Hard masking material choices for HF etching

Film Material	Resistant to HF
Silicon dioxide / Titanium	None → Poor
PECVD silicon nitride	~ 95A/min in concentrated HF
Aluminum	~ 100nm/min in concentrated HF
Chromium	~ 50nm/min in concentrated HF
Silicon / Copper / Silver / Gold / Platinum	~ no etching
Molybdenum	~ 19A/min in concentrated HF
Nickel	~ 263nm/min in concentrated HF
Photoresist (Hard Bake)	~ no ething; but HF penetrates the film
Tungsten	~ 8A/min in concentrated HF
Tantalum	~ 88A/min in concentrated HF