Supporting Information

for

Hierarchically structured superhydrophobic flowers with low hysteresis of the wild pansy (*Viola tricolor*) – new design principles for biomimetic materials

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Additional figures

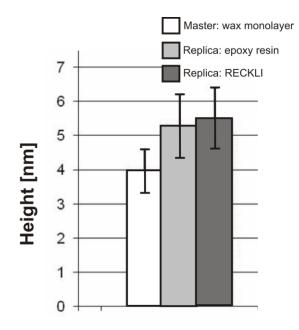


Figure S1: Replication of an octacosanol wax crystal multilayer with steps of 4 nm height. – Moulding performance of the replication material RECKLI compared to the replication performance of epoxy resin used in Koch et al. 2008 [1]. Measurements were performed by atomic force microscopy (n = 10).

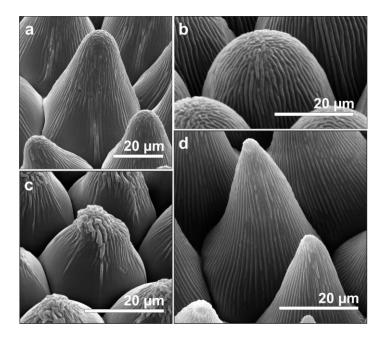


Figure S2: SEM micrographs of single epidermal cells and their cuticular folding on top: (a) *Cosmos*, (b) *Dahlia*, (c) *Rosa* and (d) *Viola*.

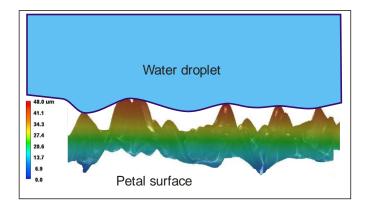


Figure S3: Schematic of the proposed wetting state of a water droplet on a 3d microscopy scan of the surface of a *Viola* petal (Cassie-Baxter state) when a water droplet is in contact with the surface of a *Viola* petal.

References

1. Koch, K.; Dommisse, A.; Barthlott, W.; Gorb, S. N. Acta Biomater. 2007, 3,

905-909. doi:10.1016/j.actbio.2007.05.013