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EDUCATION

- 1998 PhD in Physics, **Universitat de Barcelona** (Barcelona, Spain)
1994 Chemical Engineer, **Université Louis Pasteur** (Strasbourg, France)
1994 BSc in Chemical Science, **Universitat Autònoma de Barcelona** (Barcelona, Spain)

PROFESSIONAL EXPERIENCE

- | | |
|--|-------------------|
| Institut Català de Nanotecnologia (Barcelona, Spain)
<i>Group leader of the Inorganic Nanoparticles Group</i> | 06/2005 – present |
| Institució Catalana de Recerca i Estudis Avançats (Barcelona, Spain)
<i>Group leader & Research Professor</i> | 10/2005 – present |
| Universitat Autònoma de Barcelona (Barcelona, Spain)
<i>Associate Professor</i> | 09/2008 – 12/2012 |
| Universitat de Barcelona (Barcelona, Spain)
<i>Ramón y Cajal Researcher at the Department of Fundamental Physics</i> | 02/2003 – 05/2005 |
| University of California, Berkeley (Berkeley, CA, USA)
<i>Scientific Staff at the College of Chemistry</i> | 09/2000 – 09/2002 |
| University of California, Berkeley (Berkeley, CA, USA)
<i>Teaching Assistant at the Physics Department</i> | 01/2000 – 06/2001 |
| Lawrence Berkeley National Laboratory (Berkeley, CA, USA)
<i>Postdoctoral Researcher at the National Center of Electron Microscopy</i> | 06/1999 – 08/2000 |

SELECTED PUBLICATIONS

[from ISI data including Puentes, Franco and Franco-Puentes]

Publications: 103

Citations: 4,326

H-factor: 26

Ten most cited articles (most cited first)

1. Puentes, V.F., Krishnan, K.M., Alivisatos, P. **Colloidal nanocrystal shape and size control: The case of cobalt**, *Science* 291, 2115 (2001)
2. Carrettin, S., Concepción, P., Corma, A., López Nieto, J.M., Puentes, V.F. **Nanocrystalline CeO₂ Increases the Activity of Au for CO Oxidation by Two Orders of Magnitude**, *Angewandte Chemie International Edition* 43, 2538-2540 (2004).
3. Puentes, V.F., Zanchet, D., Erdonmez, C.K., Alivisatos, A.P. **Synthesis of hcp-Co Nanodisks**, *Journal of the American Chemical Society* 124, 12874 (2002).
4. Puentes, V.F., Krishnan, K.M., Alivisatos, P. **Synthesis, self-assembly, and magnetic behavior of a two-dimensional superlattice of single-crystal epsilon-Co nanoparticles**, *Applied Physics Letters* 78, 2187 (2001).
5. Puentes, V.F., Gorostiza, P., Aruguete, D.M., Bastus, N.G., Alivisatos, A.P. **Collective behaviour in two-dimensional cobalt nanoparticle assemblies observed by magnetic force microscopy**, *Nature Materials* 3, 263 (2004).
6. Kónya, Z., Puentes, V.F., Kiricsi, I., Zhu, J., Ager, J.W., Ko, M.K., Frei, H., Alivisatos, P., Somorjai, G.A. **Synthetic Insertion of Gold Nanoparticles into Mesoporous Silica**, *Chemistry of Materials* 15, 1242 (2003).
7. Kogan, M.J., Bastus, N.G., Amigo, R., Grillo-Bosch, D., Araya, E., Turiel, A., Labarta, A., Giralt, E., Puentes, V.F. **Nanoparticle-Mediated Local and Remote Manipulation of Protein Aggregation**, *Nano Letters* 6, 110 (2006).
8. Zhu, J., Kónya, Z., Puentes, V.F., Kiricsi, I., Miao, C.X., Ager, J.W., Alivisatos, A.P., Somorjai, G.A. **Encapsulation of Metal (Au, Ag, Pt) Nanoparticles into the Mesoporous SBA-15 Structure**, *Langmuir* 19, 4396 (2003).
9. Cabot, A., Puentes, V.F., Shevchenko, E., Yin, Y., Balcells, L., Marcus, M.A., Hughes, S.M., Alivisatos, A.P. **Vacancy Coalescence during Oxidation of Iron Nanoparticles**, *Journal of the American Chemical Society* 129, 10358 (2007).

10. Casals, E., Pfaller, T., Duschl, A., Oostingh, G.J., Puentes, V. **Time Evolution of the Nanoparticle Protein Corona**, *ACS Nano* 4, 3623 (2010).

Ten most relevant recent articles (most recent first)

1. Comenge, J., Sotelo, C., Romero, F., Gallego, O., Barnadas, A., Parada, T. G.-C., Dominguez, F., Puentes, V. **Detoxifying Antitumoral Drugs via Nanoconjugation: The Case of Gold Nanoparticles and Cisplatin**. *PLoS ONE*, 7(10), e47562 (2012).
2. Ojea-Jiménez, I., López, X., Arbiol, J., Puentes, V. **Citrate-Coated Gold Nanoparticles As Smart Scavengers for Mercury(II) Removal from Polluted Waters**, *ACS Nano* 6, 2253 (2012).
3. González, E., Arbiol, J., Puentes, V. F. **Carving at the Nanoscale: Sequential Galvanic Exchange and Kirkendall Growth at Room Temperature**, *Science*, 334, 1377 (2011).
4. Casals, E., Pfaller, T., Duschl, A., Oostingh, G. J., & Puentes, V. F. **Hardening of the Nanoparticle-Protein Corona in Metal (Au, Ag) and Oxide (Fe₃O₄, CoO, and CeO₂) Nanoparticles**. *Small*, 7(24), 3479–3486 (2011).
5. Bastus, N. G., Comenge, J., & Puentes, V. **Kinetically Controlled Seeded Growth Synthesis of Citrate-Stabilized Gold Nanoparticles of up to 200 nm: Size Focusing versus Ostwald Ripening**. *Langmuir*, 27(17), 11098–11105 (2011).
6. Casals, E., Pfaller, T., Duschl, A., Oostingh, G.J., Puentes, V. **Time Evolution of the Nanoparticle Protein Corona**, *ACS Nano* 4, 3623 (2010).
7. Lim, S.I., Ojea-Jiménez, I., Varon, M., Casals, E., Arbiol, J., Puentes, V. **Synthesis of Platinum Cubes, Polypods, Cuboctahedrons, and Raspberries Assisted by Cobalt Nanocrystals**, *Nano Letters* 10, 964 (2010).
8. Ojea-Jiménez, I., Puentes, V. **Instability of Cationic Gold Nanoparticle Bioconjugates: The Role of Citrate Ions**, *Journal of the American Chemical Society* 131, 13320 (2009).
9. Bastús, N.G., Sánchez-Tilló, E., Pujals, S., Farrera, C., López, C., Giralt, E., Celada, A., Lloberas, J., Puentes, V. **Homogeneous Conjugation of Peptides onto Gold Nanoparticles Enhances Macrophage Response**, *ACS Nano* 3, 1335 (2009).
10. Casals, E., Vazquez-Campos, S., Bastús, N., Puentes, V. **Distribution and potential toxicity of engineered inorganic nanoparticles and carbon nanostructures in biological systems**, *Trends in Analytical Chemistry* 27, 672 (2008).

PATENTS

1. **Noble metal nanoparticles and their preparation process**, Franco Puentes, V., González, E.E. EP11158024.7 (2011).
2. **Biogas production**, Franco Puentes, V., Casals Mercadal, E., González, E.E., Font Segura, X., Sánchez Ferrer, A., García Mestre, A., Delgado Ramisa, L. EP11157784.7 (2011).
3. **Conjugates comprising nanoparticles coated with platinum containing compounds**, Franco Puentes, V., Domínguez Puente, F., Romero Martínez, F.M., Gallego Rubio, Ó. WO 2010/069941 A1 (2008).
4. **Immunoactivating conjugates comprising nanoparticles coated with peptides**, Franco Puentes, V., Gómez Bastús, N., Sánchez Tilló, E., Farrera Sinfreu, C., Celada Cotarelo, A., Lloberas Caveró, J., Giralt Lledó, E., Pujals Riatós, S. WO 2010/046377 A2 (2008).

ACTIVITIES & MERITS

- Founder and director of Nanowiki [www.nanowiki.info], an online news & dissemination platform, whose aim is to track the evolution of paradigms and discoveries in nanoscience and nanotechnology.
- Scientific advisor for Nanotargeting [www.nanotargeting.eu], a spin-off company based on Patent #3 above, joining forces from ICN, and the companies Nanonica and Ferrer Group.
- Active in knowledge and technology transfer to industry and technology-based companies, through research contracts, technical services and nanomaterials supply. Some examples: Biosystems S.A., Silliker Ibérica S.A., Nanotargeting S.L., the Natural Environment Research Council (NERC), etc.
- Referee for Nature Nanotechnology, Nature Materials, Nano Letters, Journal of the American Chemical Society, ACS Nano, Langmuir, Journal of Physical Chemistry, among others.