K V Lakshmi

List of Publications by Year
in descending order

68 papers	4,048 citations	218677 26 h-index	114465 63 g-index
69 all docs	69 docs citations	69 times ranked	4450 citing authors

#	Article	IF	Citations
1	Binding of the substrate analog methanol in the oxygen-evolving complex of photosystem II in the D1-N87A genetic variant of cyanobacteria. Faraday Discussions, 2022, 234, 195-213.	3.2	4
2	A Dicopper Nitrenoid by Oxidation of a CuICuI Core: Synthesis, Electronic Structure, and Reactivity. Journal of the American Chemical Society, 2021, 143, 7135-7143.	13.7	5
3	Is Deprotonation of the Oxygen-Evolving Complex of Photosystem II during the S₁ â†' S₂ Transition Suppressed by Proton Quantum Delocalization?. Journal of the American Chemical Society, 2021, 143, 8324-8332.	13.7	21
4	A dimeric chlorophyll electron acceptor differentiates type I from type II photosynthetic reaction centers. IScience, 2021, 24, 102719.	4.1	13
5	Foreword to: Biophysical studies of membrane systems and interactions - Commemorative issue in honour of Professor MichÃ¨le Auger. Biochimica Et Biophysica Acta - Biomembranes, 2021, 1863, 183609.	2.6	0
6	Two-dimensional HYSCORE spectroscopy reveals a histidine imidazole as the axial ligand to Chl3A in the M688HPsaA genetic variant of Photosystem I. Biochimica Et Biophysica Acta - Bioenergetics, 2021, 1862, 148424.	1.0	5
7	Bio-Inspired Molecular Catalysts for Water Oxidation. Catalysts, 2021, 11, 1068.	3.5	3
8	Shedding Light on Primary Donors in Photosynthetic Reaction Centers. Frontiers in Microbiology, 2021, 12, 735666.	3.5	19
9	HYSCORE and DFT Studies of Proton-Coupled Electron Transfer in a Bioinspired Artificial Photosynthetic Reaction Center. IScience, 2020, 23, 101366.	4.1	2
10	Determining the Electronic Structure of Paramagnetic Intermediates in membrane proteins: A high-resolution 2D 1H hyperfine sublevel correlation study of the redox-active tyrosines of photosystem II. Biochimica Et Biophysica Acta - Biomembranes, 2020, 1862, 183422.	2.6	2
11	Two-dimensional ⁶⁷Zn HYSCORE spectroscopy reveals that a Zn-bacteriochlorophyll a_Pâ€² dimer is the primary donor (P₈₄₀) in the type-1 reaction centers of Chloracidobacterium thermophilum. Physical Chemistry Chemical Physics, 2020, 22, 6457-6467.	2.8	17
12	Selective electrochemical reduction of CO₂ to CO on CuO/In₂O₃ nanocomposites: role of oxygen vacancies. Catalysis Science and Technology, 2019, 9, 5339-5349.	4.1	25
13	Stabilization of reactive Co ₄ O ₄ cubane oxygen-evolution catalysts within porous frameworks. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 11630-11639.	7.1	41
14	Monomeric, Divalent Vanadium Bis(arylamido) Complexes: Linkage Isomerism and Reactivity. Organometallics, 2019, 38, 1648-1663.	2.3	20
15	Significance of hydrogen bonding networks in the proton-coupled electron transfer reactions of photosystem II from a quantum-mechanics perspective. Physical Chemistry Chemical Physics, 2019, 21, 8721-8728.	2.8	3
16	Redox-Initiated Reactivity of Dinuclear Î²-Diketiminatoniobium Imido Complexes. Inorganic Chemistry, 2017, 56, 1626-1637.	4.0	9
17	Dicopper Cu(I)Cu(I) and Cu(I)Cu(II) Complexes in Copper-Catalyzed Azideâ€“Alkyne Cycloaddition. Journal of the American Chemical Society, 2017, 139, 5378-5386.	13.7	108
18	Titanium Imido Complexes by Displacement of â€“SiMe₃ and Câ€“H Bond Activation in a Ti^{III} Amido Complex, Promoted by a Cyclic (Alkyl)(Amino) Carbene (cAAC). European Journal of Inorganic Chemistry, 2017, 2017, 2484-2487.	2.0	5

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19	Calixsmaragdyrin: A Versatile Ligand for Coordination Complexes. Inorganic Chemistry, 2017, 56, 3763-3772.	4.0	6
20	Construction of Novel Cyclic Tetrads by Axial Coordination of Thiaporphyrins to Tin(IV) Porphyrin. Inorganic Chemistry, 2017, 56, 13913-13929.	4.0	4
21	Mixed Boron(III) and Phosphorous(V) Complexes of mesoâ€Triaryl 25â€Oxasmaragdyrins. Chemistry - A European Journal, 2016, 22, 9699-9708.	3.3	5
22	Synthesis and Quantum Mechanical Studies of a Highly Stable Ferrocene-Incorporated Expanded Porphyrin. Inorganic Chemistry, 2016, 55, 6873-6881.	4.0	6
23	Aryl Group Transfer from Tetraarylborato Anions to an Electrophilic Dicopper(I) Center and Mixed-Valence Î¼-Aryl Dicopper(I,II) Complexes. Journal of the American Chemical Society, 2016, 138, 6484-6491.	13.7	54
24	Role of Hydrogen in Defining the n-Type Character of BiVO₄ Photoanodes. Chemistry of Materials, 2016, 28, 5761-5771.	6.7	104
25	Elucidating the design principles of photosynthetic electron-transfer proteins by site-directed spin labeling EPR spectroscopy. Biochimica Et Biophysica Acta - Bioenergetics, 2016, 1857, 548-556.	1.0	1
26	Eco-friendly synthesis of metal dichalcogenides nanosheets and their environmental remediation potential driven by visible light. Scientific Reports, 2015, 5, 15718.	3.3	100
27	A Stable Sevenâ€Membered Heterocycle, Containing B, C, N, O, and P Atoms, inside a Smaragdyrin Macrocycle. Chemistry - A European Journal, 2015, 21, 11315-11319.	3.3	9
28	Two-Dimensional HYSCORE Spectroscopy of Superoxidized Manganese Catalase: A Model for the Oxygen-Evolving Complex of Photosystem II. Journal of Physical Chemistry B, 2015, 119, 4905-4916.	2.6	8
29	Tuning the Wettability of Indium Oxide Nanowires from Superhydrophobic to Nearly Superhydrophilic: Effect of Oxygen-Related Defects. Journal of Physical Chemistry C, 2015, 119, 16026-16032.	3.1	33
30	The structure and activation of substrate water molecules in Sr²⁺-substituted photosystem II. Physical Chemistry Chemical Physics, 2014, 16, 20834-20843.	2.8	19
31	The Radical Intermediates of Photosystem II. , 2014, , 299-320.		2
32	High-Frequency Electron Nuclear Double-Resonance Spectroscopy Studies of the Mechanism of Proton-Coupled Electron Transfer at the Tyrosine-D Residue of Photosystem II. Biochemistry, 2013, 52, 4781-4790.	2.5	16
33	The Structure and Function of Quinones in Biological Solar Energy Transduction: A Cyclic Voltammetry, EPR, and Hyperfine Sub-Level Correlation (HYSCORE) Spectroscopy Study of Model Naphthoquinones. Journal of Physical Chemistry B, 2013, 117, 7210-7220.	2.6	20
34	Structure and Function of Quinones in Biological Solar Energy Transduction: A High-Frequency D-Band EPR Spectroscopy Study of Model Benzoquinones. Journal of Physical Chemistry B, 2012, 116, 676-682.	2.6	7
35	Two-dimensional 14N HYSCORE spectroscopy of the coordination geometry of ligands in dimanganese di-Î¼-oxo mimics of the oxygen evolving complex of photosystem II. Physical Chemistry Chemical Physics, 2012, 14, 7090.	2.8	10
36	The structure and activation of substrate water molecules in the S2 state of photosystem II studied by hyperfine sublevel correlation spectroscopy. Energy and Environmental Science, 2012, 5, 7747.	30.8	22

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37	Effect of Hydrogen Bond Strength on the Redox Properties of Phylloquinones: A Two-Dimensional Hyperfine Sublevel Correlation Spectroscopy Study of Photosystem I. Biochemistry, 2011, 50, 3495-3501.	2.5	19
38	High-Resolution Two-Dimensional1H and14N Hyperfine Sublevel Correlation Spectroscopy of the Primary Quinone of Photosystem II. Biochemistry, 2011, 50, 491-501.	2.5	24
39	Two-Dimensional ¹H HYSCORE Spectroscopy of Dimanganese Di-Î¼-oxo Mimics of the Oxygen-Evolving Complex of Photosystem II. Journal of Physical Chemistry B, 2011, 115, 12220-12229.	2.6	16
40	Ligand Environment of the S₂State of Photosystem II: A Study of the Hyperfine Interactions of the Tetranuclear Manganese Cluster by 2D¹⁴N HYSCORE Spectroscopy. Journal of Physical Chemistry B, 2010, 114, 10905-10911.	2.6	22
41	The Assembly of a Multisubunit Photosynthetic Membrane Protein Complex: A Site-Specific Spin Labeling EPR Spectroscopic Study of the PsaC Subunit in Photosystem I. Biochemistry, 2010, 49, 2398-2408.	2.5	9
42	The role of stoichiometry of indium and oxygen on gas sensing properties of indium oxide nanostructures. Applied Physics Letters, 2010, 96, 123114.	3.3	13
43	Investigating the role of hydrogen in indium oxide tubular nanostructures as a donor or oxygen vacancy passivation center. Applied Physics Letters, 2009, 95, 013102.	3.3	12
44	Structure and Function of Quinones in Biological Solar Energy Transduction: A Differential Pulse Voltammetry, EPR, and Hyperfine Sublevel Correlation (HYSCORE) Spectroscopy Study of Model Benzoquinones. Journal of Physical Chemistry B, 2009, 113, 15409-15418.	2.6	18
45	Isolation and characterization of the iron-binding properties of a primitive monolobal transferrin from Ciona intestinalis. Journal of Biological Inorganic Chemistry, 2008, 13, 873-885.	2.6	23
46	On the origin of photoluminescence in indium oxide octahedron structures. Applied Physics Letters, 2008, 92, .	3.3	91
47	Probing the Functional Role of Ca2+in the Oxygen-Evolving Complex of Photosystem II by Metal Ion Inhibitionâ€. Biochemistry, 2007, 46, 3211-3223.	2.5	51
48	Aqueous Spectroscopy and Redox Properties of Carboxylate-Bound Titanium. Inorganic Chemistry, 2006, 45, 1795-1804.	4.0	39
49	Bidirectional Electron Transfer in Photosystem I:â€‰ Direct Evidence from High-Frequency Time-Resolved EPR Spectroscopy. Journal of the American Chemical Society, 2005, 127, 11910-11911.	13.7	73
50	Q-Band EPR of the S2 State of Photosystem II Confirms an S= 5/2 Origin of the X-Band g= 4.1 Signal. Biophysical Journal, 2004, 87, 2885-2896.	0.5	74
51	Pulsed High-Frequency EPR Study on the Location of Carotenoid and Chlorophyll Cation Radicals in Photosystem II. Journal of the American Chemical Society, 2003, 125, 5005-5014.	13.7	28
52	Electron Paramagnetic Resonance Distance Measurements in Photosystems. Biological Magnetic Resonance, 2002, , 513-567.	0.4	11
53	Electronic Structure of the P700Special Pair from High-Frequency Electron Paramagnetic Resonance Spectroscopy. Journal of Physical Chemistry B, 2002, 106, 8911-8916.	2.6	48
54	Correlation of the cytochrome c (550) content of cyanobacterial Photosystem II with the EPR properties of the oxygen-evolving complex. Photosynthesis Research, 2002, 72, 175-189.	2.9	27

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55	Factors that determine the unusually low reduction potential of cytochrome c 550 in cyanobacterial photosystem II. Journal of Biological Inorganic Chemistry, 2001, 6, 708-716.	2.6	29
56	Pulsed electron paramagnetic resonance methods for macromolecular structure determination. Current Opinion in Structural Biology, 2001, 11, 523-531.	5.7	50
57	High-Field EPR Study of Carotenoid and Chlorophyll Cation Radicals in Photosystem II. Journal of Physical Chemistry B, 2000, 104, 10445-10448.	2.6	46
58	Low-Temperature Turnover Control of Photosystem II Using Novel Metal-Containing Redox-Active Herbicides. Journal of the American Chemical Society, 2000, 122, 5180-5188.	13.7	9
59	Location of the Ironâ^'Sulfur Clusters FAand FBin Photosystem I:Â An Electron Paramagnetic Resonance Study of Spin Relaxation Enhancement of P700+â€. Biochemistry, 1999, 38, 13210-13215.	2.5	18
60	Orientation of the Tetranuclear Manganese Cluster and Tyrosine Z in the O2-Evolving Complex of Photosystem II:Â An EPR Study of the S2YZâ€¢State in Oriented Acetate-Inhibited Photosystem II Membranesâ€. Biochemistry, 1999, 38, 12758-12767.	2.5	53
61	Tetraazacyclophanes by Palladium-Catalyzed Aromatic Amination. Geometrically Defined, Stable, High-Spin Diradicals. Organic Letters, 1999, 1, 2057-2060.	4.6	89
62	Analysis of Dipolar and Exchange Interactions between Manganese and Tyrosine Z in the S2YZâ€¢ State of Acetate-Inhibited Photosystem II via EPR Spectral Simulations at X- and Q-Bands. Journal of Physical Chemistry B, 1998, 102, 8327-8335.	2.6	89
63	Characterization of the Interaction between Manganese and Tyrosine Z in Acetate-Inhibited Photosystem II. Biochemistry, 1998, 37, 13594-13603.	2.5	60
64	Heteronuclear decoupling in rotating solids. Journal of Chemical Physics, 1995, 103, 6951-6958.	3.0	2,064
65	Solid State 13C and 15N NMR Investigations of the N Intermediate of Bacteriorhodopsin. Biochemistry, 1994, 33, 8853-8857.	2.5	35
66	Dipolar Correlation NMR Spectroscopy of a Membrane Protein. Journal of the American Chemical Society, 1994, 116, 10178-10181.	13.7	62
67	Internuclear distance measurement in a reaction intermediate: solid-state carbon-13 NMR rotational resonance determination of the Schiff base configuration in the M photointermediate of bacteriorhodopsin. Journal of the American Chemical Society, 1993, 115, 8515-8516.	13.7	45
68	Solid state NMR study of [epsilon-13C]Lys-bacteriorhodopsin: Schiff base photoisomerization. Biophysical Journal, 1993, 65, 310-315.	0.5	42