Lars J C Jeuken

List of Publications by Citations

100 papers	3,402 citations	33 h-index	55 g-index
112 ext. papers	3,721 ext. citations	6.3 avg, IF	5.17 L-index

#	Paper	IF	Citations
100	Mechanistic investigation into antibacterial behaviour of suspensions of ZnO nanoparticles against E. coli. *Journal of Nanoparticle Research*, **2010**, 12, 1625-1636	2.3	339
99	Enzyme electrokinetics: using protein film voltammetry to investigate redox enzymes and their mechanisms. *Biochemistry*, **2003**, 42, 8653-62	3.2	247
98	Redox enzymes in tethered membranes. *Journal of the American Chemical Society*, **2006**, 128, 1711-6	16.4	124
97	Insights into Gated Electron-Transfer Kinetics at the Electrode Protein Interface: A Square Wave Voltammetry Study of the Blue Copper Protein Azurin. *Journal of Physical Chemistry B*, **2002**, 106, 2304-2313	3.4	120
96	Mechanism of cellular uptake of genotoxic silica nanoparticles. *Particle and Fibre Toxicology*, **2012**, 9, 29	8.4	119
95	Electron-transfer mechanisms through biological redox chains in multicenter enzymes. *Journal of the American Chemical Society*, **2002**, 124, 5702-13	16.4	97
94	Electrochemical Origin of Hysteresis in the Electron-Transfer Reactions of Adsorbed Proteins: Contrasting Behavior of the Blue Copper Protein, Azurin, Adsorbed on Pyrolytic Graphite and Modified Gold Electrodes. *Journal of Physical Chemistry B*, **2001**, 105, 5271-5282	3.4	89
93	A functional description of CymA, an electron-transfer hub supporting anaerobic respiratory flexibility in Shewanella. *Biochemical Journal*, **2012**, 444, 465-74	3.8	88
92	Fast voltammetric studies of the kinetics and energetics of coupled electron-transfer reactions in proteins. *Faraday Discussions*, **2000**, 191-203; discussion 257-68	3.6	80
91	Loop-Directed Mutagenesis of the Blue Copper Protein Amicyanin from Paracoccus versutus and Its Effect on the Structure and the Activity of the Type-1 Copper Site. *Journal of the American Chemical Society*, **2000**, 122, 204-211	16.4	69
90	A random-sequential mechanism for nitrite binding and active site reduction in copper-containing nitrite reductase. *Journal of Biological Chemistry*, **2006**, 281, 16340-6	5.4	68
89	Conformational reorganisation in interfacial protein electron transfer. *Biochimica Et Biophysica Acta - Bioenergetics*, **2003**, 1604, 67-76	4.6	68
88	Role of the Surface-Exposed and Copper-Coordinating Histidine in Blue Copper Proteins: The Electron-Transfer and Redox-Coupled Ligand Binding Properties of His117Gly Azurin. *Journal of the American Chemical Society*, **2000**, 122, 12186-12194	16.4	68
87	Menaquinone-7 is specific cofactor in tetraheme quinol dehydrogenase CymA. *Journal of Biological Chemistry*, **2012**, 287, 14215-25	5.4	64
86	Systematic investigation of the physicochemical factors that contribute to the toxicity of ZnO nanoparticles. *Chemical Research in Toxicology*, **2014**, 27, 558-67	4	62
85	Phase separation in mixed self-assembled monolayers and its effect on biomimetic membranes. *Sensors and Actuators B: Chemical*, **2007**, 124, 501-509	8.5	58
84	Control of metalloprotein reduction potential: compensation phenomena in the reduction thermodynamics of blue copper proteins. *Biochemistry*, **2003**, 42, 9214-20	3.2	56

83	Durable proteo-hybrid vesicles for the extended functional lifetime of membrane proteins in bionanotechnology. *Chemical Communications*, **2016**, 52, 11020-3	5.8	52
82	Protein-protein interaction regulates the direction of catalysis and electron transfer in a redox enzyme complex. *Journal of the American Chemical Society*, **2013**, 135, 10550-6	16.4	52
81	Light-Driven H2 Evolution and C?C or C?O Bond Hydrogenation by Shewanella oneidensis: A Versatile Strategy for Photocatalysis by Nonphotosynthetic Microorganisms. *ACS Catalysis*, **2017**, 7, 7558-7566	13.1	47
80	Direct electrochemical interaction between a modified gold electrode and a bacterial membrane extract. *Langmuir*, **2005**, 21, 1481-8	4	45
79	Protein film voltammetry of copper-containing nitrite reductase reveals reversible inactivation. *Journal of the American Chemical Society*, **2007**, 129, 8557-65	16.4	44
78	Backbone dynamics of azurin in solution: slow conformational change associated with deprotonation of histidine 35. *Biochemistry*, **1999**, 38, 12690-7	3.2	40
77	Layer-by-Layer Assembly of Supported Lipid Bilayer Poly-L-Lysine Multilayers. *Biomacromolecules*, **2016**, 17, 324-35	6.9	40
76	Durable vesicles for reconstitution of membrane proteins in biotechnology. *Biochemical Society Transactions*, **2017**, 45, 15-26	5.1	39
75	The roles of CymA in support of the respiratory flexibility of Shewanella oneidensis MR-1. *Biochemical Society Transactions*, **2012**, 40, 1217-21	5.1	39
74	Native E. coli inner membrane incorporation in solid-supported lipid bilayer membranes. *Biointerphases*, **2008**, 3, FA59	1.8	39
73	The effect of pH and ligand exchange on the redox properties of blue copper proteins. *Faraday Discussions*, **2000**, 205-20; discussion 257-68	3.6	38
72	Enhanced oxygen-tolerance of the full heterotrimeric membrane-bound [NiFe]-hydrogenase of Ralstonia eutropha. *Journal of the American Chemical Society*, **2014**, 136, 8512-5	16.4	36
71	One-step fabrication of hollow-channel gold nanoflowers with excellent catalytic performance and large single-particle SERS activity. *Nanoscale*, **2016**, 8, 14932-42	7.7	35
70	Electrodes for integral membrane enzymes. *Natural Product Reports*, **2009**, 26, 1234-40	15.1	35
69	High Performance Reduction of HO with an Electron Transport Decaheme Cytochrome on a Porous ITO Electrode. *Journal of the American Chemical Society*, **2017**, 139, 3324-3327	16.4	34
68	The structural role of the copper-coordinating and surface-exposed histidine residue in the blue copper protein azurin. *Journal of Molecular Biology*, **2000**, 299, 737-55	6.5	34
67	Spectroelectrochemical investigation of intramolecular and interfacial electron-transfer rates reveals differences between nitrite reductase at rest and during turnover. *Journal of the American Chemical Society*, **2011**, 133, 15085-93	16.4	33
66	In vitro drug metabolism by C-terminally truncated human flavin-containing monooxygenase 3. *Biochemical Pharmacology*, **2012**, 83, 551-8	6	32

65	Concentrating membrane proteins using asymmetric traps and AC electric fields. *Journal of the American Chemical Society*, **2011**, 133, 6521-4	16.4	32
64	Multilayered Lipid Membrane Stacks for Biocatalysis Using Membrane Enzymes. *Advanced Functional Materials*, **2017**, 27, 1606265	15.6	31
63	Single Enzyme Experiments Reveal a Long-Lifetime Proton Leak State in a Heme-Copper Oxidase. *Journal of the American Chemical Society*, **2015**, 137, 16055-63	16.4	31
62	The kinetics of a weakly electron-coupled proton transfer in azurin. *Inorganica Chimica Acta*, **2002**, 331, 216-223	2.7	31
61	Monitoring the Transmembrane Proton Gradient Generated by Cytochrome bo3 in Tethered Bilayer Lipid Membranes Using SEIRA Spectroscopy. *Journal of Physical Chemistry B*, **2016**, 120, 2249-56	3.4	30
60	Minimal F-actin cytoskeletal system for planar supported phospholipid bilayers. *Langmuir*, **2008**, 24, 6827-36	4	30
59	Proton transport into a tethered bilayer lipid membrane. *Electrochemistry Communications*, **2007**, 9, 610-614	5.1	29
58	Electron Spin Echo Envelope Modulation Spectrum of Azurin at X-Band. *Journal of Physical Chemistry A*, **1998**, 102, 4462-4470	2.8	29
57	Effect of the structure of cholesterol-based tethered bilayer lipid membranes on ionophore activity. *ChemPhysChem*, **2010**, 11, 2191-8	3.2	26
56	Tethered bilayer lipid membranes studied by simultaneous attenuated total reflectance infrared spectroscopy and electrochemical impedance spectroscopy. *Journal of Physical Chemistry B*, **2007**, 111, 3515-24	3.4	26
55	Effects of dimerization on protein electron transfer. *Chemistry - A European Journal*, **2001**, 7, 2398-406	4.8	26
54	Characterization of cytochrome bo3 activity in a native-like surface-tethered membrane. *Biochemical Journal*, **2009**, 417, 555-60	3.8	25
53	Fast, long-range electron-transfer reactions of a "blue" copper protein coupled non-covalently to an electrode through a stilbenyl thiolate monolayer. *Chemical Communications*, **2004**, 316-7	5.8	25
52	An amicyanin C-terminal loop mutant where the active-site histidine donor cannot be protonated. *Journal of Biological Inorganic Chemistry*, **2001**, 6, 23-6	3.7	25
51	A reconstitution method for integral membrane proteins in hybrid lipid-polymer vesicles for enhanced functional durability. *Methods*, **2018**, 147, 142-149	4.6	21
50	Orientational control over nitrite reductase on modified gold electrode and its effects on the interfacial electron transfer. *Journal of Physical Chemistry B*, **2011**, 115, 12607-14	3.4	21
49	Design of novel molecular wires for realizing long-distance electron transfer. *Bioelectrochemistry*, **1997**, 42, 25-33		21
48	AFM study on the electric-field effects on supported bilayer lipid membranes. *Biophysical Journal*, **2008**, 94, 4711-7	2.9	21

47	Membrane pyrophosphatases from Thermotoga maritima and Vigna radiata suggest a conserved coupling mechanism. *Nature Communications*, **2016**, 7, 13596	17.4	19
46	Manipulation and sorting of membrane proteins using patterned diffusion-aided ratchets with AC fields in supported lipid bilayers. *Soft Matter*, **2012**, 8, 5459	3.6	17
45	A study of cytochrome bo3 in a tethered bilayer lipid membrane. *Biochimica Et Biophysica Acta - Bioenergetics*, **2010**, 1797, 1917-23	4.6	17
44	A Re-evaluation of Electron-Transfer Mechanisms in Microbial Electrochemistry: Releases Iron that Mediates Extracellular Electron Transfer. *ChemElectroChem*, **2016**, 3, 829-835	4.3	17
43	A Decaheme Cytochrome as a Molecular Electron Conduit in Dye-Sensitized Photoanodes. *Advanced Functional Materials*, **2015**, 25, 2308-2315	15.6	15
42	Reactivation from the Ni-B state in [NiFe] hydrogenase of Ralstonia eutropha is controlled by reduction of the superoxidised proximal cluster. *Chemical Communications*, **2016**, 52, 2632-5	5.8	15
41	The Impact of Enzyme Orientation and Electrode Topology on the Catalytic Activity of Adsorbed Redox Enzymes. *Electrochimica Acta*, **2013**, 110, 79-85	6.7	15
40	Role of ligand substitution on long-range electron transfer in azurins. *FEBS Journal*, **2000**, 267, 3123-9		15
39	Ultrafast Trap State-Mediated Electron Transfer for Quantum Dot Redox Sensing. *Journal of Physical Chemistry C*, **2018**, 122, 10173-10180	3.8	14
38	Engineering Protein Switches for Rapid Diagnostic Tests. *ACS Sensors*, **2020**, 5, 3001-3012	9.2	13
37	A decahaem cytochrome as an electron conduit in protein-enzyme redox processes. *Chemical Communications*, **2016**, 52, 7390-3	5.8	13
36	Proteoliposomes as energy transferring nanomaterials: enhancing the spectral range of light-harvesting proteins using lipid-linked chromophores. *Nanoscale*, **2019**, 11, 16284-16292	7.7	12
35	Photoreduction of Shewanella oneidensis Extracellular Cytochromes by Organic Chromophores and Dye-Sensitized TiO. *ChemBioChem*, **2016**, 17, 2324-2333	3.8	12
34	Affimer-Enzyme-Inhibitor Switch Sensor for Rapid Wash-free Assays of Multimeric Proteins. *ACS Sensors*, **2019**, 4, 3014-3022	9.2	11
33	Unprecedented Properties of Phenothiazines Unraveled by a NDH-2 Bioelectrochemical Assay Platform. *Journal of the American Chemical Society*, **2020**, 142, 1311-1320	16.4	11
32	Supramolecular electrode assemblies for bioelectrochemistry. *Chemical Communications*, **2017**, 53, 3801-3809		10
31	Amphipol-encapsulated CuInS2/ZnS quantum dots with excellent colloidal stability. *RSC Advances*, **2013**, 3, 20559	3.7	10
30	Impedance spectroscopy of bacterial membranes: coenzyme-Q diffusion in a finite diffusion layer. *Analytical Chemistry*, **2008**, 80, 9084-90	7.8	10

29	The pH-dependent redox inactivation of amicyanin from Paracoccus versutus as studied by rapid protein-film voltammetry. *Journal of Biological Inorganic Chemistry*, **2002**, 7, 94-100	3.7	10
28	The binding of imidazole in an azurin-like blue-copper site. *Journal of Biological Inorganic Chemistry*, **1999**, 4, 257-65	3.7	10
27	Structure and Modification of Electrode Materials for Protein Electrochemistry. *Advances in Biochemical Engineering/Biotechnology*, **2016**, 158, 43-73	1.7	10
26	Effects of membrane curvature and pH on proton pumping activity of single cytochrome bo enzymes. *Biochimica Et Biophysica Acta - Bioenergetics*, **2017**, 1858, 763-770	4.6	9
25	Towards compartmentalized photocatalysis: multihaem proteins as transmembrane molecular electron conduits. *Faraday Discussions*, **2019**, 215, 26-38	3.6	9
24	Electrodes modified with lipid membranes to study quinone oxidoreductases. *Biochemical Society Transactions*, **2009**, 37, 707-12	5.1	9
23	Tactic Response of Shewanella oneidensis MR-1 toward Insoluble Electron Acceptors. *MBio*, **2019**, 10,	7.8	9
22	Extracellular Electron Transfer: Respiratory or Nutrient Homeostasis?. *Journal of Bacteriology*, **2020**, 202,	3.5	8
21	Shewanella oneidensis MR-1 electron acceptor taxis and the perception of electrodes poised at oxidative potentials. *Current Opinion in Electrochemistry*, **2017**, 5, 99-105	7.2	7
20	pH dependent binding in de novo hetero bimetallic coiled coils. *Dalton Transactions*, **2018**, 47, 10784-10790	4.3	6
19	Driving bioenergetic processes with electrodes. *Soft Matter*, **2011**, 7, 49-52	3.6	6
18	Hydrogen Bonding in the Blue-Copper Site. Resonance Raman Study. *Journal of Physical Chemistry B*, **2002**, 106, 4018-4021	3.4	6
17	Quantum dot interactions with and toxicity to Shewanella oneidensis MR-1. *Nanotechnology*, **2020**, 31, 134005	3.4	6
16	Nanosecond heme-to-heme electron transfer rates in a multiheme cytochrome nanowire reported by a spectrally unique His/Met-ligated heme. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	6
15	Exploring Step-by-Step Assembly of Nanoparticle:Cytochrome Biohybrid Photoanodes. *ChemElectroChem*, **2017**, 4, 1959-1968	4.3	5
14	Spherical-supported membranes as platforms for screening against membrane protein targets. *Analytical Biochemistry*, **2018**, 549, 58-65	3.1	4
13	Electrode assemblies composed of redox cascades from microbial respiratory electron transfer chains. *Biochemical Society Transactions*, **2013**, 41, 1249-53	5.1	4
12	Enzymatically-controlled biomimetic synthesis of titania/protein hybrid thin films. *Journal of Materials Chemistry B*, **2018**, 6, 3979-3988	7.3	4

11	Single Proton Pump Activity Measurements on Single Vesicles for a Quinol Heme-Copper Oxidase. *Biophysical Journal*, **2013**, 104, 277a-278a	2.9	3
10	Membrane mixing and dynamics in hybrid POPC/poly(1,2-butadiene--ethylene oxide) (PBd--PEO) lipid/block co-polymer giant vesicles.. *Soft Matter*, **2022**,	3.6	3
9	Membrane Protein Modified Electrodes in Bioelectrocatalysis. *Catalysts*, **2020**, 10, 1427	4	3
8	Ultrafast energy transfer between lipid-linked chromophores and plant light-harvesting complex II. *Physical Chemistry Chemical Physics*, **2021**, 23, 19511-19524	3.6	2
7	Single Liposome Measurements for the Study of Proton-Pumping Membrane Enzymes Using Electrochemistry and Fluorescent Microscopy. *Journal of Visualized Experiments*, **2019**,	1.6	1
6	Vesicle-modified electrodes to study proton-pumping by membrane proteins. *Electrochimica Acta*, **2011**, 56, 10398-10405	6.7	1
5	Electrophysiology Measurements of Metal Transport by MntH2 from. *Membranes*, **2020**, 10,	3.8	1
4	Development and randomized controlled trial of an animated film aimed at reducing behaviours for acquiring antibiotics. *JAC-Antimicrobial Resistance*, **2021**, 3, dlab083	2.9	1
3	Bespoke Biomolecular Wires for Transmembrane Electron Transfer: Spontaneous Assembly of a Functionalized Multiheme Electron Conduit. *Frontiers in Microbiology*, **2021**, 12, 714508	5.7	1
2	Detergent-Free Functionalization of Hybrid Vesicles with Membrane Proteins Using SMALPs.. *Macromolecules*, **2022**, 55, 3415-3422	5.5	1
1	Biological approaches to artificial photosynthesis: general discussion. *Faraday Discussions*, **2019**, 215, 66-83	3.6	