Supplementary material

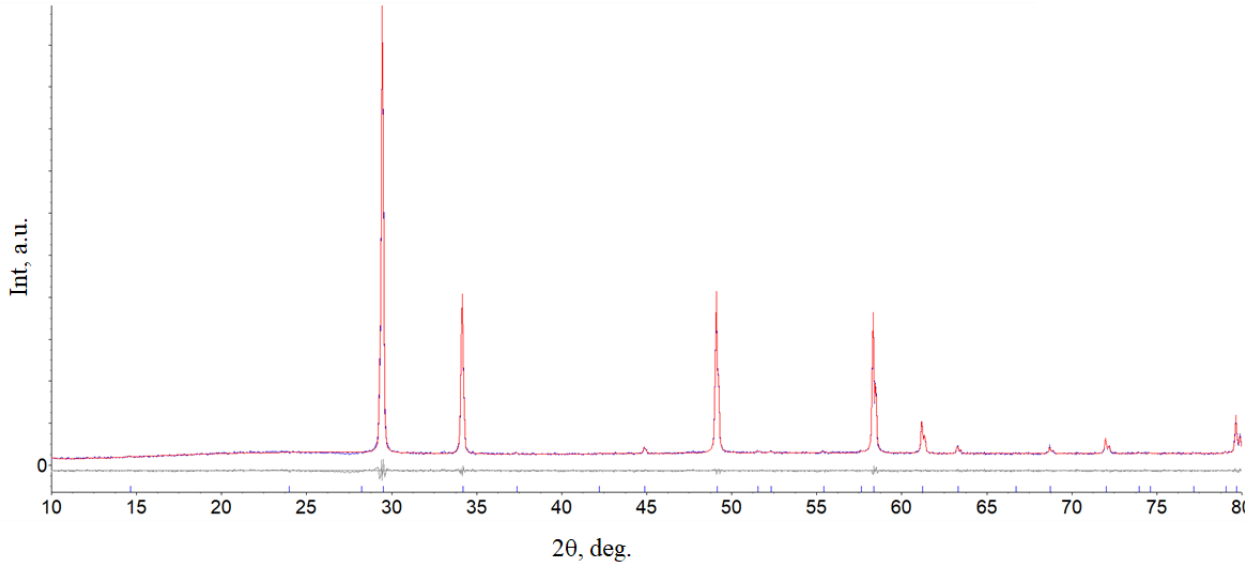

Fig. S1. XRD pattern of $Bi_{2-x}Cr_{1/6}Mn_{1/6}Fe_{1/6}Co_{1/6}Ni_{1/6}Cu_{1/6}Ta_2O_{9+\Delta}$.

Table S1. Parameters of the equivalent circuit for describing the electrical properties of the $Bi_{2-1/3}Cr_{1/6}Mn_{1/6}Fe_{1/6}Co_{1/6}Ni_{1/6}Cu_{1/6}Ta_2O_{9+\Delta}$ sample.

	R_1, Ω	C, pF	R_2, Ω	$T_{CPE}\times10^{10}$	P_{CPE}	$\chi^2\times10^4$
1	2	3	4	5	6	7
100	$3.586\cdot10^6$	29.1	$1.261\cdot10^6$	12.89	0.461	3
125	$1.422\cdot10^6$	29.2	$1.124\cdot10^6$	12.95	0.514	4
150	$6.084\cdot10^5$	29.2	$7.132\cdot10^5$	13.5	0.552	4.5
175	$2.718\cdot10^5$	29.2	$3.935\cdot10^5$	12.43	0.586	5
200	$1.272\cdot10^5$	29.2	$2.29\cdot10^5$	9.533	0.633	5.6
225	64449	29.3	$1.315\cdot10^5$	12.08	0.64	4
250	35140	29.4	99174	5.023	0.726	4
275	20265	29.4	68668	3.604	0.766	4
300	11981	29.4	43841	3.971	0.774	3
325	7355	29.3	31070	1.994	0.83	6.6
350	4651	28.7	17229	3.455	0.798	11
375	3001	27.5	9060	8.131	0.749	6
400	1937	27.2	7290	2.44	0.835	6
425	1254	19.2	1674	5.93	0.797	8
450	810	10.6	881	3.11	0.86	3

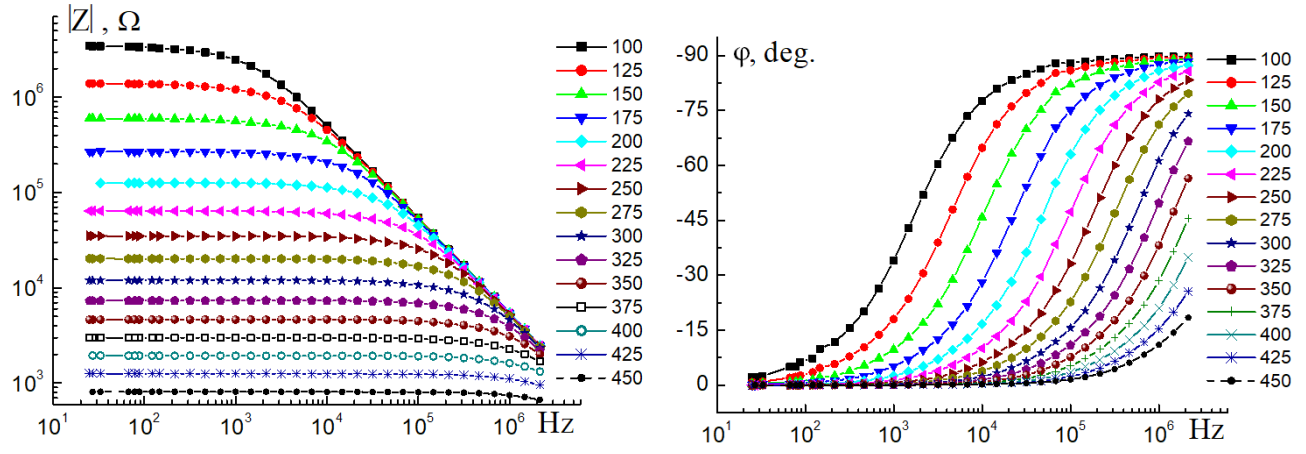

Fig. S2. (Color online) Bode curves of the $Bi_{2-1/3}Cr_{1/6}Mn_{1/6}Fe_{1/6}Co_{1/6}Ni_{1/6}Cu_{1/6}Ta_2O_{9+\Delta}$ sample, measured in the temperature range from 100 to 450°C.