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Attosecond quantum engineering

The wave nature of matter is at the heart of the quantum world. Quantum mechanics was founded more than 70 years ago, and our modern civilized societies are deeply indebted to inventions made possible by quantum mechanics such as computers and CD players. The quantum world is, however, not yet fully understood, and considerable potential for its application still exists. We are trying to control completely the wave nature of matter with light to better understand the quantum world. Improved understanding of the quantum world will result in the development of novel quantum technologies such as single-molecule information processing and sub-nano-scale bond-selective chemistry.

References

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CV

- 1987 Graduated from Faculty of Engineering, The University of Tokyo
1992 Ph. D, The University of Tokyo
1992 Research Associate, Tohoku University
2001 Associate Professor, Tohoku University
2003 Full Professor, Institute for Molecular Science (IMS)
2007-2010 Director, Laser Research Center for Molecular Science, IMS
2010-present Chairman, Department of Photo-Molecular Science, IMS
- 2007 Japan Academy Medal
2007 JSPS Prize
2009 Fellow of the American Physical Society