Highly reactive soybean oil-based superhydrophobic polyurethane film with long-lasting antifouling and abrasion resistance

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Sample	Polyol (g)	IPDI	OH-PDMS-	OTMS/	DMF	DBTDL
		(g)	OH (g)	$SiO_2(g)$	(g)	(g)
PU-0	1	0.252	0	0	1.5	0.01
10%P/PU	1	0.436	0.1	0	1.5	0.01
20% P/PU	1	0.620	0.2	0	1.5	0.01
30% P/PU	1	0.804	0.3	0	1.5	0.01
10%O/Si-20% P/PU	1	0.620	0.2	0.182	1.5	0.01
20%O/Si-20% P/PU	1	0.620	0.2	0.364	1.5	0.01
30%O/Si-20% P/PU	1	0.620	0.2	0.546	1.5	0.01

 Table S1. Formulation of polyurethane preparation

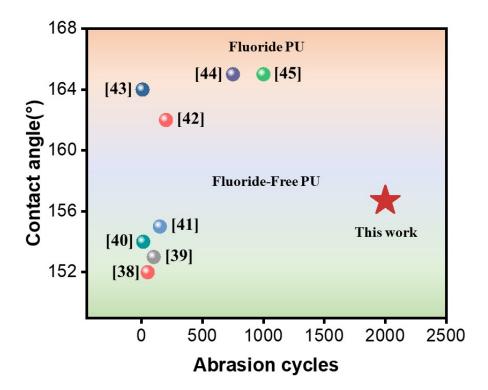


Figure S1. The sample maximum contact angle and superhydrophobic retention performance in sandpaper friction cycle tests, comparison of the article with existing literature reports.

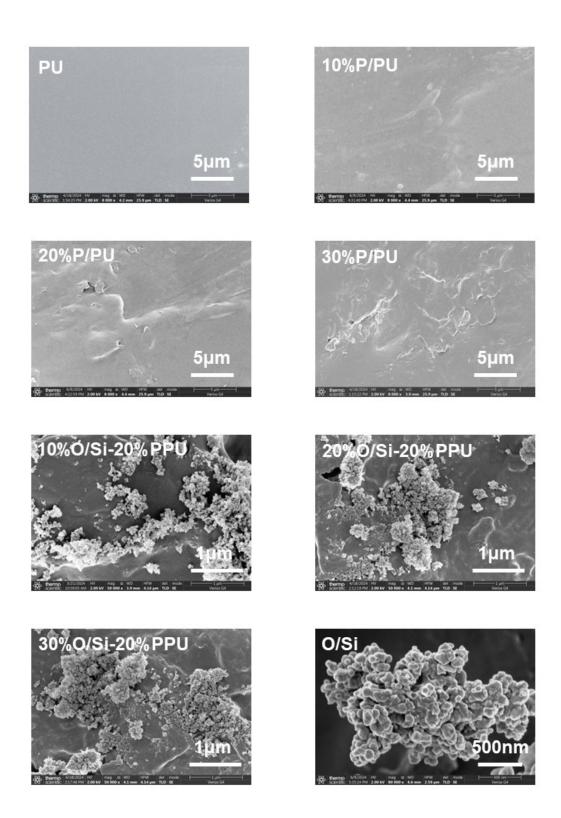


Figure S2. The results of the SEM tests for all experimental groups.

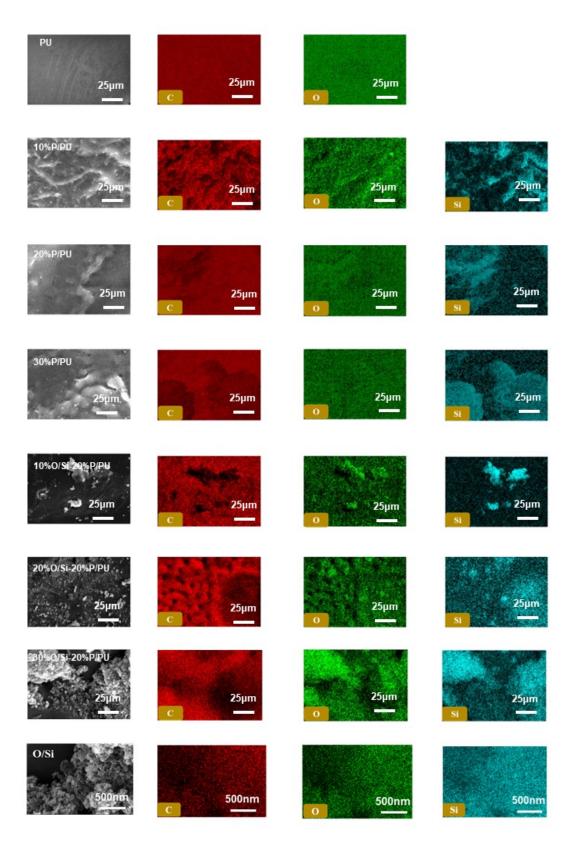


Figure S3. The results of the EDS tests for all experimental groups.

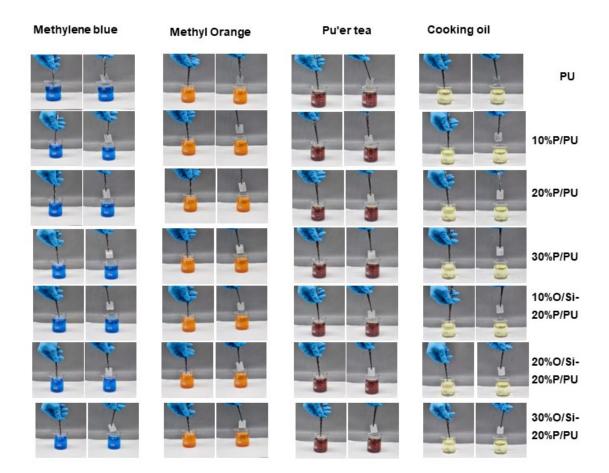


Figure S4. The results of the antifouling tests for all experimental groups.