



PDMS/TiO₂ and PDMS/SiO₂ Nanocomposites: Mechanical Properties' Evaluation for Improved Insulating Coatings

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Table S1. Reaction efficiency of the sol-gel method for TiO₂ nanoparticles.

#	Date	C ₃ H ₇ OH (ml)	C ₁₂ H ₂₈ O ₄ Ti (ml)	H ₂ O (ml)	TiO ₂ (g)
1	21/09/2020	142	14	142	3.643
2	12/10/2020	142	14	142	3.489
3	21/06/2021	142	14	142	3.895

Table S2. Reaction efficiency of the sol-gel method for SiO₂ nanoparticles.

#	Date	H ₂ O (ml)	C ₂ H ₅ OH (ml)	TEOS (ml)	SiO ₂ (g)
1	22/09/2020	1.2	4 ml	3.78	0.316
2	23/09/2020	2.4	8 ml	7.56	0.661
3	12/10/2020	3.6	12 ml	11.3	2.543
4	23/06/2021	7.1	24 ml	22.6	4.102

Table S3. Composite crosslinking performance results.

NPs (%)	TiO ₂ (%)		SiO ₂ (%)	
0	95.40	± 0.31	95.4	± 0.31
2	95.44	± 0.30	95.94	± 0.25
4	95.55	± 0.22	95.84	± 0.29
8	95.54	± 0.13	96.05	± 0.39
10	95.73	± 0.21	95.94	± 0.11