Stergios Piligkos

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/4316435/publications.pdf

Version: 2024-02-01

98 papers	5,132 citations	81743 39 h-index	91712 69 g-index
121 all docs	121 docs citations	121 times ranked	3926 citing authors

#	Article	IF	Citations
1	The coordination chemistry of p-tert-butylcalix[4]arene with paramagnetic transition and lanthanide metal ions: an Edinburgh Perspective. Dalton Transactions, 2022, 51, 4213-4226.	1.6	11
2	Analysis of vibronic coupling in a 4f molecular magnet with FIRMS. Nature Communications, 2022, 13, 825.	5.8	34
3	Design of pure heterodinuclear lanthanoid cryptate complexes. Chemical Science, 2021, 12, 6983-6991.	3.7	9
4	[(VIVO)2MII5] (M = Ni, Co) Anderson wheels. Dalton Transactions, 2021, 50, 12495-12501.	1.6	3
5	Exploiting hostâ€“guest chemistry to manipulate magnetic interactions in metallosupramolecular M₄L₆ tetrahedral cages. Chemical Science, 2021, 12, 5134-5142.	3.7	22
6	[CrIII8NiII6]n+ Heterometallic Coordination Cubes. Molecules, 2021, 26, 757.	1.7	1
7	Magnetic Archimedean Tessellations in Metalâ€“Organic Frameworks. Journal of the American Chemical Society, 2021, 143, 14041-14045.	6.6	11
8	Hard X-ray magnetochiral dichroism in a paramagnetic molecular 4f complex. Chemical Science, 2020, 11, 8306-8311.	3.7	16
9	Functionalized Trigonal Lanthanide Complexes: A New Family of 4f Single-Ion Magnets. Inorganic Chemistry, 2020, 59, 16328-16340.	1.9	10
10	Lanthanide cryptate monometallic coordination complexes. Dalton Transactions, 2020, 49, 13557-13565.	1.6	10
11	Molecular multifunctionality preservation upon surface deposition for a chiral single-molecule magnet. Chemical Science, 2019, 10, 3065-3073.	3.7	22
12	Determination of the electronic structure of a dinuclear dysprosium single molecule magnet without symmetry idealization. Chemical Science, 2019, 10, 2101-2110.	3.7	48
13	Modular [Fe^{III}₈M^{II}₆]ⁿ⁺ (M^{II} = Pd, Co, Ni, Cu) Coordination Cages. Inorganic Chemistry, 2018, 57, 3500-3506.	1.9	17
14	Chemical tunnel-splitting-engineering in a dysprosium-based molecular nanomagnet. Nature Communications, 2018, 9, 1292.	5.8	81
15	A simple methodology for constructing ferromagnetically coupled Cr(<scp>iii</scp>) compounds. Dalton Transactions, 2018, 47, 8100-8109.	1.6	11
16	Coherent Manipulation of a Molecular Ln-Based Nuclear Qudit Coupled to an Electron Qubit. Journal of the American Chemical Society, 2018, 140, 9814-9818.	6.6	86
17	[MIII2MII3]ⁿ⁺ trigonal bipyramidal cages based on diamagnetic and paramagnetic metalloligands. Chemical Science, 2017, 8, 5526-5535.	3.7	18
18	Iridates from the molecular side. Nature Communications, 2016, 7, 12195.	5.8	41

#	Article	IF	Citations
19	[Cr^{III}₈M^{II}₆]ⁿ⁺ (M^{II} = Cu, Co) face-centred, metallosupramolecular cubes. CrystEngComm, 2016, 18, 4914-4920.	1.3	10
20	Toward Molecular 4f Single-Ion Magnet Qubits. Journal of the American Chemical Society, 2016, 138, 5801-5804.	6.6	201
21	Structurally Flexible and Solution Stable [Ln₄TM₈(OH)₈(L)₈(O₂CR)₈(MeOH)_x] Complexes: A Playground for Magnetic Refrigeration. Inorganic Chemistry, 2016, 55, 10535-10546.	1.9	26
22	In-Depth Magnetic Characterization of a [2 Ã— 2] Mn(III) Square Grid Using SQUID Magnetometry, Inelastic Neutron Scattering, and High-Field Electron Paramagnetic Resonance Spectroscopy. Inorganic Chemistry, 2016, 55, 10377-10382.	1.9	9
23	A hexameric [MnIII18Na₆] wheel based on [MnIII3O]⁷⁺ sub-units. Chemical Communications, 2016, 52, 12829-12832.	2.2	13
24	Solvothermal synthesis of discrete cages and extended networks comprising {Cr(iii)3O(O2CR)3(oxime)3}2â^' (R = H, CH3, C(CH3)3, C14H9) building blocks. RSC Advances, 2016, 6, 73668-73676.	1.7	2
25	Spin Crossover in Fe(II) Complexes with N₄S₂ Coordination. Inorganic Chemistry, 2016, 55, 5904-5913.	1.9	49
26	Facile Interchange of 3d and 4f Ions in Singleâ€Molecule Magnets: Stepwise Assembly of [Mn₄], [Mn₃Ln] and [Mn₂Ln₂] Cages within Calix[4]arene Scaffolds. Chemistry - A European Journal, 2015, 21, 11212-11218.	1.7	35
27	Frontispiece: Linked Supramolecular Building Blocks for Enhanced Cluster Formation. Chemistry - A European Journal, 2015, 21, n/a-n/a.	1.7	0
28	Reversible Guest Binding in a Nonâ€Porous Fe^{II} Coordination Polymer Host Toggles Spin Crossover. Chemistry - A European Journal, 2015, 21, 16066-16072.	1.7	41
29	Linked Supramolecular Building Blocks for Enhanced Cluster Formation. Chemistry - A European Journal, 2015, 21, 2804-2812.	1.7	20
30	Design of Single-Molecule Magnets: Insufficiency of the Anisotropy Barrier as the Sole Criterion. Inorganic Chemistry, 2015, 54, 7600-7606.	1.9	191
31	[Cr^{III}₈M^{II}₆]¹²⁺ Coordination Cubes (M^{II}=Cu,â€‰Co). Angewandte Chemie - International Edition, 2015, 54, 6761-6764.	7.2	42
32	Magnetic and magnetocaloric properties of an unusual family of carbonate-panelled [LnIII6ZnII2] cages. Dalton Transactions, 2015, 44, 10315-10320.	1.6	27
33	Crystal structure of trihydrogen bis{[1,1,1-tris(2-oxidoethylaminomethyl)ethane]cobalt(III)} trinitrate. Acta Crystallographica Section E: Crystallographic Communications, 2015, 71, m275-m276.	0.2	1
34	[ReF₆]^{2â^'}: A Robust Module for the Design of Moleculeâ€Based Magnetic Materials. Angewandte Chemie - International Edition, 2014, 53, 1351-1354.	7.2	98
35	â€œConvertingâ€• an hexametallic Mn^{III} wheel to a dodecametallic Mn^{III} wheel via ligand oximation. Chemical Communications, 2014, 50, 3310-3312.	2.2	13
36	Fluorideâ€Bridged {Gd^{III}₃M^{III}₂} (M=Cr, Fe, Ga) Molecular Magnetic Refrigerants. Angewandte Chemie - International Edition, 2014, 53, 2394-2397.	7.2	86

#	Article	IF	Citations
37	Innentitelbild: [ReF6]2â^': A Robust Module for the Design of Molecule-Based Magnetic Materials (Angew. Chem. 5/2014). Angewandte Chemie, 2014, 126, 1192-1192.	1.6	0
38	From antiferromagnetic to ferromagnetic exchange in a family of oxime-based MnIII dimers: a magneto-structural study. Dalton Transactions, 2013, 42, 16510.	1.6	33
39	Angular dependence of the exchange interaction in fluoride-bridged GdIIIâ€"CrIII complexes. Chemical Communications, 2013, 49, 5583.	2.2	33
40	Synthetic, structural, spectroscopic and theoretical study of a Mn(<scp>iii</scp>)â€"Cu(<scp>ii</scp>) dimer containing a Jahnâ€"Teller compressed Mn ion. Dalton Transactions, 2013, 42, 207-216.	1.6	16
41	New Nanostructured Materials: Synthesis of Dodecanuclear Ni^{II} Complexes and Surface Deposition Studies. Chemistry - A European Journal, 2013, 19, 9064-9071.	1.7	19
42	Homo- and heterometallic planes, chains and cubanes. Dalton Transactions, 2013, 42, 10315.	1.6	16
43	Inelastic neutron scattering studies on the odd-membered antiferromagnetic wheel Cr8Ni. Physical Review B, 2012, 86, .	1.1	14
44	Twisted molecular magnets. Chemical Communications, 2012, 48, 181-190.	2.2	102
45	Calixarene-supported clusters: employment of complementary cluster ligands for the construction of a ferromagnetic [Mn5] cage. Chemical Communications, 2012, 48, 11190.	2.2	34
46	A classification of spin frustration in molecular magnets from a physical study of large odd-numbered-metal, odd electron rings. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 19113-19118.	3.3	114
47	Direct observation of a ferri-to-ferromagnetic transition in a fluoride-bridged 3dâ€"4f molecular cluster. Chemical Science, 2012, 3, 1024-1032.	3.7	78
48	Fourâ€Site Cooperative Spin Crossover in a Mononuclear Fe^{II} Complex. Angewandte Chemie - International Edition, 2012, 51, 11049-11052.	7.2	58
49	Fluoride-bridged {Ln2Cr2} polynuclear complexes from semi-labile mer-[CrF3(py)3] and [Ln(hfac)3(H2O)2]. Dalton Transactions, 2012, 41, 11284.	1.6	43
50	Fluoride Bridges as Structure-Directing Motifs in 3d-4f Cluster Chemistry. Inorganic Chemistry, 2012, 51, 5435-5443.	1.9	86
51	The Importance of Being Exchanged: [Gd^{III}₄M^{II}₈(OH)₈(L)₈(O₂CR)₈ Clusters for Magnetic Refrigeration. Angewandte Chemie - International Edition, 2012, 51, 4633-4636.	7.2	178
52	Ferromagnetic exchange in a twisted, oxime-bridged [MnIII2] dimer. Dalton Transactions, 2012, 41, 8340.	1.6	10
53	Modification of the magnetic properties of a heterometallic wheel by inclusion of a Jahnâ€"Teller distorted Cu(ii) ion. Dalton Transactions, 2011, 40, 8533.	1.6	12
54	Calix[4]arene supported clusters: a dimer of [MnIIIMnII] dimers. Chemical Communications, 2011, 47, 1440-1442.	2.2	34

#	Article	IF	Citations
55	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. Dalton Transactions, 2011, 40, 2725.	1.6	18
56	Magnetic Properties of a Manganese(III) Chain with Monoatomic Bridges: catena-MnF(salen). Inorganic Chemistry, 2011, 50, 5312-5314.	1.9	29
57	Chiral single-molecule magnets: a partial Mn(iii) supertetrahedron from achiral components. Chemical Communications, 2011, 47, 3090.	2.2	51
58	Accidentally on purpose: construction of a ferromagnetic, oxime-based [MnIII2] dimer. Dalton Transactions, 2011, 40, 9999.	1.6	16
59	A linear single-molecule magnet based on [RuIII(CN)6]3â^'. Chemical Communications, 2011, 47, 6918.	2.2	50
60	A Family of Calix[4]areneâ€Supported [Mn^{III}₂Mn^{II}₂] Clusters. Chemistry - A European Journal, 2011, 17, 7521-7530.	1.7	74
61	Alkali metal cation complexation and solvent interactions by robust chromium(III) fluoride complexes. Journal of Fluorine Chemistry, 2010, 131, 898-906.	0.9	25
62	Magnetic circular dichroism spectroscopy on the Cr8 antiferromagnetic ring. Dalton Transactions, 2010, 39, 4999.	1.6	19
63	Frozen-solution magnetisation dynamics of hexanuclear oxime-based MnIII Single-Molecule Magnets. Chemical Science, 2010, 1, 631.	3.7	16
64	Computationally inexpensive interpretation of magnetic data for finite spin clusters. Dalton Transactions, 2010, 39, 4882.	1.6	10
65	MCD spectroscopy of hexanuclear Mn(iii) salicylaldoxime single-molecule magnets. Dalton Transactions, 2010, 39, 9904.	1.6	18
66	EPR Spectroscopy of a Family of Cr^{III}₇M^{II} (M = Cd, Zn, Mn, Ni) â€œWheelsâ€• Studies of Isostructural Compounds with Different Spin Ground States. Chemistry - A European Journal, 2009, 15, 3152-3167.	1.7	77
67	A New Polynuclear Coordination Type for (Salicylaldoxime)copper(II) Complexes: Structure and Magnetic Properties of an (Oxime)Cu₆ Cluster. European Journal of Inorganic Chemistry, 2009, 2009, 4613-4617.	1.0	32
68	Calix[4]areneâ€Based Singleâ€Molecule Magnets. Angewandte Chemie - International Edition, 2009, 48, 8285-8288.	7.2	109
69	Magnetic circular dichroism spectroscopy of weakly exchange coupled transition metal dimers: A model study. Coordination Chemistry Reviews, 2009, 253, 2352-2362.	9.5	24
70	EPR OF Mn²⁺ IMPURITIES IN CALCITE: A DETAILED STUDY PERTINENT TO MARBLE PROVENANCE DETERMINATION*. Archaeometry, 2009, 51, 43-48.	0.6	14
71	Attempting to understand (and control) the relationship between structure and magnetism in an extended family of Mn6 single-molecule magnets. Dalton Transactions, 2009, , 3403.	1.6	146
72	Ground state spin-switching via targeted structural distortion: twisted single-molecule magnets from derivatised salicylaldoximes. Dalton Transactions, 2008, , 1809-1817.	1.6	169

#	Article	IF	Citations
73	A ligand-field study of the ground spin-state magnetic anisotropy in a family of hexanuclear Mn(iii) single-molecule magnets. Dalton Transactions, 2008, , 2277.	1.6	29
74	Sign and magnitude of spin Hamiltonian parameters for Mn²⁺ impurities in calcite. A multi- and low-frequency EPR study. Molecular Physics, 2007, 105, 2025-2030.	0.8	23
75	Importance of the Anisotropic Exchange Interaction for the Magnetic Anisotropy of Polymetallic Systems. Journal of the American Chemical Society, 2007, 129, 760-761.	6.6	62
76	Studies of a linear single-molecule magnet. Dalton Transactions, 2007, , 5282.	1.6	28
77	A rare mixed-valence state manganese(II/IV) tetranuclear cage formed using phenyl 2-pyridyl ketone oxime and azide as ligands. Inorganic Chemistry Communication, 2006, 9, 638-641.	1.8	39
78	Magnetic and theoretical characterization of a ferromagnetic Mn(III) dimer. Polyhedron, 2005, 24, 2450-2454.	1.0	29
79	Molecular nanoclusters as magnetic refrigerants: The case of Fe14 with very large spin ground-state. Polyhedron, 2005, 24, 2573-2578.	1.0	26
80	AF molecular rings for quantum computation. Polyhedron, 2005, 24, 2562-2567.	1.0	8
81	Studies of chromium cages and wheels. Coordination Chemistry Reviews, 2005, 249, 2577-2590.	9.5	140
82	Efficient Preparation of Functionalized Hybrid Organic/Inorganic Wellsâ€"Dawson-Type Polyoxotungstates.. ChemInform, 2005, 36, no.	0.1	0
83	A Vertebrate-type Ferredoxin Domain in the Na+-translocating NADH Dehydrogenase from Vibrio cholerae. Journal of Biological Chemistry, 2005, 280, 22560-22563.	1.6	6
84	The Electronic Structure of the Isoelectronic, Square-Planar Complexes [FeII(L)2]2-and [CoIII(LBu)2]-(L2-and (LBu)2-= Benzene-1,2-dithiolates):Â An Experimental and Density Functional Theoretical Study. Journal of the American Chemical Society, 2005, 127, 4403-4415.	6.6	176
85	Topology and spin dynamics in magnetic molecules. Physical Review B, 2005, 72, .	1.1	61
86	Studies of an Enneanuclear Manganese Single-Molecule Magnet. Journal of the American Chemical Society, 2005, 127, 5572-5580.	6.6	90
87	Efficient Preparation of Functionalized Hybrid Organic/Inorganic Wellsâ˜Dawson-type Polyoxotungstates. Journal of the American Chemical Society, 2005, 127, 6788-6794.	6.6	192
88	Molecular Engineering of Antiferromagnetic Rings for Quantum Computation. Physical Review Letters, 2005, 94, 207208.	2.9	291
89	Single-crystal parallel-mode EPR spectroscopy of anS=6ground-state transition-metal cluster. Physical Review B, 2004, 69, .	1.1	14
90	Engineering molecular rings for magnetocaloric effect. Applied Physics Letters, 2004, 84, 3468-3470.	1.5	80

#	Article	IF	Citations
91	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
92	Synthesis and Characterization of Heterometallic {Cr7M} Wheels. Angewandte Chemie, 2003, 115, 105-109.	1.6	54
93	Highly Efficient Peptide Bond Formation to Functionalized Wells-Dawson-Type Polyoxotungstates. Angewandte Chemie - International Edition, 2003, 42, 3404-3406.	7.2	116
94	Synthesis and Characterization of Heterometallic{Cr7M} Wheels. Angewandte Chemie - International Edition, 2003, 42, 101-105.	7.2	205
95	Optical Determination of the Single-Ion Zero-Field Splitting in Large Spin Clusters. Journal of the American Chemical Society, 2003, 125, 1168-1169.	6.6	20
96	A Novel Undecametallic Iron(III) Cluster with anS=11/2Spin Ground State. Inorganic Chemistry, 2003, 42, 6601-6603.	1.9	65
97	Octametallic and Hexadecametallic Ferric Wheels. Angewandte Chemie - International Edition, 2002, 41, 4318-4321.	7.2	104
98	High-resolution electron-energy-loss spectroscopy of vanadium and vanadium oxide thin films onTiO2(110)â^'(1Ã—1). Physical Review B, 2001, 64, .	1.1	15