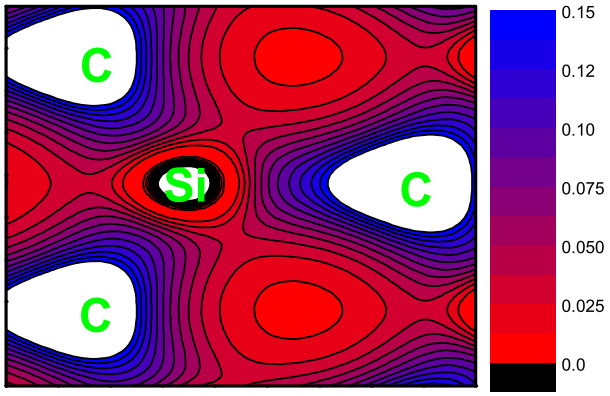

FIG. 1. (Color online) The charge density distributions of monolayer SiC (unit:|e|/bohr^3).

TABLE I. Born effective charges Z^* of Si and C atoms and the dielectric constants (ε) of monolayer SiC. They along other directions are zero except xx, yy and zz directions.

Direction	Z^*(C)	Z^*(Si)	ε
xx	-3.674	3.674	2.531
yy	-3.674	3.674	2.531
zz	-0.271	0.271	1.180

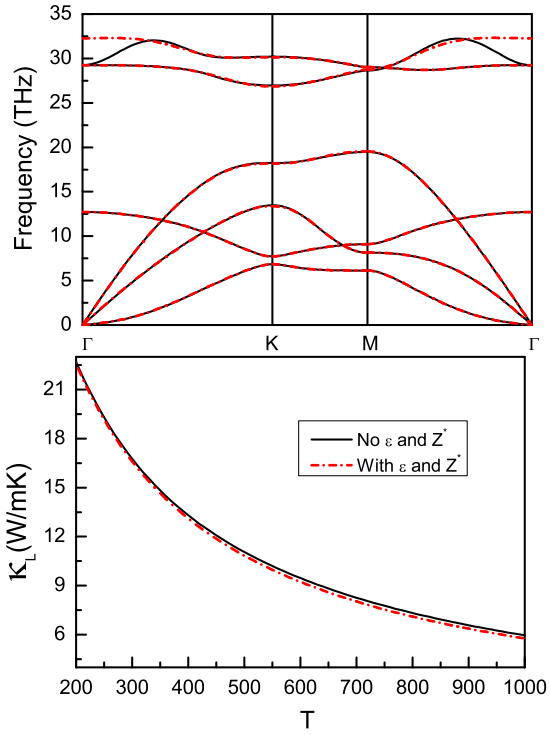

FIG. 2. (Color online) The phonon band structures (Top) and lattice thermal conductivity (Bottom) of monolayer SiC with or without the dielectric constants ε and Born effective charges Z^*.