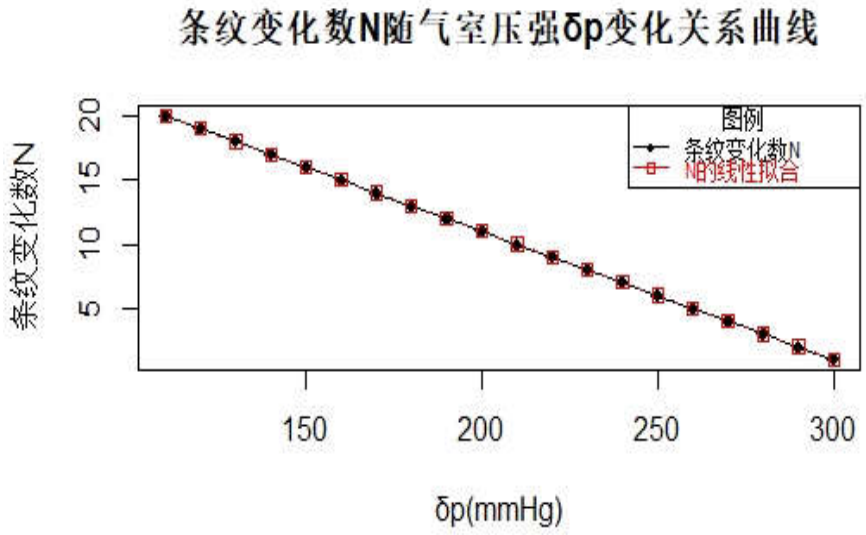
1.A07迈克尔逊干涉实验数据处理

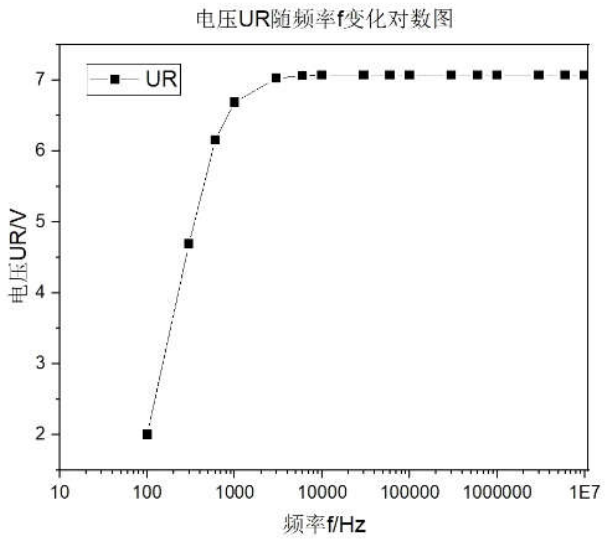
```
N1<-c(90,96,108,127,150,179,204,235,277,295)
θ<-c(10,12,14,16,18,20,22,24,26,28)
t<-0.002617
λ<-632.8*10^(-9)
l<-length(N1)


n1<-(t*(sin(θ))^2)/(2*t*(1-cos(θ))-N1*λ)+1-cos(θ)-(N1*λ)/(2*t)
a<-mean(n1)
Sn1<-sd(n1)/(sqrt(l))


#测量空气折射率
N2<-c(20,19,18,17,16,15,14,13,12,11,10,9,8,7,6,5,4,3,2,1)
p<-
c(110,120,130,140,150,160,170,180,190,200,210,220,230,240,250,260,270,280,2
90,300)
L<-0.089
p0<-760
z<-(-0.1)*p+31


n2<-1+((N2*λ)/(2*L)*((p0+300)/(300-p)))
#方法一
opar <- par(no.readonly=TRUE)
plot(p,N2,type = "o",pch=18,ann=FALSE)
lm(N2~p)
lines(p,z,type="b",pch=22,col="red",las=2,cex.axis=0.7,tck=-0.01)
legend("topright",c("实验结果","拟合曲线"),title="图
例",col=c("black","red"),
       lty=c(1,1),pch=c(18,22),cex=0.5)
title("条纹变化数N随气室压强δp变化关系曲线",
      xlab="δp(mmHg)",ylab="条纹变化数N")
```

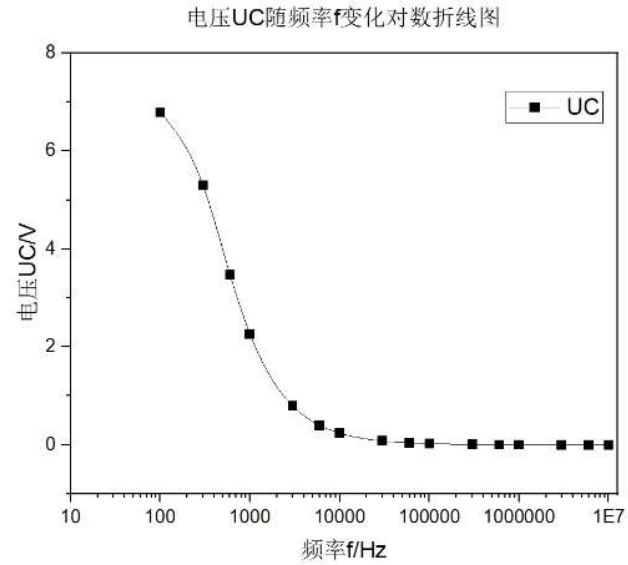


2.数据

	A(X)	B(Y)	C(Y)	D(Y)
Long Name				
Units				
Comments				
F(x)=				
1	100	2.003	6.786	69.84
2	300	4.689	5.295	49.68
3	600	6.158	3.477	27
4	1000	6.689	2.266	23.76
5	3000	7.027	0.7936	12.42
6	6000	7.06	0.3987	5.616
7	10000	7.071	0.2396	2.88
8	30000	7.071	0.07985	1.08
9	60000	7.071	0.03993	3.024
10	100000	7.071	0.02396	5.04
11	300000	7.071	0.00799	2.7
12	600000	7.071	0.00399	2.64
13	1000000	7.071	0.0024	4.32
14	3000000	7.071	7.985E-4	3.78
15	6000000	7.071	3.993E-4	2.184
16	1E7	7.071	2.396E-4	1.44
17				
18				

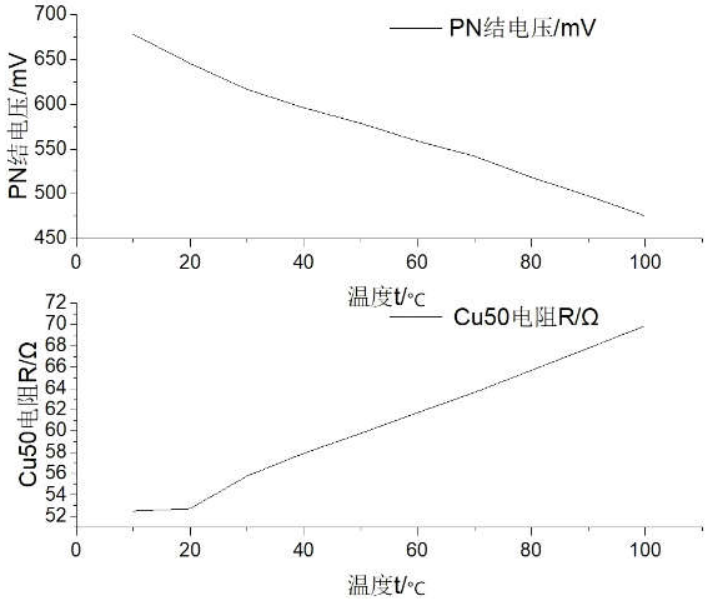
绘图

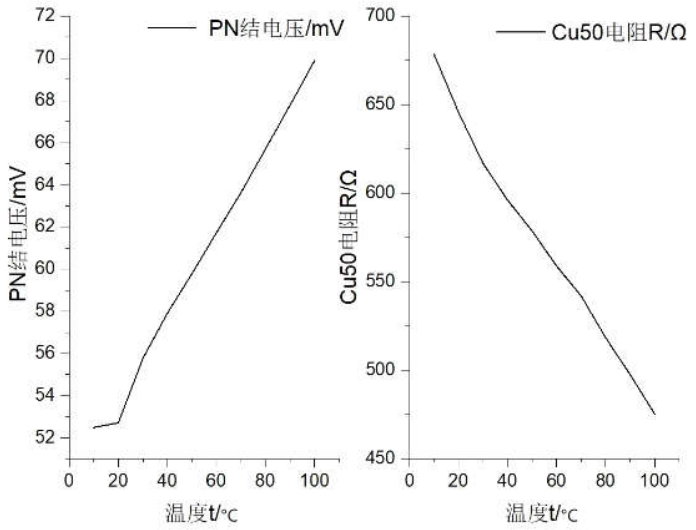

电压UR随频率f变化对数图
UR
电压UR/V
频率f/Hz
10
100
1000
10000
100000
1000000
1E7
2
3
4
5
6
7


电压UC随频率f变化对数折线图
UC
电压UC/V
频率f/Hz
10
100
1000
10000
100000
1000000
1E7
0
2
4
6
8

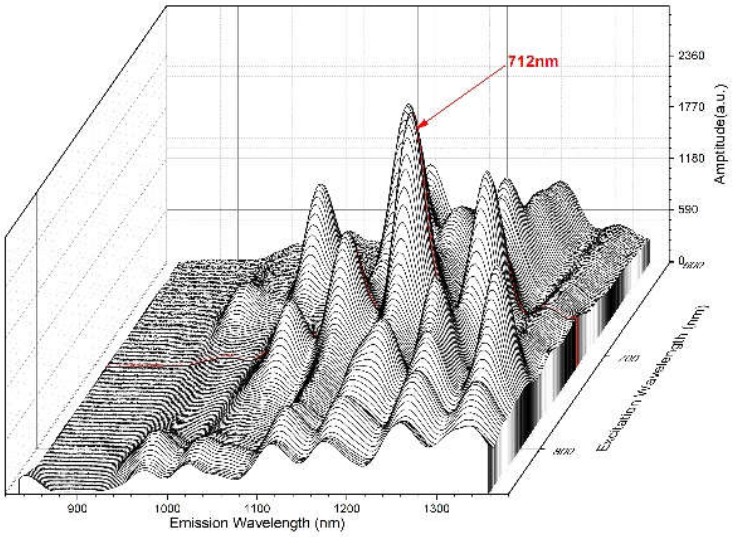
3.数据

	A(X)	B(Y)	C(Y)
Long Name			
Units			
Comments			
F(x)=			
1	10	52.497	678.4
2	20	52.711	645.7
3	30	55.765	616.8
4	40	57.905	596.1
5	50	59.788	578.7
6	60	61.726	558.9
7	70	63.632	542
8	80	65.7	518.5
9	90	67.775	497.6
10	100	69.887	475.4
11			




PN结电压/mV
PN结电压/mV
温度t/°C
Cu50电阻R/Ω
Cu50电阻R/Ω
温度t/°C

4. 三维图


712nm
Amplitude(a.u.)
Emission Wavelength (nm)
Excitation Wavelength (nm)

5.三Y轴图

	A(X)	B(Y)	C(Y)	D(yEr-)	E(Y)
Long Name	Transition	Deposition	Annealing	Error	Differential
Units	Temperature (K)	Pressure (Torr)	Temperature (^{0}C)		Temperature (K)
Comments					
1	90.66407	0.01383	--	--	--
2	90.72645	0.02863	--	--	--
3	90.53931	0.05142	--	--	--
4	90.76283	0.09162	--	--	--
5	90.60169	0.00552	--	--	--
6	90.60169	0.18093	--	--	--
7	90.66407	0.30742	--	--	--
8	89.86181	--	780.38832	2	3.89812
9	89.16699	--	772.65416	2.5	2.91689
10	88.37167	--	767.61394	1.5	2.78284
11	87.60754	--	770.90259	2	2.5
12	86.78103	--	771.97498	2.5	2.05898
13	85.82391	--	776.58624	2.5	1.23861
14	84.90448	--	781.41197	1.5	1.04021
15	83.88169	--	783.9901	2.2	0.84718
16	90.4	6	--	--	--
17	90.23	10	--	--	--
18	90.53931	20	--	--	--
19	90.55	30	--	--	--
20	90.3	40	--	--	--
21	90.60169	50	--	--	--
22	90.33	70	--	--	--
23					
24