
Editorial

Lionel Vayssieres

International Center for Materials NanoArchitectonics (MANA),
National Institute for Materials Science (NIMS),
Namiki 1-1, Tsukuba 305-0044, Japan
E-mail: Vayssieres.lionel@nims.go.jp

Biographical notes: Lionel Vayssieres obtained a BSc and a MSc in Physical Chemistry in 1989 and 1990, respectively 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, USA; the Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland; the University of Queensland, Australia, and Nanyang Technological University, Singapore. He has (co-)authored 60 refereed publications in major international journals which have already generated over 3800 citations since the year 2000; *Essential Science Indicators* shows 154 citations per paper for Materials Science and 94 for All Fields (as of May 2011) ranking him in the Top 1% Materials Scientist; 6 ISI highly cited papers (5 as first author) for the last 10 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 10 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 1100 times. He was interviewed again by *ScienceWatch* in 2010 for another of his highly cited paper in the field of Chemistry. Two other first-and-corresponding author 2001 papers have already been cited over 450 times. He has presented 250 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 70 SCI scientific journals as well as for major funding agencies in USA, Europe, Asia, and Africa.

This regular issue is part of the 2011 edition (volume 8) of the *International Journal of Nanotechnology* with its 12-issue/year format. This year consists of:

- Nos. 1–2, special double issue: *On Nanopharmaceuticals*
- Nos. 3–5, special triple issue: *On Nanotechnology in Vietnam*
- Nos. 6–7, regular double issue
- Nos. 8–9, special double issue: *On Nanomedicine*
- Nos. 10–12, special triple issue: *On Nanotechnology in France III*

In this regular double issue (Nos. 6–7) Africa's Nanofuture; Toxicity and biotransformation of ZnO nanoparticles; visible-light active nanostructures for photoelectrochemical generation of hydrogen; Shell aggregate Au nanostructures; DNA based nanostructures; and fuel cells have been addressed by scientists from China, Cyprus, India, Iran, Italy, South Africa and USA.

During its eight years of existence, *Int. J. Nanotechnol.* has released 24 special issues and 8 regular ones, representing a total of over 375 articles (mostly invited) and over 6500 pages of in-depth coverage of major topics related to nanotechnology written by professionals from over 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 Knowledge®.

A total of over 1250 citations in *SCOPUS* and *ISI Web of Knowledge* cited reference search can be found with an *h* index of 16 according to SCOPUS.

The yearly impact factors (according to *Journal Citation Reports Science Edition*) 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**
- IF 2009: **1.234**, Immediacy index: **0.170**, Cited half-life: **2.8**, Citing half-life: **6.6**

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. In 2010, JCR released a 5-year Impact Factor of 1.382 for the journal.

The quality and topics of the articles have remained at high level from the very beginning of the journal. According to *SciFinder* Journal Name Analysis, the Top 25 citing journals (from 411 citing journals) are:

1	<i>J. Appl. Phys.</i>	14	<i>J. Alloys Comp.</i>
2	<i>Nanotechnol.</i>	15	<i>Chem. Rev.</i>
3	<i>J. Phys. Chem. C</i>	16	<i>Adv. Mater.</i>
4	<i>J. Nanosci. Nanotech.</i>	17	<i>Appl. Surf. Sci.</i>
5	<i>J. Mater. Chem.</i>	18	<i>Int. J. Nanotechnol.</i>
6	<i>Phys. Rev. B</i>	19	<i>J. Magn. Mag.</i>
7	<i>Appl. Phys. Lett.</i>	20	<i>Chem. Eur. J.</i>
8	<i>Chem. Mater.</i>	21	<i>Small</i>
9	<i>Langmuir</i>	22	<i>J. Phys. D</i>
10	<i>Nano Lett.</i>	23	<i>J. Chem. Phys.</i>
11	<i>ACS Nano</i>	24	<i>CrystEngComm.</i>
12	<i>J. Am. Chem. Soc.</i>	25	<i>J. Nanoparticle Res.</i>
13	<i>J. Phys. Condensed Matter</i>		

The successful innovative series of special issues dedicated to the best of nanotechnology in specific countries/continents has been achieved with the release of 14 special issues:

Australia (A. Hill, C. Jagadish, and P. Majewski, 2008);

Canada (F. Rosei, 2008);

China (E. Wang, S. Yang, and J.G. Hou, 2007);

France (F. Grasset and P. Goudeau, 2008);

France II (L. Levy, 2010);

Greece (A. G. Nassiopoulou and C. Fostakis, 2009);

India (A. Vinu and A. K. Tyagi, 2010);

Iran (A. Simchi, 2009);

Korea (S.W. Han, 2006);

New Zealand (J. Travas-sejdic and S.C. Hendy, 2009);

Singapore (X.W. Sun, Z. Dong and Y. Lei, 2007);

Spain (P. Serena, 2005);

Ukraine (V. Pokropivny, 2006);

Vietnam (H. Le Van, 2011)

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, Université du Senegal)
- **Argentina** (Ernesto J. Calvo, City University, Buenos Aires; C. Balseiro, Bariloche; R. Salvarezza, La Plata)
- **Belgium** (S. deFeyter, Catholic University of Leuven)

- **Brazil** (E. Baggio-Saitovitch, Brazilian Center for Physics research)
- **Czech Republic** (M. Pumera, NTU)
- **Denmark** (F. Besenbacher, Interdisciplinary Nanoscience Center at Aarhus University)
- **Egypt** (M. Abel-Mottaleb, SabryCorp Ltd for Science & Development)
- **Finland** (A. Ivaska, Åbo Akademi University)
- **France IV: C’NANO Ile-de-France** (A. Levenson, LPN-CNRS)
- **Ireland** (H. J. Byrne, Dublin Institute of Technology)
- **Italy** (E. Traversa, Universita di Roma Tor Vergata)
- **Japan** (Y. Tachibana, Osaka University)
- **Latin America** (A. Fernandez, Universidad de Venezuela)
- **Portugal** (L.A. Rocha, Universidade do Minho, J. Gracio, Universidade de Aveiro)
- **Scotland** (H. Idriss, University of Aberdeen; R. Schaub, St Andrews University)
- **Sweden** (G. Westin, Uppsala University)
- **Taiwan** (Y.-Y. Chen, M. K. Wu, Academia Sinica)
- **Turkey** (A. Dericioglu, Middle East Technical University)

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 dedicated special issues to important topics related to nanotechnology:

- **Nanotechnology Toolkit** (A. Korkin, J. Labanowski, and A. A. Volinsky, 2005)
- **Nanomaterials for Security Technologies** (N. A. Kotov, 2007)
- **Bionanotechnology** (J.C.D. daCosta, J.A. Brum, and J. Albuquerque e Castro, 2007)
- **Nanotoxicity** (S.K. Sundaram and T.J. Weber, 2008)
- **Nanosensors** (S. Islam, 2008)
- **Nanoelectronics** (C.M. Tan and B.K. Tay, 2009)
- **Transparent Conducting Oxides** (L. Vayssieres, 2009)
- **Nanotechnology and Social Cohesion** (M.G. Tyshenko, 2010)
- **Nanopharmaceuticals** (S.P. Puthli, 2011)

The journal 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.

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 an exciting new field of science.

Finally, all the authors, guest editors, referees, contributors, and readers are greatly acknowledged for their support and consideration for the journal.