



NATURAL AND
AGRICULTURAL SCIENCES
NATUUR- EN
LANDBOUWETENSKAPPE

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PUBLICATIONS / PUBLIKASIES - 2014

1. **Mokhothu, T.H., Luyt, A.S. and Messori, M.** 2014. Reinforcement of EPDM rubber with *in situ* generated silica particles in the presence of a coupling agent via a sol-gel route. *Polymer Testing* **33**: 97-106. [ufs-018910](#)
2. **Wei, H.E., Yanxin, L.I., Luyt, A.S. and Tiejun, G.E.** 2014. Manufacturing Process of Packaging Products by Orthogonal Test. *Applied Mechanics and Materials* **469**: 305-308. [ufs-018918](#)
3. **Steyn, M., Visser, H.G., Roodt, A. and Engelbrecht, I.** 2014. Crystal structure of mono- μ -oxo-bis[di(5-chloro-7-iodoquinolin-8-olato- κ^2 N,O)-chloro-(dimethyl= formamido- κ O)zirconium(IV)]dimethylformamide solvate, $C_{34}H_{37}Cl_6I_4N_7O_8Zr_2$. *Zeitschrift fur Crystallographie: New Crystal Structures* **229**: 67-69. [ufs-018927](#)
4. **Warsink, S. and Roodt, A.** 2014. Crystal structure of di- μ -chlorido-bis[1-(2-(4-nitrophenyl)amidoethyl)-3-(2,4,6-trimethylphenyl)imidazol-2-ylidene- κ C]= di(dichlorido)dipalladium(II)} (Pd-Pd) dichloromethane solvate, $C_{32}H_{46}Cl_6N_8O_6Pd_2$. *Zeitschrift fur Crystallographie: New Crystal Structures* **229**: 70-72. [ufs-018929](#)
5. **Fourie, E., van Rensburg, M.J. and Swarts, J.C.** 2014. Synthesis, crystal structure and comparative electrochemistry of metallocenyldiphenylphosphines of ruthenocene, osmocene, ferrocene and cobaltocenium hexafluorophosphate. *Journal of Organometallic Chemistry* **754**: 80-87. [ufs-018931](#)
6. **von Eschwege, K.G., Bosman, G., Conradie, J. and Schwoerer, H.** 2014. Femtosecond Laser Spectroscopy and DFT Studies of Photochromic Dithizonatomercury Complexes. *The Journal of Physical Chemistry* **118**: 844-855. [ufs-018933](#)
7. **Sibeko, M.A. and Luyt, A.S.** 2014. Preparation and characterisation of vinylsilane crosslinked low-density polyethylene composites filled with nano clays. *Polymer Bulletin* **71**: 637-657. [ufs-018942](#)
8. **Gohain, M., du Plessis, M., van Tonder, J.H. and Bezuidenhoudt, B.C.B.** 2014. Preparation of phenolic compounds through catalyst-free *ipso*-hydroxylation of arylboronic acids. *Tetrahedron Letters* **55**: 2082-2084. [ufs-018943](#)
9. **Kumar, V., Swart, H.C., Gohain, M., Kumar, V., Som, S., Bezuidenhoudt, B.C.B. and Ntwaeaborwa, O.M.** 2014. Influence of ultrasonication times on the tunable colour emission of ZnO nanophosphors for lighting applications. *Ultrasonics Sonochemistry* **21**: 1549-1556. [ufs-018944](#)

10. **Steyn, M., Visser, H.G. and Roodt, A.** 2014. Synthesis and crystal structure of tetrakis(1,3-diphenyl-1,3-propanedionato)zirconium(IV). *The Journal of The Southern African Institute of living and Metallurgy* **114**: 183-188.[ufs-018945](#)
11. **Landman, M., Pretorius, R., Fraser, R., Buitendach, B.E., Conradie, M.M., van Rooyen, P.H. and Conradie, J.** 2014. Electrochemical behaviour and structure of novel phosphine- and phosphite-substituted tungsten(0) Fischer carbene complexes. *Electrochimica Acta* **130**: 104-118.[ufs-018946](#)
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15. **Brink, A., Truedsson, I., Fleckhaus, A., Johnson, M.T., Norrby, P.O., Roodt, A. and Wendt, O.F.** 2014. Fast and reversible insertion of carbon dioxide into zirconocene-alkoxide bonds. A mechanistic study. *Dalton Transactions* **43**: 8894-8898.[ufs-018956](#)
16. **Sahoo, D., Suriyanarayanan, R., Metre, R.K. and Chandrasekhar, V.** 2014. Molecular and polymeric zinc(II) phosphonates: isolation of an octanuclear ellipsoidal ensemble. *Dalton Transactions* **43**: 7304-7313.[ufs-018963](#)
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19. **Roodt, A.** 2014. **(BOOK REVIEWS)**. Structural methods in molecular inorganic chemistry. *Crystallography Reviews* **20: (1)**, 56-61.[ufs-017977](#)
20. **Motsoeneng, T.S., Luyt, A.S. and van Reenen, A.J.** 2014. Investigation of the Crystalline Phase Morphology of a β -Nucleated Impact Polypropylene Copolymer. *Journal of Applied Polymer Science* **131: (4)**, [39923](#) 1-9. [ufs-019067](#)

21. **Conradie, M.M., Conradie, J. and Erasmus, E.** 2014. Immobilisation of iron tris(β -diketonates) on a two-dimensional flat amine functionalised silicon wafer: A catalytic study of the formation of urethane, from ethanol and diisocyanate derivative. *Polyhedron* **79**: 52-59.[ufs-019070](#)
22. **Erasmus, E.** 2014. Synthesis and unexpected electrochemical reaction of *p*-substituted phenyl diphenylphosphinites. *Journal of Electroanalytical Chemistry* **727**: 1-7.[ufs-019074](#)
23. **Conradie, J. and Ghosh, A.** 2014. Stereochemical Diversity of $\{\text{MNO}\}^{10}$ Complexes: Molecular Orbital Analyses of Nickel and Copper Nitrosyls. *Inorganic Chemistry* **53**: (10), 4847-4855.[ufs-019075](#)
24. **Albrett, A.M., Thomas, K.E., Maslek, S., Mlodzianowska, A., Conradie, J., Beavers, C.M., Ghosh, A. and Brothers, P.J.** 2014. Mono- and Diboron Corroles: Factors Controlling Stoichiometry and Hydrolytic Reactivity. *Inorganic Chemistry* **53**: (11), 5405-5874.[ufs-019076](#)
25. **van Tonder, J.H.** 2014. *gem*-Bishydroperoxides. *Synlett Spotlight* **474** **25**: 1629-1630.[ufs-019077](#)
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29. **Mofokeng, T.G., Luyt, A.S., Pavlovic, V.P., Pavlovic, V.B., Dudic, D., Vlahovic, B. and Djokovic, V.** 2014. Ferroelectric nanocomposites of polyvinylidene fluoride/polymethyl methacrylate blend and BaTiO₃ particles: Fabrication of β -crystal polymorph rich matrix through mechanical activation of the filler. *Journal of Applied Physics* **115**: 084109-084109-9.[ufs-019116](#)
30. **Petronijevic, I., Simonovic, K., Marinkovic, F., Dojcilovic, J., Luyt, A.S. and Dudic, D.** 2014. The detection of the early stages of ageing in an LDPE + graphite composite by comparison of dielectric responses induced by sinusoidal and triangular signals. *eXpress Polymer Letters* **8**:10 733-744.[ufs-019124](#)
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33. **Kumar, V., Gohain, M., Kumar, V., van Tonder, J.H., Bezuidenhoudt, B.C.B., Ntwaeaborwa, O.M. and Swart, H.C.** 2014. Synthesis of yellow emitting bis-pyrimidine based purely organic phosphors. *Journal of Luminescence*, **149**, 61-68. **ufs-018950 (ingelees deur Fisika)**
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