

JOHN MEURIG THOMAS

PUBLICATIONS

In the following list, papers labelled P are pedagogic and intended primarily for schoolteachers, schoolchildren or popular (lay) audiences. Those labelled R are largely scientific reviews. The remainder are research papers.

August 2010

- 1.**P** The chemistry of a nuclear reactor, J.M. Thomas, *The School Science Review*, **143**, 25-34, 1959.
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3. Use of krypton for surface area measurements, J.M. Thomas, *Nature*, **189**, 134-135, 1961.
- 4.**P** The existence of endothermic adsorption, J.M. Thomas, *J. Chemical Education*, **38**, 138-139, 1961.
5. The effect of catalysts on the gasification of graphite and diamond by carbon dioxide, K.W. Sykes and J.M. Thomas, *Journal de Chimie Physique*, p.70, 1961.
6. Topography of oxidised graphite crystals, E.E. Glenda Hughes and J.M. Thomas, *Nature*, **193**, 838-840, 1962.
7. Etching of graphite surfaces with oxygen, E.E. Glenda Hughes, B.R. Williams and J.M. Thomas, *Trans. Faraday Soc.*, **58**, 2011-2016, 1962.
8. Illumination system for micrography of opaque objects, E.E. Glenda Hughes, K. Syers and J.M. Thomas, *J. Scientific Instruments*, **39**, 485, 1962.
9. The oxidation of graphite single crystals, J.M. Thomas and E.E. Glenda Hughes. A paper submitted to the US/UK Cockcroft-Libby Meeting held at Harwell - April 1962.
10. The catalyzed disproportionation of carbon monoxide, E.E. Glenda Hughes and J.M. Thomas, *Fuel*, *XLI*, 297-298, 1962.
- 11.**R** The interaction of gases and solid surfaces, J.M. Thomas, *Science Progress*, **50**, 46-64, 1962.
- 12.**P** Osmosis, J.M. Thomas, *Encyclopaedic Dictionary of Physics*, **5**, 223-225, 1962.
13. Unusual twinning in graphite, J.M. Thomas, E.E. Glenda Hughes and B.R. Williams, *Nature*, **197**, 682-683, 1963.
14. Variations in orientation of etch pits on graphite surfaces, J.M. Thomas, E.E. Glenda Hughes and B.R. Williams, *Philos. Magazine*, **8**, 1513-1517, 1963.
15. Disturbances arising from thermal transpiration in microbalance experiments, J.A. Poulis and J.M. Thomas, *J. Scientific Instruments*, **40**, 95-100, 1963.
16. Sensitivity of analytical balances and relevance of fluctuation theory, J.A. Poulis and J.M. Thomas, "Vacuum Microbalance Techniques", Vol. 3. (Plenum Press, N.Y., 1963) pp. 1-14.
17. Disturbances arising from thermolecular flow in microbalance experiments, J.M. Thomas and J.A. Poulis, "Vacuum Microbalance Techniques", Vol. 3. (Plenum Press, N.Y., 1963) pp. 15-27.

- 18.**P** Tyfiant ac adeiladwaith crisialau (in Welsh), J.M. Thomas, *Y Gwyddonydd*, **1**, 134-139, 1963.
19. Localized oxidation rates on graphite surfaces by optical microscopy, J.M. Thomas and E.E. Glenda Hughes, *Carbon*, **1**, 209-214, 1964.
20. Origin of etch pits on graphite surfaces, E.E. Glenda Hughes, J.M. Thomas, H. Marsh and R. Reed, *Carbon*, **1**, 339-343, 1964.
21. Chemical evidence of the existence of non-basal dislocations in graphite, J.M. Thomas, C. Roscoe, K.M. Jones and G.D. Renshaw, *Philos. Magazine*, **10**, 325-330, 1964.
22. Mobility of metal particles on graphite substrate, J.M. Thomas and P.L. Walker, Jr., *J. Chem. Physics*, **41**, 587-588, 1964.
23. Kinetic anisotropy in the oxidation of graphite, J.M. Thomas and K.M. Jones, *J. Nuclear Materials*, **11**, 236-239, 1964.
24. The influence of solid catalysts on the etching of graphite single crystals - A motion picture study, J.M. Thomas and P.L. Walker, Jr., Symposium on Carbon, Tokyo, 1964 (Carbon Society of Japan) Paper VIII-13.
- 25.**P** Essay review of 'The Chemistry of Imperfect Crystals' by F.A. Kroger and J.M. Thomas, *J. Nuclear Materials*, **13**, 288, 1964.
26. Production of dislocation etch pits on calcite using optically active etchants, J.M. Thomas, G.D. Renshaw and C. Roscoe, *Nature*, **203**, 72, 1964.
27. Longitudinal Knudsen forces, J.A. Poullis, B. Pelupessy, C.H. Massen and J.M. Thomas, *J. Scientific Instruments*, **41**, 295-301, 1964.
28. Errors in vacuum microbalances caused by unequal thermal expansion of the balance arms, C.H. Masson, J.A. Poullis and J.M. Thomas, *J. Scientific Instruments*, **41**, 302-307, 1964.
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31. Dislocations in calcite and some of their chemical consequences, J.M. Thomas and G.D. Renshaw, *Trans. Faraday Soc.*, **61**, 791-796, 1965.
- 32.**R** Theory and applications of vacuum microbalance techniques, J.M. Thomas and B.R. Williams, *Quart. Review*, **19**, 231-253, 1965.
33. Application of a metal vacuum microbalance to the study of solid surfaces by physical adsorption, J.M. Thomas and B.R. Williams, "Vacuum Microbalance Techniques", Vol. 4. (Plenum Press, New York, 1965) pp. 209-229

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37. Microscopic studies of graphite oxidation, J.M. Thomas in "Chemistry and Physics of Carbon" (eds. P.L. Walker, Jr., M. Dekker) (Vol. 1, New York, 1966) pp. 122-202.
38. The influence of boron on the reactivity of graphite crystals, J.M. Thomas and C. Roscoe, Second Conference on Industrial Carbon and Graphite (Soc. Chemical Industry, 1966) pp. 249-257.
39. Topographical studies of the decomposition of single crystals of calcite, G.D. Renshaw and J.M. Thomas, *Nature*, **209**, 1196-1197, 1966.
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41. The initial stages of the carbonization of organic solids, J.M. Thomas, J.O. Williams, H. Marsh and B. Rand, *Carbon*, **4**, 143-144, 1966.
42. Dislocation etch pits on the cleavage faces of nickel sulphate hexahydrate, G.D. Renshaw and J.M. Thomas, *Acta Metallurgica*, **14**, 1857-1860, 1966.
43. Determination of boron in boronated graphite crystals using a spark source mass spectrograph, J.M. Thomas, C. Roscoe, G.C. Cookson, T.H. Owen and R. Tushingham, *Carbon*, **4**, 457-458, 1966.
44. Longitudinal Knudsen forces, Part II, J.A. Poulis, C.H. Massen and J.M. Thomas, *J. Scientific Instruments*, **43**, 234-237, 1966.
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53. Photochemical transformations in crystalline anthracene: the importance of crystal defects, J.M. Thomas and J.O. Williams, *Chem. Commun.*, 432-433, 1967.
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