Electronic Supplementary Material (ESI) for Soft Matter.

Supporting Information

Poly(*N*,*N*-dimethyl)acrylamide-based Ion-conductive Gel with Transparency, Self-adhesion and Rapid Self-healing Properties for Human Motion Detection

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Supplementary Results

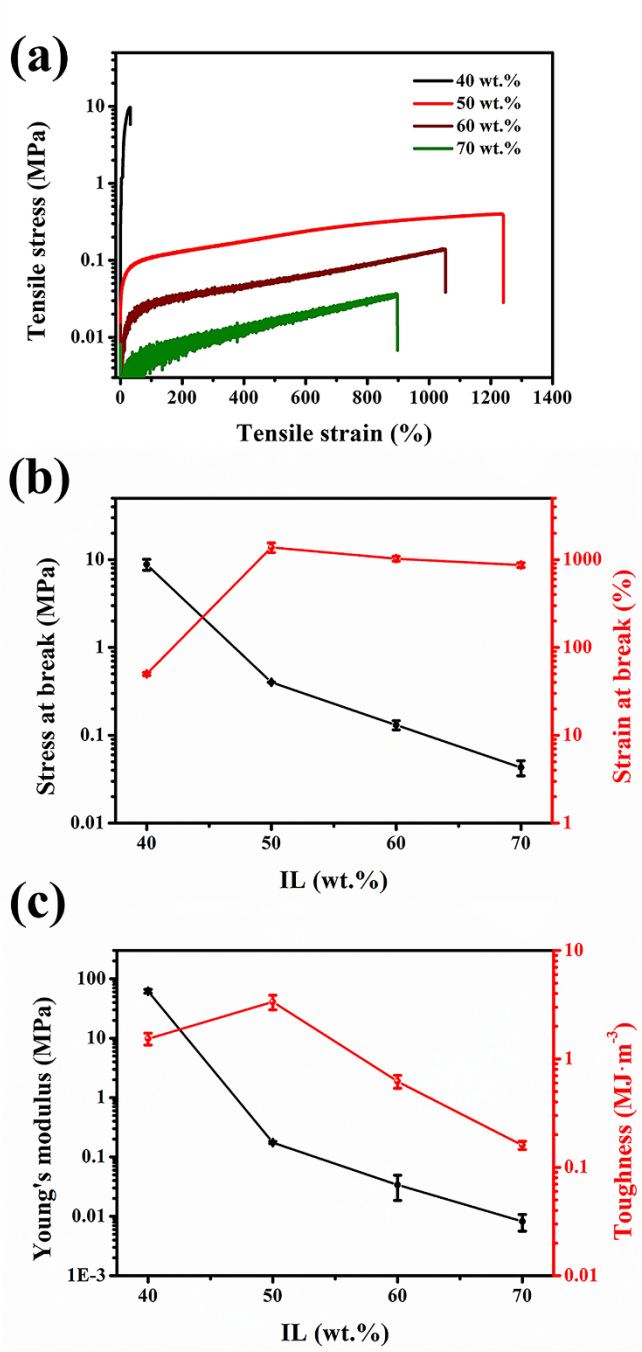


Fig. S1 (a) Tensile testing stress−strain curves, (b) stress at break and strain at break, (c) Young's modulus and toughness of the PDMA ion-conductive gels with various [BMIM][Tf_2N] contents. Error bars represent the standard deviation (n = 3).

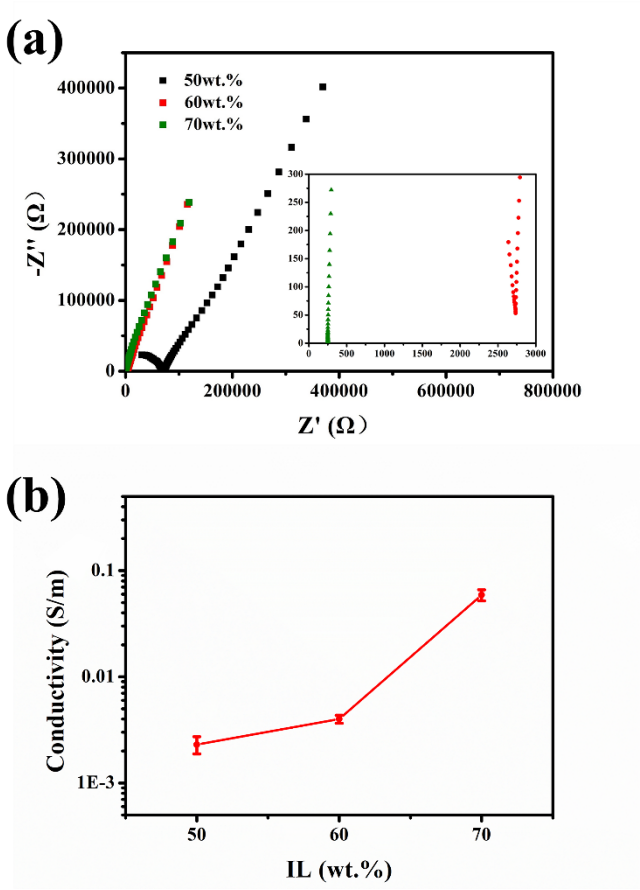


Fig. S2 (a) Nyquist plots of impedance spectra and (b) electrical conductivity of the ion-conductive gels with different [BMIM][Tf_2N] contents. Error bars represent the standard deviation (n = 3).

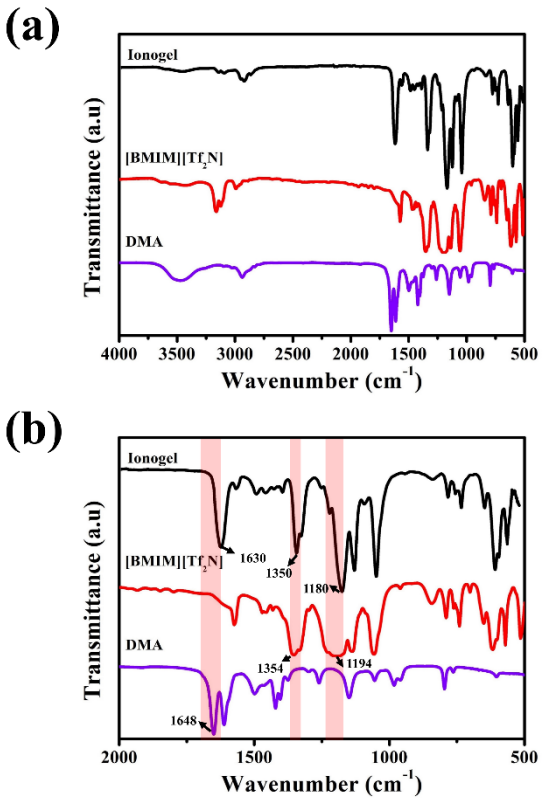
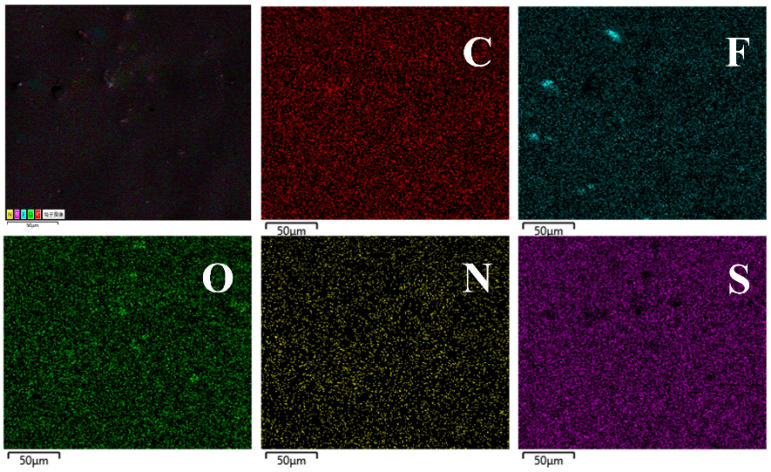


Fig. S3 FTIR spectra of DMA, [BMIM][Tf_2N] and ion-conductive gel. (a) Full spectra and (b) expanded spectra.



Element	wt%	At%
C	43.59	53.75
N	11.12	11.76
O	14.98	13.87
F	20.82	16.24
S	9.48	4.38
Sum	100.00	100.00

Fig. S4 EDS image and data of the ion-conductive gel.

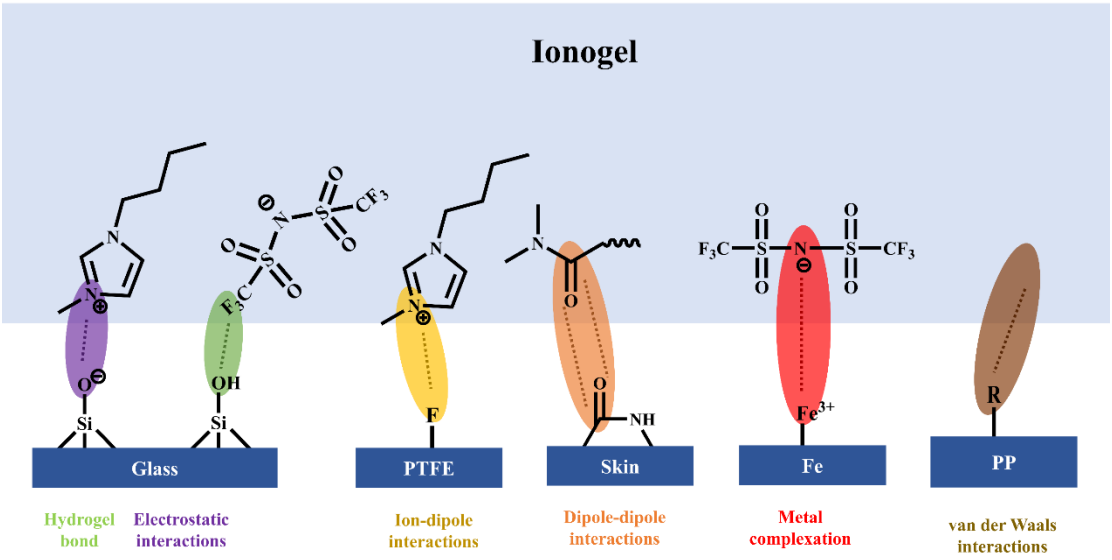


Fig. S5 Possible adhesion mechanism of ion-conductive gels on different substrate surfaces.