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Electronic Supplementary Information

One-step surface modification for irreversible bonding of various plastics with poly(dimethylsiloxane) elastomer at room temperature

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Plastic-plastic assembly Plastic-PDMS assembly Pulling Pulling direction Front view Side view direction Front view Side view **PDMS** РС Bonded area Plastic PC Pulling Pulling direction

Fig. S1. Illustrations and photos showing experimental setups for bond strength measurement for plastic–plastic assembly (in this case, PC) and plastic (PC)–PDMS assembly.

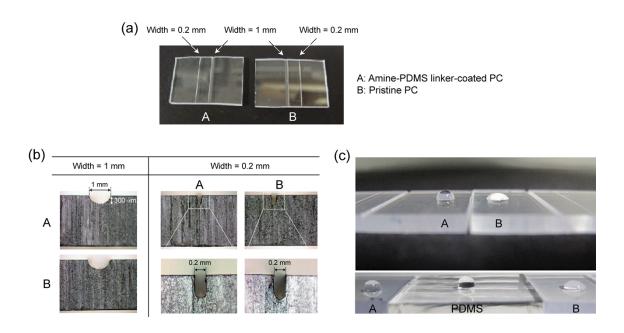


Fig. S2. (a) A photo showing pristine and amine-PDMS linker-coated PC engraved with two microchannels in parallel with 0.2 mm and 1 mm in width. (b) Optical microscope images showing the surface profiles before (B) and after (A) coating the PC with amine-PDMS linker. (c) Photos showing water contact angles measured on a pristine PC (B), amine-PDMS linker-coated PC (A), and PDMS.