CONCLUSION

It has been demonstrated that analysis of the one-electron wave functions and energies calculated in the Xa approximation can provide a basis for understanding a number of the physical properties of crystalline solids, including cohesion, p-V relationships, and phase transitions. X-ray spectra and magnetic properties have also been studied in the context of this approximation, to demonstrate their relationship to the energy-band properties of materials. The extension and refinement of studies of this general nature forms one aspect of the "perspectives for calculation of electronic properties in ordered and disordered solids".

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22

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21