

List of publications

by

David Jiles

Publications

1. Rare Earths Conference, Birmingham, England, April 17-18, 1978. "The magnetic phase diagram of terbium", S.B. Palmer and D.C. Jiles.
2. "Ultrasonic study of the magnetic structure of rare earth metals", S.B. Palmer, C. Isci and D.C. Jiles, Journal de Physique 40-C5, 33, 1979.
3. Institute of Physics Magnetism Conference on Bloch Wall Dynamics, London, England, April 1979. "The magnetic phase diagrams of gadolinium and terbium", D.C. Jiles and S.B. Palmer.
4. International Conference on Magnetism (ICM), Munich, West Germany, September 3-7, 1979. "The magnetic phase diagram of gadolinium", D.C. Jiles and S.B. Palmer.
5. Australia & New Zealand Institutes of Physics Solid State Physics Conference, Auckland, New Zealand, February 1980. "Magnetoelastic effects in some heavy rare earths", D.C. Jiles and S.B. Palmer.
6. "Magnetoelastic effects in gadolinium", D.C. Jiles and S.B. Palmer, J. Phys. F (Metal Physics) 10, 2857, 1980.
7. "Magnetoelastic effects in erbium", D.C. Jiles and S.B. Palmer, J. Phys. F (Metal Physics) 11, 45, 1981.
8. "Magnetoelastic effects in terbium", D.C. Jiles, G.N. Blackie and S.B. Palmer, Journal of Magnetism and Magnetic Materials 24, 75, 1981.
9. Australia & New Zealand Institutes of Physics Solid State Physics Conference, Wagga, NSW, Australia, February 1981. "Third order elastic constants of erbium", (**Invited Paper**), D.C. Jiles and S.B. Palmer.
10. "Third order elastic constants of erbium", D.C. Jiles and S.B. Palmer, Journal of Applied Physics 52, 1113, 1981.
11. "Hydrostatic pressure derivatives of the elastic moduli of terbium, dysprosium and erbium", D.C. Jiles and S.B. Palmer, Phil. Mag. 44, 447, 1981.
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15. Canadian Association of Physicists Conference, Kingston, Ontario, Canada, June 1982. "A mean field model of the hysteresis mechanism in ferromagnetic materials", D.C. Jiles and D.L. Atherton.
16. "Performance studies of a high speed ultrasonic sing around system", D.C. Jiles, S.B. Palmer and D.G. Whitehead, IEEE Transactions on Instrumentation & Measurement IM-31, 280, 1982.
17. "Ferromagnetic hysteresis", D.C. Jiles and D.L. Atherton, IEEE Transactions on Magnetics, MAG-19, 2183, 1983.
18. "Effects of stress on the magnetisation of steel", D.C. Jiles and D.L. Atherton, IEEE Transactions on Magnetics, MAG-19, 2021, 1983.
19. International Conference on Pipeline Inspection Methods, Edmonton, Canada, June 1983. "The development of an above-ground stress measurement method for pipelines", D.L. Atherton, D.C. Jiles, A. Teitsma and H. French.

20. "Stress-induced magnetisation changes in steel pipes (1) - laboratory tests", D.L. Atherton, L.W. Coathup, D.C. Jiles, L. Longo, C. Welbourn and A. Teitsma, IEEE Transactions on Magnetics MAG-19, 1564, 1983.
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22. "Optical properties of the heavy rare earths: piezoreflectance of gadolinium, dysprosium and erbium", D.C. Jiles and M.P. Staines, Physical Review B, 28, 5746, 1983.
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25. "Effects of alloying on the band structure of gold: piezoreflectance measurements on some AuCo and AuV alloys", D.C.Jiles, P.W.Gilberd, M.P.Staines and A.Bittar, J. Phys. Chem. Sol. 45, 595, 1984.
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27. "Ferromagnetic hysteresis and the effects of stress on magnetisation", D.C. Jiles, Review of Progress in Quantitative Nondestructive Evaluation" 4, 1141, 1984.
28. "Pseudopotential coefficients for the electron band structure of aluminum and their deformation potentials from piezoreflectance measurements", D.C.Jiles, Solid State Comms. 51, 327, 1984.
29. "Theory of the magnetisation process in ferromagnets and its application to the magnetomechanical effect", D.C. Jiles and D.L. Atherton, J. Phys. D (Applied Phys) 17, 1265, 1984.
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38. "An automated control and data logging system for the determination of magnetic properties of materials for non destructive evaluation", S.Habermehl and D.C.Jiles, Review of Progress in Quantitative NDE, 5, 843, 1986.

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49. "Investigation of the microstructural dependence of the magnetic properties of 4130 alloy steels for NDE", D.C. Jiles and J.D. Verhoeven, Review of Progress in Quantitative Nondestructive Evaluation" 6, 1681, 1987.
50. "NDE methods for determination of thermal history and mechanical properties of Al-Li alloys", D.J. Bracci D.C. Jiles and O. Buck, in Review of Progress in Quantitative Nondestructive Evaluation, 6, 1395, 1987.
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69. "Barkhausen effect and discontinuous magnetostriction in Terfenol-D", D.C.Jiles, J.E.Ostenson and C.V.Owen, Journal of Applied Physics 64, 5417, 1988.
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133. "Life prediction and nondestructive evaluation of materials properties in the power plant industry", P.K.Liaw, W.G.Clark Jr., R.Rishel, D.Drinon, M.K.Devine and D.C.Jiles, *Proceeding of the First International Conference on microstructures and mechanical properties of aging materials, Chicago, November 1992, p.345.* Edited by P.K.Liaw, R.Viswanathan, K.L.Murty, D.Frear and E.P.Simonen.
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668. "Correlating valence state, site preference and co-substitution to the magnetoelastic properties of cobalt ferrite", American Physical Society March Meeting, March 2-6, 2015.
669. "Growth and Characterization of Large Scale $(\text{Sb}_{1-x}\text{Bi}_x)_2\text{Te}_3$ Thin Films on Mica", American Physical Society March Meeting, March 2-6, 2015.
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