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1970 : Born  
1987-1990: High School (Viborg Katedralskole)  
1990-1998: Military service (including platoon leader and case officer)  
1998-2005: Student at Department of Chemistry, Aarhus University  
1998- : Reserve officer  
2005-2008: PhD student at Department of Chemistry, Aarhus University  
2008- : Lab manager at Center for Material Crystallography (Aarhus University)  
2010- : Occupational safety supervisor at Department of Chemistry, Aarhus University  
.

## Publications

### **Facile Synthesis of Brookite TiO<sub>2</sub> Nanoparticles**

Mamakhel, M. A. H., Yu, J., Søndergaard-Pedersen, F. M., Hald, P. & Iversen, B. B., 11 Dec 2020, In: Chemical Communications. 56, 95, p. 15084-15087 4 p.

### **169 kemiske eksperimenter**

Hald, P., 2018, 1 ed. Aarhus: Aarhus Universitetsforlag. 396 p.

### **A Novel Dual-Stage Hydrothermal Flow Reactor**

Hellstern, H. C., Becker, J., Hald, P., Bremholm, M., Mamakhel, M. A. H. & Iversen, B. B., 2015. 1 p.

### **Development of a Dual-Stage Continuous Flow Reactor for Hydrothermal Synthesis of Hybrid Nanoparticles**

Hellstern, H. C., Becker, J., Hald, P., Bremholm, M., Mamakhel, M. A. H. & Iversen, B. B., 2015, In: Industrial & Engineering Chemistry Research. 54, 34, p. 8500-8508 9 p.

### **Øvelser til Uorganisk Materialekemi**

Becker, J., Christiansen, T. L., Dalgaard, K. & Hald, P., 2015, Århus Universitet.

### **Supercritical Flow Synthesis of TiO<sub>2</sub>**

Hellstern, H. C., Becker, J., Hald, P., Bremholm, M. & Iversen, B. B., 10 Oct 2014. 1 p.

### **Solvothermal flow synthesis and PXRD study of the Pt<sub>1-x</sub>Ru<sub>x</sub> system**

Bondesgaard, M., Mamakhel, M. A. H., Hald, P., Becker, J. & Iversen, B. B., 16 Jun 2014.

### **Solvothermal flow synthesis and PXRD study of the Pt<sub>1-x</sub>Ru<sub>x</sub> system**

Bondesgaard, M., Mamakhel, M. A. H., Hald, P., Becker, J. & Iversen, B. B., 23 May 2014.

### **Nanopartikler på samlebånd**

Becker, J., Hald, P., Hales, J. H. & Iversen, B. B., 2014, In: Aktuel Naturvidenskab. 2, p. 34-39 6 p.

### **The influence of crystallite size and crystallinity of anatase nanoparticles on the photo-degradation of phenol**

Wang, X., Sø, L. U., Su, R., Wendt, S., Hald, P., Mamakhel, M. A. H., Yang, C., Huang, Y., Iversen, B. B. & Besenbacher, F., 2014, In: Journal of Catalysis. 310, p. 100-108 9 p.

**Direct Formation of Crystalline Phase Pure Rutile TiO<sub>2</sub> Nanostructures by a Facile Hydrothermal Method**

Mamakhel, M. A. H., Tyrsted, C., Bøjesen, E. D., Hald, P. H. & Iversen, B. B., 2013, In: Crystal Growth & Design. 13, 11, p. 4730-4734 5 p.

**Kemiske våben**

Hald, P., 2013, In: Fysik-kemi. 40, 5, p. 10-12 3 p.

**Up-Scaled Supercritical Flow Synthesis of Hybrid Materials**

Hellstern, H. C., Becker, J., Hald, P., Bremholm, M. & Iversen, B. B., 2013. 1 p.

**Glucose-assisted continuous flow synthesis of Bi<sub>2</sub>Te<sub>3</sub> nanoparticles in supercritical/near-critical water**

Mi, J., Jensen, T. N., Hald, P., Overgaard, J., Christensen, M. & Iversen, B. B., Jul 2012, In: Journal of Supercritical Fluids. 67, 0, p. 84-88 5 p.

**Highly controlled crystallite size and crystallinity of pure and iron-doped anatase-TiO<sub>2</sub> nanocrystals by continuous flow supercritical synthesis**

Mi, J., Johnsen, S., Clausen, C., Hald, P., Lock, N., Sørensen, L. U. & Iversen, B. B., 2012, In: Journal of Materials Research. 28, 3, p. 333-339 7 p.

**Mesoporous TiO<sub>2</sub> aggregate photoanode with high specific surface area and strong light scattering for dye-sensitized solar cells**

Li, C., Luo, Y., Guo, X., Mi, J., Sørensen, L. U., Hald, P., Meng, Q. & Iversen, B. B., 2012, In: Journal of Solid State Chemistry. 196, p. 504-510 7 p.

**Rapid green continuous flow supercritical synthesis of high performance Li<sub>4</sub>Ti<sub>5</sub>O<sub>12</sub> nanocrystals for Li ion battery applications**

Laumann, A., Bremholm, M., Hald, P., Holzapfel, M., Fehr, T. & Iversen, B. B., 2012, In: Journal of The Electrochemical Society. 159, 2, p. 166-171 6 p.

**Biomolecule-Assisted Hydrothermal Synthesis and Self-Assembly of Bi<sub>2</sub>Te<sub>3</sub> Nanostring-Cluster Hierarchical Structure**

Mi, J., Lock, N., Sun, T., Christensen, M., Søndergaard, M., Hald, P., Hng, H. H., Ma, J. & Iversen, B. B., 2010, In: A C S Nano. 4, 5, p. 2523-2530 8 p.

**Continuous flow supercritical water synthesis and crystallographic characterization of anisotropic boehmite nanoparticles**

Lock, N., Hald, P., Christensen, M., Birkedal, H. & Iversen, B. B., 2010, In: Journal of Applied Crystallography. 43, Part 4, p. 858-866

**Formation and Growth of Bi<sub>2</sub>Te<sub>3</sub> in Biomolecule-Assisted Near-Critical Water: In Situ Synchrotron Radiation Study**

Mi, J., Christensen, M., Tyrsted, C., Jensen, K. O., Becker, J., Hald, P. & Iversen, B. B., 2010, In: Journal of Physical Chemistry Part C: Nanomaterials and Interfaces. 114, 28, p. 12133-12138

**In-Situ Synchrotron Radiation Study of Formation and Growth of Crystalline CexZr1-xO<sub>2</sub> Nanoparticles Synthesized in Supercritical Water**

Tyrsted, C., Becker-Christensen, J., Hald, P., Bremholm, M., Pedersen, J. S., Chevallier, J., Cerenius, Y., Iversen, S. & Iversen, B. B., 2010, In: Chemistry of Materials. 22, p. 1814-1820 7 p.

**Comparison of T-piece and concentric mixing systems for continuous flow synthesis of anatase nanoparticles in supercritical isopropanol/water**

Toft, L. L., Aarup, D. F., Bremholm, M., Hald, P. & Iversen, B. B., 2009, In: Journal of Solid State Chemistry. 182, p. 491-495

**Phase pure crystalline nanoparticles and a method of manufacturing thereof**

Bremholm, M. (Inventor), Felicissimo, M. P. (Inventor), Hald, P. (Inventor), Makmakhel, A. (Inventor), Iversen, S. B. (Inventor) & Iversen, B. B. (Inventor), 2009, Patent No. PA200900270

**Supercritical synthesis of complex nano materials**

Hald, P., 2009, Aarhus Universitetsforlag.

**Critical Size of Crystalline ZrO<sub>2</sub> Nanoparticles Synthesized in Near- and Supercritical Water and Supercritical Isopropyl Alcohol**

Becker-Christensen, J., Hald, P., Bremholm, M., Pedersen, J. S., Chevallier, J., Iversen, S. B. & Iversen, B. B., 2008, In: A C S Nano. 2, 5, p. 1058-1068

**Surfactant-free synthesis of nickel nanoparticles in near-critical water**

Hald, P., Bremholm, M., Iversen, S. B. & Iversen, B. B., 2008, In: Journal of Solid State Chemistry. 181, 10, p. 2681-2683

**Comprehensive size characterisation of TiO<sub>2</sub> nanoparticles synthesized in supercritical propanol**

Hald, P., Becker, J., Pedersen, J. S., Iversen, S. & Iversen, B. B., 2006, In: Journal of Solid State Chemistry. 179, p. 2671-2677

**Supercritical Propanol-Water Synthesis and Comprehensive Size Characterisation of Highly Crystalline anatase TiO<sub>2</sub> Nanoparticles**

Hald, P., Becker-Christensen, J., Bremholm, M., Pedersen, J. S., Chevallier, J., Brummerstedt Iversen, S. & Iversen, B. B., 2006, In: Journal of Solid State Chemistry. 179, p. 2674-2680 7 p.

**Supercritical Synthesis of Boehmite**

Lock, N., Hald, P., Christensen, M., Iversen, S. B., Birkedal, H. & Iversen, B. B., 2006.

**Aqua[N,N'-ethylenebis(salicylideneaminato-N,O)]-oxovanadium(V) nitrate 0.76-hydrate**

Hald, P., Hazell, A., Jensen, T. R., Jensen, H. F. & Jørgensen, J.-E., 2001, In: Acta Crystallographica E. E57, p. 310-312 3 p.