Omni-directional Light Capture in PERC Solar Cells Enhanced by Hierarchical Structured Silicone Encapsulation that Mimic Leaf Epidermis

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Supporting Information



Figure S1. SEM micrographs of PDMS surface after silane treatments with conditions of (a) 0.04ml, 3hours, (b) 0.4 ml, 3hours and (c) 0.4ml, 5hours



Figure S2. SEM micrographs of PDMS after ozone treatment for (a) 10 minutes, (b) 30 minutes and (c) 60 minutes.



Figure S3. The variation of energy conversion efficiency according to AOI for (a) Struct. 1, (b) Struct. 2, (c) Struct. 3, (d) Struct. 4 and (e) Struct. 5 patterned PDMS encapsulated PERC solar cells.



Figure S4. The variation of short circuit current density according to AOI for (a) Struct. 1, (b) Struct. 2, (c) Struct. 3, (d) Struct. 4 and (e) Struct. 5 patterned PDMS encapsulated PERC solar cells.