

Zhen-Xing Wang

List of Publications by Year in descending order

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106
papers

3,941
citations

147801

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128289

60
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110
all docs

110
docs citations

110
times ranked

5158
citing authors

#	ARTICLE	IF	CITATIONS
1	Magnetic anisotropy of two tetrahedral Co(μ_2)-halide complexes with triphenylphosphine ligands. Dalton Transactions, 2022, 51, 7530-7538.	3.3	5
2	Magnetism and ESR of the $\text{S}^{\text{II}}\text{BaCo}_2\text{O}_7$ antiferromagnet BaCo_2O_7 . Physical Review B, 2022, 105, .	3.2	6
3	A C,S bonded quasi-two-coordinate chromium(μ_2) complex showing field-induced slow magnetic relaxation behaviour. Dalton Transactions, 2022, 51, 9218-9222.	3.3	5
4	Slow magnetic relaxation in dinuclear Co(III)-Co(II) complexes containing a five-coordinated Co(II) centre with easy-axis anisotropy. Dalton Transactions, 2022, , .	3.3	3
5	Influence of intrinsic or extrinsic doping on charge state of carbon and its interaction with hydrogen in GaN. Applied Physics Letters, 2022, 120, .	3.3	2
6	Structure and Magnetization Plateau of a Frustrated Co_6 Cluster Antiferromagnet $\text{Sr}_2\text{Co}_3(\text{C}_2\text{O}_4)_3(\text{OH})_4 \cdot 3\text{H}_2\text{O}$. Crystal Growth and Design, 2021, 21, 149-155.	3.0	2
7	Opening Magnetic Hysteresis by Axial Ferromagnetic Coupling: From Mono-Decker to Double-Decker Metallocrown. Angewandte Chemie - International Edition, 2021, 60, 5299-5306.	13.8	62
8	Opening Magnetic Hysteresis by Axial Ferromagnetic Coupling: From Mono-Decker to Double-Decker Metallocrown. Angewandte Chemie, 2021, 133, 5359-5366.	2.0	8
9	Magnetic anisotropies and slow magnetic relaxation of three tetrahedral tetrakis(pseudohalido)cobalt(μ_2) complexes. New Journal of Chemistry, 2021, 45, 16852-16861.	2.8	2
10	Magnetic Anisotropy: Structural Correlation of a Series of Chromium(II) Amidinate Complexes. Inorganic Chemistry, 2021, 60, 1344-1351.	4.0	12
11	Water-oriented magnetic anisotropy transition. Nature Communications, 2021, 12, 2738.	12.8	12
12	Room-Temperature Magnetic Field Effect on Excitonic Photoluminescence in Perovskite Nanocrystals. Advanced Materials, 2021, 33, e2008225.	21.0	24
13	CoMOF_5 (pyrazine)(H_2O) $_2$ (M = Nb, Ta): Two-Layered Cobalt Oxyfluoride Antiferromagnets with Spin Flop Transitions. Inorganic Chemistry, 2021, 60, 13309-13319.	4.0	11
14	Manipulation of Molecular Qubits by Isotope Effect on Spin Dynamics. CCS Chemistry, 2021, 3, 2548-2556.	7.8	8
15	Two-sublattice description of the dimer-trimer chain compound $\text{Li}_2\text{Cu}_5\text{Si}_4\text{O}_{14}$: High-field magnetization and ESR studies. Physical Review B, 2021, 104, .	3.2	5
16	Dzyaloshinskii-Moriya anisotropy effect on field-induced magnon condensation in the kagome antiferromagnet $\text{S}^{\text{II}}\text{BaCo}_2\text{O}_7$. Physical Review B, 2021, 104, .	3.2	0
17	Switching of easy-axis to easy-plane anisotropy in cobalt(μ_2) complexes. Inorganic Chemistry Frontiers, 2021, 8, 5158-5168.	6.0	12
18	Unpaired 3d Electrons on Atomically Dispersed Cobalt Centres in Coordination Polymers Regulate both Oxygen Reduction Reaction (ORR) Activity and Selectivity for Use in Zinc-Air Batteries. Angewandte Chemie - International Edition, 2020, 59, 286-294.	13.8	200

#	ARTICLE	IF	CITATIONS
19	Unpaired 3d Electrons on Atomically Dispersed Cobalt Centres in Coordination Polymers Regulate both Oxygen Reduction Reaction (ORR) Activity and Selectivity for Use in Zinc-Air Batteries. <i>Angewandte Chemie</i> , 2020, 132, 292-300.	2.0	21
20	Optimal diamagnetic dilution concentration for suppressing the dipole-dipole interaction in single-ion magnets. <i>Dalton Transactions</i> , 2020, 49, 2159-2167.	3.3	8
21	Magnetic anisotropy in square pyramidal cobalt(II) complexes supported by a tetraazo macrocyclic ligand. <i>Dalton Transactions</i> , 2020, 49, 14837-14846.	3.3	10
22	Probing the Axial Distortion Effect on the Magnetic Anisotropy of Octahedral Co(II) Complexes. <i>Inorganic Chemistry</i> , 2020, 59, 7622-7630.	4.0	34
23	Decoupling of Gd-Cr magnetism and giant magnetocaloric effect in layered honeycomb tellurate GdCrTeO ₆ . <i>Journal of Applied Physics</i> , 2020, 127, 173902.	2.5	7
24	Structure, magnetic anisotropy and relaxation behavior of seven-coordinate Co(II) single-ion magnets perturbed by counter-anions. <i>Dalton Transactions</i> , 2020, 49, 7620-7627.	3.3	21
25	New Insights into Mn-Mn Coupling Interaction-Directed Photoluminescence Quenching Mechanism in Mn ²⁺ -Doped Semiconductors. <i>Journal of the American Chemical Society</i> , 2020, 142, 6649-6660.	13.7	85
26	Controlling Electron Spin Decoherence in Nd-based Complexes via Symmetry Selection. <i>IScience</i> , 2020, 23, 100926.	4.1	11
27	A broad range frequency measurement method for continuous and pulsed THz waves. <i>Review of Scientific Instruments</i> , 2020, 91, 014710.	1.3	6
28	Synthesis, crystal structures, HF-EPR, and magnetic properties of six-coordinate transition metal (Co, Ni) single-ion magnets. <i>Inorganic Chemistry</i> , 2020, 59, 12833-12840.	3.6	2
29	1,2-Diaza-4-phospholide complexes of chromium(II): dipotassium organochromates behaving as single-molecule magnets. <i>Dalton Transactions</i> , 2020, 49, 6945-6949.	3.3	8
30	Highly stable polyoxometalate-resorcin[4]arene-based inorganic-organic complexes for catalytic oxidation desulfurization. <i>Applied Organometallic Chemistry</i> , 2019, 33, e5169.	3.5	5
31	Structure and 3/7-like Magnetization Plateau of Layered Y ₂ Cu ₇ (TeO ₃) ₆ Cl ₆ (OH) ₂ Containing Diamond Chains and Trimers. <i>Inorganic Chemistry</i> , 2019, 58, 10680-10685.	4.0	3
32	Ferromagnetic coupling between 4f- and delocalized π -radical spins in mixed (phthalocyaninato)(porphyrinato) rare earth double-decker SMMs. <i>Inorganic Chemistry Frontiers</i> , 2019, 6, 2142-2147.	6.0	11
33	Photochemically Tuned Magnetic Properties in an Erbium(III)-Based Easy-Plane Single-Molecule Magnet. <i>Inorganic Chemistry</i> , 2019, 58, 14440-14448.	4.0	21
34	High Magnetic Field ESR in S = 1 Skew Chain Antiferromagnet Ni ₂ V ₂ O ₇ Single Crystal. <i>Crystals</i> , 2019, 9, 468.	2.2	2
35	Slow magnetic relaxation in a {EuCu ₅ } metallocrown. <i>Dalton Transactions</i> , 2019, 48, 1686-1692.	3.3	24
36	Magnetic anisotropy and slow magnetic relaxation processes of cobalt(II)-pseudohalide complexes. <i>Dalton Transactions</i> , 2019, 48, 10743-10752.	3.3	23

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37	Anisotropic magnetization plateaus in $S_{\text{eff}}=1/2$ skew-chain single-crystal $\text{Co}_2\text{V}_2\text{O}_7$. <i>Physical Review B</i> , 2019, 99, .	3.2	16
38	Frontispiz: Tracking the Process of a Solvothermal Domino Reaction Leading to a Stable Triheteroarylmethyl Radical: A Combined Crystallographic and Mass Spectrometric Study. <i>Angewandte Chemie</i> , 2019, 131, .	2.0	0
39	Frontispiece: Tracking the Process of a Solvothermal Domino Reaction Leading to a Stable Triheteroarylmethyl Radical: A Combined Crystallographic and Mass Spectrometric Study. <i>Angewandte Chemie - International Edition</i> , 2019, 58, .	13.8	0
40	Modulation of the magnetic anisotropy of octahedral cobalt(II) single-ion magnets by fine-tuning the axial coordination microenvironment. <i>Inorganic Chemistry Frontiers</i> , 2019, 6, 848-856.	6.0	50
41	Solvent-Induced Structural Diversity and Magnetic Research of Two Cobalt(II) Complexes. <i>ACS Omega</i> , 2019, 4, 20905-20910.	3.5	8
42	A cobalt(II) chain based on pymca generated <i>in situ</i> from the hydrolysis of 2-cyanopyrimidine: spin canting and magnetic relaxation. <i>RSC Advances</i> , 2019, 9, 31115-31121.	3.6	6
43	Tracking the Process of a Solvothermal Domino Reaction Leading to a Stable Triheteroarylmethyl Radical: A Combined Crystallographic and Mass Spectrometric Study. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 3748-3753.	13.8	26
44	Tracking the Process of a Solvothermal Domino Reaction Leading to a Stable Triheteroarylmethyl Radical: A Combined Crystallographic and Mass Spectrometric Study. <i>Angewandte Chemie</i> , 2019, 131, 3788-3793.	2.0	4
45	Single-Crystal Study of a Low Spin Co(II) Molecular Qubit: Observation of Anisotropic Rabi Cycles. <i>Inorganic Chemistry</i> , 2019, 58, 2330-2335.	4.0	19
46	Broadband emission of double perovskite $\text{Cs}_2\text{Na}_{04}\text{Ag}_{06}\text{In}_{0995}\text{Bi}_{0005}\text{Cl}_6\text{Mn}^{2+}\text{Cu}^{2+}$ for single-phosphor white-light-emitting diodes. <i>Optics Letters</i> , 2019, 44, 4757.	3.5	4
47	Series of Highly Stable Lanthanide-Organic Frameworks Constructed by a Bifunctional Linker: Synthesis, Crystal Structures, and Magnetic and Luminescence Properties. <i>Inorganic Chemistry</i> , 2018, 57, 2577-2583.	4.0	33
48	Syntheses, Structure, and $2/5$ Magnetization Plateau of a 2D Layered Fluorophosphate $\text{Na}_3\text{Cu}_5(\text{PO}_4)_4\text{F}_4\text{H}_2\text{O}$. <i>Inorganic Chemistry</i> , 2018, 57, 3151-3157.	4.0	10
49	Slow magnetic relaxation in two octahedral cobalt(II) complexes with positive axial anisotropy. <i>Inorganica Chimica Acta</i> , 2018, 479, 113-119.	2.4	15
50	Novel half-magnetization plateau and nematiclike transition in the $S=1$ skew chain $\text{Ni}_2\text{V}_2\text{O}_7$. <i>Physical Review B</i> , 2018, 97, 040401.	3.2	8
51	Magnetization and $S=1$ Ground State in $\text{Ni}_2\text{V}_2\text{O}_7$. <i>Physical Review B</i> , 2018, 97, 040401.	3.2	8
52	Magnetization, ESR and large magnetocaloric effect in zigzag chain SrGd_2O_4 . <i>Journal Physics D: Applied Physics</i> , 2018, 51, 045001.	2.8	14
53	Slow magnetic relaxation influenced by change of symmetry from ideal C_4 to C_3 in cobalt(II)-based single-ion magnets. <i>Dalton Transactions</i> , 2018, 47, 2506-2510.	3.3	31
54	A mononuclear five-coordinate Co(II) single molecule magnet with a spin crossover between the $S=1/2$ and $3/2$ states. <i>Dalton Transactions</i> , 2018, 47, 16596-16602.	3.3	39

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55	Weak magnetic interaction, large magnetocaloric effect, and underlying spin model in triangular lattice GdFeTeO ₆ . <i>Journal of Applied Physics</i> , 2018, 124, 233904.	2.5	7
56	The Stabilization of Three-Coordinate Formal Mn(0) Complex with NHC and Alkene Ligation. <i>Chem</i> , 2018, 4, 2844-2860.	11.7	30
57	Magnetic Metal-Organic Framework Exhibiting Quick and Selective Solvatochromic Behavior along with Reversible Crystal-to-Amorphous-to-Crystal Transformation. <i>Inorganic Chemistry</i> , 2018, 57, 7006-7014.	4.0	38
58	Magnetic anisotropy and relaxation behavior of six-coordinate tris(pivalato)-Co(II) and -Ni(II) complexes. <i>Dalton Transactions</i> , 2018, 47, 10162-10171.	3.3	16
59	Field-induced slow magnetic relaxation of two 1-D compounds containing six-coordinated cobalt(II) ions: influence of the coordination geometry. <i>Inorganic Chemistry Frontiers</i> , 2018, 5, 2314-2320.	6.0	28
60	Rationalization of single-molecule magnet behavior in a three-coordinate Fe(III) complex with a high-spin state ($S = 5/2$). <i>Inorganic Chemistry Frontiers</i> , 2018, 5, 2486-2492.	6.0	13
61	Reversible on/off switching of both spin crossover and single-molecule magnet behaviours via a crystal-to-crystal transformation. <i>Chemical Science</i> , 2018, 9, 7986-7991.	7.4	88
62	Important Role of Intermolecular Interaction in Cobalt(II) Single-Ion Magnet from Single Slow Relaxation to Double Slow Relaxation. <i>Inorganic Chemistry</i> , 2018, 57, 10761-10767.	4.0	47
63	Series of Single-Ion and 1D Chain Complexes Based on Quinolinic Derivative: Synthesis, Crystal Structures, HF-EPR, and Magnetic Properties. <i>Inorganic Chemistry</i> , 2018, 57, 7757-7762.	4.0	17
64	Magnetostructural relationship for μ_2 -phenoxido bridged ferric dimers. <i>Dalton Transactions</i> , 2017, 46, 4317-4324.	3.3	5
65	Chemical reaction within a compact non-porous crystal containing molecular clusters without the loss of crystallinity. <i>Chemical Science</i> , 2017, 8, 5356-5361.	7.4	20
66	Embedding 1D or 2D cobalt-carboxylate substrates in 3D coordination polymers exhibiting slow magnetic relaxation behaviors: crystal structures, high-field EPR, and magnetic studies. <i>Dalton Transactions</i> , 2017, 46, 4786-4795.	3.3	10
67	Two-Coordinate Co(II) Imido Complexes as Outstanding Single-Molecule Magnets. <i>Journal of the American Chemical Society</i> , 2017, 139, 373-380.	13.7	343
68	Magnetization, ESR, and giant magnetocaloric effects in nanocrystals of Haldane-chain compound Gd ₂ BaNiO ₅ . <i>Applied Physics Letters</i> , 2017, 111, 122403.	3.3	8
69	Insights into Magnetic Interactions in a Monodisperse Gd ₁₂ Fe ₁₄ Metal Cluster. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 11475-11479.	13.8	48
70	Insights into Magnetic Interactions in a Monodisperse Gd ₁₂ Fe ₁₄ Metal Cluster. <i>Angewandte Chemie</i> , 2017, 129, 11633-11637.	2.0	5
71	Half-Sandwich Metal Carbonyl Complexes as Precursors to Functional Materials: From a Near-Infrared-Absorbing Dye to a Single-Molecule Magnet. <i>Journal of the American Chemical Society</i> , 2017, 139, 12069-12075.	13.7	8
72	Ligand Effect on the Single-Molecule Magnetism of Tetranuclear Co(II) Cubane. <i>Inorganic Chemistry</i> , 2017, 56, 15178-15186.	4.0	33

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73	The pulsed high magnetic field facility and scientific research at Wuhan National High Magnetic Field Center. <i>Matter and Radiation at Extremes</i> , 2017, 2, 278-286.	3.9	18
74	Ferromagnetic coupling in copper benzimidazole chloride: structural, mass spectrometry, magnetism, and DFT studies. <i>Dalton Transactions</i> , 2017, 46, 16663-16670.	3.3	18
75	Field-Induced Slow Magnetic Relaxation in an Octacoordinated Fe(II) Complex with Pseudo-D _{2d} Symmetry: Magnetic, HF-EPR, and Theoretical Investigations. <i>Inorganic Chemistry</i> , 2017, 56, 8018-8025.	4.0	20
76	Slow Magnetic Relaxations in Cobalt(II) Tetranitrate Complexes. Studies of Magnetic Anisotropy by Inelastic Neutron Scattering and High-Frequency and High-Field EPR Spectroscopy. <i>Inorganic Chemistry</i> , 2016, 55, 12603-12617.	4.0	39
77	Supramolecular Interactions Direct the Formation of Two Structural Polymorphs from One Building Unit in a One-Pot Synthesis. <i>Chemistry - A European Journal</i> , 2016, 22, 13900-13907.	3.3	15
78	Large Easy-Plane Magnetic Anisotropy in a Three-Coordinate Cobalt(II) Complex [Li(THF) ₄][Co(NPh) ₂] ₃ . <i>Chemistry - A European Journal</i> , 2016, 22, 14821-14825.	3.3	40
79	A two-dimensional cobalt(II) network with a remarkable positive axial anisotropy parameter exhibiting field-induced single-ion magnet behavior. <i>Journal of Materials Chemistry C</i> , 2016, 4, 7798-7808.	5.5	31
80	Strain-induced modulation of perpendicular magnetic anisotropy in Ta/CoFeB/MgO structures investigated by ferromagnetic resonance. <i>Applied Physics Letters</i> , 2015, 106, .	3.3	79
81	Slow magnetic relaxation in mononuclear seven-coordinate cobalt(II) complexes with easy plane anisotropy. <i>Dalton Transactions</i> , 2015, 44, 11482-11490.	3.3	76
82	Uniaxial magnetic anisotropy of square-planar chromium(II) complexes revealed by magnetic and HF-EPR studies. <i>Chemical Communications</i> , 2015, 51, 17688-17691.	4.1	77
83	Magnetization switching through giant spin-orbit torque in a magnetically doped topological insulator heterostructure. <i>Nature Materials</i> , 2014, 13, 699-704.	27.5	773
84	Dimethylammonium copper formate [(CH ₃) ₂ NH ₂] ₂ Cu(HCOO) ₃ : A metal-organic framework with quasi-one-dimensional antiferromagnetism and magnetostriction. <i>Physical Review B</i> , 2013, 87, .	3.2	62
85	Coherent Manipulation of Electron Spins in the {Cu ₃ } Spin Triangle Complex Impregnated in Nanoporous Silicon. <i>Physical Review Letters</i> , 2012, 108, 067206.	7.8	36
86	Polyoxopalladates Encapsulating 8-Coordinate Metal Ions, [MO ₈ Pd ^{II}] ₁₂ L ₈ (M = Tl, ET, Q, O, O, rg, BT, /Overlock 10 Tf 50	4.0	58
87	13214-13228. Spin dynamics of the S = 5/2 2D triangular antiferromagnet Ba ₃ NbFe ₃ Si ₂ O ₁₄ . <i>Journal of Physics Condensed Matter</i> , 2012, 24, 246001.	1.8	8
88	Evidence of a ZnCr ₂ Se ₄ Spinel Inclusion at the Core of a Cr-Doped ZnSe Quantum Dot. <i>Journal of the American Chemical Society</i> , 2012, 134, 5577-5585.	13.7	33
89	Direct Evidence from Electron Paramagnetic Resonance for Additional Configurations in Uncommon Paddlewheel Re ₂ ⁷⁺ Units Surrounded by an Unsymmetrical Bicyclic Guanidinate. <i>Inorganic Chemistry</i> , 2012, 51, 5257-5263.	4.0	10
90	Quantum Phase Transition from Superparamagnetic to Quantum Superparamagnetic State in Ultrasmall Cd _{1-x} Cr(II) _x Se Quantum Dots?. <i>Journal of the American Chemical Society</i> , 2012, 134, 2172-2179.	13.7	50

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91	Alloy Formation at the Tetrapod Core/Arm Interface. Nano Letters, 2012, 12, 3132-3137.	9.1	24
92	Structurally Diverse Copper(II) Complexes of Polyaza Ligands Containing 1,2,3-Triazoles: Site Selectivity and Magnetic Properties. Inorganic Chemistry, 2012, 51, 3465-3477.	4.0	78
93	3d Metal Ions in Highly Unusual Eight-Coordination: The Phosphate-Capped Dodecapalladate(II) Nanocube. Chemistry - A European Journal, 2012, 18, 6167-6171.	3.3	43
94	Tailoring the Magnetic and Optical Characteristics of Nanocrystalline BiFeO_3 by Ce Doping. Journal of the American Ceramic Society, 2012, 95, 1985-1992.	3.8	108
95	High-field electron paramagnetic resonance as a microscopic probe of anisotropic strain at Mn^{2+} sites in CdSe:Mn^{2+} quantum dots. Chemical Physics Letters, 2012, 524, 73-77.	2.6	19
96	Mn^{7+} Species with an $S = 2$ Ground State: High-Frequency EPR Studies of a Species at the Classical/Quantum Spin Interface. Journal of the American Chemical Society, 2011, 133, 17586-17589.	13.7	16
97	A high-frequency EPR characterization of the $S = 2$ linear tri-atomic chain in $\text{Cr}_3(\text{dpa})_4\text{Cl}_2 \cdot \text{CH}_2\text{Cl}_2$. Polyhedron, 2011, 30, 3058-3061.	2.2	15
98	Spin decoherence in an iron-based magnetic cluster. Polyhedron, 2011, 30, 3193-3196.	2.2	12
99	Probing the Local Site Environments in $\text{Mn}:\text{CdSe}$ Quantum Dots. Journal of Physical Chemistry C, 2011, 115, 23305-23314.	3.1	48
100	Synthesis and Characterization of the Dicopper(II)-Containing $[\text{Cu}_2\text{Pd}_2\text{P}_2\text{V}_{12}\text{O}_{60}(\text{OH})_8]$. Angewandte Chemie - International Edition, 2011, 50, 2639-2642.	13.8	180
101	A Planar $\{\text{Mn}_{19}(\text{OH})_{12}\}^{26+}$ Unit Incorporated in a Tungstosilicate Polyanion. Angewandte Chemie - International Edition, 2011, 50, 5961-5964.	13.8	180
102	Spin Dynamics of the $S = 1/2$ Pyrochlore System $\text{Cu}_2(\text{OH})_3\text{Cl}$ Studied by Using High-frequency ESR. Journal of the Korean Physical Society, 2011, 58, 270-275.	0.7	3
103	Inhomogeneous magnetic cluster states in the magnetoresistance material Lu_2Mn_8 . Physical Review B, 2010, 82, .	3.2	8
104	Site Preference of Manganese on the Copper Site in Mn-Substituted CuInSe_2 Chalcopyrites Revealed by a Combined Neutron and X-ray Powder Diffraction Study. Chemistry of Materials, 2010, 22, 1647-1655.	6.7	25
105	Proof by EPR Spectroscopy that the Unpaired Electron in an Os^{7+} Species Is in a $\hat{\Gamma}^*$ Metal-based Molecular Orbital. Inorganic Chemistry, 2010, 49, 319-324.	4.0	16
106	Structure and a $1/2$ -Like Magnetization Plateau in a $S = 1/2$ Skew Chain Compound $[\text{Co}_2(\text{CH}_3\text{O-}ip)(\text{COOH})_2(\text{H}_2\text{O})]_n$. Crystal Growth and Design, 0, , .	3.0	1