

Research Report

Central Analytical Facility : 2021

Journal Articles (subsidised)

ADEDAYO BC, ANYASI TA, TAYLOR MJC, RAUTENBACH F, LE ROES-HILL M, JIDEANI VA. Phytochemical composition and antioxidant properties of methanolic extracts of whole and dehulled Bambara groundnut (*Vigna Subterranea*) seeds. *Scientific Reports* 2021; **11**(14116):1-11.

Adedayo BC		Author	1	0.00	0.00
Anyasi TA		Author	2	0.00	0.00
TAYLOR MJC	Central Analytical Facility	Author	3	0.00	0.00
Rautenbach F		Author	4	0.00	0.00
Le Roes-Hill M		Author	5	0.00	0.00
Jideani VA		Author	6	0.00	0.00
Total				0.00	0.00

AKURUGU WA, VAN HEERDEN CJ, MULDER N, ZÖLLNER EWA. Hypothalamic-pituitary-adrenal axis suppression in asthma: A glucocorticoid receptor polymorphism may protect. *PEDIATRIC ALLERGY AND IMMUNOLOGY* 2021; **32**:273-279.

Akurugu WA		Author	1	0.00	0.00
VAN HEERDEN CJ	Central Analytical Facility	Author	2	0.00	0.00
MULDER N		Author	3	0.00	0.00
ZÖLLNER EWA	Paediatrics and Child Health	Author	4	0.00	0.00
Total				0.00	0.00

BOODHOO K, VLOK NM, TABB D, MYBURGH KH, VAN DE VYVER M. Dysregulated healing responses in diabetic wounds occur in the early stages postinjury. *JOURNAL OF MOLECULAR ENDOCRINOLOGY* 2021; **66**(2):141-155.

BOODHOO K	Physiological Science	Author	1	0.00	0.00
VLOK NM	Central Analytical Facility	Author	2	0.00	0.00
TABB D	Molecular Biology & Human Genetics	Author	3	0.00	0.00
MYBURGH KH	Physiological Science	Author	4	0.00	0.00
VAN DE VYVER M	Clinical Pharmacology	Author	5	0.00	0.00
Total				0.00	0.00

BUCHEL D, LEHMANN T, ULLRICH S, COCKCROFT SJ, LOUW QA, BAUMEISTER J. Stance leg and surface stability modulate cortical activity during human single leg stance. *EXPERIMENTAL BRAIN RESEARCH* 2021; **239**(4):1193-1202.

Buchel D		Author	1	0.00	0.00
Lehmann T		Author	2	0.00	0.00
Ullrich S		Author	3	0.00	0.00
COCKCROFT SJ	Central Analytical Facility	Author	4	0.00	0.00
LOUW QA	Physiotherapy	Author	5	0.00	0.00
BAUMEISTER J	Physiotherapy	Author	6	0.00	0.00
Total				0.00	0.00

CLOETE R, LOOCK JC, ROYCHOUDHURY AN, SAMANTA S, ROSSOUW RT. Determination of Trace Metal (Mn, Fe, Ni, Cu, Zn, Co, Cd and Pb) Concentrations in Seawater Using Single Quadrupole ICP-MS: A Comparison between Offline and OnlinePreconcentration Setups. *Minerals* 2021; **11**:1289.

CLOETE R	Earth Sciences	Author	1	0.00	0.00
LOOCK JC	Earth Sciences	Author	1	0.00	0.00
ROYCHOUDHURY AN	Earth Sciences	Author	1	0.00	0.00
SAMANTA S	Earth Sciences	Author	1	0.00	0.00
ROSSOUW RT	Central Analytical Facility	Author	2	0.00	0.00

COMMENT: 11111289

Total 0.00

DORUYTER AGG, HOLNESS JL. Dual energy window imaging for optimisation of P/V ratios in VP SPECT. *EJNMMI Physics* 2021; **8**(69):1-15.

DORUYTER AGG	Central Analytical Facility	Author	1	0.00	0.00
Holness JL		Author	2	0.00	0.00
Total				0.00	0.00

DORUYTER AGG, PARKES J, WARWICK JM, CARR JA. PET-CT in brain disorders: The South African context. *SA Journal of Radiology* 2021; **25**(1):1-9.

DORUYTER AGG	Central Analytical Facility	Author	1	0.00	0.00
Parkes J		Author	2	0.00	0.00
WARWICK JM	Nuclear Medicine	Author	3	0.00	0.00
CARR JA	Neurology	Author	4	0.00	0.00

COMMENT: Revised 1 June 2021. Accepted 12 August 2021. Published 10 November 2021.

Total 0.00

DU PLESSIS HW, HOFF JW, MOKWENA LM, VAN DER RIJST M, JOLLY N. Impact of Yeast Selection on Volatile Phenol Levels of Wines Produced from Smoked-Exposed Juice. *Fermentation* 2021; **7**(240):1-12.

DU PLESSIS HW		Author	1	0.00	0.00
HOFF JW		Author	2	0.00	0.00
MOKWENA LM	Central Analytical Facility	Author	3	0.00	0.00
Van der Rijst M		Author	4	0.00	0.00
Jolly N		Author	5	0.00	0.00
Total				0.00	0.00

ELLERO AA, VAN DEN BOUT I, VLOK NM, CROMARTY AD, HURRELL T. Continual proteomic divergence of HepG2 cells as a consequence of long-term spheroid culture. *Scientific Reports* 2021; **11**(10917):1-14.

Ellero AA		Author	1	0.00	0.00
van den Bout I		Author	2	0.00	0.00
VLOK NM	Central Analytical Facility	Author	3	0.00	0.00
Cromarty AD		Author	4	0.00	0.00
Hurrell T		Author	5	0.00	0.00

GOUSSARD P, ANDRONIKOU S, MFINGWANA L, RABIE H, JANSON JT, DORUYTER AGG, MORRISON J, DONALD PR. Extensive pulmonary and extrapulmonary tuberculosis in a child presenting with a chest wall abscess: The value of different modes of imaging. *JOURNAL OF PAEDIATRICS AND CHILD HEALTH* 2021; **57**(17):1105-1108.

GOUSSARD P	Paediatrics and Child Health	Author	1	0.00	0.00
Andronikou S		Author	2	0.00	0.00
MFINGWANA L	Paediatrics and Child Health	Author	3	0.00	0.00
RABIE H	Paediatrics and Child Health	Author	4	0.00	0.00
JANSON JT	Cardiothoracic Surgery	Author	5	0.00	0.00
DORUYTER AGG	Central Analytical Facility	Author	6	0.00	0.00
MORRISON J	Paediatrics and Child Health	Author	7	0.00	0.00
DONALD PR	Paediatrics and Child Health	Author	8	0.00	0.00

Total 0.00

GROBBELAAR LM, VENTER C, VLOK NM, NGOEPE M, LAUBSCHER GJ, LOURENS PJ, STEENKAMP J, KELL DB, PRETORIUS E. SARS-CoV-2 spike protein S1 induces fibrin(ogen) resistant to fibrinolysis: implications for microclot formation in COVID-19. *BIOSCIENCE REPORTS* 2021; **41**:1-17.

GROBBELAAR LM	Physiological Science	Author	1	0.00	0.00
VENTER C	Physiological Science	Author	2	0.00	0.00
VLOK NM	Central Analytical Facility	Author	3	0.00	0.00
Ngoepe M		Author	4	0.00	0.00
Laubscher GJ		Author	5	0.00	0.00
Lourens PJ		Author	6	0.00	0.00
STEENKAMP J	Haematological Pathology	Author	7	0.00	0.00
KELL DB	Physiological Science	Author	8	0.00	0.00
PRETORIUS E	Physiological Science	Author	9	0.00	0.00

Total 0.00

JANSE VAN RENSBURG S, HATTINGH CJ, JOHANNES CL, MOREMI KE, PEETERS AV, VAN HEERDEN CJ, ERASMUS RT, ZEMLIN A, KEMP M, JAFTHA M, WAMONO-SMALLBONE AK, POTOCNIK FCV, VAN TOORN R, KOTZE MJ. Pathology-supported genetic testing as a method for disability prevention in multiple sclerosis (MS). Part II. Insights from two MS cases. *Metabolic Brain Disease* 2021; **36**:1169-1181.

JANSE VAN RENSBURG S	Chemical Pathology	Author	1	0.00	0.00
HATTINGH CJ	Chemical Pathology	Author	2	0.00	0.00
JOHANNES CL	General Internal Medicine	Author	3	0.00	0.00
MOREMI KE	Chemical Pathology	Author	4	0.00	0.00
PEETERS AV	Chemical Pathology	Author	5	0.00	0.00
VAN HEERDEN CJ	Central Analytical Facility	Author	6	0.00	0.00
ERASMUS RT	Chemical Pathology	Author	7	0.00	0.00
ZEMLIN A	Chemical Pathology	Author	8	0.00	0.00
Kemp M		Author	9	0.00	0.00
Jaftha M		Author	10	0.00	0.00
WAMONO-SMALLBONE AK	Chemical Pathology	Author	11	0.00	0.00
POTOCNIK FCV	Psychiatry	Author	12	0.00	0.00
VAN TOORN R	Paediatrics and Child Health	Author	15	0.00	0.00
KOTZE MJ	Chemical Pathology	Author	16	0.00	0.00

COMMENT: Aye Aye Khine is Wamono-Smallbone on system

Total 0.00

JOOMA JA, WARWICK JM, DORUYTER AGG. Is progressive accumulation of radiolabelled white cells a valid positive criterion in suspected vascular Graft/Endograft infections?. *EUROPEAN JOURNAL OF VASCULAR AND ENDOVASCULAR SURGERY* 2021; **61**(3):529-530.

Jooma JA		Author	1	0.00	0.00
WARWICK JM	Nuclear Medicine	Author	2	0.00	0.00
DORUYTER AGG	Central Analytical Facility	Author	3	0.00	0.00

Total 0.00

KLEYNHANS J, RUBOW SM, LE ROUX JS, MARJANOVIC-PAINTER B, ZEEVAART J, EBENHAN T. Production of [⁶⁸Ga] Ga-PSMA: Comparing a manual kit-based method with a module-based automated synthesis approach. *Journal of Labelled Compounds and Radiopharmaceuticals* 2020; **63**:553-563.

KLEYNHANS J	Nuclear Medicine	Author	1	0.00	0.00
RUBOW SM	Nuclear Medicine	Author	2	0.00	0.00
LE ROUX JS	Central Analytical Facility	Author	3	0.00	0.00
Marjanovic-Painter B		Author	4	0.00	0.00
Zeevaart J		Author	5	0.00	0.00
Ebenhan T		Author	6	0.00	0.00

COMMENT: Received 4 May 2020; revised 3 August 2020; accepted 26 August 2020.

Total 0.00

LE ROUX JS, KLEYNHANS J, RUBOW SM. The use of HEPES-buffer in the production of gallium-68 radiopharmaceuticals - time to reconsider strict pharmacopoeial limits ?. *EUROPEAN JOURNAL OF NUCLEAR MEDICINE AND MOLECULAR IMAGING* 2021; **6**:4 pages.

LE ROUX JS	Central Analytical Facility	Author	1	0.00	0.00
KLEYNHANS J	Nuclear Medicine	Author	2	0.00	0.00
RUBOW SM	Nuclear Medicine	Author	3	0.00	0.00

COMMENT: Received 16/02/2021, accepted 23/03/2021 and published online 01/04/2021. Letter to the Editor

Total 0.00

LE ROUX JS, RUBOW SM, EBENHAN T. A comparison of the labelling characteristics of manual and automated synthesis methods for gallium-68 labelled ubiquickidin. *APPLIED RADIATION AND ISOTOPES* 2021; **168**:6 pages.

LE ROUX JS	Central Analytical Facility	Author	1	0.00	0.00
RUBOW SM	Nuclear Medicine	Author	2	0.00	0.00
Ebenhan T		Author	3	0.00	0.00

COMMENT: Received 13 July 2020, revised 10 September 2020. Accepted 25 September and available online 21 October 2020.

Total 0.00

LE ROUX ML, BURGER NFV, VLOK NM, KUNERT K, CULLIS CA, OBERHOLSTER A. EMS Derived Wheat Mutant BIG8-1 (*Triticum aestivum* L.)—A New Drought Tolerant Mutant Wheat Line. *International Journal of Molecular Sciences* 2021; **22**(5314):1-23.

LE ROUX ML	Genetics	Author	1	0.00	0.00
BURGER NFV	Genetics	Author	2	0.00	0.00
VLOK NM	Central Analytical Facility	Author	3	0.00	0.00
Kunert K		Author	4	0.00	0.00
Cullis CA		Author	5	0.00	0.00
OBERHOLSTER A	Genetics	Author	6	0.00	0.00

COMMENT: Also known as Anna-Maria Botha-Oberholster

Total 0.00

LEHMANN P, JAVAL M, DU PLESSIS A, TSHIBALANGANDA M, TERBLANCHE JS. X-ray micro-tomographic data of live larvae of the beetle *Cacosceles newmannii*. *GigaScience* 2021; **18**:1-8.

Lehmann P		Author	1	0.00	0.00
JAVAL M	Conservation Ecology and Entomology	Author	2	0.00	0.00
DU PLESSIS A	Physics	Author	3	0.00	0.00
TSHIBALANGANDA M	Central Analytical Facility	Author	4	0.00	0.00
TERBLANCHE JS	Electric and Electronic Engineering	Author	5	0.00	0.00

Total 0.00

MALEKI E, BAGHERIFARD S, RAZAVI SMJ, RICCIO M, BANDINI M, DU PLESSIS A, BERTO F, GUAGLIANO M. Fatigue behaviour of notched laser powder bed fusion AlSi10Mg after thermal and mechanical surface post-processing. *MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING* 2021; **829**:142145, 22 pages.

Maleki E		Author	1	0.00	0.00
Bagherifard S		Author	2	0.00	0.00
Razavi SMJ		Author	3	0.00	0.00
Riccio M		Author	4	0.00	0.00
Bandini M		Author	5	0.00	0.00
DU PLESSIS A	Central Analytical Facility	Author	6	0.00	0.00
Berto F		Author	7	0.00	0.00
Guagliano M		Author	8	0.00	0.00

Total 0.00

MOSEKIEMANG TT, STANDER MA, DE VILLIERS AJ. Ultra-high pressure liquid chromatography coupled to travelling wave ion mobility-time of flight mass spectrometry for the screening of pharmaceutical metabolites in wastewater samples: Application to antiretrovirals. *Journal of Chromatography A* 2021; **1660**:462650: 13.

MOSEKIEMANG TT	Chemistry & Polymer Science	Author	1	0.00	0.00
STANDER MA	Central Analytical Facility	Author	2	0.00	0.00
DE VILLIERS AJ	Chemistry & Polymer Science	Author	3	0.00	0.00

Total 0.00

MUGISHA J, WARWICK JM, DORUYTER AGG. Combined versus subtraction-only technique in parathyroid scintigraphy: effect on scan interpretation. *NUCLEAR MEDICINE COMMUNICATIONS* 2021; **41**(9):883-887.

MUGISHA J		Author	1	0.00	0.00
WARWICK JM	Nuclear Medicine	Author	2	0.00	0.00
DORUYTER AGG	Central Analytical Facility	Author	3	0.00	0.00

COMMENT: Received 3 February 2020, Accepted 26 May 2020

Total 0.00

NDOU V, PIETERSE PJ, BRAND DJ, VORSTER AA, LOUW A, PHIRI EE. Mechanism(s) of glyphosate resistance in a selected *Plantago lanceolata* (L.) R biotype. *Agronomy* 2021; **11**(5):884: 12.

NDOU V	Agronomy	Author	1	0.00	0.00
PIETERSE PJ	Agronomy	Author	2	0.00	0.00
BRAND DJ	Chemistry & Polymer Science	Author	3	0.00	0.00
VORSTER AA	Central Analytical Facility	Author	4	0.00	0.00
LOUW A	Conservation Ecology and Entomology	Author	5	0.00	0.00
PHIRI EE	Agronomy	Author	6	0.00	0.00

Total 0.00

PRETORIUS E, VLOK NM, VENTER C, BEZUIDENHOUT JA, LAUBSCHER GJ, STEENKAMP J, KELL DB. Persistent clotting protein pathology in Long COVID/Post-Acute Sequelae of COVID-19 (PASC) is accompanied by increased levels of antiplasmin. *Cardiovascular Diabetology* 2021; **20**(172):1-18.

PRETORIUS E	Physiological Science	Author	1	0.00	0.00
VLOK NM	Central Analytical Facility	Author	2	0.00	0.00
VENTER C	Physiological Science	Author	3	0.00	0.00
BEZUIDENHOUT JA	Physiological Science	Author	4	0.00	0.00
Laubscher GJ		Author	5	0.00	0.00
STEENKAMP J	Physiological Science	Author	6	0.00	0.00
KELL DB	Physiological Science	Author	7	0.00	0.00

Total 0.00

TOPLIS B, BOSCH C, STANDER MA, TAYLOR MJC, PERFECT JR, BOTHA A. A link between urease and polyamine metabolism in *Cryptococcus neoformans*. *MICROBIAL PATHOGENESIS* 2021; **158**(105076):1-7.

TOPLIS B	Microbiology	Author	1	0.00	0.00
BOSCH C	Microbiology	Author	2	0.00	0.00
STANDER MA	Central Analytical Facility	Author	3	0.00	0.00
TAYLOR MJC	Central Analytical Facility	Author	4	0.00	0.00
Perfect JR		Author	5	0.00	0.00
BOTHA A	Microbiology	Author	6	0.00	0.00

Total 0.00

VAN SCHALKWYK FJ, STANDER MA, NSIZWANE M, MATHEE A, VAN WYK B-E. Fatal pyrrolizidine alkaloid poisoning of infants caused by adulterated *Senecio coronatus*. *FORENSIC SCIENCE INTERNATIONAL* 2021; **320**:110680, 7 pages.

VAN SCHALKWYK FJ	Central Analytical Facility	Author	1	0.00	0.00
STANDER MA	Biochemistry	Author	2	0.00	0.00
Nsizwane M		Author	3	0.00	0.00
Mathee A		Author	4	0.00	0.00
Van Wyk B-E		Author	5	0.00	0.00

WARWICK JM, DORUYTER AGG. Progressive accumulation of radiolabelled white cells a valid positive criterion in suspected vascular graft/endothelial infections>. *Vascular and Endovascular Surgery* 2020; **6**(3):529-530.

Warwick JM		Author	2	0.00	0.00
DORUYTER AGG	Central Analytical Facility	Author	3	0.00	0.00

COMMENT: Research letter published in the European Journal of Vascular and Endovascular surgery.

Total 0.00

WEBSTER AB, GANSWINDT A, ROSSOUW RT, SMALL CW. Optimised ICP-MS quantification method for using animal faeces as a measure of protected area ecosystem health. *MethodsX* 2021; **8**(101441):1-14.

Webster AB		Author	1	0.00	0.00
Ganswindt A		Author	2	0.00	0.00
ROSSOUW RT	Central Analytical Facility	Author	4	0.00	0.00
SMALL CW	Central Analytical Facility	Author	13	0.00	0.00

Total 0.00

WEBSTER AB, ROSSOUW RT, CALLEALTA FJ, BENNETT NC, GANSWINDT A. Assessment of trace element concentrations in sediment and vegetation of mesic and arid African savannahs as indicators of ecosystem health. *Science of the Total Environment* 2021; **760**(143358):1-15.

Webster AB		Author	1	0.00	0.00
ROSSOUW RT	Central Analytical Facility	Author	2	0.00	0.00
Callealta FJ		Author	3	0.00	0.00
Bennett NC		Author	4	0.00	0.00
Ganswindt A		Author	5	0.00	0.00

Total 0.00

WILLIAMS C, MBUYANE LL, BAUER FF, MOKWENA LM, DIVOL BT, BUICA AS. A Gas Chromatography-Mass Spectrometry Method for the Determination of Fatty Acids and Sterols in Yeast and Grape Juice. *Applied Sciences* 2021; **11**(5152):1-17.

WILLIAMS C	Viticulture and Oenology	Author	1	0.00	0.00
MBUYANE LL	Viticulture and Oenology	Author	2	0.00	0.00
BAUER FF	Viticulture and Oenology	Author	3	0.00	0.00
MOKWENA LM	Central Analytical Facility	Author	4	0.00	0.00
DIVOL BT	Viticulture and Oenology	Author	5	0.00	0.00
BUICA AS	Viticulture and Oenology	Author	6	0.00	0.00

COMMENT: Vir info: Esmari verander die dept. van C Williams na Wingerd en Wynkunde na epos van Gertrude 21.01.

Total 0.00

ZÖLLNER EWA, AKURUGU WA, VAN HEERDEN CJ, VORSTER AA, MULDER N. Could a glucocorticoid receptor polymorphism be protective against hypothalamic-pituitary-adrenal axis suppression in asthmatic children on corticosteroids?. *Journal of Endocrinology, Metabolism and Diabetes of South Africa* 2021; **26**(1):43.

ZÖLLNER EWA	Paediatrics and Child Health	Author	1	0.00	0.00
Akurugu WA		Author	2	0.00	0.00
VAN HEERDEN CJ	Central Analytical Facility	Author	3	0.00	0.00
VORSTER AA	Central Analytical Facility	Author	4	0.00	0.00
MULDER N		Author	5	0.00	0.00

Total 0.00

SECTION TOTAL 0.00

Proceedings International

GOSS DM, AYAD BM, VLOK NM, HATTINGH SM, VAN DER HORST G, DU PLESSIS S. *Proteomics and Biomarker Identification in Improved Sperm Motility Parameters After 4 h of Ejaculatory Abstinence*. In: Björndahl L, Flanagan J, Holmberg R, Kvist U (eds.) XIIIth International Symposium on Spermatology, Switzerland, Switzerland, Springer Nature 2021: 345-364.

GOSS DM	Medical Physiology	Author	1	0.00	0.00
AYAD BM	Medical Physiology	Author	2	0.00	0.00
VLOK NM	Central Analytical Facility	Author	3	0.00	0.00
HATTINGH SM	Medical Physiology	Author	4	0.00	0.00
Van der Horst G		Author	5	0.00	0.00
DU PLESSIS S	Medical Physiology	Author	6	0.00	0.00

COMMENT: https://doi.org/10.1007/978-3-030-66292-9_48

Total 0.00

SECTION TOTAL 0.00

Chapters in Books


LUMKWANA D, ENGELBRECHT L, LOOS B. Monitoring autophagy using super-resolution structured illumination and direct stochastic optical reconstruction microscopy. In: Galluzzi L, Kepp O (eds.) *Methods in Cell Biology. Monitoring Vesicular Trafficking in Cellular Responses to Stress - Part B*, Academic Press, United Kingdom, 2021: 139-152.

Lumkwana D		Author	1	0.00	0.00
ENGELBRECHT L	Central Analytical Facility	Author	2	0.00	0.00
LOOS B	Physiological Science	Author	3	0.00	0.00

Total 0.00

SECTION TOTAL 0.00

GRAND TOTAL 0.00

SIGNED BY HOD : 

NAME : Mrs E Kamper on behalf of Prof G Stevens

DATE : 27-01-2022