

Intermolecular interactions and spin states of complexes [Fe(3-MeO-Qsal)₂]Y (Y = PF₆, BF₄)

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Abstract

© 2017, Pleiades Publishing, Ltd. Compounds [Fe(3-MeO-Qsal)₂]Y (Y = PF₆, BF₄) have been prepared by diffusion method and studied in temperature range 5–300 K by EPR and magnetic susceptibility methods. The coexistence of spatially separated high-spin (solvated) and low-spin (unsolvated) fractions in the studied compounds has been established. It has been shown that change in the type of outer-sphere anion leads to change in the character of intermolecular interactions in the high-spin fraction and has no effect on the parameters and character of interactions of paramagnetic centers in the low-spin fraction.

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