

Supplementary Information

Micro-transfer patterning of dense nanoparticle layers: roles of rheology, adhesion and fracture in transfer dynamics

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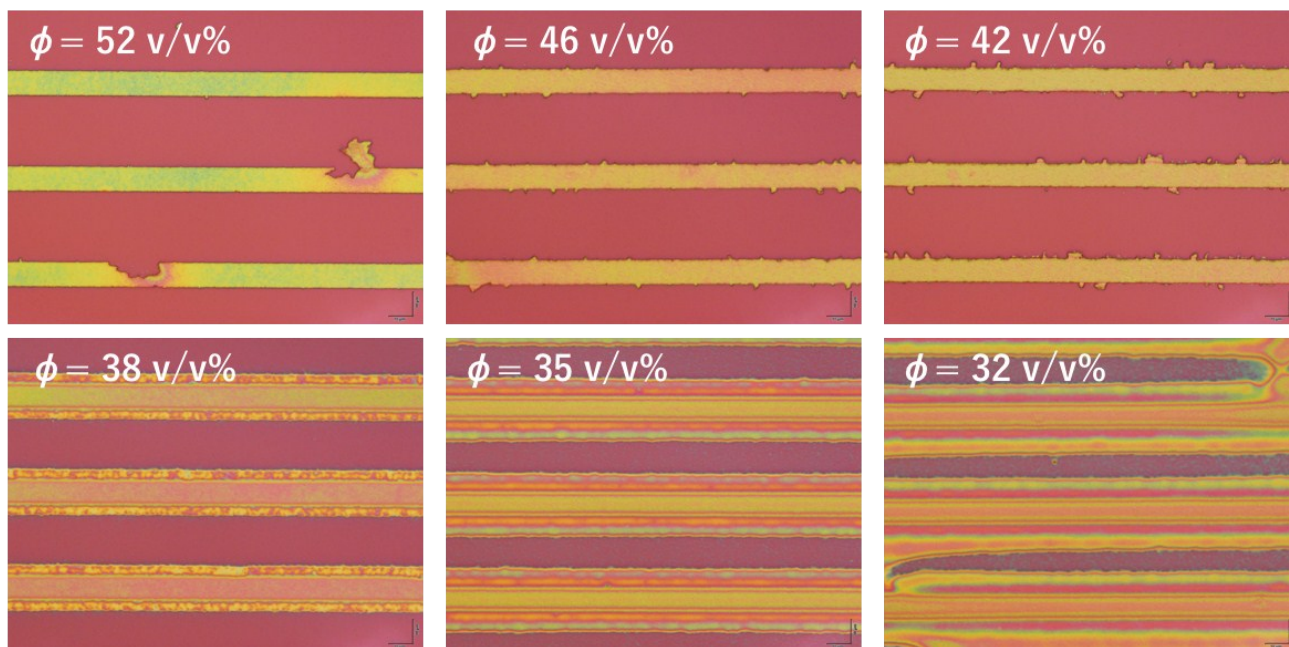


Fig. S1. Microscopic images of the ROP-processed BaTiO₃ patterns with $L/S = 10/30 \mu\text{m}$. The thickness of the BaTiO₃ pattern was ranged from 350 to 550 nm.

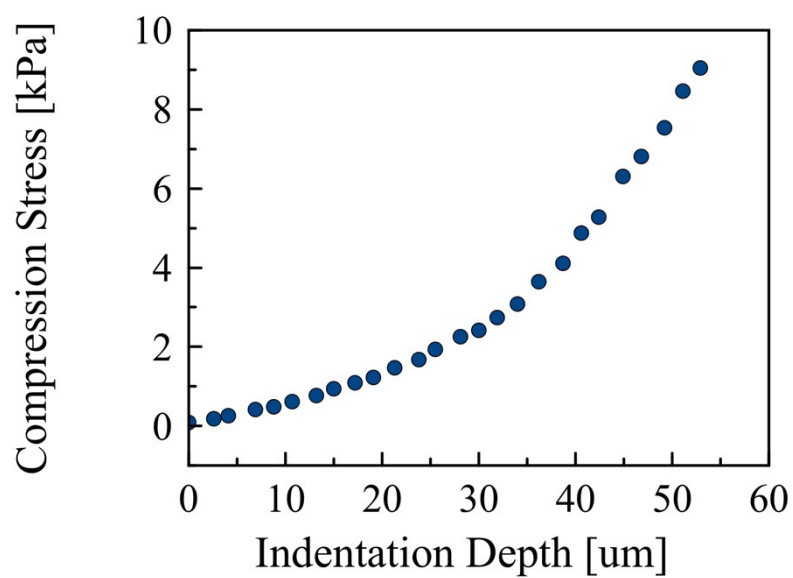


Fig. S2 Compressibility of the blanket used in the ROP patterning tests, measured at an indentation speed of 2 $\mu\text{m/s}$.

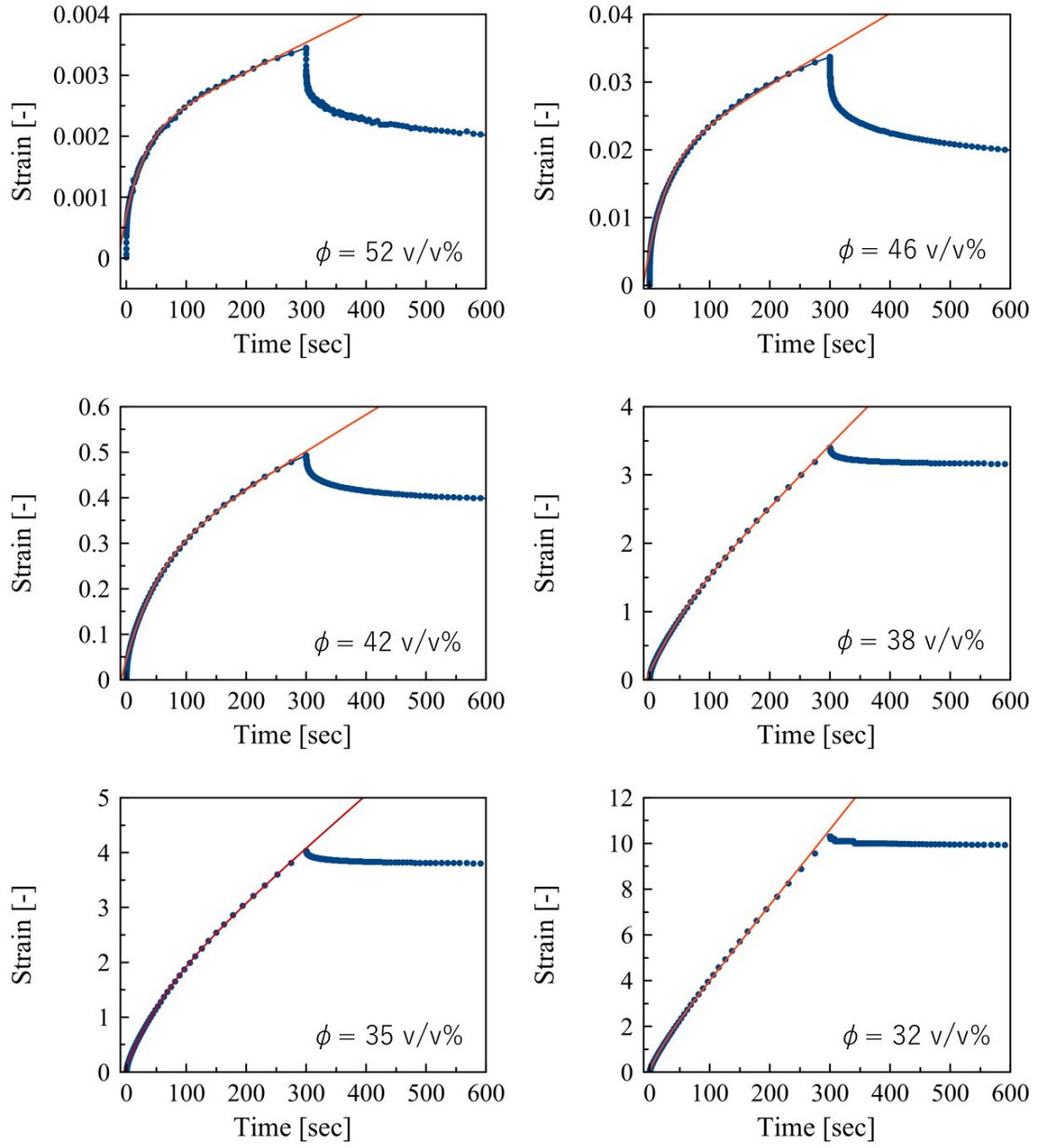


Fig. S3 Creep curves of the mill-bases with different volume fractions (blue circles) and their fitting curves to the Burgers model (red lines).

Table S1. Values of the Burgers elements estimated from the creep tests shown in Fig. S3.

Volume fraction ϕ	G_1 [kPa]	G_2 [kPa]	η_1 [Pa s]	η_2 [Pa s]	t_2 [sec]
0.52	70	37	1.0×10^7	1.2×10^6	33
0.46	9.5	3.6	9.5×10^5	1.3×10^5	35
0.42	1.1	0.23	6.3×10^4	1.3×10^4	68
0.38	0.43	0.07	5.6×10^3	5.1×10^3	68
0.35	0.42	0.05	5.2×10^3	3.1×10^3	68
0.32	0.62	0.08	1.5×10^3	2.1×10^3	26