

# Publications

Parts of this work are published in:

- 1) **I. V. Hertel, R. Stoian, D. Ashkenasi, A. Rosenfeld, E.E.B. Campbell**  
“Surface and bulk ultrashort pulsed laser processing of transparent materials”  
LPM2000, SPIE Proceedings, (2000)
- 2) **R. Stoian, D. Ashkenasi, A. Rosenfeld, R. Kelly, E.E.B. Campbell,**  
“Coulomb Explosion in Ultrashort Pulsed Laser Ablation of  $\text{Al}_2\text{O}_3$ ”  
Phys. Rev. B. 62, 13167-13173, (2000)
- 3) **R. Stoian, D. Ashkenasi, A. Rosenfeld, M. Witmann, R. Kelly, E.E.B. Campbell,**  
“The dynamics of Ion Expulsion in Ultrashort Pulse Laser Sputtering of  $\text{Al}_2\text{O}_3$ ”  
Nucl. Instr. Meth. Phys. Res. B 166-167, 682-690, (2000)
- 4) **R. Stoian, H. Varel, A. Rosenfeld, D. Ashkenasi, R. Kelly, E.E.B. Campbell**  
“Ion time-of-flight analyses of ultrashort pulsed laser-induced processing of  $\text{Al}_2\text{O}_3$ ”  
Appl. Surf. Sci. 165, 44-55, (2000)
- 5) **R. Stoian, D. Ashkenasi, A. Rosenfeld, E.E.B. Campbell**  
“Laser ablation of sapphire with ultrashort pulses”  
Advanced High Power Laser Application (AHPLA) SPIE Proceedings, C. R. Phipps  
and M. Niino eds. 3885, 121-31, (2000)
- 6) **R. Stoian, D. Ashkenasi, A. Rosenfeld, M. Lorenz, E.E.B. Campbell**  
“Dynamics of material removal in ultrashort laser ablation of dielectrics”  
CLEO 2000 Technical Digest, 615, CFK4, (2000)
- 7) **M. Lorenz, A. Rosenfeld, R. Stoian, D. Ashkenasi**  
“Beam propagation of intense ultrashort pulses inside transparent dielectric materials  
for controlled 3D micro structuring  
CLEO 2000 Technical Digest, 612, CFK1, (2000)
- 8) **D. Ashkenasi, R. Stoian, A. Rosenfeld**  
“Single and multiple ultra-short laser pulse ablation threshold of  $\text{Al}_2\text{O}_3$  (corundum) at  
different etch phases.  
Appl. Surf. Sci. 154-155, 40-46, (2000)
- 9) **D. Ashkenasi, M. Lorenz, R. Stoian, A. Rosenfeld**  
“Surface damage threshold and structuring of dielectrics using femtosecond laser  
pulses: the role of incubation”  
Appl. Surf. Sci. 150, 101-106, (1999)
- 10) **R. Stoian, M. Lorenz, D. Ashkenasi, A. Rosenfeld, E.E.B. Campbell**  
“Non-thermal and thermal processes in the ultra-short laser ablation of sapphire”  
CLEO 1999 Technical Digest, 356, CFC1, (1999)

## Publications

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- 11) **M. Lorenz, R. Stoian, D. Ashkenasi, A. Rosenfeld, E.E.B. Campbell**  
“Surface damage threshold and structuring of brittle dielectrics with ultra-short laser pulses”  
CLEO 2000 Technical Digest, 382, CFH2, (2000)
- 12) **A. Rosenfeld, D. Ashkenasi, E. E. B. Campbell, M. Lorenz, R. Stoian and H. Varel**  
“Material processing with femtosecond laser pulses”  
Lasers'98, 7-23, V. J. Corcoran and T. A. Goldman eds. (STS Press Mc Lean, VA, Tucson, AR, USA, (1999)
- 13) **A. Rosenfeld, M. Lorenz, D. Ashkenasi, R. Stoian,**  
“Ultrashort-laser pulse damage threshold of transparent materials and the role of incubation”  
Appl. Phys. A 69(Suppl.), S373-S376, (1999)
- 14) **D. Ashkenasi, G. Herbst, A. Rosenfeld, H. Varel, M. Lorenz, R. Stoian, E.E.B. Campbell,**  
“Laser ablation and structuring of transparent materials with ultrashort laser pulses”  
SPIE 3343, 400, (1998)