Supplementary Material for

The Challenges, Achievements and Applications of Submersible Superhydrophobic Materials

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No.	Reference	Surface Composition/texture	Stable for	Tested depth
1	Martinez-Gomez et al.[1] 2017	Sprayed hybrid organic-inorganic silica-based particles	6 months	2 cm
2	Xu et al.[2] 2014	A trench (1mm*46μm*85μm)	50 days	16.5 cm
3	Röhrig et al.[3] 2014	Nanofur (non-pressurized) made of polycarbonate	31 days	4 mm
4	Lee et al.[4] 2012	$W_{18}O_{49}$ nanowire arrayed superhydrophobic structures	~ 9 days	5 cm

Table S1: Surfaces with the longest-reported air-layer stability time.

No.	Reference	Surface Composition/texture	Max. tolerated Pressure	Equivalent immersion depth	Additional factors tested
1	Vüllers et al.[5] 2018	Pressurized nanofur made of polycarbonate	4 bar	40 m	-
2	Li et al.[6] 2019	Porous superhydrophobic Ti surfaces	3.5 bar	35 m	-
3	Xiang et al.[7] 2017	Lotus leaves immersed under air-saturated water	1.5 bar	15 m	Flow rate of 23 mL/min
4	Deka et al.[8] 2019	Electrospryed aerogel/PDMS/PVDF over electrospun PVDF-HFP membrane	~1.3 bar	13 m	Saline conditions (up to 0.5 mM SDS)
5	Domingues et al.[9] 2018	doubly reentrant cavities (DRCs) made of SiO_2/Si wafers	1-1.2 bar	10-12 m	-
6	Vüllers et al.[5] 2018	Nanofur (non-pressurized) made of polycarbonate	0.9 bar	9 m	-

Table S2: Surfaces with the highest-reported maximum tolerated pressure. Here, the pressure for which failure in air-layer starts is considered.

References:

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