



Name of faculty: Dr. Rajesh Sharma

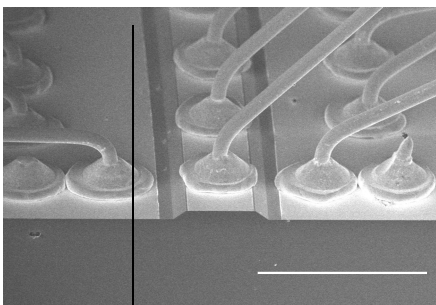
Designation: Associate Professor

Research area: Terahertz radiations, quantum-cascade lasers, ultrafast optics and Photonics, femtosecond lasers, Optics, Condensed matter physics, Materials Science, Nanomaterials

Research Highlights:

Terahertz quantum-cascade laser for Interstellar Applications

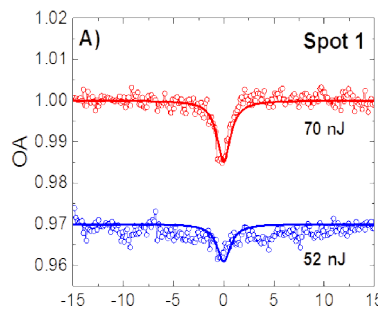
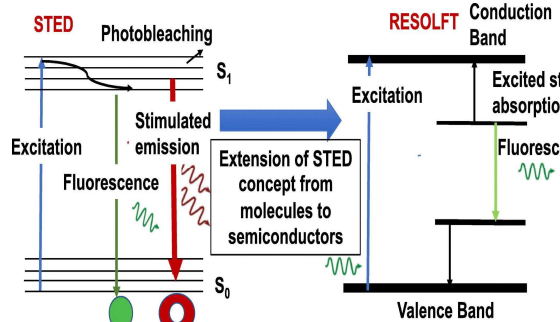
1. **R. Sharma et al.**
Applied Physics Letters, 99 (2011) 151116 Impact: **3.971**
2. **R. Sharma et al.**
Plasmonics, 16, (2021) 449
Impact : **3.0**
3. **R. Sharma et al.**
Applied Physics A 128 144 (2022) Impact : **2.7**
4. **R. Sharma et al.**
Applied Physics Letters, 99 (2011) 082101. Impact: **3.971**



Research Highlights

High-figure-of-merit semiconductor and organic materials for all-optical switching applications

1. **Journal of Materials Science**, 56(4), 2021, 2838-2855
2. **Journal of American Chemical Society** 141 (2019) 17331-36 Impact: **16.383**
3. **Journal of American Chemical Society** 138 (2016) 10112 Impact: **16.383**
4. **Optics Express**, 22 (2014) 3334. Impact: **4.120**
5. **Optics Express** 20 (2012) 11207 Impact: **4.120**



Research Publications: 120,
Cumulative impact index: ~140

*2014- Highest temperature operating terahertz continuous wave laser, featured in the headlines of Europhysics news, BBC and Science daily newspapers.

*2016-Young Scientist award for outstanding research contributions in all-optical switching by CREOL, Government of USA

*National Science Foundation fellowship, **USA -2014**

*German Research Foundation (DFG) young scientist fellowship, **GERMANY-2011**

*Ph.D. degrees awarded under my supervision: 5

*Young researcher award fellowship from **French National Centre for Scientific Research (CNRS)-2009**

