

Fig. 6. Temperature dependence of the cross coupling moduli (lower half) and compressibility parameters (upper half) for alpha uranium.

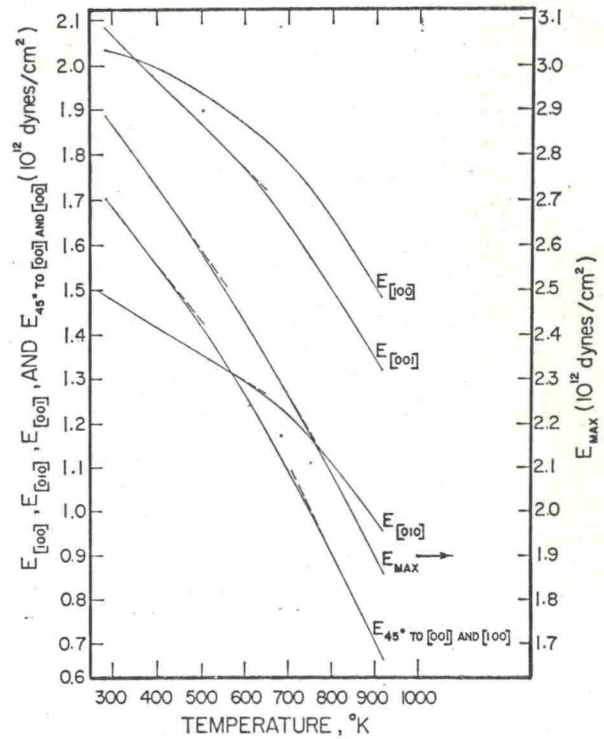


Fig. 7. Temperature dependence of the principal and the maximum and minimum Young's moduli between 300° to 923° K.

0 % between 70°
near temperature
and a positive
923° K, β_{001} and
ie, with β_{100} being
 β_V values reflect
bove 200° K.

en 440° and 923° K

β_{001}	β_V
.154	1.048
.166	1.012
.175	0.987
.181	0.969
.196	0.929
.202	0.912
.207	0.899
.210	0.894
.212	0.892
.215	0.892
.217	0.892
.219	0.893
.221	0.895
.223	0.896
.226	0.899
.228	0.899
.230	0.901
.231	0.902
.234	0.906
.237	0.912
.240	0.915
.242	0.918
.245	0.922
.248	0.926
.251	0.929
.253	0.934
.256	0.938
.259	0.942
.261	0.946
.263	0.951
.266	0.956
.268	0.960
.271	0.965
.275	0.969
.279	0.973
.283	0.977
.286	0.982
.289	0.987
.292	0.992
.295	0.999

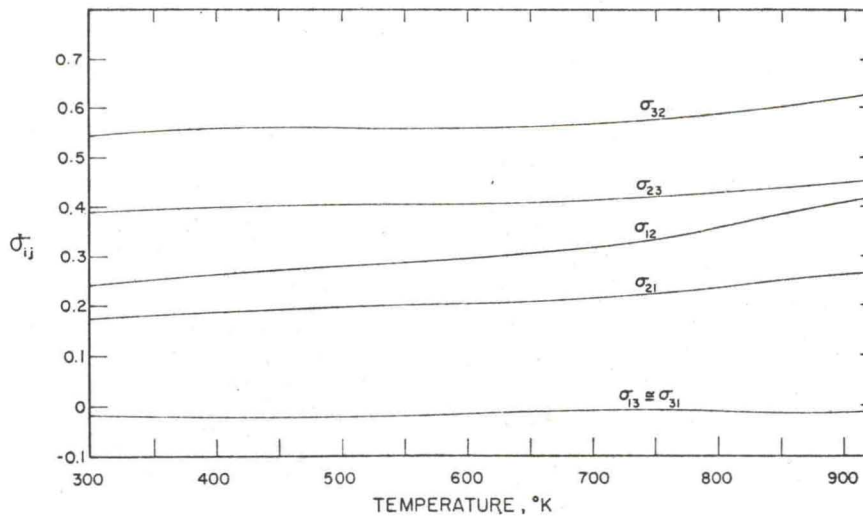


Fig. 8. Temperature dependence of the Poisson's ratio parameters between 300° and 923° K. Subscript i denotes direction of uniaxial stress and j denotes direction of coupled strain (1, 2 and 3 refer to [100], [010] and [001] directions, respectively).