

Publications in Conference Proceedings (chronological order)

1. Schächter L.
Amplification of an EM Wave by a Moving Charge in a Magnetic Wiggler.
The 15th Conf. of Electrical Electronics Engineers in Israel, April 7-9, 1987
2. Schächter L. and Ron A.
Smith-Purcell Amplifier in a Regime of Exponential Gain.
10th International Free Electron Laser Conf., Jerusalem, Israel, Aug. 29 1988.
3. Schächter L. and Ron A.
Smith-Purcell Oscillator in an Exponential Gain Regime.
LEOS'88 Annual Conference Santa Clara, California, Oct. 30, 1988.
4. Schächter L. and Ron A.
Design Principles of a Smith-Purcell Oscillator Operating in the Exponential Gain Regime.
16th Conference of IEEE in Israel - March 7, 1989, Tel Aviv.
5. Schächter L., Ivers J.D., Kerslick G. S., Nation J.A. and D. Shiffler.
High-Gain, High-Efficiency TWT Amplifiers.
SPIE Proceedings, Intense Microwave and Particle Beams II – 21. 01.1991
6. Schächter L. and Nation J.A.
Efficiency Increase in a Traveling Wave Tube by Tapering the Phase Velocity of the Wave. SPIE Proceedings, Intense Microwave and Particle Beams II -
Jan. 21 1991, Los Angeles.
7. Ivers J.D., Advani R., Nation J.A. and Schächter L.
Electron Emission From Ferroelectric Ceramics.
1991 IEEE Annual Meeting Part. Accel. 6-9 May, San Francisco.
8. Kerslick G.S., Nation J.A., Oppenheim M. and Schächter L.
Pulse Power Driven High Power Traveling Wave Amplifiers.
1991 IEEE Annual Meeting Part. Accel. 6-9 May, San Francisco.
9. Ivers J.D., Nation J.A. and Schächter L.
Theoretical Study of the Limiting Current in a Diode with a Ferroelectric Cathode. Thirty-Third Annual Meeting APS Nov.4-8, 1991, Tampa, Florida.
10. Schächter L. and Nation J.A.
An Integrated Amplifier-Accelerator System.
SPIE Meeting: OE*LASE'92 Intense Microwave and Particle Beams III,
19-24 January 1992, Los Angeles.
11. Schächter L. and Nation J.A.
Microwave Amplifiers and Oscillators: A Unified Study.
SPIE Meeting OE*LASE'92 Intense Microwave and Particle Beams III,
19-24 January 1992, Los Angeles.
12. Davis T.J., Nation J.A. and Schächter L.
A Proposed Extended Cavity for Coaxial Relativistic Klystrons.
BEAMS'92 9th International Conference on High Power Particle Beams
May 25-29, Washington DC.
13. Davis T.J., Ivers J.D., Kerslick G.S., Kuang E., Nation J.A. and Schächter L.
High Power X-Band Microwave Amplifiers
BEAMS'92 9th International Conference on High Power Particle Beams,
May 25-29, Washington DC.
14. Ivers J.D., Kerslick G.S., Nation J.A. and Schächter L.
Electron Beam Diodes Using Ferroelectric Cathodes.
BEAMS'92 9th International Conference on High Power Particle Beams,

- May 25-29, Washington DC.
15. Schächter L., Ivers J.D., Kerslick G.S. and Nation J.A.
The Study of a Diode with a Ferroelectric Cathode.
The Third Workshop on Advanced Acceleration Concepts, Port Jefferson,
Long Island NY 14-20 June 1992.
 16. Schächter L. and Nation J.A.
Narrow Band High Power Traveling Wave Amplifier.
The third Workshop on Advanced Acceleration Concepts, Port Jefferson,
Long Island NY 14-20 June 1992.
 17. Nation J.A., Ivers J.D., Kerslick G.S. and Schächter L.
*An Electron Injector Based on a High Power X-band Traveling Wave
Amplifier.*
The Third Workshop on Advanced Acceleration Concepts, Port Jefferson,
Long Island NY 14-20 June 1992.
 18. Nation J.A., Kerslick G.S., Kuang E. and Schächter L.
High Power Microwave TWT.
HEACC'92 XVth International Conference on High Energy Accelerators,
Hamburg, Aug. 1992 p. 912.
 19. Schächter L., Davis T.J. and Nation J.A.
TM-FEL with Longitudinal Wiggler and an Annular Beam.
IEEE-APS Particle Accelerator Conference PAC'93
Washington DC, May 15-20, Vol. 4, 2653, (1993).
 20. Schächter L. and Nation J.A.
Beam-Wave Interaction in Quasiperiodic Structures.
IEEE-APS Particle Accelerator Conference PAC'93
Washington DC, May 15-20, Vol.4, 2684, (1993).
 21. Ivers J.D., Kerslick G.S., Nation J.A. and Schächter L.
A Compact, Low Cost Modulator for RF Sources.
IEEE-APS Particle Accelerator Conference PAC'93,
Washington DC, May 15-20, Vol. 4, 2653, (1993).
 22. Kuang, E., Ivers J.D., Kerslick G.S., Nation J.A. and Schächter L.
Development of High Power X-Band TWT's.
20th IEEE International Conference on Plasma Science,
Vancouver, B.C., Canada, June 7-9 (1993).
 23. Ivers J.D., Kerslick G.S., Nation J.A. and Schächter L.
Repetitive Electron Beam Source for High Power RF Sources
20th IEEE Int. Conf. on Plasma Science, Vancouver, Canada, June 7-9 1993.
 24. Schächter L.
*Output Section for High Power Microwave Sources Based on Quasiperiodic
Structure.*
SPIE - Intense Microwave Pulses II, Los Angeles, January 22-28 1994.
 25. Flechtner D., Ivers J.D., Kerslick G.S., J.A. Nation and Schächter L.
Ferro-electric Electron Beam Sources,
Proceedings of the 10th International Conference on High Power Particle
Beams, Beams'94, San Diego, CA, 20-24 June 1994.
 26. Flechtner D., Ivers J.D., Kerslick G.S., Nation J.A. and Schächter L.
Ferro-electric Electron Beam Sources,
1994 Tri-Service/NASA Cathode Workshop, Cleveland, Ohio, 29-31 March
 27. Kuang E., Ivers J.D., Kerslick G.S., Naqvi S.A., Nation J.A., Schächter L.
and G. Zhang.

- Studies of the High Power Traveling Wave Interaction*
AIP Conference Proceedings 335,
Advanced Accelerator Concepts, Fontana, Wisconsin (1994).
28. Schächter L.
Acceleration of Particles by an Active Medium
AIP Conference Proceedings 335,
Advanced Accelerator Concepts, Fontana, Wisconsin (1994).
 29. Flechtner D., Ivers J.D., Kerslick G.S., Nation J.A. and Schächter L.
Ferroelectric Electron Beam Sources
AIP Conference Proceedings 335,
Advanced Accelerator Concepts, Fontana, Wisconsin (1994).
 30. Schächter L., Flechtner D., Ivers J.D., Kerslick G.S., Naqvi S.A., Nation J.A. and Zhang G.
Studies of High Efficiency Interaction in Traveling Wave Structures.
RF'94, Montauk, October 2-7 (1994).
 31. Ivers J.D., Kerslick G.S., Nation J.A. and Schächter L.
Design and operation of a 700kV, 500A Modulator
Proceedings of the 1995 Particle Accelerator Conference, Dallas, Texas,
May 1-5, 1995
 32. Nation J.A., Naqvi S.A., Kuang E., Kerslick G.S., and Schächter L.
Output Structures for High Power X-band TWT's
Proceedings of the 1995 Particle Accelerator Conference, Dallas, Texas,
May 1-5, 1995
 33. Flechtner D., Ivers J.D., Kerslick G.S., Nation J.A. and Schächter L.
Ferroelectric Cathodes as Electron Beam Sources
Proceedings of the 1995 Particle Accelerator Conference, Dallas, Texas,
May 1-5, 1995
 34. Naqvi S.A., Kuang E., Kerslick G.S., Nation J.A. and Schächter L.
High-Power X-band TWT Amplifiers
IEEE International Conference on Plasma Science, Madison Wisconsin
5-8 June, 1995.
 35. Flechtner D., Kerslick G.S., Nation J.A. and Schächter L.
Development of Ferroelectric Electron Beam Cathodes
IEEE International Conference on Plasma Science, Madison Wisconsin
5-8 June, 1995.
 36. Schächter L., Kerslick G.S., Naqvi S.A. and J.A. Nation.
Studies of Longitudinal Traveling Wave Output Structures.
RF'96, Tokyo, April 8-12, p. 205
 37. Schächter L.
Particle Acceleration by Stimulated Emission of Radiation
European Particle Acceleration Conf. EPAC'96, June 1996, Barcelona, Spain.
 38. Naqvi S.A., Kerslick G.S., Nation J.A. and Schächter L.
Coaxial Extraction of RF power from a Traveling Wave Amplifier
23rd IEEE Int. Conference on Plasma Science, June 3, 1996, Boston MA
 39. Flechtner D., Golkowski Cz., Kerslick G.S., Nation J.A. and Schächter L.
Characteristics of Ferroelectric Electron Emission
23rd IEEE Int. Conference on Plasma Science, June 3-5, 1996, Boston MA
 40. Nation J.A., Flechtner D., Golkowski Cz., Kerslick G.S., and Schächter L.
Transverse Traveling Wave Tube Amplifier Studies.
23rd IEEE Int. Conference on Plasma Science, June 3-5, 1996, Boston MA

41. Schächter L.
Particles' Dynamics in an Active Medium
Advanced Accelerator Concepts, Oct. 12-18 1996, Lake Tahoe CA.
42. B. Maly, J.A. Nation and L. Schächter
Generation of a Density Modulated Electron Beam in an Open Resonator
BEAMS'98, June 1998, Haifa Israel. Vol.2, p. 812 .
43. L. Schächter, S. Banna and J. A. Nation
Requirements of a High-Power TWT Operating at 35GHz
Advanced Acceleration Concepts AAC'98, Baltimore 1998.
44. Schächter L., Fletchner D., Golkowski Cz., Ivers J.D and Nation J.
Study of a Diode with Dielectric-Gridded Cathode.,
Advanced Acceleration Concepts AAC'98, Baltimore 1998.
45. B. Haddad and L. Schächter
Optimal Geometry for Electron Emission from a Metallic Grating
MELECOM'98, Tel-Aviv, Israel 1998.
46. J. Lasri and L. Schächter
A Theoretical Study of Energy Flow during Sintering Process
MELECOM'98, Tel-Aviv, Israel 1998.
47. P. Wang, Z. Xu, D. Flechtner, Cz. Golkowski, Y. Hayashi, Cz. Golkowski,
J.D. Ivers, J.A. Nation, S. Banna and L. Schächter
A comparative Study of a High-Power, Multistage, X-band TWT Amplifiers
PAC'99, Particle Accelerator Conference, New York 1999.
48. Y. Hayashi J.D. Ivers, D. Flechtner, J.A. Nation, S. Banna and L. Schächter
TWT Amplifier using a Ferroelectric Cathode for Electron Beam Generation
PAC'99, Particle Accelerator Conference, New York 1999.
49. S. Banna, L. Schächter J. Nation and P. Wang.
*Beam Interaction with Symmetric and Asymmetric Modes in High-Power,
High-Efficiency TW Amplifiers*
PAC'99, Particle Accelerator Conference, New York 1999.
50. Cz. Golkowski, J.D. Ivers, J. A. Nation, P. Wang and L. Schächter
First Results from a High-Power KA-Band TWT
PAC'99, Particle Accelerator Conference, New York 1999.
51. L. Schächter, E. Colby and R.H. Siemann
Wake-Amplification by a Solid-State Active Medium
Advanced Accelerator Concepts, June 10-16, 2000, Santa Fe, NM.
52. L. Schächter
Resonant Absorption Instability
Advanced Accelerator Concepts, June 10-16, 2000, Santa Fe, NM.
53. L. Schächter
Acceleration of Electrons in Active Medium
LASER'2000, 4-8 December 2000, Albuquerque, NM
54. L. Schächter, R.L. Byer and R.H. Siemann
Optical Accelerators: Figures of Merit and Scaling Laws
Advanced Accelerator Concepts, June 23-28, 2002, Mandaley Beach,
California
55. S. Banna, D. Schieber and L. Schächter
Analytic and Quasi-analytic Solutions of Wake-fields
Advanced Accelerator Concepts, June 23-28, 2002, Mandaley Beach,
California
56. S. Banna and L. Schächter

- Surface Roughness Effect on a Moving Bunch*
PAC'03, Portland, Oregon, May 12-16 (2003) p. 1879
57. A. Mizrahi, S. Banna, , L. Schächter and R. H. Siemann
Dielectric Bragg Accelerator
PAC'03, Portland, Oregon (2003), May 12-16, p.728
58. L. Schächter and R. H. Siemann
Scaling Laws of an Optical Linear Accelerator
PAC'03, Portland, Oregon (2003), May 12-16, p.722
59. A. Mizrahi and L. Schächter
Optical Bragg Acceleration Structure
APAC'04, March 22-26, 2004 at Gyeongju, Korea.
60. S. Banna, L. Schächter and D. Schieber
Scaling Laws of Wake-Fields in Optical Structures
APAC'04, March 22-26, 2004 at Gyeongju, Korea.
61. A. Mizrahi and L. Schächter
Analysis and Design of Optical Bragg Acceleration Structures
AAC'04, June 21-26, Stony Brook, p.804-810USA (2004)
62. L. Schächter
Train of Micro-Bunches in an Active Medium
AAC'04, June 21-26, Stony Brook, p.715-721 USA (2004)
63. S. Banna, L. Schächter and D. Schieber
Electromagnetic Wake-Field due to Wall Roughness in Optical Structures
AAC'04, June 21-26, Stony Brook, p. 743-749 USA (2004).
64. Alex Kanareykin, Paul Schoessow, Levi Schächter
Progress towards an experimental test of an active microwave medium based accelerator.
EPAC'06, Edinburgh, UK 26-30 June 2006
65. Amit Mizrahi, Vadim Karagodsky and Levi Schächter
Constraints on Structure Based Optical Accelerators
ICFA Workshop on Laser-Beam Interactions and Laser and Plasma Accelerators.
December 12-16, 2005, Taiwan, Taipei.
66. Amit Mizrahi, Vadim Karagodsky and Levi Schächter
Constraints on Structure Based Optical Accelerators
39th ICFA Advanced Beam Dynamics Workshop on High Intensity High Brightness Electron Beams, October 9 - 14, 2005 Erice, Sicily, Italy.
67. S. Banna, A. Ludwig and L. Schächter
Array of Metallic Posts: Possible Application for Beam Position Monitoring
AAC'06, Advanced Accelerator Concepts 12th Workshop, Lake Geneva, WI, July 2006.
68. S. Banna, V. Berezovsky and L. Schächter
Experimental Evidence for Particle Acceleration by Stimulated Emission of Radiation
AAC'06, Advanced Accelerator Concepts 12th Workshop, Lake Geneva, WI, July 2006.
69. L. Schächter
Wake-Field in the e-Cloud
ILC Damping Rings R&D Workshop – ILCDR06, September 26-28, 2006
Cornell University, Ithaca, NY
70. L. Schächter

- An Analytic Model for the E-cloud Effect on the Vertical Tune Shift in a Magnetic Field Dominated Damping Ring*
E-CLOUD'07 April 9-12, 2007; Daegu, South Korea
71. L. Schächter
Optical passive and active acceleration structures: a tutorial; Photonics West'08, San Jose CA, January 2008
 72. Amit Mizrahi, Moshe Horowitz, and Levi Schächter
Longitudinal force and torque exerted on a circular waveguide by rotating eigenmodes
SPIE Optics and Photonics conference, San Diego, CA, August 2008.
Proceeding of SPIE, vol. 7038, pp. 70381U 1-8, August 2008.
 73. L. Schächter
Optical Injector Based on PASER;
Advanced Accelerator Workshop, Santa Cruz, CA, July 2008
 74. L. Schächter
Optical Injector Based on Particle Acceleration by Stimulated Emission of Radiation;
Particles Acceleration Conference (PAC'09), Vancouver, Canada, May 2009
 75. P. Schoessow, A. Kanareykin and L. Schächter
Numerical Algorithms for Dispersive, Active and Non-linear Media with Application to the PASER
Particles Acceleration Conference (PAC'09), Vancouver, Canada, May 2009
 76. L. Schächter
Electron cloud in the region of weak vertical field of the wiggler
International Particle Acceleration Conference (IPAC'10), Kyoto, Japan, May 2010.
 77. L. Schächter;
PASER: options and perspectives
Advanced Acceleration Concepts Workshop, Annapolis, USA, June 2010
 78. W. D. Kimura, P. Muggli and L. Schächter
A Proposed High-Energy, Compact, Optical Electron Accelerator Based on Particle Acceleration by Stimulated Emission of Radiation
Advanced Acceleration Concepts Workshop, Annapolis, USA, June 2010
 79. Voin M., Hogan M., Kimura W., Muggli P. and Schächter L.
2D Formulation of E-beam Interaction with Multi-resonant Gaseous Medium
Advanced Acceleration Concepts Workshop, Austin, USA, June 2012
 80. Voin M., Kimura W., Muggli P. and Schächter L.
E-beam Interaction with Gaseous Excited Medium
IEEE 27-th Convention of Electrical and Electronics Engineers in Israel, Eilat, Israel 2012
 81. Zeev Toroker and Levi Schächter
Nonlinear Wake Amplification by Active Medium in a Cylindrical Waveguide
CHILI'13: Conference on High Intensity Laser, Tel Aviv, Israel, December 2-4, 2013.
 82. Miron Voin, Wayne Kimura and Levi Schächter
Wakefield Amplification by Active Medium
CHILI'13: Conference on High Intensity Laser, Tel Aviv, Israel, December 2-4, 2013.
 83. Adi Hanuka and Levi Schächter
Bragg Structure Based X-Ray FEL Operating in the Strong Compton Regime

- CHILI'13: Conference on High Intensity Laser , Tel Aviv, Israel, December 2-4, 2013
84. Levi Schachter and Wayne D. Kimura
Channeling Radiation in Vacuum; AAC2014
 85. Levi Schächter, Wayne D. Kimura and Ilan Ben-Zvi
Ultrashort Microbunch Electron Source; AAC2014
 86. Miron Voin, Zeev Toroker, Wayne Kimura, Patric Muggli, Chan Joshi and Levi Schächter
Two-beam accelerator with active medium as the energy source;
AAC2014
 87. R. J. England, R. J. Noble, B. Fahimian, B. Loo, E. Abel, A. Hanuka and L.Schachter,
Conceptual layout for a wafer-scale dielectric laser accelerator,
Proceedings of Advanced Accelerator Concepts Workshop, 2014
 88. Adi Hanuka and Levi Schächter
Fluence and efficiency considerations in Bragg accelerator
IPSTA 2014
 89. Miron Voin, Zeev Toroker, Wayne Kimura, and Levi Schächter
Cherenkov Wake Amplification by Waveguide Confined Active Medium
IPSTA 2014
 90. Zeev Toroker , Miron Voin, and Levi Schächter
Nonlinear Wake Amplification by Active Medium in a Cylindrical Waveguide
IPSTA 2014.
 91. A. Hanuka and L. Schächter,
Efficiency and optimal charge in Bragg accelerator
Proceedings of IPSTA2014, Israel, 2014
 92. A. Hanuka, J. Spencer, K. Wotton, Wu Ziran, J. England and L. Schächter
Fluence Damage of Femtoseconds Laser-pulse in Fused Silica
Chili 2016
 93. Zeev Toroker and Levi Schächter
Cerenkov Wake Amplification by an Active Medium for Electron Acceleration
Chili 2016
 94. A. Hanuka, L. Schächter, K. P. Wootton, Z. Wu, K. Soong, I.V. Makasyuk
and R. J. England
Cumulative damage of ultrafast laser pulses
Proceedings of IPAC2016, Busan, Korea Pre-Release Snapshot 13-May-2016
09:00 THPOW054
 95. Adi Hanuka, Elron Goldemberg, Almog Zilka and Levi Schächter
Artificial Materials for Structure-Based Laser Acceleration
Advanced Acceleration Concepts 2016
 96. Gilad Laredo, Wayne D. Kimura and Levi Schächter
Particle Confinement by a Radially Polarized Laser Bessel Beam
Advanced Acceleration Concepts 2016
 97. Adi Hanuka, Chen Cohen, Haggai Lyabock and Levi Schächter;
Optical Booster for Dielectric Laser Accelerators
Advanced Acceleration Concepts 2016
 98. Adi Hanuka , Wayne D. Kimura Igor Pogorelsky and Levi Schächter
Quasi-Analytic Design of a Dielectric Acceleration Structure
Advanced Acceleration Concepts 2016

99. A. Hanuka and L. Schächter,
Capturing Sub-Relativistic Particles in an Optical Booster
Proceedings of IPSTA2017, Israel, 2017
100. M. Voin and L. Schächter;
Spectral analysis of a THz radiation source based on high-harmonic interaction in a hybrid cavity
Proceedings of COMCAS, 2017 IEEE Int. Conf., Israel, 2017
101. M. Voin and L. Schächter,
Fowler-Nordheim Emission in the THz Hybrid Cavity
Proceedings of 2018 ICSEE International Conference on the Science of Electrical Engineering, Israel, 2018
102. N.Cohen, A. Hanuka and L. Schächter,
Bragg-based Laser-wiggler for X-ray Amplification
Proceedings of IPSTA2018, Israel, 2018
103. N.Cohen, A. Hanuka and L. Schächter,
Bragg-based Laser-wiggler for X-ray Amplification
Proceedings of IPS2018, Israel, 2018
104. A. Hanuka and L. Schächter,
Electromagnetic Wiggler for X-ray Generation
Proceedings of IPSTA2018, Israel, 2018
105. A. Hanuka and L. Schächter,
2D Dynamics in an Optical Booster
Proceedings of IPSTA2018, Israel, 2018