

table 2

Accuracy	Speed	Conversion methods	Measurement methods	Matherials/Length/Magnetic propertise
Medium	Fast	NRW	TR	Lossy solids +short + non-magnetics
Medium	Fast	NRW	TR	Lossy solids +short + magnetics
Good	Slow	NIST iterative	TR	Lossy solids +long + non-magnetics
Good	Fast	New non-iterative	TR	Lossy solids +long + non-magnetics
Good	Fast	RFM	Open-ended coaxial probe	Biological specimen
Good/Medium	Fast	RFM/ Reference liquids	Open-ended coaxial probe	Liquids
Good	Fast	RFM	Open-ended coaxial probe	semo solids
Good	Fast	NIST iterative/ New non iterative	Free space	High temperature solids+
				large/flat+ non-magnetic
Medium	Fast	NRW	Free space	High temperature solids+
				large/flat+ non-magnetic
Good	Slow/ Fast	Frequency Q-factors	Resonant	Low loss solids+ small + magnetic
Good	Fast	Frequency Q-factors	Resonant	Low loss solids+ small + non-magnetic

Table 1: text

Redoping agents	Concentrated											
	HCl vapor				HCl 1M				PTSA 1M			
Polymerization time (h)	4	6	8		4	6	8		4	6	8	
	4	6	8		4	6	8		4	6	8	
1:1:3	1603	1302	1355	2467	2160	2250	2500	2210	2285	$1/32 \times 10^5$	$1/40 \times 10^5$	
1:1:5	734	931	1263	1035	1450	1580	1520	1635	1830	$8/90 \times 10^4$	$1/13 \times 10^5$	
1:1:7	467	467	532	700	735	750	1050	1135	1170	$3/57 \times 10^4$	$5/50 \times 10^4$	
1:1:9	516	532	550	935	820	1000	1180	1217	1250	$5/20 \times 10^4$	$6/01 \times 10^4$	

Table 2: