

Supplementary Material

Табл. S1. Результаты моделирования импеданса образца согласно схеме на Рис. 5.

Table S1. The results of modeling the impedance of the sample according to the scheme in Fig. 5.

$T, ^\circ\text{C}$	r_1, W	r_2, W	T_{cpe1}	P_{cpe1}	r_3, W	T_{cpe2}	P_{cpe2}	r_4, W	T_{cpe3}	P_{cpe3}	$\chi^2 \cdot 10^4$
22	-998	2.065e6		0.959	1.139e7	3.653e-9	0.868	-	-	-	17
100	460	54438		1	1.852e5	4.393e-9	0.913	6.81e6	1.008e-7	0.767	9
125	622	26753	2.66e-11	1	73397	3.78e-9	0.941	1.832e6	1.218e-7	0.777	9
150	549	13108	1.444e-11	1	32395	4.166e-9	0.935	6.577e5	1.485e-7	0.777	3.5
175	546	6703	1.555e-11	1	15436	5.19e-9	0.916	2.553e5	1.712e-7	0.788	2.2
200	-	3993	1.684e-11	1	7685	7.305e-9	0.887	1.104e5	1.92e-7	0.795	2.4
225	-	2332	1.935e-11	1	3866	5.921e-9	0.904	51133	2.265e-7	0.790	2.9
250	-	1429	1.74e-11	1	2068	4.194e-9	0.945	23511	2.34e-7	0.800	3.9
275	-	954	1.85e-11	1	1224	5.241e-9	0.928	10641	2.266e-7	0.816	3.8
300	-	643	1.91e-11	1	733	8.228e-9	0.895	4592	2.019e-7	0.837	3.7
325	-	411	2.04e-11	1	497.5	9.335e-9	0.878	1968	1.577e-7	0.867	4.7
350	-	295	2.34e-11	-	330.3	1.185e-8	0.858	877	1.269e-7	0.891	3.8
375	-	225	9.46e-12	-6	208.6	1.037e-8	0.868	405.8	1.179e-7	0.895	1.7
400	-	184		-	151	1.798e-8	0.825	185.6	8.823e-8	0.923	0.45
425	-	173.6		-	103.5	9.534e-8	0.899	70.7	1.973e-9	1	0.9

Табл. S2. Результаты моделирования импеданса образца согласно схеме на Рис. 9.

Table S2. The results of modeling the impedance of the sample according to the scheme in Fig. 9.

$T, ^\circ\text{C}$	R_1, W	C, pF	R_2, W	T_{CPE1}	P_{CPE1}	R_3, W	R_4, W	T_{CPE2}	P_{CPE2}	$\chi^2 \cdot 10^4$
100	2.395e5	14.2	72174	2.57e-9	0.914	6.8e6	457	1.007e-7	0.767	8.8
125	1.002e5	15.4	37388	2e-9	0.941	1.83e6	612	1.217e-7	0.777	9
150	45497	16.6	18945	2.07e-9	0.936	6.58e5	531	1.483e-7	0.777	3.4
175	22150	18.8	10005	2.44e-9	0.918	2.56e5	515	1.706e-7	0.788	2.1
200	11565	17.7	6151	3e-9	0.891	1.106e5	83	1.92e-7	0.794	2.4
225	6095	19.5	3713	2.22e-9	0.907	51249	92	2.26e-7	0.79	3
250	3494	18.7	2506	1.403e-9	0.947	23518	0	2.345e-7	0.8	4
275	2176	19.9	1771	1.585e-9	0.929	10644	0	2.27e-7	0.816	3.9
300	1374	22.4	1276	2.22e-9	0.896	4593	0	2.02e-7	0.837	3.7
325	909	8	768	2.78e-9	0.878	1968	0	1.577e-7	0.867	4.9
350	625.7	-	560	3.3e-9	0.858	877	0	1.27e-7	0.891	3.8
375	433.6	-	467.8	2.4e-9	0.868	405.8	0	1.18e-7	0.895	1.7
400*	335.3	-	406.7	3.74e-9	0.824	185	0	8.74e-8	0.924	0.4
425*	246	-	417.7	1.09e-8	0.931	101.4	0	2.11e-8	0.818	0.3

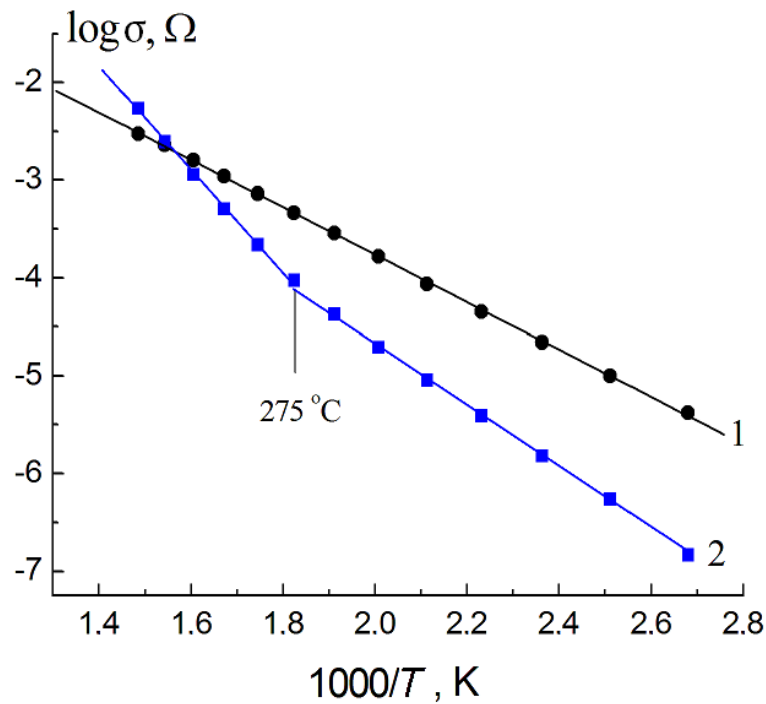


Рис. S1. (Color online) Температурные зависимости проводимостей σ_1 (1) и σ_2 (2) в аррениусовом масштабе, моделируемые резисторами R_1 (1) и R_2 (2).

Fig. S1. (Color online) Temperature dependences of conductivities σ_1 (1) and σ_2 (2) in Arrhenius scale, modeled by resistors R_1 (1) and R_2 (2).

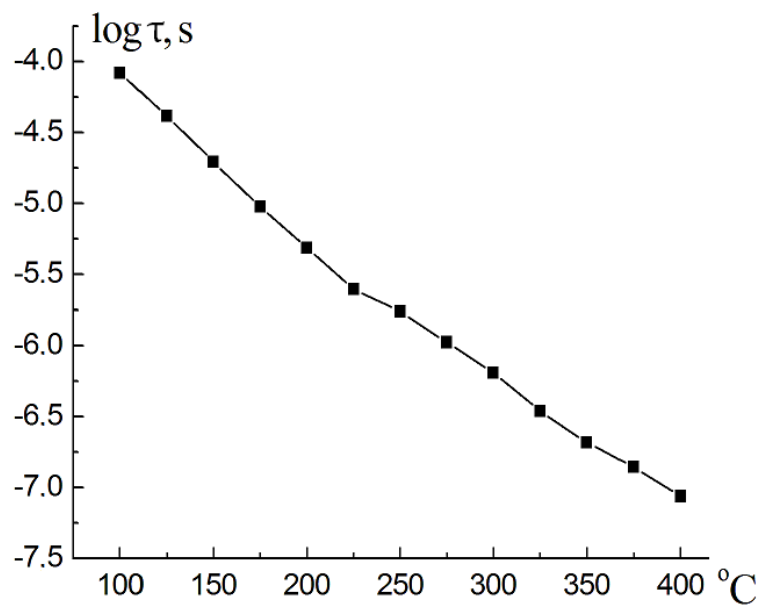


Рис. S2. Зависимость логарифма коэффициента корректировки диэлектрических потерь цепи «R2×CPE1» от температуры.

Fig. S2. Dependence of the logarithm of the coefficient of correction of dielectric losses of the circuit “R2×CPE1” on temperature.