# PUBLICATION LIST – CELINE TERNON

## SCIENTIFIC PRODUCTION

- *Patent:*
  1. **Matériau nanostructuré semi-conducteur polycristallin.**.
     P.Serre, T. Baron, C. Ternon,
     N° E.N : 14 61326
     N° de publication : US2016/148807 ; EP3023386 ; FR3029010
     Déposé le 24/11/2014

- *Publications :*
  1. **Electrical characteristics of silicon percolating nanonet-based field effect transistors in the presence of dispersion**
     T Cazimajou, M Legallais, M Mouis, C Ternon, B Salem, G Ghibaudo
     Solid-State Electronic
  2. **An innovative large scale integration of silicon nanowire-based field effect transistors**
     M Legallais, TTT Nguyen, M Mouis, B Salem, E Robin, P Chenevier, C. Ternon
     Solid-State Electronics
  3. **Mechanisms involved in the hydrothermal growth of ultra-thin and high aspect ratio ZnO nanowires**
     C. Ternon, T. Demes, F. Morisot, D. Riassetto, M. Legallais, H. Roussel, M. Langlet
     *two first authors equally credited*
     Applied Surface Science 410, 423-431 (2017)
  4. **Comprehensive study of hydrothermally grown ZnO nanowires**
     Thomas Demes, Céline Ternon, David Riassetto, Valérie Stambouli and Michel Langlet
     Journal of Materials Science 51, 10652-10661 (2016)
  5. **New insights in the structural and morphological properties of sol-gel deposited ZnO multilayer films**
     T.Demes, C.Ternon, D.Riassetto, H.Roussel, L.Rapenne, I.Gélard, C. Jimenez, V.Stambouli, M.Langlet
     Journal of Physics and Chemistry of Solids 95, 43-55 (2016)
  6. **Low temperature processing to form oxidation insensitive electrical contact at silicon nanowire/nanowire junctions**.
     C. Ternon, P.Serre, JM. Lebrun, V. Brouzet, M. Legallais, S. David, T. Luciani, C. Pascal, T. Baron, JM. Missiaen
     Advanced Electronic Materials 1, 1500172 (2015) doi: 10.1002/aelm.201500172
  7. **Percolating silicon nanowire networks with highly reproducible electrical properties.**
     P. Serre, M. Mongillo, P. Periwal, T. Baron, and C. Ternon,
     Nanotechnology **26**, 015201 (2015)
  8. **Silicon nanonet for biological sensing applications with enhanced optical detection ability.**
     P. Serre, V. Stambouli-Séné, M. Weidenhaupt, T. Baron, C. Ternon
     Biosensors and Biolelectronics **68**, 336-342 (2015)
  9. **Carbon nanotube sheet as top contact electrode for nanowires: highly versatile and simple process**.
     C. Ternon, F. Dupas, S. Stein, C. Aguirre, F. Dhalluin and T. Baron,
     J. Nanosc. Nanotech. **15**, 1669-1673 (2015)

10. **Electron scattering mechanisms in fluorine-doped SnO2 thin films**
    G. Rey, C. Ternon, M. Modreanu, X. Mescot, V. Consonni, D. Bellet,
    J. Appl. Phys. **114**, 183713 (2013).

11. **High aspect ratio semiconducting nanostructure random networks: highly versatile materials for multiple applications**
    C. Ternon, P. Serre, G. Rey, C. Holtzinger, P. Periwal, M. Martin, T. Baron, V. Stambouli, and M. Langlet,
    Phys. Status Solidi RRL **7**, 919–923 (2013) / DOI 10.1002/pssr.201308047

12. **Fabrication of silicon nanowire networks for biological sensing**,
    P. Serre, C. Ternon, V. Stambouli, P. Periwal and T. Baron,
    Sensors and Actuators B **182**, 390-395 (2013)

13. **Morphological and electrical characterization of ZnO nanocomposites in dye-sensitized solar cells,**
    G. Rey, N. Karst, B. Doisneau, H. Roussel, P. Chaudouet, V. Consonni, C. Ternon, and D. Bellet,
    J. Renewable Sustainable Energy **3**, 059101 (2011)

14. **Fabrication and characterization of a composite ZnO semiconductor as electron transporting layer in dye-sensitized solar cells**.
    N. Karst, G.Rey, B.Doisneau, H.Roussel, R.Deshayes, V.Consonni, C. Ternon, D.Bellet,
    Materials Science and Engineering B **176,** 653-659 (2011).

15. **Multifunctional oxide nanostructures by metal-organic chemical vapor deposition (MOCVD).**
    F. Weiss, M. Audier, A. Bartasyte, D. Bellet, C. Girardot, C. Jimenez, J. Kreisel, S. Pignard, M. Salaün, C. Ternon,
    Pure and Applied Chemistry **81** 1523-1534, (2009)

16. **Silicon-rich SiO2/SiO2 Multilayers : a promising material for the Third Generation of Solar Cell**.,
    F. Gourbilleau, C. Ternon, D. Maeste, O. Palais and C. Dufour,
    J. App. Phys. **106**, 013501 (2009).

17. **Carbon nanotubes as injection electrodes for organic thin film transistor devices**,
    C. M. Aguirre, C. Ternon, M. Paillet, P. Desjardins and R. Martel,
    Nanoletters, **9** (4) 1457-61 (2009).

18. **MOCVD of $BiFeO_3$ thin films on SrTiO**,
    J. Thery, C. Dubourdieu, T. Baron, C. Ternon, H. Roussel, F. Pierre,
    Chem. Vap. Depos. **13**, 232 (2007)

19. **Si nanowires growth and characterization using a microelectronics-compatible catalyst: PtSi** ,
    T. Baron, M. Gordon, F. Dhalluin, C. Ternon, P. Ferret, P. Gentile,
    Appl. Phys. Lett. **89**, 233111 (2006)

20. **Roles of interfaces in nanostructured silicon luminescence**.
    C. Ternon, C. Dufour, F. Gourbilleau and R. Rizk,
    Eur. Phys. J. B **41**, 325-332 (2004).

21. **Room-temperature visible light emission from $Si/SiO_2$ multilayers : Roles of interface electronic states and silicon phase**.
    C. Ternon, F. Gourbilleau, C. Dufour, J.L. Doualan and B. Garrido,
    J. Lumin. **99**, 361-364 (2002).

22. **An original approach for the fabrication of $Si/SiO_2$ multilayers using reactive magnetron sputtering**.
    C. Ternon, F. Gourbilleau, X. Portier, P. Voivenel and C. Dufour,
    Thin Solid Films **419**, 5-10 (2002).

23. **Si-rich/$SiO_2$ nanostructured multilayers by reactive magnetron sputtering**.
    F. Gourbilleau, X. Portier, C. Ternon, P. Voivenel, R. Madelon, and R. Rizk,
    Appl. Phys. Lett. **78**, 3058-3060 (2001).

❖ *Book chapter :*

1. **Chapter 1 Fabrication of nanowires**.
   J. Bolten, P.E. Hellström, M. Östling, C. Ternon, P. Serre,
   Beyond-CMOS Nanodevices 1, Partie 1 Silicon nanowire bio-chemical sensors, First Edition, edited by Francis Balestra. (2014). Published by ISTE Ltd and John Wiley & Sons, Inc.

2. **Chapter 2 Functionalization of Si based NW FETs for DNA detection**.
   V. Stambouli, C. Ternon, P. Serre, L. Fradetal,
   Beyond-CMOS Nanodevices 1, Partie 1 Silicon nanowire bio-chemical sensors, First Edition, edited by Francis Balestra. (2014). Published by ISTE Ltd and John Wiley & Sons, Inc.

3. "**Formation of Si-nc by reactive magnetron sputtering**",
   F. Gourbilleau, C. Ternon, C. Dufour, X. Portier, and R. Rizk.
   In Silicon Nanocrystals: Fundamentals, Synthesis and Applications. Edited by Lorenzo Pavesi and Rasit Turan, Eds Wiley, ISBN: 978-3-527-32160-5 (2010)

4. "**Emerging nanotechnology for integration of nanostructures in nanoelectronic devices**", T. Baron, C. Agraffeil, F. Dhalluin, M. Kogelschtaz, G. Cunge, T. Chevolleau, B. Salem, B. Salhi, H. Abed, A. Potié, L. Latu-Romain, C. Ternon, L. Montès, P. Mur, G. Molas, B. De Salvo, E. Jalaguier, T. Ernst, P. Ferret, P. Gentile, N. Pauc.
   *Future Trends in Microelectronics: From nanophotonics to sensor and energy*, pp183-190, 08/2010.

5. **Gold Catalyzed Silicon Nanowires: Defects in the Wires and Gold on the Wires**
   M I den Hertog, J L Rouviere, F Dhalluin, P Gentile, P Ferret, C Ternon, T Baron
   Microscopy of Semiconducting Materials 2007, Springer Proceedings in Physics Volume 120, pp 217-220 (2008),

6. **Emission properties of Si-rich silicon oxide / silica multilayers synthesized by reactive magnetron sputtering**.
   C. Ternon, F. Gourbilleau, C. Dufour, R. Madelon, X. Portier and R. Rizk, Recent Research Developments in Materials Science and Engineering, Transworld research Network, 215-234 (2002).

7. « **Ticking hour glass : effects of the Chamber volume** ».
   M. Ammi, J.-C. Messager, L. Oger, H. Orain, C. Ternon,
   Reliable Flow of Particulate Solid III, Porsgrunn, Norvay, pp. 439-443 (1999).

❖ *Actes de congrès internationaux avec comité de lecture :*

1. **Evaluation of Silicon Nanonet Field Effect Transistor as Photodiodes**
   Muhammed Kayaharman, Maxime Legallais, Celine Ternon, Sangtak Park, Bassem Salem, Mehrdad Irannejad, Eihab Abdel-Rahman, Mustafa Yavuz
   Multidisciplinary Digital Publishing Institute Proceedings **2**, 124 (2017)

2. **On the Development of Label-Free DNA Sensor Using Silicon Nanonet Field-Effect Transistors**
   Thi Thu Thuy Nguyen , Maxime Legallais , Fanny Morisot, Thibauld Cazimajou, Mireille Mouis , Bassem Salem, Valérie Stambouli and Céline Ternon
   Multidisciplinary Digital Publishing Institute Proceedings **1**, 312 (2017)

3. **Toward the integration of Si nanonets into FETs for biosensing applications**
   M. Legallais, T. T. T. Nguyen, M. Mouis, B. Salem and C. Ternon,
   2017 Joint International EUROSOI Workshop and International Conference on Ultimate Integration on Silicon (EUROSOI-ULIS), Athens, Greece, 2017, pp. 231-234.
   doi: 10.1109/ULIS.2017.7962570

4. **Electrical Characterization of Percolating Silicon Nanonet FETs for sensing applications**.
   T. Cazimajou, M. Legallais, M.Mouis, C. Ternon, B.Salem,G. Ghibaudo
   2017 Joint International EUROSOI Workshop and International Conference on Ultimate Integration on Silicon (EUROSOI-ULIS), Athens, Greece, 2017, pp. 23-26.

5. **Role of Nanowire Length in Morphological and Electrical Properties of Silicon Nanonets**
   P. Serre, P. Chapron, Q. Durlin, A. Francheteau, A. Lantreibecq, C. Ternon
   Microelectronics and Electronics (PRIME), 10th Conference on Ph.D (2014)
   doi : 10.1109/PRIME.2014.6872755.

6. **Atomic Layer Deposition of TiO2 ultrathin films on 3D substrates for energy applications**. A. Soum-Glaude, L. Tian, E. Blanquet, V. Brizé, L. Cagnon, G. Giusti, R. Salhi, S. Daniele, C. Ternon and D. Bellet,
   MRS Proceedings **1439** 63-68 (2012)

7. **Zinc oxide nanostructured material for dye sensitized solar cells.**
   G. Rey, N. Karst, V. Consonni, C. Jimenez, L. Rapenne, B. Doisneau, C. Ternon, D. Bellet,
   Conference Record of the IEEE Photovoltaic Specialists Conference, Article number 5616827, 3260-3263 (2010)

8. **Growth of ZnO nanowires by MOCVD: fundamental role of the substrate.**
   C. Ternon, G. Rey, M. Labeau, N. Thire, C. Jimenez, L. Rapenne and D. Bellet,
   ECS Trans. **25**, 437-443 (2009)

9. **Comparison of CBD and MOCVD method for ZnO nanowires growth dedicated to dye sensitized solar cells**.
   G. Rey, H. Majidi,, M. Le Rouzic, N. Bruyant, L.Rapenne, C. Jimenez, M. Labeau, J. B. Baxter, C. Ternon, D. Bellet,
   Proceedings 24rd EuPVSEC 613-617 (2009)

10. **ZnO Nanowire-based dye-sensitized solar cells: investigation of growth conditions.**
    C. Ternon, G. Rey, N. Thiré, D. Bellet,
    Proceedings 23rd EuPVSEC 214-217 (2008)

11. **Structural properties of films grown by magnetron sputtering of a $BiFeO_3$ target**.
    C. Ternon, J. Thery, T. Baron, C. Ducros, F. Sanchette and J. Kreisel,
    Thin Solid Films **515**, 481-484 (2006).

12. **Pulsed metalorganic chemical vapor deposition of iron oxides and bismuth-iron oxides**.
    J. Thery, T. Baron, C. Dubourdieu, C. Ternon, B. Pelissier, H. Roussel, S. Coindeau and I.-L. Prejbeanu, Silicon Nitride and Silicon Dioxide Thin Insulating Films and Other Emerging Dielectrics VIII, pp498-509 *(PV 2005-01 - ISBN 1-56677-459-4*, R. E. Sah, M. J. Deen, J. Zhang, J. Yota, and Y. Kamakura)

13. **Si/$SiO_2$ multilayers: elaboration by reactive magnetron sputtering and photoluminescence emission**.
    C. Ternon, F. Gourbilleau, R. Rizk and C. Dufour,
    Phys. E **16,** 517-222 (2003).

14. **Effect of swift heavy ions on the photoluminescence properties of Si/$SiO_2$ multilayers**.
    F. Gourbilleau, C. Ternon, X. Portier, P. Marie, M. Levalois, R. Rizk and C. Dufour,
    Phys. E **16**, 434-438 (2003).

15. **Anneal temperature dependence of Si/$SiO_2$ superlattice photoluminescence**.
    X. Portier, C. Ternon, F. Gourbilleau, C. Dufour and R. Rizk,
    Phys. E **16**, 439-444 (2003).

16. **Photoluminescence features of Si/$SiO_2$ superlattices produced by reactive magnetron sputtering.**
    C. Ternon, F. Gourbilleau, X. Portier, P. Voivenel, R. Madelon and R. Rizk,
    Solid State Phenomena Vols **80-81**, pp. 249-254 (2001).

❖ *Conférences invitees/Ecoles thématiques*

1. **Potentials of nanowires in photovoltaics**.
   Céline Ternon.
   3SN'2008, Summer School on Semiconductor Nanowires, Juin 2008, Roscoff France

2. **High aspect ratio nanostructure networks: highly versatile material for multiple applications**
   Céline Ternon
   FAW 2013 French American Workshop, Juillet 2013, Grenoble France

3. **In-depth study of percolating behavior of silicon nanonets**
   Céline Ternon, Pauline Serre, Thierry Luciani, Thierry Baron
   EMN Meeting on nanowires, 16-19 May 2016, Amsterdam, Netherlands

4. **Functional ZnO nanonets**
   Céline Ternon, M. Legallais, T. Demes, F. Morisot, V. Stambouli, D. Riassetto, M. Langlet
   PiezoNEMS 2016, 01/12/2016, Grenoble, France

❖ *International Conferences:*

1. On the development of label-free DNA sensor using silicon nanonet field-effect transistors
   T. T. T. Nguyen, M. Legallais, F. Morisot, T. Cazimajou, M. Mouis, B. Salem, V. Stambouli and C. Ternon
   Eurosensors, 2017, Paris (France).
   *Présentation poster*

2. Toward the integration of Si nanonets into FETs for biosensing applications
   M. Legallais, T. T. T. Nguyen, M. Mouis, B. Salem, and C. Ternon
   Joint International EUROSOI Workshop and International Conference on Ultimate Integration on Silicon (EUROSOI-ULIS), 2017, Athens (Greece)
   *Présentation poster*

3. Electrical characterization of percolating silicon nanonet FETs for sensing applications
   T. Cazimajou, M. Legallais, M. Mouis, C. Ternon, B. Salem, and G. Ghibaudo
   Joint International EUROSOI Workshop and International Conference on Ultimate Integration on Silicon (EUROSOI-ULIS), 2017, Athens (Greece)
   *communication orale*

4. ZnO nanonets: functional nanomateials designed for electrical detection
   F. Morisot, T. Demes, V. Stambouli, M. Langlet, M. Mouis, C. Ternon
   EUROMAT 2017, 17-22 septembre 2017, Thessaloniki , Greece
   *communication orale*

5. Toward an eco-friendly DNA grafting process based on epoxy silane functionalization oral,
   F. Morisot, T. Demes, A. Calais, E. Pernot, C. Jimenez, C. Ternon, V. Stambouli
   3rd International Workshop on Functionalized Surfaces for Sensor Applications, 30-31 mai 2017, Besançon, France
   *communication orale*

6. Sol-Gel Direct Photolithography - Principle and applications oral,
   D. Riassetto, C. Ternon, M. Langlet
   BIT's 6th Annual World Congress of Nano Science & Technology, 28 October 2016, Singapour - *Communication orale invitée*

7. Surface Functionalization by Sol-Gel Chemistry, oral
   D. Riassetto, C. Ternon, M. Langlet
   3rd World Congress and Expo on nanotechnology, 7 November 2016, Singapour - *Communication orale invitée*

8. **Semiconductive nanostructures for electrical DNA detection**
   M. Legallais, T. Demes, R. Bange, C. Ternon, E. Bano, M. Mouis, T. Baron, B. Salem, V. Stambouli
   8th Franco-Spanish Workshop IBERNAM-CMC2, 13-14 october 2016, Toulouse, France - *Communication orale*

9. **Fabrication and characterization of high-K dielectric integrated silicon nanowire sensor for DNA sensing application**
   Ganesh Jayakumar, Maxime Legallais, P.-E. Hellström, Mireille Mouis, Valérie Stambouli, Céline Ternon

and M. Östling
SPIE Optics + Photonics 2016, 28/08-01/09 2016, San Diego, California, USA - *Communication orale*

10. **Fabrication of Si nanonet field effect transistors by microelectronic processes**
M. Legallais, P. Serre, S. Bassem, T. Baron, V. Stambouli, M. Mouis et C. Ternon
EMN Meeting on nanowires, 16-19 May 2016, Amsterdam, Netherlands, *Communication orale*

11. **Comprehensive study of ZnO nanowires grown by hydrothermal synthesis**
T. Demes, C. Ternon, M. Langlet, V. Stambouli, D. Riassetto
EMN Meeting on nanowires, 16-19 May 2016, Amsterdam, Netherlands - *Communication orale*

12. Silicon nanonets: promising electrically active material with long-term performances
C. Ternon, P. Serre, J.-M. Lebrun, M. Legallais, S. David, T. Luciani, C. Pascal, T. Baron, J.-M. Missiaen
EMRS Fall Meeting, Septembre 2015, Varsovie Pologne, - *Communication orale*

13. Nanomaterials and their integration on a Si platform
T. Baron, F. Bassani, V. Brouzet, M. Billaud, P. Periwal, J. Moeyaert, T. Luciani, Y. Bogumilowicz, M. Martin, R. Cipro, V. Gorbenko, H. Boutry, B. Salem, T. Ernst, JP Barnes, P. Serre, C. Ternon, R. Alcotte
CMOSETR 2015, Mai 2015, Vancouver Canada - *Communication orale invitée*

14. Silicon nanonets as promising 2D materials for innovative devices_____
**P. Serre**, V.Brouzet, M. Legallais, B. Salem, T. Baron and C. Ternon,
EuroSOI-Ulis janvier 2015, Bologne, Italie. *Présentation poster*.

15. Silicon nanonets for biological sensing applications with enhanced optical detection ability
**P. Serre**, V. Stambouli-Séné, M. Legallais, M. Weidenhaupt, T. Baron, C. Ternon,
HYMA mars 2015, Sitges, Espagne. *Présentation poster*

16. **Silicon nanowire nanonet based DNA sensors for enhanced fluorescence signal**
P. Serre, V.Stambouli, P.Periwal, T. Baron and C. Ternon
*BIOSENSORS 2014, 24th Wolrd Congress on Biosensors,* Mai 2014Melbourne Australia, *Présentation poster*

17. Role of Nanowire Length in Morphological and Electrical Properties of Silicon Nanonets
P. Serre, P. Chapron, Q. Durlin, A. Francheteau, A. Lantreibecq, C. Ternon
Prime 2014, janvier 2014 Grenoble France, *Communication orale*

18. Texture development and electron scattering mechanisms in fluorine-doped SnO2 thin films.
V. Consonni, G. Rey, G. Giusti, M. Modreanu, C. Ternon, and D. Bellet
MRS Décembre 2013, Boston USA, Symposium M, *Communication orale*

19. High aspect ratio nanostructure random networks: highly versatile material for multiple applications.
C. Ternon, P. Serre, C. Holtzinger, P.Periwal, C.M. Aguirre, T. Baron,V. Stambouli, M. Langlet ICON 2013, 5th International Conference on One Dimensionnal Nanomaterials Septembre 2013, Annecy France *Présentation poster*

20. Elaboration of a DNA sensor based on a random silicon nanowire network,
P. Serre, V.Stambouli, M. Mongillo, P.Periwal, T. Baron and C. Ternon
ICON 2013, 5th International Conference on One Dimensionnal Nanomaterials Septembre 2013, Annecy France *Présentation poster*

21. Conductive randomly oriented silicon nanowire networks for biological sensing.
P. Serre, C. Ternon, V. Stambouli, M. Mongillo and T. Baron
E-MRS 2012 Fall Meeting, septembre 2012, Varsovie Pologne *Communication orale*

22. Atomic Layer Deposition of TiO2 ultrathin films on 3D substrates for energy applications
A. Soum-Glaude, L. Tian, E. Blanquet, V. Brizé, L. Cagnon, G. Giusti, R. Salhi, S. Daniele, C. Ternon and D. Bellet
MRS Spring Meeting, Avril 2012, San Francisco, USA, *Présentation poster*

23. ZnO / CdTe core shell nanowires on tin dioxide thin films for solar cells
V. Consonni, G. Rey, M. Jolliot, E. Puyoo, B. Doisneau, H. Roussel, C. Ternon, S. Renet, and D. Bellet.
MRS Décembre 2011, Boston USA, Symposium O, *Présentation poster*

24. ZnO nanowire-based radial structures for photovoltaic applications
    V. Consonni, G. Rey, J. Bonaimé, N. Karst, B. Doisneau, H. Roussel, C. Ternon, S. Renet, and D. Bellet.
    5th Nanowire Growth Workshop Novembre 2010, Rome Italie, *Présentation poster*

25. Zinc oxide nanostructured material for dye sensitized solar cells
    G. Rey, N. Karst, V. Consonni, C. Jimenez, L. Rapenne, B. Doisneau, C. Ternon, D. Bellet,
    35th IEEE Photovoltaic Specialists Conference, PVSC 2010, juin 2010, Honolulu Hawai, *Communication orale*

26. Innovative material for electron transporting layer in dye sensitized solar cells
    **N. Karst**, G. Rey, B. Doisneau, H. Roussel, R. Deshayes, V. Consonni, C. Ternon , D. Bellet
    1st European Energy Conference, Avril 2010, Barcelone Espagne, *Présentation poster*

27. **Growth of ZnO nanowires by MOCVD: fundamental role of the substrate**
    C. Ternon, G. Rey, M. Labeau, N. Thire, C. Jimenez, L. Rapenne and D. Bellet
    216th Meeting of the Electrochemical Society / EuroCVD-17, Octobre 2009, Vienne Autriche *Présentation poster*

28. **Comparison of CBD and MOCVD method for ZnO nanowires growth dedicated to dye sensitized solar cells**
    G. Rey, H. Majidi,, M. Le Rouzic, N. Bruyant, L.Rapenne, C. Jimenez, M. Labeau, J. B. Baxter, C. Ternon, D. Bellet
    24th European Photovoltaic Solar Energy Conference, Septembre 2009, Hambourg Allemagne - *Présentation poster*

29. X-Ray investigation of nanostructured materials for Photovoltaic applications
    D. Bellet, E. Bellet-Amalric, H. Roussel, S. Coindeau, N. Bruyant, G. Rey, C. Ternon, S. Huang, G. Conibeer.
    E-MRS 2009 Spring Meeting, Juin 2009, Strasbourg France - *Communication orale invitée*

30. **X-Ray diffraction of nanostructured ZnO for solar cells**
    N. Bruyant, G. Rey, M. Le Rouzic, D. Bellet, C. Ternon
    E-MRS 2009 Spring Meeting, Juin 2009, Strasbourg France - *Communication orale*

31. **Investigation of the growth of transparent conductive oxide and ZnO nanowires for dye sensitized solar cells**
    G. Rey, C. Ternon, D. Bellet,, A. Bionaz, N. Bruyant, C. Jimenez, J.L. Deschanvres, M. Labeau
    E-MRS 2009 Spring Meeting, Juin 2009, Strasbourg France - *Présentation poster*

32. X-Ray characterization of silicium quantum dots and ZnO nanowires
    N. Bruyant, D. Bellet, G. Rey, C. Ternon, F. Delachat and A. Slaoui
    E-MRS 2009 Spring Meeting, Juin 2009, Strasbourg France - *Communication orale*

33. **ZnO Nanowire-based dye-sensitized solar cells: investigation of growth conditions**
    C. Ternon, G. Rey, N. Thiré, D. Bellet
    23rd EU PVSEC (23rd European Photovoltaic Solar Energy Conference), Septembre 2008, Valence Espagne - *Communication orale*

34. **Influence of thckness on the epitaxial stabilization of $SmNiO_3$ thin films**
    Cécile Girardot**,** F. Conchon, A. Boulle, L. Rapenne-Homand , N. Ihzaz, C. Ternon, F. Weiss, N. Caillault, R. Guinebretière, J. Kreisel, S. Pignard
    EuroCVD-16, Septembre 2007, Den Haag Pays Bas - *Présentation poster*

35. **Carbon Nanotube Networks for optoelectronic applications**
    B. Cardin St-Antoine, C. M. Aguirre, C. Ternon, P. Desjardins, R. Martel
    2nd Workshop on Nanotube optics and Nanospectroscopy: WONTON 07, juin 2007, Montréal Canada - *Présentation poster*

36. **1D carbon nanotube electrodes**
    C. M. Aguirre, C. Ternon, M. Paillet, B. St-Antoine, P. Desjardins, R. Martel
    2007 APS March meeting, Mars 2007, Denver USA - *Communication orale*

37. **In-situ characterization of iron oxide quantum dots and thin film growth using AFM**
    J. Théry, M. Gordon, T. Baron, C. Dubourdieu, C. Ternon, H. Roussel
    2006 MRS Fall Meeting, Décembre 2006, Boston USA - *Communication orale*

38. **Feasibility of Si Nanowire Integration: CVD Growth, Characterization and Comparison of Au vs PtSi Catalysts**
    T. Baron, M. Gordon, F. Dhalluin, M. Den Hertog, P. Ferret, P. Gentile, C. Ternon, K. Aissou and J.-L. Rouviere
    2006 MRS Fall Meeting, Décembre 2006, Boston USA - *Communication orale*

39. **Structural properties of films grown by magnetron sputtering of a $BiFeO_3$ target**
    C. Ternon, J. Thery, T. Baron, C. Ducros, F. Sanchette and J. Kreisel
    13th International Congress on Thin Films / 8th International Conference on Atomically Controlled Surfaces, Interfaces and Nanostructures (ICTF 13/ACSIN 8), Juin 2005, Stockholm Suède - *Communication orale*

40. **Pulsed metalorganic chemical vapor deposition of iron oxides and bismuth-iron oxides**
    J. Thery, T. Baron, C. Dubourdieu, C. Ternon, B. Pelissier, H. Roussel, S. Coindeau and I.-L. Prejbeanu,
    207th Spring Meeting of the Electrochemical Society, Mai 2005, Quebec City Canada, - *Communication orale*

41. **$Si/SiO_2$ multilayers: elaboration by reactive magnetron sputtering and photoluminescence emission**
    C. Ternon, F. Gourbilleau, R. Rizk and C. Dufour
    E-MRS 2002 Spring Meeting, Juin 2002, Strasbourg France - *Communication orale*

42. **Effect of swift heavy ions on the photoluminescence properties of $Si/SiO_2$ multilayers**
    F. Gourbilleau, C. Ternon, X. Portier, P. Marie, M. Levalois, R. Rizk and C. Dufour
    E-MRS 2002 Spring Meeting, Juin 2002, Strasbourg France - *Présentation poster*

43. **Anneal temperature dependence of $Si/SiO_2$ superlattice photoluminescence**
    X. Portier, C. Ternon, F. Gourbilleau, C. Dufour and R. Rizk
    E-MRS 2002 Spring Meeting, Juin 2002, Strasbourg France - *Présentation poster*

44. **Photoluminescence features of $Si/SiO_2$ superlattices produced by reactive magnetron sputtering**
    C. Ternon, F. Gourbilleau, X. Portier, P. Voivenel, R. Madelon and R. Rizk
    Polyse 2000, Septembre 2000, Saint-Malo France - *Communication orale*

❖ *National Workshop:*

1. Semiconductor Nanonet : Conception and integration into functional devices for biomolecule detection
   Thuy NGUYEN, Maxime LEGALLAIS, Fanny MORISOT, Mireille MOUIS, Bassem SALEM, Michel LANGLET, David RIASSETTO, Valérie STAMBOULI, and Céline TERNON
   "Journées Nationales des Nanofils Semiconducteurs" (J2N 2017), Grenoble, 13-15 Novembre 2017. - *Communication orale*

2. Study of hydrothermally grown ZnO nanowires. Towards ZnO nanonet-based electrical DNA biosensors
   Thomas DEMES, Céline TERNON, Michel LANGLET, Valérie STAMBOULI, David RIASSETTO
   12ème Journée Sol-Gel et Chimie Liquide Rhône-Alpes-Auvergne, 24/03/2016 Saint-Etienne, France - *Communication orale*

3. De l'élaboration de nanonets de silicium par voie liquide à la fabrication de transistors à effet de champ
   Maxime Legallais, P. Serrc, S. Bassem, T. Baron, V. Stambouli, M. Mouis et C. Ternon
   12ème Journée Sol-Gel et Chimie Liquide Rhône-Alpes-Auvergne, 24/03/2016 Saint-Etienne, France - *Communication orale*

4. Fabrication and electrical characterisations of silicon nanowire networks : towards an integration into DNA sensors
   P. Serre, C. Ternon, V. Stambouli and T. Baron,
   Workshop GDR « Nanofil, nanotubes, semiconducteurs », Novembre 2012, Rennes, France, *Présentation poster*

5. Electron transport in polycrystalline thin films of fluorine doped tin oxide
   Rey G., Consonni V., Ternon C., Bellet D.
   NanoTCMs Workshop juin 2012 Grenoble France - *Présentation poster*

6. *ZnO nanowire-based core shell structures for solar cells*
   V. Consonni, G. Rey, M. Jolliot, E. Puyoo, B. Doisneau, H. Roussel, E. Appert, C. Ternon, S. Renet and D.

Bellet
2ème Colloque National ZnO. Juin 2011, Paris, France, *Communication orale*

7. Fabrication and characterization of ZnO composite film for dye sensitized solar cells application
**N. Karst**, G. Rey, B. Doisneau, H. Roussel, R. Deshayes, V. Consonni, C. Ternon , D. Bellet
12ème journée de la matière condensée, Août 2010, Troyes France, *Présentation poster*

8. *Élaboration de matériaux innovants en couches minces par MOCVD pour les cellules solaires de troisième génération*
J.L. Deschanvres, S. Forissier, A. Peireira, B. Moine, G. Rey, C. Ternon and D. Bellet
Matériaux 2010, Octobre 2010, Nantes, France, *Communication orale*

9. Growth of Zno nanowires by metal-organic chemical vapor deposition.
H. Abed, M. Bonvalot, T. Baron, M. Kogelschatz, F. Dhalluin, C. Jiménez, M. Labeau, E. Sarigiannidou, C. Ternon, C. Vallée, O. Joubert
Workshop " Oxydes fonctionnnels pour intégration en micro- et nano-électronique ", Juin 2008, Autrans France - *Communication orale*

10. **Croissance de nanofils de ZnO en vue de la réalisation de cellules solaires à colorant**
C. Ternon, G. Rey, N. Thiré, D. Bellet.
Journée annuelle de la SF2M, juin 2008, Paris France - *Communication orale*

11. **Carbon Nanotube Networks: Exceptional Electrical Properties**
C. M. Aguirre, B. Cardin St-Antoine, E. Adam, M. Paillet, C. Ternon, P. Desjardins, R. Martel
Congrès annuel du RQMP (Regroupement Québécois sur les Matériaux de Pointe) Mai 2007, Montréal Canada - *Présentation poster*

❖ *Séminaires :*

1. « **Nanostructures luminescentes à base de silice et de silicium. De l'élaboration par pulvérisation magnétron réactive à la modélisation de la photoluminescence.** ».
C. Ternon
22 mai 2003 : séminaire invité à l'Institut d'Électronique, de Microélectronique et de Nanotechnologie de Lille (contact : C. Delerue, département ISEN)

2. **Luminescent silica and silicon based nanostructures: from fabrication by reactive magnetron sputtering to photoluminescence modelling.**
C. Ternon
2 avril 2003 : séminaire invité à l'Institut for Atomic and Molecular Physics de Amsterdam (contact : S. Tans, Group Biophysics)

3. **A new approach for the fabrication of $Si/SiO_2$ superlattices using a reactive magnetron sputtering**
C. Ternon
29 janvier 2001 : séminaire invité à l'Institut für Physikalische Elektronik de Stuttgart (contact : J. Köhler, Gruppe Lazerprozesse)

# PEDAGOGIC PRODUCTION

❖ *Publications :*

1. **Simulation, élaboration et caractérisation de cellules photovoltaïques**.
C. Ternon, A. Kaminski, D. Constantin, L. Claudon, F. Volpi, L. Vincent, Q. Rafhay et A. Bsiesy
J3eA **13**, 0011 (2014).

2. **Réalisation et caractérisation de cellules photovoltaïques.**
A. Kaminski-Cachopo, C. Ternon, F. Volpi, D. Constantin, L. Vincent, Q. Rafhay, A. Bsiesy
Proceeding 12ème journées pédagogiques du CNFM, 28-20/11/2012, Saint-Malo (2012)

3. **Mise en place d'un TP de simulation, élaboration et caractérisation d'une cellule photovoltaïque de première génération.**

C. Ternon, D. Constantin, A. Kaminski, L. Claudon, F. Volpi, Q. Rafhay, A. Bsiesy
Proceeding 11ème journées pédagogiques du CNFM, 22-24/11/2010, Saint-Malo (2010).

4. **Utilité du débat scientifique dans l'enseignement supérieur : application à la physique quantique.**

   C ; Ternon, S ; Pignard
   « Question de pédagogies dans l'enseignement supérieur – 2vol- Enseigner, étudier dans le supérieur : pratiques pédagogiques et finalités éducatives » ISBN 978-2-908849-21-9 - pp787-792 (2008).

❖ *Conference :*

1. Dynamiser un cours: Quelques pistes
   **C.Ternon**, S. Pignard, R. Bressoux, M. Weidenhaupt, P. Petitclair, V. Poydenot, P. Benech, N. Sergent, A. Denoyelle, F. Naraghi, F. Chiaruttini, A. Kuhn, M. Legallais, H. Ouslimani, M. Guennou, I. Ionica

   Journée Pédagogique Grenoble INP, Novembre 2014, Grenoble, France - *Présentation poster*

2. Réalisation et caractérisation de cellules photovoltaïques
   A. Kaminski-Cachopo, C. Ternon, F. Volpi, D. Constantin, L. Vincent, Q. Rafhay, A. Bsiesy 12ème journées pédagogiques du CNFM, Novembre 2012, Saint-Malo France - - *Présentation poster*

3. Mise en place d'un TP de simulation, élaboration et caractérisation d'une cellule photovoltaïque de première génération.
   C. Ternon, D. Constantin, A. Kaminski, L. Claudon, F. Volpi, Q. Rafhay, A. Bsiesy,
   11ème journées pédagogiques du CNFM, Novembre 2010, Saint-Malo France - *Présentation poster*

4. **Utilité du débat scientifique dans l'enseignement supérieur : application à la physique quantique**

   C ; Ternon, S ; Pignard
   5e Colloque "Questions de pédagogie dans l'enseignement supérieur", Juin 2008 Brest France – *Communication orale*