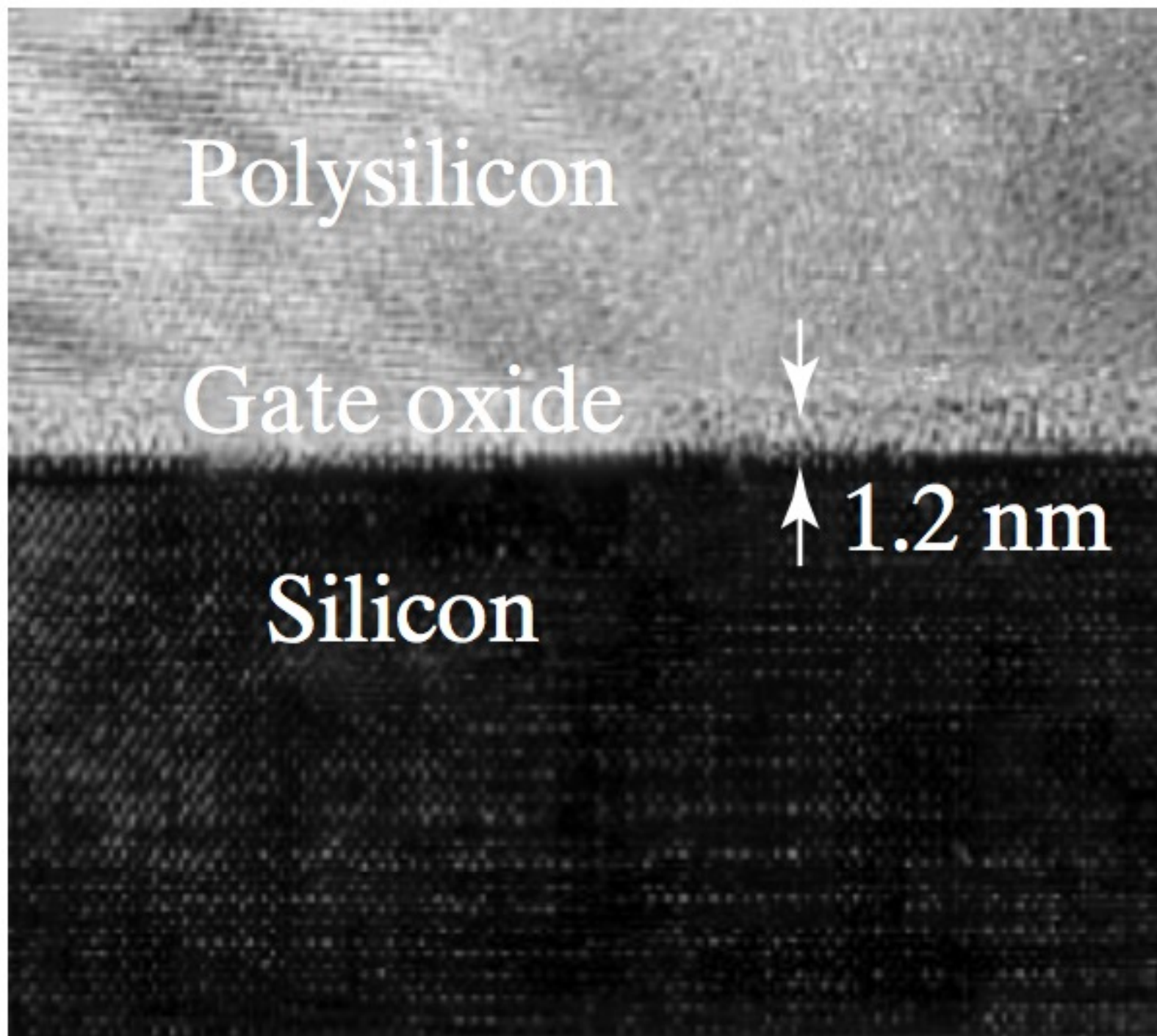


12 Å



Polysilicon

Gate oxide

Silicon

1.2 nm

Year of Production	2004	2007	2010	2013	2016
Technology Node (nm)	90	65	45	32	22
HP physical Lg (nm)	37	25	18	13	9
EOT(nm) (HP/LSTP)	1.2/2.1	0.9/1.6	0.7/1.3	0.6/1.1	0.5/1.0
Vdd (HP/LSTP)	1.2/1.2	1.1/1.1	1.1/1.0	1.0/0.9	0.9/0.8
I_{on}/W,HP (mA/mm)	1100	1510	1900	2050	2400
I_{off}/W,HP (mA/mm)	0.05	0.07	0.1	0.3	0.5
I_{on}/W,LSTP (mA/mm)	440	510	760	880	860
I_{off}/W,LSTP (mA/mm)	1e-5	1e-5	6e-5	8e-5	1e-4

Gate length

Oxide thickness

voltage

