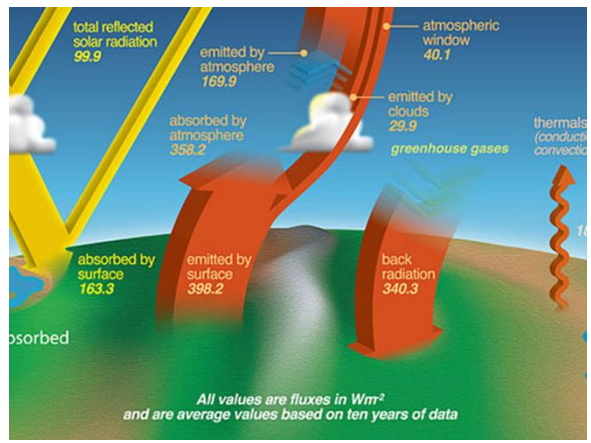
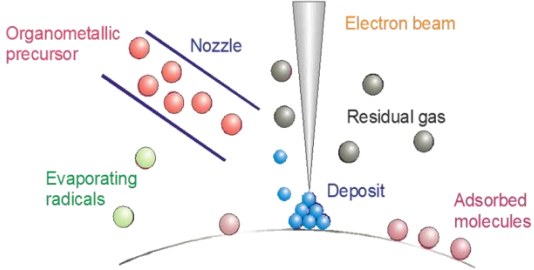


**Nanogranular Compound materials help to harvest Energy from the atmospheric Infra-red radiation in day and night to users of electricity**

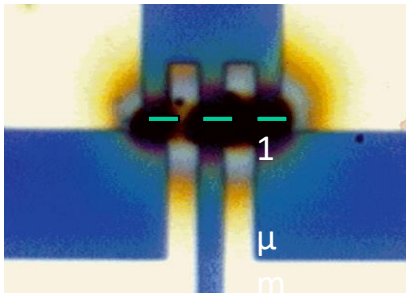
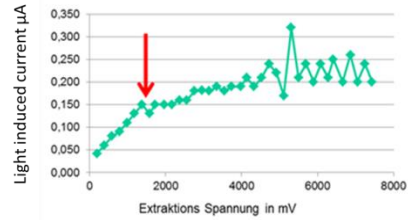
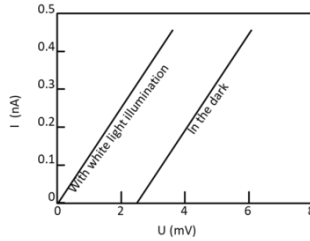
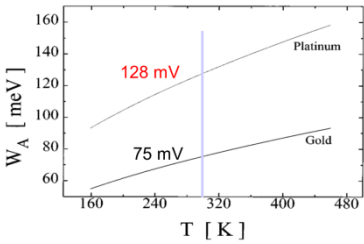
Hans W.P. Koops HaWilKo GmbH Ober-Ramstadt, DE



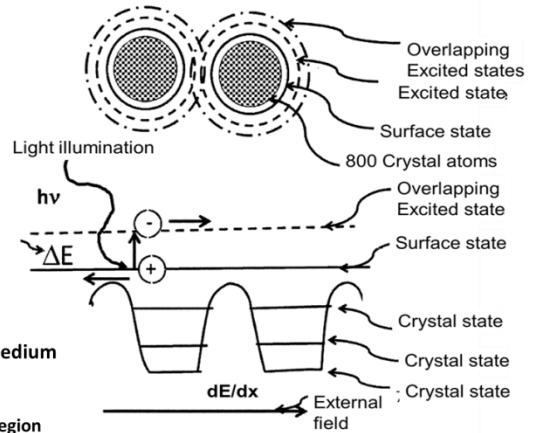
Nasa after 10 years of observation: Green-house molecules Deliver  $340W/m^2$  in the infrared window from the atmosphere



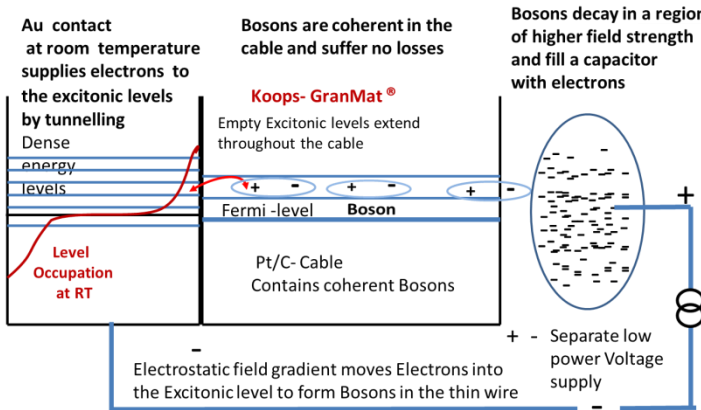
Focused electron beam induced deposition



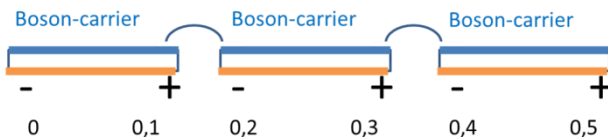
Optical image of Au/C deposit Imaged in white light. Green: Beam track Black: nanogranular Material absorbing all Light, colours: interference colours of thin deposits



**Schematic of a current supply source using Koops-GranMat® as a transport medium and a field gradient to move the Bosons**



Without a field gradient, the wire is used as a storage medium for Bosons



Static potential gradient moves the Bosons

The carbon and the metal form a common Fermi-level, into which the carbon delivers its electrons, and which is filled with electrons from metal and carbon. Electrons and holes form Bosons in the excited energy level above the fermi-level. A field gradient can move the Bosons and delivers the electrons to a capacitor or a user.

Since the Greenhouse IR Radiation penetrates the atmosphere without loss, during the day and also in the night, the application of Koops.GranMat® starts a revolution in energy use.

Also applications as solar panels are much cheaper to build and are much more effective, since almost all radiation energy can be harvested and converted to practical use, in day and at night!

Energy panels need to have a standing voltage drop, to Move the electrons in the gap and will not consume precious energy!