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**STEPHEN T. KOWEL**  
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2. 1974 DIRECT ELECTRONIC FOURIER TRANSFORMS OF IMAGES: DEVICES AND APPLICATIONS. Kodak Apparatus Division, Rochester, New York, January 17.
3. 1974 IMAGING BY DIRECT ELECTRONIC FOURIER TRANSFORMATION (DEFT): DEVICES AND APPLICATIONS. Department of Electrical and Computer Engineering, University of Massachusetts, Amherst, Massachusetts, February 26.
4. 1974 PROGRESS ON TWO-DIMENSIONAL DIRECT ELECTRONIC FOURIER TRANSFORM DEVICES. 1974 IEEE Ultrasonics Symposium, Milwaukee, Wisconsin, November 11.
5. 1974 IMAGING BY DIRECT ELECTRONIC TRANSFORMATION: DEVICES AND APPLICATIONS. Department of Electrical Engineering, University of Rhode Island, May 17.
6. 1975 VELOCITY DETECTION, FOCUS DETECTION AND PATTERN RECOGNITION USING DIRECT ELECTRONIC FOURIER TRANSFORMATION. 1975 International Electrical and Electronics Conference and Exposition, Toronto, Canada, September.
7. 1975 TWO-DIMENSIONAL FOURIER IMAGING OF LIGHT USING ACOUSTIC PSEUDO BEAM STEERING. 1975 IEEE Ultrasonics Symposium, Los Angeles, California, September.
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10. 1978 A TWO-DIMENSIONAL ACOUSTIC PROCESSOR. 1978 International Optical Computing Conference, City University, London, England, September.
11. 1978 IMAGE FEATURE ANALYSIS USING DEFT SENSORS. 1978 AIAA/NASA Conference on "Smart" Sensors, Hampton, Virginia, November 14.
12. 1979 A PROGRAMMABLE, MULTIFUNCTION PROCESSOR. 1979 SPIE Technical Symposium East, Washington, D.C., April 17.
13. 1980 APPLICATIONS OF SURFACE ACOUSTIC WAVE DEVICES. IEEE Syracuse Section, February 27.
14. 1980 LITHOGRAPHY AND METALLIZATION OF SILICONE ELASTOMERS. Webster Research Center, Xerox Corporation, Rochester, New York, December 2.
15. 1981 A LIQUID CRYSTAL ADAPTIVE LENS. Department of Electrical and Computer Engineering, Lehigh University, Bethlehem, Pennsylvania, September 23.
16. 1982 A LIQUID CRYSTAL LENS. Laboratory for Laser Energetics, University of Rochester, Rochester, New York, February 19.
17. 1982 AN ADAPTIVE APPROACH TO IMAGE FORMATION AND IMAGE ANALYSIS. Department of Electrical and Computer Engineering, Carnegie-Mellon University, Pittsburgh, Pennsylvania, April 29.

**PRESENTATIONS (Invited Lectures and Conference Papers), continued**

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19. 1982 FOCUSING AND SCANNING USING A LIQUID CRYSTAL LENS. 1982 Spring Conference on Applied Optics/Gradient Index Optical Imaging Systems, Rochester, New York, May 7.
20. 1982 NEW MATERIALS/NEW DEVICES. General Electric Electronics Laboratory Chapter Sigma Xi, Syracuse, New York, December 2.
21. 1983 TOPICS IN UNCONVENTIONAL MICROELECTRONICS. School of Electrical Engineering, Cornell University, February 7, 9, 11.
22. 1983 UNCONVENTIONAL APPROACHES TO INTEGRATED SYSTEMS. Department of Electrical and Computer Engineering, Arizona State University, Tempe, Arizona, March 23.
23. 1983 ORGANIC OPTICAL MATERIALS - FROM LIQUID CRYSTALS TO INTEGRATED OPTICS. School of Electrical Engineering, Cornell University, Ithaca, New York, April 27.
24. 1983 ORGANIC OPTICAL MATERIALS - FROM LIQUID CRYSTALS TO INTEGRATED OPTICS. School of Electrical Engineering, Cornell University, Ithaca, New York, April 29.
25. 1983 VERTICAL ALL-TUNNELING TRANSISTOR (VATT): A GALLIUM ARSENIDE IMPLEMENTATION. 7th Annual Conference on Electronic Device Activities in Western New York, Sponsored by the Rochester IEEE Section, October 18.
26. 1983 ORGANIC OPTICS. Kodak Research Laboratories, Rochester, New York, November 7.
27. 1984 SOME TOPICS IN UNCONVENTIONAL MICRO-ELECTRONICS. University of Tulsa, Tulsa, Oklahoma, February 20.
28. 1984 SOME TOPICS IN UNCONVENTIONAL MICRO-ELECTRONICS. Department of Electrical and Computer Engineering, The University of Arizona, Tucson, Arizona, March 6.
29. 1984 LIQUID CRYSTAL ADAPTIVE OPTICS. Air Force Weapons Laboratory, Albuquerque, New Mexico, March 27.
30. 1984 SOME UNCONVENTIONAL APPROACHES TO INTEGRATED OPTICS AND ELECTRONICS. Department of Electrical and Computer Engineering, University of California, Davis, April 23.
31. 1984 DEFT DEVICES AND APPLICATIONS. Department of Electrical and Computer Engineering, University of California, Davis, May 29.
32. 1985 ORGANIC FILMS IN MICROELECTRONICS AND OPTOELECTRONICS. Department of Chemical Engineering, University of California, Davis, January 14.
33. 1985 ORGANICS AND POLYMERS IN MICROELECTRONICS AND OPTICS. Department of Electrical Engineering and Computer Science, University of Santa Clara, Santa Clara, California, March 26.

34. 1985 ORGANIC AND POLYMERIC FILMS. Presented at the SPIE Conference on Advances in Materials for Active Optics, Vol. 567, ed. Solomon Musikant.
35. 1985 ON-LINE DIAGNOSTICS FOR LANGMUIR/BLODGETT FILM GROWTH. Second International Conference on Langmuir/Blodgett Films, Schenectady, N.Y., July.
- PRESENTATIONS (Invited Lectures and Conference Papers), continued**
36. 1986 ORGANIC AND POLYMER FILMS - IMPLICATIONS FOR MICROELECTRONICS AND OPTICS. Department of Electrical Engineering, University of California, Irvine, January 9.
37. 1987 FUTURE APPLICATIONS OF ORDERED POLYMERIC THIN FILMS. Presented at the National Science Foundation Workshop on the Molecular Engineering of Ultrathin Polymeric Films, Davis, CA, February.
38. 1987 LIQUID CRYSTALS AND APPLICATIONS TO REFRACTIVE POWER IN THE FORM OF LENSES. Presented to the College of Optometry, University of Houston, June 5.
39. 1987 OPTIMUL: INTRODUCING HYBRID OPTICAL COMPUTING. Graduate Seminar, Department of Electrical and Computer Engineering, Brigham Young University, Provo, Utah, November 12.
40. 1988 NONLINEAR OPTICS OF POLED AZO-DYE FILMS. Poster Session Paper, Gordon Research Conference on Organic Thin Films, Oxnard, CA, February 17.
41. 1988 OPTIMUL: AN OPTICAL INTERCONNECT FOR MULTIPROCESSOR SYSTEMS. Presented at the 1988 ACM International Conference on Supercomputing, St.-Malo, France, July 4.
42. 1988 OPTO-ELECTRONICS INCORPORATING ORGANICS AND POLYMERS. Naval Weapons Center, China Lake, CA, August 25.
43. 1988 ORGANIC FILMS, OPTO-ELECTRONICS, AND THE FUTURE OF COMPUTING. Department of Electrical Engineering, University of Rochester, October 5.
44. 1989 FIXED OPTICAL INTERCONNECTS FOR CONCURRENT COMPUTING SYSTEMS. SPIE 33<sup>rd</sup> Annual International Symposium on Optical and Optoelectronic Applied Science and Engineering, August 8.
45. 1989 GLOBAL OPTICAL INTERCONNECTS FOR CONCURRENT COMPUTING SYSTEMS. Department of Electrical and Computer Engineering, Syracuse University, August 22.
46. 1990 ORGANICS, OPTICS, AND COMPUTERS. Almaden Research Center, IBM Corporation, San Jose, CA, March 29.
47. 1990 POLYMERS AND LIQUID CRYSTALS FOR OPTICAL INTERCONNECTS. 3M Corporation, St. Paul, MN, May 7.
48. 1990 POLYMERS AND LIQUID CRYSTALS FOR OPTICAL INTERCONNECTS. Department of Electrical Engineering, University of Minnesota, Minneapolis, MN, May 9.
49. 1990 ORGANICS, OPTICS, AND COMPUTERS. Department of Electrical and Computer Engineering, University of Alabama in Huntsville, Huntsville, AL, July 6.
50. 1990 OPTICS, ORGANICS, AND SILICON. AT&T Bell Laboratories, Princeton, NJ, December 3.

51. 1990 POLYMER THIN FILMS, OPTICS, AND INTEGRATED CIRCUITS. Department of Chemistry, Princeton University, Princeton, NJ, December 4.
52. 1991 APPLICATIONS OF LIQUID CRYSTAL AND POLYMER THIN FILMS. Department of Physics, University of Alabama in Huntsville, Huntsville, AL, April 2.

**PRESENTATIONS (Invited Lectures and Conference Papers), continued**

53. 1991 DOUBLE REFRACTION, DIFFRACTION, AND LIQUID CRYSTAL LENSES. Department of Electrical Engineering and Computer Science, University of California, Davis, Davis, CA, April 5.
54. 1991 OPTOELECTRONIC APPLICATIONS OF ULTRATHIN POLYMERIC FILMS. Invited Tutorial Presentation, American Chemical Society 201<sup>st</sup> National Meeting, Atlanta, GA, April 14.
55. 1992 THE LIQUID CRYSTAL ADAPTIVE LENS: ABERRATION CORRECTION. SPIE International Symposium on Optical Applied Science and Engineering, Conference on Very Large Optical Memories, San Diego, July 24.
56. 1993 THE IC VISION PROJECT: A DIFFRACTIVE MULTISTEREOGRAM DISPLAY. Department of Electrical and Computer Engineering, University of California, Davis, Davis, CA, July 12.
57. 1993 CYLINDRICAL LIQUID CRYSTAL LENS. SPIE International Symposium on Optical Applied Science and Engineering, Conference on Very Large Optical Memories, San Diego, July 15.
58. 1993 ICVISION - 3-D DISPLAYS FOR COMPUTER SIMULATION. Armed Forces Communications and Electronics Association Huntsville Chapter, October 15.
59. 1993 IC VISION – A REAL-TIME 3-D DISPLAY SYSTEM BASED ON LIQUID CRYSTAL AND VLSI TECHNOLOGIES. Society for Information Display/ARPA/IEEE Symposium on Active Matrix Liquid Crystal Displays, Lehigh University, Bethlehem, PA, October 20.
60. 1993 ORGANIX: NEW MATERIALS FOR ELECTRONICS. Materials Science Seminar, UAH, November 19.
61. 1994 OPTICAL INTERCONNECTION SYSTEM USING STACKED THIN FILM MODULATOR AND DETECTOR. First IEEE International Workshop on Massively Parallel Processing Using Optical Interconnections (with MPPOI '94), Cancun, Mexico, April 26.
62. 1994 REAL-TIME, AUTOSTEREOSCOPIC 3-D LIQUID CRYSTAL DISPLAY ON SILICON: THE ICVISION PROJECT. Eastview Seminar Series, IBM Thomas J. Watson Research Center, Yorktown Heights, NY, May 17.
63. 1994 VLSI-COMPATIBLE ELECTRO-OPTIC REFLECTION MODULATOR. OSA Annual Meeting, Dallas, TX, October 4.
64. 1995 SILICON-SURFACE PHOTONICS - INTERCONNECTS AND 3-D DISPLAYS. Seminar; School of Electrical and Computer Engineering, and Microelectronics Research Center; Georgia Institute of Technology, Atlanta, GA, February 7.
65. 1995 IMAGE VOLUME OF THE PARTIAL PIXEL DIFFRACTIVE DISPLAY ARCHITECTURE. OSA Annual Meeting, Portland, OR, September 13.
66. 1995 NEW PRACTICAL MS/MSE DEGREE PROGRAMS IN OPTICS AND PHOTONICS TECHNOLOGY. OSA Annual Meeting, Portland, OR, September 13.

**S. T. KOWEL**  
**Publications, Patents, Presentations**

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67. 1995 THE ISSUE OF SCALE AND THE TECHNOLOGIES OF MINIATURIZATION. UAH Honors Program Seminar, Huntsville, October 31.
68. 1996 HIGH RESOLUTION LIQUID CRYSTAL DIFFRACTIVE OPTICS (Invited Paper). SPIE / IST International Symposium, San Jose, January 31.

**PRESENTATIONS (Invited Lectures and Conference Papers), continued**

- 69.1996 DIFFRACTIVE OPTICS FOR THREE-DIMENSIONAL DISPLAYS. EE Department Seminar, Stanford University, Palo Alto, February 1.
- 70.1996 LIQUID CRYSTAL ADAPTIVE LENS: IMAGING PERFORMANCE. OSA Annual Meeting, Rochester, NY, October 21.
- 71.1997 THREE-DIMENSIONAL AUTOSTEREOSCOPIC REAL-TIME DISPLAYS. ECE Department Seminar, Northeastern University, Boston, April 15.
- 72.1997 THE LIQUID CRYSTAL ADAPTIVE LENS. EE Department Colloquium, University of Pennsylvania, Philadelphia, April 17.
- 73.1997 DISCLINATION AND DEFECT WALL DYNAMICS IN HIGH RESOLUTION LIQUID CRYSTAL GRATINGS. OSA Annual Meeting, Long Beach, CA, October 13.
- 74.1997 DYNAMIC MODELING FOR LIQUID CRYSTAL DEVICES USING PARTICLE-IN-CELL CODE. OSA Annual Meeting, Long Beach, CA, October 15.
- 75.1997 ADVANCED ELECTRODE DESIGNS FOR THE LIQUID CRYSTAL ADAPTIVE LENS. Invited Presentation, IEEE LEOS Annual Meeting, San Francisco, CA, November 13.
- 76.1997 THE ICVISION STEREOSCOPIC 3-D DISPLAY – DISCUSSION AND DEMONSTRATION. Rohm and Haas Research Center, Bristol, PA, December 11.
- 77.2001 REAL-TIME AUTOSTEREOSCOPIC DISPLAY: DIFFRACTIVE VERSUS REFLECTIVE APPROACHES. University of Dayton Electro-Optics Seminar, November 16.
- 78.2004 ENGINEERING EDUCATION: A PERSONAL CONCERN. ASEE Conference for Industry and Educational Collaboration - Preparing Engineering Leaders for 2020 – Invited Presentation, February 4.