

Stuart K Langley

List of Publications by Year in descending order

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83
papers

4,980
citations

71061

41
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88593

70
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85
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85
docs citations

85
times ranked

2626
citing authors

#	ARTICLE	IF	CITATIONS
1	A {Cr ^{III} } ₂ Dy ^{III} Single-Molecule Magnet: Enhancing the Blocking Temperature through 3d Magnetic Exchange. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 12014-12019.	7.2	338
2	Single molecule magnetism in a family of mononuclear \hat{f}^2 -diketonate lanthanide(III) complexes: rationalization of magnetic anisotropy in complexes of low symmetry. <i>Chemical Science</i> , 2013, 4, 1719.	3.7	204
3	Molecular coolers: The case for [Cull5GdIII4]. <i>Chemical Science</i> , 2011, 2, 1166.	3.7	197
4	Net Toroidal Magnetic Moment in the Ground State of a {Dy ₆ }-Triethanolamine Ring. <i>Journal of the American Chemical Society</i> , 2012, 134, 18554-18557.	6.6	157
5	Synthesis and Characterization of Iron(III) Phosphonate Cage Complexes. <i>Angewandte Chemie - International Edition</i> , 2003, 42, 3804-3808.	7.2	154
6	Heterometallic Tetranuclear [Ln ^{III}] ₂ Co ^{III} Complexes Including Suppression of Quantum Tunneling of Magnetization in the [Dy ^{III}] ₂ Co ^{III} Single Molecule Magnet. <i>Inorganic Chemistry</i> , 2012, 51, 11873-11881.	1.9	154
7	Slow relaxation of magnetisation in an octanuclear cobalt(II) phosphonate cage complex. <i>Chemical Communications</i> , 2005, , 5029.	2.2	141
8	Synthesis and Structural and Magnetic Characterization of Cobalt(II) Phosphonate Cage Compounds. <i>Inorganic Chemistry</i> , 2008, 47, 497-507.	1.9	141
9	Enhancing the effective energy barrier of a Dy(ⁱⁱⁱ) SMM using a bridged diamagnetic Zn(ⁱⁱ) ion. <i>Chemical Communications</i> , 2014, 50, 8838-8841.	2.2	134
10	Magnetic Properties of Hexanuclear Lanthanide(III) Clusters Incorporating a Central \hat{f}^4 -Carbonate Ligand Derived from Atmospheric CO ₂ Fixation. <i>Inorganic Chemistry</i> , 2012, 51, 3947-3949.	1.9	131
11	Modulation of slow magnetic relaxation by tuning magnetic exchange in {Cr ₂ Dy ₂ } single molecule magnets. <i>Chemical Science</i> , 2014, 5, 3246-3256.	3.7	127
12	Structure and magnetism of new lanthanide 6-wheel compounds utilizing triethanolamine as a stabilizing ligand. <i>Dalton Transactions</i> , 2010, 39, 1705-1708.	1.6	124
13	Structure, Magnetism and Theory of a Family of Nonanuclear Cu ^{II} ₅ Ln ^{III} ₄ "Triethanolamine Clusters Displaying Single-Molecule Magnet Behaviour. <i>Chemistry - A European Journal</i> , 2011, 17, 9209-9218.	1.7	114
14	A synthetic strategy for switching the single ion anisotropy in tetrahedral Co(ⁱⁱ) complexes. <i>Chemical Communications</i> , 2015, 51, 3739-3742.	2.2	113
15	A heptadecanuclear MnIII9DyIII8 cluster derived from triethanolamine with two edge sharing supertetrahedra as the core and displaying SMM behaviour. <i>Dalton Transactions</i> , 2010, 39, 5066.	1.6	102
16	Single-Molecule Magnetism in Three Related {Co ^{III} } ₂ Dy ^{III} Acetylacetonate Complexes with Multiple Relaxation Mechanisms. <i>Inorganic Chemistry</i> , 2013, 52, 7183-7192.	1.9	100
17	What Controls the Sign and Magnitude of Magnetic Anisotropy in Tetrahedral Cobalt(II) Single-Ion Magnets?. <i>Inorganic Chemistry</i> , 2016, 55, 9564-9578.	1.9	100
18	Exploring the Influence of Diamagnetic Ions on the Mechanism of Magnetization Relaxation in {Co ^{III} } ₂ Ln ^{III} (Ln = Dy, Tb, Ho) "Butterfly" Complexes. <i>Inorganic Chemistry</i> , 2017, 56, 2518-2532.	1.9	93

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19	Heterometallic 3d-4f Single-Molecule Magnets: Ligand and Metal Ion Influences on the Magnetic Relaxation. <i>Inorganic Chemistry</i> , 2015, 54, 3631-3642.	1.9	92
20	Anisotropy barrier enhancement via ligand substitution in tetranuclear {CoII2LnIII2} single molecule magnets. <i>Chemical Communications</i> , 2013, 49, 6965.	2.2	88
21	Single-Molecule Magnetism in a Family of {Co ^{III} 2Dy ^{III} 2} Butterfly Complexes: Effects of Ligand Replacement on the Dynamics of Magnetic Relaxation. <i>Inorganic Chemistry</i> , 2014, 53, 4303-4315.	1.9	88
22	Nickel(II)-Lanthanide(III) Magnetic Exchange Coupling Influencing Single-Molecule Magnetic Features in {Ni2Ln2} Complexes. <i>Chemistry - A European Journal</i> , 2014, 20, 14235-14239.	1.7	84
23	Ferrotoroidic ground state in a heterometallic {CrIIIDyIII 6} complex displaying slow magnetic relaxation. <i>Nature Communications</i> , 2017, 8, 1023.	5.8	80
24	Synthesis, structural and magnetic studies of an isostructural family of mixed 3d/4f tetranuclear μ_4 clusters. <i>Chemical Communications</i> , 2010, 46, 7787.	2.2	72
25	Role of the Diamagnetic Zinc(II) Ion in Determining the Electronic Structure of Lanthanide Single-Ion Magnets. <i>Chemistry - A European Journal</i> , 2017, 23, 4903-4916.	1.7	72
26	Planar tetranuclear lanthanide clusters with the Dy4 analogue displaying slow magnetic relaxation. <i>Dalton Transactions</i> , 2011, 40, 12656.	1.6	71
27	A μ_4 3D network of tetranuclear μ_4 -carbonato Dy(III) bis-pyrazolylpyridine clusters showing single molecule magnetism features. <i>Chemical Communications</i> , 2012, 48, 2089.	2.2	70
28	Quenching the Quantum Tunneling of Magnetization in Heterometallic Octanuclear {TM ^{III} 4Dy ^{III} 4} (TM=Co and Cr) Single-Molecule Magnets by Modification of the Bridging Ligands and Enhancing the Magnetic Exchange Coupling. <i>Chemistry - A European Journal</i> , 2017, 23, 1654-1666.	1.7	66
29	Large Hexadecametallic {Mn ^{III} 6Ln ^{III} 6} Wheels: Synthesis, Structural, Magnetic, and Theoretical Characterization. <i>Chemistry - A European Journal</i> , 2015, 21, 16364-16369.	1.7	64
30	A {Cr ^{III} 2Dy ^{III} 2} Single-Molecule Magnet: Enhancing the Blocking Temperature through 3d Magnetic Exchange. <i>Angewandte Chemie</i> , 2013, 125, 12236-12241.	1.6	63
31	Theoretical Studies on Polynuclear {Cu ^{II} 5Gd ^{III} _n } Clusters (n = 4, 2): Towards Understanding Their Large Magnetocaloric Effect. <i>Inorganic Chemistry</i> , 2015, 54, 1661-1670.	1.9	57
32	Phosphonate ligands encourage a Platonic relationship between cobalt(ii) and alkali metal ions. <i>Chemical Communications</i> , 2004, , 142.	2.2	55
33	Enhancing the magnetic blocking temperature and magnetic coercivity of {CrII2LnIII2} single-molecule magnets via bridging ligand modification. <i>Chemical Communications</i> , 2016, 52, 10976-10979.	2.2	54
34	Synthesis and structural and magnetic characterisation of cobalt(ii)-sodium phosphonate cage compounds. <i>Dalton Transactions</i> , 2009, , 3102.	1.6	52
35	Structure and magnetism of decanuclear and octadecanuclear manganese(II/III) triethanolamine clusters. <i>Dalton Transactions</i> , 2009, , 973-982.	1.6	49
36	Post-Synthetic Monovalent Central-Metal Exchange, Specific I ₂ -Sensing, and Polymerization of a Catalytic [3+3] Grid of [Cu ^{II} 5Cu ^I 4L ₆](I) ₂ ·1.3H ₂ O. <i>Chemistry - A European Journal</i> , 2013, 19, 6321-6328.	1.7	49

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37	Discrete $\{Gd^{III}\}_4M$ ($M = Gd^{III}$ or Co^{II}) pentanuclear complexes: a new class of metal-organophosphate molecular coolers. Dalton Transactions, 2015, 44, 5961-5965.	1.6	49
38	A high nuclearity mixed valence $\{Mn^{2+}\}$ complex. Chemical Communications, 2011, 47, 6281.	2.2	47
39	Slow Magnetic Relaxation and Single-Molecule Toroidal Behaviour in a Family of Heptanuclear $\{Cr^{III}Ln^{III}\}_6$ ($Ln = Tb, Ho, Er$) Complexes. Angewandte Chemie - International Edition, 2018, 57, 779-784.	7.2	47
40	A Family of $\{Cr^{III}Ln^{III}\}_2$ Butterfly Complexes: Effect of the Lanthanide Ion on the Single-Molecule Magnet Properties. Inorganic Chemistry, 2015, 54, 10497-10503.	1.9	44
41	Synthesis and characterization of homo- and heterovalent tetra- hexa- hepta- and decanuclear manganese clusters using pyridyl functionalized β -diketone, carboxylate and triethanolamine ligands. Dalton Transactions, 2010, 39, 7236.	1.6	43
42	Synthesis, Structure, and Magnetism of a Family of Heterometallic $\{Cu_2Ln_7\}$ and $\{Cu_4Ln_{12}\}$ ($Ln = Gd, Tb$). Dalton Transactions, 2014, 53, 13154-13161.	1.9	42
43	Structure, Magnetic Behavior, and Anisotropy of Homoleptic Trinuclear Lanthanoid 8-Quinolinolate Complexes. Inorganic Chemistry, 2014, 53, 2528-2534.	1.9	41
44	Pentanuclear Lanthanide Mono-organophosphates: Synthesis, Structure, and Magnetism. Inorganic Chemistry, 2017, 56, 3946-3960.	1.9	41
45	Single molecule magnetism in a β -phenolato dinuclear lanthanide motif ligated by heptadentate Schiff base ligands. Dalton Transactions, 2012, 41, 13711.	1.6	40
46	Heteronuclear $Ni^{II}Ln^{III}$ ($Ln = La, Pr, Tb, Dy$) complexes: synthesis and single-molecule magnet behaviour. Dalton Transactions, 2016, 45, 3616-3626.	1.6	39
47	Probing the magnetic and magnetothermal properties of $M^{II}Ln^{III}$ complexes (where $M^{II} = Ni$ or Zn ; $Ln^{III} = La$ or Pr or Gd). Dalton Transactions, 2014, 43, 17375-17384.	1.6	37
48	Single-molecule magnetism in $\{Co^{II}Dy^{III}\}_2$ -amine-polyalcohol-acetylacetonate complexes: effects of ligand replacement at the Dy^{III} sites on the dynamics of magnetic relaxation. Inorganic Chemistry Frontiers, 2015, 2, 867-875.	3.0	37
49	Synthesis and magnetothermal properties of a ferromagnetically coupled $Ni^{II}Gd^{III}Ni^{II}$ cluster. Dalton Transactions, 2014, 43, 259-266.	1.6	34
50	A fluoride bridged $\{Cr^{III}\}_4Dy^{III}\}_4$ single molecule magnet. Dalton Transactions, 2015, 44, 912-915.	1.6	34
51	What Controls the Magnetic Exchange and Anisotropy in a Family of Tetranuclear $\{Mn_2CoMn_2\}$ Single-Molecule Magnets?. Inorganic Chemistry, 2017, 56, 1932-1949.	1.9	33
52	What Controls the Magnetic Exchange Interaction in Mixed- and Homovalent Mn_7 Disc-Like Clusters? A Theoretical Perspective. Chemistry - A European Journal, 2015, 21, 2881-2892.	1.7	32
53	The first 4d/4f single-molecule magnet containing a $\{Ru^{III}\}_2Dy^{III}\}_2$ core. Chemical Communications, 2015, 51, 2044-2047.	2.2	30
54	Supertetrahedral icosanuclear and ring-like decanuclear mixed valent manganese(II/III) triethanolamine clusters. Dalton Transactions, 2010, 39, 4848.	1.6	29

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55	Self-assembled decanuclear $\text{Na}_2\text{MnII}_4\text{MnIII}_4$ complexes: from discrete clusters to 1-D and 2-D structures, with the $\text{MnII}_4\text{MnIII}_4$ unit displaying a large spin ground state and probable SMM behaviour. <i>Dalton Transactions</i> , 2011, 40, 12201.	1.6	27
56	Structure and magnetic exchange in heterometallic $3d \leftrightarrow 3d$ transition metal triethanolamine clusters. <i>Dalton Transactions</i> , 2012, 41, 1033-1046.	1.6	24
57	Synthesis and characterisation of cobalt(ii) phosphonate cage complexes utilizing carboxylates and pyridonates as co-ligands. <i>Dalton Transactions</i> , 2012, 41, 12807.	1.6	24
58	Trinuclear, octanuclear and decanuclear dysprosium(III) complexes: Synthesis, structural and magnetic studies. <i>Polyhedron</i> , 2013, 64, 255-261.	1.0	24
59	New examples of triangular terbium(III) and holmium(III) and hexagonal dysprosium(III) single molecule toroids. <i>Dalton Transactions</i> , 2019, 48, 15657-15667.	1.6	24
60	Oblate versus Prolate Electron Density of Lanthanide Ions: A Design Criterion for Engineering Toroidal Moments? A Case Study on $\{\text{LnIII}_6\}$ ($\text{Ln}=\text{Tb}, \text{Dy}, \text{Ho}$ and Er) Wheels. <i>Chemistry - A European Journal</i> , 2019, 25, 4156-4165.	1.7	23
61	Synthesis and Characterization of Nickel(II) Phosphonate Complexes Utilizing Pyridonates and Carboxylates as Co-ligands. <i>Inorganic Chemistry</i> , 2014, 53, 1128-1134.	1.9	21
62	Rationalizing the sign and magnitude of the magnetic coupling and anisotropy in dinuclear manganese(III) complexes. <i>Dalton Transactions</i> , 2018, 47, 11820-11833.	1.6	20
63	Understanding the Mechanism of Magnetic Relaxation in Pentanuclear $\{\text{Mn}^{\text{IV}}_2\text{Mn}^{\text{III}}_2\text{Ln}^{\text{III}}_2\}$ Single-Molecule Magnets. <i>Inorganic Chemistry</i> , 2018, 57, 1158-1170.	1.9	19
64	Unusual oxidation state distributions observed for two mixed-valence heptanuclear manganese disc-like clusters. <i>Dalton Transactions</i> , 2012, 41, 9789.	1.6	18
65	Magnetic properties of octa- and heptadeca-nuclear heterometallic LnIII complexes derived from the ligand 6-chloro-2-hydroxypyridine. <i>Polyhedron</i> , 2013, 66, 48-55.	1.0	17
66	Mononuclear Dysprosium(III) Complexes with Triphenylphosphine Oxide Ligands: Controlling the Coordination Environment and Magnetic Anisotropy. <i>Inorganics</i> , 2018, 6, 61.	1.2	17
67	Tuning the Ferrotoroidic Coupling and Magnetic Hysteresis in Double- Δ Triangle Complexes $\{\text{Dy}_3\text{MIII}_3\}$ via the MIII linker. <i>European Journal of Inorganic Chemistry</i> , 2021, 2021, 435-444.	1.0	15
68	Magnetic Exchange Effects in $\{\text{CrIII}_2\text{DyIII}_2\}$ Single Molecule Magnets Containing Alcoholamine Ligands. <i>Australian Journal of Chemistry</i> , 2014, 67, 1581.	0.5	14
69	Coming full circle: constructing a $[\text{Gd}_6]$ wheel dimer by dimer and the importance of spin topology. <i>Dalton Transactions</i> , 2017, 46, 10255-10263.	1.6	14
70	Slow Magnetic Relaxation and Single-Molecule Toroidal Behaviour in a Family of Heptanuclear $\{\text{CrIII}_6\}$ ($\text{Ln}=\text{Tb}, \text{Ho}, \text{Er}$) Complexes. <i>Angewandte Chemie</i> , 2018, 130, 787-792.	1.6	13
71	Trinuclear and tetranuclear manganese clusters derived from cyano(imino(methoxy)methyl)nitrosomethanide (cmnm). <i>Polyhedron</i> , 2013, 52, 797-803.	1.0	12
72	Synthesis and Structure of New Lanthanoid Carbonate $\text{Ln}_2(\text{CO}_3)_3$. <i>Inorganic Chemistry</i> , 2015, 54, 792-800.	1.9	11

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73	Linear Trinuclear Copper(II) Complexes Derived from the Nucleophilic Addition Products of Dicyanonitrosomethanide $[C(CN)_2(NO)]^-$: Syntheses, Structures, and Magnetic Properties. Australian Journal of Chemistry, 2012, 65, 918.	0.5	10
74	Electronic and Magnetic Properties of a Gadolinium(III) Schiff Base Complex. European Journal of Inorganic Chemistry, 2014, 2014, 4320-4325.	1.0	10
75	A cyclic dodecanuclear cobalt cluster based on a derivative of the rhodamine 6G dye with unusual magnetization. Chemical Communications, 2015, 51, 12716-12719.	2.2	9
76	Structure and magnetism of a mixed-valence octanuclear manganese(μ_2 - μ_3) cluster derived from carbamoylcyanonitrosomethanide (ccnm). Dalton Transactions, 2013, 42, 1400-1405.	1.6	8
77	Heterometallic Tetranuclear $\{Mn^{II}Ln^{III}\}_n$ 1D Coordination Polymers: Employing Sulfonate Ligands as Connecting Groups. Australian Journal of Chemistry, 2014, 67, 1601.	0.5	8
78	Hyperpolarization of Pyridyl Fentalogues by Signal Amplification By Reversible Exchange (SABRE). ChemistryOpen, 2019, 8, 1375-1382.	0.9	8
79	Synthesis and magnetic properties of a 1-D helical chain derived from a Nickel-Sodium Schiff base complex. Journal of Chemical Sciences, 2014, 126, 1443-1449.	0.7	6
80	Enhancing the barrier height for magnetization reversal in 4d/4f $Ru^{II}Ln^{III}2$ "butterfly" single molecule magnets (Ln = Gd, Dy) via targeted structural alterations. Dalton Transactions, 2021, 50, 12265-12274.	1.6	6
81	$\{Mn^{III}2Ln^{III}2\}$ (Ln = Gd, La or Y) butterfly complexes: Ferromagnetic exchange observed between bis- μ_4 -alkoxo bridged manganese(III) ions. Polyhedron, 2019, 170, 508-514.	1.0	4
82	Crystal structure of 2,4-di- <i>tert</i> -butyl-6-(hydroxymethyl)phenol. Acta Crystallographica Section E: Crystallographic Communications, 2016, 72, 1614-1617.	0.2	2
83	1,8-bis(2-hydroxy-3,5-di- <i>tert</i> -butylbenzyl)-4,11-dibenzyl-1,4,8,11-tetraazacyclotetradecane. MolBank, 2017, 2017, M963.	0.2	2