

## PUBLICATIONS AND PATENTS

### Reviews

1. M.L. Plumer, J. van Ek, and W.C. Cain, *New paradigms in magnetic recording*, Physics in Canada **67**, 25 (2011).
2. **The Physics of Ultra-High-Density Magnetic Recording**, Eds. M. Plumer, J. van Ek and D. Weller, Springer-Verlag, Heidelberg (2001).
3. M.L. Plumer and A. Mailhot, *Monte-Carlo Simulations of Phase Transitions in Frustrated Antiferromagnets*, in **Computer Simulations in Condensed Matter Physics VIII**, Eds. D.P. Landau, K.K. Mon, and H.B. Schuttler (Springer-Verlag, Heidelberg, 1995).
4. M.L. Plumer, A. Caillé, A. Mailhot, and H.T. Diep, *Critical Properties of Frustrated Vector Spin Systems*, Chapter I in **Magnetic Systems with Competing Interactions**, Ed. H.T. Diep (World Scientific, Singapore, 1994).
5. M.L. Plumer and A. Caillé, *Magnetic phase diagrams of spin-frustrated antiferromagnets: Application to ABX<sub>3</sub> compounds*, J. Appl. Phys. **70**, 5961-6 (1991).

### Letters

6. T.J. Fal, M.L. Plumer, J.I. Mercer, J.P. Whitehead, J. van Ek, and K. Srinivasan, *Simulations of hysteresis loops for dual layer recording media*, Appl. Phys. Letts. **102**, 202404 (2013).
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13. M.L. Plumer and A. Caillé, *Lagrangian spin-wave theory of frustrated antiferromagnets: Application to ABX<sub>3</sub> compounds*, Phys. Rev. Lett. **68**, 1042-5 (1992).
14. M.L. Plumer and A. Caillé, *Theory of the successive magnetic phase transitions in tetragonal RBa<sub>2</sub>Cu<sub>3</sub>O<sub>6+x</sub>*, J. Phys. C **21**, L1119-26, (1988).
15. M.L. Plumer, Kevin Hood and A. Caillé, *Multicritical point in the magnetic phase diagram of CsNiCl<sub>3</sub>*, Phys. Rev. Lett. **60**, 45-8 (1988).
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## Regular Articles

23. H. V. Yerzhakov, M. L. Plumer, and J. P. Whitehead, *Monte Carlo Simulations of ABC Stacked Kagome Lattice Films*, J. Phys.: Condens. Matt. **28**, 196003 (2016).
24. Ahmad M. Almodallal, J. I. Mercer, J. P. Whitehead, M. L. Plumer, J. van Ek, and T. J. Fal, *Thermally activated switching at long time scales in exchange-coupled magnetic grains*, Phys. Rev. B **92**, 134418 (2015).
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### **Special Articles**

108. M. Plumer and T.L. Marchioro, *Canadian Efforts Grow*, IEEE Computational Science and Engineering **5**, no. 3, 11-15 (1998).
109. Martin Plumer, *Computational Science and Engineering: How Physicists can be Useful*, Physics in Canada **53**, 91-5 (1997).

### **Patents Issued.**

1. US Patent 7,688,545. Issued 30/30/10. "Recording Head with High Moment Material at the Writer Gap. V. Vasko, F. Stageberg," F. Wang, V. Kong, D. Dummer and M.L. Plumer.

2. US Patent 7,583,477. Issued 1/9/09. "Magnetic recording head with a point writer pole," J.K. Price, A. Nurul, A.M. Shukh, F Wang, M.L. Plumer.
3. US Patent 7,298,587. Issued 20/11/07. "Rounded Top Pole," T. Pokhil, N. Tabat, M.L. Plumer, S.Bozeman and N. Amin.
4. US Patent 7,1875,519. Issued 06/03/07. "High Gradient Disc Drive Writer," V. Kong, M.L. Plumer and F. Stageberg.
5. US Patent 7,100,266. Issued 05/09/06. "Method of Forming a Beveled Writing Pole of a Perpendicular Writing Element," M.L. Plumer, N. Amin, V. Kong, R. Michel and J. van Ek.
6. US Patent 6,807,031. Issued 19/10/04. "Single Domain State Laminated Thin Film Structure for Use as a Magnetic Layer of a Transducing Head," D. Macken,G. Brinkley, G. Pokhil, A.Shukh and M.L. Plumer.
7. US Patent 6,562,487. Issued 13/05/03. "Write Pole Employing a High Saturation Moment, Low Permeability Layer Adjacent to the Write Gap," V. Vasko, V. Inturi, M. Kief, S. Riemer and M.L. Plumer.
8. US Patent 6,385,016. Issued 7/05/02."A Magnetic Read Head with an Insulating Layer," J. van Ek, M.L. Plumer, R.P. Michel, M. Kautzky and D. Dimitrov.
9. US Patent 6,342,311. Issued 29/01/02. "High Magnetic Moment Seed Layer Materials for Writer Pole Tips," V. Inturi, M.L. Plumer, C. Tolman, S. Riemer, I. Tabakovic and S. Slade.

### **Patents Pending.**

10. US Patent App. 10/039,207. "Writing Element with no Return Path," M.L. Plumer, J. van Ek, N. Amin, N. Tabat and V. Kong,
11. US Patent App. 11/488,530. "Magnetic writing pole and a perpendicular writing element," M.L. Plumer, N. Amin, V.S. Kong, R.P. Michel, J. van Ek.