Asymptotics of Green functions and the limiting absorption principle for elliptic operators with periodic coefficients

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We give the asymptotics at infinity of Green functions for an elliptic operator with periodic coefficients on $\mathbf{R}^d$, in the case that the spectral parameter is close to and greater than the bottom of the spectrum of the operator. As a by-product, we can obtain the limiting absorption principle holds. The main tools are the method of Bloch representation of the fundamental solution, and the stationary phase mehtod. The results are joint work with M. Murata, Tokyo Institute of Technology.