List of publications

by

David Jiles


Publications


73. Workshop on NDE measurement technology to assess material properties and property changes related to aging, Gaithersburg, Maryland, October 27-28th, 1988. "Advance indications of incipient failure modes using magnetic inspection", D.C.Jiles.


126. "An investigation of various procedures for analysis of micromagnetic Barkhausen signals for nondestructive

127. International Conference on Monitoring and Predictive Maintenance of Plants and Structures, Florence, Italy, May

128. "Magnetic property changes in various steel structures due to irradiation", M.K.Devine, D.C.Jiles, P.K.Liaw,

129. "Stress detection in steels through variation in magnetic properties", D.A.Kaminski, D.C.Jiles, S.B.Biner and

130. "Evaluation of fatigue damage in steel structural components by a new magnetic measurement technique",

131. "Barkhausen emission technique for evaluating shot peening quality in high strength steels", L.B.Sipahi,

132. "Angular dependence of the magnetic properties of steels under the action of uniaxial stress", D.A.Kaminski,
D.C.Jiles, S.B.Biner and M.J.Sablik. Materials Research Society Fall Meeting, Boston, Massachusetts,

133. "Life prediction and nondestructive evaluation of materials properties in the power plant industry", P.K.Liaw,
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135. "Evaluation of fatigue in steel structural components by magnetoelastic Barkhausen noise technique",
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1993. (Abstract only).

137. "The magnetostrictive laser diode magnetometer for personal magnetic field dosimetry", R.Chung, R.Weber and
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138. "Analytic model calculation of magnetic fields in a magnetic half space due to surface magnetic charge", Z.J.Chen
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140. "A model for hysteretic behavior in ferromagnets subject to non collinear applied stress and field", M.J.Sablik,
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"Effect of magnetic field applied along the a-axis on the thermal expansion and first-order transition temperature of single crystal Gd_{3}(Si_{2}Ge_{2})", M.G.Han, D.C. Jiles, J.A. Paulsen, J.E. Snyder and S.J.Lee, American Physical Society, March Meeting, Indianapolis, March 18-22, 2002.


"Thermal expansion of single crystal Gd_{3}(Si_{2}Ge_{2}) showing unusual first-order phase transformation”, M.Han, J.A. Paulsen, J.E. Snyder, D.C. Jiles. IEEE Transactions in Magnetics 38, 3252, 2002.


364. “Angular dependence of the unusual first order transition temperature in Gd$_5$(Si$_{0.5}$Ge$_{0.5}$)$_4$”, M. Han, D. C. Jiles, S. J. Lee, J. E. Snyder, T. A. Lograsso, and D. L. Schlagel. American Physical Society, March Meeting, Austin, Texas, March 3-7, 2003.


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397. “Giant magnetostriction and thermal expansion in the germanium rich range of Gd₅(SiₓGe₁₋ₓ)₄”, M. Han, D. C. Jiles, J. E. Snyder, A. O. Pecharsky. American Physical Society, March Meeting, Montreal, Quebec, March 22-26, 2004.


419. “Anisotropy studies and magnetic transitions of single crystal Tb5(Si2.2Ge1.8)”, Han, M., Snyder, J. E., Tang, W., Lograsso, T. A., Schlager, D., Jiles, D. C. Journal of Applied Physics, 97, 10M313, 2005.


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497. “Field Induced Phase Transitions in Gd$_5$(Si$_{x}$Ge$_{1-x}$)$_4$ at High Magnetic Field Strengths”, R.L.Hadimani, Y. Melikhov, J.E.Snyder, D.C.Jiles. 10th International Workshop on 1&2 Dimensional Magnetic Measurement and Testing, Cardiff, September 1-3, 2008.


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512. “Temperature dependence of magnetic properties of CoAl\textsubscript{1-x}Fe\textsubscript{x}O\textsubscript{4} for magnetostrictive sensor and actuator applications”, N. Ranvah, I. Nlebedim, Y. Melikhov, J. E. Snyder, A. J. Moses, P. I. Williams, D. C. Jiles. IEEE Transactions on Magnetics, 45, 4261, 2009

513. “Magnetic and Magnetomechanical Properties of CoAl\textsubscript{1-x}Fe\textsubscript{x}O\textsubscript{4} for Stress Sensor and Actuator Applications”, I. Nlebedim, N. Ranvah, P.I. Williams, Y. Melikhov, J.E. Snyder, A.J. Moses and D.C. Jiles. IEEE Transactions on Magnetics, 45, 4120, 2009


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“Magnetic modelling - breaking through the materials barrier” (Invited Keynote Address) D.C.Jiles, Eighth International Conference on Computation in Electromagnetics, Wroclaw, Poland, 11-14 April 2011.


“Computation of the modified magnetostriction coefficient b₁ corresponding to different depth ranges in ferromagnetic specimens by using a frequency dependent model for magnetic Barkhausen emissions”, O.Kypris, I.C.Nlebedim and D.C.Jiles. Presented at the American Physical Society March Meeting, Baltimore, Maryland, March 18-22, 2013.


618. “Magnetocaloric effect in GdCo_{3-x}Al_{2-x} system for 0.15 \leq x \leq 1 compositions”, H. Fu*; R. L. Hadimani; M. H. Wang; B. H. Teng; D. C. Jiles. 58th Annual Conference on Magnetism and Magnetic Materials, Denver, Colorado, November 4-8, 2013. Journal of Applied Physics, 115, 17A914, 2014.


651. “Second order phase transition temperature of single crystal samples of Gd5(Si1-xGex)4 in the mixed phase region of 0.3 ≤ x ≤ 0.41”, R. L. Hadimani, Y. Melikhov, D. L. Schlagel, T. A. Lograsso, K. W. Dennis, R. W. McCallum and D. C. Jiles. Presented at the 59th Annual Conference on Magnetism & Magnetic Materials, Honolulu, Hawaii, USA, November 4-8, 2014.


“Study of Magnetic, Magnetotransport and Dielectric properties in La_{0.4}Bi_{0.6}Mn_{1-x}Ti_{x}O_{3} Manganite”, V. Punith Kumar, R. Hadimani, D.C. Jiles, R. Bhowmik and V. Dayal. Submitted to Journal of Physics C: Condensed Matter.


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“Control of proliferation rate of N27 dopaminergic neurons using Transcranial Magnetic Stimulation orientation”, American Physical Society March Meeting, March 2-6, 2015.


“Changes in magnetic properties of cobalt-iron-titanium oxide due to temperature variations”, American Physical Society March Meeting, March 2-6, 2015.


“Correlating valence state, site preference and co-substitution to the magnetoelastic properties of cobalt ferrite”, American Physical Society March Meeting, March 2-6, 2015.

“Growth and Characterization of Large Scale (Sb1−xBix)2Te3 Thin Films on Mica”, American Physical Society March Meeting, March 2-6, 2015.


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“Determination of stimulation focality in heterogeneous head models during transcranial magnetic stimulation (TMS)”, American Physical Society March Meeting, March 2-6, 2015.

“First Successful Fabrication of Nanoparticles of magnetocaloric Gd5Si4”, American Physical Society March Meeting, March 2-6, 2015.


**h-index and related citation measures**

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- Total articles in publication list: 388
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- Sum of Times Cited without self-citations: 5180
- Citing Articles: 3541
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