TABLE IV. Transport coefficients of argon at 1 atm. pressure parallel to an applied magnetic field.

T °K	σ mho/cm.	D_e^T gm/cm-sec	λ_e mW/cm-°K	λ_h mW/cm-°K	λ_r mW/cm-°K
3000	5.96,-7*	-9.12,-16	9.42,-9	1.00	-
4000	1.27,-3	-3.03,-12	2.48,-5	1.23	-
5000	0.103	-2.96,-10	2.13,-3	1.44	1.31,-4
6000	1.01	-2.07,-9	3.12,-2	1.63	2.82,-3
7000	3.61	-3.14,-9	0.188	1.82	2.55,-2
8000	9.23	3.13,-9	0.586	2.00	0.134
9000	17.7	2.19,-8	1.37	2.16	0.487
10000	27.3	5.39,-8	2.64	2.25	1.35
11000	37.3	9.82,-8	4.37	2.16	3.07
12000	47.4	1.52,-7	6.44	1.78	5.79
13000	57.4	2.14,-7	8.80	1.24	8.96
14000	66.7	2.79,-7	11.3	0.763	10.9
15000	74.9	3.45,-7	13.8	0.454	9.91
16000	82.0	4.09,-7	16.1	0.290	6.76
17000	88.1	4.71,-7	18.5	0.214	3.81
18000	93.7	5.33,-7	20.8	0.183	1.96
19000	98.8	5.96,-7	23.2	0.177	0.954
20000	104.	6.63,-7	25.7	0.180	0.502
22000	108.	7.83,-7	30.3	0.201	0.163
24000	105.	8.82,-7	34.4	0.233	7.37,-2
26000	102.	9.78,-7	38.5	-	-
28000	104.	1.10,-6	43.4	-	-
30000	109.	1.25,-6	49.3	-	-
35000	117.	1.64,-6	64.6	-	-

* $5.96,-7 \equiv 5.96 \times 10^{-7}$

FIGURE CAPTIONS

Fig. 1. Charge transfer cross sections for argon vs. relative energy.

Fig. 2. Components of argon thermal conductivity (B=0) at 1 atm. pressure. λ_e: electron component; λ_h : atom + ion component; λ_r : reactive thermal conductivity; λ_a : pure atom thermal conductivity.

Fig. 3. Electron thermal conductivities, $\lambda_e^{\perp}$ and λ_e^{H} , in argon at 1 atm pressure for magnetic fields of 25 and 100kG.

Fig. 4. Hall parameter $|\omega_e|\tau_e$ as a function of temperature for 1 atm argon with B=5, 25 and 100kG.

Fig. 5. Perpendicular and Hall components of electrical conductivity of argon at 1 atm pressure for B=5, 25 and 100kG.

Fig. 6. Heavy (atom + ion) and reactive thermal conductivities of argon at 0.01 atm pressure showing effect of an applied field of 100kG. Note that the Hall components are negative.

Fig. 7. Electrical conductivity of argon at 10000^{o}K as a function of pressure with: A - cut-off cross sections, B - static-shielded cross sections (Ref. 4), C - dynamic-shielded cross sections (Ref. 26).

Fig. 8. Electrical conductivity of argon at 12000^{o}K as a function of pressure. Symbols as in Fig. 7.

Fig. 9. Electrical conductivity of argon at 1 atm pressure compared with experiments. - : theory with electron and ion shielding in Debye length; -.- : theory with electron shielding only.

Fig. 10. Thermal conductivity of argon at 1 atm compared with experimental measurements.