

# PUBLICATIONS

**Kenneth Evans, Jr.**

July 2004

## **A. Book**

1. *Elementary Processes in Hydrogen-Helium Plasmas*, (Springer-Verlag, New York, 1987); with R. K. Janev, W. D. Langer, and D. E. Post, Jr.

## **B. Journal Articles and Proceedings**

1. "Instabilities in Finite Beam-Plasma Systems," *Phys. Fluids* **13**, 1885 (1970); with E. A. Jackson.
2. "Double Laplace Transformation in Mixed Boundary - Initial Value Problems," *J. Math. Phys.* **12**, 2012 (1970); with E. A. Jackson.
3. "The Electric Field and the Motion of Flux Lines in an Inductively Driven Multipole," *Phys. Fluids* **16**, 2330 (1974).
4. "Tokamak Experimental Power Reactor," Proc. 2nd ANS Topical Mtg. on Technology of Controlled Nuclear Fusion, USERDA CONF-760935, Vol. I (1976), p. 315; with ANL-TEPR Group.
5. "Plasma Driving Systems for a Tokamak Experimental Power Reactor," *ibid.*, Vol. IV, p. 1233; with F. E. Mills, J. N. Brooks, R. L. Kustom, W. M. Stacey, Jr., and S.-T. Wang.
6. "An Argonne Tokamak Experimental Power Reactor," Proc. IEEE Symp. on Engineering Problems of Fusion Research, IEEE Pub. No. 75-CH-1097-5-NPS (1976), p. 524; with ANL-TEPR Group.
7. "Tokamak Experimental Power Reactor," Proc. 1976 Winter Mtg. Am. Soc. Mech. Engrs., Dec. 5-10, 1976, New York, NY, Paper No. 76-WA/NE-11; with ANL-TEPR Group.
8. "Effect of Plasma Confinement and Impurity Level Upon the Performance of a D-T Burning Tokamak Experimental Power Reactor," *Nucl. Fusion* **16**, 211 (1976); with W. M. Stacey, Jr., P. J. Bertocini, and J. N. Brooks.
9. "A Tokamak Experimental Power Reactor," *Nucl. Techn.* **30**, 261 (1976); with ANL-TEPR Group.
10. "Toroidal Field Strength Requirements in Tokamak Reactors," *Nucl. Techn.* **32**, 142 (1977); with W. M. Stacey, Jr.
11. "Plasma Engineering Studies for the Tokamak Experimental Power Reactor," Proc. 7th Symp. on Engineering Problems of Fusion Research, IEEE Pub. 77CH1267-4-NPS (1977), p. 1678; with W. M. Stacey, Jr., J. N. Brooks, J. Norem, and A. M. M. Todd.
12. "The Equilibrium-Field Coil System for the ANL EPR Design," *ibid.*, p. 117; with J. Brooks, J. Dawson, J. Norem, H. Stevens, and L. Turner.

13. "Equilibrium Field Coil Considerations for Tokamak Reactors," Proc. 3rd ANS Topical Mtg. on The Technology of Controlled Nuclear Fusion, May 9-11, 1978, Santa Fe, NM, CONF-780508, Vol. II (1978), p. 1084; with D. A. Ehst and P. Messerschmidt.
14. "Impact of Technology and Maintainability on Economic Aspects of Tokamak Power Plants," Proc. 7th Int'l. Conf. on Plasma Physics and Controlled Nuclear Fusion Research, Innsbruck, Austria, Aug. 23-30, 1978, p. 673; with M. A. Abdou, C. C. Baker, *et al.*
15. "The Influence of Physics Parameters on Tokamak Reactor Design," Nucl. Techn. **43**, 28 (1979); with D. A. Ehst and W. M. Stacey, Jr.
16. "Fusion Reactor Technology Impact of Alternate Fusion Fuels," Proc. IEEE 8th Symp. on Engineering Problems of Fusion Research, IEEE Pub. No. 79CH1441-5-NPS, Vol. II (1979), p. 861; with C. C. Baker, *et al.*
17. "Superconducting Poloidal Coils for 'STARFIRE' Commercial Reactor," *ibid.*, Vol. III, p. 1625; with S.-T. Wang, L. R. Turner, Y.-C. Huang, R. Prater, and J. Alcorn.
18. "Implications of the D-D Fuel Cycle on Tokamak Reactor Technology Considerations," Proc. 4th ANS Topical Mtg. on Technology of Controlled Nuclear Fusion, King of Prussia, PA, Oct. 14-17, 1980, CONF-801011, Vol. II (1981), p. 913; with C. C. Baker, *et al.*
19. "Electromagnetic Effects Involving a Tokamak Reactor Blanket and Shield," *ibid.*, Vol. II, p. 739; with L. R. Turner, E. Gelbard, and R. Prater.
20. "STARFIRE Poloidal Coil System," *ibid.*, Vol. II, p. 1096; with S. H. Kim, L. Turner, S.-T. Wang, and R. Prater.
21. "Lower-Hybrid Heating and Current Drive System for the STARFIRE Tokamak," *ibid.*, Vol. I, p. 181; with D. A. Ehst, C. D. Boley, R. Fuja, J. Jung, C. A. Trachsel, and T. Hino.
22. "STARFIRE, A Commercial Tokamak Power Plant Design," Nucl. Eng. Design **63**, 199 (1981); with C. C. Baker, *et al.*
23. "Engineering Aspects of a D-D Commercial Tokamak Reactor," Proc. 9th Symp. of Engineering Problems of Fusion Research, IEEE Pub. No. 81CH1715-2-NPS, Vol. II (1981), p. 1976; with others.
24. "WILDCAT: A Catalyzed D-D Tokamak Reactor," in Summary of the Alternate Fuels Fusion Reactor Workshop, LaJolla, CA, Dec. 7-8, 1981, J. B. McBride (Ed.), Nucl. Techn./Fusion **2**, 443 (1982).
25. "Lower Hybrid Heating and Current Drive System for a Tokamak Reactor," J. Fusion Energy **2**, 83 (1982); with D. A. Ehst, *et al.*
26. "Tokamak Reactor Studies: Studies of DT Demonstration Reactors and DD Reactors," Proc. IAEA 9th Int'l. Conf. on Plasma Physics and Controlled Nuclear Fusion Research, Baltimore, MD, Aug. 31-Sept. 9, 1982; with others, paper combined with C. C. Baker, *et al.*
27. "The Effective Cost of Tritium for Tokamak Fusion Power Reactors with Reduced Tritium Breeding Ratios," Proc. 5th Topical Mtg. on the Technology of Fusion Energy, Knoxville, TN, April 26-28, 1983; Nucl. Technol./Fusion (Special Issue) **4**(2), Pt. 2, 273 (1983); with J. G. Gilligan and J. Jung.
28. "WILDCAT: A Commercial Deuterium-Deuterium Tokamak Reactor," Nucl. Technol./ Fusion **4**, 226 (1983); with others.

29. "Tokamak Fusion Reactors with Less Than Full Tritium Breeding," Nucl. Technol./Fusion **5**, 311 (1984); with J. G. Gilligan and J. Jung.
30. "Survey of Atomic Processes in Edge Plasma," Proc. Symp. on Energy Removal and Particle Control in Toroidal Devices, Princeton, NJ, July 26-29, 1983 p. 10, J. Nucl. Mater. **121**, 10 (1984); with R. K. Janev, *et al.*
31. "Magnet Design Approach for Pulsed Tokamak Reactors," Proc. IEEE Symp. on Engineering Problems of Fusion Research," Philadelphia, PA, IEEE Pub. No. 83CM1916 (1984), p. 677; with D.A. Ehst and S.-H. Kim.
32. "Monte Carlo Simulation of the ISX Pumped Limiter," Proc. 6th Int'l. Conf. on Plasma Surface Interactions in Controlled Fusion Devices, Nagoya, Japan, May 14-18, 1984, J. Nucl. Mater. **128 & 129**, 452 (1984).
33. "A Comparison of Pulsed and Steady-State Tokamak Reactor Burn Cycles - Part II: Magnet Fatigue, Power Supplies, and Cost Analysis," Nucl. Engr. Design/Fusion **2**, 319 (1985); with D. A. Ehst, *et al.*
34. "The FELIX Experiments: Measurements of Electromagnetic Effects," Proc. 6th Topical Mtg. on Technology of Fusion Energy, San Francisco, CA, March 3-7, 1985; Fusion Technology **8**, 227 (1985), p. 727; with L. R. Turner, *et al.*
35. "A Comparison of Burn Cycle Options for Tokamak Reactors," *ibid.*; with D. A. Ehst, *et al.*
36. "Maintenance of High Beta Tokamak Equilibria with Fast Wave Current Drive," Proc. 6th Topical Conf. on Radio Frequency Plasma Heating, Pine Mountain, GA, May 13-15, 1985; with D. A. Ehst and D. W. Ignat.
37. "Plasma Current Profile Shaping with RF-Current Drive," Proc. Erice Course on Tokamak Startup, Erice, Italy, July 14-20, 1985; with D. A. Ehst.
38. "A Comparison of Tokamak Burn Cycle Options," *ibid.*; with D. A. Ehst, *et al.*
39. "Fast Wave Current Drive for Profile Control and Beta Enhancement," in Tokamak Concept Innovations (INTOR-Related Specialists' Mtg., Phase IIA, Part 3), EURFUBUR/XII-52/86/EDVI, Vienna, Austria (1986), Vol. 2, p. 3.1; with D. A. Ehst.
40. "Tokamak MHD Equilibrium Generation by Narrow-Spectrum Fast-Wave Current Drive," Nucl. Fusion **26**, 461 (1986); with D. A. Ehst and D. W. Ignat.
41. "Tokamak Power System Studies at ANL," Proc. Seventh Topical Mtg. on the Technology of Fusion Energy, Reno, NV, June 15-19, 1986, Fusion Technology **10**, 709 (1986); with C. C. Baker, D. A. Ehst, and J. N. Brooks.
42. "Multiple-Wave Radiofrequency Current Driven Tokamak Reactors in the First Stability Regime," Nucl. Fusion **27**, 1267 (1987); with D. A. Ehst.
43. "Tokamak Power Systems Studies: A Second Stability Power Reactor," in Fusion Engineering, Proc. 12th Symp. on Fusion Engineering, Monterey, CA, Oct. 12-16, 1987, IEEE Cat. No. 87CH2507-2, Vol. 1, p. 489; with D. A. Ehst, *et al.*
44. "Bootstrap Currents in Radiofrequency Driven Tokamak Equilibria," Nucl. Fusion **29**, 49 (1989); with M.-Y. Hsiao and D. A. Ehst.
45. "MHD Equilibrium and Stability Considerations for High-Aspect-Ratio ARIES-I Tokamak Reactor," Proc. IEEE 13th Symp. on Fusion Engineering, Knoxville, TN, October 2-6, 1989; with Y.-K. M. Peng, *et al.*
46. "The ARIES Tokamak Reactor Study," *ibid.*; with F. Najmabadi, R. W. Conn, *et al.*

47. "Xorbit -- An X-Windows Accelerator Simulation", Proc. Computational Accelerator Physics Conf. 1993, Pleasanton, CA, February 22-26, 1993.
48. "Closed Orbit Correction Using Singular Value Decomposition of the Response Matrix", Proc. 1993 Particle Accelerator Conf., Washington, DC, May 17-20, 1993; with Y. Chung and G. Decker.
49. "Measurement of Beta-Function and Phase Using the Response Matrix", *ibid.*; with Y. Chung, G. Decker, J. Safranek, I. So, Y. Tang, J. Corbett, and R. Hettel.
50. "Global DC Closed Orbit Correction Experiments on the NSLS X-ray Ring and SPEAR", *ibid.*; with Y. Chung and G. Decker.
51. "Simulation Using Xorbit with EPICS", Proc. 6th. Int'l. Conf. on Accelerator and Large Experimental Physics Control Systems, Chicago, IL, October 30 - November 3, 1995.
52. "Sensitivity and Offset Calibration for the Beam Position Monitors at the Advanced Photon Source", Proc. Computational Accelerator Physics Conf. 1995, Dallas, TX, May 1-5, 1995; with Y. Chung, D. Barr, G. Decker, and E. Kahana.
53. "Evaluation of the Global Orbit Correction Algorithm for the APS Real-Time Orbit Feedback System", Proc. Computational Accelerator Physics Conf. 1997, Vancouver, B.C., May 12-16, 1997; with J. Carwardine.
54. "Commissioning of the APS Real-Time Orbit Feedback System", *ibid.*; with J. Carwardine, G. Decker, A. Hillman, F. Lenkszus, R. Merl, and A. Pietryla.
55. "Controlling EPICS from a Web Browser", Proc. 1999 Particle Accelerator Conf., New York, NY, March 29 - April 2, 1999.
56. "New Features in MEDM", *ibid.*
57. "An Overview of MEDM", Proc. 7th. Int'l. Conf. on Accelerator and Large Experimental Physics Control Systems, Trieste, Italy, October 4 - 8, 1999.
58. "EPICS for PDAs", Proc. 8th. Int'l. Conf. on Accelerator and Large Experimental Physics Control Systems, San Jose, California, November 27-30, 2001.
59. "An Overview of the Information Distribution System at the Advanced Photon Source", Rev. of Scientific. Inst., Vol. 73, No. 3, March 2002, with M. Ramanathan, *et. al.*
60. "Experience with the EPICS PV Gateway at the APS", Proc. 2005 Particle Accelerator Conf., Knoxville, TN, May 16 - 20, 2005, with M. Smith.
51. "The EPICS Process variable gateway -- Version 2", Proc. 10th. Int'l. Conf. on Accelerator and Large Experimental Physics Control Systems, Geneva, Switzerland, October 10 - 14, 2005.

### **C. Abstracts of Papers Presented at Meetings**

1. "Engineering Plasma Physics Considerations for a Tokamak Experimental Power Reactor," Trans. Am. Nucl. Soc. **21**, 32 (1975); with W. M. Stacey, Jr., P. J. Bertoncini, and J. N. Brooks.

2. "Argonne Tokamak Experimental Power Reactor Studies," *Trans. Am. Nucl. Soc.* **22**, 61 (1975); with W. M. Stacey, Jr., *et al.*
3. "Tokamak Experimental Power Reactor Studies," *Bull. Am. Phys. Soc.* **20**, 1315 (1975); paper presented at 17th Annual Mtg. Div. Plasma Physics, Am. Phys. Soc., St. Petersburg, FL, Nov. 10-14, 1975; with W. M. Stacey, Jr., *et al.*
4. "Confinement and Impurity Effects in a Tokamak Reactor," *ibid.*, p. 1314; with W. M. Stacey, Jr.
5. "Optimization of bt in a Circular Tokamak," *Bull. Am. Phys. Soc.* **21**, 1192 (1976); paper presented at 18th Annual Mtg. Div. Plasma Physics, Am. Phys. Soc., San Francisco, CA, Nov. 15-19, 1976.
6. "Plasma Physics Considerations for a Tokamak Experimental Power Reactor," *ibid.*, p. 1194.
7. "Survey of High- $\beta$  Equilibria in a Tokamak," *Bull. Am. Phys. Soc.* **22**, 1118 (1977); paper presented at the 19th Annual Mtg. Div. Plasma Physics, Am. Phys. Soc., Atlanta, GA, Nov. 7-11, 1977; with E. Goldstick.
8. "Optimization of the F(y) Profile in Tokamak MHD Equilibrium Calculations," 1978 Annual Mtg., Controlled Fusion Theory Conference, Gatlinburg, TN, April 26-28, 1978.
9. "Design of the Equilibrium Field Coil Configuration for APEX," *Bull. Am. Phys. Soc.* **23**, 898 (1978); paper presented at 20th Annual Mtg., Div. Plasma Physics, Am. Phys. Soc., Colorado Springs, CO, Oct. 30-Nov. 3, 1978.
10. "Magnetic Field Diffusion Through a Magnetic Conducting Wall," Paper presented at the Sherwood Theory Conf. on Theoretical Aspects of Controlled Thermonuclear Fusion, Mt. Pocono, PA, April 18-20, 1979; with E. M. Gelbard.
11. "Technology Implications of Advanced Fusion Fuel Cycles," 1979 IEEE Int'l. Conf. On Plasma Science, June 4-6, 1979; with C. C. Baker, *et al.*
12. "TRAC-II: A Tokamak Reactor Analysis Code," *Bull. Am. Phys. Soc.* **24**, 1111 (1979); paper presented at 21st Annual Mtg., Div. of Plasma Physics, Am. Phys. Soc., Boston, MA, Nov. 12-16, 1979.
13. "STARFIRE: Plasma Physics Basis," *ibid.*, p. 1110.
14. "Ohmic Heating and Equilibrium Field Coil Systems for STARFIRE," *Bull. Am. Phys. Soc.* **25**, 936 (1980); paper presented at the 22nd Annual Mtg., Div. Plasma Physics, Am. Phys. Soc., San Diego, CA, Nov. 10-14, 1980; with L. Turner.
15. "Plasma Physics Considerations of Tokamak Reactors Operating on DD Fuel Cycles," *ibid.*, p. 937.
16. "Conceptual Design of a D-D Tokamak Reactor," IEEE Int'l. Conf. on Plasma Science, Santa Fe, NM, May 18-20, 1981; with others.
17. "WILDCAT D-D Reactor Studies," *Bull. Am. Phys. Soc.* **26**, 965 (1981); paper presented at 23rd Annual Mtg., Div. Plasma Physics, New York, NY, Oct. 12-16, 1981; with others.
18. "Tritium-Depleted D-T Tokamak Fusion Reactors," *Bull. Am. Phys. Soc.* **27**, 921 (1982); paper presented at 23rd Annual Mtg. Div. Plasma Physics, New Orleans, LA, Nov. 1-5, 1982; with J. Gilligan and J. Jung.
19. "Monte Carlo Simulation of the ISX Pumped Limiter," *Bull. Am. Phys. Soc.* **28**, 1256 (1983); paper presented at the 25th Annual Mtg., Div. Plasma Physics, Los Angeles, CA, Nov. 7-11, 1983; with others.

20. "Monte Carlo Calculations for the ISX Pumped Limiter," paper presented at 1984 Sherwood Theory Mtg., Annual Controlled Fusion Theory Conference, Incline Village, NV, April 11-13, 1984; with others.
21. "Atomic Processes and Energy Loss in Diverted Edge Plasmas," *ibid.*, with W. D. Langer, *et al.*
22. "Atomic and Molecular Processes of Hydrogen-Helium Plasmas," Bull. Am. Phys. Soc. **29**, 1244 (1984); paper presented at the 26th Annual Mtg., Div. Plasma Physics, Am. Phys. Soc., Boston, MA, Oct. 29-Nov. 2, 1984; with W. D. Langer, R. K. Janvev, and D. E. Post.
23. "Atomic and Molecular Processes in Hydrogen-Helium Plasmas," paper presented at the 5th Topical Conf. on Atomic Processes in High Temperature Plasmas, p. 87, Monterey, CA, Feb. 24-28, 1985; with W. D. Langer and R. K. Janev.
24. "Steady-State Tokamak MHD Equilibrium with Noninductive Current Drive," *ibid.*, p. 1307; with D. A. Ehst.
25. "Toroidal MHD Equilibrium Determined by Low-Frequency Wave-Driven Currents," paper presented at the 1985 Sherwood Theory Conf., Annual Controlled Fusion Theory Conf., Madison, WI, April 15-17, 1985; with D. A. Ehst.
26. "Characteristics of MHD Equilibria Determined by Current Drive," Bull. Am. Phys. Soc. **30**, 1460 (1985), paper presented at the 27th Annual Mtg., Div. Plasma Physics, Am. Phys. Soc., San Diego, CA, Nov. 4-8, 1985; with D. A. Ehst.
27. "Studies of Tokamak Reactor Design Goals - Improvements to STARFIRE," *ibid.*, p. 1473; with D. A. Ehst.
28. "Multiple-Wave Calculations of Wave-Driven MHD Equilibria," paper presented at the 1986 Sherwood Controlled Fusion Theory Conf., New York, NY, April 14-16, 1986; with D. A. Ehst.
29. "RF Current Drive for Tokamak Reactors in the First Stability Regime," Bull. Am. Phys. Soc. **31**, 1558 (1986), paper presented at the 28th Annual Mtg., Div. of Plasma Physics, Am. Physical Soc., Baltimore, MD, Nov. 3-7, 1986; with T. K. Mau and D. A. Ehst.
30. "Two-Dimensional Tokamak Equilibria with Bootstrap and RF-Driven Seed Currents," *ibid.*, p. 1627; with M. Hsiao and D. A. Ehst.
31. "Physics Issues for a Second-Stability Tokamak Reactor," paper presented at the 1987 Sherwood Controlled Fusion Theory Conf., San Diego, CA, April 6-8, 1987; with D. A. Ehst.
32. "A Code to Calculate RF Current Drive Consistent with the Resulting MHD Equilibrium," paper presented at the 12th Conf. on Numerical Simulation of Plasmas, San Francisco, CA, Sept. 20-23, 1987; with others.
33. "Second Stability for a Tokamak Reactor," Bull. Am. Phys. Soc. **32**, 1773 (1987), paper presented at the 29th Annual Mtg., Div. of Plasma Physics, Am. Physical Soc., San Diego, CA, Nov. 2-6, 1987; with D. A. Ehst.
34. "Bootstrap Current in RF Current-Driven Tokamaks," *ibid.*, p. 1760; with M.-Y. Hsiao and D. A. Ehst.
35. "Bootstrap Currents in INTOR," paper presented at the USA Contribution to INTOR Workshop, Session XV, Vienna, Austria, November 9-20, 1987; with D. A. Ehst and M.-Y. Hsiao.
36. "Current Drive for a High Beta Reactor," paper presented at the 1988 Sherwood Controlled Fusion Theory Conf., Gatlinburg, TN, April 18-20, 1988; with D. A. Ehst.
37. "ICRF Heating and Current Drive for ITER," paper presented at the ITER Specialists' Mtg. on Heating and Current Drive, Garching, June 13, 1988; with D. A. Ehst, T. K. Mau, and M.-Y. Hsiao.

38. "Second-Stability MHD Equilibrium Candidates for a Reactor," paper presented at the 1989 International Sherwood Theory Conf., San Antonio, TX, April 3-5, 1988; with D. A. Ehst.
39. "An ICRF System for Current Drive and Heating in a Tokamak Reactor," paper presented at the Eighth Topical Mtg. on the Technology of Fusion Energy, Salt Lake City, UT, October 9-13, paper 16C-PHCD2-4, 1988; with T. K. Mau and D. A. Ehst.
40. "The ARIES Tokamak Fusion Reactor Study - The Scoping Phase," *ibid.*, paper 17-COM-6; with F. Najambadi, *et al.*
41. "Second Stability MHD Equilibrium Candidates for a Reactor," Bull. Am. Phys. Soc. **33**, 2013 (1988), paper presented at the 30th Annual Mtg., Div. of Plasma Physics, Am. Physical Soc., Hollywood, FL, October 31-November 4, 1988; with D. A. Ehst.
42. "Gateway 2.0," Proc. EPICS Collaboration Meeting, Santa Fe, New Mexico, May 5 - 7, 2004.
43. "MEDM is Not Dead Yet," Proc. EPICS Collaboration Meeting, SLAC, Menlo Park, CA, April 27 - 29, 2005.
44. "CASnooper and Other CA Diagnostics," *ibid.*

#### **D. Reports**

1. "Equations for the Flux in an Inductively Driven Multipole," University of Wisconsin Report PLP-459 (1971); with R. Willig, Jr.
2. "The Electric Field in an Inductively Driven Multipole," University of Wisconsin Report PLP-459 (1971); with R. Willig, Jr.
3. "Initially Started Sinusoidal Fields at the Surface of and Within a Conductor," University of Wisconsin Report PLP-464 (1972).
4. "Comments on Potential Measurements in the Presence of Time-Varying Fields," University of Wisconsin Report PLP-491 (1972).
5. "The Electric Field in an Inductively Driven Multipole with a Dielectric Plasma," University of Wisconsin Report PLP-503 (1973).
6. "Tokamak Experimental Power Reactor Studies," Argonne National Laboratory Report ANL/CTR-75-2 (1975); with ANL-TEPR Group.
7. "Argonne Tokamak Experimental Power Reactor Studies," Argonne National Laboratory Report ANL/CTR/TM-47 (1975); with ANL-TEPR Group.
8. "Effect of Plasma Confinement and Impurity Level Upon the Performance of a D-T Burning Tokamak Experimental Power Reactor," Argonne National Laboratory Report ANL/CTR/TM-53 (1975); with W. M. Stacey, Jr., P. J. Bertoncini, and J. N. Brooks.
9. "Toroidal Field Strength Requirements in Tokamak Reactors," Argonne National Laboratory Report ANL/CTR/TM-57 (1975); with W. M. Stacey, Jr.

10. "Tokamak Experimental Power Reactor Conceptual Design," Argonne National Laboratory Report ANL/CTR-76-3 (1976); with W. M. Stacey, Jr., *et al.*
11. "EPR-77, A Revised Design for the Tokamak Experimental Power Reactor," Argonne National Laboratory Report ANL/FPP/TM-77 (1977); with ANL-EPR Group.
12. "Tokamak Experimental Power Reactor," Argonne National Laboratory Report ANL/FPP/TM-93 (1977); with W. M. Stacey, Jr. and ANL-EPR Group.
13. "A Systematic Survey of Tokamak Reactor Physics Design Parameters," Argonne National Laboratory Report ANL/FPP/TM-95 (1977); with D. A. Ehst and W. M. Stacey, Jr.
14. "Parametric Systems Analyses for Tokamak Power Plants," Argonne National Laboratory Report ANL/FPP/TM-97 (1977); with M. A. Abdou, *et al.*
15. "High bt Equilibria in Tokamaks," Argonne National Laboratory Report ANL/FPP/TM-98 (1977).
16. "Plasma Engineering Studies for the Tokamak Experimental Power Reactor," in "Recent Contributions to Fusion Reactor Design," Argonne National Laboratory Report ANL/FPP/TM-103 (1978); with W. M. Stacey, Jr. and J. N. Brooks.
17. "The Equilibrium Field Coil System for the Argonne EPR Design," *ibid.*, p. 77; with J. N. Brooks, H. Stevens, and L. Turner.
18. "Tokamak Experimental Power Reactors," *ibid.*, p. 131; with W. M. Stacey, Jr., *et al.*
19. "The Impact of Alternate Fusion Fuels on Fusion Reactor Technology - An Initial Assessment Study," Argonne National Laboratory Report ANL/FPP/TM-128 (1980); with C. C. Baker, *et al.*
20. "STARFIRE - A Commercial Fusion Tokamak Power Plant Study," Argonne National Laboratory Report ANL/FPP/80-1 (1980); with C. C. Baker and the STARFIRE Team.
21. "D-D Tokamak Reactor Studies," Argonne National Laboratory Report ANL/FPP/TM-138 (1980); with others.
22. "A Demonstration Tokamak Power Plant Study," Argonne National Laboratory Report ANL/FPP/TM-154 (1982); with M. Abdou, *et al.*
23. "WILDCAT: A Catalyzed D-D Tokamak Reactor," Argonne National Laboratory Report ANL/FPP/TM-150 (1982); with others.
24. "A Method for Determining Poloidal Coil Configurations for Tokamak Devices," Argonne National Laboratory Report ANL/FPP/TM-156 (1983).
25. "Alternate Fuel Reactor Studies," Argonne National Laboratory Report ANL/FPP/TM-162 (1983); with others.
26. "A Tokamak Reactor Cost Model Based on STARFIRE/WILDCAT Costing," Argonne National Laboratory Report ANL/FPP/TM-168 (1983).
27. "Tokamak Fusion Reactors with Less Than Full Tritium Breeding," Argonne National Laboratory Report ANL/FPP/TM-169 (1983).
28. "Tokamak Burn Cycle Study: A Data Base for Comparing Long Pulse and Steady-State Power Reactors," Argonne National Laboratory Report ANL/FPP/TM-178 (1983); with D. A. Ehst, *et al.*



29. "Survey of Atomic Processes in Edge Plasmas," Princeton Plasma Physics Laboratory Report PPPL-2045 (1983); with R. K. Janev, *et al.*
30. "Atomic and Molecular Processes in Hydrogen-Helium Plasmas," Princeton Plasma Physics Laboratory Report PPPL-TM-368 (1985); with R. K. Janev, W. D. Langer, and D. E. Post.
31. "Tokamak Power Systems Studies - FY1985," Argonne National Laboratory Report ANL/FPP-85-2 (Dec. 1985); with C. C. Baker, *et al.*
32. "TIBER II - Tokamak Ignition/Burn Experimental Reactor - 1986 Status Report," Lawrence Livermore National Laboratory Report UCID-20863 (Oct. 1986); with C. D. Henning, B. G. Logan, *et al.*
33. "Noninductive Current Drive for INTOR: A Comparison of Four Driver Options," Argonne National Laboratory Report ANL/FPP/TM-213 (Jan. 1987); with D. A. Ehst, *et al.*
34. "Tokamak Power Systems Studies - FY1986: A Second Stability Power Reactor," Argonne National Laboratory Report ANL/FPP/86-1 (Mar. 1987); with D. A. Ehst, *et al.*
35. "TIBER II/ETR Final Design Report," ed. J. D. Lee, Lawrence Livermore National Laboratory Report UCID-21150 (Sept. 1987); with J. D. Lee, *et al.*
36. "Bootstrap Currents in Radio-Frequency-Driven Tokamak Equilibria," Argonne National Laboratory Report ANL/FPP/TM-221 (May 1988); with M.-Y. Hsiao and D. A. Ehst.
37. "Maximal Bootstrap Current Tokamak Equilibria in the First Stability Regime," Argonne National Laboratory Report ANL/FPP/TM-235 (Jan. 1989); with D. A. Ehst.
38. "Chapter V, Current Drive and Heating," U.S. Contribution to the International Tokamak Reactor, Phase-2A, Part 3 Workshop, INTOR Report USA INTOR/88-1 (June 1988); with D. A. Ehst, D. R. Mikkelsen, D. W. Ignat, T. K. Mau, and M.-Y. Hsiao.
39. "Global DC Closed Orbit Correction Experiment on the NSLS X-ray Ring," LS - 213 (September 1992); with Y. Chung and G. Decker.

#### **E. WWW Publications**

1. "CaSnooper Reference Guide",  
<http://www.aps.anl.gov/asd/controls/epics/EpicsDocumentation/ExtensionsManuals/CaSnooper/CaSnooper.html>.
2. "ADT Array Display Tool Reference Guide", <http://www.aps.anl.gov/asd/oag/manuals/adt/adt.html>.
3. "Gateway User's Guide",  
<http://www.aps.anl.gov/asd/controls/epics/EpicsDocumentation/ExtensionsManuals/Gateway/Gateway.html>.
4. "Histogram Tool", <http://www.aps.anl.gov/epics/extensions/histTool/help.txt>.
5. "MEDM Reference Manual",  
<http://www.aps.anl.gov/asd/controls/epics/EpicsDocumentation/ExtensionsManuals/MEDM/MEDM.html>.
6. "Namecapture",  
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