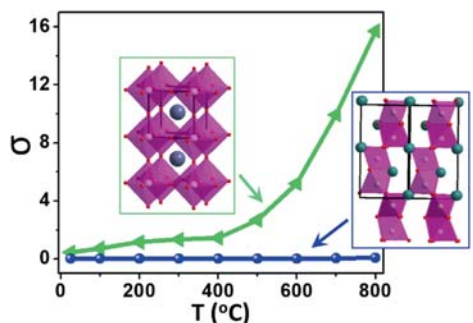


## CONTENTS

### Regular Article

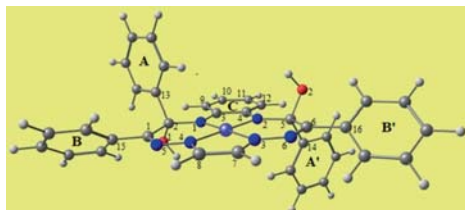


#### Structure-dependence of electrical conductivity and electrocatalytic properties of $\text{Sr}_2\text{Mn}_2\text{O}_6$ and $\text{CaSrMn}_2\text{O}_6$

Ram Krishna Hona and Farshid Ramezanipour. . . . . 109

Remarkable enhancement of the electrical conductivity and electrocatalytic activity is demonstrated as a result of the transformation of crystal structure between  $\text{Sr}_2\text{Mn}_2\text{O}_6$  and  $\text{CaSrMn}_2\text{O}_6$ .

### Regular Article

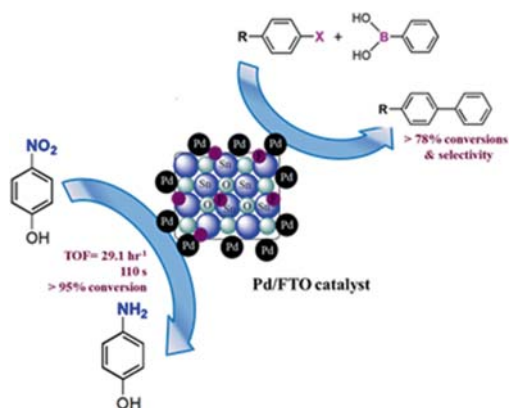


#### DFT studies on the structure and stability of tetraaza macrocyclic nickel(II) complexes containing dicarbinolamine ligand moiety

E J Padma Malar, Rebecca Jacob and S Balasubramanian . . . . . 110

Density functional theory calculations at M052X/6-311++G\*\* level explains the structure and stability of Ni(II) tetraaza macrocyclic dicarbinolamine complex.

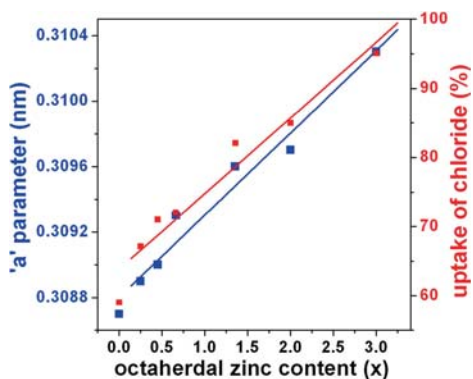
### Regular Article



#### Palladium nanoparticles supported on fluorine-doped tin oxide as an efficient heterogeneous catalyst for Suzuki coupling and 4-nitrophenol reduction

Sek Yin Mak, Kin Hong Liew, Chia Chia Chua, Mohd Ambar Yarmo, Badrul H Yahaya, Wan Zurina Samad, Mohd Suzeren Md Jamil and Rahimi M Yusop. . . . . 111

Novel Pd-supported FTO nano-powder catalyst exhibited high activity and selectivity towards C-C Suzuki coupling reaction and nitroarene reduction.

**Regular Article****Nickel-zinc hydroxy salts with varying amounts of octahedral Zn<sup>2+</sup>: trends in stability and selectivity in anion exchange reaction**

Mikhail Rajaram Kolinjavadi, Bhojaraj and Michael Rajamathi. . . . 112

The stability of Ni-Zn hydroxy acetate in alkaline medium decreases with increased octahedral substitution of Zn<sup>2+</sup>, while its selectivity for chloride in anion exchange increases.