

Electronic Supplementary Information (ESI) of

**A Gold-containing TiO-complex – a crystalline molecular Precursor as an
Alternative Route to Au/TiO₂ Composites**

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Klaus Merz^{a*}**

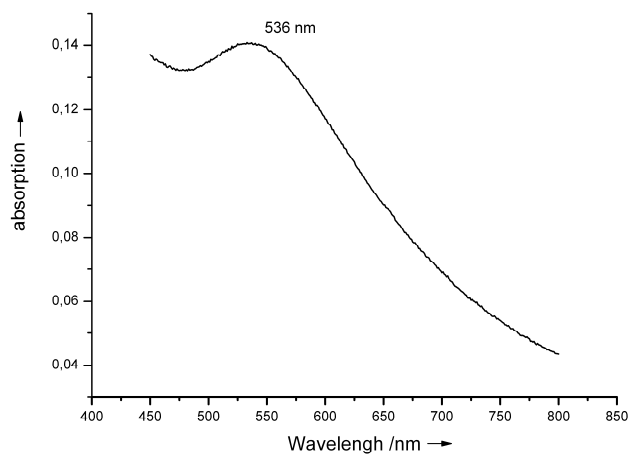
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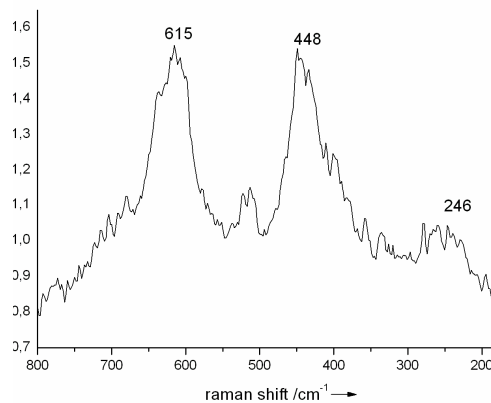
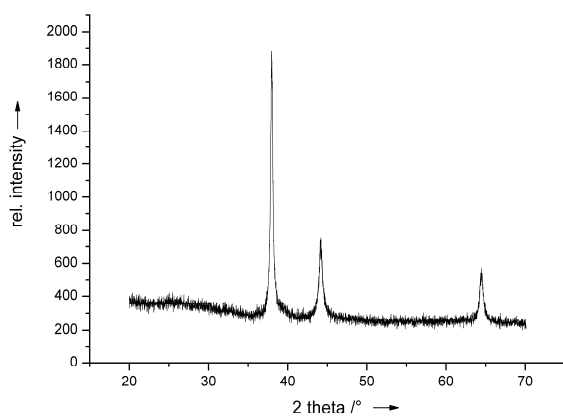
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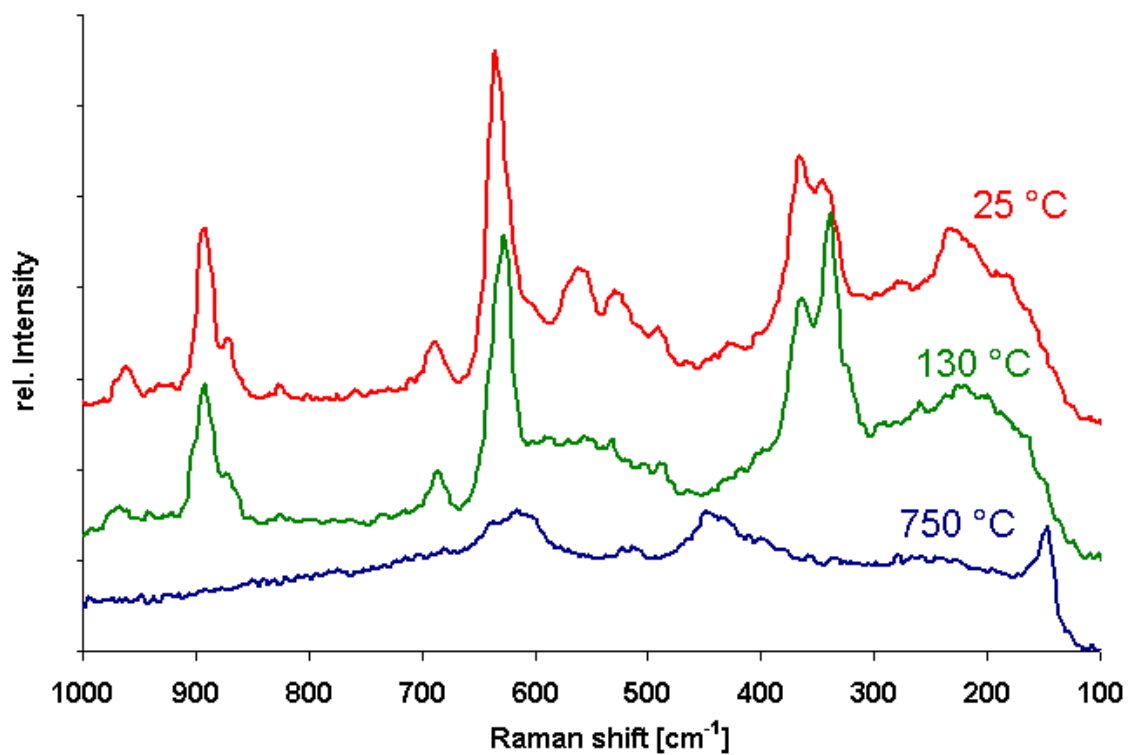
- UV/Vis spectra of the decomposition of **1**
- XRD and Raman-Spectra after photo-decomposition of **1**
- Raman spectra after thermal decomposition of **1**
- Polyhedra of the anionic unit [Ti₄(O₂)₄(Hcit)₂(cit)₂] of **1**
- DTG-MS of **1**.
- TG-DTA of **1**
- TEM image after photo-decomposition of **1**



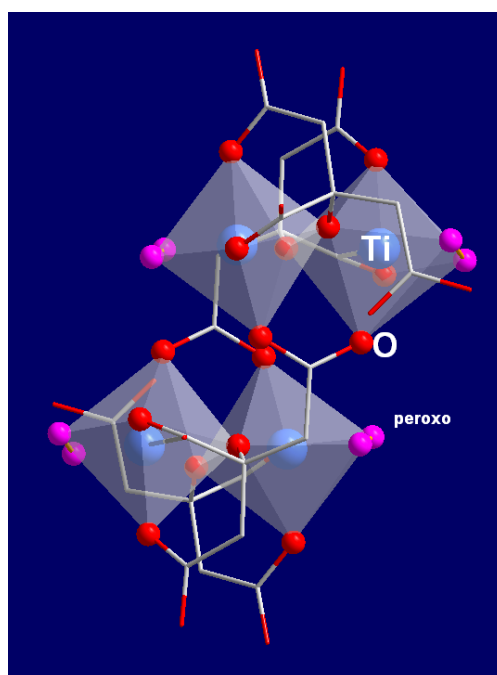
UV/-vis absorption spectra of gold nanoparticles in water produced by decomposition of **1** under UV-irradiation condition



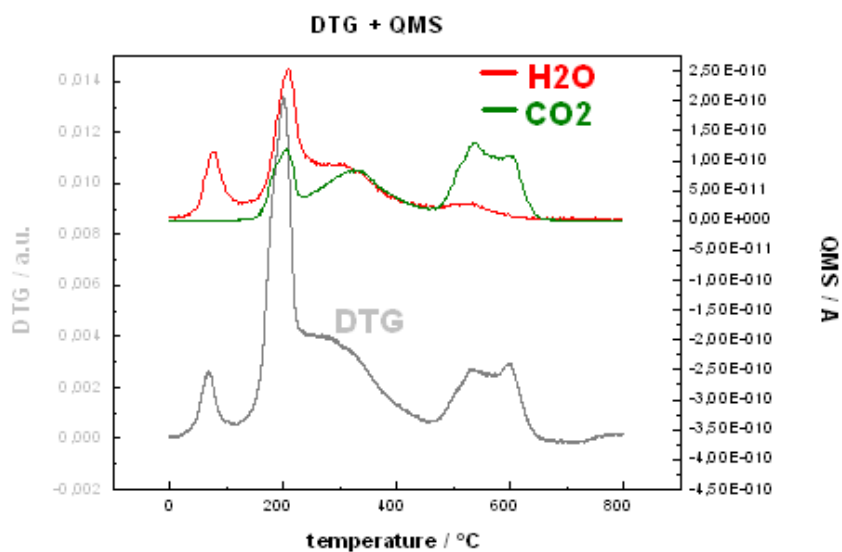
Powder diffraction and Raman spectra of residue, Gold on Rutile, after decomposition of **1** under UV-irradiation condition



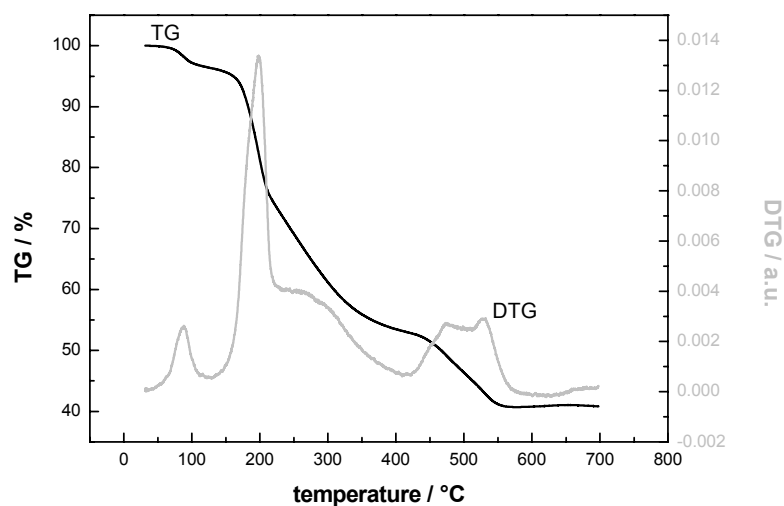
Raman spectra during the decomposition of **1** under thermal condition



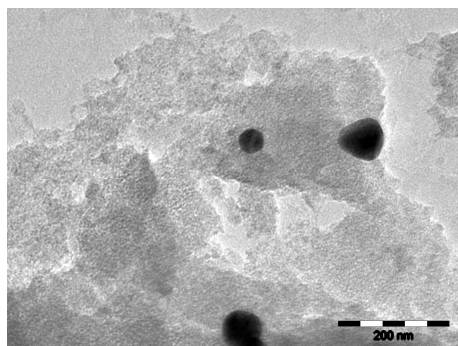
Polyhedra of the anionic unit [Ti₄(O₂)₄(Hcit)₂(cit)₂] of **1**



DTG/MS-experiment during solid-state thermolysis of **1**



TG/ DTG-experiment during solid-state thermolysis of **1**



TEM image after the photo-decomposition of **1**