



Consiglio Nazionale  
delle Ricerche

Università degli Studi  
de L'Aquila



14-18 SEPTEMBER 2015 - BOLOGNA, ITALY



# GRAPHITA<sup>2015</sup>

A Multidisciplinary and Intersectorial Workshop  
on Synthesis, Characterization and  
Technological Exploitation of Graphene

**FINAL PROGRAM**

<http://graphita.bo.imm.cnr.it>



# Program at a Glance

Monday 14 <sup>th</sup>		Tuesday 15 <sup>th</sup>		Wednesday 16 <sup>th</sup>		Thursday 17 <sup>th</sup>		Friday 18 <sup>th</sup>	
8:30	REGISTRATION	8:30	OPENING LECTURE	8:30	OPENING LECTURE	8:30	OPENING LECTURE	8:30	OPENING LECTURE
10:00		9:00	SESSION A	9:00	SESSION C	9:00	SESSION D	9:00	SESSION G
		10:30	SESSION A	10:00	COFFEE BREAK	09:45	SESSION E		
		11:00	SESSION B	10:30	SESSION C	10:30	SESSION E	10:30	
12:00	OPENING CEREMONY		SESSION B		SESSION C		SESSION E		
		12:00		12:00		12:00		12:00	
13:30	OPENING LECTURE	13:30	SESSION B	13:30	SESSION C	13:30	SESSION F	12:15	CLOSING CEREMONY
14:00			SESSION B	15:15	SESSION C		SESSION F	12:45	SESSION H
		15:30	SESSION C		SESSION D	15:30	SESSION G		
16:00	COFFEE BREAK	16:00	COFFEE BREAK	16:00	COFFEE BREAK	16:00	COFFEE BREAK		
16:30		16:30		16:30		16:30			
			SESSION C		SESSION D		SESSION G		
18:30	SESSION B	18:30	SESSION C	18:30	SESSION D	18:00	SESSION H		
						18:30			
19:30	POSTER SESSION 1	19:30	POSTER SESSION 1	19:30	POSTER SESSION 2	19:30	POSTER AWARDS and POSTER SESSION 2		
						20:30			

- A: Progress in Synthesis and Production
- B: Fundamental Experimental Investigation of Graphene and 2D Materials
- C: Fundamental Science of Graphene and 2D Materials
- D: Graphene and 2D Materials Nano-Composites
- E: Energy Applications
- F: Graphene and Living Matter
- G: Opto- and Flexible Electronics and Sensing
- H: Chemistry on Graphene



## Day 1 - Monday, September 14<sup>th</sup>

DAY 1 - SEP 14 08:30-10:00	REGISTRATION
DAY 1 - SEP 14 10:00-12:00	OPENING CEREMONY  <b>C. Spinella</b> - CNR DSFTM Director <b>L. Ambrosio</b> - CNR DSCTM Director <b>R. Zamboni</b> - CNR ISOF Director and President of Bologna Research Area
DAY 1 - SEP 14 12:00-13:30	BUFFET LUNCH
DAY 1 - SEP 14 13:30-14:00 OPENING LECTURE	<b>P. Avouris</b> Graphene Plasmonics Opening Lecture

### Session A: Progress in Synthesis and Production

DAY 1 - SEP 14 14:00-14:30 INVITED	<b>S. Hofmann</b> Towards integrated manufacturing of 2D materials Progress in Synthesis and Production
DAY 1 - SEP 14 14:30-14:45 ORAL	<b>A. Fairbrother</b> Atomically Precise Graphene Nanoribbons for Device Applications Progress in Synthesis and Production



DAY 1 - SEP 14  
14:45-15:00  
ORAL

**M. Lukosius**

Ni assisted CMOS Compatible Graphene Synthesis by CVD

Progress in Synthesis and Production

DAY 1 - SEP 14  
15:00-15:30  
INVITED

**C. Coletti**

Rapid CVD Synthesis of Highly Crystalline 2D Materials: from Large Grain Graphene on Cu, to Turbostratic Graphene on SiC and van der Waals Heterostructures

Progress in Synthesis and Production

DAY 1 - SEP 14  
15:30-15:45  
ORAL

**S. Vangelista**

Role of Temperature and Substrate in the Scalable and Uniform Deposition of MoS<sub>2</sub> by Mo Thin Films Sulfurization

Progress in Synthesis and Production

DAY 1 - SEP 14  
15:45-16:00  
ORAL

**J. Azpeitia**

Transforming C<sub>60</sub> into graphene: growth, structural and electronic characterization

Progress in Synthesis and Production

DAY 1 - SEP 14  
16:00-16:30

COFFEE BREAK

## Session B: Fundamental Experimental Investigation of 2D Materials

DAY 1 - SEP 14  
16:30-17:00  
INVITED

**A. Locatelli**

Cathode lens spectro-microscopy of the graphene-metal interface: film-substrate interactions, buffer layers and trapped species

Fundamental Experimental Investigation of 2D Materials

DAY 1 - SEP 14  
17:00-17:15  
ORAL

**P. Gnauck**

Helium Ion Microscopy: a Technology for Characterization and Nanofabrication of Challenging Materials

Fundamental Experimental Investigation of 2D Materials

DAY 1 - SEP 14  
17:15-17:30  
ORAL

**F. Bisio**

Plasmonic response of composite graphene-Au nanopatterned systems

Fundamental Experimental Investigation of 2D Materials



DAY 1 - SEP 14  
17:30-17:45  
ORAL

**A. Sala**

## Fabrication of 2D heterojunction in graphene via low energy $N_2^+$ irradiation

Fundamental Experimental Investigation of 2D Materials

DAY 1 - SEP 14  
17:45-18:00  
ORAL

**G. Brunetti**

## Latest TEM developments from JEOL

Fundamental Experimental Investigation of 2D Materials

DAY 1 - SEP 14  
18:00-18:30  
INVITED

**A. Molle**

## The Rise of Silicene: from the Synthesis to the Transistor

Fundamental Experimental Investigation of 2D Materials

DAY 1 - SEP 14  
18:30-19:30  
POSTER SESSION 1

## POSTER SESSION 1

C - Fundamental Science of Graphene and 2D Materials

F - Graphene and Living Matter

D - Graphene and 2D Materials Nano-Composites

E - Energy Applications



## Day 2 - Tuesday, September 15<sup>th</sup>

DAY - SEP 15  
08:30-09:00  
OPENING LECTURE

**M. Ruben**

Surface-confined Synthesis of 2D sp/sp<sup>2</sup> Graphdiynes

Opening Lecture

### Session A: Progress in Synthesis and Production

DAY 2 - SEP 15  
09:00-09:15  
ORAL

**S. Barwich**

Testing our Understanding of the Shear Exfoliation Model

Progress in Synthesis and Production

DAY 2 - SEP 15  
09:15-09:45  
INVITED

**H.M. Cheng**

Graphene Materials: Large-Scale Fabrication and Application Explorations

Progress in Synthesis and Production

DAY 2 - SEP 15  
09:45-10:00  
ORAL

**I. Hernandez-Rodriguez**

Graphene growth on Pt(111) and Au(111) using a MBE solid carbon source

Progress in Synthesis and Production

DAY 2 - SEP 14  
10:00-10:30

COFFEE BREAK

DAY 2 - SEP 15  
10:30-11:00  
INVITED

**A. Pžnicaud**

Additive Free, Single Layer Graphene in Water and Few Graphene Layers from Food Waste

Progress in Synthesis and Production

### Session B: Fundamental Experimental Investigation of 2D Materials

DAY 2 - SEP 15  
11:00-11:30  
INVITED

**C. Galotis**

Uniaxial tension of 2D membranes such as graphene; is orthogonal buckling avoidable?

Fundamental Experimental Investigation of 2D Materials

DAY 2 - SEP 15  
11:30-11:45  
ORAL

**G. Nicotra**

Atomic EELS/STEM analysis at interface of graphene grown on SiC

Fundamental Experimental Investigation of 2D Materials



DAY 2 - SEP 15  
11:45-12:00  
ORAL

**A. Liscio**

### Breaking 2D Materials: A Multi-Scale Statistical Analysis of Graphene Oxide Fragmentation

Fundamental Experimental Investigation of 2D Materials

DAY 2 - SEP 15  
12:00-12:15  
ORAL

**G. Fioravanti**

### Reduction dependent Wetting properties of Graphene Oxide

Fundamental Experimental Investigation of 2D Materials

DAY 2 - SEP 15  
12:15-13:30

## BUFFET LUNCH

DAY 2 - SEP 15  
13:30-14:00  
INVITED

**C. E. Giusca**

### Water Affinity to Epitaxial Graphene: Impact of Layer Thickness

Fundamental Experimental Investigation of 2D Materials

DAY 2 - SEP 15  
14:00-14:15  
ORAL

**R. Tagliapietra**

### Raman Spectroscopy Characterisation of Large Area 2D materials

Fundamental Experimental Investigation of 2D Materials

DAY 2 - SEP 15  
14:15-14:30  
ORAL

**G. Salviati**

### Native Cesium Doping and Metal Insulator Transition in a MoS<sub>2</sub> Nanosheet

Fundamental Experimental Investigation of 2D Materials

DAY 2 - SEP 15  
14:30-14:45  
ORAL

**A. Lodi Rizzini**

### Terahertz Optical Modes of Supported Graphene Bilayer

Fundamental Experimental Investigation of 2D Materials

DAY 2 - SEP 15  
14:45-15:00  
ORAL

**D. Delille**

### Study of Low-Angle boundaries in Graphene-like materials: an example of optimizing imaging conditions in a Cs-corrected S/TEM

Fundamental Experimental Investigation of 2D Materials

DAY 2 - SEP 15  
15:00-15:30  
INVITED

**F. Giannazzo**

### Graphene vertical heterostructures with wide bandgap semiconductors for energy efficient and high frequency electronics

Fundamental Experimental Investigation of 2D Materials



## Session C: Fundamental Science of Graphene and 2D Materials

DAY 2 - SEP 15 15:30-16:00 INVITED	<b>L. Ponomarenko</b> Probing Hydrodynamic Transport in Ultraclean Graphene Fundamental Science of Graphene and 2D Materials
DAY 2 - SEP 15 16:00-16:30	COFFEE BREAK
DAY 2 - SEP 15 16:30-16:45 ORAL	<b>N.I. Verbitskiy</b> Atomically Precise Semiconductor Graphene and hBN Interfaces by Ge Intercalation Fundamental Science of Graphene and 2D Materials
DAY 2 - SEP 15 16:45-17:00 ORAL	<b>R.S. Gonnelli</b> Temperature Dependence of Electric Transport in Few-layer Graphene under Strong Electrochemical Gating: Scattering and Weak Localization Fundamental Science of Graphene and 2D Materials
DAY 2 - SEP 15 17:00-17:15 ORAL	<b>M. Dosbaba</b> Characterizing Graphene using RISE system Fundamental Science of Graphene and 2D Materials
DAY 2 - SEP 15 17:15-17:45 INVITED	<b>M. Polini</b> Negative Local Resistance Due To Viscous Electron Backflow In Graphene Fundamental Science of Graphene and 2D Materials
DAY 2 - SEP 15 17:45-18:00 ORAL	<b>G.K. Gueorguiev</b> Properties and feasibility of 2D stacks based on hexagonal AlN sheets Fundamental Science of Graphene and 2D Materials
DAY 2 - SEP 15 18:00-18:15 ORAL	<b>P. Ayasse</b> The Apyron Ð New Ways of Automation in Raman Imaging Fundamental Science of Graphene and 2D Materials
DAY 2 - SEP 15 18:15-18:30 ORAL	<b>A. Giannakopoulos</b> Tuning the electronic structure of graphene by molecular dopants: Impact of substrate Fundamental Science of Graphene and 2D Materials
DAY 2 - SEP 15 18:30-19:30 POSTER SESSION 1	POSTER SESSION 1 C - Fundamental Science of Graphene and 2D Materials F - Graphene and Living Matter D - Graphene and 2D Materials Nano-Composites E - Energy Applications





## Day 3 - Wednesday, September 16th

DAY 3 - SEP 16 <b>08:30-09:00</b> OPENING LECTURE	<b>J. Hone</b> <b>Properties and Applications of hBN-encapsulated Graphene</b> Opening Lecture
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## Session C: Fundamental Science of Graphene and 2D Materials

DAY 3 - SEP 16 <b>09:00-09:30</b> INVITED	<b>L. Colombo</b> <b>Lattice Thermal Transport in Nanocrystalline Graphene</b> Fundamental Science of Graphene and 2D Materials
DAY 3 - SEP 16 <b>09:30-09:45</b> ORAL	<b>F. Hajiheidari</b> <b>Electronic and magnetic properties of graphene nanoribbons deposited on the topological insulator Sb<sub>2</sub>Te<sub>3</sub></b> Fundamental Science of Graphene and 2D Materials
DAY 3 - SEP 16 <b>09:45-10:00</b> ORAL	<b>K.A. Guerrero-Becerra</b> <b>Signatures of Wigner Localization in a Graphene Quantum Dot from Coulomb-Blockade Spectroscopy</b> Fundamental Science of Graphene and 2D Materials
DAY 3 - SEP 16 <b>10:00-10:30</b> COFFEE BREAK	
DAY 3 - SEP 16 <b>10:30-10:45</b> ORAL	<b>P.B. Sorokin</b> <b>New specific properties of graphene: from stability to electronic properties</b> Fundamental Science of Graphene and 2D Materials
DAY 3 - SEP 16 <b>10:45-11:15</b> INVITED	<b>A.V. Krasheninnikov</b> <b>Native and Irradiation-Induced Defects in Two-Dimensional Inorganic Materials</b> Fundamental Science of Graphene and 2D Materials
DAY 3 - SEP 16 <b>11:15-11:30</b> ORAL	<b>A. Ruini</b> <b>Electron and Optical Spectroscopies of Graphene Nanoribbons on Au(111)</b> Fundamental Science of Graphene and 2D Materials
DAY 3 - SEP 16 <b>11:30-11:45</b> ORAL	<b>S.T. Skowron</b> <b>Reaction Kinetics of Stone-Wales Transformations in Graphene</b> Fundamental Science of Graphene and 2D Materials



DAY 3 - SEP 16  
11:45-12:00  
ORAL

**I. Deretzis**

First principles calculations and kinetic process simulations of nitrogen and boron doped graphene

Fundamental Science of Graphene and 2D Materials

DAY 3 - SEP 16  
12:00-13:30

BUFFET LUNCH

DAY 3 - SEP 16  
13:30-14:00  
INVITED

**S. Roche**

Charge Transport in Polycrystalline Graphene-based Materials

Fundamental Science of Graphene and 2D Materials

DAY 3 - SEP 16  
14:00-14:15  
ORAL

**R. Rosati**

Information transfer via electronic wavepackets in single-walled carbon nanotubes

Fundamental Science of Graphene and 2D Materials

DAY 3 - SEP 16  
14:15-14:30  
ORAL

**F. Valencia**

A Model for Self-rolling of an Aluminosilicate sheet into a single walled Imogolite Nanotube

Fundamental Science of Graphene and 2D Materials

DAY 3 - SEP 16  
14:30-14:45  
ORAL

**D. Prezzi**

Bandgap renormalization governs the ultrafast response of MoS<sub>2</sub>

Fundamental Science of Graphene and 2D Materials

DAY 3 - SEP 16  
14:45-15:15  
INVITED

**G. Profeta**

Decoupling graphene from a substrate

Fundamental Science of Graphene and 2D Materials

## Session D: Graphene and 2D Materials Nano-Composites

DAY 3 - SEP 16  
15:15-15:30  
ORAL

**R. Ippoliti**

Protein induced self-assembly of GO

Graphene and 2D materials nano-composites



DAY 3 - SEP 16

15:30-15:45

ORAL

**A. Ciesielski**

### A Supramolecular Strategy to Leverage the Liquid-Phase Exfoliation of Graphite into Graphene: Inks and Light-Responsive Hybrid Materials

Graphene and 2D materials nano-composites

DAY 3 - SEP 16

15:45-16:00

ORAL

**Y. Shin**

### Raman Characterization of Liquid-Phase Exfoliated Graphene and Composite Membranes

Graphene and 2D materials nano-composites

DAY 3 - SEP 16

16:00-16:30

COFFEE BREAK

DAY 3 - SEP 16

16:30-17:00

INVITED

**V. Palermo**

### 2-dimensional composites based on graphene for functional and structural applications

Graphene and 2D materials nano-composites

DAY 3 - SEP 16

17:00-17:15

ORAL

**P. Lamberti**

### Exfoliated Graphite Reinforced Epoxy/Amine Composite: A Study on Morphological and Electrical Properties

Graphene and 2D materials nano-composites

DAY 3 - SEP 16

17:15-17:45

INVITED

**N.M. Pugno**

### Mechanics of 2D materials and 3D composites

Graphene and 2D materials nano-composites

DAY 3 - SEP 16

17:45-18:00

ORAL

**F. Conrado**

### A continuous 3D-graphene network to overcome threshold issues and contact resistance in thermally conductive graphene nanocomposites

Graphene and 2D materials nano-composites

DAY 3 - SEP 16

18:00-18:15

ORAL

**C. Androulidakis**

### Effect of number of layers on the compression behaviour of graphenes

Graphene and 2D materials nano-composites

DAY 3 - SEP 16

18:15-18:30

ORAL

**C. Acquarelli**

### Manufacture and electromechanical characterization of highly conductive multilayer-graphene/polydimethylsiloxane flexible paper

Graphene and 2D materials nano-composites



DAY 3 - SEP 16  
18:30-19:30  
POSTER SESSION 1

## POSTER SESSION 2

- A - Progress in Synthesis and Production
- G - Opto- and Flexible electronics and Sensing applications
- H - Chemistry on Graphene
- B - Fundamental Experimental Investigation of 2D Materials

DAY 3 - SEP 16  
20:30-23:00

## SOCIAL DINNER



## Day 4 - Thursday, September 17th

DAY 4 - SEP 17 <b>08:30-09:00</b> OPENING LECTURE	<b>M. Strano</b> Modifying 2D Material Interfaces through Chemistry and Controlled Stacking for Engineering Applications Opening Lecture
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### Session D: Graphene and 2D materials nano-composites

DAY 4 - SEP 17 <b>09:00-09:15</b> ORAL	<b>D. Pierleoni</b> Graphene-based coatings on polymer films for gas barrier applications Graphene and 2D materials nano-composites
DAY 4 - SEP 17 <b>09:15-09:30</b> ORAL	<b>P. Rivolo</b> Synthesis and Characterization of MoS2 decorated Graphene Aerogels for Supercapacitor Electrodes Graphene and 2D materials nano-composites
DAY 4 - SEP 17 <b>09:30-09:45</b> ORAL	<b>M. Gonzalez-Sanchez</b> High Porosity Graphene/CNT Hybrid Scaffold With Excellent Electromagnetic Interference Shielding Graphene and 2D materials nano-composites

### Session E: Energy Applications

DAY 4 - SEP 17 <b>09:45-10:15</b> INVITED	<b>V. Tozzini</b> Manipulating graphene properties at the nano-scale Energy Applications
DAY 4 - SEP 17 <b>10:15-10:45</b>	COFFEE BREAK
DAY 4 - SEP 17 <b>10:45-11:00</b> ORAL	<b>A. Gigot</b> Electrochemical characterization of Graphene-Mo-based electrodes for energy storage in supercapacitors Energy Applications
DAY 4 - SEP 17 <b>11:00-11:15</b> ORAL	<b>R. Rizzoli</b> Graphene as transparent conducting layer in Si-nanodot based p-i-n thin film solar cells Energy Applications



DAY 4 - SEP 17  
11:15-11:30  
ORAL

**D. Pontiroli**

Local Structure and Dynamics of Hydrogen in Defective Graphene

Energy Applications

DAY 4 - SEP 17  
11:30-12:00  
INVITED

**F. Bonaccorso**

Solution processing of graphene and other 2d crystals for energy conversion and storage

Energy Applications

DAY 4 - SEP 17  
12:00-13:30

BUFFET LUNCH

## Session F: Graphene and Living Matter

DAY 4 - SEP 17  
13:30-14:00  
INVITED

**D.H. Min**

Fluorescent Biosensors based on Graphene Oxide for Diagnostics and Drug Discovery

Graphene and Living Matter

DAY 4 - SEP 17  
14:00-14:15  
ORAL

**A.M. Monaco**

Interfacing (reduced) Graphene Oxide to neurons: an electrophysiological study

Graphene and Living Matter

DAY 4 - SEP 17  
14:15-14:30  
ORAL

**A. Bregnocchi**

Antimicrobial activity of graphene nanoplatelets against Staphylococcus aureus

Graphene and Living Matter

DAY 4 - SEP 17  
14:30-14:45  
ORAL

**K. Shivaram**

Nanostructure-Based Fluorescent Biosensors

Graphene and Living Matter

DAY 4 - SEP 17  
14:45-15:00  
ORAL

**J.F. Colomer**

Discussion about the antibacterial activity of large-area graphene films produced by atmospheric pressure Chemical Vapor Deposition

Graphene and Living Matter



DAY 4 - SEP 17 <b>15:00-15:30</b> INVITED	<b>J. Russier</b> Using Graphene Oxide for New Targeted Therapies: Effects on Immune Cells Graphene and Living Matter
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## Session G: Opto- and Flexible electronics and Sensing Applications

DAY 4 - SEP 17 <b>15:30-16:00</b> INVITED	<b>S. Borini</b> Graphene technology for the connected world: opportunities and challenges Opto- and Flexible electronics and Sensing Applications
DAY 4 - SEP 17 <b>16:00-16:30</b>	<b>COFFEE BREAK</b>
DAY 4 - SEP 17 <b>16:30-17:00</b> INVITED	<b>S. Ravesi</b> Challenges To Integrate Graphene As Enabling Materials In Smart Systems Fabricated On Flexible Substrates Opto- and Flexible electronics and Sensing Applications
DAY 4 - SEP 17 <b>17:00-17:15</b> ORAL	<b>F. Bianco</b> THz detection with epitaxial graphene field effect transistors on silicon carbide Opto- and Flexible electronics and Sensing Applications
DAY 4 - SEP 17 <b>17:15-17:45</b> INVITED	<b>C.G. Choi</b> Application of Graphene in Electronic, Photonic and Biological Devices Opto- and Flexible electronics and Sensing Applications
DAY 4 - SEP 17 <b>17:45-18:00</b> ORAL	<b>L. Ortolani</b> Graphene-Epoxy Flexible Capacitors Enhanced by Ceramic Fillers Opto- and Flexible electronics and Sensing Applications



## Session H: Chemistry on Graphene

DAY 4 - SEP 17 18:00-18:30 INVITED	<b><i>E. Bichoutskaia</i></b> Electron beam induced chemical reactions involving nano carbon: theoretical perspective  Chemistry on Graphene
DAY 4 - SEP 17 18:30-18:45	BEST POSTER AWARDS (Sponsored by EPL)
DAY 4 - SEP 17 18:45-19:30	POSTER SESSION 2  A - Progress in Synthesis and Production G - Opto- and Flexible electronics and Sensing applications H - Chemistry on Graphene B - Fundamental Experimental Investigation of 2D Materials





## Day 5 - Friday, September 18th

DAY 5 - SEP 18 <b>08:30-09:00</b> OPENING LECTURE	<b>J.N. Coleman</b> Production of nanosheets by liquid exfoliation: The route to applications Opening Lecture
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### Session G: Opto- and Flexible electronics and Sensing Applications

DAY 5 - SEP 18 <b>09:00-09:30</b> INVITED	<b>K.M. Abramski</b> Ultrafast pulsed fiber lasers based on graphene and 2-D-materials Opto- and Flexible electronics and Sensing Applications
DAY 5 - SEP 18 <b>09:30-09:45</b> ORAL	<b>A. Calimera</b> Graphene-Based Logic Circuits: Do We Really Need a Band-Gap? Opto- and Flexible electronics and Sensing Applications
DAY 5 - SEP 18 <b>09:45-10:00</b> ORAL	<b>A. Di Bartolomeo</b> Double conductance minima in graphene field-effect transistors Opto- and Flexible electronics and Sensing Applications
DAY 5 - SEP 18 <b>10:00-10:30</b> INVITED	<b>C. Casiraghi</b> 2D crystal based Heterostructures: from Superlattices to Devices Opto- and Flexible electronics and Sensing Applications

### Session H: Chemistry on Graphene

DAY 5 - SEP 18 <b>10:30-11:00</b> INVITED	<b>A. Politano</b> Surface Chemical Reactions in Epitaxial Graphene and Materials "Beyond Graphene" Chemistry on Graphene
DAY 5 - SEP 18 <b>11:00-11:15</b> ORAL	<b>S. Conti</b> Accurate and Efficient Calculation of the Desorption Energy of Small Molecules from Graphene Chemistry on Graphene
DAY 5 - SEP 18 <b>11:15-11:30</b> ORAL	<b>Z. Xia</b> Covalent functionalization of self-assembled aryl diazonium salts onto high quality graphene by electrochemistry Chemistry on Graphene



DAY 5 - SEP 18

11:30-11:45

ORAL

**S. Filice**

Modification of Graphene Oxide and Graphene Oxide-TiO<sub>2</sub> Solutions by Pulsed Laser Irradiation for Dye Degradation

Chemistry on Graphene

DAY 5 - SEP 18

11:45-12:00

ORAL

**A.V. Markevich**

Dynamics of Single Fe Atoms Embedded into the Graphene Lattice

Chemistry on Graphene

DAY 5 - SEP 18

12:00-12:15

ORAL

**C. Ingrosso**

Photoactive Hybrid Materials based on Colloidal Nanocrystals and CVD Monolayer Graphene

Chemistry on Graphene

DAY 5 - SEP 18

12:15-12:45

CLOSING CEREMONY

DAY 5 - SEP 18

12:45-14:30

FAREWELL LUNCH



## POSTER SESSION 1

DAY 1-2 : SEP 14-15

**P101**

Poster

***M. Baldoni***

### Adsorbate-Induced Curvature and Stiffening of Graphene

Fundamental Science of Graphene and 2D Materials

DAY 1-2 : SEP 14-15

**P102**

Poster

***J.J. Castro***

### On the Origin of the Pseudo Jahn-Teller Puckering Instability in Silicene

Fundamental Science of Graphene and 2D Materials

DAY 1-2 : SEP 14-15

**P103**

Poster

***M. De Corato***

### Raman fingerprints of atomically precise graphene nanoribbons: insights from ab-initio simulations

Fundamental Science of Graphene and 2D Materials

DAY 1-2 : SEP 14-15

**P104**

Poster

***C. Degli Esposti Boschi***

### Numerical simulation of electron holography response in folded graphene sheets

Fundamental Science of Graphene and 2D Materials

DAY 1-2 : SEP 14-15

**P105**

Poster

***V. De Renzi***

### Probing Excitonic Effects in Chevron-like Graphene Nanoribbons

Fundamental Science of Graphene and 2D Materials

DAY 1-2 : SEP 14-15

**P106**

Poster

***I. Deretzis***

### Atomistic dynamics and electronic transport in hydrogenated Graphene

Fundamental Science of Graphene and 2D Materials

DAY 1-2 : SEP 14-15

**P107**

Poster

***R.I. Gonzalez***

### A Strategy to Model the Bending of 2D Materials

Fundamental Science of Graphene and 2D Materials

DAY 1-2 : SEP 14-15

**P108**

Poster

***C. Androulidakis***

### Strain engineering bandgap tunability confined in small areas of MoS<sub>2</sub> bilayer membranes

Fundamental Science of Graphene and 2D Materials

DAY 1-2 : SEP 14-15

**P109**

Poster

***J. H. Los***

### Scaling behaviour of in-plane elastic properties of graphene

Fundamental Science of Graphene and 2D Materials



DAY 1-2 : SEP 14-15

**P110**

Poster

***J.A. Martin-Gago***

**Structural and Electronic Properties of Epitaxial Graphene Superstructures on Transition Metal Surfaces: The Role of the Pinning Points**

Fundamental Science of Graphene and 2D Materials

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DAY 1-2 : SEP 14-15

**P111**

Poster

***G. Murgu'a-Romero***

**Ritus Propagator and Transverse Electrical Conductivity in Multilayer Graphene**

Fundamental Science of Graphene and 2D Materials

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DAY 1-2 : SEP 14-15

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