Journal Name



ARTICLE

Received 00th January 20xx, Accepted 00th January 20xx

DOI: 10.1039/x0xx00000x

www.rsc.org/

Characterization of Polypropylene/Hydrogenated Styrene-Isoprene-Styrene Block Copolymer Blends and Fabrication of Micro-pyramids via Micro Hot Embossing of Blend Thin-films

Guiyang Jiang,^a Chunwei Wang,^a Zijin Liu,^a Yinghao Zhai,^a Yong Zhang^{*, a} Jie Jiang,^b Nobuhiro Moriguchi,^b Jun Zhu,^b Yoshihiro Yamana^b

Additional Supporting Information:

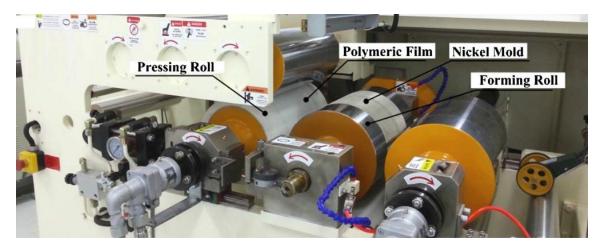


Figure S1 R2R micro hot embossing machine used for the fabrication of embossed PP/HYBRAR blend reflective thin-films

^a School of Chemistry and Chemical Engineering, State Key Laboratory for Metal Matrix Composite Materials, Shanghai Jiao Tong University, Shanghai 200240, People's Republic of China.

E-mail: yong_zhang@sjtu.edu.cn

^{b.} Elastomer Department, Kuraray Co., Ltd., Tokyo 100-8115, Japan. †Electronic Supplementary Information (ESI) available: [[The R2R micro hot embossing machine used for the fabrication of reflective thin-films]. See DOI: 10.1039/x0xx00000x

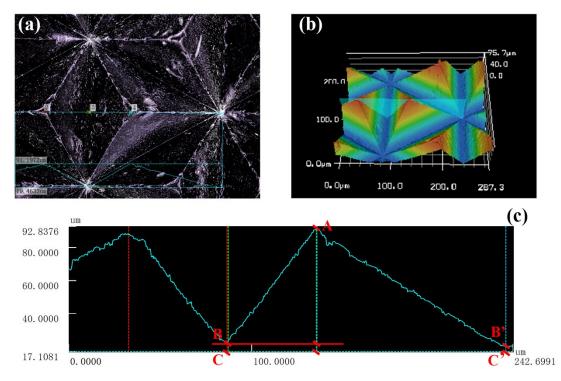


Figure S2 Schematic diagram of the measurement of the height of micro-pyramids on the embossed thin-films.

As shown in Figure S2, the micro-pyramids on embossed thin-films are not perfect and there is usually some extra polymer at the bottom of micro-pyramids. We chose point B(B'), which is the common bottom of two adjacent pyramids, as the reference point (zero point) of the right pyramid. And the perpendicular height between A and B(B') rather than A and C(C') is the height of pyramids. Average value of AB and AB' is the height of this micro-pyramid. we also measured the heights of other three pyramids in Fig. S2a. Average height of all these pyramids is the final height of this position. For those pits on the surface of mold, their shapes are uniform and perfect. As a result, perpendicular height between A and B is same with that between A and C as B coincide with C. For every sample, we chosen three random positions and the average value of their height is the final height of this sample.