

BAB V

KESIMPULAN DAN SARAN

5.1 Kesimpulan

CeO₂ berstruktur kubik yang didoping dengan kation trivalen untuk mensubstitusi secara parsial Ce mengakibatkan struktur CeO₂ terdoping mengalami kekosongan oksigen. Kekosongan oksigen ini mengakibatkan struktur CeO₂ terdoping kestabilannya menurun. Gaya tolak antar dopan Lu, Ce, Er, Gd, Eu, Nd dan La dengan oksigen lebih besar dibandingkan dengan gaya tolak antar dopan Sm, Y dan Yb dengan oksigen. Oleh karena itu, penurunan kestabilan CeO₂ yang didoping dengan Lu, Ce, Er, Gd, Eu, Nd dan La lebih besar dibandingkan dengan penurunan kestabilan CeO₂ yang didoping dengan Sm, Y, dan Yb.

5.2 Saran

Dapat dilakukan penelitian lebih lanjut untuk melihat hantaran jenis ion tertinggi pada CeO₂ dengan dopan Sm³⁺, Yb³⁺ dan Y³⁺ melalui metode atomistik dan dinamika molekul.

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