

Stergios Piligkos

List of Publications by Year in descending order

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121
docs citations

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times ranked

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citing authors

#	ARTICLE	IF	CITATIONS
1	Molecular Engineering of Antiferromagnetic Rings for Quantum Computation. <i>Physical Review Letters</i> , 2005, 94, 207208.	2.9	291
2	Synthesis and Characterization of Heterometallic{Cr ₇ M} Wheels. <i>Angewandte Chemie - International Edition</i> , 2003, 42, 101-105.	7.2	205
3	Toward Molecular 4f Single-Ion Magnet Qubits. <i>Journal of the American Chemical Society</i> , 2016, 138, 5801-5804.	6.6	201
4	Efficient Preparation of Functionalized Hybrid Organic/Inorganic Wells-Dawson-type Polyoxotungstates. <i>Journal of the American Chemical Society</i> , 2005, 127, 6788-6794.	6.6	192
5	Design of Single-Molecule Magnets: Insufficiency of the Anisotropy Barrier as the Sole Criterion. <i>Inorganic Chemistry</i> , 2015, 54, 7600-7606.	1.9	191
6	The Importance of Being Exchanged: [Gd ^{III}] ₄ M ^{II} ₈ (OH) ₈ (L) ₈ (O) ₂ CR ₈ Clusters for Magnetic Refrigeration. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 4633-4636.	1.2	178
7	The Electronic Structure of the Isoelectronic, Square-Planar Complexes [Fe ^{II} (L) ₂]- and [Co ^{III} (L ^{Bu}) ₂]- (L ₂ - and (L ^{Bu}) ₂ - Benzene-1,2-dithiolates): An Experimental and Density Functional Theoretical Study. <i>Journal of the American Chemical Society</i> , 2005, 127, 4403-4415.	6.6	176
8	Ground state spin-switching via targeted structural distortion: twisted single-molecule magnets from derivatised salicylaldehydes. <i>Dalton Transactions</i> , 2008, , 1809-1817.	1.6	169
9	Attempting to understand (and control) the relationship between structure and magnetism in an extended family of Mn ₆ single-molecule magnets. <i>Dalton Transactions</i> , 2009, , 3403.	1.6	146
10	Studies of chromium cages and wheels. <i>Coordination Chemistry Reviews</i> , 2005, 249, 2577-2590.	9.5	140
11	Highly Efficient Peptide Bond Formation to Functionalized Wells-Dawson-Type Polyoxotungstates. <i>Angewandte Chemie - International Edition</i> , 2003, 42, 3404-3406.	7.2	116
12	A classification of spin frustration in molecular magnets from a physical study of large odd-numbered-metal, odd electron rings. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 19113-19118.	3.3	114
13	Calix[4]arene-Based Single-Molecule Magnets. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 8285-8288.	7.2	109
14	Octametallal and Hexadecametallic Ferric Wheels. <i>Angewandte Chemie - International Edition</i> , 2002, 41, 4318-4321.	7.2	104
15	Twisted molecular magnets. <i>Chemical Communications</i> , 2012, 48, 181-190.	2.2	102
16	[ReF ₆] ²⁺ : A Robust Module for the Design of Molecule-Based Magnetic Materials. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 1351-1354.	7.2	98
17	Studies of an Enneanuclear Manganese Single-Molecule Magnet. <i>Journal of the American Chemical Society</i> , 2005, 127, 5572-5580.	6.6	90
18	Fluoride Bridges as Structure-Directing Motifs in 3d-4f Cluster Chemistry. <i>Inorganic Chemistry</i> , 2012, 51, 5435-5443.	1.9	86

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19	Fluoride-bridged $\{Gd^{III}\}_3M^{II}\}_2$ (M=Cr, Fe, Ga) Molecular Magnetic Refrigerants. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 2394-2397.	7.2	86
20	Coherent Manipulation of a Molecular Ln-Based Nuclear Qudit Coupled to an Electron Qubit. <i>Journal of the American Chemical Society</i> , 2018, 140, 9814-9818.	6.6	86
21	Chemical tunnel-splitting-engineering in a dysprosium-based molecular nanomagnet. <i>Nature Communications</i> , 2018, 9, 1292.	5.8	81
22	Engineering molecular rings for magnetocaloric effect. <i>Applied Physics Letters</i> , 2004, 84, 3468-3470.	1.5	80
23	Direct observation of a ferri-to-ferromagnetic transition in a fluoride-bridged $3d^4f$ molecular cluster. <i>Chemical Science</i> , 2012, 3, 1024-1032.	3.7	78
24	EPR Spectroscopy of a Family of $Cr^{III}\}_7M^{II}$ (M = Cd, Zn, Mn, Ni) "Wheels" Studies of Isostructural Compounds with Different Spin Ground States. <i>Chemistry - A European Journal</i> , 2009, 15, 3152-3167.	1.7	77
25	A Family of Calix[4]arene-supported $[Mn^{III}\}_2Mn^{II}\}_2$ Clusters. <i>Chemistry - A European Journal</i> , 2011, 17, 7521-7530.	1.7	74
26	A Novel Undecametallic Iron(III) Cluster with an $S=11/2$ Spin Ground State. <i>Inorganic Chemistry</i> , 2003, 42, 6601-6603.	1.9	65
27	Importance of the Anisotropic Exchange Interaction for the Magnetic Anisotropy of Polymetallic Systems. <i>Journal of the American Chemical Society</i> , 2007, 129, 760-761.	6.6	62
28	Topology and spin dynamics in magnetic molecules. <i>Physical Review B</i> , 2005, 72, .	1.1	61
29	Four-site Cooperative Spin Crossover in a Mononuclear Fe^{II} Complex. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 11049-11052.	7.2	58
30	Synthesis and Characterization of Heterometallic $\{Cr_7M\}$ Wheels. <i>Angewandte Chemie</i> , 2003, 115, 105-109.	1.6	54
31	Chiral single-molecule magnets: a partial Mn(III) supertetrahedron from achiral components. <i>Chemical Communications</i> , 2011, 47, 3090.	2.2	51
32	A linear single-molecule magnet based on $[Ru^{III}(CN)_6]_3^{3-}$. <i>Chemical Communications</i> , 2011, 47, 6918.	2.2	50
33	Spin Crossover in $Fe(II)$ Complexes with N_4S_2 Coordination. <i>Inorganic Chemistry</i> , 2016, 55, 5904-5913.	1.9	49
34	Magnetic and Optical Studies on an $S = 6$ Ground-State Cluster $[Cr_{12}O_9(OH)_3(O_2CCMe_3)_{15}]$: Determination of, and the Relationship Between, Single-Ion and Cluster Spin Hamiltonian Parameters. <i>Inorganic Chemistry</i> , 2003, 42, 5293-5303.	1.9	48
35	Determination of the electronic structure of a dinuclear dysprosium single molecule magnet without symmetry idealization. <i>Chemical Science</i> , 2019, 10, 2101-2110.	3.7	48
36	Fluoride-bridged $\{Ln_2Cr_2\}$ polynuclear complexes from semi-labile $mer-[CrF_3(py)_3]$ and $[Ln(hfac)_3(H_2O)_2]$. <i>Dalton Transactions</i> , 2012, 41, 11284.	1.6	43

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37	[Cr ^{III} ₈ M ^{II} ₆] ¹²⁺ Coordination Cubes (M ^{II} =Cu, Co). <i>Angewandte Chemie - International Edition</i> , 2015, 54, 6761-6764.	7.2	42
38	Reversible Guest Binding in a Non-Porous Fe ^{II} Coordination Polymer Host Toggles Spin Crossover. <i>Chemistry - A European Journal</i> , 2015, 21, 16066-16072.	1.7	41
39	Iridates from the molecular side. <i>Nature Communications</i> , 2016, 7, 12195.	5.8	41
40	A rare mixed-valence state manganese(II/IV) tetranuclear cage formed using phenyl 2-pyridyl ketone oxime and azide as ligands. <i>Inorganic Chemistry Communication</i> , 2006, 9, 638-641.	1.8	39
41	Facile Interchange of 3d and 4f Ions in Single-Molecule Magnets: Stepwise Assembly of [Mn ₄], [Mn ₃ Ln] and [Mn ₂ Ln ₂] Cages within Calix[4]arene Scaffolds. <i>Chemistry - A European Journal</i> , 2015, 21, 11212-11218.	1.7	35
42	Calix[4]arene supported clusters: a dimer of [MnIIIMnII] dimers. <i>Chemical Communications</i> , 2011, 47, 1440-1442.	2.2	34
43	Calixarene-supported clusters: employment of complementary cluster ligands for the construction of a ferromagnetic [Mn ₅] cage. <i>Chemical Communications</i> , 2012, 48, 11190.	2.2	34
44	Analysis of vibronic coupling in a 4f molecular magnet with FIRMS. <i>Nature Communications</i> , 2022, 13, 825.	5.8	34
45	From antiferromagnetic to ferromagnetic exchange in a family of oxime-based MnIII dimers: a magneto-structural study. <i>Dalton Transactions</i> , 2013, 42, 16510.	1.6	33
46	Angular dependence of the exchange interaction in fluoride-bridged GdIII-CrIII complexes. <i>Chemical Communications</i> , 2013, 49, 5583.	2.2	33
47	A New Polynuclear Coordination Type for (Salicylaldoxime)copper(II) Complexes: Structure and Magnetic Properties of an (Oxime)Cu ₆ Cluster. <i>European Journal of Inorganic Chemistry</i> , 2009, 2009, 4613-4617.	1.0	32
48	Magnetic and theoretical characterization of a ferromagnetic Mn(III) dimer. <i>Polyhedron</i> , 2005, 24, 2450-2454.	1.0	29
49	A ligand-field study of the ground spin-state magnetic anisotropy in a family of hexanuclear Mn(III) single-molecule magnets. <i>Dalton Transactions</i> , 2008, , 2277.	1.6	29
50	Magnetic Properties of a Manganese(III) Chain with Monoatomic Bridges: <i>catena</i> -MnF(salen). <i>Inorganic Chemistry</i> , 2011, 50, 5312-5314.	1.9	29
51	Studies of a linear single-molecule magnet. <i>Dalton Transactions</i> , 2007, , 5282.	1.6	28
52	Magnetic and magnetocaloric properties of an unusual family of carbonate-panelled [LnIII ₆ ZnII ₂] cages. <i>Dalton Transactions</i> , 2015, 44, 10315-10320.	1.6	27
53	Molecular nanoclusters as magnetic refrigerants: The case of Fe ₁₄ with very large spin ground-state. <i>Polyhedron</i> , 2005, 24, 2573-2578.	1.0	26
54	Structurally Flexible and Solution Stable [Ln ₄ TM ₈ (OH) ₈ (L) ₈ (O ₂ CR) ₈ (MeOH) ₈] _n A Playground for Magnetic Refrigeration. <i>Inorganic Chemistry</i> , 2016, 55, 10535-10546.	1.5	26

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55	Alkali metal cation complexation and solvent interactions by robust chromium(III) fluoride complexes. <i>Journal of Fluorine Chemistry</i> , 2010, 131, 898-906.	0.9	25
56	Magnetic circular dichroism spectroscopy of weakly exchange coupled transition metal dimers: A model study. <i>Coordination Chemistry Reviews</i> , 2009, 253, 2352-2362.	9.5	24
57	Sign and magnitude of spin Hamiltonian parameters for Mn ²⁺ impurities in calcite. A multi- and low-frequency EPR study. <i>Molecular Physics</i> , 2007, 105, 2025-2030.	0.8	23
58	Molecular multifunctionality preservation upon surface deposition for a chiral single-molecule magnet. <i>Chemical Science</i> , 2019, 10, 3065-3073.	3.7	22
59	Exploiting host-guest chemistry to manipulate magnetic interactions in metallocene tetrahedral cages. <i>Chemical Science</i> , 2021, 12, 5134-5142.	3.7	22
60	Optical Determination of the Single-Ion Zero-Field Splitting in Large Spin Clusters. <i>Journal of the American Chemical Society</i> , 2003, 125, 1168-1169.	6.6	20
61	Linked Supramolecular Building Blocks for Enhanced Cluster Formation. <i>Chemistry - A European Journal</i> , 2015, 21, 2804-2812.	1.7	20
62	Magnetic circular dichroism spectroscopy on the Cr ₈ antiferromagnetic ring. <i>Dalton Transactions</i> , 2010, 39, 4999.	1.6	19
63	New Nanostructured Materials: Synthesis of Dodecanuclear Ni ₁₂ Complexes and Surface Deposition Studies. <i>Chemistry - A European Journal</i> , 2013, 19, 9064-9071.	1.7	19
64	MCD spectroscopy of hexanuclear Mn(III) salicylaldoxime single-molecule magnets. <i>Dalton Transactions</i> , 2010, 39, 9904.	1.6	18
65	Varying spin state composition by the choice of capping ligand in a family of molecular chains: detailed analysis of magnetic properties of chromium(III) horseshoes. <i>Dalton Transactions</i> , 2011, 40, 2725.	1.6	18
66	[M _{III} 2M _{II} 3] ⁿ⁺ trigonal bipyramidal cages based on diamagnetic and paramagnetic metalloligands. <i>Chemical Science</i> , 2017, 8, 5526-5535.	3.7	18
67	Modular [Fe ^{III} ₈ M ^{II} ₆] ⁿ⁺ (M ^{II} = Pd, Co, Ni, Cu) Coordination Cages. <i>Inorganic Chemistry</i> , 2018, 57, 3500-3506.	1.9	17
68	Frozen-solution magnetisation dynamics of hexanuclear oxime-based Mn ^{III} Single-Molecule Magnets. <i>Chemical Science</i> , 2010, 1, 631.	3.7	16
69	Accidentally on purpose: construction of a ferromagnetic, oxime-based [Mn ^{III} 2] dimer. <i>Dalton Transactions</i> , 2011, 40, 9999.	1.6	16
70	Synthetic, structural, spectroscopic and theoretical study of a Mn ^{III} -Cu ^{II} dimer containing a Jahn-Teller compressed Mn ion. <i>Dalton Transactions</i> , 2013, 42, 207-216.	1.6	16
71	Homo- and heterometallic planes, chains and cubanes. <i>Dalton Transactions</i> , 2013, 42, 10315.	1.6	16
72	Hard X-ray magnetochiral dichroism in a paramagnetic molecular 4f complex. <i>Chemical Science</i> , 2020, 11, 8306-8311.	3.7	16

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73	High-resolution electron-energy-loss spectroscopy of vanadium and vanadium oxide thin films on TiO ₂ (110) (1 Å ⁻¹). <i>Physical Review B</i> , 2001, 64, .	1.1	15
74	Single-crystal parallel-mode EPR spectroscopy of an S=6 ground-state transition-metal cluster. <i>Physical Review B</i> , 2004, 69, .	1.1	14
75	EPR OF Mn ²⁺ IMPURITIES IN CALCITE: A DETAILED STUDY PERTINENT TO MARBLE PROVENANCE DETERMINATION*. <i>Archaeometry</i> , 2009, 51, 43-48.	0.6	14
76	Inelastic neutron scattering studies on the odd-membered antiferromagnetic wheel Cr ₈ Ni. <i>Physical Review B</i> , 2012, 86, .	1.1	14
77	Converting an hexametallic Mn ^{III} wheel to a dodecametallic Mn ^{III} wheel via ligand oximation. <i>Chemical Communications</i> , 2014, 50, 3310-3312.	2.2	13
78	A hexameric [Mn ^{III} 18Na ₆] wheel based on [Mn ^{III} 3O] ₇₊ sub-units. <i>Chemical Communications</i> , 2016, 52, 12829-12832.	2.2	13
79	Modification of the magnetic properties of a heterometallic wheel by inclusion of a Jahn-Teller distorted Cu(II) ion. <i>Dalton Transactions</i> , 2011, 40, 8533.	1.6	12
80	A simple methodology for constructing ferromagnetically coupled Cr(III) compounds. <i>Dalton Transactions</i> , 2018, 47, 8100-8109.	1.6	11
81	Magnetic Archimedean Tessellations in Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2021, 143, 14041-14045.	6.6	11
82	The coordination chemistry of <i>p</i> -tert-butylcalix[4]arene with paramagnetic transition and lanthanide metal ions: an Edinburgh Perspective. <i>Dalton Transactions</i> , 2022, 51, 4213-4226.	1.6	11
83	Computationally inexpensive interpretation of magnetic data for finite spin clusters. <i>Dalton Transactions</i> , 2010, 39, 4882.	1.6	10
84	Ferromagnetic exchange in a twisted, oxime-bridged [Mn ^{III}] ₂ dimer. <i>Dalton Transactions</i> , 2012, 41, 8340.	1.6	10
85	[Cr ^{III}] ₈ M ^{II} ₆ (M ^{II} = Cu, Co) face-centred, metallosupramolecular cubes. <i>CrystEngComm</i> , 2016, 18, 4914-4920.	1.3	10
86	Functionalized Trigonal Lanthanide Complexes: A New Family of 4f Single-Ion Magnets. <i>Inorganic Chemistry</i> , 2020, 59, 16328-16340.	1.9	10
87	Lanthanide cryptate monometallic coordination complexes. <i>Dalton Transactions</i> , 2020, 49, 13557-13565.	1.6	10
88	In-Depth Magnetic Characterization of a [2 Å ⁻²] Mn(III) Square Grid Using SQUID Magnetometry, Inelastic Neutron Scattering, and High-Field Electron Paramagnetic Resonance Spectroscopy. <i>Inorganic Chemistry</i> , 2016, 55, 10377-10382.	1.9	9
89	Design of pure heterodinuclear lanthanoid cryptate complexes. <i>Chemical Science</i> , 2021, 12, 6983-6991.	3.7	9
90	AF molecular rings for quantum computation. <i>Polyhedron</i> , 2005, 24, 2562-2567.	1.0	8

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91	A Vertebrate-type Ferredoxin Domain in the Na ⁺ -translocating NADH Dehydrogenase from <i>Vibrio cholerae</i> . <i>Journal of Biological Chemistry</i> , 2005, 280, 22560-22563.	1.6	6
92	[(VIVO)2MII5] (M = Ni, Co) Anderson wheels. <i>Dalton Transactions</i> , 2021, 50, 12495-12501.	1.6	3
93	Solvothermal synthesis of discrete cages and extended networks comprising {Cr(III)3O(O2CR)3(oxime)3}2 ⁿ⁺ (R = H, CH3, C(CH3)3, C14H9) building blocks. <i>RSC Advances</i> , 2016, 6, 73668-73676.	1.7	2
94	[CrIII8NiII6] ⁿ⁺ Heterometallic Coordination Cubes. <i>Molecules</i> , 2021, 26, 757.	1.7	1
95	Crystal structure of trihydrogen bis{[1,1,1-tris(2-oxidoethylaminomethyl)ethane]cobalt(III)} trinitrate. <i>Acta Crystallographica Section E: Crystallographic Communications</i> , 2015, 71, m275-m276.	0.2	1
96	Efficient Preparation of Functionalized Hybrid Organic/Inorganic Wells ⁿ⁺ Dawson-Type Polyoxotungstates. <i>ChemInform</i> , 2005, 36, no.	0.1	0
97	Innentitelbild: [ReF6]2 ⁿ⁺ : A Robust Module for the Design of Molecule-Based Magnetic Materials (<i>Angew. Chem.</i> 5/2014). <i>Angewandte Chemie</i> , 2014, 126, 1192-1192.	1.6	0
98	Frontispiece: Linked Supramolecular Building Blocks for Enhanced Cluster Formation. <i>Chemistry - A European Journal</i> , 2015, 21, n/a-n/a.	1.7	0