Nicholas Cox

List of Publications by Year
in descending order

77 papers	5,597 citations	117625 34 h-index	79698 73 g-index
82 all docs	82 docs citations	82 times ranked	3706 citing authors

#	Article	IF	Citations
1	The syntheses, structures and spectroelectrochemical properties of 6-oxo-verdazyl derivatives bearing surface anchoring groups. Journal of Materials Chemistry C, 2022, 10, 1896-1915.	5.5	7
2	Crystalline Germanium(I) and Tin(I) Centered Radical Anions. Angewandte Chemie, 2022, 134, .	2.0	4
3	Crystalline Germanium(I) and Tin(I) Centered Radical Anions. Angewandte Chemie - International Edition, 2022, 61, .	13.8	13
4	Redoxâ€Addressable Singleâ€Molecule Junctions Incorporating a Persistent Organic Radical**. Angewandte Chemie - International Edition, 2022, 61, .	13.8	25
5	Defect engineering for creating and enhancing bulk photovoltaic effect in centrosymmetric materials. Journal of Materials Chemistry A, 2021, 9, 13182-13191.	10.3	12
6	A Chiral Lanthanide Tag for Stable and Rigid Attachment to Single Cysteine Residues in Proteins for NMR, EPR and Timeâ€Resolved Luminescence Studies. Chemistry - A European Journal, 2021, 27, 13009-13023.	3.3	19
7	Enhanced Synthesis of oxo-Verdazyl Radicals Bearing Sterically-and Electronically-Diverse C3-Substitents. Organic and Biomolecular Chemistry, 2021, 19, 10120-10138.	2.8	6
8	Microwave Dielectric Materials with Defect-Dipole Clusters Induced Colossal Permittivity and Ultra-low Loss. ACS Applied Electronic Materials, 2021, 3, 5015-5022.	4.3	8
9	Hole-Pinned Defect Clusters for a Large Dielectric Constant up to GHz in Zinc and Niobium Codoped Rutile SnO₂. ACS Applied Materials & Interfaces, 2021, 13, 54124-54132.	8.0	9
10	Substituent Effects on Photoinitiation Ability of Monoaminoanthraquinoneâ€Based Photoinitiating Systems for Free Radical Photopolymerization under LEDs. Macromolecular Rapid Communications, 2020, 41, e2000166.	3.9	11
11	Free Radical Generation from High-Frequency Electromechanical Dissociation of Pure Water. Journal of Physical Chemistry Letters, 2020, 11, 4655-4661.	4.6	23
12	The primary donor of far-red photosystem II: ChlD1 or PD2?. Biochimica Et Biophysica Acta - Bioenergetics, 2020, 1861, 148248.	1.0	19
13	Current Understanding of the Mechanism of Water Oxidation in Photosystem II and Its Relation to XFEL Data. Annual Review of Biochemistry, 2020, 89, 795-820.	11.1	123
14	New Perspectives on Photosystem II Reaction Centres. Australian Journal of Chemistry, 2020, 73, 669.	0.9	6
15	Defect structure and property consequence when small Li+ ions meet BaTiO3. Physical Review Materials, 2020, 4, .	2.4	1
16	Five-coordinate Mn ^{IV} intermediate in the activation of natureâ€™s water splitting cofactor. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 16841-16846.	7.1	54
17	In Situ EPR Characterization of a Cobalt Oxide Water Oxidation Catalyst at Neutral pH. Catalysts, 2019, 9, 926.	3.5	27
18	Water oxidation in photosystem II. Photosynthesis Research, 2019, 142, 105-125.	2.9	149

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19	Chemical flexibility of heterobimetallic Mn/Fe cofactors: R2lox and R2c proteins. Journal of Biological Chemistry, 2019, 294, 18372-18386.	3.4	8
20	Structural adaptations of photosynthetic complex I enable ferredoxin-dependent electron transfer. Science, 2019, 363, 257-260.	12.6	162
21	Highly Efficient Visible Light Catalysts Driven by Ti³⁺â€V_Oâ€2Ti⁴⁺â€N^{3â^'} Defect Clusters. ChemNanoMat, 2019, 5, 169-174.	2.8	3
22	Oxygen-deficient photostable Cu₂O for enhanced visible light photocatalytic activity. Nanoscale, 2018, 10, 6039-6050.	5.6	115
23	Structured near-infrared Magnetic Circular Dichroism spectra of the Mn4CaO5 cluster of PSII in T. vulcanus are dominated by Mn(IV) d-d â€˜spin-flipâ€™ transitions. Biochimica Et Biophysica Acta - Bioenergetics, 2018, 1859, 88-98.	1.0	12
24	Biomolecular EPR Meets NMR at High Magnetic Fields. Magnetochemistry, 2018, 4, 50.	2.4	21
25	Disubstituted Aminoanthraquinone-Based Photoinitiators for Free Radical Polymerization and Fast 3D Printing under Visible Light. Macromolecules, 2018, 51, 10104-10112.	4.8	38
26	Metal-free ribonucleotide reduction powered by a DOPA radical in Mycoplasma pathogens. Nature, 2018, 563, 416-420.	27.8	50
27	What Can We Learn from a Biomimetic Model of Natureâ€™s Oxygen-Evolving Complex?. Inorganic Chemistry, 2017, 56, 3875-3888.	4.0	40
28	Solvent water interactions within the active site of the membrane type I matrix metalloproteinase. Physical Chemistry Chemical Physics, 2017, 19, 30316-30331.	2.8	16
29	The First State in the Catalytic Cycle of the Water-Oxidizing Enzyme: Identification of a Water-Derived Î¼-Hydroxo Bridge. Journal of the American Chemical Society, 2017, 139, 14412-14424.	13.7	63
30	ELDOR-detected NMR: A general and robust method for electron-nuclear hyperfine spectroscopy?. Journal of Magnetic Resonance, 2017, 280, 63-78.	2.1	35
31	Divergent assembly mechanisms of the manganese/iron cofactors in R2lox and R2c proteins. Journal of Inorganic Biochemistry, 2016, 162, 164-177.	3.5	24
32	Recent developments in biological water oxidation. Current Opinion in Chemical Biology, 2016, 31, 113-119.	6.1	97
33	A five-coordinate Mn(<scp>iv</scp>) intermediate in biological water oxidation: spectroscopic signature and a pivot mechanism for water binding. Chemical Science, 2016, 7, 72-84.	7.4	158
34	Spin State as a Marker for the Structural Evolution of Natureâ€™s Water-Splitting Catalyst. Inorganic Chemistry, 2016, 55, 488-501.	4.0	87
35	Pulse Double-Resonance EPR Techniques for the Study of Metallobiomolecules. Methods in Enzymology, 2015, 563, 211-249.	1.0	16
36	Artificial photosynthesis: understanding water splitting in nature. Interface Focus, 2015, 5, 20150009.	3.0	60

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37	Metal oxidation states in biological water splitting. Chemical Science, 2015, 6, 1676-1695.	7.4	275
38	Redox-dependent Ligand Switching in a Sensory Heme-binding GAF Domain of the Cyanobacterium Nostoc sp. PCC7120. Journal of Biological Chemistry, 2015, 290, 19067-19080.	3.4	14
39	Characterization of Oxygen Bridged Manganese Model Complexes Using Multifrequency ¹⁷O-Hyperfine EPR Spectroscopies and Density Functional Theory. Journal of Physical Chemistry B, 2015, 119, 13904-13921.	2.6	27
40	Nitrite Dismutase Reaction Mechanism: Kinetic and Spectroscopic Investigation of the Interaction between Nitrophorin and Nitrite. Journal of the American Chemical Society, 2015, 137, 4141-4150.	13.7	22
41	Structure, ligands and substrate coordination of the oxygen-evolving complex of photosystem II in the S2 state: a combined EPR and DFT study. Physical Chemistry Chemical Physics, 2014, 16, 11877.	2.8	77
42	The first tyrosyl radical intermediate formed in the S2â€“S3 transition of photosystem II. Physical Chemistry Chemical Physics, 2014, 16, 11901.	2.8	68
43	A First-Principles Approach to the Calculation of the on-Site Zero-Field Splitting in Polynuclear Transition Metal Complexes. Inorganic Chemistry, 2014, 53, 11785-11793.	4.0	32
44	The D1-173 amino acid is a structural determinant of the critical interaction between D1-Tyr161 (TyrZ) and D1-His190 in Photosystem II. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 1922-1931.	1.0	16
45	Electronic Structural Flexibility of Heterobimetallic Mn/Fe Cofactors: R2lox and R2c Proteins. Journal of the American Chemical Society, 2014, 136, 13399-13409.	13.7	37
46	Electronic structure of the oxygen-evolving complex in photosystem II prior to O-O bond formation. Science, 2014, 345, 804-808.	12.6	432
47	EPR Spectroscopy and the Electronic Structure of the Oxygen-Evolving Complex of Photosystem II. Applied Magnetic Resonance, 2013, 44, 691-720.	1.2	24
48	Ammonia binding to the oxygen-evolving complex of photosystem II identifies the solvent-exchangeable oxygen bridge (Î¼-oxo) of the manganese tetramer. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 15561-15566.	7.1	148
49	Direct observation of structurally encoded metal discrimination and ether bond formation in a heterodinuclear metalloprotein. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 17189-17194.	7.1	49
50	W-band ELDOR-detected NMR (EDNMR) spectroscopy as a versatile technique for the characterisation of transition metalâ€“ligand interactions. Molecular Physics, 2013, 111, 2788-2808.	1.7	59
51	Reflections on substrate water and dioxygen formation. Biochimica Et Biophysica Acta - Bioenergetics, 2013, 1827, 1020-1030.	1.0	234
52	Biological Water Oxidation. Accounts of Chemical Research, 2013, 46, 1588-1596.	15.6	453
53	Molecular Concepts of Water Splitting: Nature's Approach. Green, 2013, 3, .	0.4	2
54	Detection of the Water-Binding Sites of the Oxygen-Evolving Complex of Photosystem II Using W-Band ¹⁷O Electronâ€“Electron Double Resonance-Detected NMR Spectroscopy. Journal of the American Chemical Society, 2012, 134, 16619-16634.	13.7	248

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55	Two Interconvertible Structures that Explain the Spectroscopic Properties of the Oxygenâ€Evolving Complex of Photosystemâ€…II in the S₂ State. Angewandte Chemie - International Edition, 2012, 51, 9935-9940.	13.8	342
56	What Are the Oxidation States of Manganese Required To Catalyze Photosynthetic Water Oxidation?. Biophysical Journal, 2012, 103, 313-322.	0.5	72
57	The Basic Properties of the Electronic Structure of the Oxygen-evolving Complex of Photosystem II Are Not Perturbed by Ca2+ Removal. Journal of Biological Chemistry, 2012, 287, 24721-24733.	3.4	56
58	Charge separation in Photosystem II: A comparative and evolutionary overview. Biochimica Et Biophysica Acta - Bioenergetics, 2012, 1817, 26-43.	1.0	293
59	Electronic Structure of a Weakly Antiferromagnetically Coupled Mn^{II}Mn^{III}Model Relevant to Manganese Proteins: A Combined EPR,⁵⁵Mn-ENDOR, and DFT Study. Inorganic Chemistry, 2011, 50, 8238-8251.	4.0	55
60	Semiquinoneâ€“Iron Complex of Photosystem II: EPR Signals Assigned to the Low-Field Edge of the Ground State Doublet of Q_A^{â€¢â€“}Fe²⁺ and Q_B^{â€¢â€“}Fe²⁺. Biochemistry, 2011, 50, 6012-6021.	2.5	27
61	Effect of Ca²⁺/Sr²⁺ Substitution on the Electronic Structure of the Oxygen-Evolving Complex of Photosystem II: A Combined Multifrequency EPR, ⁵⁵Mn-ENDOR, and DFT Study of the S₂ State. Journal of the American Chemical Society, 2011, 133, 3635-3648.	13.7	211
62	Theoretical Evaluation of Structural Models of the S₂ State in the Oxygen Evolving Complex of Photosystem II: Protonation States and Magnetic Interactions. Journal of the American Chemical Society, 2011, 133, 19743-19757.	13.7	271
63	Effects of formate binding on the quinoneâ€“iron electron acceptor complex of photosystem II. Biochimica Et Biophysica Acta - Bioenergetics, 2011, 1807, 216-226.	1.0	30
64	The electronic structures of the S2 states of the oxygen-evolving complexes of photosystem II in plants and cyanobacteria in the presence and absence of methanol. Biochimica Et Biophysica Acta - Bioenergetics, 2011, 1807, 829-840.	1.0	81
65	D1 protein variants in Photosystem II from Thermosynechococcus elongatus studied by low temperature optical spectroscopy. Biochimica Et Biophysica Acta - Bioenergetics, 2010, 1797, 11-19.	1.0	21
66	On the assignment of PSHB in D1/D2/ cytb559 reaction centers. Physics Procedia, 2010, 3, 1601-1605.	1.2	9
67	Homologous expression of the <i>nrdF</i> gene of <i>Corynebacteriumâ€ƒammoniagenes</i> strainâ€ƒATCCâ€ƒ6872 generates a manganeseâ€metallocofactor (R2F) and a stable tyrosyl radical (Y^{â€¢}) involved in ribonucleotide reduction. FEBS Journal, 2010, 277, 4849-4862.	4.7	21
68	A Tyrosylâ^'Dimanganese Coupled Spin System is the Native Metalloradical Cofactor of the R2F Subunit of the Ribonucleotide Reductase of Corynebacterium ammoniagenes. Journal of the American Chemical Society, 2010, 132, 11197-11213.	13.7	93
69	Intramolecular light induced activation of a Salenâ€“MnIII complex by a ruthenium photosensitizer. Chemical Communications, 2010, 46, 7605.	4.1	29
70	The S1 split signal of photosystem II; a tyrosineâ€“manganese coupled interaction. Biochimica Et Biophysica Acta - Bioenergetics, 2009, 1787, 882-889.	1.0	12
71	Photo-catalytic oxidation of a di-nuclear manganese centre in an engineered bacterioferritin â€˜reaction centreâ€™. Biochimica Et Biophysica Acta - Bioenergetics, 2009, 1787, 1112-1121.	1.0	42
72	Identification of the Q_{<i>Y</i>} Excitation of the Primary Electron Acceptor of Photosystem II: CD Determination of Its Coupling Environment. Journal of Physical Chemistry B, 2009, 113, 12364-12374.	2.6	27

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73	The Semiquinone-Iron Complex of Photosystem II: Structural Insights from ESR and Theoretical Simulation; Evidence that the Native Ligand to the Non-Heme Iron Is Carbonate. Biophysical Journal, 2009, 97, 2024-2033.	0.5	34
74	Spectral characteristics of PS II reaction centres: as isolated preparations and when integral to PS II core complexes. Photosynthesis Research, 2008, 98, 207-217.	2.9	27
75	The FT-IR spectra of glycine and glycylglycine zwitterions isolated in alkali halide matrices. Chemical Physics, 2005, 313, 39-49.	1.9	70
76	Dielectric Coupler for General Purpose Q-Band EPR Cavity. Applied Magnetic Resonance, 0, , 1.	1.2	1
77	Redoxâ€Addressable Singleâ€Molecule Junctions Incorporating a Persistent Organic Radical**. Angewandte Chemie, 0, , .	2.0	0