

G. CICERO'S CURRICULUM VITAE

PERSONAL INFORMATION

Family name, First name: Cicero Giancarlo

Date of birth: 3/8/1973

Nationality: Italian

Affiliation: Politecnico di Torino
Applied Science and Technology Department (DISAT)
C.so Duca degli Abruzzi 24,
10129, Torino, Italy

• EDUCATION

2003 PhD in Physics, "Scuola di Dottorato" of the Politecnico of Torino, Italy.

Thesis title: Ab initio simulations of β -SiC growth on Si(001): from atomic adsorption to the buried interface.
Supervisors: F. Pirri (Politecnico of Torino) and A. Catellani (CNR-IMEM, Parma).

1997 Master Degree in Chemistry, University of Torino, Italy. Final score: 110/110 cum laude et mentione.
Thesis title: "Studio teorico e sperimentale di solidi molecolari semplici." Supervisor: Prof. D. Viterbo.

• CURRENT POSITIONS

06/2016 – Present Associate Professor at the DISAT Department of Politecnico of Torino, Italy.

2008 – 05/2016 Assistant Professor at the DISAT Department of Politecnico of Torino, Italy.

• PREVIOUS POSITIONS

2005 – 2008 Post-doc at the Physics Department of Politecnico of Torino.

2004 – 2005 Post-doc at the "Lawrence Livermore National Laboratory" (LLNL, California).

2003 – 2004 Post-doc at the Physics Department of Politecnico of Torino.

2000 – 2003 PhD Student at the Politecnico of Torino.

1999 – 2000 Research training fellow at Physics Department of Politecnico of Torino.

1998 Research Stage at "Centro di Ricerche Enichem-Istituto Guido Donegani" (Novara).

1998 Research training fellow at IFM Chemistry Department, University of Torino.

• MANAGED PROJECTS

- PI of a project funded by the call "La Ricerca dei Talenti", "Computational Design of Nanoporous Materials for Water Desalination Membranes" (2016-2017)

- PI of the Joint Project for the Internationalization of Research "2D materials for Solar Energy Conversion" (2015-2016)

- co-PI of a MITOR Project (MISTI-FUNDS), "Supported gold nanoparticles: a fundamental study on the substrate role and implications in gas sensing and nanocatalysis applications" (2014-2015)

- Responsible of the Italian node of a Marie Curie Initial Training Network "Semiconductor nanowires: from fundamental physics to device applications" (2010-2014)

- co-PI of a MITOR Project (MISTI-FUNDS), "Computationally optimized all carbon based blends for photovoltaic applications" (2013-2014)

- co-PI of a MITOR Project (MISTI-FUNDS), "Theoretical and experimental study of ZnO nanostructure based energy harvesting systems" (2012-2013)

- co-PI of a MITOR Project (MISTI-FUNDS), "Computationally Optimized Photovoltaic Based on Nanomaterials: Elucidating Fundamental Mechanism and Predicting New Designs" (2011-2012)

- PI of the British-Italian Partnership Programme "Comparison of ZnO and TiO₂ based Dye Sensitized Solar Cells: an ab initio study" (2008-2009)

- PI of the NanoSci-ERA FP6-European project, "nanoLICHT – Engineering Light Induced Charge Transfer at the nanoscale: a first step towards inorganic photosynthesis" (2007-2011)

- PI of several ISCRA supercomputing projects at CINECA

• FELLOWSHIPS, AWARDS AND NATIONAL QUALIFICATIONS

2012 National Scientific Qualification for University Assistant Professor position. Sector "Modelli e Metodologie per le Scienze Chimiche".

2012 National Scientific Qualification for University Assistant Professor position. Sector "Fisica Teorica della Materia".

2005 – 2007 Lagrange Post-Doc Fellowship.

1999 –2000 INFM research training fellowship.

2001 Young Scientist award for the best presentation during the European Material Society Spring Meeting.

- **SUPERVISION OF MASTER STUDENTS, GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS**

Supervised Post –Doc Fellows:

2008-2012 A. Aliano

2007-2010 A. Terentjevs

Supervised PhD Students:

2014-2016 F. Raffone currently a PhD student

2011-2013 F. Risplendi "Ab initio investigation of Dye sensitized solar cells"

2011-2013 K. K. Korir "ZnO Nanowires for energy harvesting applications: an ab initio approach"

2011-2012 L. Podrezova, visiting Erasmus PhD student from the Kazakh National Technical University

2011-2012 S. Haffad, visiting PhD student from the Univertisy of Mira-Bejaia (Algeria)

Supervised Master Students at the Politecnico of Torino:

G. Lani "Nanomechanical energy transfer in carbon nanotubes", 2007/2008

F. Risplendi "Silicon based cantilever functionalized with propyl-urea molecules", 2009/2010

G. Russo "Nucleation and induced crystallization in supercooled liquid water", 2009/2010

T. Musso "Study of photo-isomers for solar cells", 2010/2011

I. Berardone "Realizzazione di celle DSSC a base di ossidi nanostrutturati e coloranti innovativi", 2011/2012

F. Raffone "Theoretical study of the electronic properties of gold nanoparticles", 2012/2013

U. Tribuzio "Study and realization of a liquid state solar cell", 2012/2013

M. Junaid "Study of ZnO/Cu₂O based third generation solar cells" 2012/2013

M. Cagnoni "Study of the effect of the annealing process on mixed halide perovskite for solar cell applications" 2013/2014

F. Pinna "Synthesis through Sputtering and Physical-Chemical Characterization of Two-Dimensional MoS₂ Thin Films" 2014/2015

A. Anelli "Separation of ethanol and water using a nanoporous graphene membrane via reverse osmosis (RO)" 2014/2015

- **TEACHING ACTIVITIES**

2011-2015 (4 academic years) Adjoint Prof. "Chimica, fisica e ing. delle superfici", Politecnico di Torino.

2010-2015 (5 a.y.) Collaborator "Solid State Phys. and electronic devices", Politecnico di Torino.

2011-2015 (4 a.y.) Collaborator "Electronic properties of materials", Politecnico di Torino.

2008-2012 (4 a.y.) Adjoint Prof. "Fisica delle superfici ed interfacce", PhD School Politecnico di Torino.

2008-2010 (2 a.y.) Collaborator "Elementi di fisica dello stato solido", Politecnico di Torino.

2009-2010 (1 a.y.) Adjoint Prof. "Multidisciplinary Project I", Politecnico di Torino.

2007-2010 (3 a.y.) Collaborator "Fisica I" and "Fisica Generale I", Politecnico di Torino.

2006-2008 (2 a.y.) Collaborator "Metodi computazionali in Fisica della Materia", PhD School Pol. di Torino.

2006-2008 (2 a.y.) Collaborator "Fisica delle superfici ed interfacce", PhD School Politecnico di Torino.

2002-2004 (2 a.y.) Collaborator "Elementi di Struttura della Materia", Politecnico di Torino.

2000-2004 (4 a.y.) Collaborator "Fisica I", Politecnico di Torino.

- **ORGANISATION OF SCIENTIFIC MEETINGS**

2009 Symposium: "Functionalizing nanostructures towards novel paradigms for energetics" ECOSS 26, Parma, Italy.

2009 "Advanced school on hybrid nanostructured materials for photovoltaic applications", Valencia, Spain.

2007 "Nanoscience and Nanotechnology Colloquia", Politecnico di Torino, Torino, Italy.

2003 "III Congresso Nazionale sul SiC", Chivasso, Italy.

2002 "II Congresso Nazionale sul SiC", Parma, Italy.

2002 "III Silicon Workshop", Genova, Italy.

- **INSTITUTIONAL RESPONSIBILITIES**

2013 Member of the PhD Committee, University of Cagliari, Italy.

2011 Member of the PhD Committee, University of Valencia, Spain.

2011 – 2015 Member of the “Collegio Docenti” Ingegneria Chimica e Dei Materiali, Politecnico di Torino.

2010 – 2012 Member of the “Collegio Docenti” PhD course in Electronic Devices, Politecnico di Torino.

2015 – 2016 Member of the “Collegio Docenti” PhD course in Physics, Politecnico di Torino.

- **EDITORIAL AND REFEREE ACTIVITY**

Editor for the “Molecular Modeling” Section, Encyclopedia of Nanotechnology (Springer), released 2015.

G. Cicero has been reviewer of papers submitted to APS, IOP, Springer and ACS Journals.

- **MAJOR COLLABORATIONS AND VISITING SCIENTIST POSITIONS**

- Center of excellence S3, University of Modena – G. Cicero was involved by S. Corni and A. Catellani in a grand challenge DECI project regarding the simulation of protein/surface interaction mediated by water.

- CNR-IMEM, Parma – G. Cicero collaborates with CNR-IMEM (Parma) Catellani in the framework of several funded projects.

- University of Davis (California) – G. Cicero collaborated with G. Galli on the simulation of the properties of confined water.

- Lawrence Livermore National Lab. – G. Cicero collaborated as visiting scientist with E. Schwegler on the simulation of the properties of confined water and ion solvation at the nanoscale.

- Visiting scientist at the University of Berkeley (California) and MIT (Massachusetts). G. Cicero has been working with J. Grossman on several projects regarding hybrid organic/inorganic systems.

- Visiting scientist at the Molecular Foundry at LBNL, Berkeley (California). G. Cicero carried on a collaboration with D. Prendergast on the simulation of the electronic properties of InN nanostructures for photovoltaic applications.

- Visiting scientist at the Imperial College of London. G. Cicero carried on a collaboration with Prof. with N. M. Harrison and G. Mallia on the simulations of DSSC.

- **INVITED PRESENTATIONS AT INTERNATIONAL CONFERENCES AND SCHOOLS**

- MMD Meeting, Genova, June 22-25, 2005. Presentation title: “Structural properties of water confined between hydrophilic and hydrophobic surfaces, as probed by ab-initio molecular dynamics.”

- APS March Meeting 2006, March 13–17, 2006; Baltimore, MD. Invited talk: “Ab initio simulations of H₂O interaction with β -SiC surfaces.”

- Catalysis from First Principles, September 11-14, 2006, CECAM, Lion, France.

Invited talk: “Structural properties of water confined between hydrophilic and hydrophobic surfaces, as probed by ab initio molecular dynamics”.

- New Perspectives in Nano-Bio Technologies, September 27th 2006, Politecnico of Torino, Torino, Italy.

Invited Talk: “Ab initio simulations of surface stress at the alkyl-terminated Si(001) surfaces.”

- IBWAP Conference, 6-8th July 2009, Constanta, Romania. Invited talk: “Dye sensitized InN nanocolumns: application as light harvesting systems”

- Nanowiring Fall School 2013 “Advanced School on Semiconductor Nanowires”, 6-12th October 2013, Alghero, Italy. Lecture: “DFT Applications to Nanowires”.

- **PUBLISHED PAPERS**

G. Cicero is co-author of the following articles published on international journals:

1. F. Raffone, F. Risplendi and G. Cicero
“A new theoretical insight into ZnO Nanowires Memristive Behavior”
Nano Letters, **16**, 2543-2547 (2016).
2. A. Aliano, G. Cicero and A. Catellani
“Origin of the accumulation layer at the InN/a-In₂O₃ interface”
ACS Applied Materials and Interfaces, **7**, 5415-5419 (2015).
3. F. Risplendi and G. Cicero
“Co-Adsorbent Effect on the Sensitization of TiO₂ and ZnO Surfaces: A Theoretical Study”
Journal of Phys. Chem. C, **119**, 27348-27353 (2015).
4. K. K. Korir, A. Catellani and G. Cicero

- "Ethanol gas sensing mechanism in ZnO nanowires: An ab initio study"
Journal of Phys. Chem. C, **118**, 24533-24537 (2014).
5. Y. Kanai and G. Cicero
"Scaling and spatial analysis of the dielectric response of cadmium selenide nanowires"
Phys. Rev. B, **90**, 165417 (2014).
 6. F. Risplendi, M. Bernardi, G. Cicero and J. C. Grossman
"Structure-property relations in amorphous carbon for photovoltaics"
Appl. Phys. Lett., **105**, 043903 (2014).
 7. F. Fabbri, M. Villani, A. Catellani, A. Calzolari, G. Cicero, D. Calestani, G. Calestani, A. Zappettini, B. Dierre, T. Sekiguchi and G. Salviati
"Zn vacancy induced green luminescence on non-polar surfaces in ZnO nanostructures"
Scientific Reports, **4**, 5158 (2014).
 8. F. Risplendi, A. Ricci and G. Cicero
"Functionalization layer effect on the mechanical properties of silicon based micro-cantilever mass sensors: A theoretical study"
Sensors and Actuators B: Chemical, **195**, 177-180 (2014).
 9. Kh. A. Abdullin, N. B. Bakranov, D. V. Ismailov, J. K. Kalkozova, S. E. Kumekov, L. V. Podrezova and G. Cicero
"Composite materials based on Nanostructured Zinc Oxide"
Semiconductors, **48**, 471-475 (2014).
 10. L. V. Podrezova, V. Cauda, S. Stassi, G. Cicero, Kh. A. Abdullin and B. E. Alpysbaeva
"Properties of ZnO nanorods grown by hydrothermal synthesis on conductive layers"
Crystal Research and Technology, **49**, 599-605 (2014).
 11. K. K. Korir, G. Cicero and A. Catellani
"Piezoelectric properties of zinc oxide nanowires: an ab initio study"
Nanotechnology, **24**, 475401 (2013).
 12. N. Shazad, F. Risplendi, D. Pugliese, S. Bianco, A. Sacco, A. Lamberti, R. Gazia, E. Tresso and G. Cicero
"Comparison of Hemi-Squaraine Sensitized TiO₂ and ZnO Photoanodes for DSSC Applications"
J. Phys. Chem. C, **117**, 22778 (2013).
 13. L. V. Podrezova, S. Porro, V. Cauda, M. Fontana and G. Cicero
"Comparison between ZnO nanowires grown by chemical vapor deposition and hydrothermal synthesis"
Appl. Phys. A, **113**, 623-632, (2013).
 14. A. Catellani, A. Ruini, G. Cicero and A. Calzolari
"First principles description of the electronic properties of doped ZnO"
Phys. Status Solidi B, **250**, 2106-2109, (2013).
 15. G. Cicero, G. Musso, A. Lamberti, B. Camino, S. Bianco, D. Pugliese, F. Risplendi, A. Sacco, N. Shahzad, A. M. Ferrari, B. Ballarin, C. Barolo, E. Tresso and G. Caputo
"Combined experimental and theoretical investigation of the hemi-squaraine/TiO₂ interface for dye sensitized solar cells"
Phys. Chem. Chem. Phys., **15**, 7198-7203 (2013).
 16. F. Risplendi, G. Cicero, G. Mallia and N. M. Harrison
"A quantum-mechanical study of the adsorption of prototype dye molecules on rutile-TiO₂(110): a comparison between catechol and isonicotinic acid"
Phys. Chem. Chem. Phys., **15**, 235-43 (2013).
 17. F. Risplendi and G. Cicero
"Si(1 1 1) surface functionalized with H-bonded SAM: A theoretical study"
Appl. Surf. Sci., **267**, 17-20 (2013).

18. A. L. Alexe- Ionescu, G. Barbero, S. Bianco, G. Cicero and C. F. Pirri
"Electrical response of electrolytic cells limited by different types of electrodes"
J. of Electroan. Chem., **669**, 21-27 (2012).
19. S. Haffad, M. Samah and G. Cicero
"Effect of nitrogen impurities on the physical properties of ZnO nanowires: First-principles study"
Phys. Rev. B, **85**, 165207 (2012).
20. G. Cicero, A. Calzolari, S. Corni, and A. Catellani,
"Anomalous wetting layer at the Au(111) surface"
J. Phys. Chem. Lett., **2**, 2582 (2011).
21. P. A. Greaney, G. Lani, G. Cicero and J. C. Grossman
"Mpemba-Like Behavior in Carbon Nanotube Resonators"
Metallurgical and Materials Transactions A, **42A**, 3907-3912 (2011).
22. A. Aliano, A. Catellani and G. Cicero
"Adatom kinetics on nonpolar InN surfaces: implications for one-dimensional Nanostructures growth"
Appl. Phys. Lett., **99**, 193106 (2011).
23. A. Aliano, A. Catellani and G. Cicero
"Characterization of amorphous In₂O₃: an *ab initio* Molecular Dynamics study"
Appl. Phys. Lett., **99**, 211913 (2011).
24. S. Haffad, G. Cicero and M. Samah
"Structural and electronic properties of ZnO nanowires: a theoretical study"
Energy Procedia, **10**, 128-137 (2011).
25. A. Alexe-Ionescu, G. Barbero, S. Bianco, G. Cicero and E. Tresso
"Small-signal ac response of an electrolytic cell with recombining space charge"
Physics Letters A, **375**, 4225-4232 (2011).
26. A. Molina-Sanchez, A. Garcia-Cristobal, A. Cantarero , A. Terentjevs and G. Cicero
"LDA+U and tight-binding electronic structure of InN nanowires"
Phys. Rev. B, **82**, 165324 (2010).
27. A. Terentjevs, A. Catellani, D. Prendergast and G. Cicero
"Importance of on-site corrections to the electronic and structural properties of InN in crystalline solid, nonpolar surface, and nanowire forms"
Phys. Rev. B, **82**, 165307 (2010).
28. A. Antonio, Y. Li, G. Cicero and G. Giulia
"Structural and Electronic Properties of the Methyl-Terminated Si(111) Surface"
J. Phys. Chem. C, **114**, 11898–11902 (2010).
29. A. Terentjevs, A. Catellani and G. Cicero
"Nitrogen vacancies at InN (1-100) surfaces: A theoretical study"
Appl. Phys. Lett., **96**, 171901 (2010).
30. A. Calzolari, G. Cicero, C. Cavazzoni, R. Di Felice, A. Catellani and S. Corni
"Hydroxyl-Rich β -Sheet Adhesion to the Gold Surface in Water by First-Principle Simulations"
J. Am. Chem. Soc., **132**, 4790–4795 (2010).
31. G. Cicero, A. Ferretti, and A. Catellani
"Surface-induced polarity inversion in ZnO nanowires"
Phys. Rev. B, **80**, 201304(R) (2009).
32. A. Terentjevs, G. Cicero and A. Catellani
"First-principles Investigations of InN Nonpolar Surface Functionalization"
J. Phys. Chem. C, **113**, 11323 (2009).
33. D. Donadio, G. Cicero, E. Schwegler, M. Sharma and G. Galli
"Electronic effects in the IR spectrum of water under confinement"
J. Phys. Chem. B, **113**, 4170 (2009).

34. P. A. Greaney, G. Lani, G. Cicero and J. C. Grossman
"Anomalous Dissipation in Single-Walled Carbon Nanotube Resonators"
Nano Lett., **9**, 3699–3703 (2009).
35. V. Scrinivasan, G. Cicero and J. C. Grossman
"Adsorption-Induced Surface Stresses in Alkanethiolate-Au Self-Assembled Monolayers"
Phys. Rev. Lett., **101**, 185504 (2008).
36. G. Cicero, J. C. Grossman, E. Schwegler, F. Gygi and G. Galli
"Water confined in nanotubes and between graphene sheets: a first principle study"
J. Am. Chem. Soc., **130**, 1871 (2008).
37. R. W. Friddle, M. C. LeMieux, G. Cicero, A. B. Artyukhin, V. V. Tsukruk, J. C. Grossman, G. Galli and A. Noy
"Single functional group interactions with individual carbon nanotubes."
Nature Nanotech., **2**, 692, (2007).
38. G. Cicero, C. Carbonera, K. Valegard, J. Hajdu, I. Andersson and G. Raghino
"Study of the oxidative half-reaction catalyzed by a non-heme ferrous catalytic center by means of structural and computational methodologies"
Int. J. of Quantum Chem., **107**, 1514 (2007).
39. G. P. Brandino, G. Cicero, B. Bonferroni, A. Ferretti, A. Calzolari, C. M. Bertoni and A. Catellani
"Polarization properties of (1-100) and (11-20) SiC surfaces from first principles"
Phys. Rev. B, **76**, 085322 (2007).
40. A. Catellani, G. Cicero and G. Galli
"Wetting behavior of low-index cubic SiC surfaces"
J. Chem. Phys., **124**, 024707 (2006).
41. G. Cicero, J. C. Grossman and G. Galli
"Adhesion of single functional groups to individual carbon nanotubes: electronic effects probed by *ab initio* calculations"
Phys. Rev. B, **74**, 035425 (2006).
42. A. Catellani, G. Cicero, M. C. Righi and C. A. Pignedoli
"First principles simulations of SiC-based interfaces"
Mat. Sci. Forum, **483-485** (2005), 541.
43. G. Cicero, J. C. Grossman, Catellani A. and G. Galli
"Water at hydrophilic solid surface probed by *ab initio* molecular dynamics: inhomogeneous thin layers of dense fluid"
J. of Am. Chem. Soc., **127**, 6830 (2005).
44. G. Cicero and A. Catellani
"Towards SiC surface functionalization: an *ab initio* study."
J. Chem. Phys., **122**, 214716 (2005).
45. Y. Kanai, G. Cicero, A. Selloni, R. Car and G. Galli
"Theoretical studies of biotin chemisorption on clean and hydroxylated silicon terminated Si-SiC(001) surfaces"
J. Phys. Chem B., **109**, 13656 (2005).
46. C. Bocchi, L. Felisari, A. Catellani, G. Cicero, F. Germini, E. Gombia, R. Mosca, L. Nasi, E. Kh. Mukhammedzanov, M. A. Chuev, M. Camalleri and D. Cali
"Structural and electrical investigation of high temperature annealed As-implanted Si crystal"
J. Vac. Sci. Technol. B, **23** (2005), 1504.
47. G. Cicero, G. Galli, and A. Catellani
"Interaction of water molecules with SiC(001) surfaces"
J. Phys. Chem. B, **108**, 16518 (2004).

48. G. Cicero, A. Catellani and G. Galli
"Atomic control of water interaction with biocompatible surfaces: The case of SiC(001)"
Phys. Rev. Lett., **93**, 016102/1-4 (2004).
49. L. Pizzagalli, G. Cicero and A. Catellani
"Theoretical investigation of highly mismatched interface: the case of SiC/Si(001)"
Phys. Rev. B, **68**, 195302 (2003).
50. A. Catellani, G. Cicero, G. Galli and L. Pizzagalli
"First principles simulations of extended defects at cubic SiC surfaces and interfaces"
Solid State Phenomena, **95-96**, 415 (2003).
51. G. Cicero, L. Pizzagalli and A. Catellani
" Ab initio study of misfit dislocations at the SiC/Si(001) interface"
Phys. Rev. Lett., **89**, 156101-1/4 (2002).
52. G. Cicero, L. Pizzagalli and A. Catellani
" A Molecular Dynamics Study of the beta-SiC/Si(001) interface"
Journal of Physics: Cond. Matt., **14**, 13031 (2002).
53. G. Cicero and A. Catellani
" First principles study of the initial stages of SiC growth on Si(001)"
Appl. Phys. Lett., **28**, 2312 (2001).
54. G. Cicero and A. Catellani
"C adsorption and diffusion at the Si(001) surface: implication for SiC growth"
Appl. Surf. Sci., **184**, 113 (2001).
55. S. Ferrero, P. Mandracci, G. Cicero, F. Giorgis, C. F. Pirri and G. Barucca
"Large area microcrystalline silicon films grown by ECR-CVD"
Thin Solid Films, **383**, 181 (2001).
56. P. Mandracci, S. Ferrero, G. Cicero, F. Giorgis, C. F. Pirri, G. Barucca, R. Reitano, P. Musumeci, L. Calcagno and G. Foti
"Growth and characterization of SiC layers obtained by microwave-CVD"
Thin Solid Films, **383**, 169 (2001).
57. F. Giorgis, A. Chiodoni, G. Cicero, S. Ferrero, P. Mandracci, G. Barucca, Reitano and P. Musumeci
"Optical and structural properties of SiC layers grown by an electron cyclotron resonance CVD technique"
Diamond and Related Materials, **10**, 1264 (2001).
58. P. Mandracci, A. Chiodoni, G. Cicero, S. Ferrero, F. Giorgis, C. F. Pirri, G. Barucca, P. Musumeci, R. Reitano
"Heteroepitaxy of 3C-SiC by electron cyclotron resonance-CVD technique"
Appl. Surf. Sci., **184**, 43 (2001).

Invited Chapter book and Review articles:

1. G. Cicero and A. Catellani "Modification of cubic SiC surfaces: from gas adsorption to organic functionalization". This is an invited review article that appeared on a special issue of *J. Phys. D: "Wide band gap semiconductors: present status, future prospects and frontiers"*, *J. Phys. D: Appl. Phys.*, **40**, 6215 (2007).
2. G. Cicero and G. Galli contributed to the book "**Quantum Chemical Calculations of Surfaces and Interfaces of Materials**" (American Scientific Publishers) with a chapter entitled: " Structural properties of water in confined geometries: an *ab initio* molecular dynamics description".
3. A. Aliano, G. Cicero (2012). "Ab Initio DFT Simulations of Nanostructures" Encyclopedia of Nanotechnology - Springer.

4. C. Ricciardi, S. Bianco, G. Canavese, E. Celasco, G. Cicero, M. Cocuzza, E. Descrovi, S. Fiorilli, E. Giuri, S. Marasso, M. Quaglio, P. Rivolo, A. Ricci, F. Pirri, L. Napione, F. Bussolino, D. Bich, A. Merialdo, P. Schina, R. Correale and F. Pirri. (2006). Sensoristica a base micro e nano oscillatori meccanici. NANOTEC IT NEWSLETTER 10-14, 6.

Publication on proceedings of international conferences:

1. S. Marchisio, A. Troia, S. Musso, G. Cicero, N. Pugno and M. Pavese (2012). "Efficient dispersion of carbon nanotubes in polyvinylbutyral and mechanical performance of composites thereof." In: ECCM15, 15th european conference on composite materials. 24-28 June 2012, Venezia, Italia.
2. S. Ferrero, F. Giorgis, C. F. Pirri, P. Mandracci, G. Cicero and C. Ricciardi (2002). "Micro-Raman characterization of mc-Si:H films deposited by PECVD, mc-SiC:H deposited by ECR-CVD and 6H-SiC wafers". In: G. MESSINA, S. SANTANGELO. State of the Art and Future Development in Raman Spectroscopy and Related Techniques. IOS Press, AMSTERDAM: 113-130.
3. F. Giorgis, A. Chiodoni, G. Cicero, S. Ferrero, P. Mandracci, C. F. Pirri, F. G. Barucca, L. Calcagno, G. Foti, P. Musumeci and R. Reitano
"Structural properties of 3C-SiC layers grown on Si substrates by Electron Cyclotron Resonance CVD technique"
Mat. Res. Soc. Symp. Proc. **640** (2001) H 5.9.1.
4. V. Grillo, S. Frabboni, G. Cicero, G. Savini and A. Catellani
"A combined HREM and theoretical analysis of SiC/Si interfaces"
Institute of Physics 2004, pp. 69-72, Bristol, UK.

Torino 13/09/2017

Giancarlo Cicero