Other Metals

Copper, crystal	[001]	2	5 mm*	E-5	Mote (1968)
	[011]	1	5 mm*	E-5	Mote (1968)
	[111]	1	5 mm* (relaxation suppressed by prestrain)	E-5	Mote (1968)
Copper, polycrystal	-	~0.5 (ramp)	5 mmϕ	E-5	Mote (1968)
Copper	annealed	0.6-0.4	20-30 mm temp. 283-473°K	E-7	Novikov et al. (1966)
Copper	annealed	~0.4 (ramp)	13 mmϕ	G-6	Taylor (1968)
Copper	annealed	~0.5 (ramp)	ϕ	E-2,3	Munson, et al. (1966)
Copper	cold worked	-	ϕ	G-6	Taylor (1968)
Lead	annealed	<0.2	-	E-2	Munson, et al. (1966)
Brass	annealed	3-2	30-80 mm+	E-7	Novikov, et al. (1966)
Brass	-	~8	6 mmϕ	E-5	Benedick (1965)
Beryllium, crystal	c-axis	40	*	G-6	Taylor (1968)
Beryllium, crystal	a-axis	4	*	G-6	Taylor (1968)
Beryllium, sintered	-	~2 (ramp)	ϕ	G-6	Taylor (1968)
Tantalum	annealed	-	-	G-6	Taylor (1968)
Niobium	annealed	-	-	G-6	Taylor (1968)
Thorium	-	-	-	G-6	McQueen (1964)
Uranium	-	-	ϕ	G-6	Taylor (1968)
Bismuth, crystal	-	3	1-3 mm	E,G-5	Larson (1967)
Bismuth, polycrystal	cast	~2 (ramp)	2-13 mmϕ	E, G-5	Larson (1967)
Bismuth, polycrystal	cast	~4 (ramp)	2 mmϕ	G-5	Present work
Tungsten	annealed	38	10 mm	G-5	Rohde (1968b)
Antimony	cast	17-2	5-49 mm+	E-1	Warnes (1967)

SUMMARY OF HUGONIOT ELASTIC LIMIT MEASUREMENTS (cont)

Material	Condition (a)	σ_{HEL} (kbar) (b)	Remarks (c)	Technique (d)	Reference
		BRITTLE SINGLE CRYSTALS			
Quartz (SiO_2)	x-cut	94-48	5-25 mm+*	E-9	Wackerle (1962)
Quartz (SiO_2)	x-cut	66-55	6 mm*	E-11	Fowles (1967)
Quartz (SiO_2)	y-cut	110-82	10 mm*	E-9	Wackerle (1962)
Quartz (SiO_2)	y-cut	86-65	3-6 mm*	E-11	Fowles (1967)
Quartz (SiO_2)	z-cut	145-120	10 mm*	E-9	Wackerle (1962)
Quartz (SiO_2)	z-cut	148-100	3-6 mm*	E-11	Fowles (1967)
Quartz (SiO_2)	z-cut	145-60	-	E-12	Peyre, et al. (1965)
Quartz (SiO_2)	fused	98 (ramp)	10-13 mmϕ	E-9	Wackerle (1962)
Sapphire (Al_2O_3)	60° cut	120-170	10-13 mm	E-9	Brooks, et al. (1966)
Sapphire (Al_2O_3)	z-cut	120-200	10-13 mm	E-9	Brooks, et al. (1966)
Sapphire (Al_2O_3)	x-cut	135-180	10-13 mm	E-9	Brooks, et al. (1966)
Germanium	[111]	44	8 mm	G--	Graham, et al. (1966)
Germanium	[111]	41-35	6-12 mm*	E-12	McQueen (1964)
Germanium	[100]	53-46	6-12 mm*	E-12	McQueen (1964)
Germanium	[100]	45	7 mm*	E-5	Kennedy (1968)
Germanium	[100]	47	6 mm*	G-8	Graham (1967b)
Germanium	[114]	-	6-12 mm*	E-12	McQueen (1964)
Silicon	crystal	free surface velocities 50% higher than Ge values.		E-12	McQueen (1964)
Cadmium sulfide (CdS)	c-axis	>32	*	E-5	Kennedy, et al. (1966)
Cadmium sulfide (CdS)	a-axis	>28	*	E-5	Kennedy, et al. (1966)
Indium antimonide (InSb)	[100]	>20	-	E-5	Kennedy, et al. (1965)