

Publications

Conference Proceedings and Popular Accounts

1. M. Saffman, P. Buchhave, and H. Tanger, "Simultaneous measurement of size, concentration and velocity of spherical particles by a laser Doppler method", in *Laser Anemometry in Fluid Mechanics II*, (Ladoan - Instituto Superior Tecnico, Lisbon, 1984), 85-103.
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4. M. Saffman, "Optical Particle Sizing Using the Phase of LDA Signals", *Dantec Information*, **5**, pp.8-13, (1987)
5. M. Saffman, "A phase Doppler instrument for optical particle sizing", in *S.P.I.E. Proceedings Vol. 952 on "Laser technologies in industry"*, (Porto, June 1988), 145-156.
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7. M. Saffman and D. Z. Anderson, "Dynamic optical interconnects using mode-multiplexing in optical fibers and volume holograms", in *OSA Annual Meeting Technical Digest 1990*, p. 130 (1990)
8. R.T. Weverka, K. Wagner and M. Saffman, "Wavelength-multiplexed volume holograms for fully interconnected neural networks", in *OSA Annual Meeting Technical Digest 1990*, p.57 (1990)
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10. D.Z. Anderson, M. Saffman, and C. Benkert, "Self-organizing guided wave demultiplexers and switches", presented at *OSA Topical Meeting on Integrated Photonics Research*, Monterey, Ca., April, (1991)
11. M. Saffman and D. Z. Anderson, "An adaptive photorefractive frequency demultiplexer for guided wave communications," presented at *Conference on Lasers and Electro-Optics*, Baltimore, Md., May, (1991)
12. C. Benkert, V. Hebler, J.-S. Jang, S. Rehman, M. Saffman, and D.Z. Anderson, "Feature extraction by a self-organizing optical system", presented at *Conference on Lasers and Electro-Optics*, Baltimore, Md., May, (1991)
13. D.Z. Anderson, C. Benkert, V. Hebler, J.-S. Jang, D. Montgomery, and M. Saffman, "Optical implementation of a self-organizing feature extractor", in *Advances in Neural-Information Processing Systems IV*, Eds. J.E. Moody, S.J. Hanson, and R.P. Lippmann, (Morgan Kaufmann, San Mateo, 1992), 821-828.
14. M. Saffman and D. Z. Anderson, "Self-organizing photorefractive frequency decoder", presented at *Conference on Lasers and Electro-Optics*, Baltimore, Md., May, (1991)

15. M. Saffman, C. Benkert, and D.Z. Anderson, "A self-organizing photorefractive frequency decoder", poster presentation at OSA Topical Meeting on Photorefractive Materials, Effects, and Devices, Beverly, Ma., July, (1991)
16. D.Z. Anderson, C. Benkert, V. Hebler, J.-S. Jang, D. Montgomery, and M. Saffman, "Optical Implementation of a self-organizing feature extractor", presented at Neural Information Processing Systems, Denver, Co., (1991)
17. M. Saffman, D. Montgomery, and D.Z. Anderson, "Collapse of a transverse mode continuum in a photorefractive oscillator", in *Nonlinear Dynamics in Optical Systems Technical Digest 1992*, (Alpbach, June 1992) (Optical Society of America, Washington, D.C., 1992), Vol. 16, pp. PD3-1-PD3-4, ISBN 1-55752-259-6 (Postconference Edition).
18. M.Saffman, D.Montgomery, A.A. Zozulya, K.Kuroda, and D.Z. Anderson, "Transverse instability of counterpropagating waves in photorefractive media", in *Photorefractive Materials, Effects, and Devices Technical Digest 1993*, (Kiev, August 1993), (Optical Society of America, Washington, D.C., 1993).
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21. M. Saffman, "Dynamisk optisk informationsbehandling i fotorefraktive kredsløb", *DOPS-NYT* (News of the Danish Optical Society) **9**, no. 4, 15-20 (1994). (in Danish)
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25. M. Saffman and J. Glückstad, "Pattern formation in bacteriorhodopsin film with mixed absorptive-dispersive nonlinearity", in *Proceedings of Nonlinear Dynamics in Optical Systems NDOS '95* (Rochester, June5-7, 1995), paper ME42.
26. M. Saffman, "Generation of quantum correlated twin beams in photorefractive media", in *Technical Digest of Photorefractive Materials, Effects, and Devices* (Estes Park, June 11-14, 1995) pp. 334-337.
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28. M. Saffman, "Quantum noise reduction by beam coupling in photorefractive media", in *Technical Digest of 15th International Conference on Coherent and Nonlinear Optics Vol. I* (St. Petersburg, June27-July 1, 1995), pp. 285-286.

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37. A.V. Mamaev and M. Saffman, "Periodic and irregular patterns in linear and ring photorefractive oscillators", in International Quantum Electronics Conference, 1996 OSA Technical Digest Series (Optical Society of America, Washington, D.C., 1996), paper WL71.
38. A.V. Mamaev, M. Saffman, and A.A. Zozulya, "Breakup and spatial dynamics of light beams in anisotropic bulk nonlinear media", in International Quantum Electronics Conference, 1996 OSA Technical Digest Series (Optical Society of America, Washington, D.C., 1996), paper ThJ3.
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40. W. Junker, M. Saffman, and L. Lading, "Spatially resolved measurements of density fluctuations with a hybrid Doppler/time-of-flight laser anemometer", in proceedings of CLEO/Europe'96 Conference on Lasers and Electro-Optics/Europe, (Hamburg, 8-13 September, 1996), paper CWB3, p. 151.
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42. A.V. Mamaev, M. Saffman, and A. A. Zozulya, "Instability of planar solitary waves in anisotropic bulk nonlinear media", in proceedings of EQEC'96 1996 European Quantum Electronics Conference (Hamburg, 8-13 September, 1996), paper QFB7, p. 232.

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