

# Innovative Use of Metamaterials in Confining, Controlling, and Radiating Intense Microwave Pulses



Facilitating the rapid transition of research outcomes to the Air Force Research Laboratory

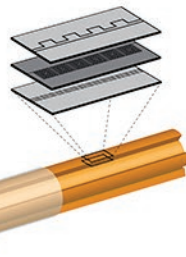
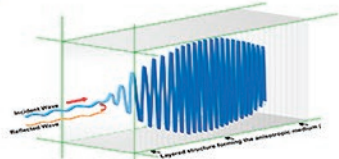
## Integrated Technologies

DIRECTED ENERGY ▲ DEFENSE & CIVILIAN RADAR  
COMMUNICATIONS ▲ ACCELERATOR RESEARCH  
FUNDAMENTAL SCIENTIFIC RESEARCH

Charging & Damage

Waveform Diversity

## Technology Base



Significant Losses

Superior Results

## FY'12 MURI

### Transformational Electromagnetics



MTMs design



High Power VEDs, MTMs, plasma diagnostics



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