

## On the nature of Ni...Ni interaction in a model dimeric Ni complex.

### Autorzy

Radosław Kamiński  
B. Herbaczyńska  
M. Srebro  
Antoni Pietrzykowski  
A. Michalak  
Lucjan B. Jerzykiewicz  
Krzysztof Woźniak

### Rok wydania

2011

### Czasopismo

Physical Chemistry Chemical  
Physics

### Numer woluminu

13

### Strony

10280-10284

### DOI

10.1039/c0cp01984d

### Kolekcja

Naukowa

### Język

Angielski

### Typ publikacji

Artykuł

### Streszczenie

A new dinuclear complex (NiC(5)H(4)SiMe(2)CHCH(2))(2) (2) was prepared by reacting nickelocene derivative [(C(5)H(4)SiMe(2)CH=CH(2))(2)Ni] (1) with methyllithium (MeLi). Good quality crystals were subjected to a high-resolution X-ray measurement. Subsequent multipole refinement yielded accurate description of electron density distribution. Detailed inspection of experimental electron density in Ni...Ni contact revealed that the nickel atoms are bonded and significant deformation of the metal valence shell is related to different populations of the d-orbitals. The existence of the Ni...Ni bond path explains the lack of unpaired electrons in the complex due to a possible exchange channel.

### Adres publiczny

<http://dx.doi.org/10.1039/c0cp01984d>

### Strona internetowa wydawcy

<https://www.rsc.org/>

Plik został wygenerowany dnia 2026-10-09 13:44:21

Adres w repozytorium <https://old.chem.uni.wroc.pl/pl/repozytorium/DS5a0FO>.