Electronic Supplementary Material (ESI) for Journal of Materials Chemistry C. This journal is © The Royal Society of Chemistry 2017

Supplementary information

Selective Photonic Sintering of Ag Flakes Embedded in Silicone Elastomers to Fabricate Stretchable Conductors

Youngsu Oh, ^{ab} In Seon Yoon, ^{ab} Chihak Lee, ^{ab} Sun Hong Kim, ^a Byeong-Kwon Ju, ^{*b} and Jae-Min Hong ^{*ac}

^a Photo-Electronic Hybrids Research Center, Korea Institute of Science and Technology, Seoul 02792, Republic of Korea

^b Display and Nanosystem Laboratory, College of Engineering, Korea University, Seoul 02841, Republic of Korea

^c KIST School, Korea University of Science and Technology, Seoul 02792, Republic of Korea

Corresponding authors: jmhong@kist.re.kr; bkju@korea.ac.kr

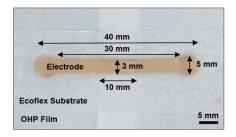


Fig. S1 Schematic showing details of the size of the printed conductor.

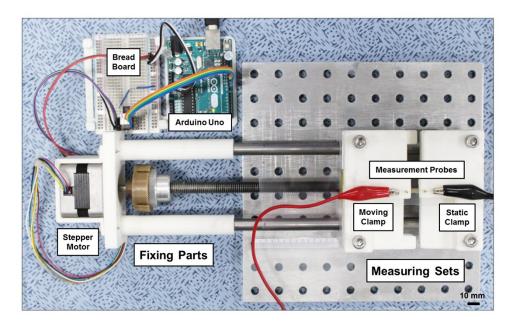


Fig. S2 Photograph of the strain test setup.

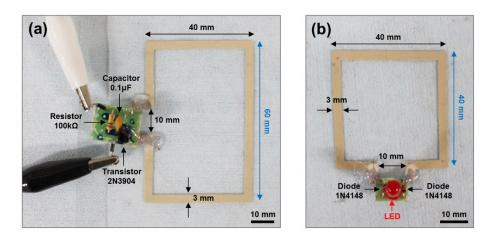


Fig. S3 Wireless power transfer circuits fabricated for (a) the transmitter, and (b) the receiver.

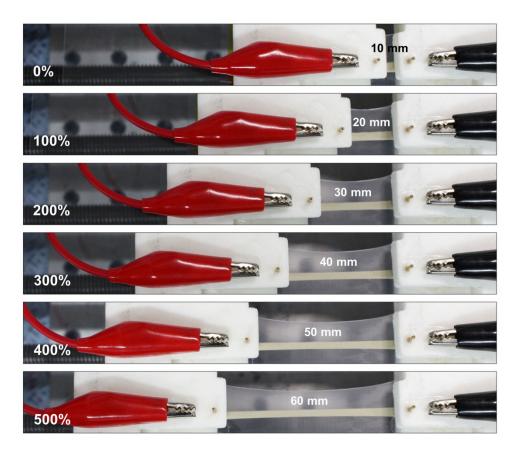


Fig. S4 Stretching of the stretchable conductor fabricated by photonic sintering.

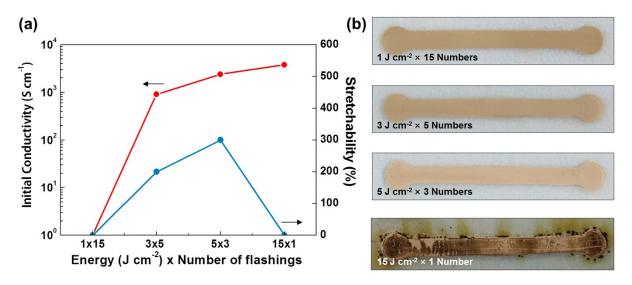


Fig. S5 (a) Comparison of the effects of the irradiation energy and the number of flashings. (b) Photographs of the conductors under various sintering conditions.

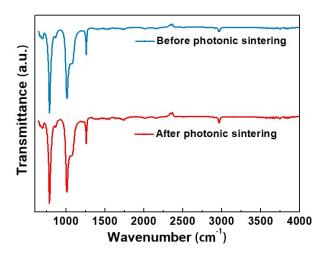


Fig. S6 FTIR analysis of Ecoflex before and after photonic sintering.