

# P#4: Feroelektrici

## Fizika čvrstog stanja 2

predavanja 2022

## # 4.1 Fazni prijelazi - feroelektrici

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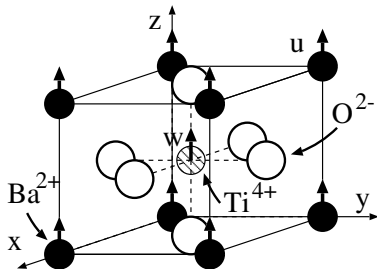
Table 2 Ferroelectric crystals<sup>a</sup>

To obtain  $P_s$  in the CGS unit of  $\text{esu cm}^{-2}$ , multiply the value given in  $\mu\text{C cm}^{-2}$  by  $3 \times 10^3$ .

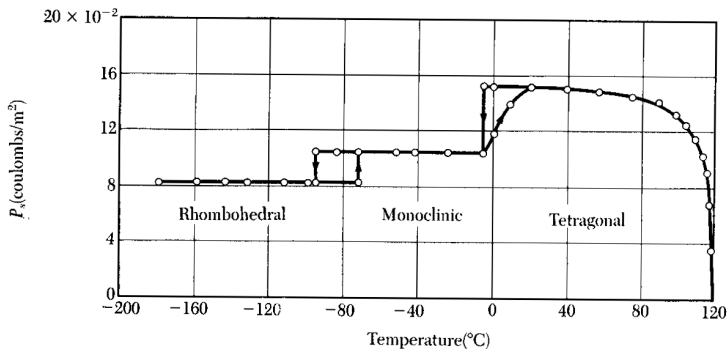
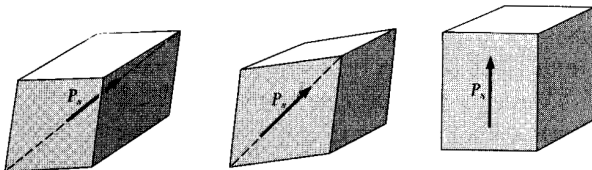
		$T_c$ , in K	$P_s$ , in $\mu\text{C cm}^{-2}$ , at $T$ K	
KDP type	$\text{KH}_2\text{PO}_4$	123	4.75	[96]
	$\text{KD}_2\text{PO}_4$	213	4.83	[180]
	$\text{RbH}_2\text{PO}_4$	147	5.6	[90]
	$\text{KH}_2\text{AsO}_4$	97	5.0	[78]
	GeTe	670	—	—
TGS type	Tri-glycine sulfate	322	2.8	[29]
	Tri-glycine selenate	295	3.2	[283]
Perovskites	$\text{BaTiO}_3$	408	26.0	[296]
	$\text{KNbO}_3$	708	30.0	[523]
	$\text{PbTiO}_3$	765	>50	[296]
	$\text{LiTaO}_3$	938	50	
	$\text{LiNbO}_3$	1480	71	[296]

## # 4.1 Fazni prijelazi u $BaTiO_3$

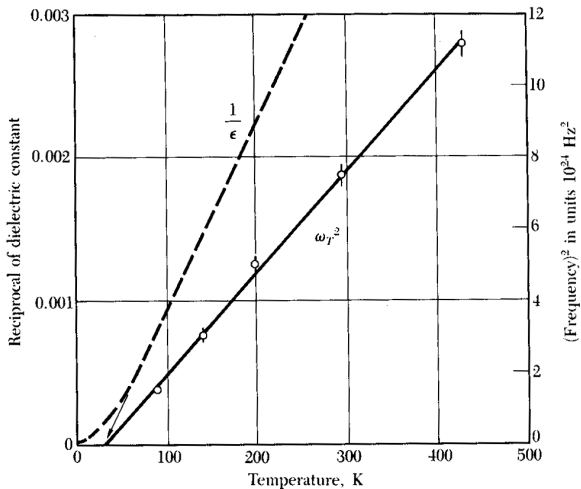
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## # 4.1 Fazni prijelazi u $BaTiO_3$

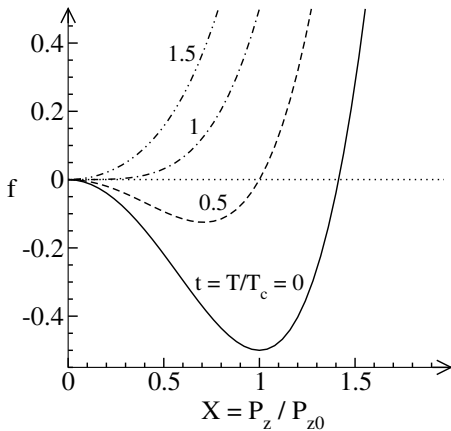


## # 4.2 Generalizirana susceptibilnost ( $\text{SrTiO}_3$ )



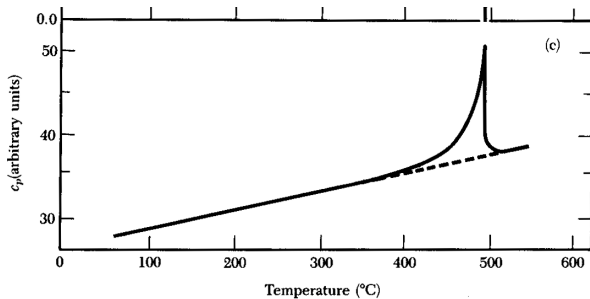
## # 4.3 Landauova teorija faznih prijelaza 2. vrste

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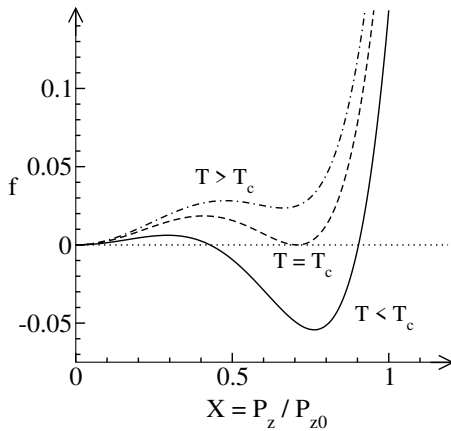
### # 4.3 Landauova teorija faznih prijelaza ( $\text{PbTiO}_3$ )

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## # 4.4 Fazni prijelazi 1. vrste

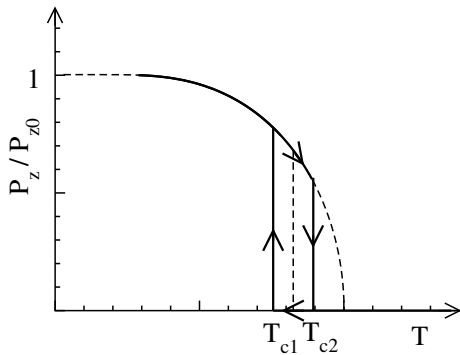
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# Histereza

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# Literatura

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- 1) Kittel, *Introduction to Solid State Physics*, §§ 13.1 - 13.6
- 2) bilješke