

Bruno GAYRAL

Born 20 February 1974

Habilitation 2010 (Grenoble University)

PhD 2000 (Paris University)

MSc 1997

CEA-Grenoble, INAC/SP2M

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Research positions	
Since Nov. 2003	Researcher at CEA-Grenoble (France) <ul style="list-style-type: none">• Research on the optical properties of wide band-gap semiconductor heterostructures<ul style="list-style-type: none">• Optical spectroscopy of GaN quantum dots and nanowires• III-Nitride microcavities• Deputy-head of CEA-CNRS “Nanophysique et semiconducteurs” lab (~60 persons) (since 2007)
Jan. 2002 – Oct. 2003	Research engineer with Schlumberger, Clamart (France) <ul style="list-style-type: none">• Responsible for european project Gladis (analysis of natural gas composition by tunable diode absorption spectroscopy)<ul style="list-style-type: none">• Absorption spectroscopy in the mid-infrared with III-Sb based distributed feed-back laser diodes• Coordination between semiconductor academic laboratories and gas metering industrials• Conception and characterization of laser diodes working at high temperatures for oil well diagnosis applications
Oct. 2000 – Dec. 2001	Post-doctoral researcher at UC Santa Barbara (USA) – Imamoglu group <ul style="list-style-type: none">• Quantum optics with single quantum dots<ul style="list-style-type: none">• Cavity quantum electrodynamics on a single quantum dot (Purcell effect) in a microcavity• Photon correlation spectroscopy on a single quantum dot
Jan. 1997 – Sept. 2000	Graduate student at France Télécom (supervisor : J.-M. Gérard) <ul style="list-style-type: none">• Spontaneous emission rate modifications for quantum dots in optical microcavities<ul style="list-style-type: none">• Fabrication of microcavities (micropillars, microdisks, photonic crystals)• Optical characterization of the quantum dot/microcavity system• Quantum optics modeling
PUBLICATIONS - PATENTS - CONFERENCES	
Publications	61 publications in peer-reviewed regular journals 4 patents
Conferences	30 oral presentations at international conferences including 16 invited presentations
Honors	Young researcher price 2000 from the French Physical Society Superlattices, Nanostructures and Nanodevices -Young Scientist award 2010