

## Luis M. Liz- Marzán

Ikerbasque Research Professor, Centre for Cooperative Research in Biomaterials, CIC. biomaGUNE, 20009, San Sebastián, Spain



LUIS M. LIZ- MARZÁN

### Education:

Bachelor in Chemistry at University of Santiago de Compostela (1988)

PhD in Chemistry at University of Universidad de Santiago de Compostela (1992)

### Current Position:

Ikerbasque Research Professor, Centre for Cooperative Research in Biomaterials, CIC biomaGUNE, 20009, San Sebastián, Spain

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<http://personal.icbiomagune.com/llizmarzan/Luis.html>

### Other Positions:

- Full Professor, Department of Physical Chemistry, University of Vigo, Spain 2006–2012
- Humboldt Research Fellow, Max-Planck-Institute of Colloids and Interfaces, Golm (Germany), Aug 2011
- Humboldt Research Fellow, University of Hamburg (Germany), Aug-Sep 2010
- Wilsmore Fellow, University of Melbourne (Australia), July 2010
- Visiting Professor, University of Michigan (Ann Arbor, USA), August 2008
- Visiting Professor, Tohoku University (Sendai, Japan), July – August 2005
- Titular Professor, University of Vigo, March 1997 – December 2005.
- Assistant Professor, University of Vigo, May 1995 – March 1997.

- Assistant Professor, University of Santiago de Compostela, January – May 1995.
- Associate Researcher, Utrecht University (The Netherlands), Feb 1993- Jan 1995.
- F.P.I. Fellow, University of Santiago de Compostela, 1989-1992.

### **Awards, Achievements:**

- Author of >270 peer reviewed research papers and co-inventor of 6 patents.
- Principal Investigator of >20 Spanish / European research grants.
- Principal Investigator of 4 major industrial grants.
- >100 Invited talks at conferences; >100 seminars and courses in 22 countries
- Supervisor of 13 PhD theses (+8 in progress) and >25 post-doctoral researchers
- >14,500 citations, h-index=66
- 36 cover articles in major journals.
- Fellow of the Royal Society of Chemistry
- A.v. Humboldt Research Award (2009)
- Physical Chemistry Award of the Spanish Royal Society of Chemistry (2009)
- DuPont Award for Science (2010)
- Burdinola Research Award (2011)
- Fellow of the Optical Society of America (2012)
- ACS Nano Lectureship Award (2012)
- Langmuir Lecturer 2012
- ERC Advanced Grant (2010)
- Senior Editor of the ACS journal of surfaces and colloids, Langmuir.
- Member of the editorial advisory boards of Langmuir (2004-2008), Journal of Physical Chemistry (ACS), Chemistry of Materials (ACS), Journal of Materials Chemistry (RSC), Journal of Colloid and Interface Science (2006-2008), Nano Today (Elsevier), Advanced Optical Materials (Wiley), ChemistryOpen (Wiley) and Particle & Particle Systems Characterization (Wiley).

- Co-editor of 2 books: “Nanoscale Materials”, “Low-Dimensional Systems. Theory, Preparation, and Some Applications”, Kluwer 2003.
- President of the Colloids and Interfaces Division of the Royal Spanish Society of Chemistry.

### **Other Activities**

In addition to the above, I have served as a government advisor or representative, and in a variety of conference roles. An abridged list of these activities is provided below:

- Co-director of NATO Advanced Research Workshop on Nanoparticle Based Nanostructures, held in Vigo, Spain in October 2000.
- Co-director of NATO Advanced Research Workshop on Dynamic Interactions in Quantum Dot Systems, held in Puszczykowo (Poland), in May 2002
- Editor of a special issue of Journal of Materials Chemistry on “Anisotropic Nanomaterials” (October 2006).
- Co-editor of the December 2001 special issue of MRS Bulletin on “New Aspects of Nanocrystal Research”.
- Co-organizer of the symposium on Nanostructured Thin Films: New Routes to Advanced Materials and Applications at the 203 Meeting of the Electrochemical Society, held in Paris, April 2003.
- Organizer of the 5th National Meeting of the Colloids and Interfaces Division of the Spanish Royal Society of Chemistry, held in Vigo, July 2003.
- Member of the Organizing Committee of the XII International Symposium on Luminescence Spectrometry, Lugo (Spain), July 2006

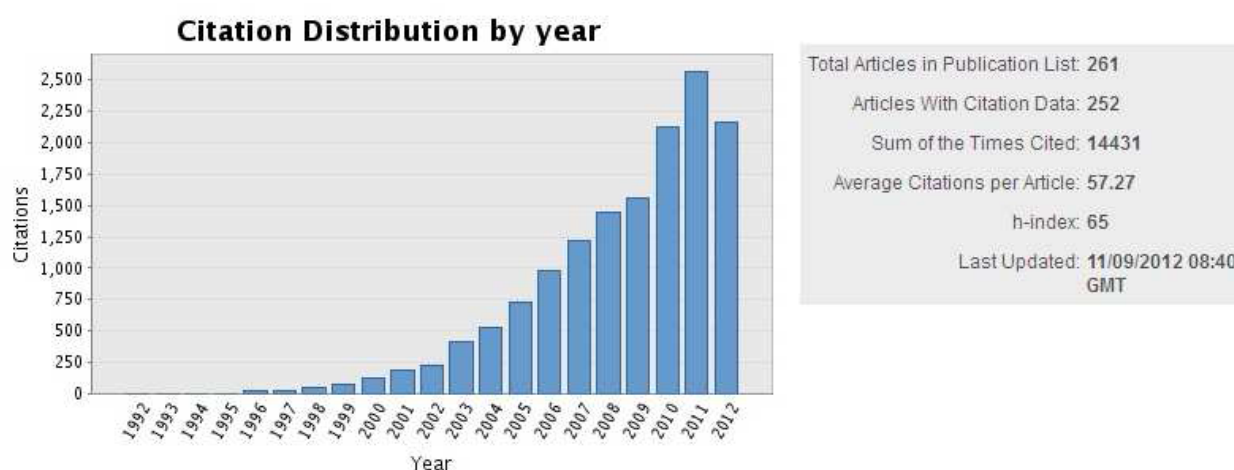
- Organizer of the International Symposium on Nanotechnology in Medicine. Diagnosis and Therapy, Vigo (Spain), November 2007
- Member of the Organizing Committee of the 5<sup>a</sup> National Meeting of the Solid State Physics Group, Santiago (Spain), February 2008
- Organizer of the Topical Meeting on Synthesis and Surface Modification of Nanocolloids, Baiona (Spain), February 2009
- Co-Organizer of the Symposium on Nanomaterials for Bioimaging and Biosensing, at ICMAT 2009, Singapore, June-July 2009
- Organizer of the International Workshop on Nanoplasmonics for Energy and the Environment, Sanxenxo (Spain), June 2011
- Co-Organizer of the 5<sup>th</sup> International Meeting on Nanoscience with Nanocrystals (NANAX5), Fuengirola (Spain), May 2012
- Proposal evaluator for the research councils of Spain, The Netherlands, Belgium, Israel, Cyprus, Ireland, Denmark, UK, Switzerland, France, Argentina, USA, Australia, the ERC and the European Commission.
- Science Board member of the Particulate Fluids Processing Centre, University of Melbourne (2007-2009).
- Panel Member of ERC Starting Grants (2011-)
- Member of the Italian Institute of Technology (IIT) Standing Committee of External Evaluators for Materials Science & Applied Physics

**Current Research Interests:**

- Synthesis and formation mechanisms of metal, semiconductor and magnetic nanoparticles with controlled composition, size and morphology.

- Creation of colloidal composites, nanostructured thin films and nanoparticle ordered arrays in two and three dimensions.
- Optical properties of nanoparticles and their assemblies.
- Use of metal nanoparticles as biosensors.
- Medical applications of magnetic nanoparticles.

(ISI Web of Science; <http://www.researcherid.com/rid/B-8910-2011>)



Listed in ISI Essential Science Indicators since 2004. Current classification:

Area	Period	Position
Chemistry	Jan 02 – Sep 12	600
Materials Science	Jan 02 – Sep 12	304

**20 top-cited publications (ISI WOS, Nov 2012):**

	Times cited
1. Langmuir <b>1996</b> , 12, 4329-4335	944
2. Coord. Chem. Rev. <b>2005</b> , 249, 1870-1901	562
3. Langmuir <b>2006</b> , 23, 32-41	468

4. J. Phys. Chem. B <b>2001</b> , 105, 3441-3452	368
5. Nano Lett. <b>2002</b> , 2, 903-905	319
6. Chem. Soc. Rev. <b>2008</b> , 37, 1783-1791	285
7. Adv. Mater. <b>2001</b> , 13, 1090-1095	272
8. Langmuir <b>2002</b> , 18, 3694-3697	265
9. J. Mater. Chem. <b>2000</b> , 10, 1259-1269	263
10. Nature Phys. <b>2007</b> , 3, 348-352	249
11. Langmuir <b>1998</b> , 14, 3740-3748	249
12. Adv. Funct. Mater. <b>2004</b> , 14, 571-579	234
13. Adv. Mater. <b>1997</b> , 9, 570-575	226
14. Chem. Phys. Lett. <b>1998</b> , 286, 497-501	219
15. Adv. Funct. Mater. <b>2006</b> , 16, 509-516	208
16. Langmuir <b>2002</b> , 18, 2888-2894	203
17. Langmuir <b>1999</b> , 15, 948-951	193
18. ACS Nano <b>2010</b> , 4, 3591-3605	188
19. Chem. Mater. <b>2001</b> , 13, 1630-1633	186
20. Chem. Soc. Rev. <b>2008</b> , 37, 1792-1805	184