

Dr. Xavier Cartoixà, Departament d'Enginyeria Electrònica, Universitat Autònoma de Barcelona (UAB), 08193-Bellaterra, SPAIN (Xavier.Cartoixa@uab.es). He obtained his B.Sc. in Physics in 1996 at the Universitat Autònoma de Barcelona (UAB), and he got his M.Sc. in 1999 and Ph.D. in 2002, both in Applied Physics, at the California Institute of Technology (Pasadena, CA, USA). After two postdoctoral stays at the University of Illinois at Urbana-Champaign and at the Lawrence Berkeley National Laboratory, he joined UAB in 2004, where he is currently working as a Ramón y Cajal Fellow. His current research interests include the calculation of electronic, optical and transport properties in nanometric semiconductor devices, with special interest in the effects that electron spin can have on the device operating mode (spintronics), and the properties quantum wire and dot arrays. He is a (co)author of over 30 publications in peer-reviewed journals. He was awarded a European Commission's Marie Curie International Reintegration Grant, and he is currently the principal investigator in an Explora research grant, apart from participating in several other projects.