03/20/2003

Yuelin Li
Argonne National Laboratory, 9700 South Cass Ave., Bldg 401-B2168, Argonne, IL 60439
Tel: (630) 252-7863; Fax: (630) 252-5703; E-mail: ylli@aps.anl.gov

PUBLICATIONS LIST BY CATEGORIES

	Type of publication/presentation	Total
A	Refereed journal papers	73
B	Refereed proceeding papers	18
C	Full proceeding papers	24
D	Conference presentations	14
E	Invited seminars	8
F	Papers in press/submitted/in preparation	2

A. REFEREED JOURNALS

A1 **Y Li**, J Lewellen, Z Huang, V Sajaev, S Milton, 'Time-resolved measurement of a self-amplified free-electron laser,' Phys Rev Lett **89**, 234801 (2002).

A2 AH Lumpkin, R Dejus, JW. Lewellen, W Berg, S Biedron, M Borland, Y Chae, M Erdmann, Z Huang, KJ Kim, **Y Li**, SV Milton, E Moog, DW Rule, V Sajaev and BX Yang, 'Evidence for microbunching "sidebands" in a saturated free-electron laser using coherent optical transition radiation,' Phys Rev Lett **88**, 234801 (2002).

A3 SG Biedron, RJ Dejus, Z Huang, SV Milton, V Sajaev, W Berg, M Borland, PK Den Hartog, M Erdmann, WM Fawley, HP Freundd, E Gluskin, KJ Kim, JW Lewellen, **Y Li**, AH Lumpkin, ER Moog, A Nassiri, G Wiemerslage and BX Yang, 'Measurements of nonlinear harmonic generation at the Advanced Photon Source's SASE FEL', Nucl Instr and Meth **A 483** 94-100 (2002).

A4 JW Lewellen, SV Milton, E Gluskin, ND Arnold, C Bensona, W Berg, SG Biedron, M Borland, YC Chae, RJ Dejus, PK Den Hartog, B Deriy, M Erdmann, YI Eidelman, MW Hahne, Z Huang, KJ Kim, **Y Li**, AH Lumpkin, O Makarov, ER Moog, A Nassiri, V Sajaev, R Soliday, BJ Tieman, EM Trakhtenberg, IB Vasserman, NA Vinokurov, G Wiemerslage and BX Yang, 'Present status and recent results from the APS SASE FEL,' Nucl Instr and Meth **A 483** 40-45 (2002).

A5 AH Lumpkin, R Dejus, JW. Lewellen, W Berg, S Biedron, M Borland, Y Chae, M Erdmann, Z Huang, KJ Kim, **Y Li**, SV Milton, E Moog, DW Rule1, V Sajaev and BX Yang, 'Comprehensive z-dependent measurements of electron-beam microbunching using COTR in a saturated SASE FEL,' Nucl Instr and Meth **A 483** 394-401 (2002).

A6 AH Lumpkin, W Berg, S Biedron, M Borland, R Dejus, M Erdmann, Z Huang, JW Lewellen, **Y Li**, SV Milton, E Moog, V Sajaev and BX Yang, 'First observations of electron-beam microbunching in the deep ultraviolet at 265 nm using COTR in a SASE FEL,' Nucl Instr and Meth **A 483** 402-406 (2002).

A7 **Y. Li**, Z. Huang, M. D. Borland, and S. Milton, 'Small-angle Thomson scattering of ultrafast laser pulses for bright, sub-100-fs x-ray radiation,' Phys Rev ST AB **5**, 044701 (2002).

A8 ND Arnold et al., 'Observation and analysis of self-amplified spontaneous emission at the APS low-energy undulator test line,' Nucl Instr and Meth **A 475** 28-37 (2001).

A9 SV Milton, E Gluskin, N D Arnold, C Benson, W Berg, S G. Biedron, M Borland, YC Chae, RJ Dejus, PK Den Hartog, B Deriy, M Erdmann, YI Eidelman, MW Hahne, Z Huang, KJ Kim, JW Lewellen, **Y Li**, AH Lumpkin, O Makarov, ER Moog, A Nassiri, V Sajaev, R Soliday, BJ Tieman, EM Trakhtenberg, G Travish, IB Vasserman, NA Vinokurov, XJ Wang, G Wiemerslage, BX Yang, 'Exponential Gain and Saturation of a Self-Amplified Spontaneous Emission Free-Electron Laser,' Science **292**, 2037-2041 (2001).

A10 J Nilsen, J Dunn, **Y Li**, AL Osterheld, VN Shlyaptsev, TW Barbee, JR Hunter, 'Review of Ni-like ion x-ray laser research at Lawrence Livermore National Laboratory,' Comptes Rendus de L Academie des Sciences Serie IV Physique Astrophysique 1, 1035-1044 (2000)

A11 J Dunn, AL Osterheld, J Nilsen, JR Hunter, **Y Li**, AY Faenov, TA Pikuz, and VN Shlyaptsev, 'Saturated output tabletop X-ray lasers,' J de Physique IV, PR2, 19-26 (2001)

A12 J Nilsen, **Y Li**, J Dunn, TW Barbee, and AL Osterheld, J de Physique IV, PR2, 67-73 (2001)

A13 **Y Li**, J Dunn, J Nilsen, A L Osterheld, V N Shlyaptsev, 'Saturated table-top X-ray laser at 19 nm,' J Opt Soc Am **B 17,** 1098-1101 (2000)

A14 J Dunn, **Y Li**, A L Osterheld, J Nilsen, J R Hunter, and V N Shlyaptsev, 'Gain saturation regime for transient Ni-like ion x-ray lasers,' Phys Rev Lett **84**, 4834-37 (2000)

A15 J Nilsen, **Y Li**, and J Dunn, 'Modeling psec-laser-driven neon-like titanium X-ray laser experiments,' J Opt Soc Am **B 17,** 1084-1092 (2000)

A16 J Dunn, A L Osterheld, **Y Li**, J Nilsen, and V N Shlyaptsev, 'Transient collisional excitation x-ray lasers with 1 ps tabletop drivers,' IEEE J Sel Topics Quantum Electron **5**, 1441-1446 (1999)

A17 A N Ryabtsev, S S Churilov, J Nilsen, **Y Li**, J Dunn, A L Osterheld, 'Additional analysis of the spectra of Ni-like ions,' Opt Spectro **87**, 181-186 (1999)

A18 J Nilsen, J Dunn, A L Osterheld, and **Y Li**, 'Lasing on the self photopumped Ni-like 4f $^1P_1$ – 4d $^1P_1$ x-ray transition,' Phys Rev **A**, R2677-2680 (1999).

A19 K Witte, M Basko, H Baumhacker, A Boswald, K Eidmann, R Fedosejevs, E Fill, V Kondrashov, A Kendl, T Lower, **Y Li**, P X Lu, J Meyer-ter-Vehn, G Pretzler, A Saemann, R Sigel, G Tsakiris, X Wang, A Benuzzi, B Faral, C Chenais-Popovics, M Koenig, H Merdji, D Batani, D Beretta, C Danson, T Hall, 'Experiments with ASTERIX and ATLAS,' Fusion Eng Design **44**, 147-155 (1999)

A20 J Dunn, J Nilsen, A L Osterheld, **Y Li**, and V N Shlyaptsev, 'Demonstration of transient gain X-ray lasers near 20 nm for nickellike yttrium, zirconium, niobium, and molybdenum,' Opt Lett **24**, 101-103 (1999)

A21 S P Nikitin, **Y Li**, T M Antonsen, and H M Milchberg, 'Ionization-induced pulse shortening and retardation of high intensity femtosecond laser pulses,' Opt Commun **157**, 139-144 (1998).

A22 **Y Li**, J Nilsen, J Dunn, A L Osterheld, and A Ryabtsev, and S Churilov, 'Wavelengths of the Ni-like 4d $^1S_0$ - 4p $^1P_1$ X-ray laser line,' Phys Rev **A 58**, R2668-2671 (1998).

A23 P Lu, E E Fill, **Y Li,** J Maruhn, and G Pretzler, 'Spatial coherence of prepulse-induced neon-like X-ray lasers,' Phys Rev **A 58**, 628-635 (1998).

A24 **Y Li**, and J Nilsen, 'Scaling laws for electron densities and gain coefficients in low-Z Ne-like lasers,' Phys Scr **57**, 237-241 (1998).

A25 S P Nikitin, T M Antonsen, T R Clark, **Y Li**, H M Milchberg, 'Guiding of intense femtosecond pulses in preformed plasma channels,' Opt Lett **22**, 1787-1789 (1997).

A26 **Y Li**, H Schillinger, Ch Ziener, and R Sauerbrey, 'Reinvestigation of the Duguay soft X-ray laser: a parameter space for high power fs laser systems,' Opt Commun **144**, 118-124 (1997); **175**, 477 (2000).

A27 P Fan, J Zhou, and **Y Li**, 'Comparison of the exposure characteristics of soft X-ray film SIOFM-5FW with Kodak 101-05 and Ilford Q-plates,' Appl Opt **36**, 2843-2847 (1997).

A28 **Y Li**, 'Analytical study of recombination X-ray lasers in an adiabatic expanding plasma,' Laser Part Beams **15**, 215-229 (1997).

A29 M Henderson, L J Curtis, R Matulioniene, D G Ellis, and **Y Li**, 'Lifetimes of the $3p^5 4s\ ^3P_1$, $^1P_1$ and $3p^5 3d\ ^3P_1$ levels in K II,' Phys Rev **A 55**, 2723-2727 (1997).

A30 **Y Li**, G Pretzler, P Lu, E E Fill and J Nilsen, 'Study of Ne- and Ni-like X-ray lasers using the prepulse technique,' Phys Plasmas **4**, 479-489 (1997).

A31 A Demir, P Zeitoun, G J Tallents, E Fill, G Jamelot, **Y Li**, M Nantel, G J Pert, B Rus, and D Schlögl, 'Detailed comparison of experimental and theoretical heliumlike Ti and Ca satellite line spectra emitted from a laser-produced plasma,' Phys Rev **E 55**, 1827-1835 (1997).

A32 **Y Li**, P Lu, G Pretzler, and E E Fill, 'Lasing in neonlike sulfur and silicon,' Opt Commun **133**, 196-200 (1997).

A33 P Lu, **Y Li**, and E E Fill, 'Angular energy distribution and temporal evolution of pulses emitted from low Z neonlike J=0-1 X-ray lasers,' Phys Rev **A 54**, 5193-5200 (1996).

A34 J Zhang, E E Fill, **Y Li**, D Schlögl, J Steingruber, M Holden, G J Tallents, A Demir, P Zeitoun, C Danson, P A Norreys, F Walsh, M H Key, C L S Lewis, and A G MacPhee, 'High gain X-ray lasing at 11.1 nm in sodium-like copper driven by a 20-J, 2-ps Nd:glass laser,' Opt Lett **21**, 1035-1037 (1996).

A35 J C Moreno, J Nilsen, **Y Li**, P Lu, and E E Fill, 'Two-dimensional near field images of the neon-like germanium soft X-ray laser,' Opt Lett **21**, 866-868 (1996).

A36 **Y Li**, G Pretzler, E E Fill, and J Nilsen, 'Temporally and spatially resolved investigation of the J=0-1 and J=2-1, 3p-3s lasers in neonlike germanium,' J Opt Soc Am **B 13**, 742-750 (1996).

A37 J Nilsen, **Y Li**, P Lu, J.C Moreno, and E E Fill, 'Relative merit of using curved targets and the prepulse technique to enhance the output of the neon-like germanium X-ray laser,' Opt Commun **124**, 287-291 (1996).

A38 J Nilsen, H Fiedorowicz, A Bartnik, **Y Li**, P Lu, and E E Fill, 'Self photo-pumped soft X-ray laser,' Opt Lett **21**, 408-410 (1996).

A39 **Y Li**, G Pretzler, P Lu, and E E Fill, 'Demonstration of X-ray lasing in nickel-like tin,' Phys Rev **A 53**, **R**652-654 (1996).

A40 H Fiedorowicz, A Bartnik, E E Fill, **Y Li**, G Pretzler, and M Szczurek, 'XUV emission from an elongated plasma column produced using a high power laser with a gas puff target,' Laser Part Beams **14**, 253-260 (1996).

A41 H Fiedorowicz, A Bartnik, **Y Li**, P Lu, and E E Fill, 'Demonstration of soft X-ray lasing with neonlike argon and nickellike xenon using a laser irradiated gas puff target,' Phys Rev Lett **76**, 415-418 (1996).

A42 **Y Li**, G Pretzler, and E E Fill, 'Study of anomalous lasing behavior of the two J=0-1 transitions in Ne-like V,' Appl Phys **B 63**, 125-130 (1996).

A43 A Präg, A Glinz, J E Balmer, **Y Li**, and E E Fill, 'Prepulse dependence of J=0-1 lasing at 32.6 nm in neon-like titanium,' Appl Phys **B 63**, 113-116 (1996).

A44 **Y Li**, G Pretzler, and E E Fill, 'Neon-like ion lasers in the extreme ultraviolet region,' Phys Rev **A 52**, **R**3433-3435 (1995).

A45 **Y Li**, G Pretzler, E E Fill, and J Nilsen, 'Space-resolved investigation of lasing on the two J=0-1, 3p-3s transitions at 20.5 and 25.5 nm in neon-like iron,' Opt Commun **119**, 557-562 (1995).

A46 * E E Fill, **Y Li**, and G Pretzler, 'Study of neon-like lasing in gallium,' IEEE J Sel Topics Quantum Electron **1**, 958-961 (1995).

A47 P Fan, **Y Li**, E Fill, and J Zhou, 'Qualitative comparison of exposure characteristics of soft X-ray film SIOFM-5FW with Kodak 101-05 and Ilford-Q plates,' Chinese J Lasers **A 22,** 584-588 (1995). (Chinese)

A48 E E Fill, **Y Li**, G Pretzler, D Schlögl, J Steingruber, and J Nilsen, 'Study of lasing in low-Z neon-like ions using the prepulse technique,' Phys Scr **52**, 158-161 (1995).

A49 **Y Li**, G Pretzler, and E E Fill, 'Spatial position of prepulse induced J=0-1, 3p-3s lasing in low-Z neon-like ions,' Phys Rev **A 51**, **R**4341-4344 (1995).

A50 **Y Li**, G Pretzler, and E E Fill, 'Observation of lasing on the two J=0-1, 3p-3s transitions at 26.1 and 30.4 nm in neonlike vanadium,' Opt Lett **20**, 1026-1028 (1995).

A51 E E Fill, **Y Li**, D Schlögl, J Steingruber, and J Nilsen, 'Sensitivity of lasing in neonlike zinc at 21.2 nm to the use of the prepulse technique,' Opt Lett **20**, 374-376 (1995).

A52 **Y Li**, G D Tsakiris, R Sigel, 'Self calibration of a thinned, backside illuminated charge coupled device in the soft X-ray region,' Rev Sci Instrumen **66**, 80-86 (1995).

A53 **Y Li**, J Zhang, 'A compact model for ultra-short pulse driven recombination X-ray lasers in hydrogen-like ions,' J Phys **D 27**, 707-713 (1994).

A54 Z Xu, P Fan, L Lin, **Y Li**, X Wang, P Lu, R Li, S Han, L Sun, A Qian, Z Jiang, Z Zhang, and J Zhou, 'Short wavelength soft-X-ray amplification in a lithium-like calcium plasma,' Phys Rev **A 49**, 485-489 (1994).

A55 Z Xu, P Fan, L Lin, **Y Li**, X Wang, P Lu, S Han, R Li, L Sun, A Qian, Z Jiang, Z Zhang, and J Zhou, 'Experimental-study of short-wavelength Li-like soft-X-ray lasers,' Sci China Ser **A 37**, 738-750 (1994)

A56 **Y Li**, P Lu, R Li, P Fan, S Chen and Z Zhang, 'Simulation and analyzation of the characteristics of a grazing incidence grating spectrograph with an imaging toroidal mirror,' Act Opt Sinica **13**, 825-829 (1993). (Chinese)

A57 Z Xu, P Fan, L Lin, **Y Li**, X Wang, P Lu, R Li, S Han, L Sun, A Qian, Z Jiang, Z Zhang, and J Zhou, 'Space and time-resolved investigation of short wavelength X-ray laser in Li-like Ca ions,' Appl Phys Lett **63**, 1023-1025 (1993).

A58 P Lu, P Fan, Z Xu, R Li, X Wang, **Y Li**, Z Zhang, and S Chen, 'A simple *in situ* calibration technique for soft X-ray film,' Rev Sci Instrumen **64**, 2879-2882 (1993).

A59 X Wang, Z Xu, P Fan, L Lin, **Y Li**, P Lu, R Li, A Qian, Z Zhang, 'Time- and space- resolved studies of recombination X-ray lasers,' Opt Commun **102**, 271-276 (1993).

A60 R Li, P Fan, Z Xu, Z Zhang, and **Y Li**, 'The simulation of soft X-ray optics by ray tracing,' Chinese J Lasers **B 2**, 229-239 (1993).

A61 X Wang, Z Xu, S Chen, A Qian, L Lin, **Y Li**, P Fan, Z Zhang, 'Spatial uniformity and its time evolution of linear laser plasmas,' Opt Eng **32**, 56-62 (1993).

A62 S Chen, **Y Li**, X Wang, A Qian, and Z Xu, 'Soft X-ray emission from 1.06 μm laser produced plasmas and its atomic number dependence,' Act Opt Sinica **12**, 27 (1992). (Chinese)

A63 X Wang, Z Xu, S Chen, A Qian, **Y Li**, P Fan, and L Lin, 'Linear laser plasma toward large-sized uniform soft X-ray source,' Laser Part Beams **10**, 777-786 (1992).

A64 **Y Li**, X Wang, Z Xu, S Chen, and A Qian, 'Absolute study of spectra from laser produced plasmas,' Laser Part Beams **9**, 787-793 (1991).

A65 **Y Li**, X Wang, Z Xu, S Chen, and A Qian, 'Measurement of absolute emission spectra from laser plasmas using a transmission grating spectrometer,' Chinese J Lasers **18**, 348 (1991). (Chinese)

A66 **Y Li**, X Wang, S Chen, and Z Xu, 'Investigation of spectrographic properties of transmission gratings,' Act Opt Sinica **11**, 105 (1991). (Chinese)

A67 X Feng, Z Xu, L Lin, and **Y Li**, 'High abundance excited state ions produced from laser irradiated groove targets,' Chinese Phys **11**, 405-407 (1991).

A68 X Wang, S Chen, Z Xu, A Pachtman, **Y Li**, and A Qian, 'Laser plasma X-ray emission studies using a pinhole transmission grating spectrometer,' J Appl Phys **69**, 2015-2020 (1991).

A69 **Y Li**, Z Xu, S Chen, X Wang, Z Jiang, and X Feng, 'Space-resolved investigation of soft X-ray emission characteristics of laser plasma in a half-cylindrical-shell target,' Phys Rev **A 41**, 4528-4530 (1990).

A70 **Y Li**, Z Xu, S Chen, X Wang, Z Jiang, and X Feng, 'Characteristics of soft X-ray emissions from laser irradiated half-cylindrical-shell targets,' Act Opt Sinica **10**, 1915 (1990). (Chinese)

A71 **Y Li**, S Chen, and Z Xu, 'A collision-radiation model for investigation of soft X-ray emissions from aluminum plasmas,' Act Opt Sinica **10**, 581 (1990). (Chinese)

A72 **Y Li**, S Chen, and Z Xu, 'Numerical studies of radiation loss from aluminum plasmas,' Act Phys Sinica **39**, 764 (1990). (Chinese)

A73 **Y Li**, W Bai, S Chen, and Z Xu, 'Simulation of diffraction efficiencies for a pinhole transmission grating spectrometer,' Act Opt Sinica **9**, 550 (1989). (Chinese)

B. REFEREED PROCEEDING PAPERS

B1 J Nilsen, **Y Li**, J Dunn, and A L Osterheld, 'Progress in understanding the short-pulse-driven collional X-ray lasers,' Inst Phys Conf Ser **159**: *X-ray Lasers 1998*, 123-130 (1998).

B2 J Nilsen, **Y Li**, J Dunn, and A L Osterheld, 'Measuring the wavelengths of the Ni-like 4d $^1S_0$ - 4p $^1P_1$ and 4f $^1P_1$-4d $^1P_1$ X-ray laser lines,' Inst Phys Conf Ser **159**: *X-ray Lasers 1998*, 135-138 (1998).

B3 J Dunn, A L Osterheld, V N Slyaptsev, **Y Li**, J Nilsen, R Spheperd, and L B Da Silva, 'Progress in table-top transient collisonal excitation x-ray lasers at LLNL,' Inst Phys Conf Ser **159**: *X-ray Lasers 1998*, 51-58 (1998).

B4 S P Nikitin, **Y Li**, T M Antonosen, H M Milchberg, 'Ionization-induced propagation effects of high-intensity femtosecond laser pulses in a neutral gas,' 1998 OSA Technical Digest Series 6: *Technical Digest of Summaries of papers presented at CLEO'1998*, 410 (1998).

B5 **Y Li**, G Pretzler, P Lu, J Nilsen, and E E Fill, 'Ne- and Ni-like X-ray lasers using the prepulse technique,' Inst Phys Conf Ser **151**: *X-ray Lasers 1996*, 255-259 (1996).

B6 P Lu, **Y Li**, and E E Fill, 'Time-resolved investigation of neonlike J=0-1 X-ray lasers,' Inst Phys Conf Ser **125**: *X-ray Lasers 1996*, 73-75 (1996).

B7 E E Fill, K Eidmann, **Y Li**, P Lu, and G Pretzler, 'Experiments towards X-ray lasers for applications,' Inst Phys Conf Ser **151**: *X-ray Lasers 1996*, 25-31 (1996).

B8 J C Moreno, J Nilsen, **Y Li**, P Lu, and E E Fill, 'High resolution two-dimensional near field images of neon-like soft X-ray lasers,' Inst Phys Conf Ser **151**: *X-ray Lasers 1996*, 430-432 (1996).

B9 J Nilsen, J C Moreno, L B Da Silva, T W Barbee Jr, **Y Li**, P Lu, and E E Fill, 'Progress in understanding the prepulse and multiple pulse techniques,' Inst Phys Conf Ser **151**: *X-ray Lasers 1996*, 240-246 (1996).

B10 H Fiedorowicz, A Bartnik, J Kostecki, M Szczurek, E E Fill, **Y Li**, P Lu, and G Pretzler, 'Laser-irradiated gas puff targets and X-ray lasing with neon-like argon and nickel-like xenon ions,' Inst Phys Conf Ser **151**: *X-ray Lasers 1996*, 76-83 (1996).

B11 A Demir, G J Tallents, P Zeitoun, E Fill, G Jamelot, **Y Li**, M Nantel, G J Pert, B Rus, and D Schlögl, 'Spectroscopic analysis of Li-like Ti and Ca X-ray laser media,' Inst Phys Conf Ser **151**: *X-ray Lasers 1996*, 383-385 (1996).

B12 Z Xu, Z Zhang, P Fan, R Li, X Wang, P Lu, S Han, **Y Li**, W Zhang, B Shen, L Zhang, 'An overview of soft X-ray laser research at SIOFM,' Inst Phys Conf Ser **151**: *X-ray Lasers 1996*, 17-24 (1996).

B13 J Zhang, A E Dangor, C A Danson, A Demir, A Dyson, A P Fews, E E Fill, P Gibbon, M Holden, M H Key, P Lee, C L S Lewis, **Y Li**, A G MacPhee, S Moustaizis, D Neely, P A Norreys, D Schlögl, J Steingruber, G.J Tallents, F Walsh, J S Wark, P Zeitoun, and M Zepf, 'High gain recombination XUV lasers and efficient XUV harmonics from ps laser pulse interactions with solid targets,' Inst Phys Conf Ser **151**: *X-ray Lasers 1996*, 122-129 (1996).

B14 G J Tallents, A Behjat, A Demir, M Holden, J Krishnan, J Lin, P Zeitoun, G F Cairns, C L S Lewis, S P McCabe, A G MacPhee, P J Warwick, J Zhang, D Neely, E Wolfrum, G Jamelot, M Nantel, B Rus, E E Fill, **Y Li**, S B Healy, and G J Pert, 'Spectroscopic investigation of X-ray laser media,' Inst Phys Conf Ser **151**: *X-ray Lasers 1996*, 372-379 (1996).

B15 M H Key, et al, 'Development and application of ultra-bright laser and harmonic XUV sources,' Inst Phys Conf Ser **151**: *X-ray Lasers 1996*, 9-16 (1996).

B16 * Z Xu, P Fan, L Lin, **Y Li**, X Wang, P Lu, S Han, R Li, L Sun, A Qian, Z Zhang, and J Zhou, 'Short-wavelength lithium-like X-ray laser development at Shanghai Institute of Optics and Fine Mechanics (SIOFM),' Inst Phys Conf Ser **125**: *X-ray Lasers 1992*, 75-82 (1992).

B17 P Lu, R Li, X Wang, **Y Li**, P Fan, Z Zhang, S Chen, and Z Xu, 'In-situ calibration of Shanghai 5F soft X-ray film without spercoat in XUV spectral region,' Inst Phys Conf Ser **125**: *X-ray Lasers 1992*, 379-382 (1992).

B18 X Wang, Z Xu, P Fan, L Lin, **Y Li**, P Lu, R Li, Z Zhang, J Zhou, Jin R, and A Qian, 'Time- and space-resolved spectroscopy of recombination X-ray lasers,' Inst Phys Conf Ser **125**: *X-ray Lasers 1992*, p 83-88 (1992).

C. FULL PROCEEDING PAPERS

C1 **Y Li** and SV Milton, 'Intensity and pulse shape effect on the spectra and the angular distribution of nonlinear Thomson scattering,' 2002 CLEO Technical Digest, paper CWA30 (2002).

C2 **Y. Li**, Z. Huang, M. D. Borland, and S. Milton, 'Bright, sub-100-fs X-ray pulse using small angle Thomson scattering of ultrafast laser pulses,' Proc SPIE 4505, 146-153 (2001).

C3 **Y Li**, J Dunn, J Nilsen, A L Osterheld,T. W. Barbee Jr, and V N Shlyaptsev, 'Saturated Plasma X-ray laser at 19 nm,' in Proc of 22nd International Free Electron Laser conference and 7th FEL Users Workshop, ed VN Litvinenko and YK Wu, II 25-26 (2001).

C4 **Y Li**, J Dunn, J Nilsen, T. W. Barbee Jr, A L Osterheld, V N Shlyaptsev, and L B Da Silva, 'Near field imaging of a saturated table top X-ray laser,' Proc SPIE **3776**, 45-51 (1999).

C5 **Y Li**, S P Nikitin, Ilya Alexeev, T M Antonsen, and H M Milchberg, 'Observation of ionization instability of intense laser pulses,' Proc SPIE **3776**, 249-255 (1999).

C6 J Dunn, **Y Li**, A L Osterheld, J Nilsen, S J Moon, and V N Shlyaptsev, 'Table-top transient collisional excitation x-ray lasers' Proc SPIE **3776**, 2-8 (1999).

C7 S J Moon, J Dunn, A Faenov, T pikus, K B Fournier, A L Osterheld, V N Shlyaptsev, **Y Li**, and J Nilsen, 'Characterization of a high-gain Ne-like Fe transient X-ray laser,' Proc SPIE **3776***,* in press, 9-13 (1999).

C8 J Nilsen, **Y Li**, J Dunn, A L Osterheld, 'Modeling short-pulse-driven collisional x-ray lasers and other new schemes,' Proc SPIE **3776**, 14-23 (1999).

C9 **Y Li,** P Lu, J Maruhn, J Nilsen, G Pretzler, and E E Fill, 'Study of prepulse-induced Ne- and Ni-like X-ray lasers,' Proc SPIE **3156**, 21-29 (1997).

C10 J C Moreno, J Nilsen, T W Barbee Jr, L B Da Silva, E E Fill, **Y Li,** and P Lu, 'Imaging experiments of Ne-like X-ray lasers,' Proc SPIE **3156**, 71-77 (1997).

C11 H Fiedorowicz, A Bartnik, E Fill, **Y Li**, P Lu, and G Pretzler, 'X-ray laser experiments by using a gas puff target with the ASTERIX IV facility,' AIP Conf. Proc **369**: *Laser Interaction and Related Plasma Phenomena*, edited by S Nakai and G H Miley (American Institute of Physics, New York, 1996), p 772-777

C12 E E Fill, **Y Li**, G Pretzler, D Schlögl, J Steingruber, and J Nilsen, 'Investigation of lasing on the J=0-1 line of neon-like ions using the prepulse technique,' Proc SPIE **2520**, 134-144 (1995).

C13 H Fiedorowicz, A Bartnik, M Szczurek, E E Fill, **Y Li**, P Lu, and G Pretzler, 'X-ray laser experiments using laser-irradiated gas puff targets at the ASTERIX IV facility,' Proc SPIE **2520**, 55-68 (1995).

C14 A R Prag, , A Glinz, J E Balmer, Y Li, and E E Fill, 'Sensitivity of 3p-3s soft-X-ray lasing in neon-like titanium to the prepulse level,' Proceedings of LEOS'95: IEEE Lasers and Electro-Optics Society 1995 Annual Meeting vol 1, 314-15 (1995).

C15 **Y Li**, J Zhang, 'Recombination X-ray lasers driven by ultra-short pulses in hydrogen-like ions: theoretical analysis,' AIP Conf. Proc **332**: *X-ray Lasers 1994*, 220-224 (1994).

C16 **Y Li**, J R Crespo Lopez-Urrutia, G D Tsakiris, R Sigel, R Volk, and L Pina, 'Comparison of the spectral response of a thinned, backside illuminated CCD with a CsI coated MCP system and Kodak 101 film,' AIP Conf. Proc **332**: *X-ray Lasers 1994*, 488-492 (1994).

C17 G J Tallents, P Zeitoun, A Behjat, A Demir, M Holden, J Krishnan, C L S Lewis, A G MacPhee, P J Warwick, M Nantel, G Jamelot, B. Rus, P. Jaegle, A Klisnick, P Goedtkindt, A Carillon, E E Fill, **Y Li**, G. Pretzler, D Schlögl, J Steingruber, D Neely, P A Norreys, M H Key, J Zhang, G J Pert, S Healy, and J Plowes, 'Improving the efficiency of X-ray lasers,' Proc SPIE **2520**, 34-44 (1995).

C18 **Y Li**, Z Xu, S Chen, X Wang, A Qian, and Z Jiang, 'Investigation of soft X-ray spectra from laser plasmas by using a transmission grating spectrometer,' Proc SPIE **1928**, 190-197 (1993).

C19 Z Xu, P Fan, L Lin, **Y Li**, X Wang, P Lu, S Han, R Li, L Sun, A Qian, Z Zhang, and J Zhou, 'Recent progress in recombination X-ray laser research at Shanghai Institute of Optics and Fine Mechanics (SIOFM),' Proc SPIE **1928**, 112-122 (1993).

C20 R Li, P Fan, Z Xu, **Y Li**, 'Ray tracing model investigation of toroidal mirror used in grazing incidence grating spectrograph,' Proc SPIE **1928**, 256-263 (1993).

C21 B Shen, Z Xu, H Teng, W Zhang, and **Y Li**, 'Theoretical calculation of soft X-ray laser gains in Li-Like Ca ions,' Proc SPIE **1928**, 172-177 (1993).

C22 B Ouyang, Z Xu, L Lin, S Chen, H Lu, P Fan, **Y Li**, R Li, P Lu, M Li, and Y Jiang, 'Intense laser source for X-ray laser research and laser-plasma study,' Proc SPIE **1928**, 131-137 (1993).

C23 L Lin, S Chen, Z Jiang, W Ge, A Qian, B Ouyang, **Y Li**, Y Kang, and Z Xu, 'Optical diagnostics of laser-produced plasmas,' Proc SPIE **1346**, 490-501 (1991).

C24 S Chen, Z Xu, **Y Li**, X Wang, and A Qian, 'Soft X-ray emission characteristics from laser plasma sources,' Proc SPIE **1552**, 288-295 (1991).

D. CONFERENCE PRESENTATIONS

D1 'Possibility of bright, polarized high energy photon sources at the Advanced Photon Source', Workshop on New Aspects of Quark Nuclear Physics with Polarized Photons, Feb. 17-20, Honolulu, Hawaii (Invited)

D2 'Experience with and expectations for the drive laser for the APS PC gun', Workshop on Laser Issues for Electron RF Photoinjectors SLAC, October 23-25, 2002, Stanford, California

D3 'Time-Resolved Measurement of a 530-nm SASE FEL' 2002 International Free Electron laser Conference; Sept 1-6, 2002, Argonne, Illinois

D4 'Intensity and pulse shape effect on the spectra and the angular distribution of nonlinear Thomson scattering,' Conference on Lasers and Electro-Optics; May 19-24, 2002, Long Beach, California

D5 'Generating sub-100 fs X-ray pulses using the APS injection linac,' Workshop on Novel Photon Sources From Relativistic Electron Beams, Nov 29-20, 2001, Pocatello, Idaho. (Invited)

D6 'Bright, tunable sub-100 fs X-ray radiation using small angle Thomson scattering,' *2001 Symposium on Optical Science, Engineering, and Instrumentation* (46th SPIE Annual Meeting), 29 July-3 August, 2001, San Diego, California

D7 'Bright sub-100 fs X-ray source using small angle Thomson scattering,' 21st International committee for Future Accelerators (ICFA) Beam Dynamics Workshop on Laser-Beam Interactions, 11-15 June 11-15, 2001, Stony Brook, New York

D9 'Recent progress on plasma X-ray lasers at LLNL,' *22nd International Free Electron Laser Conference*, 13-18 Aug 2000, Durham, North Carolina.

D10 'Ionization Instability Induced by Intense, Ultrashort Laser Pulses,' 41st Annual Meeting of the Division of Plasma Physics, America Physical Society, 15-19 November, 1999, Seattle, Washington.

D11 'Transient Inversion Collisional X-ray Lasers,' *Optical Society of America 1999 Annual Meeting/ILS-XV*, 26 September - 1 October 1999, Santa Clara, California.

D12 'Scattering of intense, ultrashort laser pulses in underdense plasmas by ionization instability,' *1999 Symposium on Optical Science, Engineering, and Instrumentation* (SPIE Annual Meeting), 18-23 July 1999, Denver, Colorado.

D13 'Near field imaging of a saturated table-top X-ray laser,' *1999 Symposium on Optical Science, Engineering, and Instrumentation* (SPIE Annual Meeting), 18-23 July 1999, Denver, Colorado.

D14 'Modulation and scattering of intense, ultrashort laser pulses in underdense plasmas,' *Centennial Meeting of American Physical Society*, Atlanta, Georgia, Mar 20-26 1999.

D15 'Ne- and Ni-like X-ray lasers using the prepulse technique,' *5th International Conference on X-Ray Lasers*, Lund, Sweden, June 10-14, 1996.

D16 'Time-resolved investigation of neonlike J=0-1 X-ray lasers,' *5th International Conference on X-Ray Lasers*, Lund, Sweden, June 10-14, 1996.

D17 'Investigation of soft X-ray spectra from laser plasmas using a transmission grating spectrometer,' *International Symposium on Laser-Matter Interactions*, Shanghai, China, November 9-12, 1992.

E. INVITED SEMINARS

E1 'Progress of table-top X-ray laser at LLNL,' Center of Ultrafast Optical Science, University of Michigan, Ann Arbor, Michigan, September 16, 1999 (Hosted by Donald Umstadter).

E2 'Development of coherent X-ray sources at LLNL,' Electrical and Computer Engineering Department, Rice University, Houston, Texas, September 13, 1999 (Hosted by Daniel Mittleman).

E3 'Table top X-ray lasers as coherent X-ray sources at LLNL,' Accelerator System Division, Argonne National Laboratory, Argonne, Illinois, September 7, 1999 (Hosted by Stephen Milton).

E4 'Modulation and scattering of ultra intense short pulse in plasmas,' Acuson Corp., Mountain View, California, August 30, 1999 (Hosted by Said Bolorforosh).

E5 'Prepulse X-ray lasers,' Institute for Laser Energetic, University of Rochester, Rochester, New York, October 2, 1997 (Hosted by Thomas Boehly).

E6 'Progress of X-ray laser research at MPQ,' Institute for Laser Science and Applications, Lawrence Livermore National Laboratory, Livermore, California, September 5, 1997 (Hosted by Hector A Baldis).

E7 'Development of X-ray lasers using the prepulse pumping scheme at MPQ,' Department of Chemistry and Biochemistry, University of California at San Diego, San Diego, California, December 13, 1996 (Hosted by Kent Wilson).

E8 'Short wavelength coherent light source using X-ray lasers and high order harmonics,' Institute of Physics, Chinese Academy of Sciences, Beijing, China, March 15, 1996 (Hosted by Guozhen Yang).

F. PAPERS IN PRESS/ SUBMITTED

F1 J. Dunn, J R Hunter, B Sellick and **Y Li**, 'Reflection echelon optic for traveling wave, transient gain soft x-ray laser,' in preparation for submittal to Appl Opt.

F2 **Y Li**, T M Antonsen, S P Nikitin, Ilya Alexeev, and H M Milchberg, 'Observation of ionization scattering of an intense, ultrashort laser pulse,' sumitted to Phy Rev Lett.