Bing-Wu Wang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1481663/publications.pdf

Version: 2024-02-01

134 papers	7,541 citations	71102 41 h-index	56724 83 g-index
138 all docs	138 docs citations	138 times ranked	4578 citing authors

#	Article	IF	Citations
1	An Organometallic Single-Ion Magnet. Journal of the American Chemical Society, 2011, 133, 4730-4733.	13.7	725
2	A Mononuclear Dysprosium Complex Featuring Singleâ€Moleculeâ€Magnet Behavior. Angewandte Chemie - International Edition, 2010, 49, 7448-7451.	13.8	597
3	Understanding the Magnetic Anisotropy toward Single-Ion Magnets. Accounts of Chemical Research, 2016, 49, 2381-2389.	15.6	354
4	Two-Coordinate Co(II) Imido Complexes as Outstanding Single-Molecule Magnets. Journal of the American Chemical Society, 2017, 139, 373-380.	13.7	343
5	Zero-field slow magnetic relaxation from single Co(ii) ion: a transition metal single-molecule magnet with high anisotropy barrier. Chemical Science, 2013, 4, 1802.	7.4	289
6	Influence of Guest Exchange on the Magnetization Dynamics of Dilanthanide Singleâ€Moleculeâ€Magnet Nodes within a Metalâ€“Organic Framework. Angewandte Chemie - International Edition, 2015, 54, 9861-9865.	13.8	268
7	Capping Ligand Perturbed Slow Magnetic Relaxation in Dysprosium Singleâ€Ion Magnets. Chemistry - A European Journal, 2011, 17, 12476-12481.	3.3	235
8	High symmetry or low symmetry, that is the question â€“ high performance Dy(<scp>iii</scp>) single-ion magnets by electrostatic potential design. Chemical Science, 2016, 7, 684-691.	7.4	229
9	Series of Lanthanide Organometallic Single-Ion Magnets. Inorganic Chemistry, 2012, 51, 3079-3087.	4.0	228
10	Room temperature ferromagnetism in ultra-thin van der Waals crystals of 1T-CrTe2. Nano Research, 2020, 13, 3358-3363.	10.4	175
11	Single-molecule magnetism of tetrapyrrole lanthanide compounds with sandwich multiple-decker structures. Coordination Chemistry Reviews, 2016, 306, 195-216.	18.8	172
12	Hydroxide-bridged five-coordinate Dy^{III} single-molecule magnet exhibiting the record thermal relaxation barrier of magnetization among lanthanide-only dimers. Chemical Science, 2017, 8, 1288-1294.	7.4	165
13	Inspiration from old molecules: field-induced slow magnetic relaxation in three air-stable tetrahedral cobalt(ii) compounds. Chemical Communications, 2013, 49, 5289.	4.1	128
14	Observation of the single-ion magnet behavior of d⁸ ions on two-coordinate Co(<scp>i</scp>)â€“NHC complexes. Chemical Science, 2015, 6, 7156-7162.	7.4	115
15	An Aâ€Site Mixedâ€Ammonium Solid Solution Perovskite Series of [(NH₂NH₃)_x(CH₃NH₃)_{1â^’x}][Mn(HCOO (x=1.00â€“0.67). Angewandte Chemie - International Edition, 2015, 54, 11093-11096.	13.8	107
16	A Mononuclear Dysprosium Complex Featuring Singleâ€Moleculeâ€Magnet Behavior. Angewandte Chemie, 2010, 122, 7610-7613.	2.0	104
17	Thermostability and photoluminescence of Dy(<scp>iii</scp>) single-molecule magnets under a magnetic field. Chemical Science, 2016, 7, 5020-5031.	7.4	100
18	Endohedral Metallofullerene as Molecular High Spin Qubit: Diverse Rabi Cycles in Gd₂@C₇₉N. Journal of the American Chemical Society, 2018, 140, 1123-1130.	13.7	100

#	Article	IF	Citations
19	A Family of CoIICoIII3 Single-Ion Magnets with Zero-Field Slow Magnetic Relaxation: Fine Tuning of Energy Barrier by Remote Substituent and Counter Cation. Inorganic Chemistry, 2015, 54, 5475-5486.	4.0	94
20	Lowâ€Coordinate Singleâ€Ion Magnets by Intercalation of Lanthanides into a Phenol Matrix. Angewandte Chemie - International Edition, 2018, 57, 4673-4676.	13.8	94
21	Magnetic molecular materials with paramagnetic lanthanide ions. Science in China Series B: Chemistry, 2009, 52, 1739-1758.	0.8	87
22	Weak Ligandâ€Field Effect from Ancillary Ligands on Enhancing Singleâ€Ion Magnet Performance. Chemistry - A European Journal, 2016, 22, 12724-12731.	3.3	81
23	(Boratabenzene)(cyclooctatetraenyl) lanthanide complexes: a new type of organometallic single-ion magnet. Inorganic Chemistry Frontiers, 2016, 3, 828-835.	6.0	77
24	An enantiopure FeIII4 single-molecule magnet. Chemical Communications, 2011, 47, 8049.	4.1	76
25	Oneâ€Dimensional Ferromagnetically Coupled Bimetallic Chains Constructed with transâ€[Ru(acac)₂(CN)₂]^{â^'}: Syntheses, Structures, Magnetic Properties, and Density Functional Theoretical Study. Chemistry - A European Journal, 2010, 16, 3524-3535.	3.3	73
26	A soft phosphorus atom to â€œhardenâ€•an erbium(<scp>iii</scp>) single-ion magnet. Chemical Science, 2018, 9, 7540-7545.	7.4	72
27	Sixâ€Coordinate Lanthanide Complexes: Slow Relaxation of Magnetization in the Dysprosium(III) Complex. Chemistry - A European Journal, 2014, 20, 15975-15980.	3.3	66
28	Enhancing the reactivity of nickel(<scp>ii</scp>) in hydrogen evolution reactions (HERs) by Î²-hydrogenation of porphyrinoid ligands. Chemical Science, 2017, 8, 5953-5961.	7.4	64
29	Does the thermal evolution of molecular structures critically affect the magnetic anisotropy?. Chemical Science, 2015, 6, 4587-4593.	7.4	61
30	Solvent Responsive Magnetic Dynamics of a Dinuclear Dysprosium Singleâ€Molecule Magnet. Chemistry - A European Journal, 2013, 19, 9619-9628.	3.3	60
31	Coupling Influences SMM Properties for Pure 4â€‰f Systems. Chemistry - A European Journal, 2018, 24, 6079-6086.	3.3	57
32	Lanthanide phosphonates with pseudo-D_{5h} local symmetry exhibiting magnetic and luminescence bifunctional properties. Inorganic Chemistry Frontiers, 2015, 2, 558-566.	6.0	56
33	A half-sandwich organometallic single-ion magnet with hexamethylbenzene coordinated to the Dy(iii) ion. Chemical Communications, 2014, 50, 11418-11420.	4.1	53
34	The slow magnetic relaxation regulated by ligand conformation of a lanthanide single-ion magnet [Hex4N][Dy(DBM)4]. Inorganic Chemistry Frontiers, 2014, 1, 503-509.	6.0	53
35	Temperatureâ€Induced Irreversible Phase Transition From Perovskite to Diamond But Pressureâ€Driven Backâ€Transition in an Ammonium Copper Formate. Angewandte Chemie - International Edition, 2016, 55, 2097-2100.	13.8	53
36	A New Bis(phthalocyaninato) Terbium Single-Ion Magnet with an Overall Excellent Magnetic Performance. Inorganic Chemistry, 2017, 56, 13889-13896.	4.0	53

#	Article	IF	Citations
37	Dinuclear dysprosium SMMs bridged by a neutral bipyrimidine ligand: two crystal systems that depend on different lattice solvents lead to a distinct slow relaxation behaviour. Dalton Transactions, 2016, 45, 8790-8794.	3.3	49
38	Dramatic impact of the lattice solvent on the dynamic magnetic relaxation of dinuclear dysprosium single-molecule magnets. Inorganic Chemistry Frontiers, 2018, 5, 1575-1586.	6.0	48
39	Can Nonâ€Kramers Tm^{III} Mononuclear Molecules be Singleâ€Molecule Magnets (SMMs)?. Chemistry - A European Journal, 2016, 22, 4704-4708.	3.3	46
40	The influence of an external magnetic field and magnetic-site dilution on the magnetization dynamics of a coordination network based on ferromagnetic coupled dinuclear dysprosium(<scp>iii</scp>) units. Inorganic Chemistry Frontiers, 2018, 5, 432-437.	6.0	44
41	Half-Sandwich Complexes of Dy^{III}: A Janus-Motif with Facile Tunability of Magnetism. Inorganic Chemistry, 2015, 54, 5162-5168.	4.0	42
42	Construction and Magnetic Study of a Trigonal-Prismatic Cobalt(II) Single-Ion Magnet. Inorganic Chemistry, 2018, 57, 14047-14051.	4.0	42
43	Two mononuclear single molecule magnets derived from dysprosium(<scp>iii</scp>) and tmphen (tmphen = 3,4,7,8-tetramethyl-1,10-phenanthroline). Dalton Transactions, 2015, 44, 9020-9026.	3.3	41
44	Rational design of an â€œall-in-oneâ€•phototheranostic. Chemical Science, 2020, 11, 8204-8213.	7.4	41
45	Enhanced magnetic anisotropy in a tellurium-coordinated cobalt single-ion magnet. Inorganic Chemistry Frontiers, 2017, 4, 701-705.	6.0	40
46	Qubit crossover in the endohedral fullerene Sc₃C₂@C₈₀. Chemical Science, 2018, 9, 457-462.	7.4	40
47	Experimental Determination of Magnetic Anisotropy in Exchangeâ€Bias Dysprosium Metallocene Singleâ€Molecule Magnets. Angewandte Chemie - International Edition, 2020, 59, 13037-13043.	13.8	40
48	A Variety of Phaseâ€Transition Behaviors in a Niccolite Series of [NH₃(CH₂)₄NH₃][M(HCOO)₃]₂. Chemistry - A European Journal, 2016, 22, 6199-6203.	3.3	39
49	Slow magnetic relaxation in a mononuclear 8-coordinate Fe(<scp>ii</scp>) complex. Chemical Communications, 2017, 53, 1474-1477.	4.1	36
50	Hierarchical cobalt-formate framework series with (412â‹…63)(49â‹…66)n (n = 1â€“3) topologies exhibiting slow dielectric relaxation and weak ferromagnetism. APL Materials, 2014, 2, .	5.1	35
51	Tri-Manganese(III) Salen-Based Cryptands: A Metal Cooperative Antioxidant Strategy that Overcomes Ischemic Stroke Damage In Vivo. Journal of the American Chemical Society, 2020, 142, 10219-10227.	13.7	35
52	Slow Magnetic Relaxation in a Series of Mononuclear 8-Coordinate Fe(II) and Co(II) Complexes. Inorganic Chemistry, 2018, 57, 3761-3774.	4.0	33
53	Coexistence of magnetic and electric orderings in a divalent Cr²⁺-based multiaxial molecular ferroelectric. Chemical Science, 2021, 12, 9742-9747.	7.4	33
54	Novel bis(phthalocyaninato) rare earth complexes with the bulky and strong electron-donating dibutylamino groups: synthesis, spectroscopy, and SMM properties. Inorganic Chemistry Frontiers, 2017, 4, 1465-1471.	6.0	32

#	Article	IF	Citations
55	A Gallium(III) Complex that Engages Protein Disulfide Isomerase A3 (PDIA3) as an Anticancer Target. Angewandte Chemie - International Edition, 2020, 59, 20147-20153.	13.8	32
56	Unprecedented Ferroelectricity and Ferromagnetism in a Cr²⁺â€Based Twoâ€Dimensional Hybrid Perovskite. Angewandte Chemie - International Edition, 2022, 61, .	13.8	32
57	A Series of Bimetallic Ammonium AlNa Formates. Chemistry - A European Journal, 2017, 23, 9857-9871.	3.3	31
58	Multiple thermal magnetic relaxation in a two-dimensional ferromagnetic dysprosium(<scp>iii</scp>) metalâ€“organic framework. RSC Advances, 2015, 5, 104854-104861.	3.6	28
59	Dy₂@C₇₉N: a new member of dimetalloazafullerenes with strong single molecular magnetism. Nanoscale, 2020, 12, 11130-11135.	5.6	28
60	A Six-Coordinate Dysprosium Single-Ion Magnet with Trigonal-Prismatic Geometry. Inorganic Chemistry, 2017, 56, 7320-7323.	4.0	27
61	Luminescent single-molecule magnet of metallofullerene DyErScN@Ih-C80. Nano Research, 2019, 12, 1727-1731.	10.4	27
62	Understanding the Magnetic Anisotropy in a Family of N₂^{3â€“} Radical-Bridged Lanthanide Complexes: Density Functional Theory and ab Initio Calculations. Journal of Physical Chemistry A, 2013, 117, 10873-10880.	2.5	26
63	Advances in Lanthanide Single-Ion Magnets. Structure and Bonding, 2014, , 111-141.	1.0	26
64	A family of enantiopure Fe^{III}₄ single molecule magnets: fine tuning of energy barrier by remote substituent. Dalton Transactions, 2014, 43, 11897-11907.	3.3	25
65	Thermal and light induced spin crossover behavior of a dinuclear Fe(<scp>ii</scp>) compound. Dalton Transactions, 2015, 44, 11282-11285.	3.3	25
66	A distinct magnetic anisotropy enhancement in mononuclear dysprosiumâ€“sulfur complexes by controlling the Dy-ligand bond length. Dalton Transactions, 2016, 45, 8149-8153.	3.3	25
67	Homochiral Ferromagnetic Coupling Dy₂ Single-Molecule Magnets with Strong Magneto-Optical Faraday Effects at Room Temperature. Inorganic Chemistry, 2021, 60, 12039-12048.	4.0	25
68	Calixarene-supported hexadysprosium cluster showing single molecule magnet behavior. Science China Chemistry, 2012, 55, 967-972.	8.2	24
69	Polymorphism of (H2mela)2[CuCl5]Cl (mela = melamine): structures, transformation and magnetic properties. CrystEngComm, 2011, 13, 4683.	2.6	23
70	Mono-, Tetra- and octanuclear transition metal complexes of in situ generated schiff base ligands containing up to 12 coordinating atoms: syntheses, structures and magnetism. CrystEngComm, 2012, 14, 7312.	2.6	23
71	Constructing a Series of Azideâ€Bridged Cu^{II} Magnetic Lowâ€Dimensional Coordination Polymers by using Pybox Ligands. European Journal of Inorganic Chemistry, 2013, 2013, 3101-3111.	2.0	23
72	Evaporable lanthanide single-ion magnet. CrystEngComm, 2016, 18, 4165-4171.	2.6	23

#	Article	IF	Citations
73	Synthesis, Structures and Magnetic Properties of Two Mixedâ€Valent Discâ€like Heptaâ€nuclear Compounds of [Fe^{II}Fe^{III}₆(tea)₆](ClO₄)₂ and [Mn^{II}₃Mn^{III}₄(nmdea)₆(N₃)₆]Â·CH<s		

#	Article	IF	Citations
91	A Series of Weakley-type Polyoxomolybdates: Synthesis, Characterization, and Magnetic Properties by a Combined Experimental and Theoretical Approach. Inorganic Chemistry, 2018, 57, 963-969.	4.0	16
92	Mechanochromic and Single-Molecule Magnetic Properties of a Rhodamine 6G Dy(III) Complex. ACS Applied Electronic Materials, 2021, 3, 1368-1374.	4.3	16
93	Ab initiomultireference configuration-interaction theoretical study on the low-lying spin states in binuclear transition-metal complex: Magnetic exchange of [(NH3)5Cr(Î¼-OH)Cr(NH3)5]5+ and [Cl3FeOFeCl3]2â^'. Journal of Chemical Physics, 2005, 122, 204310.	3.0	15
94	Weak exchange coupling effects leading to fast magnetic relaxations in a trinuclear dysprosium single-molecule magnet. Inorganic Chemistry Frontiers, 2020, 7, 447-454.	6.0	15
95	Structural Distortion Controlled Spin-Crossover Behavior. Crystal Growth and Design, 2015, 15, 2565-2567.	3.0	14
96	Three New Niccolites: Highâ€Temperature Phase Transitions, Prominent Anisotropic Thermal Expansions, Dielectric Anomalies, and Magnetism. Chemistry - A European Journal, 2019, 25, 9303-9314.	3.3	14
97	Two Magnetic Switching Complexes Based on the FeII Ion. Inorganic Chemistry, 2016, 55, 7805-7807.	4.0	12
98	Magnetic layered perovskites of [CH₃C(NH₂)₂]₂[M(HCOO)₄] (M =) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 2018, 47, 11925-11933.	3.3	12
99	Design principle of half-sandwich type erbium single-ion magnets through crystal field engineering: a combined magnetic and electronic structure study. Dalton Transactions, 2019, 48, 10407-10411.	3.3	10
100	A series of counter cation-dependent tetra Î²-diketonate mononuclear lanthanide(<scp>iii</scp>) single-molecule magnets and immobilization on pre-functionalised GaN substrates by anion exchange reaction. Journal of Materials Chemistry C, 2021, 9, 6911-6922.	5.5	10
101	Unusual magnetic properties of mixed-valence system: Multiconfigurational method theoretical study on Mn2+ cation. Journal of Chemical Physics, 2005, 123, 134306.	3.0	9
102	Cyano-bridged Ln3+-Cr3+ Binuclear Complexes [Ln(L)x(H2O)yCr(CN)6]Â·mLÂ·nH2O (Ln=Laâ€“Nd,x=5,y=2,m=1) Tj ETQq0 0 0 rgBT /Ove Spin Density Map. Chinese Journal of Chemistry, 2007, 25, 329-336.	4.9	9
103	Evolvement of molecular nanomagnets in China. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2013, 371, 20120316.	3.4	9
104	Visible-Light-Induced Living/Controlled Radical Copolymerization of 1-Octene and Acrylic Monomers Mediated by Organocobalt Complexes. Macromolecules, 2020, 53, 212-222.	4.8	9
105	Two-step magnetic switching in a mononuclear iron(<scp>ii</scp>) complex around room temperature. Dalton Transactions, 2015, 44, 8938-8941.	3.3	8
106	Temperatureâ€Induced Irreversible Phase Transition From Perovskite to Diamond But Pressureâ€Driven Backâ€Transition in an Ammonium Copper Formate. Angewandte Chemie, 2016, 128, 2137-2140.	2.0	8
107	Two half-sandwich organometallic single-ion magnets with toluene coordinated to the Dy(III) ion: The [(C7H8)Dy(AlCl4)3] and [(C7H8)Dy(AlBr4)3] complexes. Inorganic Chemistry Communication, 2017, 86, 312-314.	3.9	8
108	Divalent Ytterbium Iodide Supported by Î²â€Diketiminato Based Tridentate Ligand: Synthesis, Structure and Small Molecule Activation â€. Chinese Journal of Chemistry, 2020, 38, 247-253.	4.9	8

#	Article	IF	Citations
109	Slow magnetic relaxation in structurally similar mononuclear 8-coordinate Fe(<scp>ii</scp>) and Fe(<scp>iii</scp>) compounds. Chemical Communications, 2021, 57, 781-784.	4.1	8
110	Chiral Co-Crystals of (S)- or (R)-1,1â€²-Binaphthalene-2,2â€²-diol and Zn₂Dy₂ Tetranuclear Complexes Behaving as Single-Molecule Magnets. Crystal Growth and Design, 2021, 21, 4346-4353.	3.0	8
111	Slow magnetic relaxation in high-coordinate Co(<scp>ii</scp>) and Fe(<scp>ii</scp>) compounds bearing neutral tetradentate ligands. Dalton Transactions, 2021, 50, 15327-15335.	3.3	8
112	Theoretical study of the iodination of methoxybenzene by iodine monochloride. Journal of Physical Organic Chemistry, 2005, 18, 625-631.	1.9	7
113	Orbital-dependent magnetic properties of molecular cluster containing high-spin Co(II) ions. International Journal of Quantum Chemistry, 2009, 109, 3368-3378.	2.0	7
114	Thermodynamic and reactivity studies of a tin corroleâ€“cobalt porphyrin heterobimetallic complex. Chemical Science, 2018, 9, 4999-5007.	7.4	7
115	Electric and magnetic transitions with 90Â° turning of polarizations in a layered perovskite of [NH4Cl]2[Ni(HCOO)2(NH3)2]. APL Materials, 2018, 6, 114205.	5.1	6
116	Fine-tuning of the molecular structures and magnetic anisotropy analysis of two mononuclear dysprosiumâ€“sulfur complexes. Inorganic Chemistry Communication, 2018, 95, 82-85.	3.9	6
117	Multiple magnetic relaxation pathways in T-shaped N-heterocyclic carbene-supported Fe(i) single-ion magnets. Inorganic Chemistry Frontiers, 2019, 6, 1050-1057.	6.0	6
118	Theoretical study on potential energy curves and spectroscopy properties of ground and low-lying excited electronic states of BrCl+. Science in China Series B: Chemistry, 2008, 51, 521-528.	0.8	5
119	Experimental Determination of Magnetic Anisotropy in Exchangeâ€Bias Dysprosium Metallocene Singleâ€Molecule Magnets. Angewandte Chemie, 2020, 132, 13137-13143.	2.0	4
120	The materials of ammonium metal formate framework: structures, phase transitions and functionalities. Scientia Sinica Chimica, 2021, 51, 410-439.	0.4	4
121	Synthesis and structures of fluoride-bridged dysprosium clusters: influence of fluoride ions on magnetic relaxation behaviors. Inorganic Chemistry Frontiers, 2022, 9, 2336-2342.	6.0	4
122	A neutral auxiliary ligand enhanced dysprosium(<scp>iii</scp>) single molecule magnet. Dalton Transactions, 2018, 47, 7395-7398.	3.3	3
123	Trigonal-Planar Low-Spin Co²⁺ in a Layered Mixed-Polyhedral Network from Topotactic Reduction. Inorganic Chemistry, 2019, 58, 14193-14203.	4.0	3
124	Neutral polar hybrid perovskites of [(CH3)2SO][RE(HCOO)3] (RE = Lu and Y): Phase transitions driven by transformation of weak Câ€“Hâ‹¯O interactions. APL Materials, 2021, 9, .	5.1	3
125	Unprecedented Ferroelectricity and Ferromagnetism in a Cr²⁺â€Based Twoâ€Dimensional Hybrid Perovskite. Angewandte Chemie, 2022, 134, .	2.0	3
126	Density functional theory study of the magnetic properties of rare earth complexes: the magnetic coupling mechanism in YIII and GdIII complexes with nitronyl nitroxide. Science in China Series B: Chemistry, 2009, 52, 1961-1968.	0.8	2

#	Article	IF	Citations
127	Chain Length Modulated Dimerization and Cyclization of Terminal Thienyl-Blocked Oligopyrranes. Organic Letters, 2022, 24, 5428-5432.	4.6	2
128	Single-Ion Anisotropy: An Insight to Complicated Magnetic Molecules. Topics in Organometallic Chemistry, 2018, , 227-252.	0.7	1
129	A Gallium(III) Complex that Engages Protein Disulfide Isomerase A3 (PDIA3) as an Anticancer Target. Angewandte Chemie, 2020, 132, 20322-20328.	2.0	1
130	Homoleptic tris(6,6â€²-dimethyl-2,2â€²-bipyridine) rare earth metal complexes. Inorganic Chemistry Frontiers, 2021, 8, 2591-2602.	6.0	1
131	Group 4 Metallocene Complexes Supported by a Redox-Active O,C-Chelating Ligand. Organometallics, 2022, 41, 1488-1500.	2.3	1
132	Frontispiece: Coupling Influences SMM Properties for Pure 4â€‰f Systems. Chemistry - A European Journal, 2018, 24, .	3.3	0
133	A Unique Layered Cu-formate Hydrate of Cu(HCOO)2Â·1/3H2O: Structures, Dehydration, and Thermal and Magnetic Properties. Chemical Research in Chinese Universities, 2022, 38, 107-116.	2.6	0
134	A highly polar hybrid perovskite of [FCH2CH3NH3][Mn(HCOO)3]. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 0, , .	1.2	0