

Kenneth M. Hanson – Publication List (imaging, Bayesian analysis, and related topics)

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Please contact me at kmh@lanl.gov if you would like a publication from this list and you can not retrieve it from my web pages.

- [1] K. M. Hanson, “Quasi-Monte Carlo: halftoning in high dimensions,” in *Computational Imaging*, C. A. Bouman and R. L. Stevenson, eds., *Proc. SPIE* **5016**, pp. 161–172, 2003. (LA-UR-03-0733; Abstract: <http://home.lanl.gov/kmh/publications/compim03.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/compim03.pdf>).
- [2] K. M. Hanson and F. M. Hemez, “Uncertainty quantification of simulation codes based on experimental data,” in *Proc. 41st AIAA Aerospace Sciences*, AIAA, (Washington DC), 2003. (LA-UR-03-0171; Abstract: <http://home.lanl.gov/kmh/publications/aiaa03.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/aiaa03.pdf>).
- [3] K. M. Hanson, J. M. Booker, and F. M. Hemez, “Synopsis of a workshop on quantification of uncertainties in physics simulations,” Los Alamos Report LA-UR-02-7331, Los Alamos National Laboratory, 2002. (LA-UR-02-7331; Paper: <http://home.lanl.gov/kmh/publications/quippsum02.pdf>).
- [4] K. M. Hanson and F. M. Hemez, “A framework for assessing confidence in computational predictions,” *Experimental Techniques* **25**, pp. 50–55, 2001. (LA-UR-01-3575; Abstract: <http://home.lanl.gov/kmh/publications/extech01.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/extech01.pdf>).
- [5] K. M. Hanson, “Markov Chain Monte Carlo posterior sampling with the Hamiltonian method,” in *Proc. Third Int. Symp. on Sensitivity Analysis of Model Output*, P. Prado and R. Bolado, eds., pp. 259–262, CIEMAT, Madrid, 2001. (LA-UR-01-1410; Abstract: <http://home.lanl.gov/kmh/publications/samo01a.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/samo01a.pdf>; <http://lib-www.lanl.gov/la-pubs/00796222.pdf>).
- [6] K. M. Hanson and G. S. Cunningham, “A modular approach to simulation with automatic sensitivity calculation,” in *Proc. Third Int. Symp. on Sensitivity Analysis of Model Output*, P. Prado and R. Bolado, eds., pp. 83–86, CIEMAT, Madrid, 2001. (LA-UR-01-802; Abstract: <http://home.lanl.gov/kmh/publications/samo01b.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/samo01b.pdf>; <http://lib-www.lanl.gov/la-pubs/00357125.pdf>).
- [7] K. M. Hanson, ed., *Medical Image Processing - 1984 to 1999*, Selected SPIE Papers on CD-ROM, vol. 13, SPIE, Bellingham, 2001. (Collection of 367 papers chosen from SPIE’s publica-

tions from 1984 to 1999 (approx. 4000 pages on two CD-ROMs), with a 47-page introduction; LA-UR-00-4006; Summary: <http://home.lanl.gov/kmh/publications/medimcd.pdf>).

- [8] K. M. Hanson, “Markov Chain Monte Carlo posterior sampling with the Hamiltonian method,” in *Medical Imaging: Image Processing*, M. Sonka and K. M. Hanson, eds., *Proc. SPIE* **4322**, pp. 456–467, 2001. (LA-UR-01-1016; Abstract: <http://home.lanl.gov/kmh/publications/medim01.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/medim01.pdf>; <http://lib-www.lanl.gov/la-pubs/00357126.pdf>).
- [9] M. Sonka and K. M. Hanson, eds., *Medical Imaging: Image Processing, Proc. SPIE* **4322**, 2001. (2050 pages).
- [10] K. M. Hanson and J. M. Booker, “Inference from Rossi traces,” in *Bayesian Inference and Maximum Entropy Methods in Science and Engineering*, A. Mohammad-Djafari, ed., *AIP Conf. Proc.* **568**, pp. 604–614, Amer. Inst. Phys., (Melville, NY), 2001. (LA-UR-00-4256; Abstract: <http://home.lanl.gov/kmh/publications/maxent00.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/maxent00.pdf>; <http://lib-www.lanl.gov/la-pubs/00357141.pdf>).
- [11] R. Fischer, V. Dose, K. M. Hanson, and W. von der Linden, “Bayesian background estimation,” in *Bayesian Inference and Maximum Entropy Methods in Science and Engineering*, J. T. Rychert, G. J. Erickson, and C. R. Smith, eds., *AIP Conf. Proc.* **567**, pp. 193–212, Amer. Inst. Phys., (Melville, NY), 2001. (LA-UR-99-4340; Abstract: <http://home.lanl.gov/kmh/publications/pre00.abs.html>).
- [12] R. Fischer, K. M. Hanson, V. Dose, and W. von der Linden, “Background estimation in experimental spectra,” *Phys. Rev. E* **61**, pp. 1152–1161, 2000. (LA-UR-99-4340; Abstract: <http://home.lanl.gov/kmh/publications/pre00.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/pre00.pdf>; <http://lib-www.lanl.gov/la-pubs/00357142.pdf>).
- [13] K. M. Hanson, ed., *Medical Imaging: Image Processing, Proc. SPIE* **3979**, 2000. (1688 pages).
- [14] K. M. Hanson, “A framework for assessing uncertainties in simulation predictions,” *Physica D* **133**, pp. 179–188, 1999. (LA-UR-98-4254; Abstract: <http://home.lanl.gov/kmh/publications/physd99o.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/physd99o.pdf>; <http://lib-www.lanl.gov/la-pubs/00357143.pdf>).
- [15] A. H. Hielscher, A. Klose, and K. M. Hanson, “Gradient-based iterative image reconstruction scheme for time-resolved optical tomography,” *IEEE Trans. Med. Imaging* **18**, pp. 262–271, 1999. (Abstract: <http://home.lanl.gov/kmh/publications/tmi99a.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/tmi99a.pdf>).
- [16] K. M. Hanson and G. S. Cunningham, “Operation of the Bayes Inference Engine,” in *Maximum Entropy and Bayesian Methods*, W. von der Linden et al., ed., pp. 309–318, Kluwer Academic, Dordrecht, 1999. (LA-UR-98-4253; Abstract: <http://home.lanl.gov/kmh/publications/maxent98.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/maxent98.pdf>; <http://lib-www.lanl.gov/la-pubs/00796144.pdf>).

- [17] G. S. Cunningham, A. Lehovich, and K. M. Hanson, “Bayesian estimation of regularization parameters for deformable surface models,” in *Medical Imaging: Image Processing*, K. M. Hanson, ed., *Proc. SPIE* **3661**, pp. 562–573, 1999. (LA-UR-99-883; Abstract: <http://home.lanl.gov/kmh/publications/medim99.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/medim99.pdf>; <http://lib-www.lanl.gov/la-pubs/00188453.pdf>).
- [18] K. M. Hanson, G. S. Cunningham, and R. J. McKee, “Uncertainties in Bayesian geometric models,” in *IEEE Int. Conf. on Image Processing*, IEEE, Piscataway, 1999 (on CD-ROM: ISBN 0 7803 5470 2). (LA-UR-99-3646; Abstract: <http://home.lanl.gov/kmh/publications/icip99.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/icip99.pdf>; <http://lib-www.lanl.gov/la-pubs/00796154.pdf>).
- [19] A. D. Klose, A. H. Hielscher, K. M. Hanson, and J. Beuthan, “Two- and three-dimensional optical tomography of finger joints for diagnostics of rheumatoid arthritis,” in *Photon Migration in Tissues*, D. A. Benaron et al., ed., *Proc. SPIE* **3566**, pp. 151–160, 1999. (Abstract: <http://home.lanl.gov/kmh/publications/pmt98.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/pmt98.pdf>).
- [20] K. M. Hanson, ed., *Medical Imaging: Image Processing, Proc. SPIE* **3661**, 1999. (1706 pages).
- [21] X. L. Battle, G. S. Cunningham, and K. M. Hanson, “Tomographic reconstruction using 3D deformable models,” *Phys. Med. Biol.* **43**, pp. 983–990, 1998. (LA-UR-97-880).
- [22] G. S. Cunningham, K. M. Hanson, and X. L. Battle, “Three-dimensional reconstructions from low-count SPECT data using deformable models,” *Opt. Express* **2**, pp. 227–236, 1998. (LA-UR-96-4908; Abstract: <http://home.lanl.gov/kmh/publications/optexp98.abs.html>; <http://www.osa.org>).
- [23] W. E. King, G. H. Campbell, S. M. Foiles, D. Cohen, and K. M. Hanson, “Quantified HREM observation of the $\Sigma_{11}(113)/[\bar{1}10]$ grain boundary structure in aluminum and comparison with atomistic simulation,” *J. Microsc.* **190**, pp. 131–143, 1998. (Abstract: <http://home.lanl.gov/kmh/publications/jmic98.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/jmic98.pdf>).
- [24] K. M. Hanson, G. S. Cunningham, and S. S. Saquib, “Inversion based on computational simulations,” in *Maximum Entropy and Bayesian Methods*, G. J. Erickson, J. T. Rychert, and C. R. Smith, eds., pp. 121–135, Kluwer Academic, Dordrecht, 1998. (LA-UR-98-0998; Abstract: <http://home.lanl.gov/kmh/publications/maxent97.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/maxent97.pdf>; <http://lib-www.lanl.gov/la-pubs/00796157.pdf>).
- [25] K. M. Hanson and G. S. Cunningham, “Posterior sampling with improved efficiency,” in *Medical Imaging: Image Processing*, K. M. Hanson, ed., *Proc. SPIE* **3338**, pp. 371–382, 1998. (LA-UR-98-1518; Abstract: <http://home.lanl.gov/kmh/publications/medim98b.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/medim98b.pdf>; <http://lib-www.lanl.gov/la-pubs/00796155.pdf>).
- [26] K. M. Hanson, “A simplified method of estimating noise power spectra,” in *Medical Imaging: Physics of Medical Imaging*, J. T. Dobbins III

- and J. M. Boone, eds., *Proc. SPIE* **3336**, pp. 243–250, 1998. (LA-UR-98-1385; Abstract: <http://home.lanl.gov/kmh/publications/medim98a.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/medim98a.pdf>; <http://lib-www.lanl.gov/la-pubs/00796156.pdf>).
- [27] A. H. Hielscher, A. Klose, D. M. Catarious, Jr., and K. M. Hanson, “Tomographic imaging of breast and brain tissue by time-resolved, model-based, iterative image reconstruction,” in *Advances in Optical Imaging and Photon Migration, Tech. Dig.*, R. R. Alfano and J. G. Fujimoto, eds., vol. 21 of *OSA Trends in Optics and Photonic Series*, pp. 156–161, Optical Society of America, Washington DC, 1998. (Abstract: <http://home.lanl.gov/kmh/publications/orl98.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/orl98.pdf>).
- [28] M. L. J. Rightley, R. J. Henninger, and K. M. Hanson, “Adjoint differentiation of hydrodynamic codes,” in *CNLS Research Highlights*, Center for Nonlinear Studies, Los Alamos National Laboratory, April, 1998. (Abstract: <http://home.lanl.gov/kmh/publications/CNLS97.abs.html>; <http://cnls.lanl.gov/Publications/highlights.html>).
- [29] K. M. Hanson, ed., *Medical Imaging: Image Processing, Proc. SPIE* **3338**, 1998. (1614 pages).
- [30] K. M. Hanson, G. S. Cunningham, and R. J. McKee, “Uncertainty assessment for reconstructions based on deformable models,” *Int. J. Imaging Syst. Technol.* **8**, pp. 506–512, 1997. (LA-UR-97-879; Abstract: <http://home.lanl.gov/kmh/publications/ijist97.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/ijist97.pdf>; <http://lib-www.lanl.gov/la-pubs/00796169.pdf>).
- [31] G. S. Cunningham, K. M. Hanson, and X. L. Battle, “Three-dimensional reconstructions from low-count SPECT data using deformable models,” in *Conf. Record IEEE NSS - Medical Imaging Conf.*, O. Nalcioglu, ed., pp. 1469–1474, IEEE, Piscataway, 1998 (on CD-ROM: ISBN 0 7803 4261 5). (Abstract: <http://home.lanl.gov/kmh/publications/mic97.abs.html>).
- [32] K. M. Hanson, G. S. Cunningham, and S. S. Saquib, “Inversion based on complex computational simulations,” in *Conf. Record IEEE/EURASIP Nonlinear Signal and Image Processing Workshop*, E. J. Coyle and G. B. Adams, eds., IEEE, Piscataway, 1997 (on CD-ROM: ISBN 0 876346 09 4). (LA-UR-97-2846; Abstract: <http://home.lanl.gov/kmh/publications/nsip97.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/nsip97.pdf>).
- [33] K. M. Hanson, G. S. Cunningham, and R. J. McKee, “Uncertainties in tomographic reconstructions based on deformable models,” in *Medical Imaging: Image Processing*, K. M. Hanson, ed., *Proc. SPIE* **3034**, pp. 276–286, 1997. (LA-UR-01-4267; Abstract: <http://home.lanl.gov/kmh/publications/medim97a.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/medim97a.pdf>; <http://lib-www.lanl.gov/la-pubs/00796181.pdf>).
- [34] X. L. Battle, G. S. Cunningham, and K. M. Hanson, “3D tomographic reconstruction using geometrical models,” in *Medical Imaging: Image Processing*, K. M. Hanson, ed., *Proc. SPIE* **3034**, pp. 346–357, 1997. (LA-UR-97-0880; Abstract: <http://home.lanl.gov/kmh/publications/medim97c.abs.html>;

Paper: <http://home.lanl.gov/kmh/publications/medim97c.pdf>;
<http://lib-www.lanl.gov/la-pubs/00796162.pdf>).

- [35] S. S. Saquib, K. M. Hanson, and G. S. Cunningham, "Model-based image reconstruction from time-resolved diffusion data," in *Medical Imaging: Image Processing*, K. M. Hanson, ed., *Proc. SPIE* **3034**, pp. 369–380, 1997. (LA-UR-97-0192; Abstract: <http://home.lanl.gov/kmh/publications/medim97b.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/medim97b.pdf>; <http://lib-www.lanl.gov/la-pubs/00818559.pdf>).
- [36] K. M. Hanson, ed., *Medical Imaging: Image Processing, Proc. SPIE* **3034**, 1997. (1182 pages).
- [37] K. M. Hanson, G. S. Cunningham, and R. J. McKee, "Uncertainty estimation in reconstructed deformable models," in *MAXENT 96: Proc. Maximum Entropy Conf.*, M. Sears, V. Nedeljkovic, N. E. Pendock, and S. Sibisi, eds., pp. 41–51, Univ. Witwatersrand, Johannesburg, South Africa, 1996. (LA-UR-96-4437; Abstract: <http://home.lanl.gov/kmh/publications/maxent96.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/maxent96.pdf>; <http://lib-www.lanl.gov/la-pubs/00796163.pdf>).
- [38] K. M. Hanson, R. L. Bilisoly, and G. S. Cunningham, "Kinky tomographic reconstruction," in *Medical Imaging: Image Processing*, M. H. Loew and K. M. Hanson, eds., *Proc. SPIE* **2710**, pp. 156–166, 1996. (LA-UR-96-1203; Abstract: <http://home.lanl.gov/kmh/publications/medim96.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/medim96.pdf>; <http://lib-www.lanl.gov/la-pubs/00329356.pdf>).
- [39] K. M. Hanson and G. S. Cunningham, "The hard truth," in *Maximum Entropy and Bayesian Methods*, J. Skilling and S. Sibisi, eds., pp. 157–164, Kluwer Academic, Dordrecht, 1996. (LA-UR-94-4385; Abstract: <http://home.lanl.gov/kmh/publications/maxent94.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/maxent94.pdf>; <http://lib-www.lanl.gov/la-pubs/00796176.pdf>).
- [40] K. M. Hanson and G. S. Cunningham, "The Bayes Inference Engine," in *Maximum Entropy and Bayesian Methods*, K. M. Hanson and R. N. Silver, eds., pp. 125–134, Kluwer Academic, Dordrecht, 1996. (LA-UR-96-1204; Abstract: <http://home.lanl.gov/kmh/publications/maxent95.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/maxent95.pdf>; <http://lib-www.lanl.gov/la-pubs/00796178.pdf>).
- [41] K. M. Hanson and D. R. Wolf, "Estimators for the Cauchy distribution," in *Maximum Entropy and Bayesian Methods*, G. Heidbreder, ed., pp. 255–263, Kluwer Academic, Dordrecht, 1996. (LA-UR-93-4251; Abstract: <http://home.lanl.gov/kmh/publications/maxent93.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/maxent93.pdf>; <http://lib-www.lanl.gov/la-pubs/00324495.pdf>).
- [42] K. M. Hanson and G. S. Cunningham, "A computational approach to Bayesian inference," *Computing Science and Statistics* **27**, pp. 202–211, Interface Foundation, (Fairfax Station, VA 22039-7460), 1996. (LA-UR-95-1457; Abstract: <http://home.lanl.gov/kmh/publications/interface95.abs.html>;

Paper: <http://home.lanl.gov/kmh/publications/interface95.pdf>;
<http://lib-www.lanl.gov/la-pubs/00818488.pdf>).

- [43] G. S. Cunningham, I. Koyfman, and K. M. Hanson, "Improved convergence of gradient-based reconstructions using multi-scale models," in *Medical Imaging: Image Processing*, M. H. Loew and K. M. Hanson, eds., *Proc. SPIE* **2710**, pp. 145–155, 1996. (LA-UR-96-1202, LA-UR-96-0560; Abstract: <http://home.lanl.gov/kmh/publications/medim96g.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/medim96g.pdf>; <http://lib-www.lanl.gov/la-pubs/00406509.pdf>).
- [44] G. S. Cunningham and K. M. Hanson, "Uncertainty estimation for Bayesian reconstructions from low-count SPECT data," in *Conf. Record IEEE Nucl. Sci. Symp. and Med. Imaging Conf.*, IEEE, Piscataway, 1996. (LA-UR-96-4073; Abstract: <http://home.lanl.gov/kmh/publications/mic96.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/mic96.pdf>; <http://lib-www.lanl.gov/la-pubs/00796158.pdf>).
- [45] K. M. Hanson, G. S. Cunningham, and R. J. McKee, "Uncertainty in tomographic reconstructions (U)," in *Proc. 9th Nucl. Expl. Code Devel. Conf.*, F. Graviana, et al., ed., Lawrence Livermore National Laboratory, 1996. (LA-CP-96-0252).
- [46] R. L. Henninger, P. J. Maudlin, M. L. Rightley, and K. M. Hanson, "Application of forward and adjoint techniques to hydrocode sensitivity analysis (U)," in *Proc. 9th Nucl. Expl. Code Devel. Conf.*, F. Graviana, et al., ed., Lawrence Livermore National Laboratory, 1996. (LA-CP-96-0235).
- [47] R. F. Wagner, K. J. Myers, M. P. Anderson, D. G. Brown, and K. M. Hanson, "Toward optimal human and algorithmic observer performance of detection and discrimination tasks on reconstruction from sparse data," in *Maximum Entropy and Bayesian Methods*, K. M. Hanson and R. N. Silver, eds., pp. 211–220, Kluwer Academic, Dordrecht, 1996. (Abstract: <http://home.lanl.gov/kmh/publications/maxent95w.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/maxent95w.pdf>).
- [48] M. H. Loew and K. M. Hanson, eds., *Medical Imaging: Image Processing, Proc. SPIE* **2710**, 1996. (1056 pages).
- [49] K. M. Hanson and R. N. Silver, eds., *Maximum Entropy and Bayesian Methods*, (Dordrecht), Kluwer Academic, 1996. (475 pages).
- [50] K. M. Hanson, "Measurement of microdensitometer wobble," in *Selected Papers on Microdensitometry*, R. E. Swing, ed., pp. 394–396, SPIE, Bellingham, 1995 (reprinted from *J. Imag. Sci.* **30**, 274-276, 1986).
- [51] K. M. Hanson and G. S. Cunningham, "Exploring the reliability of Bayesian reconstructions," in *Medical Imaging: Image Processing*, M. H. Loew, ed., *Proc. SPIE* **2434**, pp. 416–423, 1995. (LA-UR-94-2647; Abstract: <http://home.lanl.gov/kmh/publications/medim95.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/medim95.pdf>; <http://lib-www.lanl.gov/la-pubs/00796177.pdf>).
- [52] K. J. Myers, M. P. Anderson, D. G. Brown, R. F. Wagner, and K. M. Hanson, "Neural network performance for binary discrimination tasks, part II: effect of task training, and feature

- pre-selection,” in *Medical Imaging: Image Processing*, M. H. Loew, ed., *Proc. SPIE* **2434**, pp. 828–837, 1995. (Abstract: <http://home.lanl.gov/kmh/publications/medim95k.abs.html>).
- [53] G. S. Cunningham, K. M. Hanson, G. R. Jennings, Jr., and D. R. Wolf, “An interactive tool for Bayesian inference,” in *Review of Progress in Quantitative Nondestructive Evaluation*, D. O. Thompson and D. E. Chimenti, eds., vol. 14A, pp. 747–754, Plenum, New York, 1995. (LA-UR-94-3448; Abstract: <http://home.lanl.gov/kmh/publications/qnde95.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/qnde95.pdf>; <http://lib-www.lanl.gov/la-pubs/00796202.pdf>).
- [54] K. M. Hanson and G. S. Cunningham, “Validation of hydrocode predictions (U),” in *Proc. 8th Nucl. Expl. Code Devel. Conf.*, E. Caramana and C. McMillan, eds., pp. 457–462, Report LA-12963-C, Los Alamos National Laboratory, 1995. (LA-CP-94-0288, LA-UR-01-6671; Abstract: <http://home.lanl.gov/kmh/publications/necdc94.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/necdc94.pdf>; <http://lib-www.lanl.gov/la-pubs/00796519.pdf>).
- [55] K. M. Hanson, G. S. Cunningham, G. R. Jennings, Jr., and D. R. Wolf, “Tomographic reconstruction based on flexible geometric models,” in *Proc. IEEE Int. Conf. Image Processing, vol. II*, pp. 145–147, IEEE, Piscataway, 1994. (LA-UR-94-2648; Abstract: <http://home.lanl.gov/kmh/publications/icip94a.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/icip94a.pdf>; <http://lib-www.lanl.gov/la-pubs/00411706.pdf>).
- [56] G. S. Cunningham, K. M. Hanson, G. R. Jennings, Jr., and D. R. Wolf, “An object-oriented implementation of a graphical-programming system,” in *Medical Imaging: Image Processing*, M. H. Loew, ed., *Proc. SPIE* **2167**, pp. 914–923, 1994. (LA-UR-94-759; Abstract: <http://home.lanl.gov/kmh/publications/medim94.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/medim94.pdf>; <http://lib-www.lanl.gov/la-pubs/00818480.pdf>).
- [57] K. J. Myers, R. F. Wagner, K. M. Hanson, H. H. Barrett, and J. P. Rolland, “Human and quasi-Bayesian observers of quantum-, artifact-, and object-variability-limited images,” in *Medical Imaging: Image Perception*, H. L. Kundel, ed., *Proc. SPIE* **2166**, pp. 180–190, 1994. (Abstract: <http://home.lanl.gov/kmh/publications/medim94b.abs.html>).
- [58] G. S. Cunningham, K. M. Hanson, G. R. Jennings, Jr., and D. R. Wolf, “An object-oriented optimization system,” in *Proc. IEEE Int. Conf. Image Processing, vol. III*, pp. 826–830, IEEE, Piscataway, 1994. (LA-UR-94-2649; Abstract: <http://home.lanl.gov/kmh/publications/icip94g.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/icip94g.pdf>; <http://lib-www.lanl.gov/la-pubs/00411705.pdf>).
- [59] K. M. Hanson, “Bayesian reconstruction based on flexible prior models,” *J. Opt. Soc. Amer. A* **10**, pp. 997–1004, 1993. (LA-UR-92-2334 Abstract: <http://home.lanl.gov/kmh/publications/josa93.abs.html>).
- [60] K. M. Hanson, “Flexible prior models in Bayesian image analysis,” in *Maximum Entropy and Bayesian Methods*, A. Mohammad-Djafari and G. Demoment, eds., pp. 399–406, Kluwer Academic, Dordrecht, 1993. (LA-UR-

- 92-3387, Abstract: <http://home.lanl.gov/kmh/publications/maxent92.abs.html>;
Paper: <http://home.lanl.gov/kmh/publications/maxent92.pdf>).
- [61] K. M. Hanson, “Introduction to Bayesian image analysis,” in *Medical Imaging: Image Processing*, M. H. Loew, ed., *Proc. SPIE* **1898**, pp. 716–731, 1993. (LA-UR-93-1179; Abstract: <http://home.lanl.gov/kmh/publications/medim93.abs.html>;
Paper: <http://home.lanl.gov/kmh/publications/medim93.pdf>;
<http://lib-www.lanl.gov/la-pubs/00323684.pdf>).
- [62] K. M. Hanson, “Tomographic reconstruction of axially symmetric objects from a single dynamic radiograph,” in *Tactical Missile Warheads*, J. Carleone, ed., pp. 687–693, Amer. Inst. Aeronautics and Astronautics, Washington, DC, 1993. (Abstract: <http://home.lanl.gov/kmh/publications/tmw93.abs.html>).
- [63] K. J. Myers, R. F. Wagner, and K. M. Hanson, “Rayleigh task performance in tomographic reconstructions: comparison of human and machine performance,” in *Medical Imaging: Image Processing*, M. H. Loew, ed., *Proc. SPIE* **1898**, pp. 628–637, 1993. (Abstract: <http://home.lanl.gov/kmh/publications/medim93m.abs.html>).
- [64] K. J. Myers, R. F. Wagner, and K. M. Hanson, “Binary task performance in images reconstructed with MEMSYS3: comparison of machine and human observers,” in *Maximum Entropy and Bayesian Methods*, A. Mohammad-Djafari and G. Demoment, eds., pp. 415–421, Kluwer Academic, Dordrecht, 1993. (Abstract: <http://home.lanl.gov/kmh/publications/maxent92a.abs.html>;
Paper: <http://home.lanl.gov/kmh/publications/maxent92a.pdf>).
- [65] K. M. Hanson, “Reconstruction based on flexible prior models,” in *Medical Imaging: Image Processing*, M. H. Loew, ed., *Proc. SPIE* **1652**, pp. 183–191, 1992. (LA-UR-92-0829; Abstract: <http://home.lanl.gov/kmh/publications/medim92.abs.html>;
<http://lib-www.lanl.gov/la-pubs/00420448.pdf>).
- [66] R. F. Wagner, K. J. Myers, and K. M. Hanson, “Task performance on constrained reconstructions: Human observers compared with suboptimal Bayesian performance,” in *Medical Imaging: Image Processing*, M. H. Loew, ed., *Proc. SPIE* **1652**, pp. 352–362, 1992. (Abstract: <http://home.lanl.gov/kmh/publications/medim92w.abs.html>).
- [67] K. M. Hanson and K. J. Myers, “Performance of the Rayleigh task based on the posterior probability of tomographic reconstructions,” in *Conf. Record IEEE Nuclear Science Symposium and Medical Imaging Conf*, pp. 2049–2053, IEEE, Piscataway, 1992. (LA-UR-91-3688; Abstract: <http://home.lanl.gov/kmh/publications/mic91.abs.html>).
- [68] K. M. Hanson, “Making binary decisions based on the posterior probability distribution associated with tomographic reconstructions,” in *Maximum Entropy and Bayesian Methods*, C. R. Smith, G. J. Erickson, and P. O. Neudorfer, eds., pp. 313–326, Kluwer Academic, Dordrecht, 1992. (LA-UR-91-3414; Abstract: <http://home.lanl.gov/kmh/publications/maxent91.abs.html>;
<http://home.lanl.gov/kmh/publications/maxent91.pdf>;
. <http://lib-www.lanl.gov/la-pubs/00387877.pdf>).
- [69] K. M. Hanson, “Simultaneous object estimation and image reconstruction in a Bayesian setting,” in *Image Processing Algorithms and Techniques II*, M. R. Civanlar, S. K. Mi-

- tra, and R. J. Moorhead, eds., *Proc. SPIE* **1452**, pp. 180–191, 1991. (LA-UR-91-1062; Abstract: <http://home.lanl.gov/kmh/publications/ipat91.abs.html>).
- [70] K. J. Myers and K. M. Hanson, “Task performance based on the posterior probability of maximum-entropy reconstructions with MEMSYS 3,” in *Medical Imaging V: Image Physics*, R. H. Schneider, ed., *Proc. SPIE* **1443**, pp. 172–182, 1991. (Abstract: <http://home.lanl.gov/kmh/publications/medim91m.abs.html>).
- [71] K. M. Hanson and K. J. Myers, “Rayleigh task performance as a method to evaluate image reconstruction algorithms,” in *Maximum Entropy and Bayesian Methods*, W. T. Grandy and L. H. Schick, eds., pp. 303–312, Kluwer Academic, Dordrecht, 1991. (LA-UR-90-3357; Abstract: <http://home.lanl.gov/kmh/publications/maxent90.abs.html>; <http://home.lanl.gov/kmh/publications/maxent90.pdf>).
- [72] K. M. Hanson, “Method to evaluate image-recovery algorithms based on task performance,” *J. Opt. Soc. Amer.* **A7**, pp. 1294–1304, 1990. (LA-UR-89-3580; Abstract: <http://home.lanl.gov/kmh/publications/josa90.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/josa90.pdf>; <http://lib-www.lanl.gov/la-pubs/00796175.pdf>).
- [73] K. M. Hanson, “Optimization of the constrained algebraic reconstruction technique for a variety of visual tasks,” in *Information Processing in Medical Imaging*, D. A. Ortendahl and J. Llacer, eds., pp. 45–57, Wiley-Liss, New York, 1990. (LA-UR-89-2255; Abstract: <http://home.lanl.gov/kmh/publications/ipmi89.abs.html>; <http://home.lanl.gov/kmh/publications/ipmi89.pdf>; <http://lib-www.lanl.gov/la-pubs/00222497.pdf>).
- [74] K. M. Hanson, “Object detection and amplitude estimation based on maximum *a posteriori* reconstructions,” in *Medical Imaging IV: Image Formation*, R. H. Schneider, ed., *Proc. SPIE* **1231**, pp. 164–175, 1990. (Abstract: <http://home.lanl.gov/kmh/publications/medim90.abs.html>).
- [75] K. J. Myers and K. M. Hanson, “Comparison of the algebraic reconstruction technique with the maximum entropy reconstruction technique for a variety of detection tasks,” in *Medical Imaging IV*, R. H. Schneider, ed., *Proc. SPIE* **1231**, pp. 176–187, 1990. (LA-UR-90-0897; Abstract: <http://home.lanl.gov/kmh/publications/medim90m.abs.html>; <http://home.lanl.gov/kmh/publications/medim90m.pdf>; <http://lib-www.lanl.gov/la-pubs/00374713.pdf>).
- [76] K. M. Hanson, “Optimization for object localization of the constrained algebraic reconstruction technique,” in *Medical Imaging III*, R. H. Schneider, S. J. Dwyer III, and R. G. Jost, eds., *Proc. SPIE* **1090**, pp. 146–153, 1989. (LA-UR-89-0266; Abstract: <http://home.lanl.gov/kmh/publications/medim89.abs.html>; <http://lib-www.lanl.gov/la-pubs/00222174.pdf>).
- [77] K. M. Hanson, “A Bayesian approach to nonlinear inversion: Abel inversion from x-ray data,” in *Transport Theory, Invariant Imbedding, and Integral Equations*, P. Nelson, V. Faber, D. L. Seth, and A. B. White, Jr., eds., vol. 115 of *Lect. Notes in Pure and Appl. Math.*, pp. 363–368, Marcel Dekker, New York, 1989. (LA-UR-88-1135; Abstract: <http://home.lanl.gov/kmh/publications/ttii89.abs.html>);

<http://home.lanl.gov/kmh/publications/ttii89.pdf>;
<http://lib-www.lanl.gov/la-pubs/00796173.pdf>;).

- [78] K. M. Hanson, "Optimization of reconstruction algorithms using Monte Carlo simulation," in *Advanced Neutron Sources*, D. K. Hyer, ed., *Amer. Inst. Phys. Conf. Ser.* **97**, pp. 721–734, 1989. (LA-UR-89-0128; Abstract: <http://home.lanl.gov/kmh/publications/aip89.abs.html>; <http://lib-www.lanl.gov/la-pubs/00222160.pdf>).
- [79] K. M. Hanson, "POPART - Performance OPTimized Algebraic Reconstruction Technique," in *Visual Comm. and Image Processing*, T. R. Hsing, ed., *Proc. SPIE* **1001**, pp. 318–325, 1988. (LA-UR-88-3126; Abstract: <http://home.lanl.gov/kmh/publications/vcip88.abs.html>; <http://lib-www.lanl.gov/la-pubs/00261438.pdf>).
- [80] K. M. Hanson and G. W. Wecksung, "Bayesian approach to limited-angle reconstruction in computed tomography," in *Maximum Entropy and Bayesian Methods*, C. R. Smith and G. J. Erickson, eds., pp. 255–272, Reidel, Dordrecht, 1988 (reprint from *JOSA* **73**, 1983). (LA-UR-83-0944; Abstract: <http://home.lanl.gov/kmh/publications/josa83.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/josa83.pdf>; <http://lib-www.lanl.gov/la-pubs/00796174.pdf>).
- [81] K. M. Hanson, "Method to evaluate image-recovery algorithms based on task performance," in *Medical Imaging II*, R. H. Schneider and S. J. Dwyer III, eds., *Proc. SPIE* **914**, pp. 336–343, 1988. (LA-UR-88-0111; Abstract: <http://home.lanl.gov/kmh/publications/medim88.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/medim88.pdf>; <http://lib-www.lanl.gov/la-pubs/00261014.pdf>).
- [82] A. Rougée, K. M. Hanson, and D. Saint-Felix, "Comparison of 3D tomographic algorithms for vascular reconstruction," in *Medical Imaging II*, R. H. Schneider and S. J. Dwyer III, eds., *Proc. SPIE* **914**, pp. 397–405, 1988. (Abstract: <http://home.lanl.gov/kmh/publications/medim88r.abs.html>).
- [83] K. M. Hanson, "Bayesian and related methods in image reconstruction from incomplete data," in *Image Recovery: Theory and Application*, H. Stark, ed., pp. 79–125, Academic, Orlando, 1987. (LA-UR-85-2878; LA-UR-87-9083; Abstract: <http://home.lanl.gov/kmh/publications/imrecov.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/imrecov.pdf>).
- [84] K. M. Hanson, "Evaluation of image-recovery algorithms on the basis of task performance," in *Proc. 11eme Colloque sur le Traitement du Signal et des Images (GRETSI)*, M. B. Picinbono, M. P. Tournois, and M. G. Bienvenu, eds., pp. 547–550, 1987. (Abstract: <http://home.lanl.gov/kmh/publications/gretsi87.abs.html>).
- [85] K. M. Hanson, D. Saint-Felix, and A. Rougée, "3-D tomographic reconstruction from limited cone-beam views," in *IEEE-ASSP/EURASIP 5th Workshop on Multidimensional Signal Processing*, 1987.
- [86] K. M. Hanson, "Effect of nonnegativity constraints on detectability," in *Dig. of Topical Meeting on Quantum-Limited Imaging and Image Processing*, pp. 142–145, Opt. Soc. Amer., (Washington DC), 1986. (Abstract: <http://home.lanl.gov/kmh/publications/osatop86.abs.html>).

- [87] K. M. Hanson and G. W. Wecksung, “Local basis-function approach to computed tomography,” *Appl. Opt.* **24**, pp. 4028–4039, 1985. (LA-UR-85-0583; Abstract: <http://home.lanl.gov/kmh/publications/appopt85.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/appopt85.pdf>).
- [88] K. M. Hanson, “Image processing: mathematics, engineering, or art?,” in *Appl. of Optical Instru. in Medicine XIII*, R. H. Schneider and S. J. Dwyer III, eds., *Proc. SPIE* **535**, pp. 70–81, 1985. (LA-UR-85-0560; Abstract: <http://home.lanl.gov/kmh/publications/medim85.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/medim85.pdf>; <http://lib-www.lanl.gov/la-pubs/00261793.pdf>).
- [89] K. M. Hanson, “Measurement of microdensitometer wobble,” *J. Imag. Sci.* **30**, pp. 274–276, 1986. (LA-UR-86-0854; Abstract: <http://home.lanl.gov/kmh/publications/jis86.abs.html>).
- [90] R. L. Whitman, K. M. Hanson, and K. A. Mueller, “Image analysis for dynamic weapons systems,” Los Alamos Report LA-LP-85-15, Los Alamos Scientific Laboratory, Los Alamos, New Mexico, 1985. (LA-UR-LP-85-15); <http://lib-www.lanl.gov/cgi-bin/getfile?00212417.pdf>).
- [91] K. M. Hanson, “Tomographic reconstruction of axially symmetric objects from a single radiograph,” in *16th Inter. Cong. on High Speed Photography and Photonics*, M. André and M. Hugonschmidt, eds., *Proc. SPIE* **491**, pp. 180–187, 1984. (LA-UR-84-2696; Abstract: <http://home.lanl.gov/kmh/publications/hspp84.abs.html>; <http://lib-www.lanl.gov/la-pubs/00261565.pdf>).
- [92] K. M. Hanson, “Optimal object and edge localization in the presence of correlated noise,” in *Appl. of Optical Instru. in Medicine XII*, R. H. Schneider and S. J. Dwyer III, eds., *Proc. SPIE* **454**, pp. 9–17, 1984. (LA-UR-84-0984; Abstract: <http://home.lanl.gov/kmh/publications/medim84.abs.html>).
- [93] R. F. Wagner, D. G. Brown, A. E. Burgess, and K. M. Hanson, “The observer SNR penalty for reconstructions from projections,” *Magn. Reson. Med.* **1**, pp. 76–77, 1984.
- [94] K. M. Hanson and G. W. Wecksung, “Bayesian approach to limited-angle reconstruction in computed tomography,” *J. Opt. Soc. Amer.* **73**, pp. 1501–1509, 1983. (LA-UR-83-0944; Abstract: <http://home.lanl.gov/kmh/publications/josa83.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/josa83.pdf>; <http://lib-www.lanl.gov/la-pubs/00796174.pdf>).
- [95] K. M. Hanson, “Variations in task and the ideal observer,” in *Appl. of Optical Instru. in Medicine XI*, G. D. Fullerton, ed., *Proc. SPIE* **419**, pp. 60–67, 1983. (LA-UR-83-2166; Abstract: <http://home.lanl.gov/kmh/publications/medim83.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/medim83.pdf>; <http://lib-www.lanl.gov/la-pubs/00248980.pdf>).
- [96] K. M. Hanson and G. W. Wecksung, “Bayesian approach to limited-angle ct reconstruction,” in *Dig. of Topical Meeting on Signal Recovery and Synthesis with Incomplete Information and Partial Constraints*, pp. FA6–1, Opt. Soc. Amer., (Washington DC), 1983. (Abstract: <http://home.lanl.gov/kmh/publications/osatop83.abs.html>).

- [97] K. M. Hanson, “Limited angle CT reconstruction using a priori information,” in *Proc. Inter. Symp. Med. Imag. and Imag. Interp.*, pp. 527–533, IEEE, (Piscataway), 1982. (LA-UR-82-2417; Abstract: <http://home.lanl.gov/kmh/publications/ismiii82.abs.html>; <http://lib-www.lanl.gov/la-pubs/00415457.pdf>).
- [98] K. M. Hanson, J. N. Bradbury, R. A. Koeppe, R. J. Macek, D. R. Machen, R. Morgado, M. A. Paciotti, S. A. Sandford, and V. W. Steward, “Proton-computed tomography of human specimens,” *Phys. Med. Biol.* **27**, pp. 25–36, 1982. (LA-UR-81-1253; Abstract: <http://home.lanl.gov/kmh/publications/pmb82.abs.html>).
- [99] K. M. Hanson, “The effect of noise in computed-tomographic reconstructions on detectability,” in *Proc. 15th Int. Conf. on System Sciences*, B. Shriver, T. M. Walker, R. R. Grams, and R. H. Sprague, Jr., eds., pp. 67–76, 1982. (LA-UR-81-3264; Abstract: <http://home.lanl.gov/kmh/publications/sysci82.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/sysci82.pdf>; <http://lib-www.lanl.gov/la-pubs/00251600.pdf>).
- [100] K. M. Hanson, “CT reconstruction from limited projection angles,” in *Appl. of Optical Instru. in Medicine X*, J. A. Mulvaney and G. D. Fullerton, eds., *Proc. SPIE* **347**, pp. 166–173, 1982. (LA-UR-82-0740; Abstract: <http://home.lanl.gov/kmh/publications/medim82.abs.html>; <http://home.lanl.gov/kmh/publications/medim82.pdf>; <http://lib-www.lanl.gov/la-pubs/00251728.pdf>).
- [101] J. M. Sandrik, R. F. Wagner, and K. M. Hanson, “Radiographic screen-film noise power spectrum: calibration and intercomparison,” *Appl. Opt.* **21**, pp. 3597–3601, 1982. (Abstract: <http://home.lanl.gov/kmh/publications/applopt82.abs.html>).
- [102] M. Zaider, D. J. Brenner, K. M. Hanson, and G. N. Minerbo, “Algorithm for determining the proximity distribution from dose-averaged lineal energies,” *Radiation Research* **91**, pp. 95–103, 1982. (LA-UR-81-2763; Abstract: <http://home.lanl.gov/kmh/publications/radres82.abs.html>).
- [103] K. M. Hanson, J. N. Bradbury, T. M. Cannon, R. L. Hutson, D. B. Laubacher, R. J. Macek, M. A. Paciotti, and C. A. Taylor, “Computed tomography using proton energy loss,” *Phys. Med. Biol.* **26**, pp. 965–983, 1981. (LA-UR-81-0154; Abstract: <http://home.lanl.gov/kmh/publications/pmb81.abs.html>).
- [104] K. M. Hanson, “On the optimality of the filtered backprojection algorithm,” *J. Comput. Assist. Tomogr.* **4**, pp. 361–363, 1980. (LA-UR-79-773; Abstract: <http://home.lanl.gov/kmh/publications/jcat80.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/jcat80.pdf>; <http://lib-www.lanl.gov/la-pubs/00796179.pdf>).
- [105] W. T. Sheridan, M. R. Keller, C. M. O’Conner, R. A. Brooks, and K. M. Hanson, “Evaluation of edge-induced streaking artifacts in CT scanners,” *Med. Phys.* **7**, pp. 108–111, 1980. (Abstract: <http://home.lanl.gov/kmh/publications/medphys80.abs.html>).
- [106] K. M. Hanson, “Detectability in computed tomographic images,” *Med. Phys.* **6**, pp. 441–451, 1979. (Abstract: <http://home.lanl.gov/kmh/publications/mphys79.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/mphys79.pdf>).

- [107] K. M. Hanson, “The detective quantum efficiency of CT reconstruction: The detection of small objects,” in *Appl. of Optical Instru. in Medicine XII*, J. E. Gray, ed., *Proc. SPIE* **173**, pp. 291–298, 1979. (LA-UR-79-0544; Abstract: <http://home.lanl.gov/kmh/publications/medim79.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/medim79.pdf>; <http://lib-www.lanl.gov/la-pubs/00258643.pdf>).
- [108] K. M. Hanson, “Proton computed tomography,” in *Computed Aided Tomography and Ultrasonics in Medicine*, J. Raviv, J. F. Greenleaf, and G. T. Herman, eds., pp. 97–106, North-Holland, Amsterdam, 1979. (LA-UR-78-1827; Abstract: <http://home.lanl.gov/kmh/publications/catum79.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/catum79.pdf>; <http://lib-www.lanl.gov/la-pubs/00247022.pdf>).
- [109] K. M. Hanson, “Noise and contrast discrimination in CT,” in *Radiology of the Skull and Brain, Vol. V: Technical Aspects of Computed Tomography*, T. H. Newton and D. G. Potts, eds., pp. 3941–3955, C. V. Mosby, New York, 1979. (LA-UR-79-0021).
- [110] K. M. Hanson, “Development of a proton-radiographic system for diagnosis and localization of soft-tissue abnormalities - final report,” Los Alamos Report LA-7107-MS, Los Alamos Scientific Laboratory, Los Alamos, New Mexico, 1979. (LA-7107-MS; Abstract: <http://home.lanl.gov/kmh/publications/la7107ms.abs.html>; <http://home.lanl.gov/kmh/publications/la7017ms.pdf>; <http://lib-www.lanl.gov/la-pubs/00311832.pdf>).
- [111] K. M. Hanson, J. N. Bradbury, T. M. Cannon, R. L. Hutson, D. B. Laubacher, R. Macek, M. A. Paciotti, and C. A. Taylor, “The application of protons to computed tomography,” *IEEE Trans. Nucl. Sci.* **NS-25**, pp. 657–660, 1978. (LA-UR-77-2385; Abstract: <http://home.lanl.gov/kmh/publications/ieeens78a.abs.html>; <http://lib-www.lanl.gov/la-pubs/00236693.pdf>).
- [112] K. M. Hanson and D. P. Boyd, “The characteristics of computed-tomographic reconstruction noise and their effect on detectability,” *IEEE Trans. Nucl. Sci.* **NS-25**, pp. 160–163, 1978. (LA-UR-77-2409; Abstract: <http://home.lanl.gov/kmh/publications/ieeens78.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/ieeens78.pdf>; <http://lib-www.lanl.gov/la-pubs/00236703.pdf>).
- [113] K. M. Hanson, “Detectability in the presence of computed-tomographic reconstruction noise,” in *Appl. of Optical Instru. in Medicine X*, J. E. Gray and W. R. Hendee, eds., *Proc. SPIE* **127**, pp. 304–312, 1977. (LA-UR-77-2080, Abstract: <http://home.lanl.gov/kmh/publications/mpphys79.abs.html>; Paper: <http://home.lanl.gov/kmh/publications/mpphys79.pdf>).