authors have reached similar conclusions for other types of aperiodic structures [23]. This observation motivated the current study. However, due to the fact that the physics is different for the two problems, the performance of the structures in Fig. 1 could not be predicted from previous results. The absorption in free-standing nanowire arrays depends on the degree to which the structure scatters the normally-incident light into in-plane optical modes. For nanorod surface textures (Fig. 1), we are not directly concerned with in-plane scattering, but only the extent to which the structure reduces reflection. Moreover, the reflection properties of the current system cannot be inferred from previous results and must be studied numerically using large-scale simulations.

Another related system consists of nanorod structures fabricated on thin substrates, or thin-film solar cells [10, 24]. We expect that harnessing structural randomness can significantly increase the device performance of thin film cells with nanostructured surface texturing. Further simulations are required to test this hypothesis.

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