Stanford



Bruce Clemens

Walter B. Reinhold Professor in the School of Engineering, Emeritus and Academic Secretary to the University

Offices of the President and Provost

CONTACT INFORMATION

- **Administrator**

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Bio

BIO

Clemens studies growth and structure of thin film, interface and nanostructured materials for catalytic, electronic and photovoltaic applications. He and his group investigate phase transitions and kinetics in nanostructured materials, and perform nanoparticle engineering for hydrogen storage and catalysis. Recently he and his collaborators have developed nano-portals for efficient injection of hydrogen into storage media, dual-phase nanoparticles for catalysis, amorphous metal electrodes for semiconductor devices, and a lift-off process for forming free-standing, single-crystal films of compound semiconductors.

ACADEMIC APPOINTMENTS

- Academic Secretary, Offices of the President and Provost
- Affiliate, Precourt Institute for Energy
- Affiliate, Stanford Woods Institute for the Environment

ADMINISTRATIVE APPOINTMENTS

- DIrector, Stanford Nano Shared Facilities, (2016- present)

PROFESSIONAL EDUCATION

- PhD, Caltech (1983)

LINKS

- Clemens Research Group: http://stanford.edu/group/clemensgroup

Publications

PUBLICATIONS

- **Pulsed laser ejection of single-crystalline III-V solar cells from GaAs substrates** *CELL REPORTS PHYSICAL SCIENCE*
  Reeves, B. A., Steiner, M. A., Carver, T. E., Zhang, Z., Lindenberg, A. M., Clemens, B. M.
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- **Hydrogen Flux through Size Selected Pd Nanoparticles into Underlying Mg Nanofilms** *ADVANCED ENERGY MATERIALS*
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- **Photoelectrochemical Water Oxidation by GaAs Nanowire Arrays Protected with Atomic Layer Deposited NiO (x) Electrocatalysts**
  Zeng, J., Xu, X., Parameshwaran, V., Baker, J., Bent, S., Wong, H., Clemens, B.
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- **Threshold Fluence Measurement for Laser Liftoff of InP Thin Films by Selective Absorption** *ADVANCED ENGINEERING MATERIALS*
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- **Vapor phase deposition of silver-copper nanoparticles for the oxygen reduction reaction**
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- **Phase segregated copper silver thin films as model catalysts for electrochemical oxygen reduction in alkaline electrolytes**
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SPIE-INT SOC OPTICAL ENGINEERING.2017

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  Li, J., B., Chawla, V., Clemens, B., M.
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  Clemens, B., M.
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