

Seconde Giornate Italo-Francesi di Nanoscienze
2èmes Journées Italo-Françaises de Nanosciences

31.01-2.02 2018
Bardonecchia - Villaggio Olimpico
Italia-Italie

Programma-Programme

PL X = plenary n. X; OX = orale/oral n. X

mercoledì/mercredi 31/01/18	
15.00	<i>Accoglienza dei partecipanti/ Accueil des participants</i>
16.00-16.15	<i>apertura/ouverture (G. Martra, P. Knauth)</i>
16.15-17.15	PL 1. B. Kuchta: "Computational study of structural properties of nano-porous materials. A research program in the Erasmus Mundus Master «Chemical Nanoengineering» p. 1
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17.15-17.35	<i>pausa caffè/pause café</i>
<i>Chairpersons: A. Ferrari, D. Grosso</i>	
Session 1: an overview of nanoscience on both sides of Alps	
17.35-17.55	O1. M.L. Di Vona: "Nano-composite ion exchange membranes" p. 2
17.55-18.15	O2. S. Bodoardo: "Post lithium-ion batteries. Nanostructures to enhance electrochemical performance" p. 3
18.15-18.35	O3. L.-M. Raimundo: "Highly versatile organic dielectric for ion detection up to the femtomole in field effect transistor sensors" p. 5
18.35-18.55	O4. S. Arpicco: "Strategies and challenges for efficient active targeting" p. 6
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19.00-20.00	<i>check-in</i>
20.00	<i>cena/diner</i>

giovedì/jeudi 01/02/18

mattino/matin

Chairpersons: L. Firlej, M. Minella

8:30-9:30	PL2. M. Laus: "Deterministic doping in semiconductors via self-limited grafting to reactions"	p. 8
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Session 2: nanofabrication

9.30-9.50	O5. P. Knauth: "Electrodeposition of ionomer membranes for miniaturized energy storage and conversion devices"	p. 9
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9.50-10.10	O6. A.M. Ferrari: "Ab initio simulation of ZnO/La(Sr)MnO ₃ heterojunctions: insights into their structural and electronic properties"	p. 10
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10.10-10.30	O7. D. Grosso: "Nano/micro structured TiO ₂ coatings prepared by high throughput top-down/bottom-up methods, and recent applications"	p. 11
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10.30-10.50	O8. O. Chuzel: "Catalytic Scanning Probe Nanolithography (CSPL). A promising strategy for chemically constructive nanolithography"	p. 12
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10.50-11.10

pausa caffè/pause café

Chairpersons: G. Cerrato, F. Fagès

Session 3: nano&light

11.10-11.30	O9. F. Sordello: "Improved photocatalysis on ordered macroporous materials"	p. 13
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11.30-11.50	O10. L. Santinacci: "Water photooxidation onto ALD-covered porous silicon electrode"	p. 14
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11.50-12.10	O11. M.C. Paganini: "New photoactive materials based on transition metal oxides doped with rare earth metal ions"	p. 15
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12.10-12.30	O12. O. Margeat: "Metal oxide nanocrystals for solution-processed interfacial layers in organic solar cells"	p. 16
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12.30-12.50	O13. E. Boccaleri: "Properties and application of 3D hybrid nanomaterials: polyhedral oligomeric silsesquioxanes"	p. 18
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13.00

pranzo/déjeuner

giovedì/jeudi 01/02/18

pomeriggio/après-midi

Chairpersons: S. Visentin, Y. Blache

14.30-15.30 **PL3. Y. Coquerel:** "A synthetic journey from anticancer drug to chiral nanographenes" **p. 20**

Session 4: nano&molecules

15.30-15.50 **O14. N. Barbero:** "Functional organic compounds in nanostructured materials: synthesis and characterization" **p. 21**

15.50-16.10 **O15. F. Fages:** "Curcuminoid-borondifluoride dyes for photonic nanomaterials" **p. 22**

16.10-16.30 **O16. K. Martina:** "Covalent functionalization of carbon based nanomaterials by 1,3 dipolar cycloaddition" **p. 23**

16.30-16.50 *pausa caffè/pause café*

Chairpersons: B. Bonelli, D. Gigmès

Session 5: bio&nano /nano&bio

16.50-17.10 **O17. Y. Blache:** "Towards bioinspired anti-biofilm strategies: a green solution to reduce environmental impact of antifouling coatings" **p. 25**

17.10-17.30 **O18. R. Cavalli:** "Polymer-shelled nanobubbles: a novel multifunctional delivery tool" **p. 26**

17.30-17.50 **O19. T. Trimaille:** "Polylactide based reactive copolymer micelles: a versatile nanoplatform for bio-related applications" **p. 27**

17.50-18.10 **O20. F. Carniato:** "Exploring mesoporous silica nanoparticles as multimodal imaging and theranostic probes" **p. 28**

18.10-18.30 **O21. N. Guigo:** "Nanocomposites from biobased furanic polymers" **p. 29**

18.30-18.50 **O22. S. Visentin:** "«Imaging» the future: a nanostructured matrices assessment to study drug distribution in solid tumor tissue by mass spectrometry" **p. 30**

19.45

*cena in chalet di montagna
diner en chalet à la montagne*

venerdì/vendredi 02/02/18

mattino/matin

Chairpersons: K. Martina, L. Santinacci

8:30-9:30 **PL4. D. Scarano:** "Carbon based and graphene analogues hybrid nanocomposites" **p. 31**

Session 6: nanocomposites, nanohybrids, nanotubes

9.30-9.50 **O23. L. Pasquini:** "Mechanically stable nanofibrous sPEEK/AQUIVION® composite membranes for fuel cell applications" **p. 33**

9.50-10.10 **O24. B. Bonelli:** "Photo-activated degradation of tartrazine by H₂O₂ as catalyzed by both bare and Fe-doped methyl-imogolite nanotubes" **p. 34**

10.10-10.30 **O25. T. Djenizian:** "Titania nanotubes based electrodes for Li-ion batteries" **p. 36**

10.30-10.50

pausa caffè/pause café

Chairpersons: N. Barbero, Y. Coquerel

Session 7: nano for the quality of life: safety & energy

11.10-11.30 **O26 C. Bisio:** " Novel active sorbents on layered materials for the decontamination of hazardous chemical warfare agents" **p. 37**

11.30-11.50 **O27. D. Gigmès:** "Synthesis of single-ion BAB triblock copolymers as efficient electrolytes for lithium metal battery" **p. 38**

11.50-12.10 **O28. M. Baricco:** "Complex hydrides: from hydrogen storage to solid electrolytes" **p. 39**

12.10-12.30 **O29. L. Firlej:** "How dense is the gas confined in nanopores?" **p. 40**

12.30-12.50 **O30. A.M. Rossi:** "Surface enhanced Raman scattering strategies for trace contaminants detection" **p. 41**

12.50-13.00

conclusione/conclusion (V. Maurino, P. Knauth)

13.00

pranzo/déjeuner

Pomeriggio: partenza, o permanenza privata al Villaggio Olimpico

Après-midi: départ, ou séjour pour le fin de semaine