

		Prof. Maria Minunni, PhD, Curriculum Vitae , Updated June 2024 Full Professor in Analytical Chemistry , at Università degli Studi di Pisa (UNIFI), Dipartimento di Farmacia, Italy
	<i>ID ISI ORCID</i>	http://www.researcherid.com/rid/H-5278-2011 http://orcid.org/0000-0003-0906-0862
Personal Data:	<i>Birth:</i>	Torino (Italy) – March 19, 1963, Italian citizen,
	<i>Address:</i>	<i>Work:</i> Via Bonanno, 6 Italy, 050 2219555 <i>Private:</i> Via N. Niosi 29, 56125 Pisa, Italy, mobile: +39-3459910067
Education	1994	Ph.D in Environmental Science (UNIFI, Italy), Analytical Chemistry, granted by Italian Ministry of Research (MIUR);
	1988	Degree in Biology , University of Pisa, Italy;
Languages		Italian (native), English (fluent), French (fluent),
Post-docs abroad and in Italy	1989-1999	In Public and private Research Centers in (M: months) as postdoc 4 years abroad in: a) <u>Switzerland</u> (1989-1990, 15M) Nestlé Research Centre - VD; b) <u>Sweden</u> (1991-1992, 12M) at Pharmacia Biosensor AB , Uppsala. c) <u>Germany</u> (1998-1999, 15M) Technical University of Munich, TUM Eliteuniversität", Institute of Life Sciences; d) <u>Ireland</u> (1995, 1M) University College UCC-Cork , Dep. of Chemistry. • <u>Italy UNIFI</u> 1994-1997, DIPCHIM ; 1997-1998, DIP Scienze Farmaceutiche ;
Present Position	2023-	Full Professor in Analytical Chemistry, Dep. of Pharmacy UNIFI;
Previous position	2017-2023	Full Professor in Analytical Chemistry, Faculty of Science, Department of Chemistry, UNIFI (Department of Excellence, I classified VQR 2011-2014, and 2015-2019, funded with 17 mil euro by MIUR;)
Academic position over years	2018 -2023	Vice-coordinator of the Innovation and Demonstration Node (IDN) for UNIFI @ High speciality Competence Center (Centro di Competenza ad alta specializzazione) Advanced Robotics and enabling digital TEchnologies & Systems 4.0 - ARTES 4.0 , funded by Ministry of Economic development;
	2017-2021	Member: Quality Assurance (QA) group (Gruppo del Riesame) Degree in Chemistry and Chemical Sciences (undergraduate and Master), UNIFI;
	2017-2020	Responsible for Quality Assurance (QA) at DIPCHIM, Dep. EXCELLENCE, I classified VQR 2011-2014, funded with 8 mil euro by MIUR;
	2015-2016	Member: Gruppo di Esperti di Valutazione (Expert Evaluators Group) for Chemistry (GEV 03) - ANVUR , to evaluate research performances at Italian University and Research Centers funded by MIUR (VQR 2011-2014); group of 20 people, national level selection, only 2 for Analytical Chemistry;
	2015-2017	Member: Comitato di Indirizzo , Master in Chemistry, UNIFI;
	2015-2016	Member: Comitato di indirizzo strategico - accordo quadro Consiglio Nazionale delle Ricerche e Società Chimica Italiana (CNR-SCI);
	2014-2016	President Sezione Toscana - Società Chimica Italiana (SCI) , 390 member in 2016, 3 rd in size in SCI. Member of Consiglio Centrale SCI;
	2013-2020	Member: Commissione di Indirizzo ed Autovalutazione DIPCHIM, UNIFI;
	2013-2017	Member: Commissione SUA-RD for QA of Research performances, UNIFI;
	2012	Abilitazione Scientifica Nazionale (ASN) for Full professorship in Analytical Chemistry; Evaluation: EXCELLENT;
	2011-2017	Member: Comitato per la didattica , CdL in Chimica, UNIFI;
	2017-2021	Member: Comitato del riesame , CdS in Chimica, UNIFI;
	2011-2017	Associate Professor in Analytical Chemistry at UNIFI;
	2011-2014	Management Committee (MC) Member [TD1003 IT] to COST Action TD1003 Bio-inspired Nanotechnologies;
	2010-2021	Member: Collegio dei docenti del PhD course, in Scienze Chimiche UNIFI;
	2005 -	Board of examiners of MULTIDISCIPLINARY topics at national and international PhD Thesis defenses in: (D: dottorato e UNI: University) 1. National: PhD in Translational Medicine, Scuola Universitaria Superiore San'Anna, Pisa, October 2022; 2. National: Dottorato in Scienze Veterinarie UNI Pisa, maggio 2022; 3. National: D in Scienze e Biotecnologie agrarie UNI Udine (prof. Firrao coordinatore), 2021

		<p>4. International: D UNI Teramo 2020 Progetto "Rep-Eat" (Horizon 2020 MSCA-COFUND). Rep-Eat - G.A. n. 713714),</p> <p>5. International: D in Chimie et Sciences vivant, UNI Grenoble France 2017</p> <p>6. D of Sciences and Innovative Technologies; PhD Program in Chemical and Material Sciences UNI Torino, 2017;</p> <p>7. D in Scienze Chimiche e dei Materiali, UNI Pisa 2016;</p> <p>8. D in Scienze Chimiche, UNI Basilicata, 2013;</p> <p>9. International: D de Physique; UNI Grenoble France 2013;</p> <p>10. D in Biotecnologie Molecolari, Industriali e Ambientali, UNI Verona 2012;</p> <p>11. International: European PhD, Besançon-France, ENSMM, École Nationale Supérieure d'Ingénieurs de Mécanique et des Microtechniques 2005;</p> <p>12. Referee for PhD thesis: in D Scienze e Biotecnologie agrarie, PhD Information Engineering, UNI Padova, 2015 and D Scienze Chimiche, UNI Roma «La Sapienza» 2015; D of Sciences and Innovative Technologies; PhD Program in Chemical and Material Sciences UNI Torino, 2022;</p>
	2000-2011	Resercher in Analytical Chemistry at UNIFI
Journals Editorial activity	2014-	<p>1. Sensors and Actuators Reports, Associate Editor, Elsevier, (IF 5,9);</p> <p>2. Talanta, Editorial Advisory Board member, Elsevier (IF 6,1);</p> <p>3. Sensing and Bio-Sensing Research (SBSR) Editorial Advisory Board member, Elsevier (IF 2023 5,2);</p> <p>4. Frontiers in Chemistry, as Review Editor, (IF 5,2);</p> <p>Sensors, Editorial Advisory Board member, MDPI (IF 3,8);</p>
Guest Editor	2019	Analytical Bioanalytical Chemistry (ABC), Springer, Issue New Developments in Biosensors , guest editors M. Minunni and F. Baldini;
Patents	2019	Palladino P., Torrini F., Scarano S., <u>Minunni M.</u> Kit per la determinazione colorimetrica del livello di cloro in acque utilizzate per scopi ricreativi. Priority nr: 102019000024778 (IT) (Dec 2019).
Panels	2004-present	<p>Referee and Evaluator for Grant Programs for National and International funding Agency and Organization:</p> <p>1 European Union (since 2004)</p> <ul style="list-style-type: none"> • ERC 2018; • FP7 Framework Projects BXL_(calls on Biosensors and ICT 2004); • Evaluation with Audit of progresses (Monitor) for FP7 (2013/14/15) and Horizon 2020, 2016; • H2020, ICT WP 2016-17; call ICT-29-2016: ICT-02 "Thin, Organic and Large Area Electronics" (TOLAE) and ICT-29-2016 "Photonics KET", BXL 2016; • H2020 ICT Call ICT-30 "Photonics KET", Innovation Action sub-topics b.ii. addressing (1) biophotonics applications for medical diagnostics, and/or (2) sensing applications in food and pharmaceutical processing/production, 2017; • H2020 ICT Call ICT-2019-2 (RIA): BXL 2019; • Horizon 2020 Marie Skłodowska-Curie Actions (H2020-MSCA-IF) 2019; • COST 2015 per Open Call OC-2015-1; • Academy of Sciences for The Developing World, TWAS 2008; • Czech Science Fundation, GACR since 2010; • Poland: National Science Center since 2017; • UK: Biotechnology and Biological Science Research Council, 2010; • French Research Agency, ANR since 2011; • Romanian National Council for Scientific Research, 2011; • Romania: Ministry of National Education and Scientific Research, 2016; • Portuguese Foundation for Science and Technology (FCT) 2012; • France: Translational Research Adv. Imaging Lab TRAIL), since 2012; • Israeli Ministry of Science, since 2014; • The Netherlands Organization Health Res. and Develop. ZonMw 2015 • Brazil: São Paulo Research Foundation, FAPESP 2016; • The Italian Ministry of Research, MIUR since 2011; • Università di Urbino, valutazione scientifica progetti di ricerca UniUrb, 2021; <p>Evaluation of Research and Higher education</p>

		<ul style="list-style-type: none"> • France: MM Chairwoman of the committee, High Council for Evaluation of Research and Higher education (Hceres), <i>title of the committee: P7-UNILIM-CaPTur-SVE5</i> Insitute: Equipe Accueil 3842 CAPTuR “Cell activation Control, Tumoral Progression and Therapeutic Resistance”, Director: Fabrice Lalloué, 2021; <p>Evaluation Board on the Nomination for Appointment to Professor</p> <ul style="list-style-type: none"> • Czech Republic, Member (total of 4) of the Evaluation Board on the Nomination for Appointment to Professor @ Faculty of Science, Biochemistry, doc. RNDr. Petr Skládal, CSc. Faculty of Science, Masaryk University, March 2022;
Chairing activity a) Workshop Chair	2013 -	<ul style="list-style-type: none"> • 2nd European Biosensor Symposium (ESB), co-chair: F. Baldini, 2019, Firenze, Italy, sponsored by Springer, 230 participants. • COST Workshop “Bio-inspired Nanotechnologies for Biosensing”, 16 May, sponsored by Elsevier, 2013, Stiges, Spain, 116 participants. • COST Workshop “Integrated approaches for biomolecular detection: nanostructures, biosensors and lab-on-chip devices”, Catania 2014, Italy, 100 participants, co -chair, Chair: G. Spoto; <p>Excecutive or Scientific committee, Session chair at numerous international conferences (30, latest: Internazionale: 4th European Biosensor Symposium (ESB) 2023, Aechen, Germany, 27-30 August 2023 (Organizing and Scientific Committee));</p>
Honours	2017	Guest of Honor, World Advanced Materials Congress , Baltic Conference Series – BCS- Stockholm, Sweden
Price	1993	Awarded the price for young researcher sponsored by Analytica Chimica Acta ;
Grants		<p>Projects under evaluation</p> <ul style="list-style-type: none"> • MUR- BANDO FIS - Fondo Italiano per la Scienza. Novel therapeutic tools for mesothelioma, ovarian, and pancreatic mesothelin-expressing cancers; Acronym Thermec; MM, Participant, PI Prof. S: Landi - UNIPI, PROPOSAL FIS-02668, Main ERC Field: LS7 - Prevention, Diagnosis and Treatment of Human Diseases (submitted 8 November 2023); <p>On going:</p> <ul style="list-style-type: none"> • Università Italo-Francese, 2023, Bando “Leonardo da Vinci”, 3 years PhD grant partership: UNI Grenoble I J. Fourier University I, Joseph Fourier, <i>Département de Pharmacochimie Moléculaire</i> (Prof. Corinne Ravelet, coordinator), project “Rilevazione di un biomarcatore clinico mediante un biosensore basato su rame nanoaggregato e aptameri”; MM PI; • MUR-PNNR, Ecosistema innovativo sulla Salute, Theme Nanotechnologies for Diagnosis and Therapy; project: “Innovative analytical platforms for personalized, anticipated and low-cost diagnostics” (participant @ cluster di UNIPI, Spoke 4); <p>Past funded projects:</p> <ul style="list-style-type: none"> • Ministero della Salute, Coordinator, “<i>Abuso di immunoterapici nello sport: sviluppo di un biosensore per inibitori della miostatina</i>” (STAMULUMAB) Programma di Ricerca 2020 sui farmaci, sulle sostanze e pratiche mediche utilizzabili ai fini di doping nelle attività sportive (62 k€) 18M; • Private contracts: PPM Services SA, A NOGRA Group company is incorporated in Switzerland, under reg. no CHE-420.383.918, whose registered office is in Morbio Inferiore; <i>Affinity sensing for Nucleic acid analogues-based drugs</i>; • POR FESR 2014-2020 - Linea d'azione 1.1.5.a3 - Aiuti agli investimenti R&SI - Bando FAR-FAS2014 – PI Sviluppo di sensori biotofonici per la determinazione di OGM nell'ambiente^{SEP} Acronimo (SENSOGM) (200 k€ 35 M) up to december 2019; since january 2020 PI was Dr. S. Scarano; • EC Horizon 2020, ERA-NET-PhotonicSensing Transnational Call 2016, Coordinator, project: “<i>advanced PLAsmonic Biosensors ANalysis of nucleic acid</i>” (556 k€ 36 M); end 2021 • Ministero della Salute, Coordinator, “<i>Sviluppo di Biosensori ottici per l'analisi di ormoni peptidici attraverso polimeri a stampo molecolare</i>” acronimo (MIPISA); Programma di Ricerca 2018 sui farmaci, sulle sostanze e pratiche mediche utilizzabili ai fini di doping nelle attività sportive (120 k€) 18M;

		<ul style="list-style-type: none"> •UNIFI, 2018 Proponent: Call UNIFI for relevant instrumentation: acquired Biacore T100 based on SPR (74,6 k€); •Private funding: bioMérieux, bioMérieux Italia S.p.A. @ CSGI – 2017-2020; •Korea Institute of Science and Technology Forschungsgesellschaft mbH (“KIST Europe”) Saarbrücken, Germany) @CSGI, 2017; •Scuola Superiore di Studi Universitari e Perfezionamento Sant’Anna PI @CSGI. “<i>Plasmonic sensors</i>, 2017; •Private funding: CDR FOODLAB s.r.l., Via degli Artigiani 6, 50055 – Ginestra F.na, Firenze – ITALIA, Collaborazione per lo <i>sviluppo di approcci analitici innovativi nei controlli alimentari basati sulla nanofotonica</i>; 2016-2017 •EC H2020, 2015 PI ULTRAPLACAD ULTRAsensitive PLAsmonic devices for early CAancer Diagnosis, "Personalising health and care (H2020-PHC-2014-two-stage)", Topic: "Development of new diagnostic tools and technologies: in vitro devices, assays and platforms (PHC-10-2014 6 mil€, UNIFI: 100 k€); •World Antidoping Agency (WADA), “Scientific Research Grant -2010, PI, “<i>Detection of Hepsidin as a New Biomarker of Erythropoiesis Stimulators Abuse: A Pilot Study</i>”, (150 kUS\$, UNIFI 50 kUS\$) 2011; •Fondazione ARPA, Progetto Dolore, PI 2010 (10 k€); •Università Italo-Francese, Bando “Leonardo da Vinci” 2013, 3 years PhD grant partership: UNI Grenoble I J. Fourier University, “<i>Development of Affinity Biosensors based on a new aptameric receptor for Alzheimer molecular diagnostic</i>“ (60 k€); •World Antidoping Agency (WADA), Coordinator “<i>Affinity-Based Biosensing (ABs) for gene doping detection: a pilot study</i>”, within the “Scientific Research Grant 2008, Detection of Prohibited Substances/Methods: novel methodologies”, 2010 (400 kUS\$); •Regione Toscana, PI, Programma per la Ricerca Regionale in materia di Salute 2009, “<i>Minimally invasive microsystem for glucose monitoring in diabetic patients</i>” (amount 400 k€, UNIFI 80 k€); •Ministry of Health, Coordinator: “<i>Bioanalytical method based on biosensors for the new frontiers of doping: detection of exogenous proteins and genes</i>” – Programma di Ricerca 2005 sui farmaci, sulle sostanze e pratiche mediche utilizzabili ai fini di doping nelle attività sportive 80 k€; •European Union FP7 PI “<i>Growth of Large GaPO₄ Single Crystals and their use for Special Sensor Applications</i>”, acronym GAPOGROWTH, 2002 UNIFI, 170 k€; •Private funding: ElbaTech srl, 2003 “<i>Development and optimization of DNA chip based on nanogravimetric system</i>”; •Ministry of Health PI “<i>Ciclooxigenase-2 inhibitors (COX2) for the colon rectal cancer treatment</i>”, 2002 196 k€ 24 M; •Fundig for mobility: EC 1991 Concerned action “<i>Strategies for in vivo sensing</i>” Pharmacia Biosensor AB Uppsala, Sweden.
Teaching	2000-present	Teaching: Laboratory of Analytical Chemistry I, Analytical Chemistry II, Clinical Analytical Chemistry, Bioanalysis, Advanced Instrumental Analysis and Environmental applications; Advanced and innovative analytical methods for applications in Life Sciences (in English, Master’s in Advanced Molecular Sciences AMS)
	2009-2011 and 2014	Teaching at Dottorato in Scienze Chimiche (PhD course), UNIFI “Immobilization of Biomolecules on surfaces” UNIFI (8 hs) , and “ Analytical chemistry for molecular diagnostic ” (8 hs);
	2007-2010	Teaching (invited) at the International PhD course in Nanoscience at Scuola Superiore di Catania (SSC), Università di Catania (8 hs) “Immobilization of Biomolecules on surfaces”;
Others	2000-present	<p>Supervisor (Relatore) of Italian <i>Laurea in Chemistry (21 students)</i>, 1 stage (tirocinio); <i>Laurea in Biotechnology (2 students)</i>,</p> <p>Supervisor of PhD thesis in Chemical Sciences, candidates:</p> <ul style="list-style-type: none"> •Maria Laura Ermini, thesis: “Surface plasmon resonance imaging for the detection of single nucleotide polymorphisms” Grant: borsa Ministeriale; thesis defence in 2013; presently post-doc @ IIT - NEST Scuola Normale Superiore, Pisa •Stefano Mariani, thesis” Development of affinity biosensors based on optical transduction”, presently post-doc @ ITT - Scuola Sant’Anna Pisa and Genova, thesis defence in 2014; Grant: Progetti WADA and Regione Toscana; •Samuele Lisi, with Grenoble University- France (Prof. E. Peyrin); grant: Università Italo Francese- Bando Vinci, thesis defence in 2017, presently @

		<p>Biopharma analyst, Lyon, France</p> <ul style="list-style-type: none"> • Francesca Torrini (XXXIV- 2018) “Neurotransmitters-derived biopolymers for future diagnostics and bioanalysis” Grant University of Florence; winner of Roche Young researcher Grant 2021; presently post-doc @ Department of Chemistry and Applied Biosciences, ETH Zurich, Switzerland; • Maria Grazia Lettieri (XXXV- 2019), grant borsa Ministero della Salute. Since november 2021 co-tutor (tutor Prof. S. Scarano); thesis defence in 2023; presently Jung Researcher (RTdA) @ Università di Siena; • Simone Ventisette, grant: PNNR -THE, since November 2023, First Year; External Tutor; <p>PhD thesis in Ecole Doctorale en Chemie & Sciences du Vivant, cotutela with PhD Scool in Scienza del Farmaco e delle sostanze bioattive UNIPI:</p> <ul style="list-style-type: none"> • Fabio Spiaggia with Grenoble University- France (Prof. C. Ravelet); grant: Università Italo Francese- Bando Vinci 2023; Coordinator Grenoble University; Co-tutela with Dottorato di ricerca. Since January 2024, First Year;
Visiting scientists	2011-	<p>Reference person of international exchanging programs for students and researchers; Guests hosted:</p> <p>Guests with Short Term Scientific Mission within COST program TD1300 from</p> <ul style="list-style-type: none"> • Slovacchia (Gabriela Milagros Castillo Bautista 2012 and 2013) and • France (Dr. E. Daussè) for aptasensing development 2013; <p>From collaboration programs:</p> <ul style="list-style-type: none"> • Poland: Miss Agnieska Pazieskva-Novac, from Prof. Dorota Pijanowska laboratory, Nalecz Institute of Biocybernetic and biomedical Engineering, Polish Academy of Science, 2019; • Israel Accordo Internazionale registrati sul MIUR con Prof. I. Willner (Israele), Institute of Chemistry, The Hebrew University of Jerusalem, 2016; • Greece Dr. Despina P. Kalogianni, Lecturer / Lab of Analytical Chemistry, Department of Chemistry, University of Patras (GRE), with the Erasmus + academic staff mobility program for teaching 2016; • China Prof. Dujuan Li, Hangzou Daizi University (12 mesi: gennaio. 2016-dicembre 2016) supported by a scholarship for the international visit scholar sponsored by China Scholarship Council; QCM and SPR sensing; • Indonesia (Nina Siti Aminah short term - 1 month) stay supported, by the Indonesian Government Scholarship); SPR sensing 2014; • Repubblica Ceca (Pavlina Sobrova Adam 3 mesi aprile-luglio), Department of Chemistry and Biochemistry, Mendel University in Brno, 2013; SPR imaging, PhD student; • Canada (Xinran Cheng, PhD student 3 months), University of Toronto at Scarborough, 2011, SPR and QCM sensing; • Francia (Mr. Laurent Dalmas), Sviluppo di DNA sensors by piezoelectric sensing 2004; 3 months PhD grant; • Italia <p>-Dr. Federica Battaglia, Università di Pisa, Facoltà di Medicina Veterinaria, 2019, dottoranda UNIPI, sviluppo di un sensore SPR per la procalcitona a base di MIP referente Prof. V. Meucci – UNIPI;</p> <p>- Dr. Ilaria Lamberti, Università di Roma 3, 2014, caratterizzazione di aptameri per la proteina biomarcatore tumorale CA125, Roma 3;</p> <p>- Dr. Valentina Lanzone, Università di Teramo, 2013, Sviluppo di sensori a DNA per l’analisi degli alimenti due settimane, borsa dottorato;</p> <p>- Dr. Fabiana Crispo, Università degli Studi della Basilicata 2012, sviluppo di aptasensori per la metalloproteinasi 9 (MMP9) 12 mesi borsa di dottorato;</p> <p>- Dr. Francesco Piva, Università Politecnica delle Marche, sviluppo di biosensori piezoelettrici 2008;</p>
Memberships in professional bodies	2000–present	Italian Society of Chemistry (SCI), Tessera SCI n° 12826
Current research interests		New methods in Analytical Chemistry: Sensors and Biosensors coupled to different transduction principles (electrochemical, optical and piezoelectric); Development of new analytical methods with application to environmental, food, pharmaceutical, antidoping and clinical analysis.

		Affinity sensing development based on immuno, nucleic acid or biomimetic receptor recognition (aptamers or molecularly imprinted polymers (MIP)); Recently, nanophotonics, and innovative, disposable analytical platforms , is the focus of her research with application to molecular medicine, theranostics, food, drug and antidoping analysis.
Seminars and invited lectures:		In the last five years, presentations at over 30 seminars on current research activity in Universities and Research Institutions (in Italy and abroad). Participation in more than 150 scientific meetings, of which more than 100 at the international level. almost 200 communications have been presented. Science general conference for undergraduate students: "Analisi antidoping: la chimica analitica al servizio dello sport" in secondary schools. <i>Latest: 2024</i> , Technical University of Munich (TUM), Dep. Of Chemistry, 25 Jan. <i>Affinity sensing: trends and challenges</i> (https://portal.mytum.de/termine/Event.2024-01-12.4466260897);
		In detail, invited plenary conferences: 1) 8th International Conference on Bio-Sensing Technology Saville Spain, 12-15 th May 2024 ; Keynote (40 min) "The future of Bio-sensing technology" (https://www.elsevier.com/events/conferences/international-conference-on-bio-sensing-technology) (invited by Prof. Richard Luxton, UK); 2) Exner Symposium, "All-Ladies-Symposium", "From Bench to Bedside – The International Laboratory for Life Sciences and Technology at DPU", Symposium <i>in honor</i> of the <i>Exner Medal Laureate</i> Thuc-Quyen Nguyen, UC Santa Barbara-Conference Center of DPU, May 22, 2023 , in the Wachau, Austria (40 min). https://www.wilhelmexner.org/en/quotes/ (invited by Prof. Wolfgang Knoll, Austrian Institute of Technology -AIT Director); " <i>Affinity sensing: trends and challenges</i> "; 3) Workshop on Nano and Photonics , Castle Mauterndorf, Salzburg Austria , March 15-17, 2023 , " <i>Recent trends in Bioanalysis: from biomimetic receptors to point-of-care drugs</i> "; (30 min) (invited by Prof. W. Knoll); 4) Reunion Biennial Real Sociedad Española de Química (RSEQ) 28 June-1 July Granada 2022 , Spain (Keynote 30 min, Symposium S9. Bioanalytical Chemistry in Health and Food Safety) ; (invited by Prof. Susana Campuzano, Spain) https://bienal2021.com/index.php/en/ 5) International Symposium on Advances in Pharmaceutical Analysis , July 2022 , Nancy, France , <i>Advances and challenges in affinity-based sensing</i> ; (50 min, invited by Prof. Igor Clarot, France) 6) XII Reunion Nacional de Optoelectrónica, Evento online , Spanish Optoelectronic meeting, OPTOEL2021 30/06-2/07 2021 , " <i>Advances in Affinity based sensing</i> " (45 min; invited by Prof. Javier Mateo, Spain); 7) Winter School of Photonics and Bioelectronics: 18-24 Febbraio 2018 Hirschegg- Austria (50 min, invited by Prof. W. Knoll, Austrian Institute of Technology -AIT Director); 8) Seminar on Micro and Nanosystem in Biochemical Analysis, International Centre of Cybernetic (ICB), Polish Academy of Science , 12-14 October 2016 , Warsaw –Poland , titolo: " <i>Molecular diagnostic by optical based sensing</i> " (invited by Prof. Dorota. Pijanowska (ICB Polonia)); 9) X Scuola Nazionale di Chimica Analitica per Dottorandi Roma (Villa Benedetta) 25–30 settembre 2016 " <i>Chimica Analitica e Ambiente</i> "; 10) Workshop on Acoustic and electrochemical methods in the study of affinity interactions at surfaces , AEMIS 2016, title: " <i>Affinity sensing: recent advances</i> " June 20, 2016 , Bratislava, Slovakia (invited by Prof. Tibor Janik, Slovakia); 11) "Bioelectrochemistry and more...2016" , title: " <i>Biosensing for molecular diagnostics: current trends and perspectives</i> ", to be held June 13/14, 2016 , at the Competence Center for Electrochemical Surface Technology (CEST, www.cest.at), in Wiener Neustadt, Austria (invited by Prof. Wolfgang Knoll); 12) X edition of the European Winter School on Physical Organic Chemistry (e-WISPOC) , January 31 - February 6, 2016 , http://www.chimica.unipd.it/wispoc/pubblica/), title " <i>Surface Plasmon Resonance: principle, advances and applications</i> "; 13) EC-funded workshop on Acoustic and Optical Biosensors, BiosCrete2015, FORTH 16-18 February 2015 Crete, Greece " <i>New trends in SPR-based sensing</i> " (invited by Prof. Electra Giseli, Greece); 14) IX Scuola Nazionale di Chimica Analitica per Dottorandi Roma

(Villa Benedetta), 22-26 September **2014**. "*Biosensori ottici e piezoelettrici: principi e loro applicazione all'analisi alimentare*";

15) Giornata sulla "Sicurezza Alimentare: Allergeni alimentari, micotossine nella filiera alimentare, OGM, flavours & off flavours in ambito alimentare", organizzato dall'Ordine dei Chimici della Toscana, 20 SETTEMBRE **2014**, Firenze, Italy. Titolo: "*Gli organismi geneticamente modificati (OGM)*";

16) Seconda Scuola Nazionale sui Biosensori Ottici e Biofotonica, Otranto (LE) dal 15 al 20 Settembre **2014**, "*Il biosensore: proprietà e definizioni*" (90 min);

17) "Biosensors and drug discovery" at International Summer School on Pharmaceutical Analysis- Advanced Analytical Methodologies in Drug Discovery SSPA Pavia, Italy 19-21 september 2011;

18) "Affinity Based sensing in antidoping control", at **World Anti-Doping Agency**, Symposium on Developments and Challenges in The Detection of Doping with Peptide Hormones and Related Substances, 15/16, Rome- **Italy**, June **2011**;

19) SPRI sensing: an analytical approach", SPRI user meeting organized by Horiba, Paris-**France**, 26 may **2011**;

20) "Biosensors as an Innovative Analytical Tool", Lectures on Current Trends in Analytical Chemistry, University of Geneva, **Switzerland**", June **2009 (Conference grand public)**;

21) "I Biosensori come strumenti analitici innovativi" at the national conference "Controllo di qualità dei prodotti alimentari mediante biosensori, realizzati con l'uso di microtecnologie", Centro per la Ricerca Elettronica in Sicilia (CRES) Monreale (PA)-**Italy** 26 november **2007**;

22) "New trends in affinity sensing" at 10th European Conference on Organised Films, 21-24 August **2006**, Riga-**Lettonia**;

23) "Biosensors as new analytical tool for detection of Genetically Modified Organisms" at First International Conference on Biomedical Spectroscopy: From Molecules to Men, 7-10 July **2002**, Cardiff, **UK**,

24) at Laboratory Based Training Course on Advanced Analytical Techniques on advanced analytical methods, sponsored by European Union of Trainers Programme 1995 on "Biosensors in Pharmaceutical, Food and Environmental Analysis", organized by University College, UCC-Cork – **Ireland** and by EU;

25) "Real-time BIA applied to binding studies", alla Winter School of the German Biophysic Group, Anterselva (BZ)-**Italy**, **1995**,

Invited contribution (short):

26) Pianeta Galileo: Poggibonsi (SI) La chimica analitica per la sicurezza alimentare e la lotta al doping 2018;

27) Pianeta Galileo: Bagno a Ripoli (FI) La chimica analitica per la sicurezza alimentare e la lotta al doping 2018;

28) Seminar on Micro and Nanosystem in Biochemical Analysis, International Centre of Cybernetic (ICB), Polish Academy of Science, 12-14 October 2016, Warsaw – **Poland**, titolo: "Molecular diagnostic by optical based sensing" (invited by Prof. Dorota Pijanowska - ICB Polonia);

29) Regional: "Lo sport contro la droga: approfondimenti su doping e sostanze da abuso" title: "La chimica analitica per la lotta al doping", Bagno a Ripoli, 30 nov. **2015**;

30) International conference on Biophysics, section Bioinspired nanotechnologies and Biosensors at RBC 2014, May 15-20, **2014**, Smolenice castle, **Slovacchia** (<http://www.skbs.fmph.uniba.sk/rbc2014>). Talk: *New Trends in affinity sensing*;

31) Nutra-Scienza per Horizon 2020, Bio-Economia e Innovazione Agro-Alimentare, c/o CNR 13 dicembre **2013**, Sesto Fiorentino (FI), **Italy**;

32) Convegno Tutela della salute negli sportivi e lotta al doping with a talk: "La chimica analitica al servizio dello sport: il caso del doping genetico", Aula Magna del Rettorato, 27/09/**2013**, in the occasion of **Mondiali di Ciclismo a Firenze, Italy**;

33) Annual Progress Conference of the CMST domain in Assisi, Italy (June 5-7, **2013**), Activity of the cost TD1003;

34) Convegno Nazionale Sensori: Innovazione, Attualità e Prospettive, European opportunities for sensing applications, MST COST Action

		TD1003, <i>Bio-inspired nanotechnologies: from concepts to applications</i> , 15-17 Febbraio 2012 Roma, Italy; 35) "Affinity Biosensors", Russian Academy of Science, at the FP7, German-Russian forum on Biotechnology-ISTC, Moscow, Russia november 2009,
Meeting and Publications:		157 full papers have been published and 17 chapters published on books; in addition: Proceedings (26) and articles on popular science magazines. The journals in which publications have appeared include <i>Analytical Chemistry</i> , <i>J. of the American Chemical Society (JACS)</i> , <i>Talanta</i> , <i>Analytica Chimica Acta</i> , <i>Biosensor and Bioelectronics</i> , <i>analytical Chemistry</i> , <i>J. Pharmaceutical and Biochemical Analysis</i> , <i>Analytical and Bioanalytical Chemistry</i> , <i>Trends in Analytical Chemistry</i> , <i>Trends in Biotechnology</i> . H index 44, citations 7118 (Scopus) , 157 products;
Scientific reviews:		Over the last 5 years, several manuscripts submitted to international journals have been reviewed, among which many international journals in analytical chemistry and sensor science: <i>Talanta</i> , <i>Analytica Chimica Acta</i> , <i>Journal of Pharmaceutical and Biomedical Analysis</i> , <i>Biosensor & Bioelectronics</i> , <i>Sensor and Actuators B: Chemical</i> , <i>IEEE Sensor Journal</i> , <i>Thin solid films</i> , (<i>JEAC</i>); <i>Nature Communications</i> , <i>Angewante Chemie</i> , <i>Analytical and Bioanalytical Chemistry</i> , <i>Analytical Chemistry</i> , <i>Food Chemistry</i> , <i>Chem. Comm</i> , <i>Nano</i> ,; <i>Biotechnology Progress</i> , <i>ACS Applied Materials & Interfaces</i> ; <i>Advanced Material</i> ; <i>Colloids and Surfaces B</i> ; <i>Langumir</i> .

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COLLABORATIONS (past and present)

CNR- Istituto per la Microelettronica ed i Microsistemi (IMM), sezione di Lecce,	Dr. Roberto Rella (Development of SPR-imaging DNA-based sensing), 2005-2019;
Università degli Studi di Pisa	
<u>Dipartimento di Clinica veterinaria</u>	Prof. Luigi Intorre; Prof. V. Meucci, (2005-) Rapid systems for vitellogenin, heavy metals detection and Procalcitonin detection;
<u>Dipartimento di Ingegneria dell'informazione</u>	Dr. Ing. G. Barillaro (2000-2018) sviluppo di sistemi microinvasivi per il glucosio; sviluppo id biosensosri micornvasivi per la misura della glicemia; sviluppo di un sensore ISPR per la misura della troponina T (SIR S: Scarano)
<u>Department of Surgical, Medical and Molecular Pathology and Critical Care Medicine, University of Pisa,</u>	Prof. Alessandro Saba (2019-) sviluppo di sistemi diagostici per la misura gonadoelina e validazione via LC-MS (progetto Ministero salute doping);
<u>Laboratory of Clinical Pathology, University Hospital of Pisa</u>	Prof. Aldo Paolicchi, Dr.ssa Laura Caponi (2017-) sviluppo di sistemi diagostici per la misura gonadoelina e rame in urina (progetto Ministero salute - doping);
<u>Dipartimento di Chimica e Chimica industriale (DCCI)</u>	Prof. Lorenzo di Bari, Dott.ssa Tiziano Funaioli (2024-) Gravimetric sensing coupled to electrochemistry for chiral discrimination; Prof. Fabio di Francesco, Dott. Federico Vivaldi (2024-): Electrochemical sensor by imprinting technology;
Università degli Studi di Firenze	
<u>Dipartimento di Chimica</u>	Prof.ssa Simona Scarano (dal 2005-): Plasmonic affinity sensing by SPR and oother optical transductions Dr. Pasquale Palladino (2015-) Colorimetric systems with analytical application to food and drug analysis; Prof. C. Nativi (2020-) Affinity interaction studies of biomimetic glicopeptides as therapeutic agents in oncology;
Università degli Studi di Teramo- Dipartimento di Scienze degli alimenti-	Prof. D. Compagnone (2004-2005; 2012-2013); (sviluppo di genosensori per DNA animale);
Univesità degli Studi di Catania Dipartimento di Scienze Chimiche	Prof. Giuseppe Spoto (2015-2018); nell'ambito del progetto ULTRAPLACAD, Polymorphism detection in genomic DNA,
Università degli Sudi di Napoli Federico II	Prof. Angela Amoresano (2020-2023) Melanochrome formation by non enzymatic reaciton and its application to colorimtric tests; Characterization by LC-MS spectrometry.
<u>International collaborations:</u>	
<u>Austrian Institute of Technology (AIT), Wien and Danube Private University</u>	Prof. W. Knoll, Director, (2018-) Dr. J. Dostálek (2011-2023), Development of Affinity sensor for DNA metilation detection by SPR; development of SPR-fluorescence sensing;

Institute for Physics of the Czech Academy of Science (Slovakia)	Dr. J. Dostálek
Canada: Department of Physical and Environmental Sciences Department of Biological Sciences, University of Toronto Scarborough	Dr. Kagan Kerman, (2011) Label free methods for probing the interaction of Clioquinol with Amyloid-beta;
France: Institut Européen de Chimie et Biologie, Pessac, France	Dr. Jean-Jacques Toulmé, Director (2011- 2015); Aptasensing development for MMP-9 for cancer molecular diagnostic;
France: Département de Pharmacochimie Moléculaire, Université Joseph Fourier, Grenoble	Prof. Eric Peyrin (Progetto Vinci 2013- 2016); Aptasensing development for Alzheimer molecular diagnostic Prof. Corinen Ravelet, (Vinci program 2022)

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Publications list

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687 detection XXII Congress of Analytical Chemistry, SCI Como (Italy), September 13-16th, 2010 (N)
688 55) M.L. Ermini, S. Scarano, R. Bini, M. Mascini, M. Minunni, Design razionale di sonde da utilizzare in sensori
689 a DNA: un approccio computazionale con verifica sperimentale. GS2010, Congresso Nazionale Gruppo
690 divisionale Sensori (GS) della SCI, Sesto F.no (Firenze) 26-28 octoebr 2010 (N)
691 56) S. Scarano, M.L. Ermini, M. Mascini, M. Minunni, Affinity Sensing Based on Surface Plasmon Resonance
692 Imaging: Recent Advances, XVI conferenza **AISEM** - Associazione Italiana Sensori e Microsistemi - AISEM 2011,
693 Roma 7-9 February 2011 (N)
694 57) M. Minunni, "SPRI sensing: an analytical approach", SPRI user meeting organized by Horiba, 26 May 2011,
695 Paris-France; (invited)
696 58) M.L. Ermini, S. Scarano, M. Mascini, M. Minunni, Surface Plasmon Resonance Imaging for Affinity-Based
697 Sensing: An Analytical Approach, Biophotonics 2011, Parma, Italy 8-11 2011,
698 59) M. Minunni, Affinity Based sensing in antidoping control", at **World Anti-Doping Agency**, Symposium on
699 Developments and Challenges In the detection of Doping with Peptide Hormones and Related substances, 15/16
700 June 2011, Rome- **Italy (plenary, invited); (I)**
701 60) Ermini M.L., S. Scarano, S. Mariani, M. Bonini, M. Minunni Coupling nanotechnology to optical affinity
702 sensing: the case of surface plasmon resonance imaging for DNA detection, XXIV Congresso della Società
703 Chimica Italiana 11-16 sept 2011 Lecce, Italy (N)
704 61) M. Minunni, Biosensors and drug discovery, Summer School on Pharmaceutical Analysis-SSPA Pavia,
705 **Italy** 19-21 september 2011 (I) (plenary, invited); (I)
706 62) Ermini M.L., S. Mariani, S. Scarano, F. Bellissima, M. Bonini and M. Minunni, Surface Plasmon Resonance
707 imaging: improving analytical performances for DNA sensing applications, Nanoswet, Bordeaux, France, 14-18
708 november 2011, (I)
709 63) M.L. Ermini, S. Mariani, F. Bellissima, S. Scarano, M. Bonini and M. Minunni, Coupling Nanotechnology to
710 Optical Affinity Sensing: The Case of Surface Plasmon Resonance Imaging For DNA Detection, Convegno
711 Nazionale Sensori: Innovazione, attualità e prospettive, Roma 15-17 Febbraio 2012, (N)

- 712 64) S. Scarano, A. Vestri, F. Crispo, M.L. Ermini and M. Minunni, Hepcidin Detection By Affinity Based Sensing: A Possible Application in Clinical and Anti-Doping Analysis, Convegno Nazionale Sensori: Innovazione, attualità
713 e prospettive, Roma 15-17 Febbraio **2012 (N)**
- 714 65) M. Minunni, MST COST Action TD1003, Bio-inspired nanotechnologies: from concepts to applications,
715 **European opportunities for sensing applications**, COST Action TD1003, Bio-inspired nanotechnologies: from
716 concepts to applications Convegno Nazionale Sensori: Innovazione, Attualità e Prospettive, 15-17 Febbraio **2012**
717 Roma (**invited**) **(N)**
- 718 66) G. Castillo, S. Scarano, M. Minunni, T. Hianik, Aptamer-based biosensor sensitive to ochratoxin A studied
719 under electrochemical impedance spectroscopy and surface plasmon resonance approaches, COST
720 Symposium, 26-27 April **2012**, Linköping, Sweden; **(I)**
- 721 67) S. Scarano, A. Vestri, M.L. Ermini, S. Mariani and M. Minunni, Affinity based sensing for proteins detection
722 with potential application in clinical and anti-doping analysis, COST Symposium, 26-27 April **2012**, Linköping,
723 Sweden; **(I)**
- 724 68) S. Scarano, M.L. Ermini, S. Mariani, M. Minunni, Aptamers in biosensors: recent advances and possible
725 applications, XXIII Congresso Nazionale di Chimica Analitica, Biodola, Isola d'Elba 16–20 Settembre **2012, (N)**
726 ISBN: 978-88--907670-8-1
- 727 69) V. Lanzone, R. Tofalo, G. Perpetuini, M. Minunni, S. Scarano, F. Corrado, M. Esposito, D. Compagnone,
728 Bioanalytical assays for DNA-[a]pde adducts detection, XXIII Congresso Nazionale di Chimica Analitica, Biodola,
729 Isola d'Elba 16–20 Settembre **2012, (N)**; ISBN: 978-88-907670-8-1
- 730 70) S. Scarano, E. Dausse, F. Crispo, J-J. Toulmè, L. M. Minunni, Development of a piezoelectric biosensor
731 for targeting MMP-9 Protein for molecular diagnostics, COST Thematic Workshop, "Biomimetic structure and
732 DNA technology in biosensing", Bratislava, Slovacchia 8-10 April, **2013, (I)**
- 733 71) G. Castillo, A. Miodek, H. Korri-Youssoufi, L. Kvapilova, P. Kois, M. Minunni, T. Hianik, Development of
734 aptamer-based biosensors designed for targeting small molecules and proteins, Thematic Workshop,
735 "Biomimetic structure and DNA technology in biosensing", Bratislava, Slovacchia 8-10 April, **2013, (I)**
- 736 72) M. Minunni, **Key Note Lecture at 3rd annual European Lab Automation (ELA) 2013** to speak in the
737 Food Safety Testing track. Hamburg, Germany on the 6th – 7th June **2013**; "Biosensors: a chance for fast analysis"
738 (**invited**) **(I)**
- 739 73) Jean-Jacques Toulmé, Eric Dausse, Simona Scarano, Fabiana Crispo, Maria Minunni, Aptamers for the
740 detection of biomarkers. NanoBioEurope, 10-12 June **2013**, Toulouse, France, **(I)**
- 741 74) S. Mariani, M.L. Ermini, S. Scarano, R. Barale, M. Minunni, Surface Plasmon Resonance Imaging and
742 Human DNA: High Sensitive Detection and Polymorphism discrimination, XXIV Congresso Nazionale della
743 Divisione di Chimica Analitica della SCI, Sestri Levante (GE), 15 - 19 settembre **2013 (N)**
- 744 75) S. Mariani, S. Scarano, R. Barale, M. Minunni Single nucleotide polymorphisms high sensitive detection
745 on human DNA with surface plasmon resonance imaging, COST Thematic Workshop, "Nano-scales
746 arrangements of proteins, aptamers and other nucleic acid structures - and their potential applications" Leipzig,
747 7-9 October **2013**, Germany **(I)**
- 748 76) S. Scarano, S. Mariani, M. Minunni, Trends in Affinity sensing, **International conference on Biophysics**,
749 section Bioinspired nanotechnologies and Biosensors at RBC 2014 in Smolenice castle (May 15-20, **2014**)
750 <http://www.skbs.fmph.uniba.sk/rbc2014> **(I) invited (I)**
- 751 77) S. Mariani, S. Scarano, J. Spadavecchia and M. Minunni, Improving Surface Plasmon Resonance imaging
752 DNA sensing with gold nanostars, XXV CONGRESSO DELLA SOCIETA' CHIMICA ITALIANA, Rende 8-12
753 Settembre **2014 (N)**
- 754 78) M. Minunni, "Il biosensore: proprietà e definizioni" Seconda Scuola Nazionale sui Biosensori Ottici e
755 Biofotonica, Otranto (LE) dal 15 al 20 Settembre **2014, (plenary, invited) (N)**
- 756 79) M. Minunni, "Biosensori ottici e piezoelettrici: principi e loro applicazione all'analisi alimentare" **IX Scuola**
757 **Nazionale di Chimica Analitica per Dottorandi**, Roma (Villa Benedetta), dal 22 al 26 Sept. **2014, (invited) (N)**
- 758 80) S. Scarano, S. Mariani and Maria Minunni, Affinity sensing for food control, 1st IMEKO FOOD - Promoting
759 Objective and measurable Food Quality and Safety – Rome, Italy, 13-15 October 2014 **(I)**
- 760 81) Jean-Jacques Toulmé, Sonia Da Rocha, Eric Dausse, Philippe Fernandez, Michèle Allard, David Kryza,
761 Marc Janier, Simona Scarano, Fabiana Crispo, Maria Minunni, Aref Hassan, Olivier Paurelle, Laurent Azéma,
762 Imaging human tumors with aptamers to Matrix Metallo Protease-9, OLIGO 2015 Oxford Antisense and
763 therapeutic Nucleic Acids, 30 march **2015** Oxford, UK **(I)**
- 764 82) S. Scarano, S. Mariani, M.L. Ermini, R. Barale, M. Bonini and M. Minunni, Towards personalized SNPs
765 screening by SPR biosensing: recent strategies and achievements, Biophotonics 2015, Florence, Italy, 20-22
766 May **2015 (I)**
- 767 83) S. Scarano, E. Carretti, P. Baglioni, L. Dei, and M. Minunni, A 'Clean & Check' Method for the simultaneous
768 recognition of Albumen and Yolk by Biosensing: Application in Cultural Heritage Conservation, XXV Congresso
769 della Divisione di Chimica Analitica della Società Chimica Italiana (SCI) 13-17 Settembre **2015**, Trieste. **(N)**
- 770 84) Jean-Jacques Toulmé, Eric Dausse, Philippe Fernandez, Frédéric Debordeaux, David Kryza, Marc Janier,
771 Simona Scarano, Fabiana Crispo, Maria Minunni, Aref Hassan, Olivier Paurelle, Laurent Azéma, Detecting
772 human tumors with aptamers to Matrix MetalloProtease-9, 11th Annual Meeting of the Oignonucleotide
773 Therapeutic Society, October 11-14 **2015** Leiden, The Netherlands **(I)**
- 774 85) Maria Minunni, Surface Plasmon Resonance: principle, advances and applications, European Winter
775 School of Physical Organic Chemistry, Bressanone, Italy 30/1-5/02 **2016 (invited) lesson (2 hrs) (I)**
776

777 86) L.M. Strambini, A. Longo, S. Scarano, T. Prescimone, I. Palchetti, M. Minunni, D. Giannessi, G. Barillaro
778 Towards pain-free and high accuracy point of care glycemic control using autonomous Microneedle-based
779 system, Terzo Convegno Nazionale Sensori, Roma 23-25 Febbraio **2016; (N)**
780 87) E. Carretti, S. Scarano, L. Dei, M. Minunni, P. Baglioni, Clean & check method for the simultaneous
781 recognition of albumen and yolk by biosensing: Application in cultural heritage conservation. *251 American*
782 *Chemical Society (ACS) Spring meeting*, San Diego, CA, USA, 13-17 March **2016; (I)**
783 88) S. Scarano and M. Minunni, Biosensing for molecular diagnostics: current trends and perspectives at
784 "Bioelectrochemistry and more...2016", Wiener Neustadt, Austria, June 13/14, **2016; (plenary invited) (I)**
785 89) S. Scarano and M. Minunni "Affinity sensing: recent advances", at
786 Acoustic and electrochemical methods in the study of affinity interactions at surfaces, AEMIS 2016,
787 June 20, **2016**, Bratislava, Slovakia (**invited) (I)**
788 90) S. Lisi, S. Scarano, S. Fedeli, S. Cicchi, C. Ravelet, E. Peyrin, M. Minunni Novel detection strategies for
789 protein tau, Bioanalitica 2016, giornata scientifica "Chimica bioanalitica e nanotecnologie", Bologna, 4 luglio **2016**
790 (**N)**
791 91) S. Scarano, M. Bonini, M.G. Manera, R. Rella and M. Minunni Recent applications of plasmonic
792 nanomaterials and their composites: from Localized Surface Plasmon Resonance (LSPR) to colorimetric
793 detection for bioanalysis, XXVI Congresso della Divisione di Chimica Analitica della Società Chimica Italiana
794 (SCI) Giardini Naxos (ME) 18-22 Settembre **2016 (N)**
795 92) S. Scarano and M. Minunni Molecular diagnostic by optical based sensing Warsaw, **Polonia** 12-14
796 settembre **2016 (Invited) (I);**
797 93) P. Palladino, M. G. Manera, R. Rella, M. Minunni, and S. Scarano* Synthetic receptors for Troponin T detection
798 by SPR transduction for acute myocardial infarction diagnosis, XXVI Congresso Nazionale della Società Chimica Italiana
799 (SCI), Paestum 10-14 settembre **2017 (N)**
800 94) I. Latini, C. Berlangieri, E. Carretti, L. Dei, S. Scarano and M. Minunni A 'Clean & Check' Method for the
801 Simultaneous recognition of Albumen and Yolk by Biosensing: Application in Cultural Heritage Conservation,
802 European Materials Research Society (EMRS) Warsaw University of Technology, Warsaw, **Poland** 18-21
803 September **2017 (I)**
804 95) S. Scarano, E. Pascale, P. Palladino, I. Palchetti, M. Minunni, Biosensing coupled to nanotechnology:
805 recent advances in affinity sensing, Baltic Symposium, Stockholm, **Sweden**, 8-11 October **2017 (I)**
806 96) Y. Marin, V. Toccafondo, P. Velha, S. Scarano, S. Tirelli, A. Nottola, Y. A. Jeong, H. P. Jeon, M. Minunni,
807 F. Di Pasquale, C. J. Oton Silicon photonic biochemical sensor on chip based on balanced Mach-Zehnder
808 interferometry and phase-generated-carrier demodulation, Photonics West Conference, in San Francisco, **USA**
809 21 January -1 February **2018; (I)**
810 97) M. Cesaria, A. Taurino, M. Minunni, S. Scarano, M.G. Manera, R. Rella, Short-range ordered nanohole
811 arrays in gold thin films, Fotonica 2018, 20^a Edizione, Convegno italiano delle tecnologie fotoniche, Lecce 23-25
812 maggio **2018 (N)**
813 98) A.Colombelli, M.G. Manera, M. Minunni, S. Scarano, and R. Rella, Functional PDMS-Au nanoparticles
814 nanocomposites: a rapid and low-cost approach for potential application as a strain sensor and biosensor in
815 microfluidic devices Eurotrode XIV Naples, March 25-28, 2018
816 99) M.G. Manera, A. Colombelli, M. Cesaria, D. Lospinoso, S. Scarano, M. Minunni, R. Rella Tunable
817 nanoplasmonic functional transducers: novel insights for health applications, 2nd European Biosensor
818 Symposium – EBS2019, 18-21 February 2019, Firenze
819 100) S. Scarano, P. Palladino, A. Brittolli, E. Pascale, F. Torrini, V. Baldoneschi, M. Minunni Polydopamine:
820 a smart polymer for biosensing, 2nd European Biosensor Symposium – EBS2019, 18-21 February 2019, Firen
821 101) T. Allsop, C. Mou, R. Neal, S. Scarano, D. Nagel, S. Tombelli, K. Kalli, C. Wang, M. Minunni, D.J.
822 Webb, J. Ana-Castonon Ultra-sensitive aptasensors based upon single-stage opto-plasmonic sensing platform,
823 2nd European Biosensor Symposium – EBS2019, 8-21 February 2019, Firenze,
824 102) P. Palladino, F. Torrini, V. Baldoneschi, S. Scarano, M. Minunni, Innovative Uses of Polydopamine
825 (PDA) in the Field of (Bio)Analytical Chemistry, XXVIII Congress Analytical Chemistry Division 22 – 26 September
826 2019, Bari, Italy
827 103) V. Baldoneschi, P. Palladino, F. Battaglia, V. Meucci, L. Intorre, F. Bonelli, S. Scarano, M. Minunni,
828 Norepinephrine as New Functional Monomer for Molecular Imprinted Optical Biosensors: Applicative Study on
829 Human and Canine Biomarkers, XXVIII Congress Analytical Chemistry Division 22 – 26 September 2019, Bari,
830 Italy.
831 104) F. Torrini, P. Palladino, S. Scarano, M. Minunni A polynorepinephrine-based molecular imprinting assay
832 targeting a small peptide hormone in doping control analysis, 2nd European Biosensor Symposium – EBS2019,
833 9-12 March 2021,
834 105) Minunni et al. Spanish Optoelectronics Meeting OPTOEL2021 Conference celebration, on-line,
835 Advances in Affinity based sensing (Invited by Carmen Vázquez from Universidad Carlos III de
836 Madrid), Spain, June 2021 (Plenary Invited) (I)
837 106) Minunni M. Incontro UniFi@ARTES 4.0: tecnologie e servizi per le imprese 22-23 June 2021 *on line*
838 <https://p.artes4.it/it/webinar-on-demand-macronodo-unifi-22/23-giugno>; Sviluppo di piattaforme analitiche
839 innovative,
840 107) Katharina Schmidt, Simone Hageneder, Bernadette Lechner, Yasaman Ahmadi, Maria Minunni, Erik
841 Reimhult, Ivan Barisic, Jakub Dostalek, Rolling Circle Amplification Tailored for Plasmonic Biosensors: from

- 842 Ensemble to Single Molecule Detection SPIE PE117, Biophotonics Point-of-Care II, 3-7 April 2022 Strasburg
843 France, (I)
844 108) M. Minunni et al. 4th Interational Symposium on Advances in Pharmaceutical Analysis, APA 2022 28-30
845 june 2022 Nancy France (Plenary Invited) (I)
846 109) S. Scarano, P. Palladino, V. Baldoneschi, F. Torrini, M.G. Lettieri, M. Banchini, M. Minunni, Affinity
847 based sensing: trends and challenges, XXXVIII Reunion Biennial Real Sociedad Espagnola de Quimica (RSEQ)
848 28 June-1 July Granada 2022, Spain (Keynote Invited) (I) [https://bienal2021.com/index.php/en/speakers/invited-](https://bienal2021.com/index.php/en/speakers/invited-speakers)
849 [speakers](https://bienal2021.com/index.php/en/speakers/invited-speakers)
850 110) M. Lettieri, P. Palladino, S. Scarano, M. Minunni Copper nanoclusters and their application for
851 innovative fluorescent detection strategies: an overview, AISEM 2022, XXI Conferenza Nazionale Sensori e
852 Microsistemi 10-11 febbraio, *on line* (AISEM 2022)
853 111) F. Torrini*, P. Palladino, S. Scarano, M. Minunni Catechol-derived imprinted biopolymers for future abiotic
854 diagnostics, AISEM 2022, XXI Conferenza Nazionale Sensori e Microsistemi 10-11 febbraio, *on line* (AISEM
855 2022)
856 112) M. Letteri, P. Palladino, S. Scarano, M. Minunni Active principles monitoring in Parkinson's drugs via easy,
857 low cost and fast response colorimetric detection strategies, XXIX Congresso della Divisione di Chimica Analitica
858 2022, Milazzo 11-15 settembre 2022 (N)
859 113) F. Torrini, P. Palladino, G. Goletta, M. Minunni, S. Scarano 3K-Toolbox to trigger epitope imprinting into
860 biopolymers: the case study of PDL-1 sensing detection, XXIX Congresso della Divisione di Chimica Analitica
861 2022, Milazzo 11-15 settembre 2022 (N)
862 114) **Workshop on Nano and Photonics**, Castle Mauterndorf, Salzburg Austria, March 15-17, 2023, "Recent
863 trends in Bioanalysis: from biomimetic receptors to point-of-care drugs"; **(Plenary Invited) (I)**
864 115) **Exner Symposium, "All-Ladies-Symposium", "From Bench to Bedside – The International Laboratory**
865 **for Life Sciences and Technology at DPU**, Symposium in honor of the Exner Medal Laureate Thuc-Quyen
866 Nguyen, UC Santa Barbara-Conference Center of DPU, May 22, 2023, in the Wachau, Austria (40 min).
867 <https://www.wilhelmexner.org/en/quotes/> "Affinity sensing: trends and challenges" **(Plenary Invited) (I)**
868 116) Federica Battaglia, Francesca Torrini, Pasquale Palladino, Simona Scarano*, Maria Minunni,
869 Polyserotonin as new functional monomer for molecular imprinting: An applicative study for TNF- α detection by
870 Surface Plasmon Resonance, 4th European Biosensor Symposium -EBS2023, Aachen, 27-31 August 2023;
871 Germany **(I)**;
872 117) S. Scarano, F. Battaglia, F. Torrini, G. Ciacci, A. Barucci, P. Palladino: M. Minunni Bio inspired polymers
873 fro endogenous neurotransmitters: towards universal protein imprinting? Richiesta al Congresso della Divisione di
874 Chimica Analitica 2023, Vasto 10-15 settembre 2023
875 118) F. Torrini (UniFi) "Harnessing the potential of nano-imprinted biopolymers: IgG detection using SPR
876 technology **GS 2023** - Workshop del Gruppo Interdivisionale Sensori. Roma 13-15 Dicembre 2023
877
878

879 Vocational guidance (Conferenze di orientamento)

880 **A) To University selection (Orientamento per la scelta universitaria)**, CdL in Chemistry, -

881 M. Minunni "La chimica al servizio dello sport", *Seminario dedicato*

882 - *Students: Classes IV e V Liceo Scientifico "Salutati", Montecatini Terme (PT) 2010;*

883 - *Students: Classi IV e V Liceo Scientifico Guido CastelnuovFirenze 2011;*

884

885 **B) Training (Formazione)**

886 • within the Ministry of Health project:

887 - Doping genetico e farmacologico nello Sport. La corsa all'utilizzo di nuovi agenti dopanti e la messa a punto di
888 nuovi metodi per la rivelazione. Formazione ed informazione dedicate agli atleti. Tecnici, Dirigenti, Studenti,

889 Insegnanti", inizio: 2009

890 - "Chemistry for sport" ("La chimica al servizio dello sport"), *dedicato agli Allievi delle Classi IV e V*, Istituto

891 Francesco Datini, Prato, 20 dicembre 2011;

892

893 **C) Dissemination of Chemistry culture (Diffusione della cultura Chimica):**

894 - **"Analytical Chemistry and Doping"** ("La Chimica Analitica e il Doping", **Open Lab**, Università di Firenze,

895 **Scienza Estate**, Conoscere giocando, Polo Scientifico di Sesto F.no, "11-12 June 2013

896

897 • **PROGETTO NAZIONALE LAUREE SCIENTIFICHE (PNLS); Training course for teachers in Science**
898 **of secondary schools (CORSO DI FORMAZIONE PER DOCENTI DI SCUOLA SECONDARIA)**, Ministero

899 **dell'Istruzione, dell'Università e della Ricerca**- Ufficio Scolastico Regionale Toscana *Direzione Generale*,

900 - LICEO SCIENTIFICO STATALE G. MARCONI, Carrara, *Theme: Chemistry in daily life* (La chimica nella vita di

901 tutti i giorni), 9 hours november-december 2014;

902 <http://ismarconi.gov.it/29-notizie-importanti-a-s-2014-15/328-progetto-lauree-scientifiche2.html>

903

904 **PhD thesis:** M. Minunni, 1994, Immunosensors for Environmental control (Immunosensori per il controllo

905 Ambientale),

906

907