

# Stuart K Langley

## List of Publications by Year in descending order

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83  
papers

4,980  
citations

71061

41  
h-index

88593

70  
g-index

85  
all docs

85  
docs citations

85  
times ranked

2626  
citing authors

#	ARTICLE	IF	CITATIONS
1	Enhancing the barrier height for magnetization reversal in 4d/4f R <sub>1</sub> II <sub>2</sub> LnIII <sub>2</sub> butterfly single molecule magnets (Ln = Gd, Dy) via targeted structural alterations. Dalton Transactions, 2021, 50, 12265-12274.	1.6	6
2	Tuning the Ferrotoroidic Coupling and Magnetic Hysteresis in Double Triangle Complexes {Dy <sub>3</sub> M <sub>3</sub> Dy <sub>3</sub> } via the M-Linker. European Journal of Inorganic Chemistry, 2021, 2021, 435-444.	1.0	15
3	Hyperpolarization of Pyridyl Fentalogues by Signal Amplification By Reversible Exchange (SABRE). ChemistryOpen, 2019, 8, 1375-1382.	0.9	8
4	New examples of triangular terbium(III) and holmium(III) and hexagonal dysprosium(III) single molecule toroids. Dalton Transactions, 2019, 48, 15657-15667.	1.6	24
5	Oblate versus Prolate Electron Density of Lanthanide Ions: A Design Criterion for Engineering Toroidal Moments? A Case Study on {LnIII <sub>6</sub> } (Ln=Tb, Dy, Ho and Er) Wheels. Chemistry - A European Journal, 2019, 25, 4156-4165.	1.7	23
6	{MnIII <sub>2</sub> LnIII <sub>2</sub> } (Ln= Gd, La or Y) butterfly complexes: Ferromagnetic exchange observed between bis-μ <sub>4</sub> -alkoxo bridged manganese(III) ions. Polyhedron, 2019, 170, 508-514.	1.0	4
7	Understanding the Mechanism of Magnetic Relaxation in Pentanuclear {Mn <sup>IV</sup> Mn <sup>III</sup> <sub>2</sub> Ln <sup>III</sup> <sub>2</sub> } Single-Molecule Magnets. Inorganic Chemistry, 2018, 57, 1158-1170.	1.9	19
8	Slow Magnetic Relaxation and Single-Molecule Toroidal Behaviour in a Family of Heptanuclear {Cr <sup>III</sup> Ln <sup>III</sup> <sub>6</sub> } (Ln=Tb, Ho, Er) Complexes. Angewandte Chemie - International Edition, 2018, 57, 779-784.	7.2	47
9	Mononuclear Dysprosium(III) Complexes with Triphenylphosphine Oxide Ligands: Controlling the Coordination Environment and Magnetic Anisotropy. Inorganics, 2018, 6, 61.	1.2	17
10	Rationalizing the sign and magnitude of the magnetic coupling and anisotropy in dinuclear manganese(III) complexes. Dalton Transactions, 2018, 47, 11820-11833.	1.6	20
11	Slow Magnetic Relaxation and Single-Molecule Toroidal Behaviour in a Family of Heptanuclear {Cr <sup>III</sup> Ln <sup>III</sup> <sub>6</sub> } (Ln=Tb, Ho, Er) Complexes. Angewandte Chemie, 2018, 130, 787-792.	1.6	13
12	What Controls the Magnetic Exchange and Anisotropy in a Family of Tetranuclear {Mn <sub>2</sub> II <sub>2</sub> Mn <sub>2</sub> III <sub>2</sub> } Single-Molecule Magnets?. Inorganic Chemistry, 2017, 56, 1932-1949.	1.9	33
13	Exploring the Influence of Diamagnetic Ions on the Mechanism of Magnetization Relaxation in {Co <sup>III</sup> <sub>2</sub> Ln <sup>III</sup> <sub>2</sub> } (Ln = Dy, Tb, Ho) Butterfly Complexes. Inorganic Chemistry, 2017, 56, 2518-2532.	1.9	93
14	Role of the Diamagnetic Zinc(II) Ion in Determining the Electronic Structure of Lanthanide Single-Ion Magnets. Chemistry - A European Journal, 2017, 23, 4903-4916.	1.7	72
15	Pentanuclear Lanthanide Mono-organophosphates: Synthesis, Structure, and Magnetism. Inorganic Chemistry, 2017, 56, 3946-3960.	1.9	41
16	Coming full circle: constructing a [Gd <sub>6</sub> ] wheel dimer by dimer and the importance of spin topology. Dalton Transactions, 2017, 46, 10255-10263.	1.6	14
17	Ferrotoroidic ground state in a heterometallic {Cr <sup>III</sup> Dy <sup>III</sup> <sub>6</sub> } complex displaying slow magnetic relaxation. Nature Communications, 2017, 8, 1023.	5.8	80
18	Quenching the Quantum Tunneling of Magnetization in Heterometallic Octanuclear {TM <sup>III</sup> <sub>4</sub> Dy <sup>III</sup> <sub>4</sub> } (TM=Co and Cr) Single-Molecule Magnets by Modification of the Bridging Ligands and Enhancing the Magnetic Exchange Coupling. Chemistry - A European Journal, 2017, 23, 1654-1666.	1.7	66

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19	1,8-bis(2-hydroxy-3,5-di- <i>tert</i> -butylbenzyl)-4,11-dibenzyl-1,4,8,11-tetraazacyclotetradecane. <i>MolBank</i> , 2017, 2017, M963.	0.2	2
20	Enhancing the magnetic blocking temperature and magnetic coercivity of {CrIII2LnIII2} single-molecule magnets via bridging ligand modification. <i>Chemical Communications</i> , 2016, 52, 10976-10979.	2.2	54
21	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
22	Crystal structure of 2,4-di- <i>tert</i> -butyl-6-(hydroxymethyl)phenol. <i>Acta Crystallographica Section E: Crystallographic Communications</i> , 2016, 72, 1614-1617.	0.2	2
23	Heteronuclear Ni(II)–Ln(III) (Ln = La, Pr, Tb, Dy) complexes: synthesis and single-molecule magnet behaviour. <i>Dalton Transactions</i> , 2016, 45, 3616-3626.	1.6	39
24	Large Hexadecametallic {Mn <sup>III</sup> –Ln <sup>III</sup> } Wheels: Synthesis, Structural, Magnetic, and Theoretical Characterization. <i>Chemistry - A European Journal</i> , 2015, 21, 16364-16369.	1.7	64
25	Synthesis and Structure of New Lanthanoid Carbonate –Lanthaballs–. <i>Inorganic Chemistry</i> , 2015, 54, 792-800.	1.9	11
26	Discrete {Gd <sup>III</sup> <sub>4</sub> M} (M = Gd <sup>III</sup> or Co <sup>II</sup> ) pentanuclear complexes: a new class of metal-organophosphate molecular coolers. <i>Dalton Transactions</i> , 2015, 44, 5961-5965.	1.6	49
27	Theoretical Studies on Polynuclear {Cu <sup>II</sup> <sub>5</sub> Gd <sup>III</sup> <sub>n</sub> } Clusters (n = 4, 2): Towards Understanding Their Large Magnetocaloric Effect. <i>Inorganic Chemistry</i> , 2015, 54, 1661-1670.	1.9	57
28	What Controls the Magnetic Exchange Interaction in Mixed- and Homo-valent Mn <sub>7</sub> Disc-Like Clusters? A Theoretical Perspective. <i>Chemistry - A European Journal</i> , 2015, 21, 2881-2892.	1.7	32
29	Single-molecule magnetism in {CoIII2DyIII2}-amine-polyalcohol-acetylacetonate complexes: effects of ligand replacement at the Dy <sup>III</sup> sites on the dynamics of magnetic relaxation. <i>Inorganic Chemistry Frontiers</i> , 2015, 2, 867-875.	3.0	37
30	A cyclic dodecanuclear cobalt cluster based on a derivative of the rhodamine 6G dye with unusual magnetization. <i>Chemical Communications</i> , 2015, 51, 12716-12719.	2.2	9
31	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
32	A Family of {CrIII2LnIII2} Butterfly Complexes: Effect of the Lanthanide Ion on the Single-Molecule Magnet Properties. <i>Inorganic Chemistry</i> , 2015, 54, 10497-10503.	1.9	44
33	The first 4d/4f single-molecule magnet containing a {Ru <sup>III</sup> <sub>2</sub> Dy <sup>III</sup> <sub>2</sub> } core. <i>Chemical Communications</i> , 2015, 51, 2044-2047.	2.2	30
34	A fluoride bridged {Cr <sup>III</sup> <sub>4</sub> Dy <sup>III</sup> <sub>4</sub> } single molecule magnet. <i>Dalton Transactions</i> , 2015, 44, 912-915.	1.6	34
35	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
36	Heterometallic Tetranuclear {Mn <sup>III</sup> Ln <sup>III</sup> } <sub>n</sub> 1D Coordination Polymers: Employing Sulfonate Ligands as Connecting Groups. <i>Australian Journal of Chemistry</i> , 2014, 67, 1601.	0.5	8

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37	Probing the magnetic and magnetothermal properties of $M(\text{II})\text{Ln}(\text{III})$ complexes (where $M(\text{II}) = \text{Ni}$ or $\text{Zn}$ ; $\text{Ln}(\text{III}) = \text{La}$ or $\text{Pr}$ or $\text{Gd}$ ). Dalton Transactions, 2014, 43, 17375-17384.	1.6	37
38	Synthesis and magnetothermal properties of a ferromagnetically coupled $\text{Ni}_2\text{Gd}$ cluster. Dalton Transactions, 2014, 43, 259-266.	1.6	34
39	Single-Molecule Magnetism in a Family of $\{\text{Co}^{\text{III}}_2\text{Dy}^{\text{III}}_2\}$ Butterfly Complexes: Effects of Ligand Replacement on the Dynamics of Magnetic Relaxation. Inorganic Chemistry, 2014, 53, 4303-4315.	1.9	88
40	Synthesis and Characterization of Nickel(II) Phosphonate Complexes Utilizing Pyridonates and Carboxylates as Co-ligands. Inorganic Chemistry, 2014, 53, 1128-1134.	1.9	21
41	Magnetic Exchange Effects in $\{\text{Cr}^{\text{III}}_2\text{Dy}^{\text{III}}_2\}$ Single Molecule Magnets Containing Alcoholamine Ligands. Australian Journal of Chemistry, 2014, 67, 1581.	0.5	14
42	Synthesis, Structure, and Magnetism of a Family of Heterometallic $\{\text{Cu}_2\text{Ln}\}$ and $\{\text{Cu}_4\text{Ln}_2\}$ ( $\text{Ln} = \text{Gd}, \text{Tb}$ ) Single Molecule Magnets. Dalton Transactions, 2014, 43, 13154-13161.	1.9	42
43	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
44	Electronic and Magnetic Properties of a Gadolinium(III) Schiff Base Complex. European Journal of Inorganic Chemistry, 2014, 2014, 4320-4325.	1.0	10
45	Structure, Magnetic Behavior, and Anisotropy of Homoleptic Trinuclear Lanthanoid 8-Quinolinolate Complexes. Inorganic Chemistry, 2014, 53, 2528-2534.	1.9	41
46	Modulation of slow magnetic relaxation by tuning magnetic exchange in $\{\text{Cr}_2\text{Dy}_2\}$ single molecule magnets. Chemical Science, 2014, 5, 3246-3256.	3.7	127
47	Enhancing the effective energy barrier of a $\text{Dy}(\text{III})$ SMM using a bridged diamagnetic $\text{Zn}(\text{II})$ ion. Chemical Communications, 2014, 50, 8838-8841.	2.2	134
48	Nickel(II)-Lanthanide(III) Magnetic Exchange Coupling Influencing Single-Molecule Magnetic Features in $\{\text{Ni}_2\text{Ln}_2\}$ Complexes. Chemistry - A European Journal, 2014, 20, 14235-14239.	1.7	84
49	Anisotropy barrier enhancement via ligand substitution in tetranuclear $\{\text{Co}_2\text{Ln}_2\}$ single molecule magnets. Chemical Communications, 2013, 49, 6965.	2.2	88
50	A $\{\text{Cr}^{\text{III}}_2\text{Dy}^{\text{III}}_2\}$ Single-Molecule Magnet: Enhancing the Blocking Temperature through 3d Magnetic Exchange. Angewandte Chemie, 2013, 125, 12236-12241.	1.6	63
51	Magnetic properties of octa- and heptadeca-nuclear heterometallic $\text{Co}_n\text{Ln}_m$ complexes derived from the ligand 6-chloro-2-hydroxypyridine. Polyhedron, 2013, 66, 48-55.	1.0	17
52	A $\{\text{Cr}^{\text{III}}_2\text{Dy}^{\text{III}}_2\}$ Single-Molecule Magnet: Enhancing the Blocking Temperature through 3d Magnetic Exchange. Angewandte Chemie - International Edition, 2013, 52, 12014-12019.	7.2	338
53	Structure and magnetism of a mixed-valence octanuclear manganese(II/III) cluster derived from carbamoylcyanonitrosomethanide (ccnm). Dalton Transactions, 2013, 42, 1400-1405.	1.6	8
54	Single molecule magnetism in a family of mononuclear $\beta^2$ -diketonate lanthanide(III) complexes: rationalization of magnetic anisotropy in complexes of low symmetry. Chemical Science, 2013, 4, 1719.	3.7	204

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55	Trinuclear and tetranuclear manganese clusters derived from cyano(imino(methoxy)methyl)nitrosomethanide (cmnm). <i>Polyhedron</i> , 2013, 52, 797-803.	1.0	12
56	Trinuclear, octanuclear and decanuclear dysprosium(III) complexes: Synthesis, structural and magnetic studies. <i>Polyhedron</i> , 2013, 64, 255-261.	1.0	24
57	Post-Synthetic Monovalent Central-Metal Exchange, Specific $\text{I}^{2-}$ Sensing, and Polymerization of a Catalytic $[3\text{A}-3]$ Grid of $[\text{Cu}^{\text{II}}_5\text{Cu}^{\text{I}}_4\text{L}_6] \cdot (\text{I})^{2-} \cdot 1.3\text{H}_2\text{O}$ . <i>Chemistry - A European Journal</i> , 2013, 19, 6321-6328.	1.7	49
58	Single-Molecule Magnetism in Three Related $\{\text{Co}^{\text{III}}_2\text{Dy}^{\text{III}}_2\}$ -Acetylacetonate Complexes with Multiple Relaxation Mechanisms. <i>Inorganic Chemistry</i> , 2013, 52, 7183-7192.	1.9	100
59	Net Toroidal Magnetic Moment in the Ground State of a $\{\text{Dy}_6\}$ -Triethanolamine Ring. <i>Journal of the American Chemical Society</i> , 2012, 134, 18554-18557.	6.6	157
60	Magnetic Properties of Hexanuclear Lanthanide(III) Clusters Incorporating a Central $\text{I}^{2-}$ -Carbonate Ligand Derived from Atmospheric $\text{CO}_2$ Fixation. <i>Inorganic Chemistry</i> , 2012, 51, 3947-3949.	1.9	131
61	Structure and magnetic exchange in heterometallic $3d-3d$ transition metal triethanolamine clusters. <i>Dalton Transactions</i> , 2012, 41, 1033-1046.	1.6	24
62	Linear Trinuclear Copper(II) Complexes Derived from the Nucleophilic Addition Products of Dicyanonitrosomethanide $[\text{C}(\text{CN})_2(\text{NO})]^{2-}$ : Syntheses, Structures, and Magnetic Properties. <i>Australian Journal of Chemistry</i> , 2012, 65, 918.	0.5	10
63	Heterometallic Tetranuclear $[\text{Ln}^{\text{III}}_2\text{Co}^{\text{III}}_2]$ Complexes Including Suppression of Quantum Tunneling of Magnetization in the $[\text{Dy}^{\text{III}}_2\text{Co}^{\text{III}}_2]$ Single Molecule Magnet. <i>Inorganic Chemistry</i> , 2012, 51, 11873-11881.	1.9	154
64	Single molecule magnetism in a $\text{I}^{2-}$ -phenolato dinuclear lanthanide motif ligated by heptadentate Schiff base ligands. <i>Dalton Transactions</i> , 2012, 41, 13711.	1.6	40
65	Unusual oxidation state distributions observed for two mixed-valence heptanuclear manganese disc-like clusters. <i>Dalton Transactions</i> , 2012, 41, 9789.	1.6	18
66	A $\text{I}^{2-}$ 3D network of tetranuclear $\text{I}^{2-}$ -carbonato $\text{Dy}^{\text{III}}$ bis-pyrazolylpyridine clusters showing single molecule magnetism features. <i>Chemical Communications</i> , 2012, 48, 2089.	2.2	70
67	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
68	Self-assembled decanuclear $\text{Ni}_2\text{Mn}_4\text{Mn}_4$ complexes: from discrete clusters to 1-D and 2-D structures, with the $\text{Mn}_4\text{Mn}_4$ unit displaying a large spin ground state and probable SMM behaviour. <i>Dalton Transactions</i> , 2011, 40, 12201.	1.6	27
69	A high nuclearity mixed valence $\{\text{Mn}_{32}\}$ complex. <i>Chemical Communications</i> , 2011, 47, 6281.	2.2	47
70	Molecular coolers: The case for $[\text{CuI}_5\text{GdIII}_4]$ . <i>Chemical Science</i> , 2011, 2, 1166.	3.7	197
71	Planar tetranuclear lanthanide clusters with the $\text{Dy}_4$ analogue displaying slow magnetic relaxation. <i>Dalton Transactions</i> , 2011, 40, 12656.	1.6	71
72	Structure, Magnetism and Theory of a Family of Nonanuclear $\text{Cu}^{\text{II}}_5\text{Ln}^{\text{III}}_4$ -Triethanolamine Clusters Displaying Single-Molecule Magnet Behaviour. <i>Chemistry - A European Journal</i> , 2011, 17, 9209-9218.	1.7	114

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73	Synthesis, structural and magnetic studies of an isostructural family of mixed 3d/4f tetranuclear $\mu_3$ -oxo clusters. <i>Chemical Communications</i> , 2010, 46, 7787.	2.2	72
74	A heptadecanuclear Mn(III)9Dy(III)8 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
75	Supertetrahedral icosanuclear and ring-like decanuclear mixed valent manganese(II/III) triethanolamine clusters. <i>Dalton Transactions</i> , 2010, 39, 4848.	1.6	29
76	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
77	Synthesis and characterization of homo- and heterovalent tetra- hexa- hepta- and decanuclear manganese clusters using pyridyl functionalized $\beta^2$ -diketone, carboxylate and triethanolamine ligands. <i>Dalton Transactions</i> , 2010, 39, 7236.	1.6	43
78	Structure and magnetism of decanuclear and octadecanuclear manganese(II/III) triethanolamine clusters. <i>Dalton Transactions</i> , 2009, , 973-982.	1.6	49
79	Synthesis and structural and magnetic characterisation of cobalt(II)-sodium phosphonate cage compounds. <i>Dalton Transactions</i> , 2009, , 3102.	1.6	52
80	Synthesis and Structural and Magnetic Characterization of Cobalt(II) Phosphonate Cage Compounds. <i>Inorganic Chemistry</i> , 2008, 47, 497-507.	1.9	141
81	Slow relaxation of magnetisation in an octanuclear cobalt(II) phosphonate cage complex. <i>Chemical Communications</i> , 2005, , 5029.	2.2	141
82	Phosphonate ligands encourage a Platonic relationship between cobalt(II) and alkali metal ions. <i>Chemical Communications</i> , 2004, , 142.	2.2	55
83	Synthesis and Characterization of Iron(III) Phosphonate Cage Complexes. <i>Angewandte Chemie - International Edition</i> , 2003, 42, 3804-3808.	7.2	154