

Supplementary Content

**EPDM/MVQ polymer blends based magnetorheological
elastomer with good mechanical and thermostability
performances**

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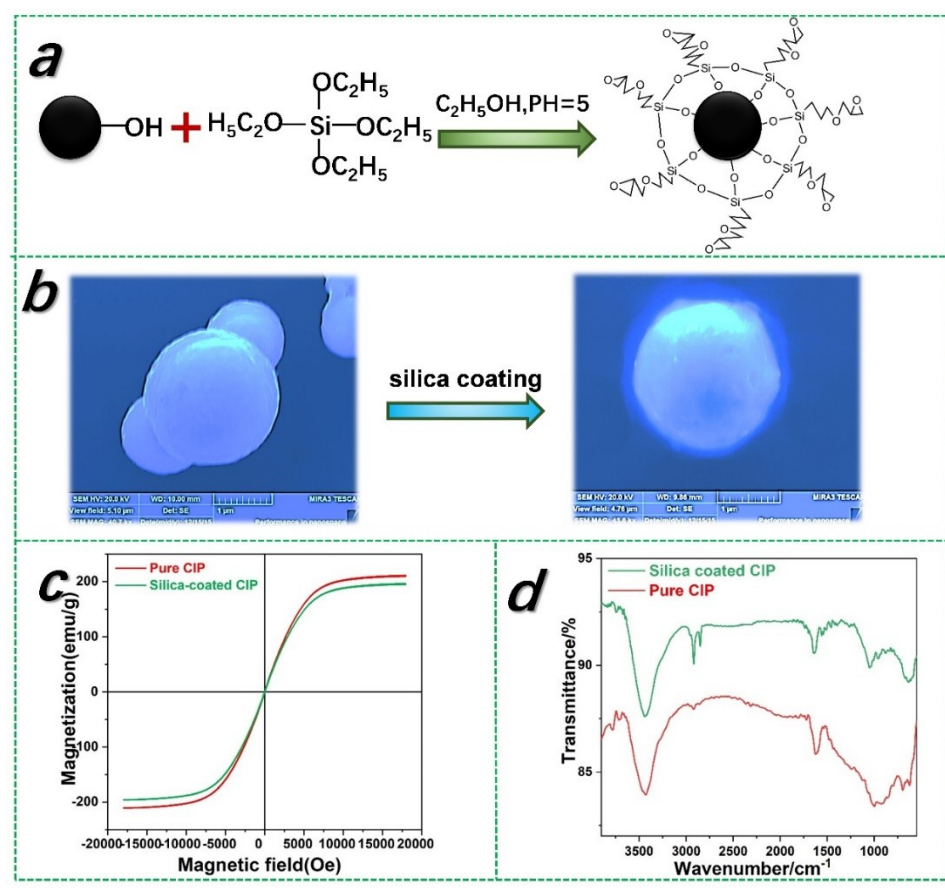


Fig. S1. *Synthesis and characterization of silica-coated CIPs.* (a) Schematic of the coating process of silica on the CIPs; (b) Scanning electron micrographs of pure and silica-coated CIPs; (c) Magnetization curves (magnetic moment per unit mass) of pure and silica-coated CIPs; (d) FT-IR spectra of pure and silica-coated CIPs

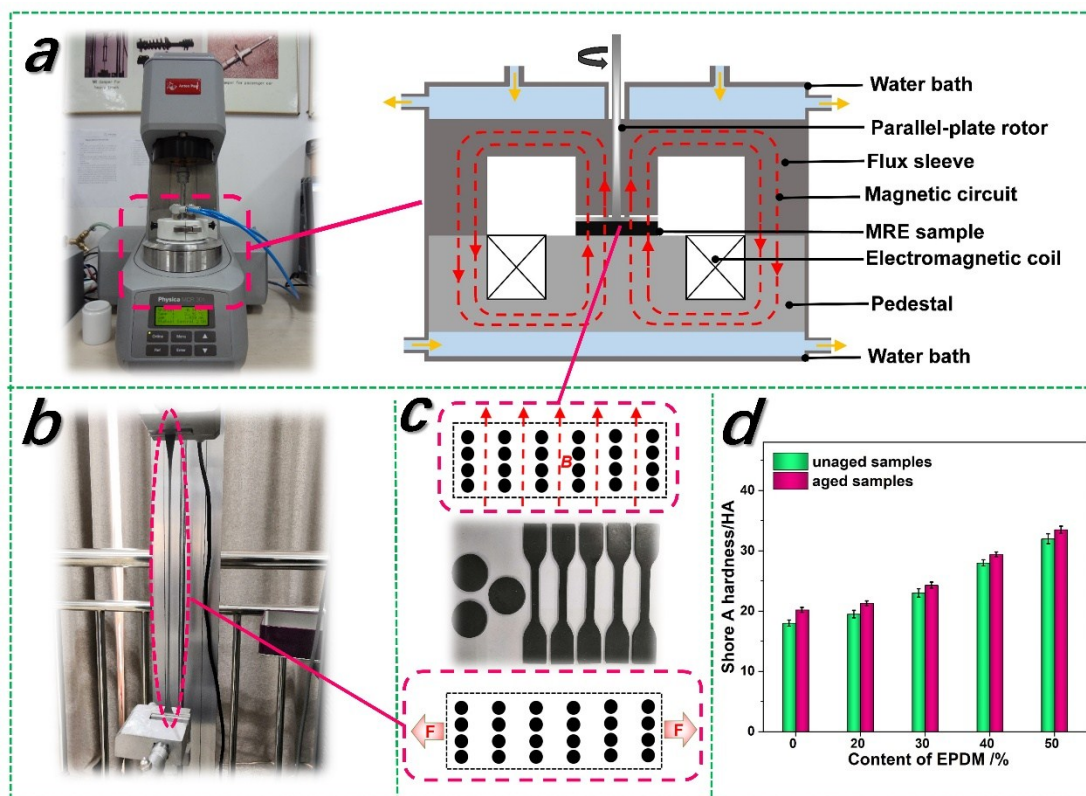


Fig. S2. (a) Photograph and schematic of the rheometer; (b) Photograph of the extension test; (c) Schematic of tests and photograph of the disc and dumbbell samples for the static and dynamic mechanical test; (d) The influences of EPDM content and thermal aging on shore A hardness

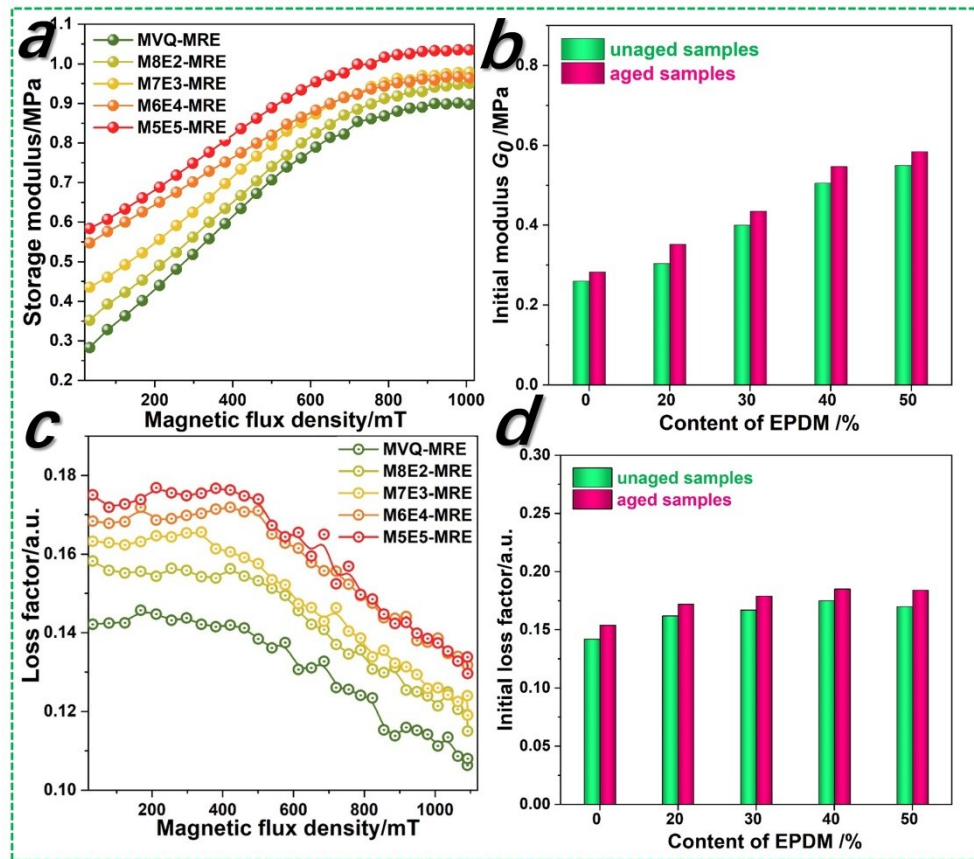


Fig. S3. *Magneto-induced properties of aged MRE samples.* (a) Dependence of storage modulus on magnetic flux density; (b) Dependence of loss factor on magnetic flux density; (c) The influences of EPDM content and thermal aging on initial storage modulus; (d) The influences of EPDM content and thermal aging on initial loss factor