 2017, 53, 4799-4802.	2.2	17
32	A [Ce₂₁] keplerate. Dalton Transactions, 2017, 46, 7677-7680.	1.6	7
33	Probing photoinduced spin states in spin-crossover molecules with neutron scattering. Physical Review B, 2017, 95, .	1.1	8
34	Ligand-directed synthesis of {MnIII5} twisted bow-ties. Dalton Transactions, 2017, 46, 11201-11207.	1.6	10
35	Pressure induced enhancement of the magnetic ordering temperature in rhenium(IV) monomers. Nature Communications, 2016, 7, 13870.	5.8	30
36	A non-topological mechanism for negative linear compressibility. Chemical Communications, 2016, 52, 7486-7489.	2.2	21

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37	Hydroxido-Supported and Carboxylato Bridge-Driven Aggregation for Discrete [Ni4] and Interconnected [Ni2]n Complexes. Inorganic Chemistry, 2016, 55, 10783-10792.	1.9	12
38	Enhancement of Tb^{III}â€“Cu^{II} Singleâ€Molecule Magnet Performance through Structural Modification. Chemistry - A European Journal, 2016, 22, 12839-12848.	1.7	46
39	Surface Charge Control of Quantum Dot Blinking. Journal of Physical Chemistry C, 2016, 120, 19487-19491.	1.5	13
40	Gadolinium-doped magnetite nanoparticles from a single-source precursor. RSC Advances, 2016, 6, 74500-74505.	1.7	34
41	Rational serendipity: â€œundirectedâ€•synthesis of a large {MnIII10CuII5} complex from pre-formed Mn^{II} building blocks. Dalton Transactions, 2016, 45, 18094-18097.	1.6	7
42	Pushing the limits of magnetic anisotropy in trigonal bipyramidal Ni(<scp>ii</scp>). Chemical Science, 2015, 6, 6823-6828.	3.7	136
43	3d single-ion magnets. Chemical Society Reviews, 2015, 44, 2135-2147.	18.7	671
44	A high-pressure crystallographic and magnetic study of Na₅[Mn(<scp>l</scp>-tart)₂]Â·12H₂O (<scp>l</scp>-tart) Tj ETQq0 0 0 rgBT/Overlock 10 Tf 50	1.6	6
45	Directed synthesis of {CuII2ZnII2} and {CuII8ZnII8} heterometallic complexes. Dalton Transactions, 2015, 44, 19275-19281.	1.6	11
46	Field-Induced Slow Relaxation in a Monometallic Manganese(III) Single-Molecule Magnet. Inorganic Chemistry, 2015, 54, 13-15.	1.9	53
47	A pressure-induced displacive phase transition in Tris(ethylenediamine) Nickel(II) nitrate. Zeitschrift Fur Kristallographie - Crystalline Materials, 2014, 229, .	0.4	2
48	Formation of octapod MnO nanoparticles with enhanced magnetic properties through kinetically-controlled thermal decomposition of polynuclear manganese complexes. Nanoscale, 2014, 6, 172-176.	2.8	31
49	Exploring the Coordination Chemistry of 3,3â€²-Di(picolinamoyl)-2,2â€²-bipyridine: One Ligand, Multiple Nuclearities. Inorganic Chemistry, 2014, 53, 8610-8623.	1.9	11
50	Exchange Interactions at the Origin of Slow Relaxation of the Magnetization in {TbCu₃} and {DyCu₃} Single-Molecule Magnets. Inorganic Chemistry, 2014, 53, 8970-8978.	1.9	54
51	Directed Synthesis of {Mn₁₈Cu₆} Heterometallic Complexes. Angewandte Chemie - International Edition, 2013, 52, 1949-1952.	7.2	42
52	Coordinative flexibility of the 2-amino-2-(hydroxymethyl)propane-1,3-diol ligand in the synthesis of polynuclear Fe(III) complexes. Polyhedron, 2013, 52, 227-233.	1.0	8
53	Ultra-low temperature structure determination of a Mn12 single-molecule magnet and the interplay between lattice solvent and structural disorder. CrystEngComm, 2013, 15, 3423.	1.3	11
54	Solvothermal synthesis of chromium(III) complexes with the â€˜Bisâ€“trisâ€™ ligand. Inorganic Chemistry Communication, 2012, 25, 89-91.	1.8	6

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55	Directed assembly of nanoscale Co(ii)-substituted {Co9[P2W15]3} and {Co14[P2W15]4} polyoxometalates. Chemical Communications, 2012, 48, 9819.	2.2	54
56	Self-assembly of ultra-thin lanthanide oxide nanowires via surfactant-mediated imperfect oriented attachment of nanoparticles. CrystEngComm, 2012, 14, 7110.	1.3	20
57	A study of the role of the solvent during magnetite nanoparticle synthesis: tuning size, shape and self-assembly. RSC Advances, 2012, 2, 8027.	1.7	31
58	Access to an unusual Fe9 core topology from the initial use of tricine in iron(iii) cluster chemistry. Dalton Transactions, 2011, 40, 3125.	1.6	15
59	Bis-tris propane as a new multidentate ligand for nickel- and cobalt-based spin clusters. Dalton Transactions, 2011, 40, 334-336.	1.6	29
60	Cubic assembly of a geometrically frustrated {Fe12} spin cluster. Dalton Transactions, 2011, 40, 12271.	1.6	13
61	High-Pressure Study of Oxo-bridged Mixed-Valent MnIII/MnIV Dimers High-Pressure Study of Oxo-bridged Mixed-Valent MnIII/MnIV Dimers. Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences, 2010, 65, 221-230.	0.3	6
62	High pressure studies of hydroxo-bridged Cu(ii) dimers. Dalton Transactions, 2010, 39, 113-123.	1.6	23
63	Cobalt(ii) single-molecule magnets. Chemical Society Reviews, 2010, 39, 1986.	18.7	522
64	Magnetic Properties of Two New Fe₄ Singleâ€Molecule Magnets in the Solid State and in Frozen Solution. Chemistry - A European Journal, 2010, 16, 10178-10185.	1.7	27
65	Multidentate Ligands for the Synthesis of Multimetallic Complexes. 2. Formation of a Planar Cu₄OH Motif. Inorganic Chemistry, 2010, 49, 5350-5352.	1.9	10
66	Pressure-induced switching in a copper(ii) citrate dimer. CrystEngComm, 2010, 12, 2516.	1.3	29
67	The effect of pressure on the crystal structure of [Gd(PhCOO)3(DMF)]n to 3.7 GPa and the transition to a second phase at 5.0 GPa. Dalton Transactions, 2010, 39, 7004.	1.6	8
68	Pressure-induced Jahnâ€“Teller switching in a Mn12 nanomagnet. Chemical Communications, 2010, 46, 1881-1883.	2.2	57
69	Slow magnetic relaxation in a 3D network of cobalt(ii) citrate cubanes. Dalton Transactions, 2010, 39, 4727.	1.6	28
70	Synthesis and characterisation of Fe6 and Fe12 clusters using bicine. Polyhedron, 2009, 28, 1830-1833.	1.0	17
71	High pressure induced spin changes and magneto-structural correlations in hexametallic SMMs. Dalton Transactions, 2009, , 4858.	1.6	47
72	High pressure effects on a trimetallic MnII/III SMM. Dalton Transactions, 2009, , 7390.	1.6	17

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73	Polymerisation of a Cu(II) dimer into 1D chains using high pressure. CrystEngComm, 2009, 11, 2601.	1.3	39
74	Access to new magnetic cores in Fe(III) and Fe(III)/Cu(II) spin clusters. Dalton Transactions, 2009, , 9395.	1.6	11
75	[Mn₆] under Pressure: A Combined Crystallographic and Magnetic Study. Angewandte Chemie - International Edition, 2008, 47, 2828-2831.	7.2	68
76	Polyoxometalateâ€Mediated Selfâ€Assembly of Singleâ€Molecule Magnets: {[XW₉O₃₄]₂[Mn^{III}₄Mn^{II}₂O₄(Angewandte Chemie - International Edition, 2008, 47, 5609-5612.	7.2	254
77	Cobalt(II) Citrate Cubane Single-Molecule Magnet. Inorganic Chemistry, 2008, 47, 7438-7442.	1.9	123
78	Synthesis and characterisation of a Ni4 single-molecule magnet with S4 symmetry. Dalton Transactions, 2008, , 6409.	1.6	83
79	Linking iron(<scp>iii</scp>) carboxylates into high-nuclearity complexes by using Bis-tris. Dalton Transactions, 2008, , 731-733.	1.6	28
80	Polymetallic clusters of iron(iii) with derivatised salicylaldoximes. Dalton Transactions, 2008, , 2043.	1.6	45
81	Bis-Tris Propane as a New Polydentate Linker in the Synthesis of Iron(III) and Manganese(II/III) Complexes. Inorganic Chemistry, 2008, 47, 9742-9744.	1.9	21
82	Molecular magnetism. Annual Reports on the Progress of Chemistry Section A, 2007, 103, 20.	0.8	50
83	Synthesis and characterisation of a mixed-valence Mn13complex with S6symmetry by using 2-phenoxybenzoate. Dalton Transactions, 2007, , 728-730.	1.6	18
84	A mixed-valence Co7 single-molecule magnet with C3 symmetry. Chemical Communications, 2007, , 3473.	2.2	153
85	Heisenberg model of an {Fe8}-cubane cluster. Physical Review B, 2007, 76, .	1.1	8
86	A Ferromagnetic Mixed-Valent Mn Supertetrahedron: Towards Low-Temperature Magnetic Refrigeration with Molecular Clusters. Angewandte Chemie - International Edition, 2007, 46, 4456-4460.	7.2	184
87	Synthesis and structural characterisation of polynuclear cobalt complexes with partially-deprotonated Bis-tris. Dalton Transactions, 2006, , 3627.	1.6	26
88	High-Spin M2+ Carboxylate Triangles from the Microwave. Inorganic Chemistry, 2006, 45, 7053-7055.	1.9	71
89	A Cube in a Tetrahedron:Â Microwave-Assisted Synthesis of an Octametallic FeIIICluster. Inorganic Chemistry, 2006, 45, 5281-5283.	1.9	64
90	Tuning the structural motif by tuning the countercation size: from double salts to a 1-D coordination polymer. CrystEngComm, 2006, 8, 346.	1.3	7

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91	Exchange interactions and high-energy spin states inMn12-acetate. Physical Review B, 2004, 70, .	1.1	62
92	Supertetrahedral decametallic Ni(ii) clusters directed by Î¼6-tris-alkoxides. Chemical Communications, 2004, , 1418-1419.	2.2	49
93	Magnetic and Optical Studies on an S = 6 Ground-State Cluster [Cr12O9(OH)3(O2CCMe3)15]:â€‰ Determination of, and the Relationship Between, Single-Ion and Cluster Spin Hamiltonian Parameters. Inorganic Chemistry, 2003, 42, 5293-5303.	1.9	48
94	Molecular Spin Clusters: New Synthetic Approaches and Neutron Scattering Studies. ChemPhysChem, 2003, 4, 910-926.	1.0	76
95	Solvothermal Syntheses of High-Nuclearity Vanadium(III) Clusters. Chemistry - A European Journal, 2003, 9, 6215-6220.	1.7	59
96	Synthesis and Characterization of a Cobalt(II) Single-Molecule Magnet. Angewandte Chemie - International Edition, 2003, 42, 4653-4656.	7.2	236
97	Increasing the crystallisation temperature to access new spin clusters: conversion of [Ni8(cit)6(OH)2(H2O)2]10â€“ to [Ni8(cit)6(OH)2]10â€“. Chemical Communications, 2003, , 230-231.	2.2	33
98	Synthesis, Structure, and Magnetic Properties of the Single-Molecule Magnet [Ni21(cit)12(OH)10(H2O)10]16-. Inorganic Chemistry, 2002, 41, 5133-5140.	1.9	138
99	Inelastic Neutron Scattering on Three Mixed-Valence Dodecanuclear Polyoxovanadate Clustersâ€. Inorganic Chemistry, 2002, 41, 5675-5685.	1.9	49
100	Studies of a Nickel-Based Single-Molecule Magnet. Chemistry - A European Journal, 2002, 8, 4867-4876.	1.7	194
101	Studies of a nickel-based single molecule magnet: resonant quantum tunnelling in an S = 12 moleculeElectronic supplementary information (ESI) available: saturation magnetisation at 150 mK; 1/Ï‡â€² vs. T. See http://www.rsc.org/suppdata/cc/b1/b108894g/. Chemical Communications, 2001, , 2666-2667.	2.2	228
102	Assembly of Ni7 and Ni21 Molecular Clusters by Using Citric Acid. Angewandte Chemie - International Edition, 2001, 40, 1957-1960.	7.2	61
103	Characterisation of a dodecanuclear chromium(III) cage with an S = 6 ground state. Chemical Communications, 1999, , 643-644.	2.2	4
104	Synthesis, structural and magnetic characterisation of a new Mnâ€“Gd pivalate: preparation from a pre-formed hexanuclear clusterâ€Šâ€. Journal of the Chemical Society Dalton Transactions, 1999, , 4125-4126.	1.1	77
105	Turning up the heat: synthesis of octanuclear chromium(III) carboxylates. Chemical Communications, 1999, , 285-286.	2.2	20
106	Structural Variations and Magnetic Studies of Polymetallic Cages. Molecular Crystals and Liquid Crystals, 1999, 335, 263-282.	0.3	1
107	New high-spin clusters featuring transition metals. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 1999, 357, 3119-3137.	1.6	14
108	Deltahedra as underlying structural motifs in polynuclear metal chemistry: structure of an undecanuclear manganeseâ€“potassium cage. Journal of the Chemical Society Dalton Transactions, 1998, , 1423-1424.	1.1	47

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109	Synthesis structure magnetic properties of [Cu5(bta)6L4] (bta=benzotriazolate;L=Î²-diketonate) Clusters. Polyhedron, 1998, 17, 3031-3043.	1.0	54
110	Nanoscale Cages of Manganese and Nickel with â€œRock Saltâ€•Cores. Journal of the American Chemical Society, 1998, 120, 7365-7366.	6.6	49
111	Constructing â€œClosedâ€•and â€œOpenâ€•{Mn₈} Clusters. Crystal Growth and Design, 0, , .	1.4	0