

# Dr. Thomas Cottineau

## Chargé de recherche CNRS

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### Research Experience and Education

- Oct. 2014- **Chargé de Recherche CNRS.** *Institut de Chimie et Procédés pour l'Energie, l'Environnement et la Santé* (ICPEES) UMR7515 CNRS/Univ. Strasbourg. Team Photocatalyse & Photoconversion.
- 2010-2014 **Post doctorat at LMSPC.** *Laboratoire Matériaux Surfaces Procédés pour la Catalyse* (CNRS. Univ. Strasbourg). Teams of Dr. Valérie Keller and Pr. Elena Savinova.
- 2008-2009 **Post doctorat at UQAM.** *Université du Québec à Montréal* (Montréal, Canada), Faculty of Chemistry. Group of Pr. Daniel Bélanger.
- 2007 **PhD in Material Chemistry.** *Institut des matériaux Jean Rouxel de Nantes* (IMN) UMR 6502 CNRS/Univ. Nantes. Advisors Dr. Luc Brohan and Dr. Mireille Richard.
- 2004 **Engineer Degree & DEA of Material Sciences.** *Ecole Polytechnique de l'Univ. de Nantes.*

### Grants and Awards

- 2020-2023 **FRCR HyPE** (Scientific Resp. for ICPEES) *Production and storage of carbon-free hydrogen and its use for the production of energy in devices without noble metals.*
- 2016-2020 **ANR BAGETE** Jeune Chercheur (PI): *Band gap engineering of titanium dioxide nanotubes for solar energy conversion.*
- 2015-2016 **IdEX CoDoTiN** Attractivité Univ. Strasbourg (PI): *Synthesis of co-doped TiO<sub>2</sub> nanotubes for H<sub>2</sub> generation by photoelectrochemistry.*
- 2013 Award « **Prix réflexion stratégique** » for the work on micromechanical detection.
- As partner: ANR BioNanoDetec PRC (2015-2019), ANR ReTiNO<sub>2</sub> Blanc (2012-2016), CNRS PI Energie STEPPEES (2009-2012), ANR OxiTiMIB Photovoltaïque (2006-2009).

### Scientific activities and responsibilities

**Publications:** 32 Peer-reviewed articles (h-index 15; ≈1400 citations)  
4 Proceedings papers 2 Patents

**Presentations:** 22 oral presentations (2 invited) + 6 posters in national and international conferences  
8 presentations in international workshops & 2 invited seminars in foreign universities

**Other:** Member of the organizing committees of 28<sup>th</sup> ICP (2017 Strasbourg); SPEA9 (2016 Strasbourg); 1<sup>st</sup> & 2<sup>nd</sup> workshops of Solar Fuel GDR (2015 Strasbourg; 2016 Autrans)  
Scientific contact for Cronenbourg SEM platform (MEB-Cro). Nominated member of the ICPEES Council. 4 interviews and videos for mainstream media for sciences dissemination.

### Selected publications

- T. Favet, T. Cottineau, V. Keller, M. A. El Khakani. *Solar Energy Materials and Solar Cells* 217, **2020**, 110703
- F. Gelb, Y.-C. Chueh, N. Sojic, V. Keller, D. Zigah, T. Cottineau. *Sustainable Energy & Fuels*, 4, **2020**, 1099
- U. Biapo, A. Ghisolfi, G. Gerer, D. Spitzer, V. Keller, T. Cottineau. *ACS Applied Mater. & Inter.*, 11, **2019**, 35122.
- C. Ronzani, T. Cottineau, I. Gonzalez-Valls, V. Keller, S. Picaud et al. *Adv. Funct. Mater.* 28, **2018**, 18004639.
- T. Favet, D. Ihiawakrim, V. Keller, T. Cottineau. *Materials Science in Semiconductor Processing* 73, **2018**, 22-29.
- C. Marchal, T. Cottineau, M.G. Mendez, C. Colbeau-Justin, V. Caps, V. Keller. *Adv. Energy Mater.* 8, **2018**, 1702142.
- T. Cottineau, H. Cachet, V. Keller, E. M. M. Sutter. *Phys.Chem.Chem.Phys.* 19, **2017**, 31469.
- C. Marien, T. Cottineau, P. Drogui, D. Robert. *Applied Catalysis B*. 194, **2016**, 1.
- T. Cottineau, N. Bealu, P.-A. Gross, S. N. Pronkin, N. Keller, E. R. Savinova, V. Keller. *J. Mater. Chem. A*, 1, **2013**, 2151.
- T. Cottineau, N. Piazzon, S. Josset, F. Schnell, S. Pronkin, E. Savinova, et al. *Angew. Chem. Int. Ed.* 51, **2012**, 5334.