

Photo-initiated Quantum Molecular Dynamics: Faraday Discussion 163 (Faraday Discussions)



Photochemistry and molecular photophysics have been highly active fields of research for more than half a century; however, during the last two decades synergistic advances in experimental technology and computational methodology have led to a renewed interest in understanding photochemistry and photophysics at the quantum level - photo-initiated quantum molecular dynamics. One of the grand challenges for the 21st century is to develop such a detailed understanding of energy flow in molecules, following the absorption of a photon, that we can begin to develop the knowledge and tools to control photochemistry. Photo-initiated quantum molecular dynamics is not only core fundamental science, it has potentially wide impact. Perhaps one of the most compelling reasons for developing a more detailed understanding of energy flow in molecules between light, electrons and chemical bonds, is to enable us to contribute to some of the challenges in designing light harvesting systems for clean energy generation thus addressing one of the big problems facing society. There are also important applications in fields such as photocatalysis, the design of efficient light-driven molecular devices for data storage and processing, and photomedicine.

From the themed collection: Photo-initiated Quantum Molecular Dynamics. The article was first published on . Faraday Discuss., 2013,163, 9-32 Photo-initiated Quantum Molecular Dynamics: Faraday Discussion 163 Faraday Discussions are a long-established series of meetings by the 17th August to events@ adding FD163 abstract in the subject line.Faraday Discussions (Print ISSN 1359-6640, Electronic. ISSN 1364-5498) Volume 163 ISBN-13: 978-1-84973-690-9 A General Discussion on Photo-initiated Quantum Molecular Dynamics was held in Nottingham, UK on 15th,. 16th andInspire Photo-initiated Quantum Molecular Dynamics. Volume 163, 2013 Previous Article Next Article From the journal: Faraday Discussions field of molecular logic, we focus this discussion on the prospect of using quantum coherence Home Faraday Discussions Blog RSS RSS 2.0 Photo-initiated Quantum Molecular Dynamics: Faraday Discussion 163 Please head your message FD163 oral abstract and follow the submission guidelines.Photo-initiated Quantum Molecular Dynamics: Faraday Discussion 163 Photochemistry and molecular photophysics have been highly active fields of researchThe three pillars of photo-initiated quantum molecular dynamics.

Albert Stolow. Faraday Discuss., 2013,163, 9-32. DOI: 10.1039/C3FD90021E Received 03 JulOur approach is based Photo-initiated Quantum Molecular Dynamics. Journal cover: Faraday Discussions Faraday Discuss., 2013,163, 223-242. 100 ps. Characteris Photo-initiated Quantum Molecular Dynamics. Volume 163, 2013 Previous Article Faraday DiscussionsIndex of contributors. This article is part of the themed collection: Photo-initiated Quantum Molecular Dynamics. About. Cited by. Related. Back to tab navigation.From the themed collection: Photo-initiated Quantum Molecular Dynamics. The article was first published on . Faraday Discuss., 2013,163, 9-32 Photo-initiated quantum molecular dynamics is not only core fundamental science, Photo-initiated Quantum Molecular Dynamics: Faraday Discussion 163 Faraday Discussions documents a long-established series of Faraday Discussion meetings which provide a unique international forum for theFaraday Discussions (Print ISSN 1359-6640, Electronic. ISSN 1364-5498) Volume 163 ISBN-13: 978-1-84973-690-9 A General Discussion on Photo-initiated Quantum Molecular Dynamics was held in Nottingham, UK on 15th,. 16th and DOI: 10.1039/C3FD00090G (Paper) Faraday Discuss., 2013, 163, 545- Photoinitiated quantum molecular dynamics: Concluding Remarks.Recent measurements of the transient laser-induced fragmentation of photoexcited 1,3-cyclohexadiene undergoing isomerization have seen that some of the Photo-initiated Quantum Molecular Dynamics. Volume 163, 2013 Previous Article Next Article From the journal: Faraday DiscussionsFaraday Discussions (Print ISSN 1359-6640, Electronic. ISSN 1364-5498) Volume 163 ISBN-13: 978-1-84973-690-9 A General Discussion on Photo-initiated Quantum Molecular Dynamics was held in Nottingham, UK on 15th,. 16th andVolume 163, 2013 Previous Article Next Article From the journal: Faraday Discussions. Photoinitiated quantum molecular dynamics: Concluding Remarks.We consider here issues in Photo-initiated Quantum Molecular Dynamics raised by Faraday Discussions 163, in the context of three main categories or pillars