electronic resonance of the two-level atom. The frequency of the incident wave is so chosen that the third size-related resonance (in the order of increasing wavenumbers, counting only those resonances allowed by the symmetry of the problem; for more detail see [2]) is excited in each dimension. Eight distinct vortices of the LF are visible in the plot. Fig. 4 only shows the imaginary parts of the complex field amplitudes, because they are dominant for each of the resonant locsitons. (We would like to note that a pair of vortices, apparently consistent with 2D-locsiton patterns originated by the 1-st locsiton resonance in our classification, was very recently observed in numerical simulations of plasmonic excitations in a 2D lattice of small metallic particles [17].)

B. "Magic shapes"

As we noted in Sec. III A, the LF is "pushed out" of the lattice of strongly interacting dipoles at the exact atomic resonance [see Eq. (10)]. This effect, which we call the resonant LF suppression, represents a typical LF behavior at the atomic resonance; it is not limited to 2D lattices, but also occurs in 1D arrays of interacting atoms [1, 2] and in many finite 2D structures. We have shown earlier that in the 1D case, if a linear array of atoms is of a certain "magic size", one encounters a *cancellation* of the resonant LF suppression, where one of the size-related locsitonic resonances partially restores the LF in the system [1, 2].

Finite 2D lattices and similar small systems of resonant atoms provide especially interesting examples of cancellation of the resonant LF suppression. Unlike in 1D arrays of atoms, the "restoration" of the LF in such systems at $\delta = 0$, compared to that in the uniform, Lorentz, case, can be more complete (up to 100%). Like in the 1D case [1, 2], the 2D "magic shapes" have a certain "cabbalistic" streak. For example, in the NNA the effect is most pronounced only in a system of $N = 13$ atoms arranged as an equilateral six-point star with an atom at the center, for which the maximum restoration of the LF is reached, $E_{\max}/E_{\text{in}} \approx 1.02$. The directions and relative amplitudes of the LF at the atoms in this system are shown in Fig. 5(a) for $\mathbf{E}_{\text{in}} \parallel \mathbf{u}_{\text{K}}$ and in Fig. 5(b) $\mathbf{E}_{\text{in}} \perp \mathbf{u}_{\text{K}}$. It is very notable that the system is "magic" for both orientations of the incident field. One can see from the picture that the LF is concentrated on the outermost atoms and the one at the center, while the LF at the inner hexagon of atoms is almost completely suppressed. This suppression is a manifestation of a special case of a locsiton standing eigenwave in a finite discrete atomic