Francois H Van Der Westhuizen

List of Publications by Citations

87 papers	2,181 citations	25 h-index	43 g-index
92 ext. papers	2,490 ext. citations	4.7 avg, IF	4.76 L-index

#	Paper	IF	Citations
87	Inhibition of complex I of the electron transport chain causes O2-. -mediated mitochondrial outgrowth. *American Journal of Physiology - Cell Physiology*, **2005**, 288, C1440-50	5.4	227
86	OXPHOS gene expression and control in mitochondrial disorders. *Biochimica Et Biophysica Acta - Molecular Basis of Disease*, **2009**, 1792, 1113-21	6.9	101
85	Chemoprotective properties of rooibos (Aspalathus linearis), honeybush (Cyclopia intermedia) herbal and green and black (Camellia sinensis) teas against cancer promotion induced by fumonisin B1 in rat liver. *Food and Chemical Toxicology*, **2009**, 47, 220-9	4.7	91
84	Aloe ferox leaf gel phytochemical content, antioxidant capacity, and possible health benefits. *Journal of Agricultural and Food Chemistry*, **2007**, 55, 6891-6	5.7	89
83	Recessive germline SDHA and SDHB mutations causing leukodystrophy and isolated mitochondrial complex II deficiency. *Journal of Medical Genetics*, **2012**, 49, 569-77	5.8	87
82	The effects of high walnut and cashew nut diets on the antioxidant status of subjects with metabolic syndrome. *European Journal of Nutrition*, **2007**, 46, 155-64	5.2	87
81	Metallothionein isoform 2A expression is inducible and protects against ROS-mediated cell death in rotenone-treated HeLa cells. *Biochemical Journal*, **2006**, 395, 405-15	3.8	81
80	Modulation of hepatic drug metabolizing enzymes and oxidative status by rooibos (Aspalathus linearis) and Honeybush (Cyclopia intermedia), green and black (Camellia sinensis) teas in rats. *Journal of Agricultural and Food Chemistry*, **2003**, 51, 8113-9	5.7	80
79	3-Methylglutaconic aciduria--lessons from 50 genes and 977 patients. *Journal of Inherited Metabolic Disease*, **2013**, 36, 913-21	5.4	66
78	Curcumin Rescues a PINK1 Knock Down SH-SY5Y Cellular Model of Parkinson's Disease from Mitochondrial Dysfunction and Cell Death. *Molecular Neurobiology*, **2017**, 54, 2752-2762	6.2	59
77	Metabolomics of mitochondrial disease. *Mitochondrion*, **2017**, 35, 97-110	4.9	52
76	Glycaemic control improves fibrin network characteristics in type 2 diabetes - a purified fibrinogen model. *Thrombosis and Haemostasis*, **2008**, 99, 691-700	7	52
75	Metabolomics of urinary organic acids in respiratory chain deficiencies in children. *Metabolomics*, **2012**, 8, 264-283	4.7	50
74	Glycation of fibrinogen in uncontrolled diabetic patients and the effects of glycaemic control on fibrinogen glycation. *Thrombosis Research*, **2007**, 120, 439-46	8.2	43
73	Polyphenol composition and antioxidant activity of Kei-apple (Dovyalis caffra) juice. *Journal of Agricultural and Food Chemistry*, **2006**, 54, 1271-6	5.7	41
72	A kinetic study into the hydrolysis of the ochratoxins and analogues by carboxypeptidase A. *Chemical Research in Toxicology*, **2001**, 14, 302-4	4	41
71	Human mitochondrial complex I deficiency: investigating transcriptional responses by microarray. *Neuropediatrics*, **2003**, 34, 14-22	1.6	40

70	Phytochemical contents and antioxidant capacities of two Aloe greatheadii var. davyana extracts. *Molecules*, **2008**, 13, 2169-80	4.8	38
69	The involvement of metallothioneins in mitochondrial function and disease. *Current Protein and Peptide Science*, **2010**, 11, 292-309	2.8	37
68	Blood glutathione and subclinical atherosclerosis in African men: the SABPA Study. *American Journal of Hypertension*, **2009**, 22, 1154-9	2.3	35
67	Associations between reactive oxygen species, blood pressure and arterial stiffness in black South Africans: the SABPA study. *Journal of Human Hypertension*, **2012**, 26, 91-7	2.6	32
66	Inhibition of N-acetylglutamate synthase by various monocarboxylic and dicarboxylic short-chain coenzyme A esters and the production of alternative glutamate esters. *Biochimica Et Biophysica Acta - Molecular Basis of Disease*, **2014**, 1842, 2510-6	6.9	29
65	Altered Mitochondrial Respiration and Other Features of Mitochondrial Function in Parkin-Mutant Fibroblasts from Parkinson's Disease Patients. *Parkinson's Disease*, **2016**, 2016, 1819209	2.6	27
64	Kinetic analysis, size profiling, and bioenergetic association of DNA released by selected cell lines in vitro. *Cellular and Molecular Life Sciences*, **2017**, 74, 2689-2707	10.3	26
63	Obesity and metabolomics: metallothioneins protect against high-fat diet-induced consequences in metallothionein knockout mice. *OMICS A Journal of Integrative Biology*, **2015**, 19, 92-103	3.8	25
62	The effect of glycaemic control on fibrin network structure of type 2 diabetic subjects. *Thrombosis and Haemostasis*, **2006**, 96, 623-629	7	25
61	Use of metabolomics to elucidate the metabolic perturbation associated with hypertension in a black South African male cohort: the SABPA study. *Journal of the American Society of Hypertension*, **2015**, 9, 104-14		23
60	DNA damage and repair detected by the comet assay in lymphocytes of african petrol attendants: a pilot study. *Annals of Occupational Hygiene*, **2008**, 52, 653-62		23
59	In vitro antioxidant, antimutagenic and genoprotective activity of Rosa roxburghii fruit extract. *Phytotherapy Research*, **2008**, 22, 376-83	6.7	23
58	The utilization of alanine, glutamic acid, and serine as amino acid substrates for glycine N-acyltransferase. *Journal of Biochemical and Molecular Toxicology*, **2000**, 14, 102-9	3.4	23
57	Combined tarsal and carpal tunnel syndrome in mucolipidosis type III. A case study and review. *Annals of the New York Academy of Sciences*, **2009**, 1151, 77-84	6.5	22
56	Characterization of mtDNA variation in a cohort of South African paediatric patients with mitochondrial disease. *European Journal of Human Genetics*, **2012**, 20, 650-6	5.3	21
55	Disclosure of a putative biosignature for respiratory chain disorders through a metabolomics approach. *Metabolomics*, **2013**, 9, 379-391	4.7	20
54	A significant decline in IGF-I may predispose young Africans to subsequent cardiometabolic vulnerability. *Journal of Clinical Endocrinology and Metabolism*, **2010**, 95, 2503-7	5.6	20
53	Untargeted urine metabolomics reveals a biosignature for muscle respiratory chain deficiencies. *Metabolomics*, **2015**, 11, 111-121	4.7	19

52	Rosa roxburghii supplementation in a controlled feeding study increases plasma antioxidant capacity and glutathione redox state. *European Journal of Nutrition*, **2005**, 44, 452-7	5.2	19
51	The effect of glycaemic control on fibrin network structure of type 2 diabetic subjects. *Thrombosis and Haemostasis*, **2006**, 96, 623-9	7	18
50	Conservation of the coding regions of the glycine N-acyltransferase gene further suggests that glycine conjugation is an essential detoxification pathway. *Gene*, **2015**, 571, 126-34	3.8	16
49	Systemic and organ specific metabolic variation in metallothionein knockout mice challenged with swimming exercise. *Metabolomics*, **2013**, 9, 418-432	4.7	15
48	Characterisation of the influence of genetic variations on the enzyme activity of a recombinant human glycine N-acyltransferase. *Gene*, **2013**, 515, 447-53	3.8	15
47	Clinically proven mtDNA mutations are not common in those with chronic fatigue syndrome. *BMC Medical Genetics*, **2017**, 18, 29	2.1	14
46	DNA Methylation Associated with Mitochondrial Dysfunction in a South African Autism Spectrum Disorder Cohort. *Autism Research*, **2020**, 13, 1079-1093	5.1	14
45	Development and validation of LC-ESI-MS/MS methods for quantification of 27 free and conjugated estrogen-related metabolites. *Analytical Biochemistry*, **2020**, 590, 113531	3.1	14
44	MtDNA population variation in Myalgic encephalomyelitis/Chronic fatigue syndrome in two populations: a study of mildly deleterious variants. *Scientific Reports*, **2019**, 9, 2914	4.9	14
43	Using MutPred derived mtDNA load scores to evaluate mtDNA variation in hypertension and diabetes in a two-population cohort: The SABPA study. *Journal of Genetics and Genomics*, **2017**, 44, 139-149	4	13
42	The First Case of Riboflavin Transporter Deficiency in sub-Saharan Africa. *Seminars in Pediatric Neurology*, **2018**, 26, 10-14	2.9	13
41	Metabolic and glutathione redox markers associated with brain-derived neurotrophic factor in depressed african men and women: evidence for counterregulation?. *Neuropsychobiology*, **2013**, 67, 33-40	4	13
40	An overview of a cohort of South African patients with mitochondrial disorders. *Journal of Inherited Metabolic Disease*, **2010**, 33 Suppl 3, S95-104	5.4	13
39	The unresolved role of mitochondrial DNA in Parkinson's disease: An overview of published studies, their limitations, and future prospects. *Neurochemistry International*, **2019**, 129, 104495	4.4	12
38	8-Oxo-7,8-dihydro-2Sdeoxyguanosine, reactive oxygen species and ambulatory blood pressure in African and Caucasian men: the SABPA study. *Free Radical Research*, **2014**, 48, 1291-9	4	12
37	A call for global action for rare diseases in Africa. *Nature Genetics*, **2020**, 52, 21-26	36.3	11
36	A novel mutation in ETFDH manifesting as severe neonatal-onset multiple acyl-CoA dehydrogenase deficiency. *Journal of the Neurological Sciences*, **2018**, 384, 121-125	3.2	11
35	Attenuation of Endoplasmic Reticulum Stress, Impaired Calcium Homeostasis, and Altered Bioenergetic Functions in MPP-Exposed SH-SY5Y Cells Pretreated with Rutin. *Neurotoxicity Research*, **2019**, 36, 764-776	4.3	10

34	A 3-methylcrotonyl-CoA carboxylase deficient human skin fibroblast transcriptome reveals underlying mitochondrial dysfunction and oxidative stress. *International Journal of Biochemistry and Cell Biology*, **2016**, 78, 116-129	5.6	10
33	A urinary biosignature for mitochondrial myopathy, encephalopathy, lactic acidosis and stroke like episodes (MELAS). *Mitochondrion*, **2019**, 45, 38-45	4.9	10
32	A molecular analysis of the gene in Caucasian South Africans with Parkinson's disease. *Molecular Genetics & Genomic Medicine*, **2017**, 5, 147-156	2.3	9
31	Panel-Based Nuclear and Mitochondrial Next-Generation Sequencing Outcomes of an Ethnically Diverse Pediatric Patient Cohort with Mitochondrial Disease. *Journal of Molecular Diagnostics*, **2019**, 21, 503-513	5.1	9
30	The dilemma of diagnosing coenzyme Q deficiency in muscle. *Molecular Genetics and Metabolism*, **2018**, 125, 38-43	3.7	9
29	Aberrant synthesis of ATP synthase resulting from a novel deletion in mitochondrial DNA in an African patient with progressive external ophthalmoplegia. *Journal of Inherited Metabolic Disease*, **2010**, 33 Suppl 3, S55-62	5.4	9
28	Increased excretion of c4-carnitine species after a therapeutic acetylsalicylic Acid dose: evidence for an inhibitory effect on short-chain Fatty Acid metabolism. *ISRN Pharmacology*, **2011**, 2011, 851870		9
27	The aetiology of cardiovascular disease: a role for mitochondrial DNA?. *Cardiovascular Journal of Africa*, **2018**, 29, 122-132	0.7	9
26	Metabolomics of Ndufs4 skeletal muscle: Adaptive mechanisms converge at the ubiquinone-cycle. *Biochimica Et Biophysica Acta - Molecular Basis of Disease*, **2019**, 1865, 98-106	6.9	9
25	Toward a mtDNA locus-specific mutation database using the LOVD platform. *Human Mutation*, **2012**, 33, 1352-8	4.7	7
24	Disorders of flavin adenine dinucleotide metabolism: MADD and related deficiencies. *International Journal of Biochemistry and Cell Biology*, **2021**, 132, 105899	5.6	7
23	Barriers and Considerations for Diagnosing Rare Diseases in Indigenous Populations. *Frontiers in Pediatrics*, **2020**, 8, 579924	3.4	6
22	Draft De Novo Genome Sequence of Agapornis roseicollis for Application in Avian Breeding. *Animal Biotechnology*, **2018**, 29, 241-246	1.4	5
21	The contribution of the C-824T tyrosine hydroxylase polymorphism to the prevalence of hypertension in a South African cohort: the SABPA study. *Clinical and Experimental Hypertension*, **2013**, 35, 614-9	2.2	5
20	Metallothionein 1 Overexpression Does Not Protect Against Mitochondrial Disease Pathology in Ndufs4 Knockout Mice. *Molecular Neurobiology*, **2021**, 58, 243-262	6.2	5
19	Curcumin pre-treatment may protect against mitochondrial damage in -mutant Parkinson's disease and healthy control fibroblasts. *Biochemistry and Biophysics Reports*, **2021**, 27, 101035	2.2	5
18	Exploring the link between serum peroxides and angiogenesis in a bi-ethnic population from South Africa: the SAfrEIC study. *Journal of the American Society of Hypertension*, **2013**, 7, 267-75		4
17	Leukocyte telomere length and hemostatic factors in a South African cohort: the SABPA Study. *Journal of Thrombosis and Haemostasis*, **2014**, 12, 1975-85	15.4	4

16	One mutation, three phenotypes: novel metabolic insights on MELAS, MIDD and myopathy caused by the m.3243A > G mutation. *Metabolomics*, **2021**, 17, 10	4.7	4
15	Investigating the effects of the presence of foreign DNA on DNA methylation and DNA repair events in cultured eukaryotic cells. *Gene*, **2013**, 512, 117-22	3.8	3
14	Mitochondrial DNA replication and OXPHOS gene transcription show varied responsiveness to Rieske protein knockdown in 143B cells. *Biochimie*, **2011**, 93, 758-65	4.6	3
13	Carnitine palmitoyltransferase I activity monitoring in fibroblasts and leukocytes using electrospray ionization mass spectrometry. *Analytical Biochemistry*, **1998**, 256, 178-84	3.1	3
12	Contribution of regions 3Sand 5Sto the hIL-5 gene on the expression of rhIL-5 in CHO-cells. *Biochemical and Biophysical Research Communications*, **1996**, 227, 576-80	3.4	3
11	Aberrant BCAA and glutamate metabolism linked to regional neurodegeneration in a mouse model of Leigh syndrome. *Biochimica Et Biophysica Acta - Molecular Basis of Disease*, **2021**, 1867, 166082	6.9	3
10	Nuclear Genes Associated with Mitochondrial DNA Processes as Contributors to ParkinsonS Disease Risk. *Movement Disorders*, **2021**, 36, 815-831	7	3
9	Implementing a new variant load model to investigate the role of mtDNA in oxidative stress and inflammation in a bi-ethnic cohort: the SABPA study. *Mitochondrial DNA Part A: DNA Mapping, Sequencing, and Analysis*, **2019**, 30, 440-447	1.3	2
8	A bioinformatics pipeline for rare genetic diseases in South African patients. *South African Journal of Science*, **2019**, 115,	1.3	2
7	Proteomics and metabolomics of HIV-associated neurocognitive disorders: A systematic review. *Journal of Neurochemistry*, **2021**, 157, 429-449	6	2
6	S-Nitrosylation and Attenuation of Excessive Calcium Flux by Pentacycloundecane Derivatives. *Medicinal Chemistry*, **2012**, 8, 367-371	1.8	1
5	Simple, rapid technique for cloning eukaryotic colonies. *Technical Tips Online*, **2002**, 7, 1-2		1
4	Health Status Is Affected, and Phase I/II Biotransformation Activity Altered in Young Women Using Oral Contraceptives Containing Drospirenone/Ethinyl Estradiol. *International Journal of Environmental Research and Public Health*, **2021**, 18,	4.6	1
3	Data on the optimisation of a solid phase extraction method for fractionating estrogen metabolites from small urine volumes. *Data in Brief*, **2020**, 29, 105222	1.2	0
2	Cross-comparison of systemic and tissue-specific metabolomes in a mouse model of Leigh syndrome. *Metabolomics*, **2021**, 17, 101	4.7	0
1	NON-PROTEIN AMINO ACIDS AND ORGANIC ACIDS INHIBIT SERINE HYDROXYMETHYLTRANSFERASE ACTIVITY IN THE CHICKEN EMBRYO NEURAL TUBE DEFECT MODEL. *Biochemical Society Transactions*, **2000**, 28, A438-A438	5.1	