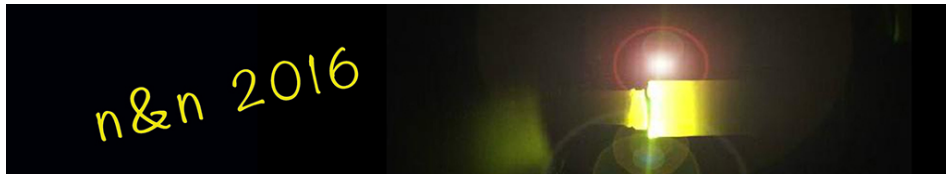


Nanoscience and Nanotechnology



Report of Contributions

Contribution ID: 0

Type: **not specified**

Safety Assessment of Engineered Nanomaterials: Implications for Nanomedicine

Monday, 26 September 2016 12:00 (45 minutes)

Presenter: FADEEL, Bengt (Karolinska Institute)

Session Classification: Plenary Session

Contribution ID: 1

Type: **not specified**

Nanotechnologies and Raman SERS applied in Medicine: from Therapeutic Drug Monitoring to screening in oncology

Monday, 26 September 2016 12:45 (45 minutes)

Presenter: SERGO, Valter (University Trieste)

Session Classification: Plenary Session

Contribution ID: 2

Type: **not specified**

Safety assessment of nanotechnologies in the food sector: problems and perspectives

Tuesday, 27 September 2016 09:30 (45 minutes)

Presenter: CUBADDA, Francesco (Istituto Superiore Sanità)

Session Classification: Plenary Session

Contribution ID: 3

Type: **not specified**

**pH and thermo-sensitive self-assembling properties
in aqueous solution of the lipopeptide
lauril-Gly-Gly-D-Ser-D-Lys-NH₂**

Wednesday, 28 September 2016 15:00 (30 minutes)

Presenter: Dr NOVELLI, Federica (La Sapienza, Department of Chemistry)

Session Classification: NANOMEDICINE AND NANOTHERAPEUTICS

Contribution ID: 4

Type: **not specified**

A New Anticancer Agent for Hedgehog-dependent Tumors: from Drug Discovery to Drug Delivery

Wednesday, 28 September 2016 12:00 (30 minutes)

Presenters: INGALLINA, Cinzia (Sapienza Università di Roma); GHIRGA, Francesca (Italian Institute of Technology IIT)

Session Classification: NANOMEDICINE AND NANOTHERAPEUTICS

Contribution ID: 5

Type: **not specified**

Use of ferritin-based nanoparticles for the treatment of human diseases

Wednesday, 28 September 2016 13:00 (30 minutes)

Presenter: COLOTTI, Gianni (IBPM CNR)

Session Classification: NANOMEDICINE AND NANOTHERAPEUTICS

Contribution ID: 6

Type: **not specified**

Hyaluronic acid as carrier for anti-inflammatory and anticancer bioactives: the role of CD44 in cancer treatment

Presenter: QUAGLIARIELLO, Vincenzo (IRCCS Istituto nazionale tumori G. Pascale)

Contribution ID: 7

Type: **not specified**

Optical Flow tracing of micro and nano contrast agents: new method for tumor's microenvironment evaluation

Presenter: Dr GIUSTETTO, Pierangela (PUlse Waves S.R.L.s)

Contribution ID: 8

Type: **not specified**

Targeting and drug delivery by nanogels with temperature tunable surface: A case study

Wednesday, 28 September 2016 11:30 (30 minutes)

Presenter: PARADOSSI, Gaio

Session Classification: NANOMEDICINE AND NANOTHERAPEUTICS

Contribution ID: 9

Type: **not specified**

Designing Magnetic Nanomaterials for Biomedical Applications

Wednesday, 28 September 2016 15:30 (30 minutes)

Presenter: Dr PEDDIS, Davide (ISM-CNR)

Session Classification: NANOMEDICINE AND NANOTHERAPEUTICS

Contribution ID: **10**

Type: **not specified**

The biogenesis and function of matrix (nano)vesicles during endochondral ossification

Monday, 26 September 2016 14:30 (45 minutes)

Presenter: MILLÁN, José Luis (Sanford Burnham Prebys Medical Discovery Institute)

Session Classification: Plenary Session

Contribution ID: 11

Type: **not specified**

Advanced biomaterials and technologies for tissue repair/regeneration

Monday, 26 September 2016 11:15 (45 minutes)

Presenter: AMBROSIO, Luigi (Institute for Polymers, Composites and Biomaterials)

Session Classification: Plenary Session

Contribution ID: 12

Type: **not specified**

Raman Spectroscopy as a tool for investigation of carbon materials: a careful approach

Tuesday, 27 September 2016 10:15 (45 minutes)

Presenter: TAGLIAFERRO, Alberto (Politecnico di Torino)

Session Classification: Plenary Session

Contribution ID: 13

Type: **not specified**

Immunotherapy on chip: "under the microscope" drug-induced modulation of the immune response

Tuesday, 27 September 2016 16:45 (45 minutes)

Presenter: BUSINARO, Luca (CNR)

Session Classification: Plenary Session

Contribution ID: 14

Type: **not specified**

Electrospinning of nanofibers for tissue engineering

Wednesday, 28 September 2016 09:30 (45 minutes)

Presenter: RAINER, Alberto (Università Campus Bio-Medico di Roma)

Session Classification: Plenary Session

Contribution ID: 15

Type: **not specified**

Recent Advances in Graphene Nanophotonics

Wednesday, 28 September 2016 10:15 (45 minutes)

Presenter: DE ABAJO, Javier García (Instituto de Ciencias Fotónicas)

Session Classification: Plenary Session

Contribution ID: 16

Type: **not specified**

Sensing Properties of Electrically Conductive Polymer blends and composites containing CNT

Wednesday, 28 September 2016 16:45 (45 minutes)

Presenter: PIONTECK, Jürgen (Leibniz Institute of Polymer Research Dresden)

Session Classification: Plenary Session

Contribution ID: 17

Type: **not specified**

Prospective Technologies for Organ Repair

Tuesday, 27 September 2016 11:30 (30 minutes)

Presenter: DI NARDO, Paolo (University of Tor Vergata)

Session Classification: Tissue Engineering and Microgravity

Contribution ID: 18

Type: **not specified**

Microgravity and cell shape. Non-equilibrium related emergence of different phenotypes

Tuesday, 27 September 2016 12:00 (30 minutes)

Presenter: Prof. BIZZARRI, Mariano (University La Sapienza)

Session Classification: Tissue Engineering and Microgravity

Contribution ID: 19

Type: **not specified**

The effects induced by the microgravity: in vitro cell models to study the variation of extracellular mechanical forces

Tuesday, 27 September 2016 12:30 (30 minutes)

Presenter: MARIGGIO, Maria A.

Session Classification: Tissue Engineering and Microgravity

Contribution ID: 20

Type: **not specified**

Two Dimensional Nitrides: an ab-initio study

Tuesday, 27 September 2016 11:30 (30 minutes)

Presenter: PRETE, Maria Stella (University of Tor Vergata)

Session Classification: Electronic Devices and Fundamental properties

Contribution ID: 21

Type: **not specified**

Doping graphene with nitrogen, theory and experiment

Tuesday, 27 September 2016 12:00 (30 minutes)

Presenter: Prof. LAMBIN, Philippe (University of Namur)

Session Classification: Electronic Devices and Fundamental properties

Contribution ID: 22

Type: **not specified**

Carbon Gibbson Cells for electromagnetic applications

Tuesday, 27 September 2016 12:30 (30 minutes)

Presenter: Dr KUZHIR, Polina (Research Institute for Nuclear Problems of Belarusian State University)

Session Classification: Electronic Devices and Fundamental properties

Contribution ID: 23

Type: **not specified**

Recent progress in osteoarthritis nanomedicine

Tuesday, 27 September 2016 14:30 (45 minutes)

Presenter: BOTTINI, Massimo (University of Tor Vergata)

Session Classification: Tissue Engineering and Microgravity

Contribution ID: 24

Type: **not specified**

Fabrication and characterization of matrix vesicles biomimetic systems and their interaction with collagen fibers during biomineralization

Tuesday, 27 September 2016 15:15 (30 minutes)

Presenter: BOLEAN, Maytê (Universidade de São Paulo)

Session Classification: Tissue Engineering and Microgravity

Contribution ID: 25

Type: **not specified**

Proteoliposomes in nanobiotechnology: proteins carrier systems to study the biomineralization process

Tuesday, 27 September 2016 15:45 (30 minutes)

Presenter: SPER SIMÃO, Ana Maria (Universidade de São Paulo)

Session Classification: Tissue Engineering and Microgravity

Contribution ID: 26

Type: **not specified**

Nanostructured Membrane Bioreactor for the creation of a human Liver Tissue

Thursday, 29 September 2016 11:30 (30 minutes)

Presenter: Dr SALERNO, Simona (Institute on Membrane Technology, National Research Council of Italy, ITM-CNR)

Session Classification: Nanomedical application

Contribution ID: 27

Type: **not specified**

Electrofluidinamics: Innovative platforms for Tissue Engineering and Molecular Therapies

Thursday, 29 September 2016 12:00 (30 minutes)

Presenter: GUARINO, Vincenzo

Session Classification: Nanomedical application

Contribution ID: 28

Type: **not specified**

Removing interferences with the MS-MS technology in triple quadrupole ICP-MS to improve the analytical detection of inorganic nanomaterials

Thursday, 29 September 2016 11:30 (30 minutes)

Presenter: SCARDINA, Paolo (Agilent Technologies Italia S.p.A.)

Session Classification: Characterization on nanomaterials

Contribution ID: 29

Type: **not specified**

Electron microscopy of nanostructured materials for photovoltaic and photocatalytic applications

Thursday, 29 September 2016 09:30 (45 minutes)

Presenter: DUCATI, Caterina (University of Cambridge)

Session Classification: Plenary Session

Contribution ID: 30

Type: **not specified**

Efficient Surface Enhanced Raman Substrates for trace analysis and bio-sensing

Thursday, 29 September 2016 12:00 (45 minutes)

Presenter: MUSTO, Pellegrino (Institute for Polymers, Composites and Biomaterials of CNR)

Session Classification: Characterization on nanomaterials

Contribution ID: 31

Type: **not specified**

Structural Characterization of Carbon-Based Nanomaterials

Thursday, 29 September 2016 12:45 (45 minutes)

Presenter: GUERRA, Gaetano (University of Salerno)

Session Classification: Characterization on nanomaterials

Contribution ID: 32

Type: **not specified**

Tunable electron devices based on 2d materials

Thursday, 29 September 2016 12:45 (45 minutes)

Presenter: DRAGOMAN, Mircea (IMT Bucharest)

Session Classification: Electronic Devices and Fundamental properties

Contribution ID: 33

Type: **not specified**

Opening bandgap in graphene by nanopatterning

Presenter: Dr DINESCU, Adrian (IMT Bucharest)

Contribution ID: **34**

Type: **not specified**

TBA

Presenter: BRUNO, Giovanni (CNR)

Contribution ID: 35

Type: **not specified**

Nanoantimicrobials. Progress and Prospects

Thursday, 29 September 2016 10:15 (45 minutes)

Presenter: CIOFFI, Nicola (University of Bari)

Session Classification: Plenary Session

Contribution ID: 36

Type: **not specified**

Nano-biomaterials for cancer treatment: a light triggered implemented approach

Thursday, 29 September 2016 12:30 (30 minutes)

Presenter: Dr VARCHI, Greta (Institute of Organic Synthesis and Photoreactivity - Italian National Research Council (ISOF-CNR))

Session Classification: Nanomedical application

Contribution ID: 37

Type: **not specified**

In situ observation of heat-induced degradation of perovskite solar cells

Thursday, 29 September 2016 14:30 (30 minutes)

Presenter: DIVINITI, Giorgio (University of Cambridge)

Session Classification: Characterization on nanomaterials

Contribution ID: **38**

Type: **not specified**

Carbon nano-materials for electronics packaging applications

Tuesday, 27 September 2016 11:30 (30 minutes)

Presenter: FU, Yifeng (CHALMERS UNIVERSITY OF TECHNOLOGY)

Session Classification: Electronic devices and ICT

Contribution ID: 39

Type: **not specified**

Microwave Microscopy for Nano-Scale Characterization of Semiconductors and Dielectric Materials

Thursday, 29 September 2016 15:30 (30 minutes)

Presenter: MARCELLI, Romolo (CNR-IMM)

Session Classification: Electronic Devices and Fundamental properties

Contribution ID: 40

Type: **not specified**

Electromagnetic characterization of vertically-aligned MWCNT bundles: Applications to subwavelength antennas in microwave domain

Presenter: Dr TRIPON-CANSELIET, Charlotte (Assoc.Prof)

Contribution ID: 42

Type: **not specified**

Atomic force microscopy cantilevers beyond imaging

Wednesday, 28 September 2016 12:30 (30 minutes)

Presenter: Dr LONGO, Giovanni (ISM-CNR)

Session Classification: NANOMEDICINE AND NANOTHERAPEUTICS

Contribution ID: 43

Type: **not specified**

Performance Analysis and robust design of a graphene-based device for shielding application

Tuesday, 27 September 2016 13:00 (30 minutes)

Presenter: LAMBERTI, Patrizia (University of Salerno)

Session Classification: Electronic Devices and Fundamental properties

Contribution ID: 44

Type: **not specified**

High performance computing to design new materials for energy applications: the a-Si:H/c-Si interface for PV technology

Tuesday, 27 September 2016 12:00 (30 minutes)

Presenter: GIUSEPPONI, Simone (ENEA)

Session Classification: Electronic devices and ICT

Contribution ID: 45

Type: **not specified**

Advanced polymer nanocomposites through a tailored control of graphene spatial distribution

Wednesday, 28 September 2016 11:30 (30 minutes)

Presenter: LAVORGNA, Marino (CNR- IPCB)

Session Classification: Nanocomposite Materials

Contribution ID: 46

Type: **not specified**

Nanostructured Polymeric Ablative Materials

Wednesday, 28 September 2016 12:00 (30 minutes)

Presenter: Dr NATALI, Maurizio (University of Perugia)

Session Classification: Nanocomposite Materials

Contribution ID: 47

Type: **not specified**

Multiscale Molecular Simulations of Polymers and Polymer Composites

Wednesday, 28 September 2016 12:30 (30 minutes)

Presenter: GIUSEPPE, Milano (University of Salerno)

Session Classification: Nanocomposite Materials

Contribution ID: 48

Type: **not specified**

Structure and electronic properties of Zn-tetra-phenyl-porphyrins single- and multi-layers films grown on Fe (001)-p(1x1)O

Tuesday, 27 September 2016 12:30 (30 minutes)

Presenter: Dr BUSSETTI, Gianlorenzo (Dipartimento di Fisica, Politecnico di Milano)

Session Classification: Electronic devices and ICT

Contribution ID: 49

Type: **not specified**

Disclosing the early stages of electrochemical anions intercalation in graphite by a combined AFM/STM investigation

Thursday, 29 September 2016 16:00 (30 minutes)

Presenter: Mrs YIVLIALIN, Rossella (Politecnico di Milano)

Session Classification: Characterization on nanomaterials

Contribution ID: 50

Type: **not specified**

Full-Wave modeling of the ballistic Ratchet effect in graphene-based nanodevices

Tuesday, 27 September 2016 13:00 (30 minutes)

Presenter: PIERANTONI, Luca (Università Politecnica delle Marche)

Session Classification: Electronic devices and ICT

Contribution ID: 51

Type: **not specified**

Novel Microwave Applications of Few-layer Graphene Flakes

Tuesday, 27 September 2016 14:30 (30 minutes)

Presenter: YASIR, Muhammad (University of Pavia)

Session Classification: Electronic devices and ICT

Contribution ID: 52

Type: **not specified**

Surface-enhanced spectroscopy of sulfonated Zn-phthalocyanine by gold nanoparticles

Thursday, 29 September 2016 15:00 (30 minutes)

Presenter: Dr FESENKO, Olena (Institute of Physics of the National Academy of Sciences of Ukraine)

Session Classification: Characterization on nanomaterials

Contribution ID: 54

Type: **not specified**

PHYSICAL AND BIO- NANOSENSORS FOR MEDICAL APPLICATIONS AND ECOLOGICAL MONITORING

Tuesday, 27 September 2016 15:00 (30 minutes)

Presenter: Prof. SHUNIN, Yuri (Institute of Solid State Physics, University of Latvia)

Session Classification: Electronic devices and ICT

Contribution ID: 55

Type: **not specified**

Electrodecoration methods for the controlled incorporation of transition metal nanophases in organic and inorganic nano-substrates. Synthesis, characterization and applications to environmental monitoring and green processes

Thursday, 29 September 2016 13:00 (30 minutes)

Presenter: Dr DITARANTO, Nicoletta (UNIVERSITA' DEGLI STUDI DI BARI "ALDO MORO")

Session Classification: Nanomedical application

Contribution ID: 56

Type: **not specified**

Electronic structure of hydrogenated diamond: Microscopical insight into surface conductivity

Thursday, 29 September 2016 15:30 (30 minutes)

Presenter: Dr IACOBUCCI, Stefano (CNR-ISM)

Session Classification: Fundamental Properties

Contribution ID: 57

Type: **not specified**

GRAPHENE-BASED MATERIALS: Look underneath with Scanning Probe Microscopy

Wednesday, 28 September 2016 13:00 (30 minutes)

Presenter: Mr LISCIO, Andrea (CNR-ISOF)

Session Classification: Nanocomposite Materials

Contribution ID: 58

Type: **not specified**

Graphene based Thermoset composites: an overview and a study on the Role of graphene nano-platelets morphology

Thursday, 29 September 2016 15:30 (30 minutes)

Presenter: MIROTTA, Nicola (ISOF-CNR)

Session Classification: Characterization on nanomaterials

Contribution ID: **60**

Type: **not specified**

Opening bandgap in graphene by nanopatterning

Thursday, 29 September 2016 15:00 (30 minutes)

Primary author: Dr DINESCU, Adrian (National Institute for Research and Development in Microtechnology (IMT))

Presenter: Dr DINESCU, Adrian (National Institute for Research and Development in Microtechnology (IMT))

Session Classification: Electronic Devices and Fundamental properties

Contribution ID: 61

Type: **not specified**

Carbon-based devices with negative coefficient of the resistance

Thursday, 29 September 2016 14:30 (30 minutes)

Presenter: MAFFUCCI, Antonio (L)

Session Classification: Electronic Devices and Fundamental properties

Contribution ID: 62

Type: **not specified**

Hot Disk and Hot Strip Technique: Tests of Anisotropic Thermal Transport Properties and Future Outlook

Wednesday, 28 September 2016 14:30 (30 minutes)

Presenter: GUSTAVSON, Mattias (Hot disk)

Session Classification: Nanocomposite Materials

Contribution ID: 63

Type: **not specified**

Pyrofluidic: a novel platform for manipulating multiphase materials from micro to nanoscale

Wednesday, 28 September 2016 17:30 (45 minutes)

Presenter: FERRARO, Pietro

Session Classification: Plenary Session

Contribution ID: 64

Type: **not specified**

High performance computing to design new materials for energy applications : the a - Si:H/c - Si interface for PV technology

Presenter: CELINO, Massimo (Enea)

Contribution ID: 65

Type: **not specified**

Studying the reinforced composites by high-frequency ultrasound

Wednesday, 28 September 2016 15:00 (30 minutes)

Presenter: PETRONYUK, Yulia (RAS-Moscow)

Session Classification: Nanocomposite Materials

Contribution ID: **66**

Type: **not specified**

tba

Contribution ID: 67

Type: **not specified**

Round table

Thursday, 29 September 2016 17:00 (45 minutes)

Session Classification: Plenary Session

Contribution ID: **68**

Type: **not specified**

Social Dinner at Gallo Regillo Restaurant

Wednesday, 28 September 2016 20:00 (3 hours)

Session Classification: Social Dinner

Contribution ID: 69

Type: **not specified**

Plasmon properties and hybridization effects in Silicene

Tuesday, 27 September 2016 14:30 (30 minutes)

Presenter: Dr VACACELA, Cristian (Dipartimento di Fisica)

Session Classification: Electronic Devices and Fundamental properties

Contribution ID: 70

Type: **not specified**

Fundamental properties of Transition Metal dichalcogenides : a new class of 2D materials for opto-electronic applications

Tuesday, 27 September 2016 15:00 (30 minutes)

Presenter: Dr PALUMMO, Maurizia (Dipartimento di Fisica Universita' di Rome "Tor Vergata")

Session Classification: Electronic Devices and Fundamental properties

Contribution ID: 71

Type: **not specified**

Plasmon Modes of Graphene Nanoribbons with Periodic Planar Arrangements

Tuesday, 27 September 2016 15:30 (45 minutes)

Presenter: SINDONA, Antonio (C)

Session Classification: Electronic Devices and Fundamental properties

Contribution ID: 72

Type: **not specified**

Terahertz Plasmonics and non Linear Optics based on Dirac electrons in Topological Insulators

Thursday, 29 September 2016 12:00 (45 minutes)

Presenter: LUPI, Stefano (ROMA1)

Session Classification: Electronic Devices and Fundamental properties

Contribution ID: 73

Type: **not specified**

Local Phase Density Approximation (LPDA) to the Bogolubov-de Gennes equations throughout the BCS-BEC crossover

Thursday, 29 September 2016 14:30 (30 minutes)

Presenter: SIMONUCCI, Stefano (University of Camerino)

Session Classification: Fundamental Properties

Contribution ID: 74

Type: **not specified**

Monte Carlo simulations of fast electrons in Diamond and Graphite crystals

Thursday, 29 September 2016 15:00 (30 minutes)

Presenter: AZZOLINI, Martina (ECT*)

Session Classification: Fundamental Properties

Contribution ID: 75

Type: **not specified**

Designing graphene based nanofoams with nonlinear auxetic and anisotropic mechanical properties under tension or compression

Thursday, 29 September 2016 11:30 (30 minutes)

Presenter: PEDRIELLI, Andrea (ECT*)

Session Classification: Electronic Devices and Fundamental properties

Contribution ID: 76

Type: **not specified**

High-resolution ultrasonic technique for bulk microstructure investigation. Principles and areas of application

Monday, 26 September 2016 10:30 (45 minutes)

Presenter: PETRONYUK, Yulia S. (Russian Accademy of Science)

Session Classification: Plenary Session