TABLE AI. (*Continued*)

Material	Condition	Transition conditions Stress (GPa)	Compression (%)	Technique	Remarks	References
Alkali halides (*Continued*)						
KBr	Crystal	~2.2	...	P-1	3.5 mm, $\rho_0=1.999$ Mg/m^3	Al'tshuler *et al.* (1963)
KBr	Crystal	1.85±0.08	...	E-8	...	Larson (1965)
KBr	Pressed	2.38	11.3	E-10	4.9 to 30.2 mm, $\rho_0=2.70$ Mg/m^3	Dremin *et al.* (1965)
KBr	[001] crystal	...	...	E-10	Unloading hysteresis of 1 GPa	Al'tshuler *et al.* (1967)
KBr	Pressed powder	2.05	10.9	E-10	$\rho_0=2.70$ Mg/m^3	Adadurov *et al.* (1970)
KBr	Pressed powder	...	...	E-10	$\rho_0=2.57$, 2.45, and 2.00 Mg/m^3	Adadurov *et al.* (1970)
KBr	...	2.1	11.5	–10	$\rho_0=2.70$ Mg/m^3	Khristoforov *et al.* (1971)
NaCl	Crystal	2.9	...	E-8	?	Larson (1965) See Royce (1969)
NaCl	Pressed powder	2.3	...	E-8	?	Larson (1965) See Royce (1969)
NaCl	...	~3.0	...	E-5	?	Larson *et al.* (1966) See Royce (1969)
NaCl	Pressed powder	...	...	E-6	No transition observed, problem with explosive driver used by Larson (1965)	Royce (1969)
NaCl	[100], [111] crystal	23.1	30.6	P-2	$\rho_0=2.165$ Mg/cm^3	Fritz *et al.* (1971)
NaCl	Crystal	...	...	P-17	Recovery of samples loaded between 4.0 and 3.5 GPa. $T_0=113$, 253, 293, 328 and 348 K. Evidence for recrystallization from dense phase.	Brazhnik *et al.* (1969)
CsI	Crystal	<25	...	E-14	Electrical resistance	Alder *et al.* (1956a)
CsI	Crystal	<28	...	E-14	Electrical resistance	Alder *et al.* (1956b)
CsI	Pressed pellet	<28	...	E-14	Electrical resistance	Alder *et al.* (1956b)
CsI	...	...	...	...	Calculated temperature rise to explain Alder's results	Pospelov *et al.* (1966)
RbI	Pressed pellet	<28	...	E-14	Electrical resistance	Alder *et al.* (1956b)
RbCl and CsCl	...	...	...	–17	Solid solutions of RbCl–CsCl synthesized from RbCl and CsCl starting materials	Batsanov *et al.* (1969)
III–V, II–VI Compounds						
CdS	Crystal *c* axis	3.15	3.3	E-8	*, τ	Kennedy *et al.* (1966)
CdS	Crystal *a* axis	2.8	3.3	E-8	ϕ, τ	Kennedy *et al.* (1966)
CdS	CdS–water mixture	...	...	D-17	Zinc blende structure recovered	Leiserowitz *et al.* (1966)
InSb	Crystal [100]	2.0	3.0	E-8	...	Kennedy *et al.* (1965)
InSb	Crystal [111]	1.7	2.1	E-8	ϕ, τ	Kennedy *et al.* (1965)
BN	Graphitelike	12.0	28.8	E-1	$\rho_0=1.95$ Mg/m^3 rarefaction shock not observed	Al'tshuler *et al.* (1967)
BN	Hexagonal powder pressed to 98.5% of theoretical density	12.2	20	P-3	3.2 to 3.8 mm, T_0 values 298 K, 393 K, 473 K, 573 K, 658 K, 713 K, $\Delta V=\sim 19\%$, cubic zinc blende phase and wurtzite recovery	Coleburn *et al.* (1968)
BN	Graphitelike	12.8	29.6	...	$\rho_0=2.00$ Mg/m^3, wurtzite phase recovered	Adadurov *et al.* (1967)
BN	Hexagonal	...	...	P-17	$\rho_0=0.8$ Mg/m^3, 1.98 Mg/m^3, $T_0=300$ K and 800 K cubic and wurtzite phases recovered after shocking to 12.0 GPa	Dulin *et al.* (1969)
BN	Powder	...	...	D	Dense phase recovered	Batsanov *et al.* (1965)
BN	Pressed powder	13.5	...	P-14	$\rho_0=1.97$ Mg/m^3, electrical resistance	Kuleshova (1969)
BN	Graphitelike	...	...	G, P-17	Recovered samples showed no zinc blende structure, wurtzite structure recovered, crystallites ~200 Å	Soma *et al.* (1975)

TABLE AI. (*Continued*)

Material	Condition	Transition conditions: Stress (GPa)	Transition conditions: Compression (%)	Technique	Remarks	References
III–V, II–VI Compounds (*Continued*)						
GaAs	High purity polycrystal	20±1.1	19	E-4	$\rho_0=5.326$ Mg/m^3	Goto *et al.* (1976)
GaP	High purity polycrystal	26	22	E-4	$\rho_0=4.127$ Mg/m^3	Syono *et al.* (1977)
Oxides						
TiO_2	Rutile phase crystal	33	12	P-2, 17	$\Delta V\sim 21\%$, orthorhombic lead dioxide structure recovered	McQueen *et al.* (1967)
TiO_2	Hot pressed powder	<20	···	E, P-11, 17	6 mm, $\rho_0=4.18$, 4.15, 4.07, 2.83 Mg/m^3, orthorhombic lead dioxide structure recovered, τ	Linde *et al.* (1969)
SiO_2	α-Crystal x-cut	14.5	16.5	E, P-5	3.2 to 12.7 mm, τ	Wackerle (1962)
SiO_2	α-Crystal y-cut	14.5	16.5	E, P-5	3.2 to 9.5 mm, τ	Wackerle (1962)
SiO_2	α-Crystal z-cut	14.5	16.5	E, P-5	3.2 to 9.5 mm, τ	Wackerle (1962)
SiO_2	α-Crystal x,y,z-cut	···	···	P-	Examination of samples shocked at 50 GPa shows amorphous quartz; those shocked at 25 GPa show α-quartz	Wackerle (1962)
SiO_2	Fused	···	···	P-	Recovered samples show permanent densification at 25 GPa	Wackerle (1962)
SiO_2	α-Crystal	···	···	P-	Recovered samples show amorphous quartz when shocked to 36 and 60 GPa	DeCarli *et al.* (1959)
SiO_2	α-Crystal, quartz rocks	···	···	D-17	Traces stishovite recovered	DeCarli *et al.* (1965)
SiO_2	α-Crystal	···	···	?	Very high pressure	Al'tshuler *et al.* (1965)
SiO_2	Powder	···	···	D-17	Coesite recovered	Deribas *et al.* (1968)
SiO_2	α-Crystal	···	···	E, P-4	Loading and unloading	Ahrens *et al.* (1968)
SiO_2	α-Crystal	···	···	P-1	Very high pressure	Trunin *et al.* (1971a)
SiO_2	Powder	···	···	P-	$\rho_0=1.15$, 1.35, 1.55, and 1.75 Mg/m^3	Trunin *et al.* (1971b)
SiO_2	x- and z-cut crystals	···	···	E, P	Recovered amorphous quartz above HEL	Anan'in *et al.* (1974)
SiO_2	α-Quartz	···	···	···	Pulsed electron beam, $\alpha\rightarrow\beta$ transition	Gauster *et al.* (1973)
SiO_2	Quartzite, α-quartz	···	···	···	Orthorhombic quartz in recovered samples	German *et al.* (1973)
PbO_2	···	···	···	D-17	Dense phase recovered	Leiserowitz *et al.* (1966)
PbO_2	PbO_2–water mixture	···	···	D-17	Dense phase recovered	Leiserowitz *et al.* (1966)
D. Ferroelectric ceramics						
$Pb(Zr_{0.52}Ti_{0.48})O_3$	Polycrystalline ceramic	···	···	E-5	Multiple wave structure observed	Reynolds *et al.* (1961)
$Pb(Zr_{0.52}Ti_{0.48})O_3$ 1 wt% Nb_2O_5	Polycrystalline ceramic	···	···	E-5	12.7 mm, multiple waves not associated with ferroelectric to paraelectric transition	Reynolds *et al.* (1962)
$BaTiO_3$	Polycrystalline ceramic	···	···	E-5	Multiple wave structure observed	Reynolds *et al.* (1961)
$BaTiO_3$	Polycrystalline ceramic	···	···	E-5	12.7 mm, multiple waves not associated with ferroelectric to paraelectric transition	Reynolds *et al.* (1962)