

주요 부처별 국가 우선 순위 분야의 비교

OSTP (National Critical Technologies)	DOC (Emerging Technologies)	DOD (Critical Technologies)
<b>MATERIALS</b> <ul style="list-style-type: none"> <li>• Materials synthesis and processing</li> <li>• Electronic and photonic materials</li> <li>• Ceramics</li> <li>• Composites</li> <li>• High-performance metals and alloys</li> </ul>	<ul style="list-style-type: none"> <li>• Advanced materials</li> <li>• Advanced semiconductor devices</li> <li>• Superconductors</li> </ul> <p>] Advanced materials</p>	<ul style="list-style-type: none"> <li>• Composite materials</li> <li>• Semiconductor materials and microelectronic circuits</li> <li>• Superconductors</li> </ul> <p>] Composite materials</p>
<b>MANUFACTURING</b> <ul style="list-style-type: none"> <li>• Flexible computer integrated manufacturing</li> <li>• Intelligent processing equipment</li> <li>• Micro and nanofabrication</li> <li>• Systems management technologies</li> </ul>	<ul style="list-style-type: none"> <li>• Flexible computer integrated manufacturing</li> <li>• Artificial intelligence</li> </ul>	<ul style="list-style-type: none"> <li>• Machine intelligence and robotics</li> </ul>
<b>INFORMATION AND COMMUNICATIONS</b> <ul style="list-style-type: none"> <li>• Software</li> <li>• Microelectronics and optoelectronics</li> <li>• High-performance computing and networking</li> <li>• High-definition imaging and displays</li> <li>• Sensors and signal processing</li> <li>• Data storage and peripherals</li> <li>• Computer simulation and modeling</li> </ul> <b>BIOTECHNOLOGY AND LIFE SCIENCES</b> <ul style="list-style-type: none"> <li>• Applied molecular biology</li> <li>• Medical technology</li> </ul>	<ul style="list-style-type: none"> <li>• High-performance computing</li> <li>• Advanced semiconductor devices</li> <li>• Optoelectronics</li> <li>• High-performance computing</li> <li>• Digital imaging</li> <li>• Sensor technology</li> <li>• High-density data storage</li> <li>• High-performance computing</li> <li>• Biotechnology</li> <li>• Medical devices and diagnostics</li> </ul>	<ul style="list-style-type: none"> <li>• Software producibility</li> <li>• Semiconductor materials and microelectronic circuits</li> <li>• Photonics</li> <li>• Parallel computer architectures</li> <li>• Data fusion</li> <li>• Data fusion</li> <li>• Signal processing</li> <li>• Passive sensors</li> <li>• Sensitive radars</li> <li>• Machine intelligence and robotics</li> <li>• Photonics</li> <li>• Simulation and modeling</li> <li>• Computational fluid dynamics</li> <li>• Biotechnology materials and processes</li> </ul>
<b>AERONAUTICS AND SURFACE TRANSPORTATION</b> <ul style="list-style-type: none"> <li>• Aeronautics</li> <li>• Surface transportation technologies</li> </ul>		<ul style="list-style-type: none"> <li>• Air-breathing propulsion</li> </ul>
<b>ENERGY AND ENVIRONMENT</b> <ul style="list-style-type: none"> <li>• Energy technologies</li> <li>• Pollution minimization, remediation, and waste management</li> </ul>		
		<ul style="list-style-type: none"> <li>• No National Critical Technologies counterpart: High energy density materials, Hypervelocity Projectiles, Pulsed power, Signature control, Weapon system environment.</li> </ul>

자료 : OSTP, National Critical Technologies, March 1991  
 DOC, Emerging Technologies: A Survey of Technical and Economic Opportunities, Spring 1990  
 DOD, Critical Technologies Plan, 15, March 1990