

## Bibliographie

---

- [1] : Réalisation d'un système de pilotage d'un simulateur solaire : mesures I-V et extraction des paramètres- laboratoire de recherche URMER
- [2] : L. Protin, S. Astier, "Convertisseurs photovoltaïques", Techniques de l'ingénieur, Réf D3360 – Vol DAB, <http://ti.idm.fr>
- [3]: **HONSBERG C. and BOWDEN S.** Photovoltaic: Devices, Systems and applications [CDROM]. Sydney, Australia: University of New South Wales, 1998.
- [4] : **D.R. di Valdalbero**, 'La Recherche Energétique Européenne: Pont de Coopération sur la Méditerranée', Liaison Energie-Francophonie, N°71, Energie et Développement Durable en Méditerranée, pp. 71 - 76, 2ème Trimestre 2006.
- [5] : **Document**, Liaison Energie-Francophonie. 'Energie et Développement Durable en Méditerranée', N°71, p. 95, 2ème Trimestre 2006.
- [6] : **S. Bentouba, A. Slimani et M.S. Boucherit**, 'Les Energies Renouvelables dans le Cadre d'un Développement Durable en Algérie, Wilayas du Grand Sud par Exemple', 8ème Séminaire International sur la Physique Energétique, SIPE'06, Centre Universitaire de Béchar, Algérie, 11 - 12 Novembre 2006.
- [7]: **CHAPIN D.M., FULLER C.S., PEARSON G.L.** A new silicon pn junction photocell for converting solar radiation into electrical power. J. Appl. Phys., 1954, Vol. 25, pp. 676-677.
- [8] : **Sze S.M.** Semi-conducteur Devices. New York : John Wiley, 1981, 867 p.
- [9] : **MARTINUZZI S., PALAIS O., PASQUINELLI M. and FERRAZZA F.** *N-type multicrystalline silicon wafers and rear junction solar cells*. The European Physical Journal – Applied Physics, 2005, vol. 32, pp. 187-192.
- [10]: **SZLUFCIK J. et al.** Low-cost industrial technologies of crystalline silicon solar cells. Proc. of the IEEE, vol. 85, No. 5, 1997, pp. 711-729.
- [11]: **GREEN M.A.** Silicon Solar Cells : Advanced Principles and Practice. Sydney, Australia: Centre for photovoltaic devices and systems, UNSW, 1995, 366 p.
- [12] : **RICAUD A.** Photopiles solaires. Lausanne, Suisse : Presse polytechniques et universitaires romandes, 1997, 332 p.
- [13]: **SHOCKLEY W. and QUEISSER H.J.** Detailed Balance Limit of Efficiency of p-n Junction Solar Cells. Journal of Applied Physics, 1961, vol. 32, n°3, pp. 510-519.
- [14]: Z. Bendjellouli ' Contribution a la modélisation d'une cellule solaire', Mémoire de magister université de bachar, 2009.

## Bibliographie

---

[15]: S. PETIBON ‘ Nouvelles architectures distribuées de gestion et de conversion de l’énergie pour les applications photovoltaïques’, université de Toulouse, 2009.

[16]: L. ABBASSEN ‘ Etude de la connexion au réseau électrique d'une centrale photovoltaïque’ Mémoire de magister, université mouloud Mammeri Tizi ouzzo, 2011.

[17] Etude des Propriétés Physiques et Optiques des Couches Minces et des Nanomatériaux pour les Matériaux IV-IV. Application aux Cellules Solaires de Troisième Génération

Thèse doctorat En Physique Energétique et Matériaux, ziani zakarya.

[18] : Céline Mouchet thèse doctorat thème « Croissance des nano fils de Si et de SiGe» 2009 pages 20-50, 60-120.

[19] : M. Bechelany. Nouveau Procédé de Croissance de Nano fils à Base de SiC et de Nanotubes de BN, étude des Propriétés Physiques d'un Nano fils Individuel à Base de SiC. Thèse de Doctorat, Université Claude Bernard - LYON I, 2006.

[20] Yuting Wan, Jian Sha, Bo Chen, Yanjun Fang, Zongli Wang, and Yewu Wang, Nanodevices Based on Silicon Nanowires, Recent Patents on Nanotechnology, 2009, 3, pp:1-9.

[21] : Yao Hea, Chunhai Fanc, Shuit-Tong Lee, Silicon nanostructures for bioapplications, Nano Today, 2010, 5, pp:282-295.

[22] : Zhipen Huang, Nadine Geyer, Peter Werner, Johannes de boor and Ulrich Gösele, Metal assisted Chemical Etching of Silicon: A Review, Adv.Mater, 2011, 23, pp: 285-308.

[23] : L. P. Zhang, J. van Ek, and U. Diebold, Spatial self-organization of a nanoscale structure on the Pt.111. surface, Physical Review B, 1999, 59.

[24] : Y. F. Zhang, Y. H. Tang, N. Wang, D. P. Yu, C. S. Lee, I. Bello, and S. T. Lee, Silicon nanowires prepared by laser ablation at high temperature, Applied Physics Letters, 1998, 72.

[25] : Bodo Fuhrmann, Hartmut S. Leipner, and Hans-Reiner Höche, Ordered Arrays of Silicon Nanowires Produced by Nanosphere Lithography and Molecular Beam Epitaxy, NanoLetters, 2005,5, pp: 2524-2527.

[26] : N.D. Zakharov, P. Werner, G. Gerth, L. Schubert, L. Sokolov, U. Gösele, Growth phenomena of Si and Si/Ge nanowires on Si (1 1 1) by molecular beam epitaxy, Journal of Crystal Growth, 2006, 290, pp: 6–10.

## Bibliographie

---

- [27] : *S. Hofmann, C. Ducati, R. J. Neill, S. Piscanec, and A. C. Ferrari*, Gold catalyzed growth of silicon nanowires by plasma enhanced chemical vapor deposition, Journal of Applied Physics, 2003, 94.
- [28] : *J. Westwater, D.P.Gosain, S.Tomiya, S.Usui, H.Ruda*, Growth of silicon nanowires via gold/silane vapour-liquid-solid reaction, J. Vac. Sci. Technol. B, 1997, 15, pp: 554-557.
- [29] : *Yi Cui, Lincoln J. Lauhon, Mark S. Gudiksen, Jianfang Wang, and Charles M. Lieber*, Diameter-controlled synthesis of single-crystal silicon nanowires, Applied Physics Letters, 2001, 78.
- [30] : *M. K. Sunkara,a) S. Sharma, and R. Miranda*, Bulk synthesis of silicon nanowires using a low-temperature vapor–liquid–solid method, Applied Physics Letters, 2001, 79.
- [31] : Francois Vaurette,lille 1, sciences des matériaux, Fabrication top-down, caractérisation et applications de nanofils silicium
- [32] : *I Zardo, L Yu, S Conesa-Boj, S Estradé, Pierre Jean Alet*, Gallium assisted plasma enhanced chemical vapor deposition of silicon nanowires, Nanotechnology, 2009, 20, pp: 155602.
- [33] : *Jordi Arbiol, Billel Kalache, Pere Roca i Cabarrocas*, Influence of Cu as a catalyst on the properties of silicon nanowires synthesized by the vapour–solid–solid mechanism, Nanotechnology, 2007, 18, pp: 305606.
- [34] : *S. Sharma, T.I. Kamins, R. Stanley Williams*, Diameter control of Ti-catalyzed silicon nanowires, Journal of Crystal Growth, 2004, , pp: 613-618.
- [35] : *Hsing-Yu Tuan, Doh C. Lee, Tobias Hanrath, and Brian A. Korgel*, Catalytic Solid-Phase Seeding of Silicon Nanowires by Nickel Nanocrystals in Organic Solvents, NanoLetters, 2005, 5, pp: 681-684
- [36] : *L. J. Lauhon, Mark S. Gudiksen and Charles M. Lieber*, Semiconductor nanowire heterostructures, Phil. Trans. R. Soc. Lond. A, 2004, 362, pp: 1247–1260.
- [37] : *T. I. Kamins and R. Stanley Williams*, Ti-catalyzed Si nanowires by chemical vapor deposition: Microscopy and growth mechanisms, Journal of Applied Physics, 2001, 89.
- [38] : LAAS – CNRS, LARRIEU Guilhem, CRISTIANO Filadelfo, ED GEET : Micro et Nano systèmes Manipulation et Adressage grande échelle de Nano fils Semi conducteurs pour la réalisation de Nano systèmes Innovants.
- [39] : *H.F. Yan , Y.J. Xing, Q.L. Hang , D.P. Yu , Y.P. Wang , J. Xu ,Z.H. Xi b, S.Q. Feng*, Growth of amorphous silicon nanowires via a solid–liquid–solid mechanism, Chemical Physics Letters, 2000, 323, pp:224–228.

## Bibliographie

---

- [40]: Y.Y. Wong, M. Yahaya, M. Mat Salleh, B. Yeop Majlis, Controlled growth of silicon nanowires synthesized via solid–liquid–solid mechanism, *Science and Technology of Advanced Materials*, 2005, 6 pp: 330–334.
- [41]: Linwei Yu, Maher Oudwan, Oumkelthoum Moustapha, Franck Fortuna and Pere Roca i cabarrocas, Guided growth of in-plane silicon nanowires, *Applied Physics Letters*, 2009, 95, pp: 113106.
- [42]: Rui-qui Zhang, Yeshayahu lifshitz and shuit-tong lee, Oxide-assisted growth of semiconducting nanowires, *Adv .Mater.*2003, 15.
- [43]: Suhua Wang and Shihe Yang, Growth of Crystalline Cu<sub>2</sub>S Nanowire Arrays on Copper Surface: Effect of Copper Surface Structure, Reagent Gas Composition and Reaction Temperature, *Chem. Mater.* 2001, 13, pp: 4794-4799.
- [44]: Xuchuan Jiang, Thurston Herricks, and Younan Xia, CuO Nanowires Can Be Synthesized by Heating Copper Substrates in Air, *Nano Lett.* 2002, 2.
- [45]: yadong yin, guangtao zhang and younou xia, synthesis and characterization of MgO nanowires through a vapor-phase precursor method, *Adv.Funct Mater.*2002,12.
- [46]: D. D. D. Ma, C. S. Lee, F. C. K. Au, S. Y. Tong, S. T. Lee, Small-Diameter Silicon Nanowire surfaces, *Science*, 2003, 299.
- [47] S. T. Lee, N. Wang, Y. F. Zhang, and Y. H. Tang, Oxide-Assisted Semiconductor Nanowire Growth, *Mrs Bulletin*, 1999, 24, pp: 36-42.
- [48]: D. Mijatovic, J. C. T. Eijkel and A. van den Berg, Technologies for nanofluidic systems: top-down vs. bottom-up, *Lab Chip*, 2005, 5, pp: 492–500.
- [49]: Xue-Mei Li, David Reinhoudt and Mercedes Crego-Calama, What do we need for a superhydrophobic surface on the recent progress in the preparation of superhydrophobic surfaces, *Chem. Soc. Rev.* 2007, 36, pp: 1350–1368.
- [50]: Byron D. Gates, Qiaobing Xu, Michael Stewart, Declan Ryan, C. Grant Willson, and George M. Whitesides, New Approaches to Nanofabrication: Molding, Printing, and Other Techniques, *Chem. Rev.* 2005, 105, pp: 1171-1196.
- [51]: Laixia Yang, Iskander Akhatov, Mohammed Mahinfalah, and Bor Z. Jang, NANO-FABRICATION, *Journal of the Chinese Institute of Engineers*, 2007, 30,pp: 441-446
- [52]: Brian Bilenberg, Søren Jacobsen, Carine Pastore, Theodor Nielsen, Simon Riis Enghoff, Claus Jeppesen, Asger Vig Larsen and Anders Kristensen, Technology for Fabrication of Nanostructures by Standard Cleanroom Processing and Nanoimprint Lithography, *Jpn. J. Appl. Phys.* 2005, 44, pp:5606-5608.
- [53]: Kirt R. Williams, Kishan Gupta and Matthew Wasilik, Etch Rates for Micromachining Processing—Part II, *Journal of Microelectromechanical systems*, 2003, 12.

## Bibliographie

---

- [54]: *C.H.Chi,C.J.Kim*, Fabrication of a dense array of tall nanostructures over a large sample area with sidewall profile and Tip sharpness control,Nanotechnology, 2006, pp: 5326-5333.
- [55]: *Kurt W. Kolasinski*, Silicon nanostructures from electroless electrochemical etching, Current Opinion in Solid State and Materials Science, 2005, pp: 73–83.
- [56]: *J.-S. Lee, N.-H. Cho*, Nanostructural and photoluminescence features of nanoporous silicon prepared by anodic etching, Applied Surface Science, 2002, 190, pp: 171–175.
- [57]: Kurt W. Kolasinski, Etching of silicon in fluoride solutions, Surface Science, 2009, 603, pp: 1904–1911.
- [58]: *Lynne Koker and Kurt W. Kolasinski*, Laser-Assisted Formation of Porous Si in Diverse Fluoride Solutions: Reaction Kinetics and Mechanistic Implications, J. Phys. Chem. B , 2001, 105, pp: 3864-3871.
- [59]: *J. Charrier , V. Alaiwan , P. Pirasteh a, A. Najar , M. Gadonna*, Influence of experimental parameters on physical properties of porous silicon and oxidized porous silicon layers, Applied Surface Science, 2007, 253, pp: 8632–8636.
- [60]: Housse Kallel, Etude des propriétés optiques de nano fils individuels de Si, de Ge, et d'alliages et hétéro structures SiGe pour le contrôle de l'absorption et de la diffusion de la lumière.
- [61] : David Kohen. Etude des nano fils de silicium et de leur intégration dans des systèmes de récupération d'énergie photovoltaïque. Matériels. Institut National Polytechnique de Grenoble - INPG, 2012. French. <tel-00802501>.
- [62] : Gunawan, O.Guha, S. Characteristics of vapor-liquid—solid grown silicon nanowire solar cells. Solar Energy Materials and Solar Cells 93, 1388-1393 (aout 2009).
- [63] : Tsakalakos, L, Balch, J., Fronheiser, Korevaar, B.a, Sulima, O. Rand,J.Silicon nanowire solar cells. Applied physics letters 91, 233117 (2007).
- [64] : S. Fonash, J. Arch., J. Hou, W. Howland, P. McElheny,A. Moquin, M. Rogosky, T.Tran, H. Zhu, F. Rubinelli, A Manual for AMPS-1D for windows 95/NT a One-DimensionalDevice Simulation Program for the Analysis of Microelectronic and Photonic Structures. The Pennsylvania State University (1997).
- [65]: P. J. McElheny, J. K. Arch, H.S. Lin and S. J. Fonash, Journal of Applied Physics 64(3) (1988) p.1254.
- [66] : Mohamed Iqbal Kabir , Seyed A.Shahahmadi , Victor Lim, Saleem Zaidi, Kamaruzzaman Sopian, and Nowshad Amin. International Journal of Photoenergy ID 460919 (2012).
- [67] : Zeman. M, et al., Solar Energij Materials and Solar Cells 46, 81-99 (1997).

## Bibliographie

---

- [68] : F. Sgrignuoli, G. Paternoster, A. Marconi, P. Ingenhoven, A. Anopchenko, G. Pucker and L. Pavesi, Modeling of silicon nanocrystals based down-shifter for enhanced silicon solar cell performance, *Journal of Applied Physics* 111, (2012) 034303-1-034303-7.
- [69] : J. K. Arch, F. A. Rubinelli, J. Y. Hou, S. J. Fonash, *Journal of Applied Physics* 69 (10) (1991) p.7057.
- [70] : Rémi Biron, Céline Pahud, Franz-Josef Haug, Cristophe Ballif, *Journal of Non Crystalline Solids* 358 (2012) 1958-1961.