**Fig. S1.** Scanning electron micrographs and Fourier transforms of oblique sectioned green-colored feather barbs of a Panama amazon feather (compare Fig. 4). (A, B) Two different regions of a barb showing the inside of the spongy cells. (C, D) Power spectrum of the spongy cells of (A, B) calculated with a fast Fourier transform (FFT) using ImageJ (Schneider et al., 2012). The ring-like distribution around the centre indicates a quasi-periodic order of the spatial features (Stavenga et al., 2011; Saranathan et al., 2012). Scale bar: 2 µm (A,B). In C and D, the unit distance represents a spatial frequency of 5 µm⁻¹.

**Supplementary References**