Danna E Freedman

List of Publications by Year
in descending order

71 papers	4,451 citations	117625 34 h-index	102487 66 g-index
76 all docs	76 docs citations	76 times ranked	4341 citing authors

#	Article	IF	Citations
1	Slow Magnetic Relaxation in a High-Spin Iron(II) Complex. Journal of the American Chemical Society, 2010, 132, 1224-1225.	13.7	457
2	Slow Magnetic Relaxation in a Family of Trigonal Pyramidal Iron(II) Pyrrolide Complexes. Journal of the American Chemical Society, 2010, 132, 18115-18126.	13.7	317
3	Millisecond Coherence Time in a Tunable Molecular Electronic Spin Qubit. ACS Central Science, 2015, 1, 488-492.	11.3	296
4	Topological Magnon Bands in a Kagome Lattice Ferromagnet. Physical Review Letters, 2015, 115, 147201.	7.8	289
5	Exploiting chemistry and molecular systems for quantum information science. Nature Reviews Chemistry, 2020, 4, 490-504.	30.2	247
6	A Redox-Switchable Single-Molecule Magnet Incorporating [Re(CN)₇]³⁻. Journal of the American Chemical Society, 2008, 130, 2884-2885.	13.7	235
7	Site Specific X-ray Anomalous Dispersion of the Geometrically Frustrated KagomÃ© Magnet, Herbertsmithite, ZnCu₃(OH)₆Cl₂. Journal of the American Chemical Society, 2010, 132, 16185-16190.	13.7	166
8	Fast and programmable locomotion of hydrogel-metal hybrids under light and magnetic fields. Science Robotics, 2020, 5, .	17.6	163
9	Optically addressable molecular spins for quantum information processing. Science, 2020, 370, 1309-1312.	12.6	148
10	A Mononuclear Transition Metal Single-Molecule Magnet in a Nuclear Spin-Free Ligand Environment. Inorganic Chemistry, 2014, 53, 10716-10721.	4.0	132
11	Influence of Electronic Spin and Spinâ€"Orbit Coupling on Decoherence in Mononuclear Transition Metal Complexes. Journal of the American Chemical Society, 2014, 136, 7623-7626.	13.7	120
12	Long Coherence Times in Nuclear Spin-Free Vanadyl Qubits. Journal of the American Chemical Society, 2016, 138, 14678-14685.	13.7	118
13	Forging Solid-State Qubit Design Principles in a Molecular Furnace. Chemistry of Materials, 2017, 29, 1885-1897.	6.7	94
14	Symmetry-breaking substitutions of [Re(CN)8]3âˆ’into the centered, face-capped octahedral clusters (CH3OH)24M9Mâ€²6(CN)48(M = Mn, Co; Mâ€² = Mo, W). Dalton Transactions, 2006, , 2829-2834.	3.3	91
15	A Porous Array of Clock Qubits. Journal of the American Chemical Society, 2017, 139, 7089-7094.	13.7	86
16	Multiple Quantum Coherences from Hyperfine Transitions in a Vanadium(IV) Complex. Journal of the American Chemical Society, 2014, 136, 15841-15844.	13.7	81
17	Employing Forbidden Transitions as Qubits in a Nuclear Spin-Free Chromium Complex. Journal of the American Chemical Society, 2016, 138, 1344-1348.	13.7	74
18	Slow Magnetic Relaxation and Charge-Transfer in Cyano-Bridged Coordination Clusters Incorporating [Re(CN)₇]^{3âˆ’/4âˆ’}. Inorganic Chemistry, 2010, 49, 8886-8896.	4.0	72

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19	Synthetic Approach To Determine the Effect of Nuclear Spin Distance on Electronic Spin Decoherence. Journal of the American Chemical Society, 2017, 139, 3196-3201.	13.7	72
20	A concentrated array of copper porphyrin candidate qubits. Chemical Science, 2019, 10, 1702-1708.	7.4	58
21	Frustrated magnetism in the S = 1 kagomÃ© lattice BaNi3(OH)2(VO4)2. Chemical Communications, 2012, 48, 64-66.	4.1	53
22	A Molecular Approach to Quantum Sensing. ACS Central Science, 2021, 7, 712-723.	11.3	52
23	Metalâ€"ligand covalency enables room temperature molecular qubit candidates. Chemical Science, 2019, 10, 6707-6714.	7.4	50
24	Discovery of a Superconducting Cuâ€"Bi Intermetallic Compound by Highâ€Pressure Synthesis. Angewandte Chemie - International Edition, 2016, 55, 13446-13449.	13.8	46
25	Trigonal Bipyramidal V³⁺ Complex as an Optically Addressable Molecular Qubit Candidate. Journal of the American Chemical Society, 2020, 142, 20400-20408.	13.7	46
26	Nickel(II) Metal Complexes as Optically Addressable Qubit Candidates. Journal of the American Chemical Society, 2020, 142, 14826-14830.	13.7	46
27	Strong magnetic exchange coupling in the cyano-bridged coordination clusters [(PY5Me2)4V4M(CN)6]5+ (M = Cr, Mo). Chemical Communications, 2009, , 4829.	4.1	44
28	Transformation of the coordination complex [Co(C₃S₅)₂]^{2â^'} from a molecular magnet to a potential qubit. Chemical Science, 2016, 7, 6160-6166.	7.4	40
29	Creating Binary Cuâ€"Bi Compounds via High-Pressure Synthesis: A Combined Experimental and Theoretical Study. Chemistry of Materials, 2017, 29, 5276-5285.	6.7	39
30	Spectral Addressability in a Modular Two Qubit System. Journal of the American Chemical Society, 2021, 143, 8069-8077.	13.7	39
31	Dinitrogen binding at vanadium in a tris(alkoxide) ligand environment. Chemical Communications, 2011, 47, 10242.	4.1	38
32	Qubit Control Limited by Spinâ€"Lattice Relaxation in a Nuclear Spin-Free Iron(III) Complex. Inorganic Chemistry, 2015, 54, 12027-12031.	4.0	38
33	Probing Nuclear Spin Effects on Electronic Spin Coherence via EPR Measurements of Vanadium(IV) Complexes. Inorganic Chemistry, 2017, 56, 8106-8113.	4.0	37
34	Spin and Phonon Design in Modular Arrays of Molecular Qubits. Chemistry of Materials, 2020, 32, 10200-10206.	6.7	37
35	A Cu2+(S = 1/2) KagomÃ© Antiferromagnet: MgxCu4â^'x(OH)6Cl2. Journal of the American Chemical Society, 2010, 132, 5570-5571.	13.7	36
36	Discovery of FeBi2. ACS Central Science, 2016, 2, 867-871.	11.3	35

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37	Progress towards creating optically addressable molecular qubits. Chemical Communications, 2018, 54, 13773-13781.	4.1	34
38	High-Pressure Synthesis: A New Frontier in the Search for Next-Generation Intermetallic Compounds. Accounts of Chemical Research, 2018, 51, 1315-1323.	15.6	32
39	Tunable Cr⁴⁺ Molecular Color Centers. Journal of the American Chemical Society, 2021, 143, 21350-21363.	13.7	29
40	A flexible iron(<scp>ii</scp>) complex in which zero-field splitting is resistant to structural variation. Chemical Science, 2016, 7, 416-423.	7.4	28
41	Magnetic transitions in the topological magnon insulator Cu(1,3-bdc). Physical Review B, 2016, 93, .	3.2	25
42	A chemical path to quantum information. Science, 2019, 366, 1070-1071.	12.6	20
43	Dynamic Nuclear Polarization with Vanadium(IV) Metal Centers. CheM, 2021, 7, 421-435.	11.7	20
44	Magnetic Anisotropy from Main-Group Elements: Halides versus Group 14 Elements. Inorganic Chemistry, 2017, 56, 8195-8202.	4.0	19
45	Magnetic Anisotropy in Heterobimetallic Complexes. Inorganic Chemistry, 2019, 58, 11893-11902.	4.0	19
46	Charting a course for chemistry. Nature Chemistry, 2019, 11, 286-294.	13.6	18
47	Computationally Directed Discovery of MoBi₂. Journal of the American Chemical Society, 2021, 143, 214-222.	13.7	17
48	Chemical control of spinâ€"lattice relaxation to discover a room temperature molecular qubit. Chemical Science, 2022, 13, 7034-7045.	7.4	16
49	(BiSe)_{1.23}CrSe₂ and (BiSe)_{1.22}(Cr_{1.2}Se₂)₂: Magnetic Anisotropy in the First Structurally Characterized Biâ€"Seâ€"Cr Ternary Compounds. Inorganic Chemistry, 2015, 54, 2765-2771.	4.0	14
50	Unexpected suppression of spinâ€"lattice relaxation via high magnetic field in a high-spin iron(<scp>iii</scp>) complex. Chemical Communications, 2016, 52, 10175-10178.	4.1	14
51	Discovery of a Superconducting Cuâ€"Bi Intermetallic Compound by Highâ€Pressure Synthesis. Angewandte Chemie, 2016, 128, 13644-13647.	2.0	14
52	Enhancement of magnetic anisotropy in a Mnâ€"Bi heterobimetallic complex. Chemical Communications, 2016, 52, 11394-11397.	4.1	13
53	Synthetic investigation of competing magnetic interactions in 2D metalâ€"chloranilate radical frameworks. Chemical Science, 2020, 11, 5922-5928.	7.4	13
54	Controlled nâ€Doping of Naphthaleneâ€Diimideâ€Based 2D Polymers. Advanced Materials, 2022, 34, e2101932.	21.0	13

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55	Introduction of spin centers in single crystals of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">B</mml:mi><mml:msub><mml:mi mathvariant="normal">a</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi>CaW</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mrow><mml:mn>6</mml:mn><mml:mo>âˆ'</mml:mo><mml:mi>Î´</mml:mi></mml:mrow></ Physical Review Materials, 2019, 3, .	2.4	12
56	High-pressure discovery of Î²-NiBi. Chemical Communications, 2017, 53, 11241-11244.	4.1	11
57	Control of the Porosity in Manganese Trimer-Based Metalâ€"Organic Frameworks by Linker Functionalization. Inorganic Chemistry, 2020, 59, 8444-8450.	4.0	11
58	Impact of Pressure on Magnetic Order in Jarosite. Journal of the American Chemical Society, 2018, 140, 12001-12009.	13.7	9
59	Octacyanometallate qubit candidates. Dalton Transactions, 2018, 47, 11744-11748.	3.3	8
60	Controlling Dimensionality in the Niâ€"Bi System with Pressure. Chemistry of Materials, 2019, 31, 955-959.	6.7	8
61	Strong Magnetocrystalline Anisotropy Arising from Metalâ€"Ligand Covalency in a Metalâ€"Organic Candidate for 2D Magnetic Order. Chemistry of Materials, 2021, 33, 8712-8721.	6.7	8
62	Discovery of Cu 3 Pb. Angewandte Chemie - International Edition, 2018, 57, 12809-12813.	13.8	7
63	High-pressure synthesis of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>BiV</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> perovskite. Physical Review Materials, 2019, 3, .	2.4	7
64	MnBi2: A Metastable High-Pressure Phase in the Mnâ€"Bi System. Chemistry of Materials, 2019, 31, 3083-3088.	6.7	6
65	Orbital energy mismatch engenders high-spin ground states in heterobimetallic complexes. Chemical Science, 2020, 11, 9971-9977.	7.4	4
66	Discovery of Cu 3 Pb. Angewandte Chemie, 2018, 130, 12991-12995.	2.0	3
67	Pressure-Induced Collapse of Magnetic Order in Jarosite. Physical Review Letters, 2020, 125, 077202.	7.8	3
68	2,3-Dihydroxy-N-methylbenzamide monohydrate. Acta Crystallographica Section E: Structure Reports Online, 2004, 60, o1296-o1298.	0.2	1
69	Size Determines Efficacy of Nanoparticle Magnetoresistance. ACS Central Science, 2018, 4, 1092-1094.	11.3	1
70	Taking titanium for a spin. Nature Chemistry, 2020, 12, 670-671.	13.6	1
71	Synthesis of the Candidate Topological Compound Ni₃Pb₂. Journal of the American Chemical Society, 2022, 144, 11943-11948.	13.7	1