

Publications list

R.J. Elliott

(Highlights are marked with a ● sign).

Papers

1. A Preliminary Survey of the Paramagnetic Resonance Phenomena Observed in Rare Earth Ethyl Sulphates (with K.W.H. Stevens). Proc. Phys. Soc., A. **64**. 205 (1951).
2. The Paramagnetism of Cerium Ethylsulphate: Theory. (with K.W.H. Stevens). Proc. Soc. A. **64**. 932 (1951).
3. Paramagnetic Resonance in Gadolinium Ethylsulphate (with Bleaney, Scovil and Trenam). Phil. Mag. (Ser. 7) **62**. 1062, (1951).
4. Dipole-dipole Interaction in the Rare-earth Ethylsulphates (with Bleaney and Scovil). Proc. Phys. Soc. A. **64**. 933 (1951).
5. The Paramagnetism of Samarium Ethylsulphate: Theory (with K.W.H. Stevens). Proc. Phys. Soc. A. **65**. 370 (1952).
6. The Theory of Magnetic Properties of Rare Earth Salts; Cerium Ethylsulphate (with K.W.H. Stevens). Proc. Roy. Soc. A. **215** . 437-452 (1952).
7. ● The Theory of Magnetic Resonance Experiments on Salts of the Rare Earths (with K.W.H. Stevens). Proc. Roy. Soc. A. **218**. 553-566 (1953).
8. The Magnetic Properties of Certain Rare-earth Ethylsulphates (with K.W.H. Stevens). Proc. Roy. Soc. A. **219**. 387-404 (1953).
9. Crystal Field Theory in the Rare Earths. Rev. Mod. Phys. **25**. 167-169 (1953).
10. A Theory of the Paramagnetism of Uranyl-like Ions. Phys. Rev. **89**. 659-660, (1953).
11. Resistance Anomalies in Some Rare-earth Metals. Phys. Rev. **94**. 564-568 (1954).
12. Theory of g-values and Spin-lattice Relaxation for Paramagnetic Resonance in Conduction Electrons. Reprinted from "Defects in Crystalline Solids - Report of 1954 Bristol Conference". 121.
13. ● Spin-orbit Coupling in Band Theory - Character Tables for some "Double" Space Groups. Phys. Rev. **96**. 280-287 (1954).
14. Effect of Spin-orbit Coupling on Paramagnetic Resonance in Semi-conductors. Phys. Rev. **96**. 266-279 (1954).
15. ● The Inelastic Scattering of Neutrons by Magnetic Spin Waves (with R.D. Lowde). Proc. Roy. Soc. A. **230**. 46-73 (1955).
16. Theory of Neutron Scattering by Conduction Electrons in a Metal and on the Collective-electron Model of a Ferromagnet. Proc. Roy. Soc. A. **235**. 289-304 (1956).
17. The Vibrations of a Perturbed Lattice. Phil. Mag. **1** . 298 (1956).
18. On the Multiple Spin Wave Scattering of Neutrons in Ferromagnets (with R.D. Lowde and W. Marshall). Proc. Phys. Soc. A. **69** . 939 (1956).
19. Theory of Nuclear Magnetic Resonance in Eu^{3+} . Proc. Phys. Soc. B. **70**. p.119-123 (1957).
20. The Theory of Neutron Scattering by Magnetic Substances. Proceedings of Meeting of Neutron Scattering in Solid State Physics, Stockholm (1957). 58.
21. ● Intensity of Optical Absorption by Excitons. Phys. Rev. **108** . 1384-1389, (1957).
22. ● Theory of Critical Scattering (with W. Marshall). Rev. Mod. Phys. **30**. 75-89 (1958).
23. The Polarisation of Luminescence in Diamond (with I.G. Matthews and E.W.J. Mitchell). Phil. Mag. 3. 360-369. (1958).

24. Theory of the Effect of a Magnetic Field on the Absorption Edge in Semiconductors (with T.P. McLean and G.G. Macfarlane). Proc. Phys. Soc. **82**. 553-565 (1958).
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26. Theory of Semiconductors (with P.C. Banbury). Metallurgical Reviews, **4**. 257-308 (1959).
27. Group Theory of Scattering Processes in Crystals (with R. Loudon). J. Phys. Chem. Solids, **15**. 146-151 (1960).
28. ● Theory of the Absorption Edge in Semiconductors in a High Magnetic Field (with R. Loudon). J. Phys. Chem. Solids. **15**. p.196-207 (1960).
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30. Some Properties of Concentrated and Dilute Heisenberg Magnetics of General Spin. J. Phys. Chem. Solids **16**. 165-168 (1960).
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32. Line-Widths in Neutron-phonon and Neutron-magnon Scattering (with H. Stern). Proc. Vienna Symposium on Neutron Scattering, I.A.E.A. (1960).
33. ● Neutron Scattering from a Liquid on a Jump Diffusion Model (with C. Chudley). Proc. Phys. Soc. **77**. 353-361 (1961).
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36. ● Phenomenological Discussion of Magnetic Ordering in the Heavy Rare Earth Metals. Phys. Rev. **124**. 345-359 (1961).
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39. Phenomenological Discussion of Magnetic Ordering in the Heavy Rare Earth Metals. J. Phys. Soc. Japan, **17**. Suppl. B-I, 1 (1962).
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41. ● Theory of Excitons - from "Excitons and Polarons". (Publ. Oliver and Boyd) (1963).
42. The Possible Observation of Electronic Raman Transitions in Crystals (with R. Loudon) Phys. Letters. **3**. 189-190 (1963).
43. The Vibrations of an Atom of Different Mass in a Cubic Crystal (with P.G. Dawber). Proc. Roy. Soc. A. **273**. 222-236 (1963).
44. Theory of Optical Absorption by Vibrations of Defects in Silicon (with P.G. Dawber). Proc. Phys. Soc. **81**. 435-460 (1963).
45. ● Theory of the Resistance of the Rare Earth Metals (with F.A. Wedgwood). Proc. Phys. Soc. **81**. 846-855, (1963).
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51. Optical Absorption Due to the Vibration of Defects. "Lattice Dynamics" 459-466 (1964).
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63. Cortina Lecture 1967 "Elementary Excitations and their Observation and Spin Waves". "Elementary Excitations in Solids". 300-305; 306-315 (Plenum Press 1969).
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65. Vibrations of Random Dilute Alloys (with D.W. Taylor). Proc. Roy. Soc. **296**. 161-188 (1967).
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