

# Michael Edwin Glinsky

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## EDUCATION

B.S. (Highest Honors, Physics), Case Western Reserve University (1983), GPA 3.97/4.00  
Ph.D. (Physics), University of California at San Diego (1991), GPA 4.00/4.00  
Executive Education (Corporate Finance, Advanced Options, 2001) University of Chicago GSB  
Executive Education (Negotiations, 2003) Harvard GSB

## EXPERIENCE

Sandia National Laboratories (2016-present).

*Research Physicist.* Conducting inertial confinement fusion research relevant to the hybrid magnetic/inertial scheme to produce energy from fusion called MagLIF using the Sandia Pulsed Power facilities. This includes analytic theory and large scale computer simulations. The results of the experiments are being analyzed via Bayesian analysis so that all measurements can be integrated and estimates can be given with minimized uncertainty. Advanced mathematical methods (related to Convolutional Neural Networks) are being used to develop predictive models of plasma turbulence relevant to fusion. Principal designer of 8 National Ignition Facility shots per year. Developing software and data science strategy development for Sandia Pulsed Power division. Leading deployment of decision quality for division. Member of computer science new technology review committee.

Geotrace Technologies (2014-2016).

*Manager, Reservoir Technologies.* Led group to develop the next generation technologies to support petroleum development decision making, using Bayesian methods to estimate and minimize risk and uncertainty.

Halliburton (2014).

*Senior Technology Manager, Integrated Interpretation Group.* Led a group to develop technology for the integrated interpretation of downhole measurements.

ION Geophysical (2012-2014).

*Research Director, Quantitative Interpretation.* Led a team to develop breakthrough technology for the integrated quantitative interpretation of multicomponent surface seismic, buried microseismic arrays, and well logs; goal was to revolutionize exploration and development of unconventional shale reservoirs.

University of Western Australia (2010-2013).

*Adjunct Professor of Physics.* Scientific collaboration, teaching, research supervision of undergraduate and graduate students.

CSIRO (2010-2012).

*CEO Science Leader.* Highest scientific position within the Australian national laboratory. Led and conducted R&D on the physics of geology, including high performance computation. The goal was to have predictive models of the self organization of geologic deposition. Set the

scientific vision for the Earth Science and Resource Engineering division of CSIRO. Led joint Curtin University and CSIRO project to geophysically assess reservoirs for CO<sub>2</sub> sequestration. Lead project to develop stochastic model based Bayesian inversion that integrated seismic time lapse and well information.

BHP Billiton (2008-2010).

*Manager, Resource R&D.* Managing team of PhD geoscientists developing technology to assess mining resources. The focus was on integration of physical measurements (seismic, E&M, gravity, drill hole logs, and core) to obtain resource estimates with uncertainty, then optimize the data acquisition to minimize the uncertainty. Also contributed to the research.

BHP Billiton Petroleum (2000-2008).

*Section Leader, Quantitative Interpretation & Global Quantitative Interpretation Specialist.* Established stochastic method of quantitative interpretation. This included software development, training course development, and training over 100 people. Over 200 quantitative interpretation projects done (Gulf of Mexico, Australia, West Africa, Brunei, Venezuela, Brazil Middle East). Developed wavelet based method of geologic lithology identification. Project manager and contributor to projects developing stochastic model based inversion, using stochastic model based inversion in reservoir simulation, developing stochastic wavelet derivation, doing large scale Navier-Stokes simulations of geological turbidite flow (submarine sand avalanches), and establishing an open source software infrastructure enabling multi dimensional data viewing and state-of-the-art applications deployed on Linux clusters. Supervised local quantitative interpretation specialists.

*Section Leader, Global Geoscience Technology.* Line manager of top geoscientists. Responsible for \$4 million budget of internal and external technology development. Member of team which developed and deployed currently used probabilistic portfolio management system. Instrumental in development of probabilistic integrated risk and volumetric estimation method that is currently being deployed.

Shell International E&P (1983-1985,1997-1999).

*Senior Research Physicist.* Developed methods of statistical prestack seismic inversion including time lapse and integrated handling of subsurface uncertainty. Helped develop more than a half dozen integrated reservoir models (North Sea, NW Australian Shelf and Gulf of Mexico). Gained experience in use of petrophysical data and AVO analysis. Stochastic business modeling applied to the development of a R&D funding model. Member of team that established new methodology for managing the R&D portfolio.

*Exploration Geophysicist.* Digital signal processing of seismic data. Development of experimental and computational methods to obtain near surface acoustic velocity. Did research on a statistical technique to estimate a randomly measured 2D velocity profile. Extensive company training in programming techniques, geophysics and petroleum geology. Computer coordinator for Rocky Mountain Division, served as liaison between the computer center and the division.

Lawrence Livermore National Laboratory (1991-1997,1985,1982).

*Business Development.* Developed and helped execute the business and marketing strategy for the Technology Development Program. Focus being to develop joint business ventures using Laser Program core competencies to do product development funded by the biomedical device industry. Program grew to over a \$4 million/yr project within two years.

*Theoretical and Computational Laser-Biological Tissue Research.* Performed computer simulations of laser-tissue welding, and of photorefractive keratotomy. Contributed to the analytic theory of short pulse laser ablation of biological tissues and to the understanding of laser cerebral thrombolysis. Developed and implemented computer models of biological tissue strength and failure.

*Seismic Processing.* Managed and technically contributed to a project which used advanced neural network and signal processing to identify seismic events on pre-stack migrated gathers. Project was a joint oil industry-national laboratory collaboration that included 10 people.

*Theoretical and Computational Inertial Confinement Fusion Research.* Worked in the Laser Fusion Energy Program on an advanced inertial confinement fusion concept. Modeled suprathreshold electron transport and laser self focusing in short pulsed laser produced plasmas. As part of this research, developed a 2D relativistic fluid computer simulation code.

*Experimental X-ray Research.* Developed method of measuring resolution of curved x-ray crystals. Measured, by optical techniques, local defects in crystal curvature affecting resolution. Helped design and build a high intensity line x-ray source for calibration of spectrometers. Designed and tested of x-ray measurement systems for use in nuclear testing and beam foil spectroscopy. Did preliminary design and calculations on a system to measure target gas pressures via electron scattering cross-section. Also tested collimated hole arrays as a possible high flux x-ray collimator for spectrometers.

University of California at San Diego (1985-1991). Studied temperature equilibration and three-body recombination in strong magnetic fields. This included both Monte Carlo computer simulation and theoretical analysis. Part of this work done in collaboration with researchers at the University of Tokyo. Collaborated with a Danish mathematician on research applying topology to plasma physics. Served as teaching assistant for freshman honors level physics class. Duties included conducting weekly problem sessions, composing and grading exams.

### **ACTIVITIES AND OFFICES**

Senior class president (CWRU)  
Member University Student Government (CWRU)  
Sigma Nu Fraternity  
Tau Beta Pi (engineering honorary)  
American Physical Society  
Bicycle racing (throughout U.S., Mexico and France)  
Swimming, running and cross country skiing  
Study of French culture and language

### HONORS

CSIRO Medal for Research Achievement, 2004 (reservoir characterization)

LLNL Award for Outstanding Scientific Publication, 1994

Simon Ramo Award, 1993 (outstanding doctoral thesis in plasma physics, American Physical Society)

Department of Energy Distinguished Postdoctoral Fellowship

National Science Foundation Graduate Fellowship

Albert W. Smith Scholarship (full tuition, CWRU)

Ohio Academic Scholar (undergraduate)

Grauer Award (outstanding photography, CWRU)

### SUMMER SCHOOLS

SPE Forum on Uncertainty in Reservoir Evaluation (2003, 1 week). Workshop on moving subsurface evaluation through reservoir simulation into economic evaluation – the goal being to influence business decisions. Member of organizing committee, responsible for session on advanced economic evaluation.

NATO Advanced Study Institute (1992, 2 weeks). Laser interactions with atoms, solids and plasmas. Attended advanced lectures, and presented a paper.

Third International School for Space Plasma Simulation (1987, 2 weeks). Classroom instruction on the theory and methods used in particle, fluid and hybrid plasma simulation. This included "hands on use" of simulation codes running on both an IBM PC and a Cray computer.

NSF Summer Workshop (1978, 8 weeks). Intensive classroom training in nuclear physics supplemented by experimental work on a 2 MeV Van de Graaf accelerator. This work included trace element analysis using Proton Induced X-ray Emission.

### PATENTS

L.B. da Silva, M.D. Feit, M.E. Glinsky, D.L. Matthews, M.D. Perry, B.C. Stuart and A.M. Rubenchik, "Ultrashort pulse high repetition rate laser system for biological tissue processing," U.S. Patent 5720894.

M.E. Glinsky, S.L. Jacques, R.A. London and G.B. Zimmerman, "Intraluminal tissue welding for anastomosis," U.S. Patent 5827265.

P. Celliers, L.B. da Silva, M.E. Glinsky, R.A. London, D.J. Maitland, D.L. Matthews, P. Fitch, "Opto-acoustic thrombolysis," U.S. Patent 6022309.

W. Bennet, P. Celliers, L.B. da Silva, M.E. Glinsky, R.A. London, D.J. Maitland, D.L. Matthews, P. Krulevich, A. Lee, "Opto-acoustic transducer for medical applications," U.S. Patent 5944687.

J. Gunning, M.E. Glinsky, C.D. White, "Method for estimating and/or reducing uncertainty in reservoir models of potential petroleum reservoirs" U.S. Patent 7254091.

D.C. DeMartini, M.E. Glinsky, "Method for improving prediction of the viability of potential petroleum reservoirs" U.S. Patent 7516016.

M.E. Glinsky, J. Kalifa, S. Mallat, "Method for determining impedance coefficients of a seismic trace" U.S. Patent 7519477.

M. E. Glinsky, "Model Predicting Fracturing of Shale" U.S. Patent 9152745.

#### Patent applications

G. Hansen M.E. Glinsky, "Method and system for providing a graphical workbench environment with intelligent plug-ins" (2006).

G. Hansen M.E. Glinsky, "Method and system for providing a graphical workbench environment with intelligent plug-ins for processing and/or analyzing subsurface data" (2006).

M. Strauss, B. Kneller, F. Blanchette, E. Meiburg, M. E. Glinsky, "High resolution numerical simulations of resuspending gravity currents" (2007).

M.E. Glinsky, J. Gunning, "Method for determining improved estimates of properties of a model" (2008).

M.E. Glinsky, A.A. Inayat-Hussain, G. Liu, T. Robb, D.B. Boggs, J.S. Gunning, "Method for evaluating measured electromagnetic data relating to a subsurface region" (2010).

## **PUBLICATIONS**

### Refereed Journals

A.J. Harvey-Thompson et al., "The effect of laser entrance hole foil thickness on MagLIF-relevant laser preheat," Phys. Plasmas **27**, 113301 (2020).

M.E. Glinsky et al., "Quantification of MagLIF Morphology using the Mallat Scattering Transformation," Phys. Plasmas **27**, 112703 (2020).

M.R. Gomez et al., "Performance scaling in magnetized liner inertial fusion experiments," accepted for publication in Physics Review Letters (2020).

M.R. Gomez et al., "Assessing stagnation conditions and identifying trends in Magnetized Liner Inertial Fusion," IEEE Trans. Plasma **47**, 2081 (2019).

A.J. Harvey-Thompson et al., "Constraining preheat energy deposition in MagLIF experiments with multi-frame shadowgraphy," Phys. Plasmas **26**, 032707 (2019).

P.F. Knapp et al., "Origins and effects of mix on magnetized liner inertial fusion target performance," Phys. Plasmas **26**, 012704 (2019).

D.E. Ruiz, M.E. Glinsky, I.Y. Dodin, "Wave kinetic equation for inhomogeneous drift-wave turbulence beyond the quasilinear approximation," *J. Plasma Phys.* **85**, 905850101 (2019).

M. Geissel et al., "Minimizing scatter-losses during pre-heat for magneto-inertial fusion targets," *Phys. Plasmas* **25**, 022706 (2018).

S. A. Slutz et al., "Enhancing performance of magnetized liner inertial fusion at the Z facility," *Phys. Plasmas* **25**, 112706 (2018).

A. J. Harvey-Thompson et al., "Diagnosing and mitigating laser preheat induced mix in MagLIF," *Phys. Plasmas* **25**, 112705 (2018).

M.E. Glinsky, A. Cortis, J. Chen, D. Sassen, H. Rael, "Geomechanical property estimation of unconventional reservoirs using seismic data and rock physics," *Geophysical Prospecting* **63**, 1224 (2015).

J. Chen, M.E. Glinsky, "Stochastic inversion of seismic PP and PS data for reservoir parameter estimation," *Geophysics* **79**, R233 (2014).

D. Myer, S. Constable, K. Key, M.E. Glinsky, G. Lui, "Marine CSEM of the Scarborough gas field, Part 1: Experimental design and data uncertainty," *Geophysics* **77**, E281 (2012).

M. Strauss, M.E. Glinsky, "Turbidity current flow over an erodible obstacle and phases of sediment wave generation," *J. Geophys. Res.* **117**, C06007 (2012).

M.E. Glinsky, J. Gunning, "Understanding uncertainty in CSEM", *World Oil* **232**, 57 (2011).

J. Gunning, M.E. Glinsky, J. Hedditch, "Resolution and uncertainty in 1D CSEM inversion: a Bayesian approach and open-source implementation", *Geophysics* **75**, F151 (2010).

S. Bryant, C. Lerch, M.E. Glinsky "Critical grain size parameters for predicting framework and floating grains in sediments", *Journal of Sedimentary Research* **79**, 817 (2009).

S. Kalla, C.D. White, J. Gunning, M.E. Glinsky, "Downscaling multiple seismic inversion constraints to fine-scale flow models", *SPE Journal* **14**, 746 (2009).

S. Kalla, C.D. White, J. Gunning, M.E. Glinsky, "Consistent downscaling of seismic inversion thicknesses to cornerpoint flow models", *SPE Journal* **13**, 412 (2008).

M.E. Glinsky, M.C. Haase, V. Charoing, G. Duncan, R. Hill, G. O'Halloran, L. Dang, J. Gunning, "Bayesian inversion whispers", *The Leading Edge* **27**, 642 (2008).

M.E. Glinsky, J. Gunning, R. Pascoe, B. Asher, "The value of using relative amplitude changes", *The Leading Edge* **26**, 562 (2007).

- J. Gunning, M.E. Glinsky, C.D. White, "DeliveryMassager: a tool for propagating seismic inversion information into reservoir models", *Computers & Geosciences* **33**, 630 (2007).
- J. Gunning, M.E. Glinsky, "Detection of reservoir quality using Bayesian seismic inversion", *Geophysics* **72**, R37 (2007).
- D.C. DeMartini, M.E. Glinsky, "A model for variation of velocity versus density trends in porous sedimentary rocks", *J. Appl. Phys.* **100**, 014910 (2006).
- J. Gunning, M.E. Glinsky, "Wavelet extractor: a Bayesian well-tie wavelet derivation program", *Computers & Geosciences* **32**, 681 (2006).
- F. Blanchette, M. Strauss, E. Meiburg, B. Kneller, M.E. Glinsky, "High-resolution numerical simulations of resuspending gravity currents: Conditions for self-sustainment", *J. Geophys. Res.* **110**, C12022 (2005).
- M.E. Glinsky, B. Asher, R. Hill, M. Flynn, M. Stanley, J. Gunning, T. Thompson, J. Kalifa, S. Mallat, C. White, D. Renard, "Integration of uncertain subsurface information into multiple reservoir simulation models", *The Leading Edge* **24**, 990
- J. Gunning, M.E. Glinsky, "Delivery: an open-source model-based Bayesian seismic inversion program", *Computers & Geosciences* **30**, 619 (2004).
- S.G. Kuzmin, T.M. O'Neil, M.E. Glinsky, "Guiding center drift atoms", *Phys. Plasmas* **11**, 2382 (2004)
- M. Strauss, M. Sapir, M.E. Glinsky, J.J. Melick, "Geologic lithofacies identification using the multiscale character of seismic reflections", *J. Appl. Phys.* **94**, 5350 (2003).
- M. Strauss, Y. Kaufman, M. Sapir, P. Amendt, R. A. London, M.E. Glinsky, "Self-consistent coupling of cavitation bubbles in aqueous systems", *J. Appl. Phys.* **91**, 4720 (2002).
- M. Friedman, M. Strauss, P. Amendt, R.A. London and M.E. Glinsky, "Two-dimensional Rayleigh model for bubble evolution in soft tissue", *Phys. Fluids* **14**, 1768 (2002).
- M.E. Glinsky, D.S. Bailey, R.A. London, P.A. Amendt, A.M. Rubenchik, M. Strauss, "An Extended Raleigh model of bubble evolution", *Phys. Fluids* **13**, 20 (2001).
- M.E. Glinsky, G.A. Clark, P.K.Z. Cheng, K.R.S. Devi, J.H. Robinson, G.E. Ford, "Automatic event picking in prestack migrated gathers using a probabilistic neural network", *Geophysics* **66**, 1488 (2001).
- F.N. Beg, A.R. Bell, A.E. Dangor, C.N. Danson, AP. Fewes, M.E. Glinsky, B.A. Hammel, P. Lee, P.A. Norreys and M. Tatarakis, "A study of picosecond laser-solid interactions up to  $10^{19}$  W  $\text{cm}^{-2}$ ", *Phys. Plasmas* **4**, 447 (1997).

R.A. London, M.E. Glinsky, G.B. Zimmerman, D.S. Bailey, D.C. Eder, "Laser-tissue interaction modeling with LATIS," *Applied Optics* **36**, 9068 (1997).

M.E. Glinsky, "A Simple Model of Suprathermal Electron Transport," *Physics of Plasmas* **2**, 2796 (1995).

M. Tabak, J. Hammer, M.E. Glinsky, W.L. Kruer, S.C. Wilks, J. Woodworth, E.M. Campbell, M.D. Perry, and R.J. Mason, "Ignition and High Gain with Ultra-Powerful Lasers," *Phys. of Plasmas* **1**, 1626 (1994).

M.E. Glinsky, T.M. O'Neil, M.N. Rosenbluth, K. Tsuruta and S. Ichimaru, "Collisional Equipartition Rate for a Magnetized Pure Electron Plasma," *Phys. Fluids B* **4**, 1156 (1992).

M.E. Glinsky and T. M. O'Neil, "Guiding Center Atoms: Three-body Recombination in a Strong Magnetic Field," *Phys. Fluids B* **3**, 1279 (1991).

Submitted to refereed journals, in preparation for refereed journals, conference proceedings

M.E. Glinsky, D. Baptiste, M. Unaldi, V. Nagassar, "A novel workflow for seismic net pay estimation with uncertainty", submitted to *Geophysical Prospecting*.

M.E. Glinsky, "A new perspective on renormalization: the scattering transformation", submitted to *Physical Review D*.

J. Gunning, M.E. Glinsky, "The implementation and application of fluid contacts in Bayesian model based inversion", in preparation for *Computers & Geosciences*.

M.E. Glinsky, "A coordinate free expression of the BBGKY hierarchy and the variational theory of reaction rates", in preparation for *Phys. Fluids*.

M.E. Glinsky, "Stratigraphic facies from the physics perspective of emergent faces of self organization", Kavli Institute of Theoretical Physics conference on Particle Laden Flows in Nature (2013).

D.S. Sassen, M.E. Glinsky, "Noise-thresholding sparse-spike inversion with global convergence: calibration and applications", Society of Exploration Geophysicists Annual Meeting, extended abstracts (2013).

J. Chen, M.E. Glinsky, "Stochastic inversion of seismic PP and PS data for reservoir parameter estimation", Society of Exploration Geophysicists Annual Meeting, extended abstracts (2013).

M.E. Glinsky, A. Cortis, J. Chen, D. Sassen, H. Rael, "Rock physics and geophysics for unconventional resource, multicomponent seismic, quantitative interpretation", 2<sup>nd</sup> International Workshop on Rock Physics (2013).



J. Gunning, M.E. Glinsky, "Error Modelling in Bayesian CSEM Inversion", European Association of Geophysicists and Engineers Annual Meeting, extended abstracts (2010).

M.E. Glinsky, J. Gunning, S.L. Bryant, D.C. DeMartini, "Detection of reservoir sorting characteristics from seismic data", European Association of Geophysicists and Engineers Annual Meeting, extended abstracts (2010).

J. Gunning, M.E. Glinsky, "Bayesian Approaches to Resolution in CSEM", European Association of Geophysicists and Engineers Annual Meeting, extended abstracts (2009).

S. Kalla, C.D. White, J. Gunning, M.E. Glinsky, "Integration of multi-resolution data using geostatistics, stratigraphy and seismic inversions to build realistic flow simulation models" American Geophysical Union Annual Meeting (2007).

S. Kalla, C.D. White, J.G. Gunning, M.E. Glinsky, "Imposing multiple seismic inversion constraints on reservoir simulation models", SPE Annual Technical Conference (2007).

S. Kalla, C.D. White, J.G. Gunning, M.E. Glinsky, "Consistent Downscaling of seismic inversions to cornerpoint flow models", SPE Annual Technical Conference (2006).

M.E. Glinsky, C. Haase, "The business of open standards in the E&P industry", European Association of Geophysicists and Engineers Annual Meeting, workshop on open standards (2006).

G. Hansen, M.E. Glinsky, "qiWorkbench – an extensible open-source platform for seismic interpretation", European Association of Geophysicists and Engineers Annual Meeting, workshop on open standards (2006).

J.Gunning, M.E. Glinsky, C.D. White, "DeliveryMassager – propagating seismic inversion information into reservoir flow models", European Association of Geophysicists and Engineers Annual Meeting, extended abstracts (2006).

M.E. Glinsky, B. Asher, R. Hill, M. Flynn, M. Stanley, J. Gunning, T. Thompson, J. Kalifa, S. Mallat, C. White, D. Renard, "Integration of uncertain subsurface information into multiple reservoir simulation models", Society of Exploration Geophysicists Annual Meeting, extended abstracts (2005).

J. Gunning, M.E. Glinsky, "Delivery-Extractor: A new open-source wavelet extraction and well tie program", European Association of Geophysicists and Engineers Annual Meeting, extended abstracts (2005).

M.E. Glinsky, G.G. Duncan, M. Jamieson, A. Morrison, "Application of integrated risking on a South African prospect", European Association of Geophysicists and Engineers Annual Meeting, extended abstracts (2004).

G.G. Duncan, M. Jamieson, A. Morrison, M.E. Glinsky, "Lithology and fluid prediction in lightly explored basins", Australian Society of Exploration Geophysicists Annual Meeting, extended abstracts (2004).

T.A. Thompson, M.G. Lamont, B.M. Hartley, M.E. Glinsky, "Automated event picking in prestack hyperspace", Australian Society of Exploration Geophysicists Annual Meeting, extended abstracts (2004).

B. Little, G.G. Duncan, K. Tomich, C. Taylor, M.E. Glinsky, "Boris oilfield in the Gulf of Mexico – a geophysical case study", Australian Society of Exploration Geophysicists Annual Meeting, extended abstracts (2004).

M.E. Glinsky, W.T. Ryan, M.G. Lamont, G.G. Duncan, N.N. Gaynor, J. Gunning, S. Kong, O. Lhemann, "A new paradigm for rapid technology onboarding", Society of Exploration Geophysicists Annual Meeting, extended abstracts (2003).

J. Gunning, M.E. Glinsky, "Bayesian seismic inversion delivers integrated subsurface models", European Association of Geophysicists and Engineers Annual Meeting, extended abstracts (2003).

M.E. Glinsky, M. Strauss, J.J. Melick, M. Sapir, "Geologic lithofacies identification using seismic wavelet transformation", Society of Exploration Geophysicists Annual Meeting, extended abstracts (2002).

M.E. Glinsky, D. DePledge, J. Stracia, "Turbojet model of R&D management" Royal Dutch Shell internal report (1999).

M.E. Glinsky, T.B. Barker, W.E. Sims, J Leguijt "Application of probabilistic AVO inversion to the Ram/Powell field" *Proceedings of Shell Geophysical Conference*, paper 50, (1999).

M. E. Glinsky, W.E. Sims, J. Leguijt, "Developments in probabilistic AVO and 4D inversion," *Proceedings of Shell Geophysical Conference*, paper 50, (1998).

M. Strauss, Y. Kaufman, M Sapir, P. Amendt, R.A. London, M.E. Glinsky, "Self-consistent evolution of tissue damage under stress wave propagation," *SPIE 3601*, 178 (1999).

M. Strauss, M. Friedman, E. Gurewitz, P. Amendt, R.A. London, M.E. Glinsky, "Two-dimensional extended Rayleigh model of vapor bubble evolution," *SPIE 3601*, 212 (1999).

P. Amendt., R.A. London, M. Strauss, M.E. Glinsky, D.J. Maitland, P. Celliers, S.R. Visuri, D.S. Bailey, D.A. Young and D. Ho, C.P. Lin, M.W. Kelly, "Simulation studies of vapor bubble generation by short-pulse lasers," *SPIE 3195*, 259 (1998)

M.E. Glinsky, P.A. Amendt, D.S. Bailey, R.A. London, A.M. Rubenchik, "Extended Rayleigh model of bubble evolution with material strength compared to detailed dynamic simulations", *Laser Tissue Interaction VIII*, Steven L. Jacques, Editor, *Proc. SPIE 2975*, 318 (1997).

M.E. Glinsky, D.S. Bailey, R.A. London, "LATIS modeling of laser induced midplane and backplane spallation", *Laser Tissue Interaction VIII*, Steven L. Jacques, Editor, Proc. SPIE **2975**, 374 (1997).

P.A. Amendt, M.E. Glinsky, D.S. Bailey, R.A. London, M. Strauss, "Modeling of bubble dynamics in relation to medical applications", *Laser Tissue Interaction VIII*, Steven L. Jacques, Editor, Proc. SPIE **2975**, 362 (1997).

M. Strauss, P.A. Amendt, R.A. London, D.J. Maitland, M.E. Glinsky, C.P. Lin, W.M. Kelley, "Computational modeling of stress transient and bubble evolution in short-pulse laser irradiated melanosome particles", *Laser Tissue Interaction VIII*, Steven L. Jacques, Editor, Proc. SPIE **2975**, 261 (1997).

M. Strauss, P. Amendt, R.A. London, D.J. Maitland, M.E. Glinsky, P. Celliers, D.S. Bailey, D.A. Young, S. L. Jacques, "Computational modeling of laser thrombolysis for stroke treatment", *Lasers in Surgery*, Proc. SPIE **2671**, 11 (1996).

W. Small IV, N.J. Heredia, P.M. Celliers, L.B. DaSilva, D.C. Eder, M.E. Glinsky, R.A. London, D.J. Maitland, D.L. Matthews," Laser tissue welding mediated with a protein solder", *Laser Tissue Interaction VII*, Steven L. Jacques, Editor, Proc. SPIE **2681**, (1996).

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M.E. Glinsky, "Medical applications of stress wave propagation and material failure physics," invited talk at the 1995 APS Topical Conference on Shock Compression of Condensed Matter (August 1995, Seattle, WA).

M.E. Glinsky, R.A. London, G.B. Zimmerman, S.L. Jacques, J.D. Ols, "Computer modeling of endovascular patch welding using temperature feedback," *Proceedings of Medical Applications of Lasers III*, Vol. 2623, pp.349-358 (1995).

A.A. Oraevsky, L.B. DaSilva, M.D. Fiet, M.E. Glinsky, B.M. Mammini, K.L. Paquette, M.E. Perry, A.M. Rubenchik, W. Small IV, B.C. Stuart, "Plasma mediated ablation of biological tissues with ultrashort laser pulses," *Laser Tissue Interaction VI*, Steven L. Jacques, Editor, Proc. SPIE **2391**, 423 (1995).

T. Antoun, M.E. Glinsky, L. Seaman, "Modeling of ablation by photospallation using the computer program PUFF/DFRACT," *Laser Tissue Interaction VI*, Steven L. Jacques, Editor, Proc. SPIE **2391**, 413 (1995).

M.E. Glinsky, R.A. London, G.B. Zimmerman, S.L. Jacques, "Modeling of endovascular patch welding using the computer program LATIS," *Laser Tissue Interaction VI*, Steven L. Jacques, Editor, Proc. SPIE **2391**, 262 (1995).

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M.E. Glinsky, T.M. O'Neil, "Guiding center atoms," *Bul. Am. Phys. Soc.* **33**, 1899 (1988).

M. E. Glinsky, "Diversification and strategic management of LLNL's R&D portfolio," *Lawrence Livermore National Laboratory Internal Report UCRL-ID-119576* (December 1994).

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