

# Christine Giorgetti

CNRS RESEARCHER

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## Education

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### PhD Thesis (Physics)

1991-1994

LABORATOIRE POUR L'UTILISATION DU RAYONNEMENT ELECTROMAGNETIQUE, ORSAY

France

Thesis: "X-Rays magnetic circular dichroism at  $L_{II,III}$  edges of Rare Earths."

Marks: "Très honorable avec félicitations du Jury."

### Student of Ecole Normale Supérieure de Cachan

1987-1991

MAGISTÈRE DE PHYSIQUE D'ORSAY, FRANCE

France

1988 : Licence de physique fondamentale (Orsay), France

1989 : Maîtrise de physique fondamentale (Orsay), France

1991 : D. E. A. de physique quantique (Paris VI - ENS Ulm), France

1990 : Agrégation de Physique

## Research Positions

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### Researcher at CNRS

2005-present

ÉCOLE POLYTECHNIQUE, LABORATOIRE DES SOLIDES IRRADIÉS, PALAISEAU

France

Description of absorption or electron energy loss spectra, within ab initio framework ; particular interest for low dimensional systems.

### Researcher at CNRS

1994-2004

UNIVERSITÉ D'ORSAY, LABORATOIRE POUR L'UTILISATION DU RAYONNEMENT ELECTROMAGNETIQUE, ORSAY

France

Study of magnetic properties of rare earths and 3d-transition metal alloys by X-ray magnetic circular dichroism.

### Phd Thesis

1991-1994

UNIVERSITÉ D'ORSAY, LABORATOIRE POUR L'UTILISATION DU RAYONNEMENT ELECTROMAGNETIQUE, ORSAY

France

## Responsibilities

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### In charge of group's projects for calculation time at GENCI and CCRT

2017-present

Electronic Spectroscopy of materials : ab initio calculations

### In charge of group's projects for calculation time at CCRT

2004-2016

Electronic Spectroscopy of materials : ab initio calculations

### Referee for international ANR-DBG project

2016

### Referee for international journals

1994-present

Physical Review B and Letters, etc.

### In charge of an industrial project

2010

### In charge of a PHC Galileo project

2007

Franco-italian collaboration with PR. S. Ossicini at University of Modena et Reggio Emilia

### Member of ETSF-I3 project (FP7)

2006-2011

WP "Foresight for Improvement", more specifically in charge social issues

### Member of Conseil de Laboratoire of LURE

1998-2003

### In charge of the seminars of LURE

1996-2003

### Co-supervisor of the experimental beamline Dispersive-EXAFS at LURE

1996-2003

## Languages

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French (native language), English (fluent), German (scolar).

## Teaching and scientific management

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### University lectures (Assistante Monitrice Normalienne during PhD Thesis)

1991-1994

ORSAY UNIVERSITY, ORSAY

France

Tutorials of Classical Mechanics (L1)

Practicals of Optics and Electricity (L1)

### Training

1999-2004

LURE, ORSAY UNIVERSITY, ORSAY

France

Practicals of XMCD in the framework of european school HERCULES

Tutorials of XMCD: initiation to calculations (LMTO (M. Alouani's code), XMCD Hard-Xrays (Ch. Brouder's code), Multiplets (T. Thole's code)) of the PhD-students doing XMCD experiment on the Dispersive-EXAFS beamline

### Scientific Management

2004-present

LSI, ECOLE POLYTECHNIQUE, PALAISEAU

France

3 co-supervisions of PhD thesis

2 supervisions of post-doctoral researchers

## Publications :: 44 (h-index 23)

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A full list of publications (a total of 44 papers, cited over than 1600 times, and a H-index of 23, according to [Web Of Science](#)) is available on [ResearchID](#).

Five selected publications:

*Dielectric properties of graphene/MoS<sub>2</sub> heterostructures from ab initio calculations and electron energy-loss experiments*

Michael J. Mohn, Ralf Hambach, Philipp Wachsmuth, Christine Giorgetti, and Ute Kaiser, Phys. Rev. B **97**, 235410 (2018).

*Ab initio description of second-harmonic generation from crystal surfaces*

Nicolas Tancogne-Dejean, Christine Giorgetti and Valérie Véniard, Phys. Rev. B **94**, 125301-15 (2016).

*Exciton Band Structure in Two-Dimensional Materials*

Pierluigi Cudazzo, Lorenzo Sponza, Christine Giorgetti, Lucia Reining, Francesco Sottile and Matteo Gatti, Physical Review Letter **116**, 066803-6 (2016).

*Optical properties of surfaces with supercell ab initio calculations: Local-field effects*

Nicolas Tancogne-Dejean, Christine Giorgetti and Valérie Véniard, Physical Review B **92**, 245308-10 (2015).

*Linear plasmon dispersion in single-wall carbon nanotubes and the collective excitation spectrum of graphene*

C. Kramberger, R. Hambach, C. Giorgetti, M. H. Rummeli, M. Knupfer, J. Fink, B. Büchner, L. Reining, E. Einarsson, S. Maruyama, F. Sottile, K. Hannewald, V. Olevano, A. G. Marinopoulos and T. Pichler, Phys. Rev. Lett. **100**, 196803-4 (2008).