

Keep

ticked.

Items checked

are in stock.

Nothing else
done about
non stock
items

S P Smith

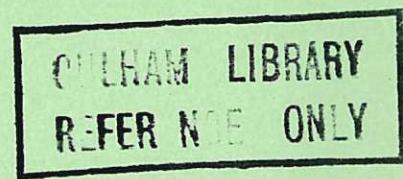
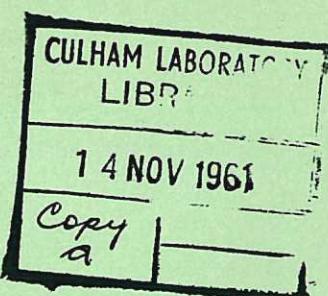
24/12/86 United Kingdom Atomic Energy Authority



UNCLASSIFIED

2 EXTRA COPIES

AERE - Bib 121



RESEARCH GROUP

Bibliography

There is an entry in LIBRIS for the
bibliography. AERE Bib 121.

Oscillating electromagnetic field interaction
with and containment of plasmas.

F. B. KNOX C. S. SABEL

Library,

Atomic Energy Research Establishment,
Harwell, Berkshire.

1959

Available from H.M.S.O.
(PRICE FIVE SHILLINGS & SIXPENCE NET)

UNCLASSIFIED
(Approved for sale)

A.E.R.E. BIB. 121

OSCILLATING ELECTROMAGNETIC FIELD INTERACTION

WITH, AND CONTAINMENT OF, PLASMAS

A BIBLIOGRAPHY

Compiled by

F. B. KNOX

and

C. S. SABEL

Library,
U.K.A.E.A. Research Group,
Atomic Energy Research Establishment,
HARFELL
June, 1959.
HL.59/4193 (SC 5)

CAP./V.P.

The references are arranged alphabetically within each year. There is an author index at the end.

Science Abstracts A from 1950 to date and Nuclear Science Abstracts and the Library Catalogues, have been searched; where appropriate the relevant abstract journal reference is given.

The following references relate directly to oscillating electromagnetic field containment of plasmas:- 144, 145, 146, 147, 207, 246, 255, 260, 262, 263, 264, 271, 275, 276, 286, 293, 294, 296, 298, 303, 306, 308.

1. 1924 - 1947

1. DARWIN, C. G.

The optical constants of matter.

Trans. Camb. Phil. Soc., vol. 23, pp. 137 - 167, November, 1924.

2. APPLETON, E. V. & BARNETT, M. A. F.

Wireless wave propagation.

Electrician, vol. 94, p. 398, April 3, 1925.

3. NICHOLS, H. W. & SCHELLENG, J. C.

Propagation of electric waves over the earth.

Bell Syst. Tech J., vol. 4, pp. 215 - 234, April, 1925.

4. BURNETT, D.

The propagation of radio waves in an ionised atmosphere.

Proc. Camb. Phil. Soc., vol. 27, pp. 578 - 587, October 31, 1931.

5. APPLETON, E. V.

Wireless studies in the ionosphere.

J. Instn. Elect. Engrs., vol. 71, pp. 642 - 650, October, 1932.

6. APPLETON, E. V. & CHARMAN, F. W.

The collisional friction experienced by vibrating electrons in ionised air.

Proc. Phys. Soc., vol. 44, pp. 246 - 254, May, 1932.

7. APPLETON, E. V. & NAISSMITH, R.

Some measurements of upper-atmospheric ionisation.

Proc. Roy. Soc., series A., vol. 137, pp. 36 - 54, July, 1932.

8. APPLETON, E. V. & BUILDER, G.

The ionosphere as a doubly refracting medium.

Proc. Phys. Soc., vol. 45, p. 208, March, 1933.

9. BAILEY, V. A.

Study of the magneto-ionic theory of wave-propagation by means of conformal representation.

Phil. Mag., vol. 18, pp. 516 - 523, September, 1934.

10. BAILEY, V. A. & MARTYN, D. F.
The influence of electric waves on the ionosphere.
Phil. Mag., series 7, vol. 18, pp. 369 - 386, August, 1934.
11. BERKNER, L. V. & WELLS, H. W.
Report of ionosphère investigations at the Huancayo magnetic observatory (Peru) during 1933.
Proc. I.R.E. N.Y., vol. 22, pp. 1102 - 1123, September, 1934.
12. BOOKER, H. G.
Some general properties of the formulae of the magneto-ionic theory.
Proc. Roy. Soc., series A., vol. 147, pp. 325 - 382, November 15, 1934.
13. FARMER, F. T. & RATCLIFFE, J. A.
A new test of the magneto-ionic theory.
Nature, vol. 135, No. 3420, pp. 831 - 832, May 18, 1935.
14. GOUBAU, G.
Dispersion theory of the ionosphere. (In German)
Hochfrequenz.u. Elektroakustic, vol. 45, pp. 179 - 185, June, 1935.
15. GOUBAU, G.
Dispersion in an ionised medium under the influence of an external magnetic field (In German).
Hochfrequenz.u. Elektralustick, vol. 46, pp. 37 - 49, August, 1935.
16. MARTYN, D. F.
Dispersion and absorption curves for radio-wave propagation in the ionosphere according to the magneto-ionic theory.
Phil. Mag., series 7, vol. 19, pp. 376 - 388, February, 1935.
17. BOOKER, H. G.
Oblique propagation of electro-magnetic waves in a non-isotropic medium.
Proc. Roy. Soc., series A, vol. 155, pp. 235 - 257, June, 1936.
18. APPLETON, E. V.
Regularities and irregularities in the ionosphere.
Proc. Roy. Soc., series A., vol. 162, pp. 451 - 479, October 15, 1937.
19. BAJPAI, R. R. & MATHUR, K. B.
Group velocity curves for radio-wave propagation in the ionosphere.
Indian J. Phys., vol. 11, pp. 165 - 175, July, 1937.
20. SAHA, M. N. & RAI, R. N.
On the propagation of electro-magnetic waves through the atmosphere.
Proc. Nat. Inst. Sci. India, vol. 3, p. 359, 1937.
21. APPLETON, E. V. et al.
Magnetic double refraction of medium radio-waves in the ionosphere.
Nature, vol. 141 No. 3566, pp. 409 - 410, March 5, 1938.

22. BAILEY, V. A. & SOMERVILLE, J. M.
Study of the magneto-ionic theory of wave-propagation by means of simple formulae, linkages and graphical devices.
Phil. Mag., vol. 26, pp. 888 - 905, November, 1938.
23. BOOKER, H. G.
Propagation of wave packets incident obliquely upon a stratified doubly-refracting ionosphere.
Roy. Soc. Phil. Trans. A, vol. 237, pp. 411 - 451, September 30, 1938.
24. GHOSH, S. P.
Dispersion, absorption and polarisation curves for wave propagation in the ionosphere.
Indian J. Phys., vol. 12, pp. 341 - 354, November, 1938.
25. HUXLEY, L. G. H.
The propagation of electromagnetic waves in an ionised atmosphere.
Phil. Mag., series 7, vol. 25, pp. 148 - 159, January, 1938.
26. MILLINGTON, G.
Attenuation and group retardation in the ionosphere.
Proc. Phys. Soc., vol. 50, pp. 561 - 580, July, 1938.
- ✓ 27. HUXLEY, L. G. H.
The propagation of electro-magnetic waves in an atmosphere containing free electrons.
Phil. Mag., series 7, vol. 29, pp. 313 - 329, April, 1940.
- ✓ 28. WILKES, K. V.
The theory of reflexion of very long wireless waves from the ionosphere.
Proc. Roy. Soc., series A., vol. 175, pp. 143 - 163, April 10, 1940.
- ✓ 29. FÜRSTERLING, K.
On the propagation of electromagnetic waves in a magnetised medium at perpendicular incidence (In German).
Hochfrequenzteh. u. Elektroakust., vol. 59, pp. 10 - 22, January, 1942.
- ✓ 30. DARWIN, C. G.
The refractive index of an ionized medium, Part II.
Proc. Roy. Soc., series A., vol. 182, pp. 152 - 166, December 16, 1943.
31. GINSBURG, V.
The refractive index of an ionised gas.
Wireless Engr., (Abstract) vol. 22, p. 393, 1944.
32. RYDBECK, O. E. H.
On the propagation of radio-waves
Trans. Chalmers Univ. Tech. Gottenburg No. 34, 168 pp., 1944.

33. COWLING, T. G.
The electrical conductivity of an ionized gas in a magnetic field with applications to the solar atmosphere and the ionosphere.
Proc. Roy. Soc., series A., vol. 183, pp. 453 - 479, June 18, 1945.
34. SAHA, M. N. & BANERJEA, B. K.
Wave-treatment of propagation of electro-magnetic waves in the ionosphere.
Indian. J. Phys., vol. 19, pp. 159 - 166, October, 1945.
35. BANERJEA, B. K.
On the propagation of electro-magnetic waves through the ionosphere.
Proc. Roy. Soc., series A., vol. 190, pp. 67 - 81, June 17, 1947.
36. BEYNON, W. J. G.
Oblique radio transmission in the ionosphere and the Lorentz polarisation term.
Proc. Phys. Soc., vol. 59., pp. 97 - 107, January, 1947.
37. MITRA, S. K.
The upper atmosphere.
Royal Association Society of Bengal, p. 143, 1947.
38. SAHA, M. N. et al.
On the propagation of electro-magnetic waves through the upper atmosphere.
Indian J. Phys., vol. 21, pp. 181 - 198, August, 1947.

2. 1948

39. ALLEN, E. W. Jnr.
Reflections of very high frequency radio-waves from meteoric ionization.
Proc. I.R.E., vol. 36, pp. 346 - 352, March, 1948.
40. BECKMANN, B.
Absorption processes in the ionosphere. (In German)
Arch. elekt. Übertragung, vol. 2., pp. 124 - 135, April - May, 1948.
Sci. Abstr. A. 1950, 4533.
41. GERSON, N. C. & SEATON, S. L.
Generalised magneto-ionic theory.
J. Franklin. Inst., vol. 246, pp. 483 - 494, December, 1948.
42. KOLODZIEJCZYK, L.
The passage of electromagnetic waves through the ionosphere.
Soc. Sci. Lodz., Sect. III No. 6, 26 pp., 1948.
Sci. Abstr. A. 1950, 7385.

43. RAWER, K.
The geometrical optics of the ionosphere. (In French).
Rev. Sci. Paris, vol. 86, pp. 585 - 60., September - October, 1948.
Sci. Abstr. A. 1950, 3285.
44. VOOGT, A. H. DE
The analysis of ionospheric reflections. Part 1.
Tijdschr. ned. Radiogenoot, vol. 13, p. 183, 1948.

5. 1949

45. ARGENCE, E. & RAWER, K.
Calculation of the absorption coefficients for a parabolic ionospheric layer in the case of normal incidence. (In French).
C.R. Acad. Sci., Paris, vol. 229, pp. 996 - 997, November 15, 1949.
Sci. Abstr. A. 1950, 2598.
46. BOOKER, H. G.
Application of the magneto-ionic theory to radio-waves incident obliquely upon a horizontally-stratified ionosphere.
J. Geophys. Res., vol. 54, pp. 243 - 276, September, 1949.
Sci. Abstr. A. 1950, 1890.
47. BRACEWELL, R. N. & WEEKES, K.
Ionospheric absorption.
J. Appl. Phys., vol. 20, p. 724, July, 1949.
Sci. Abstr. A. 1950, 2819.
48. GILL, E. W. B. & VON ENGEL, A.
Starting potentials of electrodeless discharges.
Proc. Roy. Soc., series A., vol. 197, pp. 107 - 124, April 22, 1949.
49. HUXLEY, L. G. H. & RATCLIFFE, J. A.
A survey of ionospheric cross-modulation (wave-interaction or Luxembourg effect).
Proc. Instn. Elect. Engrs., Pt. III, vol. 96, pp. 433 - 440,
September, 1949.
Sci. Abstr. B. 1949, 3774.
50. JAEGER, J. C. & WESTFOLD, K. C.
Transients in an ionized medium with applications to bursts of radio noise.
Asst. J. Sci. Res. A, vol. 53, pp. 322 - 334, September, 1949.
Sci. Abstr. A. 1950, 5982.
51. KOLODZIEJCZYK, L.
Stationary waves in the ionosphere.
Soc. Sci. Lodz., Sect. III No. 15, 15 pp., 1949.
Sci. Abstr. A. 1950, 7387.

52. MCKINLEY, D. W. R. & MILLMAN, P. M.
 A phenomenological theory of radar echoes from meteors.
 Proc. I.R.E., vol. 37, pp. 364 - 375, 1949.
53. FOEVERLEIN, H.
 Radio-wave trajectories in the ionosphere II Theoretical principles
 (In German).
 Z. angew. Phys., vol. 1, No. 11, pp. 517 - 524, 1949.
 Sci. Abstr. A. 1950, 2601.
54. ROSEN, P.
 The propagation of electromagnetic waves in a tube containing a
 coaxial d.c. discharge.
 J. Appl. Phys., vol. 20, pp. 868 - 877, September, 1949.
 Sci. Abstr. A. 1950, 1100.
55. VOOGT, A. H. DE
 The analysis of ionospheric reflections. Part II.
 Tijdschr. ned. Radiogenoot, vol. 14, pp. 73 - 85, May, 1949.
 Sci. Abstr. A. 1950, 2090.
56. WESTFOLD, K. C.
 The wave-equations for electro-magnetic radiation in an ionised
 medium in a magnetic field.
 Aust. J. Sci. Res., vol. 2. pp. 169 - 183, June, 1949.
 Sci. Abstr. A. 1950, 2600.

4. 1950

57. ADEN, A. L. et al.
 A note on ionospheric radio-wave polarization.
 J. Geophys. Res., vol. 55, pp. 53 - 56, March, 1950.
 Sci. Abstr. A. 1950, 5983.
58. ARGENCE, E. & RAWER, K.
 Calculation of the absorption coefficient for the case of oblique
 incidence on a parabolic ionospheric layer. (In French)
 C.R. Acad. Sci. Paris, vol. 230, pp. 69 - 70, January 2, 1950.
 Sci. Abstr. A. 4231.
59. BECKER, W.
 The damping of extra-ordinary components in the ionosphere E₁-layer.
 J. Atmos. Terr. Phys., vol. 1 (No. 2) pp. 73 - 81, 1950
 Sci. Abstr. A 1951, 2871.
60. BIBL, K.
 The ray path in a curved ionospheric layer. (In French).
 Rev. Sci. Paris., vol. 88, pp. 27 - 29, January - March, 1950.
 Sci. Abstr. A. 1951, 3668.

- ✓ 61. BOOKER, H. G. et al.
Diffraction from an irregular screen with applications to
ionospheric problems.
Phil. Trans. Roy. Soc., series A, vol. 242, No. 856, pp. 579 - 609,
September 12, 1950.
Sci. Abstr. A. 1950, 6660.
- ✓ NO 62. BOOKER, H. G.
An outline of the magneto-ionic theory.
Tech. Report, No. 1, School of Elect. Engng., Cornell University, 1950.
- ✓ 63. CAMBRIDGE CONFERENCE
The regular behaviour of long and very long waves returned from
the ionosphere. (Abstracts of 5 papers given at Cambridge Conference
July 14 - 16, 1949).
Proc. Phys. Soc., section B, vol. 63, pp. 142 - 144, February, 1950
Sci. Abstr. A. 1950, 3286.
- ✓ 64. ECKERSLEY, T. L.
Coupling of the ordinary and extraordinary rays in the ionosphere.
Proc. Phys. Soc., section B, vol. 63, pp. 49 - 58, January, 1950.
- ✓ NO 65. FEINSTEIN, J.
Ionospheric wave propagation at low frequencies.
Mixed Commission on Ionosphere, International Council of Scientific
Unions, Proceedings of Second Meeting, Brussels, September, 4 - 6, 1950.
U.R.S.I. 1951, 230, pp. (pp. 166 - 175).
Sci. Abstr. A. 1952, 4493 (see also 4798).
- ✓ 66. FEINSTEIN, J.
Higher order approximations in ionospheric wave-propagation.
J. Geophys. Res., vol. 55, pp. 161 - 170, June, 1950.
Sci. Abstr. A. 1950, 8138.
- ✓ 67. FÖRSTELLING, K. & WUSTER, H. O.
On reflection in inhomogeneous media. (In German).
Ann. Phys. Lpz., vol. 8, No. 3 & 4, pp. 129 - 133, 1950.
Sci. Abstr. A. 1951, 4555.
- ✓ 68. HUXLEY, L. G. H.
Ionospheric cross-modulation at oblique incidence.
Proc. Roy. Soc., series A., vol. 200, pp. 486 - 511, February 22, 1950.
Sci. Abstr. A. 1950, 3289.
- ✓ 69. KELSO, J. M.
Radio wave propagation in a curved ionosphere.
Proc. I.R.E., vol. 38, pp. 533 - 539, May, 1950.
Sci. Abstr. A., 1950, 7392.

70. MITRA, S. N.
Fading of short wireless waves due to the interference between the magneto-ionic components.
Indian. J. Phys., vol. 24, pp. 197 - 206, May, 1950.
Sci. Abstr. A. 1951, 1207.
71. FOLVERLEIN, H.
The trajectories of radio waves in the ionosphere III. (In German).
Z. angew. Phys., vol. 2, pp. 152 - 160, April, 1950.
Sci. Abstr. A. 1950, 7393.
72. RYDBECK, O. E. H.
Magneto ionic triple splitting of ionospheric waves.
Proc. Indian Acad. Sci. A., vol. 31, pp. 63 - 82, February, 1950.
Sci. Abstr. A. 1950, 7391.
73. RYDBECK, O. E. H.
Magneto-ionic triple splitting of ionospheric waves.
J. Appl. Phys., vol. 21, pp. 1205 - 1214, December, 1950.
Sci. Abstr. A. 1951, 1205.
74. SCOTT, J. C. W.
Magneto-ionic measurements at high latitudes.
J. Geophys. Res., vol. 55, p. 65, 1950.
75. SCOTT, J. C. W.
The Poynting vector in the ionosphere.
Proc. I.R.E., vol. 38, pp. 1057 - 1068, September, 1950.
Sci. Abstr. A. 1951, 1203.
76. SCOTT, J. C. W.
Computation of propagation in the ionosphere.
J. Geophys. Res., vol. 55., pp. 267 - 270, September, 1950.
Sci. Abstr. A. 1951, 1206.
77. STANLEY, J. P.
The absorption of long and very long waves in the ionosphere.
J. Atmos. Terr. Phys., vol. 1 (No. 2) pp. 65 - 72, 1950.
Sci. Abstr. A. 1951, 2870.
78. STANLEY, J. P.
Ionospheric reflection of very long radio waves.
Canad. J. Res. A, vol. 28, pp. 549 - 557, November, 1950.
Sci. Abstr. A. 1951, 3669.
79. WEEMS, K.
Effect of a sudden ionospheric disturbance on long radio waves reflected obliquely from the ionosphere.
Nature, vol. 165, no. 4206, pp. 935 - 936, June 10, 1950.
Sci. Abstr. A. 1950, 8139.

80. WILALE, H. A. & STANLEY, J. P.
Group and phase velocities from the magneto-ionic theory.
J. Atmos. Terr. Phys., vol. 1, No. 2, pp. 82 - 94, 1950.
Sci. Abstr. A. 1951, 2869.
81. YONEZAWA, T.
On the reflection of radio waves from a meteor.
Int. Ass. Terr. Magn. Elect. Bull., No. 13, pp. 516 - 518, 1950.
Sci. Abstr. A. 1951, 5988.
5. 1951
82. ARGENCE, E.
Radio wave paths in the ionosphere. (In French).
C.R. Acad. Sci. (Paris), vol. 233, pp. 607 - 608, September, 10, 1951.
Sci. Abstr. A. 1952, 423.
83. BAILEY, V. A.
The relativistic theory of electro-magneto-ionic waves.
Phys. Rev., vol. 83, pp. 439 - 453, July 15, 1951.
Sci. Abstr. A. 1951, 7125.
84. BECKER, W.
On the problem of 'triple splitting' in the ionosphere. (In German)
Z. angew. Phys., vol. 3, No. 3 - 4, pp. 83 - 88, 1951.
Sci. Abstr. A. 1951, 7130.
85. BELL, D. A.
Ionospheric interaction in disturbed conditions.
Proc. Phys. Soc., section B, vol. 64, pp. 1053 - 1062, December, 1951.
Sci. Abstr. A. 1952, 3742.
- NO
86. BERZ, F., JOHNSEN, K. & SIMS, G. D.
A bibliography of the dynamics of electron streams and on ionized media.
A.E.R.E. HaR 699, 13 pp., April, 1951.
87. BUDDEN, K. G.
The reflection of very low frequency radio waves at the surface of a sharply bounded ionosphere with superimposed magnetic field.
Phil. Mag., series 7, vol. 42., pp. 833 - 850, August, 1951.
Sci. Abstr. A. 1951, 8861.
88. CLEGG, J. A. & CLOSS, R. L.
Plasma oscillations in meteor trails.
Proc. Phys. Soc., section B, vol. 64, pp. 718 - 719, July, 1951.
Sci. Abstr. A. 1951, 8449.

89. CLOGSTON, A. M.
Reduction of skin effect losses by the use of laminated conductors.
The Bell System Technical Journal, vol. 30, pp. 491 - 529, 1951.
90. CUTOLO, M.
Self-interaction of radio waves in the ionosphere.
Nature, vol. 167, no. 4243, pp. 314 - 315, February 24, 1951.
Sci. Abstr. A. 1951, 4558.
91. DENISOV, N. G.
Propogation of electromagnetic signals in an ionized gas. (In Russian)
Zh. eksper. teor. Fiz., vol. 21, pp. 1354 - 63, (No. 12, 1951).
Sci. Abstr. A. 1952, 5930.
92. FEINSTEIN, J.
The interpretation of radar echoes from meteor trails.
J. Geophys. Res., vol. 56, pp. 37 - 51, March, 1951.
Sci. Abstr. A. 1951, 5987.
93. FORSGRÖN, S. K. H.
Some cal lations of ray paths in the ionosphere.
Trans. Chalmers Univ. Techn. (Gothenburg), No. 104, 22 pp., 1951.
Sci. Abstr. A. 1952, 424.
94. "FORSTELLING, K. & WUSTER, H. O.
On the generation of higher harmonics in the ionosphere. (In German)
J. Atmos. Terr. Phys., vol. 2, pp. 22 - 31, (No. 1, 1951)
Sci. Abstr. A. 1952, 1989.
95. FREIDMAN, B.
Propagation in a non-homogeneous atmosphere.
Commun. Pure Appl. Math., vol. 4, pp. 317 - 350, August, 1951.
Sci. Abstr. A. 1952, 2857.
96. GERSHMAN, B. N.
On the spreading of electromagnetic pulses propagating in the
ionosphere. (In Russian).
Zh. tekhn. Fiz., vol. 22, pp. 101 - 104, (No. 1, 1951).
Sci. Abstr. A. 1952, 8357.
97. GIBBONS, J. J. & HERLTNEY, R. J.
A method for obtaining the wave solutions of ionospherically
reflected long waves including all variables and their height
variation.
J. Geophys. Res., vol. 56, pp. 355 - 371, September, 1951.
Sci. Abstr. A. 1952, 1988.
98. GINZBURG, V. L.
On the influence of the electron-electron impacts upon the
absorption of radio-waves in the F - layer of the ionosphere and in the
corona of the sun. (In Russian).
Zh. tekhn. Fiz., vol. 21, No. 8, pp. 943 - 947, 1951.
Sci. Abstr. A. 1953, 338.

99. GOLDSTEIN, L. & COHEN, N. L.
Behaviour of gas discharge plasma in high frequency electromagnetic fields.
Elect. Commun., vol. 28, pp. 305 - 321, December, 1951.
Sci. Abstr. A. 1952, 4378.
100. HERLOFSON, N.
Plasma resonance in ionospheric irregularities.
Ark. Fys., vol. 3, Paper 15, pp. 247 - 297, 1951.
Sci. Abstr. A. 1951, 7132.
101. HEWISH, A.
The diffraction of radio waves in passing through a phase-changing ionosphere.
✓ Proc. Roy. Soc., series A., vol. 209, pp. 81 - 96, October 8, 1951.
Sci. Abstr. A. 1951, 9621.
102. HOGARTH, J. E.
Polarisation of the Z-trace.
Nature, vol. 167, no. 4258, p. 943, June 9, 1951.
Sci. Abstr. A. 1951, 7131.
103. KELSO, J. M. et al.
The polarization of vertically incident long radio waves
(in the ionosphere).
Ann. Geophys., vol. 7, pp. 215 - 244, (No. 4, 1951).
Sci. Abstr. A. 1952, 1990.
104. KELSO, J. M.
Magneto-ionic calculations for 150 Kc/s.
✓ Pen. State. Coll. Tech. Rep. No. 24, 1951.
105. KELSO, J. M.
The effect of the Lorentz polarisation term on the vertical
incidence absorption in a deviating ionosphere layer.
Proc. I.R.E., vol. 39, pp. 412 - 419, April, 1951.
Sci. Abstr. A. 1951, 5612.
106. LLIWELLYN JONES, F. & MORGAN, G. D.
High frequency discharges. I Breakdown mechanism and similarity
relationship.
✓ Proc. Phys. Soc., section B., vol. 64, pp. 560 - 573, July, 1951.
107. LLIWELLYN JONES, F. & MORGAN, G. D.
High frequency discharges II Similarity relationship for minimum
maintenance potentials.
✓ Proc. Phys. Soc., section B., vol. 64, pp. 574 - 578, July, 1951.
108. MARCUVITZ, N.
Field representations in spherically stratified regions.
Commun. Pure Appl. Math., vol. 4, pp. 263 - 316, August, 1951.
Sci. Abstr. A. 1952, 2861.

109. NUPEN, W.
Selective annotated bibliography on radar as applied to meteorology.
Meteorology Abstr., vol. 2, pp. 680 - 681, August, 1951.
Sci. Abstr. A. 1952, 4053.
110. RAWER, K.
Lateral ray-displacement on reflection at a non-homogeneous ionospheric layer. (In German).
Z. angew. Phys., vol. 3, pp. 226 - 227. (No. 6, 1951).
Sci. Abstr. A. 1952, 1991.
111. RGMILL, D.
Radio reflections from a column of ionized gas.
Nature, vol. 167, no. 4241, p. 243, February 10, 1951.
Sci. Abstr. A. 1951, 3664.
112. RYDBECK, O. E. H.
The theory of magneto-ionic triple splitting (triple splitting radio waves normal to the ionosphere).
Trans. Chalmers, Univ. Techn., Gothenburg, No. 101, 38 pp., 1951.
Sci. Abstr. A. 1951, 7129.
113. RYDBECK, O. E. H.
The theory of magneto-ionic triple splitting.
Commun. Pure Appl. Math., vol. 4, pp. 129 - 160, June, 1951.
Sci. Abstr. A. 1951, 9622.
114. SAHA, M. N. et al.
Vertical propagation of electromagnetic waves in the ionosphere (discussion of the equations for).
Proc. Nat. Inst. Sci. India., vol. 17, pp. 205 - 226, May - June, 1951.
Sci. Abstr. A. 1951, 8860.
115. SCHUmann, W. O.
On longitudinal and transverse electric waves in uniformly moving plasma. (In German).
Z. angew. Phys., vol. 3, pp. 178 - 181, (No. 5, 1951).
Sci. Abstr. A. 1952, 1126.
116. SHAW, I. J.
Some further investigations of ionospheric cross-modulation.
Proc. Phys. Soc., section B, vol. 64, pp. 1 - 20, January, 1951.
Sci. Abstr. A. 1951, 3670.
- ✓ 117. TWISS, R. C.
On Bailey's theory of amplified circularly polarized waves in an ionized medium.
Phys. Rev., vol. 84, pp. 448 - 457, November 1, 1951.
Sci. Abstr. A. 1952, 426.
- ✓ 118. WATFIELD, K. C.
The interpretation of the magneto-ionic theory.
J. Atmos. Terr. Phys., vol. 2, No. 3 pp. 152 - 186, 1951.
Sci. Abstr. A. 1951, 3662.

6. 1952

119. ARGENCE, E.
The application of the Appleton-Hartree formula to the determination of the phase path of an electromagnetic wave in the ionosphere.
(In French).
C.R. Acad. Sci. (Paris), vol. 234, pp. 456 - 458, January 21, 1952.
Sci. Abstr. A. 1952, 3740.
120. ARZELIES, H.
On the mean velocity of propagation of the energy in an heterogeneous absorbing ionized medium with slowly varying parameters.
(In French).
C.R. Acad. Sci. (Paris), vol. 235, pp. 421 - 423, August 11, 1952.
Sci. Abstr. A. 1953, 337.
121. BAILEY, V. A. et al.
Resonance in gyro-interaction of radio waves.
Nature, vol. 169, no. 4309, pp. 911 - 913, May 31, 1952.
Sci. Abstr. A. 1952, 6653.
122. BANERJEE, S. S. & MEHROTRA, R. R.
Equivalent paths of the extraordinary waves for oblique incidence at the ionosphere.
J. Sci. Industr. Res., vol. 11B, pp. 216 - 218, June, 1952.
Sci. Abstr. A. 1952, 8965.
123. BANERJI, R. B.
On the origin of the third ionospheric echo.
Indian J. Phys., vol. 26, pp. 28 - 37, January, 1952.
Sci. Abstr. A. 1952, 7433.
124. BIBL, K. et al.
An improved method for the calculation of the field strength of waves reflected by the ionosphere.
Nature, vol. 169, no. 4291, pp. 147 - 148, January 26, 1952.
Sci. Abstr. A. 1952, 3741.
125. BOLLE A. & DOMINICI, P.
Contribution to the calculation of absorption in the ionospheric propagation of short waves. (In Spanish).
Ann. Geofis., vol. 5, pp. 377 - 396, July, 1952.
Sci. Abstr. A. 1953, 7807.
126. BUDDEN, K. G.
The propagation of a radio atmospheric II.
Phil. Mag., series 7, vol. 43, pp. 1179 - 1200, November, 1952.
Sci. Abstr. A. 1953, 1788.
127. BUDDEN, K. G.
The theory of the limiting polarization of radio waves reflected from the ionosphere.
Proc. Roy. Soc., series A., vol. 215, pp. 215 - 233, November 25, 1952.
Sci. Abstr. A. 1953, 1791.

128. CHATTERJEE, B.
Studies on ionospheric absorption (of radio waves).
Indian J. Phys., vol. 26, pp. 585 - 596, December, 1952.
Sci. Abstr. A. 1954, 2615.
129. COLONNESE, G.
On the theory of the interaction of radio waves in the ionosphere.
(In Italian).
Elettrotecnica, vol. 39, pp. 200 - 204, (No. 4, 1952).
Sci. Abstr. A. 1952, 8966.
130. CUTOLO, M.
Experimental determination of resonance curves in the motion of
slow electrons of the upper atmosphere. (In Italian).
Nuovo Cimento, series 9, vol. 9, pp. 391 - 406, May, 1952.
Sci. Abstr. A., 1953, 1789.
131. CUTOLO, M.
On a new phenomena of interaction between a wave and free electrons
superposed on the terrestrial magnetic field (In Italian).
Nuovo Cimento, series 9, vol. 9, pp. 697 - 698, August, 1952.
Sci. Abstr. A. 1954, 2616.
132. GERTSENSHTEIN, M. E.
On the longitudinal waves in an ionized medium (plasma). (In Russian).
Zh. eksper. teor. Fiz., vol. 22, pp. 303 - 309, (No. 3, 1952).
Sci. Abstr. A. 1952, 7415.
133. GERTSENSHTEIN, M. E.
The scattering of radio waves by the local non homogenetics in the
plasma of the ionosphere. (In Russian).
Zh. eksper. teor. Fiz., vol. 23, No. 6 (12) pp. 678 - 681, 1952.
Sci. Abstr. A. 1954, 3691.
134. GIBBONS, J. J. & MERTNEY, R. J.
Wave solutions, including coupling, or ionospherically reflected
long radio waves for a particular E region model.
J. Geophys. Res., vol. 57, pp. 323 - 338, September, 1952.
Sci. Abstr. A. 1954, 11241.
135. HEADING, J. & WHIPPLE, R. T. P.
The oblique reflection of long wireless waves from the ionosphere
at places where the earth's magnetic field is regarded as vertical.
Phil. Trans. Roy. Soc., series A, vol. 244, pp. 469 - 503, (No. 887, 1952).
Sci. Abstr. A. 1952, 3743.
136. KAISER, T. R. & CLOSS, R. L.
Theory of radio reflections from meteor trails.
Phil. Mag., series 7, vol. 43, No. 336, pp. 1 - 32, January, 1952.
Sci. Abstr. A. 1952, 1400.

137. KELLER, H. B.
Plane waves in the ionosphere.
Trans. I.R.E. Proj. Group on Antennas and Propagation, No. 3
pp. 42 - 49, August, 1952.
Sci. Abstr. A. 1953, 3463.
138. KELSO, J. M.
Radio-wave propagation at oblique incidence including the Lorentz polarization term.
Proc. I.R.E., vol. 40, pp. 87 - 97, January, 1952.
Sci. Abstr. A. 1952, 4494.
139. LABRUM, N. R. & BIGG, E. K.
Observations on radio frequency oscillations on low pressure electrical discharges.
✓ Proc. Phys. Soc., section B, vol. 65, pp. 356 - 368, May, 1952.
Sci. Abstr. A. 1952, 5137.
140. LAGRONE, A. H.
Volume integration of scattered radio waves.
Proc. I.R.E., vol. 40, p. 54, January, 1952.
Sci. Abstr. A. 1952, 4490.
141. LANDMARK, B.
Polarization of radio waves reflected from the ionosphere.
J. Atmos Terrest. Phys., vol. 2, No. 4, pp. 254 - 255, 1952.
Sci. Abstr. A. 1955, 401.
142. LANGE-HESSE, G.
Comparison of the double refraction in crystals and in the ionosphere. (In German).
Arch. elekt. Ubertragung, vol. 6, pp. 149 - 158, April, 1952.
Sci. Abstr. A. 1952, 8356.
143. MOTZO, M.
Theoretical resonance curves of interaction between electromagnetic waves for vertical incidence in the ionosphere. (In Italian).
Nuovo Cimento, series 9, vol. 9, pp. 213 - 219, March, 1952.
Sci. Abstr. A. 1953, 2573.
144. OKRESS, E. C. & WROUGHTON, D. N.
Metals melted without crucibles.
Iron Age, vol. 170, No. 5, pp. 83 - 86, 1952.
Chem. Abstr. 1952, 8585 e.
145. OKRESS, E. C. et al.
Electromagnetic levitation of solid and molten metals.
J. Appl. Phys., vol. 23, pp. 545 - 552, May, 1952.
146. OKRESS, E. C. et al.
A technique for eliminating crucibles in heating and melting of metals.
J. Electrochem. Soc., vol. 49, No. 5, pp. 205 - 211, 1952.

147. OKRESS, E. C. et al.
Erratum: Electromagnetic levitation of solid and molten metals.
J. Appl. Physics, vol. 23, p. 1413, December, 1952.
148. SATO, T.
Influences of ions on the ionosphere.
J. Geomagn. Geoelectr. Kyoto, vol. 4, pp. 114 - 130, December, 1952.
Sci. Abstr. A. 1954, 1499.
149. SCHUMANN, W. O.
The propagation of very long radio waves round the earth and
signals from lightning. (In German).
Nuovo Cimento, series 9, vol. 9, pp. 1116 - 38, December, 1952.
Sci. Abstr. A. 1954, 1498.
150. SCHUMANN, W. O.
On the non-radiating free oscillations of a conducting ball
surrounded by a layer of air and an ionosphere. (In German).
✓ Z. Naturforsch, vol. 7a, pp. 149 - 154, February, 1952.
Sci. Abstr. A. 1952, 5204.
151. SCOTT, J. C. W.
The polarization ellipse in the ionosphere.
Trans. I.R.E., Proj. Group on Antennas and Propagation,
No. 3, pp. 50 - 52, August, 1952.
Sci. Abstr. A. 1953, 3464.
152. SHINE, D. H. & WHALE, H. A.
Group velocities and group heights from the magneto-ionic theory.
J. Atmos. Terr. Phys., vol. 2, No. 2, pp. 85 - 105, 1952.
Sci. Abstr. A. 1954, 3692.
153. SNYDER, W & HELLIWELL, R. A.
Universal wave polarisation chart from the magneto-ionic theory.
J. Geophys. Res., vol. 57, pp. 73 - 84, March, 1952.
Sci. Abstr. A. 1954, 11240.
154. VILENSKII, I. M.
On the theory of the interaction of radio waves in the ionosphere.
(In Russian).
Zh. eksper. teor. Fiz., vol. 22, No. 5, pp. 544 - 561, 1952.
Sci. Abstr. A. 1953, 983.
155. WHITLIBAD, J. D.
The quasi-transverse (QT) approximation to Appleton's magneto-ionic
equation.
J. Atmos. Terr. Phys., vol. 2, no. 6, pp. 361 - 362, 1952.

7. 1953

156. ARGENCE, E. et al.
Influence of the terrestrial magnetic field on the absorption of short waves in the ionosphere (normal incidence) (In French).
C.R. Acad. Sci. (Paris), vol. 236, pp. 190 - 192, January 12, 1953.
Sci. Abstr. A. 1953, 3461.
157. BANERJEE, S. S. et al.
Scattering of short wave radio signals and their bearing on the ionosphere.
J. Sci. Indust. Res., vol. 12A, pp. 278 - 282, June, 1953.
Sci. Abstr. A. 1954, 1913.
158. BANERJEE, S. S. & BANERJEE, D. K.
Scattering of radio waves and horizontal gradient of ionization in the ionosphere.
J. Sci. Indust. Res., vol. 12B, pp. 277 - 279, June, 1953.
Sci. Abstr. A. 1954, 1914.
159. BROWNE, I. C. & KAISER, T. R.
The radio echo from the head of meteor trails.
J. Atmos. Terrest. Phys., vol. 4, pp. 1 - 4, September, 1953.
Sci. Abstr. A. 1954, 8853.
160. BUDDEN, K. G.
The propagation of very low frequency radio waves to great distances.
Phil. Mag., series 7, vol. 44, pp. 504 - 513, May, 1953.
Sci. Abstr. A. 1953, 7804.
161. CHATTERJEE, B.
Oblique propagation of radio waves over a curved earth.
Indian. J. Phys., vol. 27, pp. 257 - 268, May, 1953.
Sci. Abstr. A. 1954, 4753.
162. DAVIDS, N.
Optic axes and critical coupling in the ionosphere.
J. Geophys. Res., vol. 58, pp. 311 - 321, September, 1953.
Sci. Abstr. A. 1954, 11237.
163. ECKERSLEY, T. L.
Recombination and diffusion and spread echoes from the ionosphere.
Proc. Phys. Soc., section B., vol. 66, pp. 1025 - 1038, December, 1953.
Sci. Abstr. A. 1954, 1897.
164. FRANCIS, G. & VON ENGEL, A.
The growth of the high frequency electrodeless discharge.
Phil. Trans. Roy. Soc., series A., vol. 246, No. 909, pp. 143 - 180,
1953.
Sci. Abstr. A. 1953, 6822.

165. GERTSENSTEIN, M. E.
Effect of elastic collisions between electrons and molecules on longitudinal electric waves in the plasma. (In Russian).
Zh. eksper. teor. Fiz., vol. 24, No. 6, pp. 652 - 658, 1953.
Sci. Abstr. A. 1954, 11248.
166. GINZBURG, V. L.
On certain questions in the theory of the propagation of a radio wave in the ionosphere in connection with their incorrect treatment by V.N. Kessenikh. (In Russian).
Zh. eksper. teor. Fiz., vol. 25, No. 4 (10), pp. 498 - 500, 1953.
Sci. Abstr. A. 1955, 402.
167. GOLDSTEIN, L. et al.
Interaction of microwaves propagated through a gaseous discharge plasma.
Phys. Rev., vol. 90, p. 151, April 1, 1953.
Sci. Abstr. A. 1953, 4929.
168. HASIKUNI, M.
The dispersion relation of plasma oscillations in an external magnetic field.
J. Sci. Hiroshima Univ. A., vol. 17, pp. 129 - 138, August, 1953.
Sci. Abstr. A. 1954, 6647.
169. HIBBLERD, F. H.
Theoretical resonance curves in the gyrointeraction of electromagnetic waves in the ionosphere.
Nuovo Cimento, series 9, vol. 10, pp. 380 - 385, April, 1953.
Sci. Abstr. A. 1953, 8596.
170. HINES, C. O.
Higher-order approximations in ionospheric wave propagation.
J. Geophys. Res., vol. 58, pp. 95 - 98, March, 1953.
Sci. Abstr. A. 1954, 11247.
171. HINES, C. O.
Reflection of waves from varying media.
Quart. Appl. Math., vol. 11, pp. 9 - 31, April, 1953.
Sci. Abstr. A. 1953, 7805.
172. HUXLEY, L. G. H.
Alternative developments of the theory of radio wave interaction.
Proc. Roy. Soc., series A., vol. 218, pp. 520 - 536, July 23, 1953.
Sci. Abstr. A. 1953, 6975.
173. JACBI, R. & KAHAN, T.
Electromagnetic phenomena in the ionosphere: crossed effects of a constant magnetic field and oscillating electric field. (In French).
C.R. Acad. Sci. (Paris), vol. 236, pp. 788 - 790, February 23, 1953.
Sci. Abstr. A. 1953, 5594.

174. JANCEL, R. & KAHAN, T.
Propagation of plane electromagnetic waves in the ionosphere.
(In French).
C.R. Acad. Sci. (Paris), vol. 236, pp. 2045 - 2047, May 27, 1953.
Sci. Abstr. A. 1953, 7808.
175. JANCEL, R. & KAHAN, T.
Conditions of coupling and reflection of ordinary and extraordinary
electromagnetic waves in an inhomogeneous and anisotropic plasma
(ionosphere). (In French).
C.R. Acad. Sci. (Paris), vol. 237, pp. 1657 - 1659, December 21, 1953.
Sci. Abstr. A. 1954, 4751.
176. KAISER, T. R.
Radio echo studies of meteor ionization.
Advances in Phys., vol. 2, pp. 495 - 544, October, 1953.
Sci. Abstr. A. 1954, 18.
177. KELSO, J. M.
On the coupled wave equations of magneto-ionic theory.
J. Geophys. Res., vol. 58, pp. 431 - 436, December, 1953.
Sci. Abstr. A. 1954, 11245.
178. KITCHEN, F. A. et al.
A review of present knowledge of the ionospheric propagation of
very low, low - and medium - frequency waves.
Proc. Instn. Elect. Engrs., III, vol. 100, pp. 100 - 108, March, 1953.
Sci. Abstr. A. 1953, 2575.
179. LEPECHINSKY, D.
The ionosphere and wave propagation. (In French).
Summary of Proceedings of Commission III at 10th General Assembly of
U.R.S.I. (Sydney, 1952).
Onde. elect., vol. 33, pp. 151 - 164, March, 1953.
Sci. Abstr. A. 1953, 6976.
180. LEWIS, R. P. W.
The reflection of radio waves from an ionized layer having both
vertical and horizontal ionization gradients.
Proc. Phys. Soc., section B., vol. 66, pp. 308 - 316, April, 1953.
Sci. Abstr. A. 1953, 4935.
181. MANNING, L. A.
The strength of meteoric echoes from dense columns.
J. Atoms. Terrest. Phys., vol. 4, pp. 219 - 225, December, 1953.
Sci. Abstr. A. 1954, 3034.
182. MARSHALL, J. S. & HITSCHFIELD, W.
Interpretation of the fluctuating echo from randomly distributed
scatterers. I.
Canad. J. Phys., vol. 31, pp. 962 - 994, September, 1953.
Sci. Abstr. A. 1954, 2613.

133. MORGAN, G. D.
High frequency discharges in gases.
Science Progress, vol. 41, No. 161, pp. 22 - 41, January, 1953.
134. MORGAN, M. G.
A review of v.h.f. ionospheric propagation.
Proc. I.R.E., vol. 41, pp. 502 - 587, May, 1953.
Sci. Abstr. A. 1953, 6156.
135. PIGGOTT, W. R.
The reflection and absorption of radio waves in the ionosphere.
Proc. Instn. Elect. Engrs. III, vol. 100, pp. 61 - 72, March, 1953.
Sci. Abstr. A. 1953, 2574.
136. RØHOLT, B. A.
Mechanical model of the ionosphere. (In Norwegian).
(The expression for refractive index for radio waves in the ionosphere
is compared with a mechanical model).
Tekh. Ukeblad, vol. 100, pp. 531 - 537, June 18, 1953.
Sci. Abstr. A. 1953, 7353.
137. ROSS, C. & FLUKE, C. S.
Magneto-ionic calculations.
No Wright Air. Div. Centre Tech. Rep., pp. 53 - 96, 1953.
138. SCOTT, J. C. W.
Real and complex wave polarization in the ionosphere.
J. Geophys. Res., vol. 58, pp. 437 - 443, December, 1953.
Sci. Abstr. A. 1954, 11246.
139. SNYDER, W.
The effect of ions on magneto-ionic characteristics polarisation.
Trans. I.R.E. (AP), vol. 1, pp. 23 - 27, July, 1953.
Sci. Abstr. A. 1954, 4754.
140. STOREY, L. R. O.
An investigation of whistling atmospherics.
Phil. Trans. A., vol. 246, No. 908, pp. 113 - 141, 1953.
Sci. Abstr. A. 1953, 8135.
141. VIREAUX, P.
The transmission of Hertzian waves through strongly ionized gases.
(In French).
J. Phys. Radium, vol. 14, pp. 310 - 316, May, 1953.
Sci. Abstr. A. 1953, 8591.
142. VILNIASHII, I. M.
Effects of nonlinear properties of the ionosphere on radiowaves.
Dokl. Akad. Nauk. S.S.R., vol. 92, No. 3, pp. 525 - 528, 1953.
English translation U.S. National Sci. Found. NSF-tr-200. - NO
Sci. Abstr. A. 1954, 7586.

193. DE VOOGT, A. H.
The calculation of the path of a radio-ray in a given ionosphere.
Proc. I.R.E., vol. 41, pp. 1183 - 1187, September, 1953.
Sci. Abstr. A. 1954, 1502.
194. WALLACE, F. R.
Interpretation of the fluctuating echo from randomly distributed
scatterers II.
Canad. J. Phys., vol. 31, pp. 995 - 1009, September, 1953.
Sci. Abstr. A. 1954, 2514.

8. 1954

195. ASKAR'YAN, G. A.
On the generation of radio waves in the millimetre region by
passing an electron cloud through a retarding medium. (In Russian).
Letter in Zh. eksper. teor. Fiz., vol. 27, No. 6 (12), p. 761, 1954.
Sci. Abstr. A. 1955, 7209.
196. BANERJEE, S. S. & BANERJEE, D. K.
Effect of thickness of the ionospheric layer on the multiple
splitting and scattering of radio waves.
J. Sci. Industr. Res., vol. 13B, No. 8, pp. 587 - 588, August, 1954.
Sci. Abstr. A. 1955, 403.
197. BEYNON, W. J. G.
Some notes on the absorption of radio waves reflected from the
ionosphere at oblique incidence.
✓ Proc. Instn. Elect. Engrs. III, vol. 101, pp. 15 - 19, January, 1954.
Sci. Abstr. A. 1954, 1503.
198. BOELLA, M.
Note on experiments on the ionospheric interaction of radiowaves.
(In Italian).
Nuovo Cimento, series 9, vol. 12, pp. 140 - 142, July, 1954.
Sci. Abstr. A. 1954, 9416.
199. BUDDEN, K. G.
A reciprocity theorem on the propagation of radio waves via the
ionosphere.
Proc. Cambridge Phil. Soc., vol. 50, Pt. 4, pp. 604 - 613, October, 1954.
Sci. Abstr. A. 1954, 11238.
200. CLEMMOW, P. C. & HEADING, J.
Coupled forms of the differential equations governing radio
propagation in the ionosphere.
Proc. Cambridge Phil. Soc., vol. 50, Pt. 2, pp. 319 - 333, April, 1954.
Sci. Abstr. A. 1954, 4752.

201. JACKSON, J. E.
 Measurements in the E-layer with a navy Viking rocket. (Including a test of the Lorentz theory).
J. Geophys. Res., vol. 59, No. 3, pp. 377 - 390, September, 1954.
Sci. Abstr. A. 1955, 1385.
202. JANCEL, R. & KAHAN, T.
 Propagation of plane electromagnetic waves in a homogeneous plasma (ionosphere). (In French).
J. Phys. Radium, vol. 15, pp. 26 - 33, January, 1954.
Sci. Abstr. A. 1954, 5825.
203. JANCEL, R. & KAHAN, T.
 Maxwellian approximation of the general magneto-ionic theory of plasmas subjected to external electric and magnetic fields. (In French).
J. Phys. Radium, vol. 15, pp. 382 - 383, May, 1954.
Sci. Abstr. A. 1954, 9415.
204. MAKINSON, R. E. B. & SLADE, D. M.
 Dipole resonant modes of an ionized gas column.
Aust. J. Phys., vol. 7, No. 2 pp. 268 - 278, June, 1954.
205. MILLINGTON, G.
 Ray-path characteristics in the ionosphere.
 ✓ Proc. Instn. Elect. Engrs., IV, vol. 101, pp. 235 - 249, August, 1954.
Sci. Abstr. A. 1954, 8458.
- ✓ 206. PHYSICAL SOCIETY, LONDON
 The physics of the ionosphere. Report on Physical Society conference held at Cavendish Laboratory, Cambridge, September, 1954.
 London, The Physical Society, 1955, 406 pp.
207. FOLONIS, D. H. et al.
 Levitation melting of titanium and titanium alloys.
 ✓ Research Correspondence Suppl. to Research (London), vol. 7, No. 2, pp. S 10 - 12, 1954.
Chem. Abstr. A. 1955, 8429e.
208. SCHUMANN, W. O.
 On the additional field produced by propagation in the system earth-air-ionosphere of long electric waves with two examples (horizontal and perpendicular dipoles). (In German).
Z. angew. Phys., vol. 6, No. 1, pp. 35 - 43, 1954.
Sci. Abstr. A. 1954, 6744.
209. SCHUMANN, W. O.
 On the radiation of long waves of a horizontal dipole in the air cavity between earth and ionosphere I. (In German).
Z. angew. Phys., vol. 6, No. 5, pp. 225 - 229, 1954.
Sci. Abstr. A. 1954, 8455.

210. TURNER, C. H. M.
Birefringence in crystals in the ionosphere.
Canad. J. Phys., vol. 32, pp. 16 - 34, January, 1954.
Sci. Abstr. A. 1954, 3693.
211. VILLENSKII, I. M.
On the influence of the earth's magnetic field on the interaction
of radiowaves in the ionosphere. (In Russian).
Zh. eksper. teor. Fiz., vol. 26, No. 1, pp. 42 - 56, 1954.
Sci. Abstr. A. 8457.
212. WILHELMSSON, H.
The interaction between an obliquely incident plane electro-
magnetic wave and an electron beam I.
Chalmers Tekn. Hogsk Handl., No. 155, 1954, 30 pp.
Sci. Abstr. A. 1955, 4812.

9. 1955

213. ALFVEN, H
On the electric field theory of magnetic storms and aurorae.
Tellus., vol. 7, No. 1 pp. 50 - 64, February, 1955.
Sci. Abstr. A. 1955, 74
214. ANDERSON, J. M. & GOLDSTEIN, L.
Interaction of electromagnetic waves of radio-frequency in
isothermal plasmas. Collision cross sections of helium atoms and
ions for electrons.
Phys. Rev., vol. 100 No. 4, pp. 1037 - 1046, November 15, 1955.
Sci. Abstr. A. 1956, 2262.
215. APHLETON, E. & BLEYNOV, W. J. G.
An ionospheric attenuation equivalence theorem.
J. Atmos. Terrest. Phys., vol. 6, No. 2 & 3, pp. 141 - 148, March, 1955.
Sci. Abstr. A. 1955, 3908.
216. ARGENCE, E. et al.
The equivalence theorems of ionospheric absorption. (In French).
C.R. Acad. Sci., vol. 241, No. 5, pp. 505 - 507, August 1, 1955.
Sci. Abstr. A. 1956, 511.
217. BLOCK, L.
Model experiments on aurorae and magnetic storms.
Tellus., vol. 7, No. 1 pp. 65 - 86, February, 1955.
Sci. Abstr. A. 1955, 7549.
218. BOOKER, H. G. et al.
Interpretations of radio reflections from the aurorae.
J. Geophys. Res., vol. 60, No. 1, pp. 1 - 22, March, 1955.
Sci. Abstr. A. 1955, 5806.

✓ 219. BUDDIN, K. G.

The numerical solution of differential equations governing reflection of long radio waves from the ionosphere.

Proc. Roy. Soc., series A., vol. 227, pp. 516 - 537, February 8, 1955.
Sci. Abstr. A. 1955, 2908.

✓ 220. BUDDIN, K. G.

The numerical solution of the differential equations governing the reflection of long radio waves from the ionosphere II.

Phil. Trans. Roy. Soc., series A, vol. 248, No. 939, pp. 45 - 72, May 12, 1955.
Sci. Abstr. A. 1955, 5538.

✓ 221. CARLEVARO, E.

Researches on the interaction and self-demodulation of electromagnetic waves. (In Italian).

Ricerca. Sci., vol. 25, No. 3, pp. 521 - 531, March, 1955.
Sci. Abstr. A. 1955, 6845.

✓ 222. CHAPMAN, J. H. et al.

Radio observations of the ionosphere at oblique incidence.
Canad. J. Phys., vol. 33, No. 12, pp. 722 - 737, December, 1955.
Sci. Abstr. A. 1956, 832.

✓ 223. CLEMENT, M.

Polarity effects of a h.f. discharge. (In French).
~~Ordered~~
Appl. Sci. Res. B, vol. 5, No. 1 - 4, pp. 124 - 126, 1955.
Sci. Abstr. A. 1957, 3324.

✓ 224. CUTCLO, M.

Note on experiments of the ionospheric interaction of radio waves.
(In Italian).
Nuovo Cimento, series 10, vol. 1, No. 4, pp. 726 - 732, April, 1955.
Sci. Abstr. A. 1955, 7219.

✓ 225. DAVIDS, W. & PARKINSON, R. W.

Wave solutions for critical and near-critical coupling conditions in the ionosphere.
J. Atmos. Terr. Phys., vol. 7, No. 4 - 5, pp. 175 - 202, October, 1955.
Sci. Abstr. A. 1956, 4749.

✓ 226. RUSTYI, P. A. & VOGAN, E. L.

Forward-scattering of radio waves by meteor trails.
Canad. J. Phys., vol. 33, No. 5, pp. 176 - 188, May, 1955.
Sci. Abstr. A. 1955, 5130.

✓ 227. HEDING, J.

The reflexion of vertically-incident long radio waves from the ionosphere when the earth's magnetic field is oblique.
Proc. Roy. Soc., series A., vol. 231, pp. 414 - 435, September 6, 1955.
Sci. Abstr. A. 1955, 8942.

228. HEBBLERD, F. H.
Ionospheric self-interaction of radio waves.
J. Atmos. Terrest. Phys., vol. 16, No. 5, pp. 268 - 279, May, 1955.
Sci. Abstr. A. 1955, 6323.
- ✓ 229. HUXLEY, L. G. H.
Comment on the theory of radio wave interaction.
Proc. Roy. Soc., series A., vol. 229, pp. 405 - 407, May 10, 1955.
Sci. Abstr. A. 1955, 5547.
- ✓ 230. INTERNATIONAL COUNCIL OF SCIENTIFIC UNIONS
Mixed commission on the ionosphere proceedings of the Fourth
Meeting, Brussels, August 16 - 18, 1954.
Secretariat General de l' U.R.S.I., 238 pp., 1955.
Sci. Abstr. A. 1956, 823.
- ✓ 231. JANCIL, R. & KAHAN, T.
Theory of coupling of ordinary and extra ordinary electromagnetic
waves in an inhomogeneous and anisotropic plasma and the conditions of
reflection. Applications to the ionosphere. (In French).
J. Phys. Radium, vol. 16, No. 2, pp. 136 - 145, February, 1955.
Sci. Abstr. A. 1955, 4822.
- ✓ 232. KEITEL, G. H.
Certain mode solutions of forward scattering by meteor trails.
Proc. I.R.E., vol. 43, pp. 1481 - 1487, October, 1955.
- ✓ 233. LANDMARK, B.
Measurements of limiting polarization of radio waves reflected from
the F-layer.
J. Atmos. Terrest. Phys., vol. 6, No. 5, pp. 284 - 286, May, 1955.
Sci. Abstr. A. 1955, 7220.
- ✓ 234. LOZZI, M. et al.
General expression for the absorption of electromagnetic waves in
a Lorentzian plasma (ionosphere). (In French).
C.R. Acad. Sci. (Paris), vol. 240, No. 2 pp. 162 - 164, January 10, 1955.
Sci. Abstr. A. 1955, 3907.
- ✓ 235. PIDDINGTON, J. H.
The four possible waves in a magneto-ionic medium.
Phil. Mag., series 7, vol. 46, pp. 1037 - 1050, October, 1955.
Sci. Abstr. A. 1955, 9790.
- ✓ 236. POINCELOT, P.
Reflection of a plane electromagnetic wave from an ionized medium.
(In French).
C.R. Acad. Sci. (Paris), vol. 241, No. 2, pp. 186 - 188, July 11, 1955.
Sci. Abstr. A. 1955, 9784.

237. POINCLOT, P.

Reflection of a plane electromagnetic wave from an ionized gas following a certain law. (In French).

C.R. Acad. Sci. (Paris), vol. 241, No. 3, pp. 290 - 292, July 18, 1955.
Sci. Abstr. A. 1955, 9785.

238. POINCLOT, P.

Reflection of an electromagnetic plane wave in a stratified ionized gas. (In French).

C.R. Acad. Sci. (Paris), vol. 241, No. 19, 1272 - 1275, November 7, 1955.
Sci. Abstr. A. 1956, 2256.

239. SALMON, J.

Theory of h.f. discharge at very low pressures. (In French).

Appl. Sci. Res. B, vol. 5, No. 1 - 4, pp. 135 - 138, 1955.
Sci. Abstr. A. 1957, 3325.

240. WAIT, J. R. & FROME, C.

Reflection of a transient electromagnetic wave at a conducting surface.

J. Geophys. Res., vol. 60, No. 1, pp. 97 - 103, March, 1955.
(Possible application is mentioned by reflection of radio atmospheric at a sharply bounded ionosphere).
Sci. Abstr. A. 1955, 4813.

241. YAMAMOTO, K. & OKUDA, T.

On the electrical discharge in D.C. and high frequency fields simultaneously.

Appl. Sci. Res. B., vol. 5, No. 1 - 4, pp. 144 - 147, 1955.
Sci. Abstr. A. 1957, 1341.

10. 1956

242. AKHIEZER, A. I. & SITENKO, A. G.

On plasma oscillations in an external magnetic field.
Zh. eksper. teor. Fiz., vol. 30, No. 1 pp. 216 - 217, 1956.
(In Russian).

Sci. Abstr. A. 1956, 7437.

243. BROWN, S. C.

Breakdown in gases: Alternating and high-frequency fields.
Berlin, Encyclopaedia of Physics, vol. 22, Gas Discharges II, Edited
by S. Flugge, pp. 531 - 575, 1956.

244. DENISOV, N. G.

The interaction of extraordinary and ordinary waves in the ionosphere and the effect of multiplication of reflected signals. (In English).
Soviet Physics JETP., vol. 2, No. 2, pp. 343 - 344, March, 1956.
Sci. Abstr. A. 1956, 7560.

245. MELIS, G. R.
The Z-propagation hole in the ionosphere.
J. Atmos. Terr. Phys., vol. 8, No. 1 - 2, pp. 43 - 54, February, 1956.
Sci. Abstr. A. 1956, 8504.
- ✓ 246. GOOD, M. L. (University of California Radiation Laboratory)
A proposed particle containment device.
UCRL - 4146. 24 pp. July 8, 1953, Decl. August 15, 1956.
(Alternating electric field of resonant cavity used. Limitations to
particle density are discussed.)
- ✓ 247. GREENHOW, J. S. & NEUFIELD, E. L.
Phase charges and resonance effects in radio echoes from meteor
trails.
Proc. Phys. Soc., section B., vol. 69, Pt. II, pp. 1069 - 1076,
November, 1956.
Sci. Abstr. A. 1957, 1016.
248. GUREVICH, A. V.
On the effect of radio waves on the plasma (ionosphere).
(In Russian).
Zh. eksper. teor. Fiz., vol. 30, No. 6 pp. 1112 - 1124, 1956.
Sci. Abstr. A. 1956, 8884.
- ✓ 249. HALL, L. S. et al. (University of California Radiation Laboratory)
Analysis of the interaction of electromagnetic radiation with a
plasma in a magnetic field.
UCRL - 4744, 34 pp. September, 1956.
NSA 1958, 9966.
250. MULLALY, R. F.
The calculation of group velocity in magneto-ionic theory.
J. Atmos. Terr. Phys., vol. 9, p. 322, 1956.
251. MUNCK, J. C. de.
An elaboration of the Appleton-Hartree formulae.
Netherlands PTT IRRI Rep. No. 9, 1956.
- NO 252. RATCLIFFE, J. A.
The microscopic mechanism for the absorption of radio waves in
the ionosphere.
Vistas in Astronomy, vol. 2, p. 791, 1956.
Pergamon Press.
- NO 253. RAKER, K.
The ionosphere - Its significance for geophysics and radio
communications.
Crosby Lockwood, 1956, 202 pp.

11. 1957

254. ARKHEZAR, A. I., et al.

On the scattering of electromagnetic waves in a plasma. (In Russian).

Zh. eksper. teor. Fiz., vol. 33, No. 3 (9), pp. 750 - 757, 1957.

255. BOOT, H. A. H. & SIERSBØ-MARVIE, R. B. R.

Charged particles in a non-uniform radio-frequency field.

Nature, vol. 180, no. 4596, p. 1187, November 30, 1957.

256. DATTLER, A.

The plasma resonator.

Ericsson Technics, vol. 13, No. 2, pp. 309 - 350, 1957.

257. DATTLER, A.

The plasma resonator.

Terzo Congresso Internazionale sui Fenomeni d' Ionizzazione nei Gas. pp. 215 - 227, October, 1957.

258. HINES, C. O. & O'GRADY, M.

Height gain in the forward-scattering of radio waves by meteor trails.

Canad. J. Phys., vol. 35, pp. 1033 - 1041, 1957.

259. HINES, C. O. & O'GRADY, M.

Height gain in the forward-scattering of radio waves by meteor trails.

Canad. J. Phys., vol. 35, No. 1, pp. 125 - 127, January, 1957.

Sci. Abstr. A. 1957, 7553.

260. IANKOV, V. V.

Ponderomotive forces in a localized plasma in the electromagnetic field of a plane wave.

Sov. Phys. (J.E.T.P.), vol. 5, No. 4, pp. 753 - 754, November, 1957.

261. KADOMTSEV, B. B.

On the effective field in a plasma (effective field acting on charged particle differs somewhat from mean field). (In Russian). Zh. eksper. teor. Fiz., vol. 33, No. 1 (7), pp. 151 - 157, 1957.

262. KNOX, F. B.

A method of heating matter of low density to temperatures in the range 10^5 to 10^6 °K.

Aust. J. Phys., vol. 10, No. 1, pp. 221 - 225, March, 1957.

263. KNOX, F. B.

A method of heating matter of low density to temperatures in the range 10^5 to 10^6 °K.

Aust. J. Phys., vol. 10, No. 4, pp. 565 - 586, December, 1957.

*Refered
Recd*

264. KOVRIZHNIKH, L. M.
On the dynamics of a bounded plasma in an external field, (field is plane electromagnetic wave). (In Russian).
Zh. eksper. teor. Fiz., vol. 33, No. 1 (7), pp. 72 - 76, 1957.

✓ 265. LLEWELLYN JONES, F.
Ionization and breakdown in gases.
Methuen, London, 176 pp, 1957.

✓ 266. MIHU, V. F.
On the absorption of electromagnetic waves by ionized gases.
(In French).
Revue de Physique, vol. 2, No. pp. 99 - 103, 1957.

✓ 267. KULLITT, L. B. (Atomic Energy Research Establishment, Harwell).
The use of plasma wave guides as accelerating structures in
linear accelerators.
AERE GP/R 2186, 32 pp., February, 1957.

✓ 268. PRADHAN, T.
Plasma oscillations in a steady magnetic field: circularly
polarised electromagnetic modes.
Phys. Rev., vol. 107, No. 5, pp. 1222 - 1227, September 1, 1957.

✓ 269. RAWER, K.
The Ionosphere.
NO London, Crosby Lockwood. 202 pp. 72 figs., 1957.

✓ 270. SCHUMANN, W. O.
Wave propagation in plasmas.
Terso Congresso Internazionale sui Fenomeni d' Ionizzazione nei Gas
p. 989, October, 1957.

✓ 271. TERLETSKII, I. P.
Motion of a rarefied plasma in a variable magnetic field.
Sov. Phys. (J.E.T.P.), vol. 5, No. 4, pp. 755 - 756, November, 1957.

12. 1958

✓ 272. AKHIEZER, A. I. PROKHODA, I. G. & SITENKO, A. G.
Scattering of electromagnetic waves in a plasma.
Sov. Phys. (J.E.T.P.), vol. 6(33), No. 3, pp. 576 - 582, March, 1958.

✓ 273. BERNSTEIN, I. B.
Waves in a plasma in a magnetic field.
Phys. Rev., vol. 109, No. 1, pp. 10 - 21, January 1, 1958.

✓ 274. BOLEY, F. R.
Scattering of microwave radiation by a plasma column.
Nature, vol. 182, No. 4638, pp. 790 - 791, September 20, 1958.

- ✓ 275. BOOT, H. A. H. et al.
Containment of a fully-ionised plasma by radio-frequency fields.
S.B.R.L. Technical Journal, vol. 8, No. 3, pp. 107 - 131, May, 1958.
Journal of Electronics and Control, Vol. 4, No. 5, pp. 434-453, May, 1958.
- ✓ 276. BUTLER, J. W. et al.
Radio frequency thermonuclear machines.
Proceedings of the 2nd United Nations International Conference on the
Peaceful Uses of Atomic Energy, Geneva, September, 1958, Paper 350, vol.
32, pp. 324 - 332, 1958.
- ✓ 277. BUNIMAN, O.
Instability, turbulence and conductivity in current carrying plasma.
Phys. Rev. Letters., vol. 1, No. 1, p. 8, July 1, 1958.
- ✓ 278. CHANDRASEKHAR, S.
On the equilibrium configurations of an incompressible fluid with
axisymmetric motions and magnetic fields.
Proc. Nat. Acad. of Sciences., vol. 44, No. 9, pp. 842 - 847, September
15, 1958.
- ✓ 279. DRUMMOND, J. E.
Basic microwave properties of hot magneto-plasmas.
Phys. Rev., vol. 110, No. 2, pp. 293 - 306, April 15, 1958.
- ✓ 280. DUNGEY, J. W.
Cosmic electrodynamics,
Cambridge University Press, 1958, 183 pp.
- ✓ 281. FORSYTH, P. A.
The forward-scattered radio signal from an overdense meteor trail.
Canad. J. Phys., vol. 36, No. 8, pp. 1112 - 1124, August, 1958.
Sci. Abstr. A. 1958, 7655.
- ✓ 282. GUREVICH, A. V.
On the temperature of the electrons in a plasma in a variable
electric field.
Zh. eksp. teor. Fiz., vol. 35, No. 2(8), pp. 392 - 400, 1958.
- ✓ 283. HARRISON, E. R.
Spherical plasmoids on low pressure electrodeless discharges.
J. of Electronics and Control, vol. 5, No. 4, pp. 319 - 328, October, 1958.
- ✓ 284. HINES, C. O.
A theoretical rate-amplitude relation in meteoric forward-scattering.
Canad. J. Phys., vol. 36, No. 5, pp. 539 - 554, May, 1958.
Sci. Abstr. A. 1958, 7654.
- ✓ 285. KARP, I. L.
Reflectivity of a meteor trail in a magnetic field (also takes account
of electron temperature).
Bull. Amer. Phys. Soc., Series II, vol. 3, No. 8, p. 411, 1958.

286. LANGMUIR, R. V. et al.
Electrodynamic containment of a charged particle by three-phase voltages, also electrodynamic containment of many charged particles by three-phase voltages. (The Remo-Woolridge corporation).
Bull. Amer. Phys. Soc., Series II, vol. 3, No. 8, pp. 410 - 411, 1958.
287. LARGENAU, H.
Conductivity of plasmas to microwaves.
Phys. Rev., vol. 109, No. 1, pp. 6 - 9, January 1, 1958.
288. FEDDINGTON, J. H.
Growth of electric space charge and radio waves in moving ion streams.
Phil. Mag., vol. 3, No. 35, pp. 1241 - 1255, November, 1958.
289. PITTEWAL, M. L. V.
The reflexion of radio waves from a stratified ionosphere modified by weak irregularities.
Proc. Roy. Soc., series A., vol. 246, No. 1247, pp. 556 - 569, August 26, 1958.
Sci. Abstr. A. 1958, 8945.
290. FOINCELOT, P.
Diffraction of a plane electromagnetic wave by a semi-infinite perfectly conducting sheet. (In French).
C.R. Acad. Sci. (Paris), vol. 246, No. 25, pp. 3418 - 3419, June 2 1958.
Sci. Abstr. A. 1958, 8945.
291. RAWER, K. & SUCHY, K.
The "fourth reflection condition" of electromagnetic waves in a plasma. (In French).
C.R. Acad. Sci. (Paris), vol. 246, No. 25, pp. 3428 - 3430, June 23, 1958.
Sci. Abstr. A. 1958, 8946.
292. TANTRY, B. A. P. & SRIVASTAVA, R. S.
Polarization of atmospheric pulses due to successive reflections from the ionosphere.
J. Geophys. Res., vol. 63, No. 3, pp. 527 - 538, September, 1958.
Sci. Abstr. A. 1959, 1633.
293. TRUBNIKOV, B. A.
The behaviour of a plasma in a rapidly varying magnetic field (In Russian).
The Physics of Plasmas, vol. 4, pp. 309 - 330, 1958.
To be translated by Pergamon Press in 1959.
ISA. 1959, 639.
294. VEDENOV, A. A. et al.
Thermal insulation and confinement of plasma with a high-frequency electromagnetic field.
Proceedings of the 2nd United Nations International Conference on the Peaceful Uses of Atomic Energy, Geneva, September, 1958, Paper 2501, vol. 32, pp. 239 - 244, 1958.

295. WAIT, J. R.
Transmission and Reflection of electromagnetic waves in the presence of stratified media.
Jnl. of Res. of National Bureau of Standards, vol. 61, No. 3, pp. 205 - 232, September, 1958.
296. WOLTJER, L.
On hydromagnetic equilibrium.
Proc. Nat. Acad. of Sciences, vol. 44, No. 9, pp. 833 - 841, September 15, 1958.
297. ZIL'BERMAN, G. E.
Electron motion along self intersecting trajectories. (In Russian)
Zhur. eksp. teoret. Fiz., vol. 34, pp. 748 - 9, March, 1958.
NSA 1958, 9927.

13. 1959

298. BUTLER, J. W.
Stability of plasma confinement by electromagnetic field pressure.
(Abstract of paper delivered March 30, 1959).
Bulletin of American Physical Society, Series II, vol. 4, No. 3, p. 152,
Abstract H9, March 30, 1959.
299. CARRELLI, A. & MARINARO, M.
On the mechanical moment of rotation of mixtures of liquids in
rotating electric fields.
Nuovo Cimento, series 10, vol. 11, No. 2, pp. 262 - 268, 1959.
300. CHIVERS, H. J. A. & WELLS, H. W.
A new ionospheric phenomena.
Nature, vol. 183, No. 4689, p. 1178, April 25, 1959.
301. DAELLS, F. B. & BAUER, S. J.
The ionospheric Faraday effect and its applications.
Jnl. Franklin Inst., vol. 267, No. 3, pp. 187 - 200, March, 1959.
302. HATCH, A. J.
Radio-frequency fields in plasmas and plasmoids. (Abstract)
Bulletin of American Physical Society, Series II, vol. 4, No. 3, p. 152,
Abstract H.10, March 30, 1959.
303. IANKOV, V. V.
On the behaviour of a conducting gaseous sphere in a quasistationary
electromagnetic field.
Zh. eksper. teor. Fiz., vol. 36, No. 2, pp. 560 - 564, 1959.
304. KING, J. W.
Ionospheric self-demodulation and self-distortion of radio waves.
J. Atmos and Terr. Phys. vol. 14, Nos. 1/2, pp. 41 - 49, April, 1959.

305. MANNING, L. A.
Oblique echoes from over-dense meteor trails.
J. Atmos. Terr. Phys., vol. 14, Nos. 1/2, pp. 82 - 93, April, 1959.
306. MILLER, M. A.
Reflection of electrons from a high frequency potential barrier.
Soviet Physics (J.E.T.P.), vol. 8 (35), No. 1, pp. 206 - 7, January, 1959.
307. RATCLIFFE, J. A.
The magneto-ionic theory and its applications to the ionosphere.
Cambridge University Press, 1959, 206 pp.
308. ULRICH, A. J. & BUTLER, J. W.
Steady-state plasma distribution in a rotating electromagnetic
field. (Abstract).
Bulletin of American Physical Society, Series II, vol. 4, No. 3, p. 52,
Abstract Hall, March 30, 1959.
309. WESTON, D. E.
Guided propagation in a slowly varying medium.
Proc. Phys. Soc., vol. 73, Pt. 3, No. 471, pp. 365 - 384, March, 1959.

Alphabetical Author Index to References

- Aden, A. L. 57.
Akhiezer, A. I. 242, 254, 272.
Alfvén, H. 213.
Allen, E. W. 39.
Anderson, J. M. 214.
Appleton, E. V. 2, 5, 6, 7, 8, 18, 21, 215.
Argence, E. 45, 53, 82, 119, 156, 216.
Arzeliès, H. 120.
Askar'yan, G. A. 195.

Bailey, V. A. 9, 10, 22, 83, 121.
Bajpai, R. R. 19.
Banerjea, B. K. 34, 35.
Banerjee, D. K. 158, 196.
Banerjee, S. S. 122, 157, 158, 196.
Banerji, R. B. 123.
Barnett, M. A. F. 2.
Becker, W. 59, 84.
Bückmann, B. 40.
Bell, D. A. 85.
Berkner, L. V. 11.
Bernstein, I. B. 273.
Berz, F. 36.
Beynon, W. J. G. 36, 197, 215.
Bibl, K. 60, 124.
Bijl, B. K. 139.
Block, L. 217.
Boela, M. 198.
Boley, F. R. 274.
Bolle, A. 125.
Booker, H. G. 12, 17, 23, 46, 61, 62, 218.
Boot, H. A. H. 255, 275.
Bracewell, R. N. 47.
Brown, S. C. 243.
Browne, I. C. 159.
Budden, K. G. 87, 126, 127, 160, 199, 219, 220.
Builder, G. 8.
Buneman, O. 277.
Burnett, D. 4.
Butler, J. W. 276, 298, 303.

Carlevaro, E. 221.
Carrelli, A. 299.
Chandraschär, S. 278.
Chapman, F. W. 6.
Chapman, J. H. 222.
Chatterjee, B. 123, 161.
Chinot, M. 223.

Chivers, H. J. A.	300.
Clegg, J. A.	88.
Clemow, F. C.	200.
Clogston, A. M.	89.
Closs, R. L.	83, 136.
Cohen, N. L.	99.
Colomese, G.	129.
Cowling, T. G.	33.
Cutolo, M.	90, 130, 131, 224.
 Daniels, F. B.	 301.
Darwen, C. G.	1, 30.
Dattner, A.	256, 257.
Davids, N.	162, 225.
Denisov, N. G.	91, 244.
Dominici, P.	125.
Drummond, J. E.	279.
Dungey, J. W.	280.
 Eckersley, T. L.	 64, 163.
Ellis, G. R.	245.
Engel, A Von	48, 164.
 Farmer, F. T.	 13.
Feinstein, J.	65, 66, 92.
Fluke, C. S.	187.
Forsgren, S. K. H.	93.
Forstelling, K.	29, 67, 94.
Forsyth, P. A.	226, 258, 281.
Francis, G.	164.
Friedman, B.	95.
Froese, C.	240.
 Gershman, B. N.	 96.
Gerson, N. C.	41.
Gertsinshtein, M. E.	132, 133, 165.
Ghosh, S. P.	24.
Gibbons, J. J.	97, 134.
Gill, E. W. B.	48.
Ginsburg, V.	31.
Ginzburg, V. L.	98, 166.
Goldstein, L.	99, 167, 214.
Good, L. L.	246.
Goubau, G.	14, 15.
Greenhow, J. S.	247.
Gurevich, A. V.	248, 282.
 Hall, L. S.	 249.
Harrison, E. R.	283.
Hasikuni, M.	168.
Hatch, A. J.	302.
Hoading, J.	135, 200, 227.
Helliwell, R. A.	153.

Herlofson, N.	100.
Hewish, A.	101.
Hibberd, F. H.	169, 228.
Hines, C. O.	170, 171, 258, 259, 284.
Hitschfield, W.	182.
Hogarth, J. E.	102.
Huxley, L. G. H.	25, 27, 49, 68, 172, 229.
Iankov, V. V.	260, 303.
International Council of Scientific Unions	230.
Jackson, J. E.	201.
Jaegar, J. C.	50.
Jancel, R.	173, 174, 175, 202, 203, 231.
Kadomtsev, B. B.	261.
Kahan, T.	173, 174, 175, 202, 203, 231.
Kaiser, T. R.	136, 159, 176.
Karp, I. L.	285.
Keitel, G. H.	232.
Keller, H. B.	137.
Kelso, J. M.	69, 103, 104, 105, 138, 177.
King, J. W.	304.
Kitchin, F. A.	178.
Knox, F. B.	262, 263.
Kolodziejczyk, L.	42, 51.
Kovrizhnikh, L. M.	264.
Labrum, N. R.	139.
Lagrone, A. H.	140.
Landmark, B.	141, 233.
Lange-Hesse, G.	142.
Langmuir, R. V.	226.
Lepechinsky, D.	179.
Lewis, R. P. W.	180.
Llewellyn-Jones, F.	106, 107, 265.
Lozzi, M.	234.
Makinson, R. E. B.	204.
Manning, L. A.	181, 305.
Marcuvitz, N.	108.
Margenau, H.	287.
Marinaro, M.	299.
Marshall, J. S.	182.
Martyn, D. F.	10, 16.
Mather, K. B.	19.
McKinley, D. W. R.	52.
Mehrotra, R. R.	122.
Mihu, V. P.	266.
Miller, M. A.	306.
Millman, P. M.	52.

- Millington, G. 26, 205.
 Mitra, S. K. 37.
 Mitra, S. N. 70.
 Morgan, G. D. 106, 107, 183.
 Morgan, M. G. 184.
 Motzo, M. 143.
 Mullaly, R. F. 250.
 Mullett, L. B. 267.
 Munck, J. C. de 251.

 Naismith, R. 7.
 Neartney, R. J. 97, 134.
 Neufeld, E. L. 247.
 Nichols, H. W. 3.
 Nupen, W. 109.

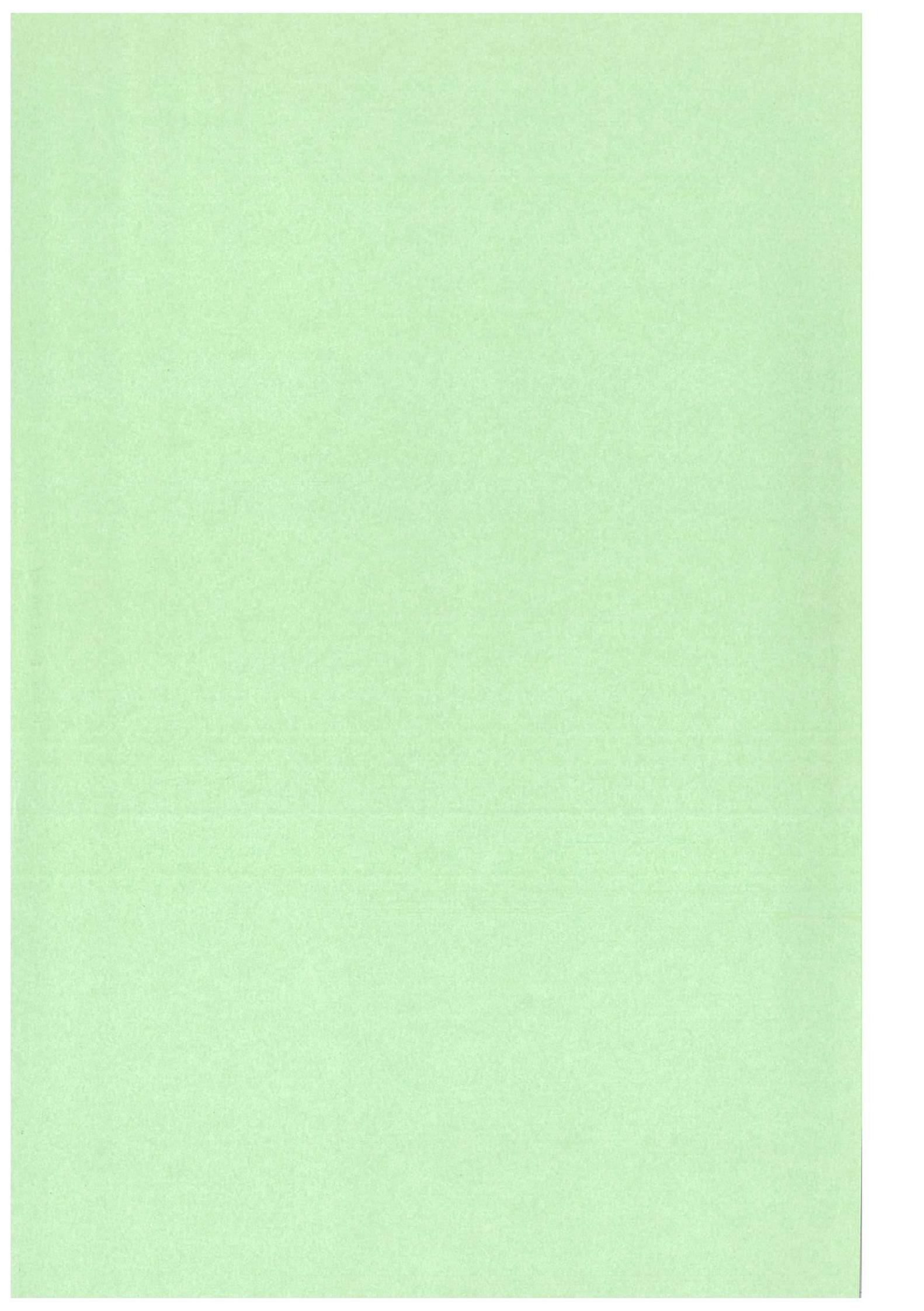
 O'Grady, M. 259.
 Okress, E. C. 144, 145, 146, 147.
 Okuda, T. 241.

 Parkinson, R. W. 225.
 Physical Society, London 206.
 Piddington, J. H. 235, 288.
 Piggott, W. R. 185.
 Pitteway, M. L. V. 289.
 Poeverlein, H. 53, 71.
 Poincelot, P. 236, 237, 238, 290.
 Polonis, D. H. 207.
 Pradhan, T. 268.

 Rai, R. N. 20.
 Ratcliffe, J. A. 13, 49, 252, 307.
 Rawer, K. 43, 45, 58, 110, 253, 269, 291.
 Romell, D. 111.
 Rosen, P. 54.
 Ross, C. 187.
 Rørholt, B. A. 186.
 Rydbeck, O. E. H. 32, 72, 73, 112, 113.

 Saha, M. N. 20, 34, 38, 114.
 Salmon, J. 239.
 Sato, T. 148.
 Schumann, W. O. 115, 149, 150, 208, 209, 240.
 Scott, J. C. W. 74, 75, 76, 151, 188.
 Seaton, S. L. 41.
 Shaw, J. J. 116.
 Shersby-Harvie, R. B. R. 255.
 Shinn, D. H. 152.
 Sitenko, A. G. 242.
 Slade, D. M. 204.
 Snyder, W. 153, 189.
 Somerville, J. M. 22.

Srivastava, R. S.	292.
Stanley, J. P.	77, 78, 80.
Storey, L. R. O.	190.
Suchy, K.	291.
Tantry, B. A. P.	292.
Terletskii, I. P.	271.
Trubnikov, B. A.	293.
Turner, C. H. M.	210.
Twiss, R. Q.	117.
Ulrich, A. J.	308.
Vedenov, A. A.	294.
Versaux, P.	191.
Vilenskii, I. M.	154, 192, 211.
Vogan, E. L.	226.
Voogt, A. H. de	44, 55, 193.
Wait, J. R.	240, 295.
Wallace, P. R.	194.
Weeks, K.	47, 79.
Wells, H. W.	11, 300.
Westfold, K. C.	50, 56, 118.
Weston, D. E.	309.
Whale, H. A.	80, 152.
Whipple, R. T. P.	135.
Whitehead, J. D.	155.
Wilhelmsson, H.	212.
Wilkes, M. V.	28.
Woltjer, L.	296.
Wroughton, D. N.	144.
Wüster, H. O.	67, 94.
Yamamoto, K.	241.
Yonezawa, T.	81.
Zil'berman, G. E.	297.



Available from
HER MAJESTY'S STATIONERY OFFICE
P.O. Box 569, London, S.E. 1

or

York House, Kingsway, London W.C. 2
423 Oxford Street, London W. 1
13a Castle Street, Edinburgh 2
109 St. Mary Street, Cardiff
39 King Street, Manchester 2
Tower Lane, Bristol 1
2 Edmund Street, Birmingham 3
80 Chichester Street, Belfast
or through any bookseller.

Printed in Great Britain

S. O. Code No. 91 - 3 - 7 - 25