

Visible light focusing flat lenses based on hybrid dielectric-metal metasurface reflector-arrays

Supplementary information

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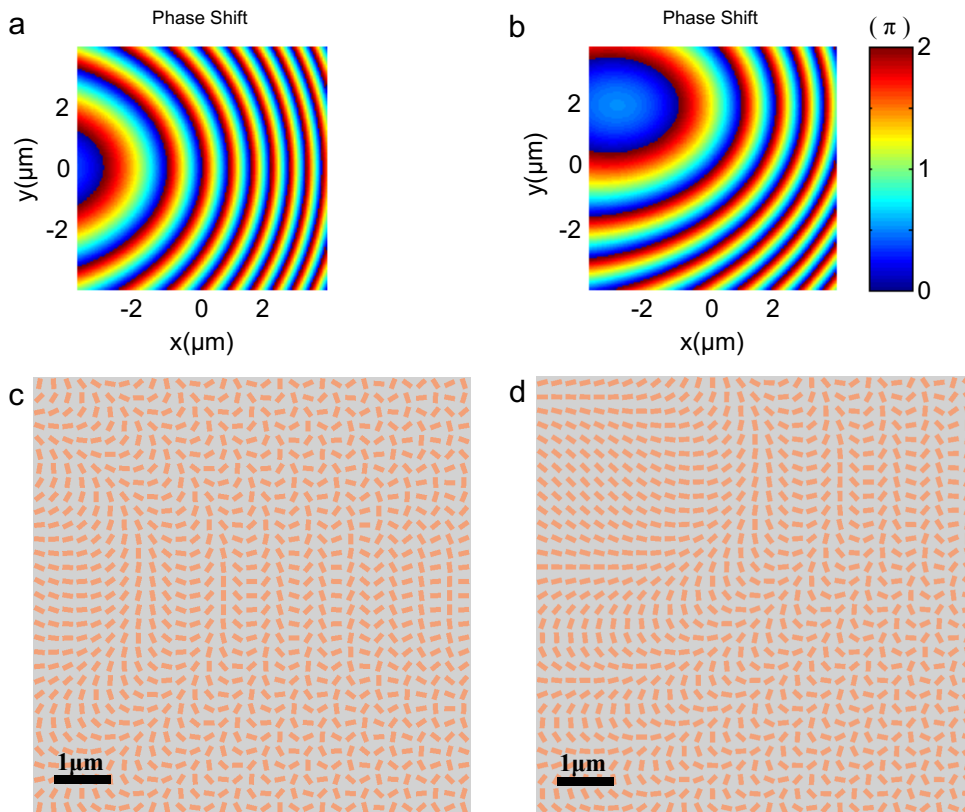


Figure S1. The ideal phase shift distribution of the designed lens to focus at (a) central position ($x=0$, $y=0$) and (b) arbitrary position ($x=2 \mu\text{m}$, $y=2 \mu\text{m}$) in the x - y plane. (c and d) Corresponding structure of the flat lens.

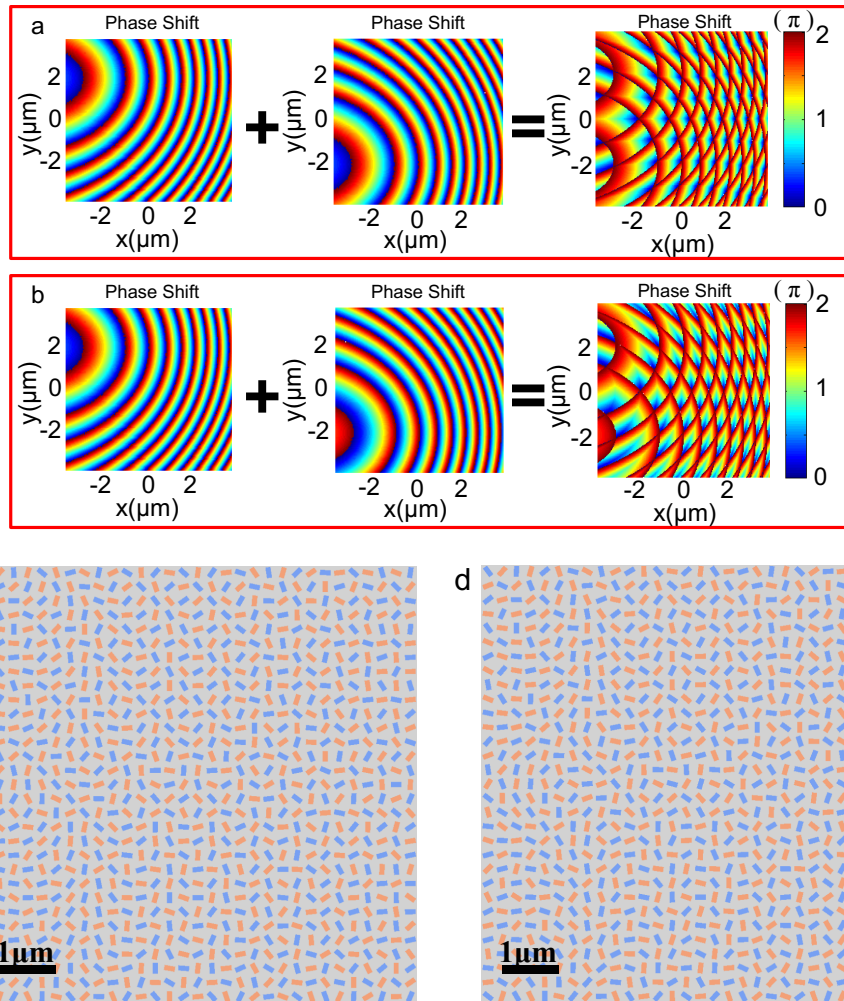


Figure S2. Illustration of the formation principle of the composited lens's phase shift distribution for multifocal focusing with the (a) same and (b) opposite chirality. (c and d) Corresponding structure of the flat lens.

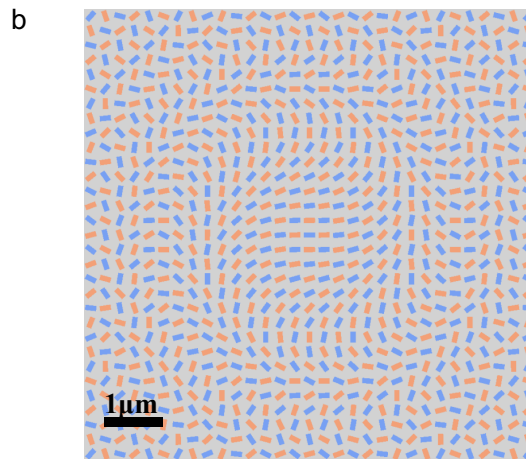
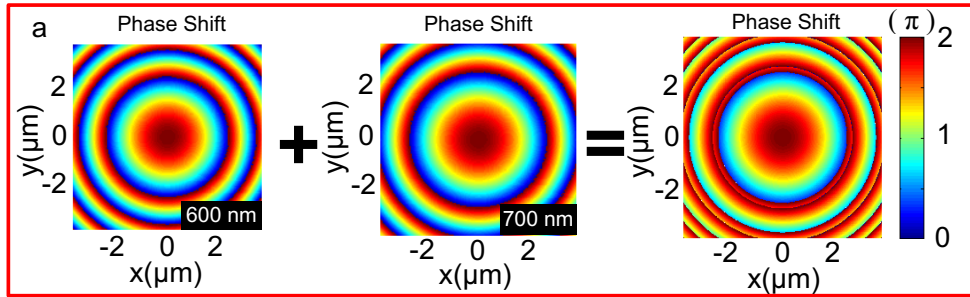


Figure S3. (a) Illustration of the formation principle of the achromatic lens's phase shift distribution. (b) Corresponding structure of the flat lens.