Editorial

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Biographical notes: Dr. Lionel Vayssieres obtained a MSc in Physical Chemistry in 1991 and a PhD in Inorganic Chemistry in November 1995 from the Université Pierre et Marie Curie, Paris, France for his research work on the Interfacial and thermodynamic growth control of metal oxide nanoparticles in aqueous solutions. Thereafter, he joined Uppsala University, Sweden as a postdoctoral researcher for the Swedish Materials Consortium on Clusters and Ultrafine Particles to extend his concepts and develop purpose-built metal oxide nanomaterials for photoelectrochemical applications as well as to characterise their electronic structure by x-ray spectroscopies at synchrotron radiation facilities. He has been invited as a visiting scientist at: the University of Texas at Austin; the UNESCO Centre for Macromolecules & Materials, Stellenbosch University, and iThemba LABS, South Africa; the Glenn T. Seaborg Center, Chemical Sciences Division, at Lawrence Berkeley National Laboratory; Texas Materials Institute; EPFL, Switzerland; the University of Queensland, Australia, Nanyang Technological University, Singapore. He has (co-)authored 60 refereed publications in major international journals which have already generated over 2900 citations since the year 2000; Essential Science Indicators shows 108 citations per paper for Materials Science and 67 for All Fields; 5 ISI highly cited papers (4 as first author) for the last ten years, a single-author 2003 paper No. 1 in the Top 10 hot papers in Chemistry (July-August 2005), No. 2 (September-December 2005) and No. 3 (May-June 2005) in the Top 3 hot papers in Materials Science and most cited paper in Materials Science for the country of Sweden for the last ten years and 1st in core papers for vertical ZnO nanowires arrays for the last ten years as identified by Essential Science Indicators. He has been interviewed by In-Cites and by ScienceWatch in 2006 for a single authored 2003 paper cited now over 750 times. Two other first-and-corresponding author 2001 papers have already been cited over 400 times. He has presented 200 lectures at universities, governmental and industrial research institutes and international conferences in 26 countries and acts as a chairman, executive program committee, and advisory member for major international conferences and projects worldwide. He is currently an independent scientist at the International Center for Materials NanoArchitectonics, National Institute for Materials Science, Tsukuba, Japan and a R&D consultant. He is also the founder and the editor-in-chief of the International Journal of Nanotechnology and a referee for 60 SCI scientific journals as well as for major funding agencies in USA, Europe, Asia, and Africa.

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This issue completes the 2009 edition (vol. 6) of the *International Journal of Nanotechnology* with its 12-issue/year format where six special issues were released:

- Nos. 1-2, special double issue: On Nanotechnology in Greece
- Nos. 3–4, special double issue: On Nanotechnology in New Zealand
- Nos. 5–6, special double issue: International Conference on Nanoscience-Technology
- Nos. 7–8, special double issue: On Nanoelectronics
- No. 9, special issue: On Transparent Conducting Oxides
- Nos. 10–11, special double issue: On Nanotechnology in Iran.

In this latest issue (No. 12) AFM lithography, mechanochemical theory for biomolecular motors, two-dimensional photonic crystals, low cost synthesis of hollow oxide nanospheres, environmental applications of nanotechnology, image processing for nanostructural feature analysis and thermal stability of bimetallic clusters have been addressed by scientists from Australia, Canada, China, France, Iran, Mexico and USA.

During its six years of existence, *Int. J. Nanotechnol.* has released 19 special issues and 7 regular ones, representing a total of about 300 articles and editorials (mostly invited) and over 4850 pages of in-depth coverage of major topics related to nanotechnology written by professionals from 35 different countries. The journal has been released at major international conferences in North America, Europe, Asia, and Africa, and is indexed in leading publication databases such as ANTE, Chemical Abstracts® Services, Compendex®, Current Contents® (Physical, Chemical and Earth Sciences and Engineering, Computing and Technology), Engineered Materials Abstracts, Google™Scholar, Ingenta Connect, INSPEC®, Journal Citation Reports®, Materials Science Citation Index®, Metadex, Pascal®, Science Citation Index™, SciFinder Scholar®, Scopus®, Technology and Management (TEMA), the Web of Science®.

A total of over 650 citations in SCOPUS and the Web of Science cited reference search can be found with an h index of 13 according to SCOPUS. Interestingly, the *Journal of Scientific Research (JCR)* shows only 200+ citations. The first Impact Factor should have been released in 2007 (IF 2006) but Thomson Scientific Corporation officially announced that the citations were being collected only from the 2nd Volume (2005) leaving behind hundreds of citations from the inaugural volume (2004) with several papers in the top 1–10% for citations in Materials Science according to the latest Essential Science Indicators percentiles table. The impact factors are as follows:

- IF 2007: 0.750, Immediacy index: 0.130, Cited half-life: 3.2, Citing half-life: 5.6
- IF 2008: 1.184, Immediacy index: 0.214, Cited half-life: 2.9, Citing half-life: 6.4.

The quality and topic of the papers remain at high level and so from the very beginning of the journal. A wider distribution and a better (yet, still not completely accurate) calculation from Thomson explain the increase in the impact factor.

According to SciFinder Journal Name Analysis, the Top 20 citing journals (from 241 citing journals) is: J. Phys. Chem. C; Nanotechnology; Nano Lett.; Chem. Mater.; Appl. Phys. Lett.; Phys. Rev. B; J. Appl. Phys.; J. Nanosci. Nanotech.; Langmuir; J. Phys. Condensed Matter; J. Mater. Chem.; Angew. Chem. Int. Ed.; Small;

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Appl. Surf. Sci.; Adv. Mater.; Chem. Rev.; J. Chem. Phys.; Phys. Rev. Lett.; J. Phys. D.; Adv. Funct. Mater.

The successful innovative series of special issues dedicated to the best of nanotechnology in specific countries/continents has been achieved with the release of special issues for:

Australia (A. Hill, C. Jagadish, P. Majewski, 2008) Canada (F. Rosei, 2008) China (E. Wang, S. Yang, J.G. Hou, 2007) France (F. Grasset, P. Goudeau, 2008) Greece (A. G. Nassiopoulou, C. Fostakis, 2009) Iran (A. Simchi, 2009) Korea (S.W. Han, 2006) New Zealand (J. Travas-sejdic, S.C. Hendy, 2009) Singapore (X.W. Sun, Z. Dong, Y. Lei, 2007) Spain (P. Serena, 2005) Ukraine (V. Pokropivny, 2006)

This series is being perpetuated with a growing number of additional issues currently being prepared by eminent guest editors from all over the world:

- Africa (M. Maaza, iThemba LABS; A.C. Beye, Universite du Senegal)
- Belgium (S. deFeyter, Catholic University of Leuven)
- Brazil (E. Baggio-Saitovitch, Brazilian Center for Physics research)
- Denmark (F. Besenbacher, Aarhus University)
- Egypt (M. Abel-Mottaleb, SabryCorp Ltd for Science & Development)
- *India* (A. Vinu, M. Lakshmi Kantam, Indian Institute of Chemical Technology; A.K. Tyagi, Bhabha Atomic Research Centre; S.B. Halligudi, Centre for Materials for Electronics Technology)
- Ireland (W. Ahmed, University of Ulster)
- Italy (E. Traversa, Universita di Roma)
- *Finland* (A. Ivaska, Åbo Akademi University)
- France (Part II) (L. Levy, Université J. Fourier)
- Japan (Y. Tachibana, Osaka University)
- Portugal (L.A. Rocha, Universidade do Minho, J. Gracio, Universidade de Aveiro)
- Sweden (G. Westin, Uppsala University)
- *Taiwan* (Y.-Y. Chen, M. K. Wu, Academia Sinica)
- *Turkey* (A. Dericioglu, Middle East Technical University)
- Vietnam (L.V. Hong, Institute of Materials Science).

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The aim of such series is to genuinely identify active and representative research themes and researchers involved in nanotechnology in various countries. It reveals the status and advances of nanotechnology as well as promoting scientists, institutions, laboratories, research networks and funding agencies all over the world. Such an initiative is already contributing to develop a better knowledge of nanoscience and nanotechnology and thus, more active collaborations between researchers in different countries are happening. The journal has truly become a worldwide major source of information on nanotechnology.

The journal also dedicates special issues to important topics related to nanotechnology and in 2008 (Vol. 5) special issues on **Nanotoxicology** (guest editor: S.K. Sundaram, USA) and on **Nanosensors** (guest editor: S. Islam, USA) were released. It will continue to do so by delivering high quality and geographically-balanced papers on major topics related to nanoscience and nanotechnology with 12-issue/year format. Both fundamental and applied aspects are equally represented by invited contributions from rising young scientists as well as more established ones from many different fields. Indeed, special issues dedicated to **Nanomedicine** (guest editor: H. Hosseinkhani, Japan); **Nanopharmaceuticals** (guest editor: S.P. Puthli, India) and **NanoFerroics** (guest editor: A. Rudiger, Canada) are in preparation.

Moreover, beyond the very exciting new science, knowledge, and applications being discovered and investigated, the public awareness, perception, and understanding of nanoscience/nanotechnology is also of tremendous importance for the implementation and commercial success of such evolutionary and revolutionary technology. We intend to pursue such an educational direction and sincerely believe the journal is actively contributing to a better understanding of such a new field. Indeed, a special issue dedicated to **Nanotechnology and Society** (guest editor: M. Tyshenko, Canada) will be featured in the 2010 edition. Finally, all the authors, contributors, and readers are greatly acknowledged for their support, consideration, and appreciation of this new journal.