

CURRICULUM VITÆ

Nom: TALEB-IBRAHIMI
Marital name: HAMMOUTENE
forname: Amina
Citizenship: French

EDUCATION

1986-89 : *Post-Doctorate at IBM T.J.Watson Research Centre, Yorktown Heights, New York, USA ; supervision : R.Ludeke and F.J. Himpsel*
1986 : Doctorat d'Etat, Paris VI "Electronic properties of Si interfaces" Laboratoire de Physique des Solides, Université Paris VI. Direction: Claude Sébenne, President of Jury : Jacques Friedel
1981 : D.E.A de Physique des Solides (Masters of Physics), Université Paris VI -Paris XI

CARRIER

Sept 2016 Science Director at Synchrotron SOLEIL
Oct 2012- Deputy Director in charge of Large scale facilities ; Institute of Physics at CNRS
Since January 2014 : Scientific Expert at Cassiopée beamline, Synchrotron SOLEIL
2008-2013 Beamline Manager of Cassiopée beamline, Synchrotron SOLEIL.
Head of scientific department « Surfaces/interfaces and nano-objects » at SOLEIL
DR1 (First class research Director at CNRS) since 2011
2004-2008 : CNRS Scientist at UR1-SOLEIL - july 2004. Beamline manager of the Cassiopée Beamline.
2000-2004: DR2 (second class research Director at CNRS) in 2000, at laboratoire LURE
Head of scientific department « Surfaces-Interfaces » at LURE
Manager of the High resolution SU3 Franco-Swiss beamline
Responsible of the beamline project "High resolution spectroscopy for condensed matter" at SOLEIL
1989-2000: CR1 CNRS in 1989, In charge of research at Laboratoire LURE
Head of scientific department « Surfaces-Interfaces » at LURE
Manager of the High resolution SU3 Franco-Swiss beamline
1986-1989: Post-Doctoral at IBM, U.S.A
Research at "T.J. Watson" à Yoktown Heights, N.Y and in charge of 2 Synchrotron beamline at "NSLS, Brookhaven National Laboratory"

Publications : (200RCL) – h factor = 37

25 invited conferences since 2009, member of several international conferences

Teaching : Large scale facilities practicals, HERCULES prg, Univ. Paris XI Masters practicals, International

Contracts : ANR, RTRA, C-Nano, JSPS Japan-CNRS, PUF-USA

Expertise : AERES, ANR, RTRA, PSUD, PVI, TGIR, SFP, International

Supervision : 8 PHD thesis, 8 post-docs

SCIENTIFIC INTERESTS :

keywords : Surfaces - Interfaces - Nanostructures - Low dimension systems - Highly correlated systems - Cobaltates - Pnictides superconductors - 2D electron Gaz - Magnetic Tunnel Junctions - Transition metal monosilicides - Graphene - Topological Insulators - In situ growth - Structural characterisation - STM - New

electronic states - Photoemission Spectroscopy - High energy resolution - Time resolution - Spectromicroscopy - Instrumental developments - Synchrotron Radiation - Large scale facilities

Sélection of 7 publications :

« microscopic structure at Si/SiO₂ interface »

Himpsel F.J., McFeely F.R., Taleb-Ibrahimi A., Yarmoff J.A., Hollinger G. "Microscopic structure of the SiO₂/Si interface. *Physical Review B* **38**, 1988, **9** 6084-96 1755 citations

« First experimental evidence of a linear dispersion in the electronic structure of multiepitaxial graphene »

Sprinkle, M., Siegel, D., Hu, Y., Hicks, J., Tejada, A., Taleb-Ibrahimi, A., Le Fevre, P., Bertran, F., Vizzini, S., Enriquez, H., Chiang, S., Soukiassian, P., Berger, C., de Heer, W. A., Lanzara, A., & Conrad, E. H. First direct observation of a nearly ideal graphene band structure. *Physical Review Letters*, 2009, 103(22) 324 citations

« First evidence of a 2D gaz at the SrTiO surface »

Santander-Syro, A. F., Copie, O., Kondo, T., Fortuna, F., Pailhès, S., Weht, R., Qiu, X. G., Bertran, F., Nicolaou, A., Taleb-Ibrahimi, A., Le Fèvre, P., Herranz, G., Bibes, M., Reyren, N., Apertet, Y., Lecoœur, P., Barthélémy, A., & Rozenberg, M. J. "Two-dimensional electron gas with universal subbands at the surface of SrTiO₃." *Nature*, 2011, 469(7329): 189–193 368 citations

« Evidence of gap opening at the edges of graphene nano-ribbons»

Hicks, J., Tejada, A., Taleb-Ibrahimi, A., Nevius, M. S., Wang, F., Shepperd, K., Palmer, J., Bertran, F., Le Fèvre, P., Kunc, J., de Heer, W. A., Berger, C., & Conrad, E. H. A wide-bandgap metal–semiconductor–metal nanostructure made entirely from graphene. *Nature Physics*, 2013, 9(1): 49-54 128 citations

« Chemical selectivity in photo-stimulated desorption»

JA Yarmoff, A Taleb-Ibrahimi, FR McFeely, P Avouris. Chemical selectivity in photon-stimulated desorption of fluorine from silicon, *Physical review letters*, 1989 60 (10), 960 42 citations

« Evidence of ballistic transport in graphene nano-ribbons »

Baringhaus, J., Ruan, M., Edler, F., Tejada, A., Sicot, M., Taleb-Ibrahimi, A., Li, A. P., Jiang, Z., Conrad, E. H., Berger, C., Tegenkamp, C., & de Heer, W. A. Exceptional ballistic transport in epitaxial graphene nanoribbons. *Nature*, 2014, 506(7488): 349–354 218 citations

« Observation of topological order in α -Sn(001) thin films »

Ohtsubo, Y., Le Fevre, P., Bertran, F., & Taleb-Ibrahimi, A. Dirac Cone with Helical Spin Polarization in Ultrathin α -Sn(001) Films. *Physical Review Letters*, 2013, 111(21): art.n° 216401 28 citations