Hole injection dynamics from two structurally related Ru-bipyridine complexes into NiO$_x$ is determined by the substitution pattern of the ligands

Maximilian Bräutigam$^{1,2}$, Joachim Kübel$^{1,2}$, Martin Schulz$^{1,2}$, Johannes G. Vos$^5$, Benjamin Dietzek$^{1-4}$

1 Leibniz Institute of Photonic Technology (IPHT) Jena e. V., Albert-Einstein-Str. 9, 07745 Jena, Germany
2 Institute for Physical Chemistry and Abbe Center of Photonics, Friedrich-Schiller University Jena, Helmholtzweg 4, 07743 Jena, Germany, benjamin.dietzek@ipht-jena.de
3 Jena Center for Soft Matter, Friedrich-Schiller University Jena, Lessingstraße 8, 07743 Jena, Germany
4 Center for Energy and Environmental Chemistry Jena (CEEC), Philosophenweg 7a, 07743 Jena, Germany
5 SRC for Solar Energy Conversion, School of Chemical Sciences, Dublin City University, Dublin 9, Ireland
Ru1 in ACN

Figure: DAS of Ru1 in ACN

Figure: transient absorption spectra of Ru1 in ACN

Figure: Kinetic traces at selected wavelengths of Ru1 in ACN

Figure: Residuals after fitting the transient absorption data of Ru1 in ACN with a multi-exponential function
Figure: DAS of Ru1 on NiO

Figure: transient absorption spectra of Ru1 on NiO

Figure: Kinetic traces at selected wavelengths of Ru1 on NiO

Figure: Residuals after fitting the transient absorption data of Ru1 on NiO with a multi-exponential function
Ru2 in ACN

Figure: DAS of Ru2 in ACN

Figure: transient absorption spectra of Ru2 in ACN

Figure: Kinetic traces at selected wavelengths of Ru2 in ACN

Figure: Residuals after fitting the transient absorption data of Ru2 in ACN with a multi-exponential function
Figure: DAS of Ru2 on NiO

Figure: transient absorption spectra of Ru2 on NiO

Figure: Kinetic traces at selected wavelengths of Ru2 on NiO

Figure: Residuals after fitting the transient absorption data of Ru2 on NiO with a multi-exponential function