Theoretical Studies of the Optical Spectra and EPR Parameters of Trigonal Yb^{3+} Center in $KMgF_3$ and $KZnF_3$ Crystals

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The optical spectra and EPR parameters of trigonal Yb^{3+} centers in $KMgF_3$ and $KZnF_3$ crystals are calculated in a unified way, based on the crystal-field theory. The results agree reasonably with the observed values. The results are discussed.

Key words: Crystal-field Theory; Electron Paramagnetic Resonance; Yb^{3+}; $KZnF_3$; $KMgF_3$.