v606 Suszeptibilität paramag. Stoffe

Vermessung der Filterkurve

f / kHz	U_A / V	f / kHz	U_A / V
15,05	0,21	22,7	1,9
16,12	0,28	22,84	2,9
17,12	0,375	22,5	2,4
18,20	0,53	23,9	0,95
19,05	0,745	23,3	1,4
20,1	1,3	24,3	0,8
19,6	0,95	25,0	0,7
20,4	1,4	25,8	0,55
~~20,7~~	~~2,1~~	27,3	0,4
~~20,9~~		29,0	0,3
20,7	1,9	27,8	0,36
20,5	2,0	30,5	0,22
21	2,3		
21,3	3,7		
21,6	8,5		
21,7	7,0		
21,5	6,0		

KMA

b) $R_p = 530 \cdot 5m\Omega$

Bei $U_0 = 12.5mV$

Probe 1: Nd_2O_3

$m = 7.66 g$ $\ell = 15.6 cm$ $d \approx 0.85 cm$

Probe 2: Dy_2O_3

$m = 14.38 g$ $\ell = 15.3 cm$ $d \approx 0.85 cm$

1. Messung

$R_{p,0} = 530 \cdot 5m\Omega$, $U_0 = 12.5 mV$

$U_B = 18.5 mV$

$R_p' = 255 \cdot 5m\Omega$ $U_0' = 11.4 mV$

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2.

$R_{p,0} = 551 \cdot 5m\Omega$, $U_0 = 12.75 mV$

$U_B = 19.5 mV$

$R_p' = 240 \cdot 5m\Omega$, $U_0' = 11.25 mV$

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3.

$R_{p,0} = 545 \cdot 5m\Omega$, $U_0 = 12.5 mV$

$U_B = 19 mV$

$R_p' = 218 \cdot 5m\Omega$, $U_0' = 11 mV$

Probe 2: Gd_2O_3 $m = 10,2g$ $\ell = 15,5cm$
$$d \approx 0,85 cm$$

$R_{p_{,0}} = 542 \cdot 5m\Omega$ $\qquad$ $U_0 = 12,55 mV$

$U_B = 13,5 mV$ $\qquad$ ⊓ Voltmeteranzeige

$R_{p_{,0}}' = \cancel{449.5m\Omega}$ $\qquad$ ⌷ ohne Einwirkung gedoppt

$R_p' = 421 \cdot 5m\Omega$ $\qquad$ $U_0' = 10,75 mV$

$R_{p_{,0}} = 545 \cdot 5m\Omega$ $\qquad$ $U_0 = 11,5 mV$

$U_B = 12,4 mV$

$R_p' = 409 \cdot 5m\Omega$ $\qquad$ $U_0' = 10,6 mV$

$R_{p_{,0}} = 547 \cdot 5m\Omega$ $\qquad$ $U_0 = 11,5 mV$

$U_B = 12,2 mV$

$R_p' = 401 \cdot 5m\Omega$ $\qquad$ $U_0' = 10,7 mV$

Probe 3: $C_6 O_{12} Pr_2$ $m = 7,87g$ $\ell = 15,9cm$

$R_{p,0} = 539.5 m\Omega$ $U_0 = 11,6 mV$

$U_B = 11,4 mV$

$R_p' = 514.5 m\Omega$ $U_0' = 12,4 mV$

$R_{p,0} = 544.5 m\Omega$ $U_0 = 12,5 mV$

$U_B = 12,45 mV$

$R_p' = 504.5 m\Omega$ $U_0' = 12,4 mV$

$R_{p,0} = 530.5 m\Omega$ $U_0 = 12,5 mV$

$U_B = 12,45 mV$

$R_p'' = 510.5 m\Omega$ $U_0' = 12,3 mV$

KHo