



CURRICULUM VITAE WILLIAM W. DESTLER

Executive Summary

Administration – Dr. Destler has served as Electrical and Computer Engineering Department Chair, as Dean of Engineering, as Interim Vice President for University Advancement, as Vice President for Research and Dean of the Graduate School, and as Senior Vice President for Academic Affairs and Provost at the University of Maryland, his current position. As Dean of Engineering at the University of Maryland during the period 1994-99, he led the construction of a detailed strategic plan and its subsequent implementation aimed at placing the University's engineering programs among the top ten at public institutions nationwide. As a result of these efforts, the national ranking of University of Maryland engineering graduate programs in US News and World Report improved from 37th in 1994 to 13th in 1999 among all engineering schools, and from 22nd to 9th among publicly funded institutions. Dr. Destler also greatly expanded efforts to secure individual and corporate funding for the University's engineering programs, and he raised more than \$40M in external funds from these sources during his term as Dean, including funds for 10 endowed chairs and professorships. As Interim Vice President for University Advancement, he was in charge of all University fundraising and external relations activities for the period 1/99-10/99, a period in which private giving to the University increased to a record of almost \$90M. He also personally secured a \$25M naming gift from Comcast Corporation to support the construction of the University's new basketball arena. He assumed the position of Vice President for Research and Dean of the Graduate School at the University of Maryland in the Summer of 1999. After assuming this position, he instituted significant improvements to operations in both areas which resulted in record research funding (up over 30% in only two years), increased graduate student application numbers (up over 20% in only two years), and improved graduate student quality indicators (average GRE scores of new enrolls up 100 points). He has served as Senior Vice President for Academic Affairs since 2001. In this capacity he has initiated significant new student-success programs which have increased retention and graduation rates markedly (62% to 80% in five years), he has introduced academic minors across the campus, and he has initiated several new living-learning programs including the Jiminez-Porter Writer's House and the Global Communities House. In addition, he has worked with the President, other campus administrators, and faculty and staff to advance the quality of the University in many areas. Examples of this progress are shown below:

	FY00	FY06
National Ranking (publics)	32	18
No. of Top-Ten Programs	11	32
No. of Top-15 Programs	18	61
No. of Top-25 Programs	38	93
No. of Chairs, Endowed Prs.	46	79
No. of Nat'l Academy Mems.	23	42

Research – Dr. Destler is an international authority on high power microwave sources and advanced accelerator concepts. He is best known for his pioneering work in the collective acceleration of heavy ions, where he achieved the highest energies achieved to date by this method, and for his development of large orbit microwave devices including large orbit gyrotrons and rotating beam free electron lasers (w/ G. Bekefi). He has also made important contributions in the areas of intense electron beam propagation in vacuum, high brightness beam sources, wiggler-focused sheet beam free electron lasers, and plasma filled microwave devices. This work has been reported in more than 200 journal articles and conference papers and has been supported by research grants and contracts exceeding \$40M. Dr. Destler was elected Fellow of both the IEEE and the American Physical Society in recognition of these contributions. In 1992, he was named a University of Maryland Distinguished Scholar-Teacher in honor of these accomplishments and his educational contributions described below.

Education – Dr. Destler is an award-winning educator who has created new paradigms for undergraduate and graduate education not only in engineering, but across the higher education intellectual spectrum as well. He is the originator of the Gemstone Program, one of the most ambitious educational experiments currently underway nationwide. Gemstone students are drawn from every corner of the University, and are challenged to work in teams with students from widely varying majors on the solution to some aspect of a major societal problem over their entire undergraduate career. This program has already attracted the best student cohort ever attracted to the University for a specific educational program (over 700 students are currently enrolled in the Gemstone Program with an average SAT score of 1440). In addition, he led a team of faculty from four different colleges in the creation of the very successful Cross-Disciplinary Masters program in Telecommunications, one of the first University degree programs developed with significant corporate input and financial support. He is also the originator of the Hinman CEO's Program, a new undergraduate program centered around an entrepreneur's dormitory for upperclass students interested in forming their own businesses upon graduation. His most recent innovation is the "President's Promise" program, in which all entering Freshmen are guaranteed a special outside-the-classroom experience during their undergraduate programs. Dr. Destler's contributions in engineering education have been recognized by numerous awards, including the A.S.E.E./A.T.&T. Award for Excellence in Engineering Education for the Middle Atlantic States. He has served as Chair of the American Association of Engineering Societies Education Task Force and he currently Chairs the Cornell University Electrical Engineering Advisory Council.

Professional Service – Dr. Destler has served as an elected member of the IEEE Plasma Science Applications Committee and has been on Program Committees for the IEEE Int. Conf. on Plasma Science, the IEEE Particle Accelerator Conference, and the American Physical Society Division of Plasma Physics Annual Meeting. He also served as the Editor of the 3rd Special Issue on High Power Microwaves of the IEEE Transactions on Plasma Science. In addition, he served as a member of the External Review Committee of the Accelerator Operations and Technology Division of Los Alamos National Laboratory. Dr. Destler has served on the Board of Directors of the Maryland Technology Development Corporation and he currently is Vice-Chair of the Board of Directors of the National Institute of Aerospace.

**CURRICULUM VITAE
WILLIAM W. DESTLER**

I. Personal Data

Citizenship: U.S.A.

II. Education

B.S. Stevens Institute of Technology, June 1968

Ph.D. Cornell University, August 1972

III. Experience in Higher Education

July 2001-present – Senior Vice President for Academic Affairs and Provost,
University of Maryland at College Park

July 1999-July 2001: Vice President for Research and Dean of the Graduate School,
University of Maryland at College Park.

December 1998-October 1999: Interim Vice President for University Advancement,
University of Maryland at College Park.

1994-1999: Dean of Engineering, University of Maryland at College Park

1985-present: Professor of Electrical Engineering (Acting Chairman,
1985-1986; Chairman, 1986-94), University of Maryland at College Park.

1980 - 1985: Associate Professor of Electrical Engineering, University of
Maryland at College Park

1975 - 1980: Assistant Professor of Electrical Engineering, University of
Maryland at College Park

1973 - 1975: Research Associate, University of Maryland at College Park

1972-1973: Postdoctoral Research Associate, Cornell University

IV. Experience Other Than in Higher Education

Consultant for (Dr. Destler is an authority on High Power Microwave Sources and Advanced Accelerator Technologies):

EG&G Corporation
U.S. Arms Control and Disarmament Agency
Los Alamos National Laboratory
U.S. Patent Office
Naval Research Laboratory
Science Applications International Corporation

DNA Review Panel on National Simulator Program
External Review Committee, Accelerator Operations and Technology Division,
Los Alamos National Laboratory

Member, Board of Directors, Maryland Technology Development Corporation 2000-2005

Member, Board of Directors, National Institute of Aerospace 2000-present

V. Membership and Participation in Professional Societies

Member of: American Physical Society

IEEE

American Society of Engineering Education

Elected to IEEE Nuclear and Plasma Sciences Application Committee, 1985-1988
Session Organizer, 1986 IEEE Int. Conf. on Plasma Science (High Power Microwave and Millimeter Wave Generation)

Editor, 3rd Special Issue on High Power Microwaves, IEEE Trans. Plasma Science, 1990
Program Committee, 1991 IEEE Particle Accelerator Conference

Program Committee, 1994 American Physical Society Division of Plasma Physics
Annual Meeting

Chair, American Association of Engineering Societies Education Task Force, 1998-2000.

Member, AAAS West Virginia EPSCOR Review Team, 2000

Member, AAAS Kentucky EPSCOR Review Team, 2000-2004

Member, AAAS Nebraska EPSCOR Review Team, 2006

VI. Theses Directed

Type of Degree	Recipient	Date
M.S.	J. Cremer	May 1981
M.S.	P. O'Shea	May 1982
M.S.	C. Sullivan	December 1987
M.S.	K. Irwin	May 1990
M.S.	P. Huang	May 1990
M.S.	J. Gregor	May 1992
M.S.	K. Ramaswamy	May 1992
Ph.D.	L. Floyd	December 1983

Ph.D.	T. Cremer	May 1984
Ph.D.	R. Weiler	August 1984
Ph.D.	W. Lawson	May 1985
Ph.D.	P. O'Shea	December 1985
Ph.D.	E. Chojnacki	May 1987
Ph.D.	F. Aghamir	December 1988
Ph.D.	D. Abe	December 1992
Ph.D.	J. Cheng	May 1995
Ph.D.	K. Ramaswamy	May 1996
Ph.D.	J. Gregor	December 1997

VII. Awards, Contracts and Grants

A. Awards and Honors

B.S. with High Honors

Eta Kappa Nu Undergraduate Teaching Award, 1976, 1979

George Corcoran Award for Outstanding Contributions to Electrical Engineering,
May 1977

Student Government Association/Interfraternity Council/Pan Hellenic

Association

Student-Selected Teaching Award for Engineering, Mathematics,
Physical Sciences, Agricultural, and Life Sciences, 1979

IEEE Outstanding Professor Award, 1982, 1986

A.T.&T./A.S.E.E. Award for Excellence in Engineering Education for the
Middle-Atlantic States, 1989

University Certificate of Teaching Excellence, 1990

Elected Member: Tau Beta Pi, Eta Kappa Nu, Omicron Delta Kappa

Fellow of the American Physical Society

Fellow of the IEEE

University of Maryland Distinguished Scholar-Teacher 1992

College of Engineering Teaching Award for Senior Faculty 1994

Graduate Student Government President's Award 2000

UM Nyunburu Cultural Center "Institutional Change Award" for Black Student
Advocacy and Institutional Change - 2003

B. Educational Contracts and Grants

Dr. Destler has obtained significant support from NSF and a number of corporations and corporate foundations for University of Maryland educational programs. These include AT&T, Hewlett-Packard, Digital Equipment Corporation, IBM, MCI, DuPont, Exxon, Allied Signal, Arthur Anderson, Bechtel, Boeing, EDS, Hughes Network Systems, Black&Decker, Booz, Allen, and Hamilton, BGE, Kemper, Litton, Cadence Design Systems, Telecommunications Techniques, Fairchild Industries, Motorola, Pulse Electronics, Westinghouse, General Electric, Bechtel, Potomac Edison, Bell Atlantic, Whiting Turner, Mentor-Graphics, Northrup Grumman, Poole & Kent, Tracor Systems Engineering, and Lockheed Martin (details on request).

C. Research Contracts and Grants as Principal Investigator

1. "Studies of Large-Orbit Microwave Sources," (w/C. Striffler), AFOSR, 9/77-11/85, \$715,362.
2. "Linear Beam Collective Ion Accelerator Studies," (w/M. Reiser), AFOSR, 10/77-02/81, \$105,469.
3. "Study of Collective Acceleration of Ions from a Laser Produced Plasma," (w/ M. Reiser), DOE, 06/79-05/80, \$30,000 (equipment).
4. "Millimeter Wave Center of Excellence," (w/C. Lee, C. Davis, and C.D. Striffler), Minta Martin Fund, 06/79-06/83, \$170,500.
5. "Investigation of Ion Beam Production from Linear Electron Beams and a Pulse-Powered Plasma Focus," (w/M. Reiser, M.J. Rhee, and C.D. Striffler), AFOSR, 03/81-03/84, \$339,803.
6. "Studies of Collective Field Accelerators," (w/M. Reiser, M.J. Rhee, and C. Striffler), DOE, 6/82-5/91, \$2,251,000.
7. "Backward Wave Oscillator Experiments on DRAGON," HDL, 01/83-04/87, \$89,200.
8. "Studies of the Propagation of Intense Charged Particle Beams into Vacuum," (w/M. Reiser, M.J. Rhee, and C. Striffler), AFOSR, 4/84-4/90, \$1,131,058.
9. "Joint Maryland/MIT Research on Millimeter and Submillimeter Radiation from Rotating Electron Beams in Rippled Magnetic Fields," (w/G. Bekefi, MIT), DOE, 07/84-06/87, \$457,946.
10. "Fast Data Acquisition System," Department of Defense University Instrumentation Program, 08/84-07/85, \$120,000.
11. "Study of Free Electron Lasers with Electromagnetic Pump Waves," (w/V.L. Granatstein), ONR, 04/85-02/86, \$125,000.
12. "Study of the Propagation of Short Burst, High Power Microwave Radiation through Neutral and Ionized Media," (w/C.D. Striffler), AFOSR, 12/85-11/88, \$388,000.
13. "Near Millimeter Wave Free Electron Lasers for Space Based Radar," (w/V. Granatstein and I. Mayergoyz), ONR, 8/86-12/89, \$560,000.
14. "Millimeter Wave Free Electron Lasers," (w/V.L. Granatstein and I.D. Mayergoyz), NRL, 08/86-12/87, \$35,000.

15. "Research on Plasma Filled Backward Wave Oscillators," (w/V. Granatstein), HDL, 3/87-12/88, \$350,000.
16. "Free Electron Lasers with Small Period Wigglers," (w/V.L. Granatstein, T. Antonsen and E. Ott), DOE, 9/87-9/95, \$1,250,000.
17. "Large Orbit Gyrotrons for High Power, Low Frequency Microwave Generation," Maryland Industrial Partnerships and AAI Corporation, 3/88-3/91, \$300,000.
18. "High Power Microwave Generation from a Multiwave Cherenkov Generator," (w/V. Granatstein, T. Antonsen, Y. Carmel, and B. Levush), HDL, 8/88-2/93, \$1,067,000.
19. "RF Absorption and Reflection from Preformed Plasmas," AFOSR, 9/89-8/93, \$400,000.
20. "High Power Plasma Filled Backward Wave Oscillators," (w/T. Antonsen, Y. Carmel, V. Granatstein, and B. Levush), NRL, 9/89-9/91, \$200,000.
21. "Innovative Intense Beam Diagnostics," NRL, 1/89-12/93, \$105,000.
22. "Modelocked Laser Array," NSA, 10/89-9/91, \$450,000.
23. "Large Orbit Gyrotron Design Studies," LANL, 2/90-6/90, \$20,000.
24. "Center for Strategic Man-Made Materials," General Services Administration, 9/90-8/91, \$2,839,000.
25. "Study of Collective Field Accelerators and High Brightness Beams from a High Power Pseudospark Discharge,"(w/ M. Reiser, M. J. Rhee, and C. D. Striffler) DOE, 6/91-5/94, \$1,020,000.
26. "Architectures and Materials for Optical Computing and Processing," NSA, 9/91-10/95, \$1,685,000.
27. "Plasma Microwave Electronics--Studies of High Power Plasma Loaded Backward Wave Oscillators,"(w/ Y. Carmel, B. Levush, and V. Granatstein) AFOSR, 1/92-1/95, \$650,000.
28. "Collaborative Research on High Power Repetitively Pulsed Microwave Amplifiers," (w/T. Antonsen, Jr., Y. Carmel, B. Levush, and V. Granatstein) HDL, 7/92-9/94, \$854,041.
29. "Center of Excellence in Ion Beam Lithography, NSA, 5/94-4/98, \$7,500,000.
30. "Experimental and Theoretical Studies of High Power Microwave Sources for DOD Applications", ARO, 9/93-8/96, \$110,000.

31. "Specialized Optical Sources for Advanced Fiber Optic Communications Systems", NSA, 1/92-12/93, \$157,494.

32. "Study of High Brightness Electron Beams from a High Power Pseudospark Discharge", (w/M. Reiser and M. J. Rhee), DOE, 6/94-5/96, \$265,000.

33. "Experimental and Theoretical Research on Advanced Vacuum Electronic Microwave Devices", AFOSR, 9/94-9/97, \$916,147.

34. "High Power Microwave Generation", (w/V. Granatstein and T. Antonsen, Jr.), AFOSR Multidisciplinary Research Initiative Award, 4/95-4/99, \$5,000,000.

35. "Microelectronics Research Collaboration Program", ARL, 5/95-5/99, \$7,313,000.

36. "Research on Chemical and Biological Sensors and Terahertz Devices, ARL, 7/95-6/96, \$732,000.

Data on additional grants and contracts since FY96 is available on request.

VIII. Op-Ed Pieces

1. "Don't Undercut Gains of Md. Universities", *Baltimore Sun*, Oct. 10, 2002.
2. "Separating the Myths from the Reality of Higher-Education Funding in Maryland", *Baltimore Sun*, Nov. 16, 2003.

IX. Publications

A. Books and Book Chapters

1. "Helix Controlled Collective Ion Acceleration," W. W. Destler, H. Kim, G.T. Zorn, and R.F. Hoeberling, in *Collective Methods of Acceleration*, edited by M. Reiser and N. Rostoker, (Harwood Academic, New York, 1979), pp. 509-520.

2. "Collective Ion Acceleration from a Localized Ion Source," W. W. Destler, in *Energy Storage, Compression, and Switching*, edited by W. Bostick, V. Nardi, and H. Sahlin, (Plenum Press, New York, 1983), pp. 477-484.

3. "High Brightness Beams for Advanced Accelerator Applications", W. W. Destler and S. Guharay, Eds., (AIP Press, New York, 1992).

B. Invited Journal Articles

1. W.W. Destler, P.G. O'Shea, and Z. Segalov, "Collective Acceleration and the Propagation of Intense Beams into Vacuum", IEEE Trans. Nucl. Sci. NS-32 , 3481 (1985).
2. V.L. Granatstein, T.M. Antonsen, J.H. Booske, W.W. Destler, P.E. Latham, B. Levush, I.D. Mayergoyz, D. Radack, and A. Serbeto, "Near-Millimeter Free Electron Lasers with Small Period Wigglers and Sheet Electron Beams," Nucl. Instr. and Meth. in Phys. Res. A272 , 110(1988).
3. W.W. Destler, E. Chojnacki, R.F. Hoeberling, W. Lawson, A. Singh, and C.D. Striffler, "High Power Microwave Generation from Large Orbit Devices," IEEE Trans. Plasma Sci. (Special Issue on High Power Microwaves), 16 , 71 (1988).
4. W.W. Destler, "Electrical Engineering: In the Midst of a True Renaissance," Engineering Horizons, January 1989, pps. 14-15.
5. W.W. Destler and B. Levush, "Introduction to the Third Special Issue on High Power Microwave Generation," IEEE Trans. Plasma Science, 18 , 257 (1990).
6. Y. Carmel, W.R. Lou, T.A. Antonsen, Jr., J. Rodgers, B. Levush, W.W. Destler, and V.L. Granatstein, "Relativistic Plasma Microwave Electronics: Studies of High Power Plasma Filled Backward Wave Oscillators," Phys. of Fluids B 4, 2286-2292 (1992).
7. W. W. Destler, S. Cheng, Z. X. Zhang, T. M. Antonsen, Jr., V. L. Granatstein, B. Levush, and J. Rodgers, "First Operation of a Wiggler-Focused, Sheet Beam Free Electron Laser Amplifier", Phys. Plasmas 1, 1708-1713 (1994).
8. J. H. Booske, M. A. Basten, A. H. Kumbasar, T. M. Antonsen, Jr., S. W. Bidwell, Y. Carmel, W. W. Destler, V. L. Granatstein, and D. J. Radack, "Periodic Magnetic Focusing of Sheet Electron Beams", Phys. Plasmas 1, 1714-1720 (1994).
9. W. W. Destler and Y. Y. Lau, "A Tribute to George Bekefi (1925-1995)", IEEE Trans. Plasma Science (Special Issue on High Power Microwaves) 24, 556-557 (1996).

C. Regular Journal Articles

10. D.L. Morse and W.W. Destler, "Laboratory Study of High Beta Plasma Shock Waves," Plasma Physics 14 , 153 (1972).
11. D.L. Morse, W.W. Destler, and P.L. Auer, "Non-Stationary Behavior of Collisionless Shock Waves," Phys. Rev. Lett. 28 (1), 13 (1972).
12. D.L. Morse and W.W. Destler, "Laboratory Simulation of Artificial Plasma Clouds in the Ionosphere," J. of Geophys. Res. 78 (31), 7417 (1973).
13. M.J. Rhee and W.W. Destler, "Relativistic Electron Dynamics in a Cusped Magnetic Field," Phys. Fluids 17 (8), 1574 (1974).

14. W.W. Destler, P.K. Misra, and M.J. Rhee, "Relativistic Electron Dynamics in a Cusped Magnetic Field with an Adiabatically Varying Downstream Drift Region," *Phys. Fluids* 18 (12), 1820 (1975).
15. W.W. Destler, D.W. Hudgings, P.K. Misra, and M.J. Rhee, "Single Particle and Collective Effects Observed in the Electron Beam of the Maryland ERA Experiment," *IEEE Trans. Nucl. Sci.* 22 , 995 (1975).
16. W.W. Destler, D.W. Hudgings, M.J. Rhee, S.K. Kawasaki, and V.L. Granatstein, "Experimental Study of Microwave Generation and Suppression in a Nonneutral E-Layer," *J. Appl. Phys.* 48 (8), 3291 (1977).
17. W.W. Destler and M.J. Rhee, "Radial and Axial Compression of a Hollow Electron Beam Using an Asymmetric Magnetic Cusp," *Phys. Fluids* 20 (9), 1582, (1977).
18. C.N. Boyer, W.W. Destler, and H. Kim, "Controlled Field Propagation for Collective Ion Acceleration Using a Slow Wave Structure," *IEEE Trans. Nucl. Sci.* 24 , 1625 (1977).
19. W.W. Destler, D.W. Hudgings, and M.J. Rhee, "Observation and Suppression of Radial Beam Blowup in the Maryland ERA," *IEEE Trans. Nucl. Sci.* 24 , 1642 (1977).
20. W.W. Destler, D.W. Hudgings, H. Kim, M. Reiser, M.J. Rhee, C.D. Striffler, and G.T. Zorn, "Recent Results of the University of Maryland Research Program on Collective Ion Accelerators," *IEEE Trans. Nucl. Sci.* 24 , 1656 (1977).
21. D.W. Hudgings, R.A. Meger, C.D. Striffler, W.W. Destler, H. Kim, M. Reiser, and M.K. Rhee, "Trapping of Cusp-Injected Nonneutral Electron Rings with Resistive Walls and Static Mirror Coils," *Phys. Rev. Lett.* 40 (12), 764 (1978).
22. W.W. Destler, H.S. Uhm, H. Kim, and M.P. Reiser, "Study of Collective Ion Acceleration in Vacuum," *J. Appl. Phys.* 50 (5), 3015 (1979).
23. W.W. Destler, H. Kim, R.F. Hoerberling, and W.H. Bostick, "Collective Acceleration of Carbon Ions to 170 MeV," *Appl. Phys. Lett.* 35 , 3 (1979).
24. W.W. Destler, L. Floyd and M. Reiser, "Experimental Studies of Heavy Ion Collective Acceleration at the University of Maryland," *IEEE Trans. Nucl. Sci.* 26 , 4177 (1979).
25. W.W. Destler, L.E. Floyd, and M. Reiser, "Collective Acceleration of Heavy Ions," *Phys. Rev. Lett.* 44 , 70 (1980).
26. W.W. Destler, H. Romero, C.D. Striffler, R.L. Weiler, and W. Namkung, "Intense Microwave Generation From a Non-Neutral Rotating E-Layer," *J. Appl. Phys.* 52 , 2740 (1981).

27. W.W. Destler, R.L. Weiler, and C.D. Striffler, "Intense Microwave Generation from a Rotating E-Layer in a Magnetron-Type Waveguide," *Appl. Phys. Lett.* 38 , 570 (1981).
28. L.E. Floyd, W.W. Destler, M. Reiser, and H.M. Shin, "Experimental Study of Collective Acceleration of Ions from a Localized Gas Cloud," *J. Appl. Phys.* 52 , 693 (1981).
29. W.W. Destler, L.E. Floyd, J.T. Cremer, C.R. Parsons, M. Reiser, and J.W. Rudmin, "Collective Acceleration of Light and Heavy Ions," *IEEE Trans. Nucl. Sci.* 28 , 3404 (1981).
30. I.D. Mayergoyz, W.W. Destler, and F.P. Emad, "Application of Intense Relativistic Electron Beams to the Switching of High Currents in High Power Electrical Networks," *J. Appl. Phys.* 53 , 7189 (1982).
31. W.W. Destler, "Production of Positron Emitting Isotopes Using a Collective Accelerator," *Rev. Sci. Inst.* 54 , 253 (1983).
32. W.W. Destler and J.T. Cremer, "Charge State Measurements of Collectively Accelerated Heavy Ions," *J. Appl. Phys.* 54 , 636 (1983).
33. W.W. Destler, R. Kulkarni, C.D. Striffler, and R.L. Weiler, "Microwave Generation from Rotating Electron Beams in Magnetron-Type Waveguides," *J. Appl. Phys.* 54 , 4152 (1983).
34. W.W. Destler, P.G. O'Shea, M. Reiser, C.D. Striffler, D. Welsh, and H.H. Fleischmann, "Studies of the Helix Controlled Beam Front Accelerator Concept," *IEEE Trans. Nucl. Sci.* 30 , 3183 (1983).
35. J.T. Cremer and W.W. Destler, "Collective Acceleration of Laser Produced Ions," *IEEE Trans. Nucl. Sci.* 30 , 3186 (1983).
36. C.D. Striffler, W.W. Destler, R. Kulkarni, and R.L. Weiler, "High Power Microwave Generation from Rotating E-Layers in Magnetron-Type Conducting Boundary Systems," *IEEE Trans. Nucl. Sci.* 30 , 3429 (1983).
37. G. Bekefi, R.E. Shefer, and W.W. Destler, "Millimeter Wave Emission from a Rotating Electron Ring in a Rippled Magnetic Field," *Appl. Phys. Lett.* 44 , 280 (1984).
38. W.W. Destler, P.G.O'Shea, and M. Reiser, "Electron Beam Propagation through a Localized Plasma into Vacuum," *Phys. Rev. Lett.* 52 , 1978 (1984).
39. P.G. O'Shea, D. Welsh, W.W. Destler, and C.D. Striffler, "Intense Relativistic Electron Beam Propagation in Evacuated Drift Tubes," *J. Appl. Phys.* 55 , 3934 (1984).
40. W.W. Destler, P.G. O'Shea, and M. Reiser, "Experimental Study of Electron Beam Propagation through a Localized Plasma into Vacuum," *Phy. Fluids*, 27 , 1897 (1984).

41. L.E. Floyd and W.W. Destler, "Experimental Study of the Collective Acceleration of Deuterons," *J. Appl. Phys.* 57 , 1592 (1985).
42. J.T. Cremer and W.W. Destler, "Collective Acceleration of Laser-Produced Ions," *J. Appl. Phys.* 57 , 4391 (1985).
43. W.W. Destler, F.M. Aghamir, D.A. Boyd, G. Bekefi, R.E. Shefer, and Y.Z. Yin, "Experimental Study of Millimeter Wave Radiation from a Rotating Electron Beam in a Rippled Magnetic Field," *Phys. Fluids*, 28 , 1962 (1985).
44. W. Lawson, W.W. Destler, and C.D. Striffler, "High Power Microwave Generation from a Large Orbit Gyrotron in Vane and Hole-and-Slot Conducting Wall Geometries," *IEEE Trans. Plasma Science*, PS-13, 444 (1985).
45. R.A. Kehs, A. Bromborsky, B.G. Ruth, S.E. Graybill, W.W. Destler, Y.C. Carmel, and M.C. Wang, "A High Power Backward Wave Oscillator Driven by a Relativistic Electron Beam," *IEEE Trans. Plasma Science*, PS-13 , 559 (1985).
46. V.L. Granatstein, W.W. Destler, and I.D. Mayergoyz, "Small-Period Electromagnet Wigglers for Free Electron Lasers," *Appl. Phys. Lett.*, 47 , 643 (1985).
47. W. Lawson, W.W. Destler, and C.D. Striffler, "High Power Microwave Generation from a Large Orbit Gyrotron," *IEEE Trans. Nucl. Sci.* NS-32 , 2960 (1985).
48. W.W. Destler, V.L. Granatstein, I.D. Mayergoyz, and Z. Segalov, "Near-Millimeter Free Electron Laser Designs Based on Measured Characteristics of Small Period Electromagnet Wigglers," *J. Appl. Phys.* 60 (2), 521 (1986).
49. P.G. O'Shea, W.W. Destler, J. Rodgers, and Z. Segalov, "Laser Controlled Collective Ion Accelerator," *Appl. Phys. Lett.*, 49 (25), 1696 (1986).
50. G. Bekefi, R.E. Shefer, and W.W. Destler, "Millimeter Wave Radiation from a Rotating Electron Ring Subjected to an Azimuthally Periodic Wiggler Magnetic Fields", *Nucl. Instrum. Methods in Phys. Res.* A250 , 352 (1986).
51. E. Chojnacki, W.W. Destler, W. Lawson, and W. Namkung, "Studies of Microwave Radiation from a Low Energy Rotating Electron Beam in a Multiresonator Magnetron Cavity," *J. Appl. Phys.* 61 (4), 1268 (1987).
52. W.W. Destler, P.G. O'Shea, and Z. Segalov, "Experimental Study of Propagation of Intense Relativistic Electron Beams in Nonconducting Vacuum Drift Tubes after Passage Through a Localized Plasma Source," *J. Appl. Phys.* 61 (7), 2458 (1987).
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D. Invited Papers at Conferences

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23. W. W. Destler, "Electrical Engineering in the 21st Century", Proc. EECOM '97 (plenary address), Bangkok, November 12-14, 1997.

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E. Articles in Conference Proceedings

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