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Electronic Supplementary Information

Low cost and highly conductive elastic composites for flexible and printable electronics

Yougen Hu,[a,b] Tao Zhao,[a] Pengli Zhu,*[a] Yu Zhu,[a,c] Xingtian Shuai,[a] Xianwen Liang,[a] Rong Sun,*[a] Daoqiang Daniel Lu*[a], Ching-Ping Wong[d,e]

a Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, Shenzhen 518055, China.. E-mail: pl.zhu@siat.ac.cn
b University of Chinese Academy of Sciences, Beijing 100049, China.
c Nano Science and Technology Institute, University of Sciences and Technology of China, Suzhou 215123, China
d Department of Electronic Engineering, The Chinese University of Hong Kong, Hong Kong, China
e School of Materials Sciences and Engineering, Georgia Institute of Technology, Atlanta, Georiga 30332, USA

*Corresponding author

E-mail: pl.zhu@siat.ac.cn;

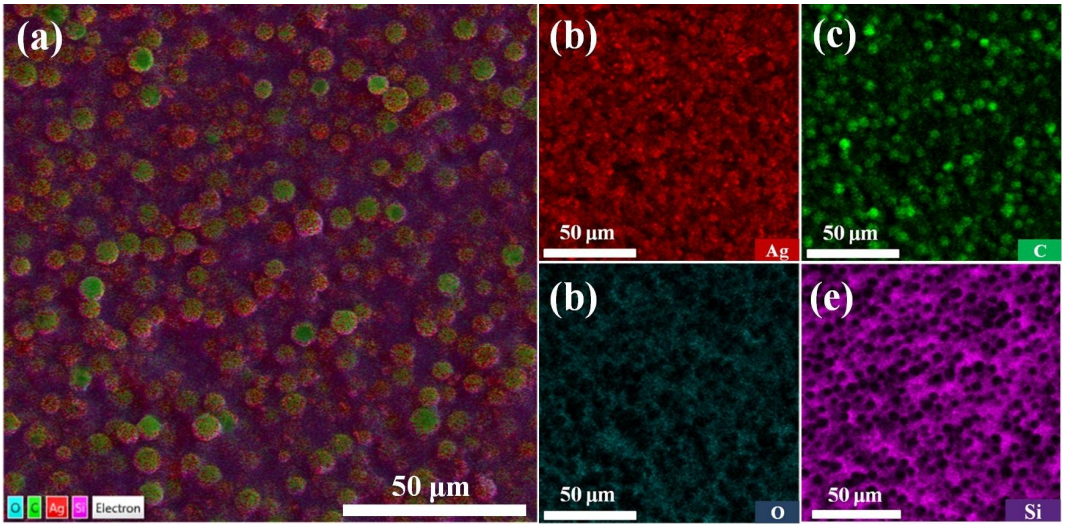

Fig. S1 Elemental mapping images of the cross-section of PS@Ag/PDMS composites.

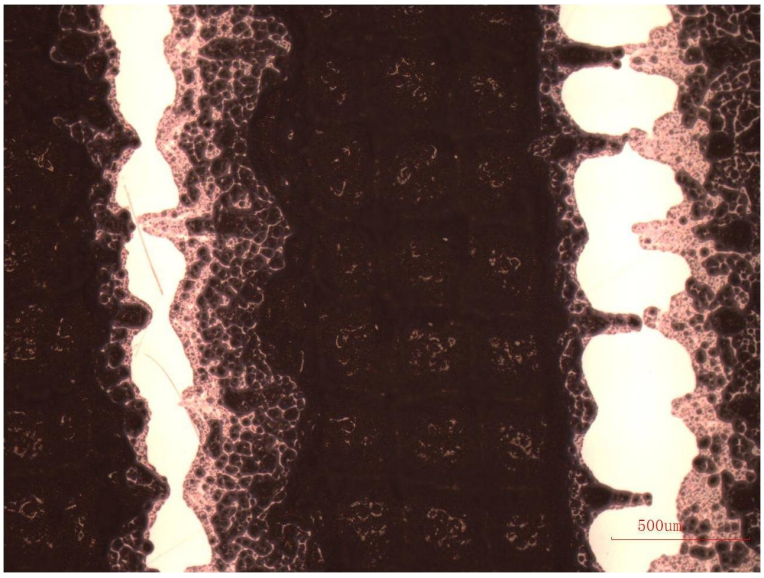

Fig. S2 An example of failing PS@Ag/PDMS printed patterns with low filler loading (40 wt%) by screen printing on glass substrate.

Fig. S3 Photographic images of the PS@Ag/PDMS conductive paste with moderate filler loading (60 wt%).

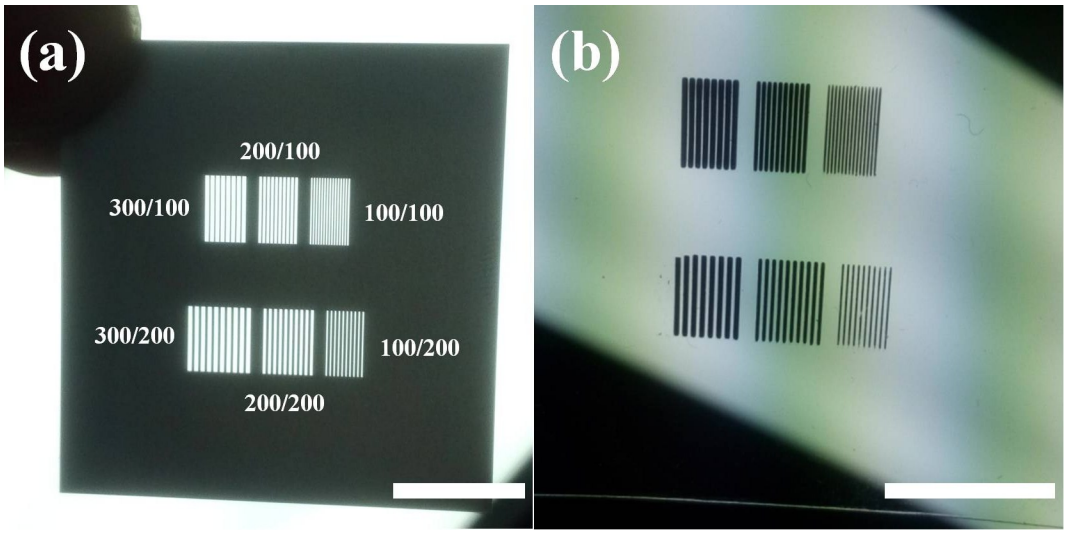

Fig. S4 (a) Photo of the customized stainless steel shadow mask with various ratios of line width to line spacing (W/S, μm/μm); and (b) Photo of the printed PS@Ag/PDMS patterns on PET film substrate using the shadow mask. The scale bar is 1 cm.

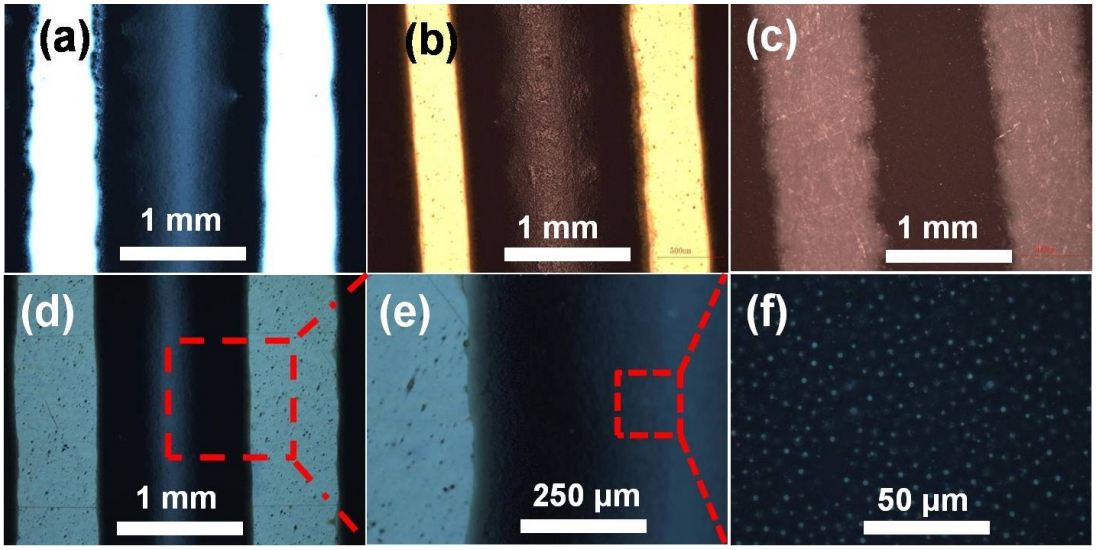

Fig. S5 Optical microscope images of the screen printed elastic conductive patterns of PS@Ag/PDMS on various substrates: (a) glass; (b) PI film; (c) paper and (d-f) PDMS under different amplifications, respectively.

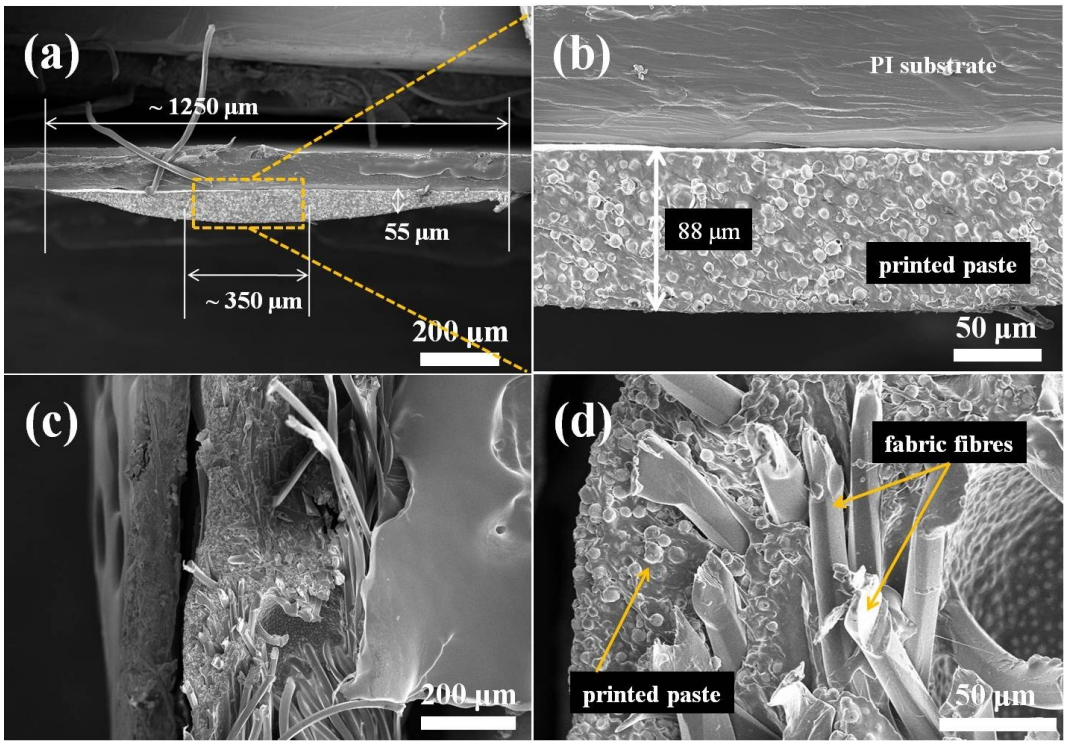

Fig. S6 The cross sectional SEM images of the PS@Ag/PDMS paste printed on various substrates by screen printing. (a) and (b) PI film; (c) and (d) woven textile.