On the early history of atomic layer deposition: most significant findings

VPHA, vph-ald.com: Worldwide collaborative effort, in an atmosphere of openness, respect and trust

VPHA in a nutshell
- In VPHA, volunteer scientists from all around the world work together in an atmosphere of openness, respect and trust, to better understand the early days of ALD.
- VPHA was started in July 2013 and is open for anybody with an ALD background.
- Several conference presentations and two essays on the history of ALD have been published.

Creating the list of most significant publications
VPHA has for this poster created a "recommended reading list of the most significant early ALD publications". This list has been made through open voting that ended June 15th, 2016.

Early ALD applications
The early ALD applications of ALD have been thin-film electronmicroscopy (TFEEL) displays, enabled by Mn-doped ZnS and other ALD layers. Production started in 1985 by Loth Björk and still continues in Espoo by Bencet Oy [1].

Noteworthy early applications for example catalysts, sorbents, polymer fillers.

VPHA in numbers
- as of July 19, 2016
  - 70 co-authors from
  - 19 countries
  - 3 continents

There are:
- 365 articles listed
- 779 comments given

References

Flight display modules with ALD (ALE) TFEEL character units at Helsinki-Vantaa airport, 1983. Photo courtesy of Bencet Oy.

Recommended reading list of early ALD publications:

A. A. Malynov, V. E. Drезд, A. A. Malynov, V. M. Smirnov, "From V. B. Akhleshkov's "Framework" Hypothesis to the Method of Molecular Layering/Atomic Layer Deposition", Chemical Vapor Deposition 21 (2015) 216–240. DOI: 10.1007/s10470-015-00213-

More info: http://vph-ald.com; http://aldhistory.blogspot.fi; LinkedIn group ALD History

Conclusion
This poster presents a recommended reading list of early ALD publications from all over the world. The list has been created collectively in collaboration of tens of scientists from around the world. Although the current list is far from complete, the list currently available, it is also evident that many significant early ALD publications remain outside of this short list.

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