



**INFORMAZIONI
PERSONALI****RINALDI ROSARIA**

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Sesso Donna | [Data di Nascita](#) 28/03/1968 | [Nazionalità](#) Italiana

POSIZIONE ATTUALE

Professore ordinario di Fisica della Materia presso il Dipartimento di Matematica e Fisica "Ennio De Giorgi" dell'Università del Salento, Lecce, ITALIA;
 Direttore del Laboratorio di Scienze Naturali e component del Cosiglio Direttivo della Scuola Superiore ISUFI (Istituto Superiore Universitario di Formazione Interdisciplinare) dell'Università del Salento, Lecce, ITALIA;
 Coordinatore del corso di dottorato in "Fisica e Nanoscienze" dell'Università del Salento, Lecce, ITALIA.
 Componente gruppo di Lavoro sulla promozione della PROGETTUALITA' SCIENTIFICA dell'Università del Salento, Lecce, ITALIA.

**ESPERIENZA
PROFESSIONALE**

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- Maggio 2015 – aprile 2016** Eleonore Trefftz Professor presso Technical University Dresden Germany
Giugno 2013 IDONEITA' alla posizione di DIRETTORE dell'ISTITUTO DI BIOFISICA DEL CNR- Nomina nella terna di candidati idonei per la direzione dell'Ist. di Biofisica del CNR (prot.n 0036706 del 20/06/2013- bando n.364.123)
2012 – 2015 Componente della Giunta del Dipartimento di Matematica e Fisica "Ennio De Giorgi" dell'Università del Salento, Lecce, ITALIA
2010 - 2015 Vice-Direttore della Scuola Superiore ISUFI
2010 - 2017 Coordinatore dell'Area delle Scienze Naturali della Scuola Superiore ISUFI
2005 – 2016 Nomina di Responsabile della commessa CNR "Nanotecnologie per la scienza della vita" (MD.P06.008), Dipartimento Materiali e Dispositivi, progetto "Nanoscienze e Nanotecnologie". Istituto esecutore : Istituto di Nanoscienze (dal 2010 CNR NANO, Lecce)
Ottobre 2005 – dicembre 2011 Nomina di Responsabile scientifico dell'Unità di ricerca dell'Istituto Italiano di Tecnologia (IIT) su "Nano -Bioelectronics, Tissue Engineering, and new Cancer Therapy based on magnetic nanoparticles" istituita presso il laboratorio National Nanotechnology Laboratory di Lecce.
2006 - 2013 Coordinatore della scuola di dottorato internazionale su " Interdisciplinary Science and Technology and Nanoscience" della Scuola Superiore ISUFI dell'Università del Salento, Lecce, ITALIA

- Giugno 2004 – maggio 2009 Responsabile del laboratorio congiunto fra NNL and ST-Microelectronics per i seguenti programmi di ricerca e sviluppo: i) “R&D ST platform Lab-on-Chip for molecular diagnostic applications”; ii) “Non-Conventional Quantum Dot Computing at the Molecular Scale.”; e iii) “Development of Lab-on-chip systems for molecular diagnostics”.
- 2001 – 2007 Nomina di Professore Associato per il settore scientifico disciplinare FIS/03 – Fisica della Materia- presso la Facoltà di Scienze Matematiche Fisiche e Naturali dell’Università degli Studi di Lecce con afferenza al Dipartimento di Ingegneria dell’Innovazione della stessa Università.
- Gennaio – Dicembre 1999 Incarico come Joint Visiting Faculty Member presso Department of Physics- Virginia Commonwealth University- Richmond -Virginia,U.S.A.
- Giugno - luglio 1998 Visiting Scientist - presso Department of Physics - Virginia Commonwealth University - Richmond Virginia (U.S.A.) per eseguire col gruppo del Prof. A.Baski misure di spettroscopia STM in ultra alto vuoto su eterostrutture ibride organiche/inorganiche.
- 1997–2001 Nomina di ricercatore presso la Facoltà di Scienze Matematiche Fisiche e Naturali dell’Università degli Studi di Lecce con afferenza al Dipartimento di Scienza dei Materiali della stessa Università.
- Giugno-Luglio 1993 Visiting Scientist presso il Clarendon Laboratory OXFORD (U.K.) nel gruppo del Prof. J.Ryan
- Marzo -Apr. 1993 Visiting Scientist presso il Max Planck Institut Stuttgart (GERMANY) nella divisione di ricerca diretta dal Prof. Von Klitzing, premio Nobel per la fisica nel 1985.
- Ottobre - Nov. 1992 Visiting Scientist presso il Clarendon Laboratory OXFORD (U.K.) nel gruppo del Prof. J.Ryan.

ATTIVITA' DIDATTICA

- 1997-oggi A partire dal 1997 la Prof.ssa Rinaldi è stata titolare dei seguenti incarichi didattici:
1. Corso di Laurea in Fisica (Laurea di Base e Magistrale) – Facoltà di Scienze, dell’Università del Salento, Lecce.
 - a) Corso di Esperimentazioni di fisica III ; b) Corso di Fisica dei Materiali ;
 - c) Corso di Nanoscienze e Nanotecnologie ; d) Corso di Struttura della Materia; e) Corso di fisica dello Stato solido; f) Corso di Fisica e Tecnologia dei Materiali e Dispositivi a Semiconduttori; g) Corso di Fisica dei Semiconduttori
 2. Corso di Laurea Magistrale in Biotecnologie Mediche e Nanobiotecnologie, Facoltà di Scienze, dell’Università del Salento, Lecce.
 - a) Corso di Nanobiotecnologie e Nano Bioelettronica b) Corso di Metodologie Fisiche per le biotecnologie Farmaco-Industriali; c) Metodi di Nanofabbricazione e analisi a nanoscala per il biotech avanzato
 3. Scuola Superiore ISUFI dell’Università del Salento, Lecce
 - a)Molecular Electronics; b)Nano-bio technology; c)Introduction to Nanotechnology I & II; d)Physics and Technology of molecular materials

2015-2016 Docente nel Master di II livello e del Corso di formazione finalizzata in “Sviluppo, progettazione e sperimentazione di sistemi di elaborazioni dei segnali e diagnostica intelligente nel settore biomedicale” presso il Dipartimento di Fisica Interateneo dell’Università degli Studi di Bari.

2016-2018 Docente nel Master di II livello in “Medicina Biomolecolare” dell’Università del Salento, Lecce : “Nanostructures and systems for targeted drug delivery”

ISTRUZIONE E FORMAZIONE

- Ottobre 1994 Dottore di Ricerca in Fisica, Dottorato del Consorzio Universitario Bari-Lecce Facoltà di Scienze, Dipartimento di Fisica/ Università di Bari
- Luglio. 1991 Laurea in Fisica presso l’Università di Bari con 110/110 con lode , discutendo la tesi “Conservazione del momento nella ricombinazione elettrone-buca in plasmi a una e a due componenti”.
- Gennaio 1995 Vincitrice di un borsa di studio nazionale INFN – Unità di Ricerca di Lecce
- Gennaio 1996 Titolare Borsa INFN nell’ambito del Progetto Sud ” Quantum Wires V-Grooved per Applicazioni Optoelettroniche”.
- Giugno 1996 Vincitrice di una borsa di studio nazionale CNR (prima classificata) della durata di 24 mesi nell’ambito della tematica “FISICA DELLA MATERIA” per eseguire ricerche sul tema “Fabbricazione, studio e applicazioni di eterostrutture monodimensionale e zerodimensionali con disaccoppiamento reticolare alle interfacce” presso il CNR-IME di Lecce.
Fellowship at Institute of Micro-Electronics of CNR (CNR-IME), Lecce, Italy
- Novembre 1996 Vincitrice di una borsa di studio nazionale CNR (prima classificata) della durata di 12 mesi nell’ambito della tematica “FISICA DELLA MATERIA” per eseguire ricerche sul tema “Fabbricazione, studio e applicazioni di eterostrutture a fili quantici” presso il CNR-IME di Lecce.

COMPETENZE PERSONALI

Lingua Madre Italiano

Altre Lingue

Inglese

COMPRESIONE		PARLATO		PRODUZIONE SCRITTA
Ascolto	Lettura	Interazione	Produzione orale	
B2	B2	B2	B2	B2

Competenze comunicative

Ottime capacità comunicative acquisite attraverso le attività di insegnamento universitario, attività scientifica di ricerca e responsabilità di strutture di ricerca e coordinamento di gruppi di ricerca e progetti.

Competenze organizzative e gestionali

La Prof.ssa Rosaria Rinaldi è responsabile e coordinatrice del "Laboratorio di Nanomedicina, Nanobioelettronica e Nanobiotecnologie", che è un laboratorio congiunto del Dipartimento di Matematica e Fisica di UNISALENTO e del CNR-IMM di Lecce. Consiste in una struttura interdisciplinare con competenze di Nano-Tecnologie e Nano-Scienze per la ricerca e la tecnologia su scala nanometrica applicata alle scienze della vita, alla medicina e alla sicurezza alimentare e ambientale. La missione del Laboratorio è focalizzata sulla realizzazione e gestione di attività di ricerca e progetti che sfruttano la sinergia tra nuovi materiali e nanotecnologie e il campo della salute umana e dispositivi e sistemi di nanobioelettronica. Il centro ha attualmente circa 250 mq di laboratori, avendo come obiettivo lo sviluppo di nuovi concetti e nuovi nano-sistemi, sfruttando sia il "bottom-up" (autoassemblaggio e ingegneria molecolare per sistemi ibridi organici / inorganici) sia gli approcci "top- down " (tecniche di litografia stato dell'arte applicate a nanostrutture organiche e inorganiche). Grande attenzione è dedicata al potenziale tecnologico e applicativo della ricerca svolta su nuovi materiali, processi, dispositivi, architetture e strumentazione. Inoltre, il Laboratorio è anche sede della Facility Regionale "Reti di Laboratori NaBiDiT - Nano- Biotechnological methods for innovative Diagnostics and Therapy ", sotto la direzione scientifica della stessa Prof.ssa Rinaldi. Il Laboratorio ha gestito diversi progetti di Ricerca e Sviluppo Industriali per l'implementazione di nano-dispositivi funzionali e intelligenti per applicazioni biomediche e diagnostica avanzata nel campo della salute, dell'ambiente e del territorio. Alcune attività di ricerca del Laboratorio sono dedicate all'implementazione di dispositivi per elettronica molecolare e biomolecolare, nanoelettronica e "unconventional computation".

Competenze professionali

Il gruppo di ricerca del Prof. Rinaldi, attualmente attivo nel Laboratorio di Nanomedicina, Nanobioelettronica e Nanobiotecnologia, ha più di 25 anni di esperienza nelle seguenti aree di ricerca: i) Nanolithografie, litografie soffici e funzionalizzazione di superfici; ii) Progettazione e sviluppo di nuovi prototipi di dispositivi elettronici molecolari e biomolecolari. Nanobiosensori, Lab-on-chip per analisi e diagnostica nel punto di cura; iii) Microscopia a scansione di sonda e spettroscopia di singole molecole, cellule e monostrati molecolari e cristalli, in ambiente diverso e a bassa temperatura; iv) somministrazione intelligente di farmaci e terapia mirata; v) progettazione e bioingegneria di scaffold polimerici per ingegneria tissutale e medicina rigenerativa; vi) studi di fluorescenza, fosforescenza, confocale-STED, Raman e micro-nano-fluorescenza di specie biologiche; e vii) tecnologia di prototipi di dispositivi ibridi. Molecular Quantum Cellular Automata; viii) studio delle proprietà ottiche lineari e non lineari di molecole fluorescenti, polimeri e nanocristalli; ix) sviluppo e studio di nanomateriali per applicazioni nel campo della conservazione dei beni culturali; x) sintesi ed applicazioni di nanoparticelle composte da materiali metallici, ossidi, semiconduttori, superparamagnetici e nano e microcolloidi polimerici.

La struttura di ricerca comprende i seguenti laboratori:

1. Nanofabbricazione e nano chimica;
2. Laboratorio nano-biologico, comprendente una camera sterile e una camera fredda;
3. Strumenti avanzati di spettroscopia e microscopia, tra cui microscopia confocale, piattaforma di luminescenza IVIS Spectrum e sistema per risonanza magnetica per piccoli animali " Icon MRI scanner 1T" - Bruker, sistema di microscopia / spettroscopia " Stimulated emission depletion " (Leica TCS SP8 STED CW), micro-spettroscopia a raggi X;
4. Laboratorio di microscopia a nanosonda in scansione, incluso un STM ad ultra alto vuoto operante a temperature criogeniche CREATEC, sistema AFM / STM Veeco, AFM / MFM, c-AFM, KPFM EFM / SCM e sistema AFM NT-MDT in liquido, Microscopio a forza atomica Catalyst™ / Confocale / TIRFF;
5. Laboratorio per l'implementazione e test di materiali e dispositivi per nanoelettronica, optoelettronica e sensori micro-nano;
6. Facility per la sintesi di nanoparticelle e nanovesicole polimeriche multifunzionali.

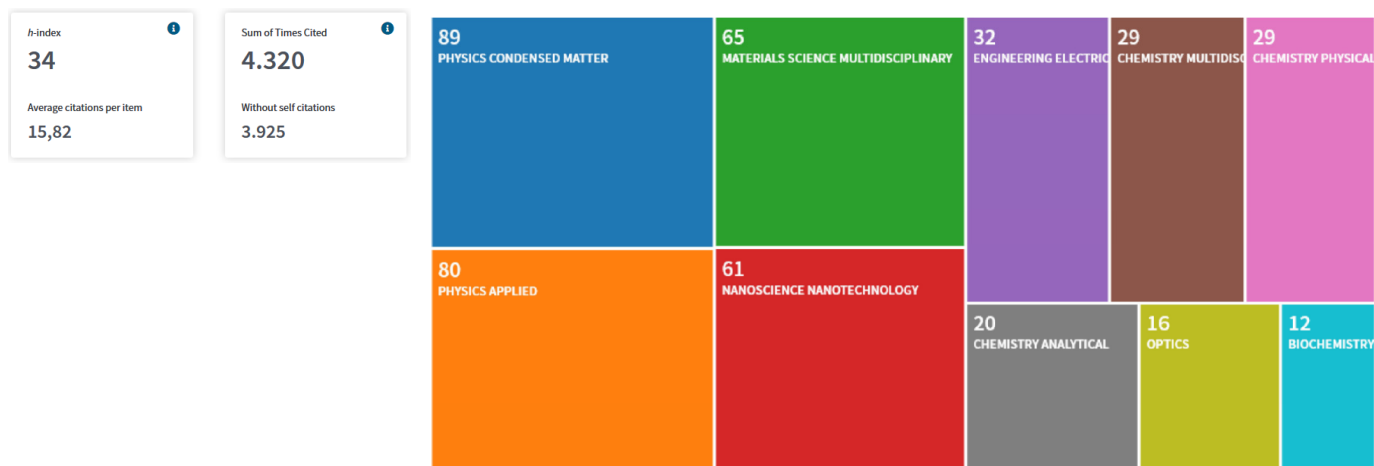
Supervisione di tesi di laurea, dottorato e assegnisti di Ricerca

Dal 2001 la prof.ssa Rosaria Rinaldi è stata supervisore di circa 110 Tesi di laurea di Base e magistrale , 45 Dottorandi e 35 Postdoc presso la Facoltà di Scienze dell'Università del Salento, Lecce, l'Istituto di Nanoscienza CNR, Lecce, l'Istituto di Microelettronica e Microsistemi CNR, Lecce, e la Scuola Superiore ISUFI, Università del Salento, Lecce.

ULTERIORI INFORMAZIONI

Pubblicazioni

(Web of Science core collections-Clarivate Analytics)



1. D'Agostino, S.; Rinaldi, R.; Cuniberti, G.; Della Sala, F., Density Functional Tight Binding for Quantum Plasmonics. *The Journal of Physical Chemistry C* 2018, 122 (34), 19756-19766.
2. Di Corato, R., A. Aloisi, S. Rena, J. M. Greneche, G. Pugliese, T. Pellegrino, C. Malitesta, and R. Rinaldi. "Maghemite Nanoparticles with Enhanced Magnetic Properties: One Pot Preparation and Ultrastable Dextran Shell." *Acs Applied Materials & Interfaces* 10, no. 24 (2018): 20271-20280.
3. Hanafy, N. A. N., A. Quarta, M. M. Ferraro, L. Dini, C. Nobile, M. L. De Giorgi, S. Carallo, C. Citti, A. Gaballo, G. Cannazza, R. Rinaldi, G. Giannelli, and S. Leporatti. "Polymeric Nano-Micelles as Novel Cargo-Carriers for Ly2157299 Liver Cancer Cells Delivery." *International Journal of Molecular Sciences* 19, no. 3 (2018).
4. Panaro, M. A., A. Aloisi, G. Nicolardi, D. D. Lofrumento, F. De Nuccio, V. La Pesa, A. Cianciulli, R. Rinaldi, R. Calvello, V. Fontani, and S. Rinaldi. "Radio Electric Asymmetric Conveyer Technology Modulates Neuroinflammation in a Mouse Model of Neurodegeneration." *NEUROSCIENCE BULLETIN* 34, no. 2 (2018): 270-282.
5. Toma, C. C., A. Aloisi, V. Bordoni, R. Di Corato, M. Rauner, G. Cuniberti, L. G. Delogu, and R. Rinaldi. "Immune Profiling of Polysaccharide Submicron Vesicles." *Biomacromolecules* 19, no. 8 (2018): 3560-3571.
6. Zizzari, A., M. Bianco, L. L. del Mercato, A. Soraru, M. Carraro, P. Pellegrino, E. Perrone, A. G. Monteduro, M. Bonchio, R. Rinaldi, I. Viola, and V. Arima. "Highly Sensitive Membrane-Based Pressure Sensors (Meps) for Real-Time Monitoring of Catalytic Reactions." *Analytical Chemistry* 90, no. 12 (2018): 7659-7665.
7. Bianco, M., A. Sonato, A. De Girolamo, M. Pascale, F. Romanato, R. Rinaldi, and V. Arima. "An Aptamer-Based Spr- Polarization Platform for High Sensitive Ota Detection." *Sensors and Actuators B-Chemical* 241, (2017): 314-320.
8. Aloisi, A., C. C. Toma, R. Di Corato, and R. Rinaldi. "Microfluidics and Bio-Encapsulation for Drug- and Cell-Therapy." In *Organic Sensors and*

- Bioelectronics X, edited by I. Kymissis, R. Shinar and L. Torsi, 10364, 2017.
9. Cascione, M., V. De Matteis, R. Rinaldi, and S. Leporatti. "Atomic Force Microscopy Combined with Optical Microscopy for Cells Investigation." *Microscopy Research and Technique* 80, no. 1 (2017): 109-123.
 10. Cascione, M., V. De Matteis, C. C. Toma, P. Pellegrino, S. Leporatti, and R. Rinaldi. "Morphomechanical and Structural Changes Induced by Rock Inhibitor in Breast Cancer Cells." *Experimental Cell Research* 360, no. 2 (2017): 303-309.
 11. De Matteis, V., L. Rizzello, M. P. Di Bello, and R. Rinaldi. "One-Step Synthesis, Toxicity Assessment and Degradation in Tumoral Ph Environment of Sio2@Ag Core/Shell Nanoparticles." *Journal of Nanoparticle Research* 19, no. 6 (2017).
 12. Hanafy, N. A. N., A. Quarta, R. Di Corato, L. Dini, C. Nobile, V. Tasco, S. Carallo, M. Cascione, A. Malfettone, J. Soukupova, R. Rinaldi, I. Fabregat, and S. Leporatti. "Hybrid Polymeric-Protein Nano-Carriers (Hppnc) for Targeted Delivery of Tgf Beta Inhibitors to Hepatocellular Carcinoma Cells." *Journal of Materials Science-Materials in Medicine* 28, no. 8 (2017).
 13. Sallustio, F., C. Curci, A. Aloisi, C. C. Toma, E. Marulli, G. Serino, S. N. Cox, G. De Palma, A. Stasi, C. Divella, R. Rinaldi, and F. P. Schena. "Inhibin-a and Decorin Secreted by Human Adult Renal Stem/Progenitor Cells through the Tlr2 Engagement Induce Renal Tubular Cell Regeneration." *Scientific Reports* 7, (2017).
 14. Aloisi, A., E. Tarentini, A. Ferramosca, V. Zara, and R. Rinaldi. "Microoxygraph Device for Biosensoristic Applications." *Journal of Sensors*, (2016).
 15. De Matteis, V., M. Cascione, V. Brunetti, C. C. Toma, and R. Rinaldi. "Toxicity Assessment of Anatase and Rutile Titanium Dioxide Nanoparticles: The Role of Degradation in Different Ph Conditions and Light Exposure." *Toxicology in Vitro* 37, (2016): 201-210.
 16. del Mercato, L. L., F. Guerra, G. Lazzari, C. Nobile, C. Bucci, and R. Rinaldi. "Biocompatible Multilayer Capsules Engineered with a Graphene Oxide Derivative: Synthesis, Characterization and Cellular Uptake." *Nanoscale* 8, no. 14 (2016): 7501-7512.
 17. del Mercato, L. L., L. G. Passione, D. Izzo, R. Rinaldi, A. Sannino, and F. Gervaso. "Design and Characterization of Microcapsules-Integrated Collagen Matrixes as Multifunctional Three-Dimensional Scaffolds for Soft Tissue Engineering." *Journal of the Mechanical Behavior of Biomedical Materials* 62, (2016): 209-221.
 18. Dionisi, C., N. Hanafy, C. Nobile, M. L. De Giorgi, R. Rinaldi, S. Casciaro, Y. M. Lvov, and S. Leporatti. "Halloysite Clay Nanotubes as Carriers for Curcumin: Characterization and Application." *Ieee Transactions on Nanotechnology* 15, no. 5 (2016): 720-724.
 19. Hanafy, N. A., M. M. Ferraro, A. Gaballo, L. Dini, V. Tasco, C. Nobile, M. L. De Giorgi, S. Carallo, R. Rinaldi, and S. Leporatti. "Fabrication and Characterization of Alk1fc-Loaded Fluoro-Magnetic Nanoparticles for Inhibiting Tgf Beta 1 in Hepatocellular Carcinoma." *Rsc Advances* 6, no. 54 (2016): 48834-48842.
 20. Hanafy, N. A. N., M. L. De Giorgi, C. Nobile, M. Cascione, R. Rinaldi, and S. Leporatti. "Caco3 Rods as Chitosan-Polygalacturonic Acid Carriers for Bromopyruvic Acid Delivery." *Science of Advanced Materials* 8, no. 3 (2016): 514-523.
 21. Hanafy, N. A. N., A. Quarta, R. Di Corato, L. Dini, C. Nobile, M. L. De Giorgi, V. Tasco, S. Carallo, M. Cascione, R. Rinaldi, I. Fabregat, and S. Leporatti. "Encapsulation of Sht-DNA, Sirna and Polypeptide-17 inside Hybrid Polymericnano- Protein Folicacid (Hpn-p-Fa) Carrier as Targeted Tgf. Inhibitor for Hepatocellular Carcinoma." *Journal of Hepatology* 64, (2016): S573-S573.
 22. Hanafy, N. A. N., A. Quarta, M. M. Ferraro, A. Gaballo, L. Dini, C. Nobile, M. L. De Giorgi, S. Carallo, C. Citti, G. Cannazza, A. L. Capodilupo, G. Ciccarella, R. Rinaldi, G. Giannelli, and S. Leporatti. "Polymeric Nano-Micelles as Novel

- Tools for Ly2157299 Cancer Cells Delivery." *European Journal of Clinical Investigation* 46, (2016): 30-30.
23. Marulli, E., A. Aloisi, P. Di Giuseppe, and R. Rinaldi. "Micro and Nanotechnology for Early Diagnosis and Detection of Rheumatic Diseases- Molecular Markers." *Biochip Journal* 10, no. 3 (2016): 189-197.
 24. Monteduro, A. G., Z. Ameer, M. Martino, A. P. Caricato, V. Tasco, I. C. Lekshmi, R. Rinaldi, A. Hazarika, D. Choudhury, D. D. Sarma, and G. Maruccio. "Dielectric Investigation of High-K Yttrium Copper Titanate Thin Films." *Journal of Materials Chemistry C* 4, no. 5 (2016): 1080-1087.
 25. Sallustio, F., A. Aloisi, C. Curci, C. C. Toma, E. Marulli, G. Serino, S. N. Cox, G. De Palma, R. Rinaldi, and F. P. Schena. "Inhibin a and Decorin Secreted by Adult Renal Stem/Progenitor Cells through the Tlr2 Engagement Induce Renal Tubular Cell Regeneration." *Nephrology Dialysis Transplantation* 31, (2016): 48-48.
 26. Bianco, Monica, Vita Guarino, Giuseppe Maruccio, Giancarlo Galli, Elisa Martinelli, Giancarlo Montani, Rosaria Rinaldi, and Valentina Arima. "Non-Biofouling Fluorinated Block Copolymer Coatings for Contact Lenses." *Science of Advanced Materials* 7, no. 7 (2015): 1387-1394.
 27. Bianco, M., V. Guarino, G. Maruccio, G. Galli, E. Martinelli, G. Montani, R. Rinaldi, and V. Arima. "Non-Biofouling Fluorinated Block Copolymer Coatings for Contact Lenses." *Science of Advanced Materials* 7, no. 7 (2015): 1387-1394.
 28. Bramanti, A. P., A. Santana-Bonilla, and R. Rinaldi. "Quantum-Dot Cellular Automata: Computation with Real-World Molecules." *International Journal of Unconventional Computing* 11, no. 1 (2015): 63-82.
 29. Chiriaco, M. S., F. de Feo, E. Primiceri, A. G. Monteduro, G.E. de Benedetto, A. Pennetta, R. Rinaldi, and G. Maruccio. "Portable Gliadin-ImmunoChip for Contamination Control on the Food Production Chain." *Talanta* 142, (2015): 57-63.
 30. De Luca, M., M. M. Ferraro, R. Hartmann, P. Rivera-Gil, A. Klingl, M. Nazarenus, A. Ramirez, W. J. Parak, C. Bucci, R. Rinaldi, and L. L. del Mercato. "Advances in Use of Capsule-Based Fluorescent Sensors for Measuring Acidification of Endocytic Compartments in Cells with Altered Expression of V-AtPase Subunit V(1)G(1)." *Acs Applied Materials & Interfaces* 7, no. 27 (2015): 15052-15060.
 31. del Mercato, L. L., M. Moffa, R. Rinaldi, and D. Pisignano. "Ratiometric Organic Fibers for Localized and Reversible Ion Sensing with Micrometer-Scale Spatial Resolution." *Small* 11, no. 48 (2015): 6417-6424.
 32. Della Torre, A., A. G. Monteduro, G. Maruccio, M. Pugliese, F. Ferrara, D. Ercolani, S. Roddaro, L. Sorba, and R. Rinaldi. "Rapid Method for the Interconnection of Single Nano-Objects." *Materials Research Express* 2, no. 5 (2015).
 33. Panaro, M. A., V. Carofiglio, R. Calvello, G. Nicolardi, D. D. Lofrumento, F. De Nuccio, V. La Pesa, A. Aloisi, R. Rinaldi, V. Fontani, S. Rinaldi, and Ieee. "Modulation of Pro-Inflammatory Response in a Mouse Model of Parkinson's Disease by Non- Invasive Physical Approach. Preliminary Evaluation 2015 Ieee 15th Mediterranean Microwave Symposium, 2015.
 34. Vergara, D., M. M. Ferraro, M. Cascione, L. L. del Mercato, S. Leporatti, A. Ferretta, P. Tanzarella, C. Pacelli, A. Santino, M. Maffia, T. Cocco, R. Rinaldi, and A. Gaballo. "Cytoskeletal Alterations and Biomechanical Properties of Parkin-Mutant Human Primary Fibroblasts." *Cell Biochemistry and Biophysics* 71, no. 3 (2015): 1395-1404.
 35. Vergara, D., P. Simeone, D. Latorre, F. Cascione, S. Leporatti, M. Tretotola, A. M. Giudetti, L. Capobianco, P. Lunetti, A. Rizzello, R. Rinaldi, S. Alberti, and M. Maffia. "Proteomics Analysis of E-Cadherin Knockdown in Epithelial Breast Cancer Cells." *Journal of Biotechnology* 202, (2015): 3-11.

36. Zacheo, A., A. Zizzari, E. Perrone, L. Carbone, G. Giancane, L. Valli, R. Rinaldi, and V. Arima. "Fast and Safe Microwave- Assisted Glass Channel-Shaped Microstructure Fabrication." *Lab on a Chip* 15, no. 11 (2015): 2395-2399.
37. Ameer, Z., E. Primiceri, F. De Feo, M. S. Chniaco, A. G. Monteduro, G. Maruccio, and R. Rinaldi. "DNA Sensors with Impedimetric and Magnetoresistive Transduction - a Comparison Study." In *Proceedings of 2014 11th International Bhurban Conference on Applied Sciences & Technology*, edited by A. Munir, 65-68, 2014.
38. del Mercato, L. L., M. Carraro, A. Zizzari, M. Bianco, R. Miglietta, V. Arima, I. Viola, C. Nobile, A. Soraru, D. Viloni, G. Gigli, M. Bonchio, and R. Rinaldi. "Catalytic Self-Propulsion of Supramolecular Capsules Powered by Polyoxometalate Cargos." *Chemistry-a European Journal* 20, no. 35 (2014): 10910-10914.
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Presentazioni su Invito a Conferenze e Workshops

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Marzo 2000 EC Thematic Workshop COST-P5 -Workgroups WG3 (Quantum Dots and Nanoparticles) and WG4 (Carbon Nanotubes), Delft (The Netherlands)

“*Transport in hybrid electronic devices based on a modified DNA nucleoside (deoxyguanosine)*”

Dicembre 2000 International Conference “Molecular electronics 2000” of United Engineering Foundation , Kailua-Kona, Hawaii (U.S.A.) “*Biomolecular electronic devices based on self-organized Deoxyguanosine nanocrystals*”

Settembre 2001 International Conference “6th European Conference on Molecular Electronics (ECME)”, Rolduc (The Netherlands). “*Biomolecular electronic devices based on modified DNA-nucleosides and proteins.*”

Ottobre 2001 Workshop Nanobiotec, Muenster (GERMANY).“*Biomolecular electronic devices based on modified DNA nucleosides*”

Novembre 2001 International Workshop “Structuring, Manipulation, Analysis and Reactive Transformation of Nano-Structures (SMARTON5):Functional Surfaces and Materials Exploring the Vectorial World” , Maastricht (THE NETHERLANDS).“*Self-Assembling of copper Metalloproteins and Enzymes at nanoscale for Biodevice Applications*”

Giugno 2002 Euroworkshop “Solid-state implementation of quantum information processing” Torino - Villa Gualino (ITALY)

Ottobre 2002 International Workshop “Nanobionics II : From Molecules to Applications” Marburg (GERMANY). “*Protein based electronic devices*”

Dicembre 2002 6th Engineering Foundation conference on MOLECULAR- SCALE ELECTRONICS, Key West , Florida (USA). “*A protein-based three terminal electronic device*”

Maggio 2003 International Workshop “Biology and Physics at Interfaces -From Single Molecules to Cells”, Julich (GERMANY).“*Self assembling of proteins and emzymes at nanoscale for biodevice applications*”

Ottobre 2003 BIOTECHNICA 2003 . 13th International trade fair for biotechnology, Hannover (GERMANY). “*Biomolecular functional devices*”

Dicembre 2003 - “EuroNanoForum2003”, Trieste (ITALY). “*Interface with biomolecules*”

Dicembre 2004 - “The 3rd Int. Workshop on Nanoscale Spectroscopy

and Nanotechnology” - University of Maryland, College Park, MD 20742 (U.S.A). *“Scanning tunneling methods for the determination of the electronic structure of organic films on metal surfaces.”*

Ottobre 2005 Bioelectronics, Biointerfaces, and Biomedical Application Symposium at 210th Meeting of The Electrochem. Society, Cancun (MEXICO). *“Proteins, Nanocrystals and hybrid systems for nanobiosensing applications”*

Ottobre 2005 Int. Workshop : “DNA-based Nanowires : on the way for biomolecules to nanodevices”, Modena, (ITALY). *“Transport phenomena in biological macromolecules: from fundamental studies to device applications”*

Settembre 2006 ESF Workshop on Guanosine self-assembly, Bled (Slovenia). *“Self-assembly of guanosine derivatives: from quadruplex DNA to Biomolecular devices”*

Settembre 2008 Workshop NANOSENS 2008 – Vienna (Austria). *“Lab-on-chip and biochips for real-time analysis of biosystems”*

Ottobre 2008 Plenary talk *“Nanobiotechnologies”*- Center for Process Analytical Chemistry (CPAC) Conference of Siena- ITALY

Giugno 2009 ESF-FWF Conference “Self Assembly of Guanosine Derivatives: From Biological Systems to Nanotechnological Applications”, Innsbruck, (Austria). *“Guanosine based nanodevices”*

Settembre 2009 - Plenary talk *“Nanotechnology for human and humanoid systems”* - 10th Conference on Intermolecular and Magnetic Interactions in Matter, Joint Conferences FNMA & IMIM '09, Sulmona (Italy)

Maggio 2010 International Symposium on DNA Based MicroNano Integration 2010- IPHT Jena (Germany). *“Optical Transducer micro device for genomic and proteomic applications”*

Luglio 2011 – Int. Workshop on “Microfluidics for molecular imaging” Pisa, CNR-Area (ITALY) . *“Genomics and proteomics Lab-on-Chip: from static to microfluidic prototypes”*

Sept. 2013 WORKSHOP on New Methods in Nanomedicine and

Tissue engineering. Napoli (ITALY). *“Multifunctional smart Nanodevices for Nnanomedicine”*

November 2013 ICT2013 – Create, Connect, Grow Conference and Exhibition, Europe's biggest digital technology event-ICT in Horizon 2020, Vilnius, (Lituania). *“Bio-inspired computing”*

Luglio 2014 - International Workshop “Unconventional Computation in Europe” - Unconventional Computation & Natural Computation Conference 2014 – Ontario (Canada). *“Quantum-dot Cellular Automata: Computation with Real-world Molecules”*

Settembre 2015 –Workshop “Nonlinear Dynamics in Computational Neuroscience: from Physics and Biology to ICT”, Turin (Italy). *“Nanotechnologies for Neurosciences”*

Novembre 2015 - “Lab-on-Chip e Biochip miniaturizzati e portatili per diagnostica medica” – SME WEEK – Tecnopolis Bari (Italy).

Ottobre 2016 International Workshop “Organic Bioelectronics” ORBITALY , Santa Cesarea Terme , Lecce (Italy). *“Lab-on-Chip and Biochips for genomics, proteomics and cellomics”*

Febbraio 2017 AISEM 2017 - XIX Conferenza Annuale dell'Associazione Italiana Sensori e Microsistemi, Lecce (Italy). *“Lab-on- Chip and Biochips for Genomics,Proteomics and Cellomics”*.

Giugno 2017 Nanobiomed Sardinia – Alghero (ITALY). *“Multifunctional nano-carriers for theranostics”*

Agosto 2017 “SPIE Optics and Photonics” – San Diego (USA). *“Microfluidics and BIO-encapsulation for drug- and cell-therapy”*

Settembre 2018 NanomaterialsTrends - Hybrid nanocomposites and nanogranular materials Workshop *“Multifunctional Nanocarriers and BIO-encapsulation for drug- and cell-therapy*, Brescia (Italy)

Ottobre 2018 2nd International Symposium on the Future of Regenerative Medicine, *“Nano-biophysical and diagnostics tools forcellular processes investigations.”* Ostuni, Italy

October 2018 5th International Conference on NeuroRehabilitation (ICNR2018) Pisa (Italy). *“Neuroprosthetic haptic interface and haptic stimulation: neuromorphic microtransduction and EEG gamma variations”*

PROGETTI PRINCIPALI PROGETTI E FINANZIAMENTI PER LA RICERCA NEL PERIODO 2000-2018:

1998-2002 Advanced Lithographies for nanotechnologies - National Research Council (CNR)(PROMIF-MADESSII)

1999-2002 "Solid State Implementation of Quantum Information Processing Devices"- National Institute for the Physics of Matter (INFM)-PRA

2000-2003 Partner EUROPEAN PROJECT GSQ (V Framework programme), Frame: IST Programme, RTD Project: "GaAs based second window quantum dot lasers(GSQ)"

2000-2003 "Single Protein Transistor (SINPROT)" - INFM PRA project

2000-2003 Local Coordinator EU PROJECT SQID (V framework programme), IST Programme, FET project: "Semiconductor-based Implementation of Quantum Information Devices (IST -1999-11311 SQID)"

2001-2004 Coordinator EU PROJECT SAMBA (V framework programme), IST Programme, FET Project: "Self Assembling of copper Metalloproteins at nanoscale for future Biodevice Application (SAMBA)"

2003-2005 Novel BIOSensors based on immobilized Neuroreceptors (BIOLINE) PAISS INFM project

2003-2006 Local Coordinator Italian University and Research Ministry (MIUR) "FIRB" (Fondo per gli Investimenti Ricerca di Base) Project: "Design and Fabrication of Optical Tweezers for applications to nanoscience and biotechnology"

2004 –2005 National Coordinator of "Programma di Ricerca Scientifica di Rilevante Interesse Nazionale (PRIN)" su : "Nuovi biosensori basati su neurorecettori immobilizzati" (Prot.2003022158)

2003-2006 Local Coordinator Italian University and Research Ministry (MIUR) "FIRB" (Fondo per gli Investimenti Ricerca di Base) Project: "Molecular Nanodevices"

2004-2006 National Coordinator of "Programma di Ricerca Scientifica di Rilevante Interesse Nazionale (PRIN)" MIUR Project : "Novel biosensor based on immobilized neuroreceptors" (Prot.2003022158)

2006-2010 Coordinator of MIUR "FIRB" project: "National Laboratory for Nanotechnology applied to Genomics and Post-Genomics"

2006 - 2007 local coordinator of "Programma di Ricerca Scientifica di Rilevante Interesse Nazionale (PRIN) " on " Scanning probe microscopy studies of fluorinated polymers and nanocomposites with nanostructured surface for applications in micro-fluidics networks."

2006-2010 Coordinator of Italian MIUR "FAR" project "Micro- and nano-fabrication processes for implementation of devices and functional systems for in the electronics, photonics, micromechanics, and biosensing applications" Technological District HIGH TECH (DHITECH) S.C.A.R.L

2007-2010 Key Scientist of Coordinator group - STREP EU Project "Spitronic Devices for Molecular Electronics" SpiDME, FP6 : NEST - 2004- ADV (VI framework programme)

2008 -2010 British-Italian Partnership Programme "Structural probing of hepatitis C glycoprotein E2 interaction with CD81-LEL receptor through spectroscopic techniques".

2008-2011 Coordinator STREP EU Project NMP: "Radiochemistry on chip (ROC)" (FP7) -CP-FP 213803-2

2009-2012 Local Coordinator – EU Network COST (European Cooperation in Science and Technology) "Self-assembled guanosine structures for molecular electronic devices" EUROPEAN NETWORK ON

G-QUARTETS AND QUADRUPLEX NUCLEIC ACIDS (G4-NET).

2011-2013 Local Coordinator of Strategic Regional Project “Sviluppo e realizzazione di bio-chip per la diagnostica molecolare e la tipizzazione di virus patogeni umani (HPV, HCV)”

2011-2013 Local Coordinator Fondazione Umberto Veronesi Project :” Development of cytochrome c assay marker of ischemia/reperfusion damage to the heart”

2011-2015 Coordinator Apulia Region Project for the institution of Public laboratories networks “Nano- Biotechnological methods for innovative Diagnostics and Therapy (NaBiDiT)”

2012-2014 Local Coordinator of PON01 Project: “Innovazioni di processo e di prodotto per incrementare i profili di sicurezza e per diversificare la gamma dei prodotti (freschi e stagionati) a base di carne suina (SAFEMEAT)” PON01_01409

2012 -2015 Local Coordinator PONa3 Project: “Omics and Nanotechnology applied to living organisms for diseases diagnosis” PONa3-00134

2012-2016 Coordinator European Project FP7 : “Molecular Architectures for QCA-inspired Boolean Networks ” Grant agreement no: 318516 Objective ICT-2011-9.6: FET Proactive:Unconventional Computation (UCOMP)

2012–2015 Local participant unit Coordinator PON REC Project “Distretti ad Alta tecnologia, aggregazioni e laboratori pubblico-privati per il rafforzamento del potenziale scientifico e tecnologico delle Regioni” – “RINOVATIS” Rigenerazione di tessuti nervosi ed osteocartilaginei mediante innovativi approcci di Tissue Engineering – DISTRETTO DHITECH Università del Salento (PON02_00563_3448479) (Ambito SALUTE DELL'UOMO E BIOTECNOLOGIE)

2012–2015 Local participant unit Coordinator PON R&C Project “Distretti ad Alta tecnologia, aggregazioni e laboratori pubblico-privati per il rafforzamento del potenziale scientifico e tecnologico delle Regioni” – “AMIDERHA” Advanced Mini-invasive Systems for Radiotherapy and Diagnosis– DISTRETTO MEDIS – Università degli Studi di Bari (PON02_00576_3329762) (Ambito SALUTE DELL'UOMO E BIOTECNOLOGIE)

2012 – 2014 Local Coordinator CNR Project “Nanotechnology-based therapy and diagnostics of brain diseases” (Proposal acronym: NanoBrain), within the national Flagship Project “Nanomax”

2013-2017 Local participant unit Coordinator PON R&C Project 2007-2013 “Cluster Tecnologici Nazionali” : “SAFE&SMART – Nuove tecnologie abilitanti per la food safety e l'integrità delle filiere agro- alimentari in uno scenario globale” (CTN01_00230_248064) – Cluster “CL.A.N. – Cluster Agrifood Nazionale” (CTN01_00230)

2014-2015 Scientific coordinator of Progetto Fondazione Cassa di Risparmio di Puglia : “Micro- e Nano-tecnologie applicate per la diagnosi precoce e l'identificazione di indicatori molecolari di gravità nelle malattie reumatiche fattore reumatoide associate”

2015-2017 Coordinator of Participant unit of Cluster Tecnologici Regionali Project : ”PERvasive game for perSONalized treatment of cognitive and functional deficits associated with chronic and Neurodegenerative diseases” (PERSON).

2018-2020 – Coordinator of UniSalento participant unit Apulia Region Project – Bando Innonetwork : “PAPer analyser for particulate Exposure Risk –PAPER”

2018-2020 – Coordinator of UniSalento participant unit Apulia Region Project – Bando Innonetwork : “sisTema wireless corTico

pArkiNsOn:TITANO”

2018- 2020 – Coordinator of ISUFI participant Unit “Apulia Region Project” – Bando INNOLABS: “Metodologie INnovative per la Elaborazione per la Rilevazione di sostanze odorigene Volatili nell' Aria - M.IN.E.R.V.A.”.

2018- 2020 – Coordinator ofl participant CNR-IMM Unit “Apulia Region Project” – Bando INNOLABS: “Piattaforma tecnologica di monitoraggio real time e di supporto alle decisioni orientata all’efficienza idrica, ai rischi idrogeologici e alla qualità delle acque delle condutture idriche sul territorio pugliese - HydroRiskLab

CONFERENZE:ORGANIZZAZIONE DI MEETINGS SCIENTIFICI

Nov. 2006 Chair of Session entitled : “Engineering Applications to Nanobiosensors I” International Symposium “Materials Science and Materials Mechanics at the Nanoscale: Modeling, Experimental Mechanics & Applications.” Bari (Italia), 19-23 November 2006.

Maggio 2010 Co-Chair and Member of Scientific commission for the International Conference “Trends in Spintronics and Nanomagnetism” (TSN-2010), Lecce

Sett. 2009 Member of Scientific Commission of the 2nd National Conference on Nanomedicine , Pavia Italy

Ottobre. 2010 Member of Scientific Commission of the 3rd National Conf. on Nanomedicine, Venezia, Italy

luglio 2011 Co-Chair and Member of Scientific commission of International Workshop :”Radiochemistry on Chip”, Pisa, Italia

Settembre 2012 Chair of International “Workshop on Nanomedicine and Nanobiosystems – WOMEN”, Museo Provinciale “Sigismondo Castromediano”, Lecce (Italia).

Settembre 2016 Chair of International Workshop : “Supramolecular Assembly: towards Novel Functional Materials and Devices”, Lecce (Italia) – MUST .

Agosto 2017 – Member of Scientific and technical committee of “Biosensing and Bioelectronics X” symposium – SPIE San Diego –USA

Settembre 2018.– Member Organizing committee of “Trends in Nanotechnology International Conference, TNT2018 “ – Lecce (Italy)

Settembre 2018 – Chair ISUFI Workshop: 'Robotics, Neuroprosthetics and new materials in Human field' , Lecce (Italia)

Giugno 2019 - Member Organizing committee - 14th International Symposium on Macrocyclic and Supramolecular Chemistry , Apollo Theater, Lecce (Italia)

Giugno 2019 – co-Chair - XIV Italian Conference on Supramolecular Chemistry (Supramol 2019) - College ISUFI, Lecce (Italia)

SEMINARI **Sett. 1995** Seminario alla IX Mediterranean School “Physics and Technology of Nanonstructures” Otranto (Lecce). Titolo: Physics and Technology of Quantum Wires.

Sett. 1998 Seminari alla National School on Condensed Matter Physics (Scuola Nazionale di Fisica della Materia), Torino. Titolo : Physics and technology of semiconductos heterostrucutres

Feb. 2001 International School “9th Seminaire de Physique Rhodanien” on “Physics of Entangled States”, Dolomieu (Isere) (FRANCE). Titolo: Entangled States in Quantum Dots

Maggio 2002 Tutorial corse on ”Micro- and Nano- Technologies for Sensors Manufacturing” at the int. workshop Inter ”New developements on sensors for environmental control”, S.Cesaria Terme (Lecce, Italia)

Sett. 2002 Seminari alla National School on Condensed Matter Physics

on "Calculus and Quantum Computation", Torino (ITALIA). Title :
Quantum computation with quantum dots.

Sett. 2003 Seminario alla NATO-ASI School on Nano-Engineered Materials Antalya, Turchia. Title: "Hybrid three terminal devices based on modified DNA bases and metalloprotein"

Giugno 2005 Seminari alla Organic Electronic Summer School (OESS), Porto Conte, Sardegna (ITALIA). Titolo: Transport in carbon based conjugated materials.

Maggio 2007 Seminario presso CIC BiomaGUNE : "Novel integrated biochips for highly sensitive real-time analyses of biomolecules" – San Sebastian, Spagna

Feb. 2008- Seminario per il "Corso di Aggiornamento ECM " L'HPV , il tumore del collo dell'utero e la vita della donna. Un moderno approccio di laboratorio e il vaccino : l'inizio di una nuova era?" : "Metodologie nano biotecnologiche per la realizzazione di biochips per la diagnosi delle infezioni da HPV", Gallipoli, Lecce (Italia)

Marzo 2008 Seminario alla Fondazione Centro San Raffaele del Monte Tabor (HSR) Milano (Italia). Titolo : "Nano- Biotechnological methods for innovative diagnostics and therapy"

Marzo 2009 – Seminario presso CIC bioGUNE Bizkaia Technology Park, Bilbao –SPAIN. Titolo : "Lab-on-chip and biochips for real-time analysis of biosystems"

Ott. 2011 – Seminari alla "4 NANO" Scuola di Alta FORMazione in NANOScienze: "Lab-on-Chip Technology for Genomics and proteomics" – CNR IMM Napoli (Italia).

Feb. 2012 – Seminario : "Nano- Biotechnological methods and tools for innovative Diagnostics and Therapy" Facoltà di Medicina e Psicologia Università La Sapienza – osp. S.Andrea Roma (Italia).

Sett. 2012 – Seminario : "Innovative Bio-Devices and Bio Systems for Diagnostics and Therapy" Department of Materials Science and Engineering University of Maryland, College Park, MD 20742, USA

Ott. 2012 – Seminario: "Nano-Biotechnological methods and tools for innovative Diagnostics and Therapy" , School of Biomedical Engineering, Science and Health Systems Drexel University, Philadelphia, PA, USA

Marzo 2014 – Seminari presso Istituto di Istruzione Secondaria Superiore " L.Pepe – A.Calamo" – Ostuni Progetto C-2_FSE-2013-19, Ostuni (Brindisi, Italia).

Giugno 2014 – Seminario: "The potential of Nano-bio-technologies for exploring the brain" - presso The Centre for Cognitive Neuroscience CNRS LION (FR)

PREMI ED ONOREFICENZE

Giugno 1992 Premiazione del Poster intitolato "Linear and non-linear optical processes in semiconductor quantum wires" nell'ambito della Columbus Conference on Physics of Matter, Genova

Settembre 1993 Vincitrice del premio della Società Italiana di Fisica per i laureati dopo Maggio 1990 (LXXIX Congresso della Società Italiana di Fisica - UDINE).

Maggio 1995 Premiazione del Poster intitolato "Wavefunction Localization in Monolayer-Controlled GaSb/AlGaSb Quantum Wells Probed by Magnetoluminescence" nell'ambito del Congresso Nazionale di Fisica della Materia , Napoli.

Giugno 1999 Premiazione del Poster intitolato "Excitonic and Free Carrier Recombination in In-GaAs/GaAs V-shaped Quantum Wires for Different In Content" nell'ambito dell'INFMEETING99, Catania.

Dicembre 2005 Conferimento della medaglia di "Le Scienze" e della

medaglia del Presidente della Repubblica Carlo Azeglio Ciampi per le ricerche effettuate nel campo delle Nanobioteconologie.

Dicembre 2007 Rosaria Rinaldi è stata riconosciuta come una delle donne di maggior successo nel Sud Italia per la leadership in Scienze Applicate e Innovazione industriale nel quotidiano "ilSole 24 Ore": "Quando carrier fa rima con impresa"

Ottobre 2011 – Vincitrice Europrize RENOIR.

Novembre 2016 –Vincitrice ITWIIN 2016 High Education.

Giugno 2017 Finalista EuWIIN "European Women Inventors and Innovators Network" contest prize.

MEMBERSHIPS 2006-2010 Membro del Scientific Advisory Board - Istituto Superiore Universitario di Formazione Interdisciplinare (ISUFI), Università del Salento, Lecce – Nanoscience & Grid Computing Area.
2010 - oggi Scientific Project Reviewer of Ireland Science Fundation
2010 - 2015 Scientific Project Reviewer of U.S. Department of Energy
2009 - 2015 Scientific Project Reviewer per la Fondazione Cassa di Risparmio di Padova e Rovigo
2010 - oggi Scientific Project Reviewer for National Research Project funded by Italian Ministry of University and Research (MIUR)
2015 - oggi Scientific Project Reviewer of ARAID-Spain
2016 - oggi Scientific Project Reviewer for *Helmholtz Association*
2000 – oggi Referee for scientific Journals of the American Physical Society, American Chemical Society, RSC, Institute of Physics, Nature Nanotechnology
2010-2013 Member of del Scientific Advisory and Editorial board of Scientific Journal:" Current Nanoscience (CNANO)" - Bentham Science
2006-2012 Member of European Technology Platform on Nanomedicine (ETP)

BREVETTI

1. "Electronic devices and transistors based on polypeptide films" Patent n. T02005A000830 (2005)
2. "Optical apparatus and method for the inspection of nucleic acid probes by polarized radiation" Patent n° WO IT06000061 (2006).
3. "Nucleic acid analysis chip integrating a waveguide and optical apparatus for the inspection of nucleic acid probes" WO2006IT00062 20060206 (2006).
4. "A nanoelectrode-based chip for the detection of single biorecognition events for genomics and proteomics applications", patent n. TO2007A000341 (2007).
5. "Method for micro- and nanoscale patterning of metal substrates" Patent TO2008A000632.(2008)
6. "Integrated plastic microdevice for quantitative analyses of real-time PCR" Italian Patent TO2008A000810.(2008).
7. "A method and a microdevice for the identification and/or quantification of an analyte in a biological sample with optical detection systems based on FRET processes". WO2008072209.(2008).
8. "Photonic crystal resonators array chip for improved optical sensing of (bio)molecules in genomics and proteomics" Italian Patent TO2008A000614 (2008).
9. "Oxygraph chamber and insertable micro-culture device and uses thereof" European Patent EP2597148 (2013)

MONOGRAFIE , LIBRI E CAPITOLI DI LIBRI

1. R.Rinaldi: "Growth and characterization of self-assembled semiconductor macroatoms", in "SEMICONDUCTOR MACROATOMS 2. Basics Physics and Quantum-Device Applications" World Scientific, edited by Fausto Rossi.(2005)
3. R. Rinaldi, G. Maruccio, Molecular Electronics, published as a chapter in the collective work entitled WILEY ENCYCLOPEDIA OF BIOMEDICAL ENGINEERING (6-Volume, ISBN: 0-471-24967-X, Hardcover, 4152 pages, June 2006), edited by Metin Akay.
4. R. Rinaldi, G. Maruccio, Nano-Bio Electronics, WILEY-VCH - Weinheim – Berlin, chapter in the book entitled "Series on Nanotechnology for Life Sciences" - Vol 4 (Nanodevices for Life Sciences) edited by Challa Kumar (2007)
5. OFFENHAEUSSER A, RINALDI R. (Edts), Nanobioelectronics - for electronics, biology, and medicine: David Lockwood (USA). Springer Series "Nanostructure Science and Technology". (2009).
6. P.P.Pompa and R. Rinaldi "Protein based nano-devices" in Frontiers in Nanoscience and Nanotechnology, Oxford Handbook of Nanoscience and Technology , Volume 3: "Applications", edited by A.V. Narlikar and Y.Y. Fu ,Oxford University Press (2010).
7. S.Sabella, P.P.Pompa, B.Sorce, L.L. Del Mercato, and R.Rinaldi "Amyloid fibrils: from nature to nanotechnology" in Functional Amyloid Aggregation, Research Signpost (2010)
8. A.Aloisi and R.Rinaldi "Nanotechnology for diagnostics and sensing: soft and advanced imaging/sensing approaches" in "Optical Nano- and Microsystems for Bioanalytics", Springer Series on Chemical Sensors and Biosensors , 2012, edited by Jurgen Popp (ISBN-13:9783642254970)
9. Del Mercato L.L., Ferraro M.M., Baldassarre F., Mancarella S., Greco V., Rinaldi R., Loporatti S.: "Biological Applications of LbL Multilayer Capsules: From Drug Delivery to Sensing. ", Advances in Colloid and Interface Science Volume 207, May 2014, Pages 139–154
10. A.Aloisi and R.Rinaldi, "Carnosine and Alzheimer's Disease-Related Fibril Formation" Chapt. 24 – Book Title: Imidazole Dipeptides: Chemistry, Analysis, Function and Effects-Royal Society of Chemistry, edited by Victor Preedy
10. V. De Matteis and R. Rinaldi, "Toxicity Assessment in the Nanoparticle Era" in "Cellular and Molecular Toxicology of Nanoparticles" Chapt. 1 pp1-19; Saquib, Q., Faisal, M., Al-Khedhairi, A.A., Alatar, A.A. (Eds.), "Advances in Experimental Medicine and Biology" Springer Series 2018
11. A.Aloisi, D.Pisignano, and R.Rinaldi: "Nanotechnologies for Neurosciences" Chapt. 7. Book title : "Nonlinear Dynamics in Computational Neuroscience" Springer International Publishing AG, F. Corinto and A.Toncini (Eds.) (2018) (DOI 10.1007/978-3-319-71048-8_7).
12. Ross Rinaldi, Rafael Gutierrez, Alejandro Santana Bonilla, Gianauelio Cuniberti, and Alessandro Bramanti: "Nanoscale Molecular Automata : from Materials to Architectures", Chapt. 16, pp316-340. Book title : "Unconventional Computing" Springer International Publishing AG 2019 Susan Stepney, Steen Rasmussen, and Martyn Amos (eds.)

Lecce, 9 settembre 2018

Rosaria Rinaldi

