

Robert L. Byer PhD Students

<u>NAME</u>	<u>THESIS</u>	<u>YEAR</u>
Kildal, Helge	<i>CdGeAs<sub>2</sub> and CdGeP<sub>2</sub> Chalcopyrite Materials for Infrared Nonlinear Optics</i>	1973
Herbst, Richard L.	<i>Cadmium Selenide Infrared Parametric Oscillator</i>	1973
Roundy, Carlos	<i>Advances in Pyroelectric Detectors</i>	1973
Begley, Richard	<i>Higher Order Nonlinear Optics Processes in Solids and Liquids</i>	1974
Fleming, Robert	<i>The High Energy Broadly Tunable Coherent Source</i>	1975
Choy, Michael M.	<i>Second Order Nonlinear Optical Processes in Semiconductors</i>	1976
Warshaw, Sandy	<i>A Remote Laser/Radar Measurement System</i>	1977
Komine, Hiroshi	<i>Energy Storage and Two-photon Extraction from Metastable States</i>	1978
Baumgartner, Richard	<i>Optical Parametric Amplification</i>	1978
Brosnan, Stephen J.	<i>Tunable Infrared Generation Using Parametric and Raman Processes</i>	1979
Trutna, Richard	<i>Generation of 16 micron Radiation Using Stimulated Rotational Raman Scattering in Hydrogen</i>	1979
Wolfe, David C., Jr.	<i>On the Application of Optical Computed Tomography to Remote Air Pollution Measurement</i>	1980
Duncan, Michael D.	<i>Pulsed Molecular Beam Coherent Anti-Stokes Raman Spectroscopy</i>	1981
Park, Yongkwan	<i>Frequency and Mode Control of Q-switched Nd:YAG Lasers</i>	1981
Endemann, Martin J.	<i>Remote Atmospheric Measurements with a Tunable Infrared Laser Source</i>	1981
Henesian, Mark A.	<i>High Resolution Continuous-Wave Coherent Anti-Stokes Raman Spectroscopy</i>	1982
Eggleston, John M. III	<i>Theoretical and Experimental Studies of Slab Geometry Lasers</i>	1983
McDaniel, James	<i>Investigation of Laser Induced Iodine Fluorescence for the Measurement of Density in Compressible Flows</i>	1983
Gustafson, Eric K.	<i>CARS Spectroscopy in a Supersonic Jet</i>	1983
Bennett, Keith	<i>Optical Tomography</i>	1985
Nightingale, John	<i>The Growth and Optical Applications of Single Crystal Fibers</i>	1985
Kuhn, Kelin	<i>Research and Development of a High Average Power Photo-processing Laser System</i>	1985
West, Larry	<i>Spectroscopy of Gallium Arsenide in Quantum Wells</i>	1985
Kane, Thomas	<i>Coherent Laser Radar at 1.06 microns Using Solid State Lasers</i>	1986
Fejer, Martin M.	<i>Single Crystal Fibers: Growth Dynamics and Nonlinear Optical Interactions</i>	1986

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Faris, Gregory	<i>Quantitative Optical Tomographic Imaging of Fluid Flows and Flames</i>	1987
Lacy, Robert	<i>Optical Gain at the Vacuum Ultraviolet Wavelength of 185 nm in a Laser-Produced, Photoionization-Pumped Indium Plasma</i>	1987
Fan, Tso Yee	<i>Diode Laser Pumped Solid State Lasers</i>	1987
Basu, Santanu	<i>A High Peak and High Average Power Nd:glass Moving Slab Laser for X-ray Generation</i>	1988
Kozlovsky, William	<i>Efficient Nonlinear Conversion of Frequency Stable Lasers</i>	1989
Trail, John	<i>A Compact Scanning Soft X-ray Microscope</i>	1989
Day, Timothy	<i>Frequency Stabilized Solid State Lasers for Coherent Optical Communications</i>	1990
Nilsson, Alan	<i>Eigenpolarization Theory and Experimental Linewidth Study of Monolithic Nonplanar Ring Oscillators</i>	1989
Day, Timothy	<i>Frequency Stabilized Solid State Lasers for Coherent Optical Communications</i>	1990
Nabors, Charles	<i>Coherence and Two-color Squeezing in Doubly Resonant Optical Parametric Oscillators</i>	1990
Reed, Murray	<i>Nd:Glass Slab Laser Development and Application for X-ray Lithography</i>	1990
Magel, Gregory	<i>Optical Second Harmonic Generation in Lithium Niobate Fibers</i>	1990
Eckardt, Robert	<i>Continuous Tuning and Frequency Stabilization of Doubly Resonant Optical Parametric Oscillators</i>	1991
Schellenberg, Frank	<i>Linear and Nonlinear Spectroscopy in Polysilane Polymers</i>	1991
Richman, Bruce	<i>Three-Dimensional Guiding Effects in a Free-Electron Laser</i>	1991
Yoo, Ben	<i>Linear and Nonlinear Spectroscopy of Quantum Well Intersubband Transitions</i>	1991
Jundt, Dieter	<i>Lithium Niobate: Single Crystal Fiber Growth and Quasi-Phasematching</i>	1991
Lim, Eric	<i>Quasi-Phasematching for Guided -Wave Nonlinear Optics in Lithium Niobate</i>	1992
Schiller, Stephan	<i>Principles and Applications of Optical Monolithic Total-Internal-Reflection Resonators</i>	1993
Yang, Steven	<i>Continuous Wave Singly Resonant Optical Parametric Oscillator</i>	1993
Farinas, Alex	<i>A5-W, All-Solid-State Laser for Precision Interferometry</i>	1994
Serkland, Darwin	<i>Squeezed Vacuum Generation in a Quasi-Phasematched Lithium Niobate Waveguide</i>	1995
Shine, Robert John (Jr.)	<i>A High-Power, Diode-Laser-Pumped, Solid-State Laser for Precision Interferometry</i>	1995
Myers, Lawrence	<i>Quasi-Phasematched Optical Parametric Oscillators in Bulk Periodically Poled Lithium Niobate</i>	1995
Zheng, Dong	<i>Tunable Infrared Generation with Diffusion-Bonded-Stacked Gallium Arsenide</i>	1998
Miller, Greg	<i>Periodically Poled Lithium Niobate: Modeling, Fabrication, and Nonlinear-Optical Performance</i>	1998

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Ewart, Roberta	<i>Comparison of Amplitude Noise Properties of Solid-State Laser Oscillators and Amplifiers</i>	1998
Gordon, Leslie	<i>Diffusion-Bonded-Stacked Gallium Arsenide for Mid-Infrared Generation</i>	2000
Beyersdorf, Peter	<i>The polarization Sagnac interferometer for gravitational wave detection</i>	2001
Rutherford, Todd	<i>An edge-pumped YB;YAG laser and phased array resonator</i>	2001
Mansell, Justin	<i>Micromachined deformable mirrors for laser wavefront control</i>	2001
Lawrence, Matthew	<i>Amplitude-noise suppression in a pump-and-signal resonant optical parametric oscillator</i>	2001
Plettner, Tomas	<i>Proof-of-Principle Experiment for Crossed Laser Beam Electron Acceleration in a Dielectric Loaded Vacuum Structure</i>	2002
Saraf, Shalendahar	<i>Power Scaling and Quantum Noise Measurements in ND:YAG Slab Laser Amplifiers</i>	2005
Sridharan, Arun	<i>Yb:YAG master oscillator power amplifier and PPLN optical parametric amplifiers for remote wind sensing</i>	2006
Sinha, Supriyo	<i>Power scaling long-wavelength ytterbium-doped silica fiber lasers for frequency doubling to yellow</i>	2007
Lee, Yin-wen	<i>Power scaling of ytterbium(3+)-doped phosphate fiber lasers and amplifiers</i>	2008
Widom, Jeffrey	<i>Design, characterizaion and fabrication of neodymium doping profiles in transparent YAG ceramics</i>	2008
Wong, Samuel	<i>Self-phase-locking of degenerate synchronously pumped optical parametric oscillators</i>	2008
Bullington, Amber	<i>Thermal loading and modal frequency degeneracy in optical resonators for the LIGO</i>	2009
Allen, Graham	<i>Optical sensor design for advanced drag-free satellites</i>	2009
Lu, Patrick	<i>Diffraction gratings for optical sensing</i>	2009
Han, Chinsan	<i>Dual Frequency Radio Occultation and a Method for Separation of Interfering Diffracted Signals</i>	2011
Marandi, Alireza	<i>Sub-harmonic generation of frequency combs for spectroscopy and quantum optics</i>	2012
Rudy, Charles	<i>Mode-locked thulium-doped fiber lasers for supercontinuum generation in the mid-infrared</i>	2013
Leindecker, Nicolas	<i>Degenerate Synchronously Pumped OPOS for Broadband Mid-Infrared Frequency Comb Generation</i>	2013
Wolf, Stephen	<i>TBD</i>	
Ingold, Kirk	<i>TBD</i>	