

---

AUSTRALIAN JOURNAL OF  
**CHEMISTRY**  
AN INTERNATIONAL JOURNAL FOR CHEMICAL SCIENCE

---

**Volume 72    Number 9    2019**

**CONTENTS**

**Essays**

Element 78 – Platinum

*T. W. Hambley*    **649**

Element 5 – Boron

*L. M. Rendina*    **652**

**Full Papers**

Novel Homogeneous and Mesoporous MnO<sub>x</sub>-Doped Ceria Nanosheets as Catalysts for Low-Temperature Selective Catalytic Reduction

*Y. Yue, Y. Wang, J. Ling, W. Sun, Z. Shen*    **657**

Effect of Structure Change on Luminescent Properties of CsPbBr<sub>2</sub>I Perovskite Nanocrystals after Heat Treatment

*J. Li, L. Wang, X. Gao*    **663**

Solubility of Cellulose in Binary Mixtures of 1-Alkyl-3-methylimidazolium Acetate and Dimethyl Sulfoxide: Influence of Alkyl Chain Length in the Cation

*Y. Tomimatsu, Y. Yoshimura, A. Shimizu*    **669**

Pd<sup>II</sup> Immobilized on Ferromagnetic Multi-Walled Carbon Nanotubes Functionalized by Aminated 2-Chloroethylphosphonic Acid with *S*-Methylisothiourea (FMMWCNTs@CPA@SMTU@Pd<sup>II</sup> NPs) Applied as a Highly Efficient and Recyclable Nanostructured Catalyst for Suzuki–Miyaura and Mizoroki–Heck Cross-Coupling Reactions in Solvent-Free Conditions

*M. S. Ghasemzadeh, B. Akhlaghinia*    **674**

Zinc-Containing Coordination Polymer as a Suitable Precursor for Solid State Synthesis of ZnO

*M. Mohammadikish, Z. Zafari, S. Torabi*    **693**

Prototropic Tautomerism and Some Features of the IR Spectra of 2-(3-Chromenyl)-1-hydroxyimidazoles

*P. A. Nikitina, T. Y. Koldaeva, V. S. Mityanov, V. S. Miroshnikov, E. I. Basanova, V. P. Perevalov*    **699**

The Effect of Solvent on the Seebeck Coefficient and Thermocell Performance of Cobalt Bipyridyl and Iron Ferri/Ferrocyanide Redox Couples

*A. Taheri, D. R. MacFarlane, C. Pozo-Gonzalo, J. M. Pringle*    **709**

Facile Preparation of Iron-Manganese Oxide@Diatomite Composite for Effective Removal of Vanadium from Wastewater

*J. Song, Z. Huang, F. Yang*    **717**