

CURRICULUM DELL'ATTIVITA' SCIENTIFICA E DIDATTICA

Formazione

- 1970-1974 Maturità Scientifica, Liceo Scientifico "Filippo Lussana" di Bergamo. Votazione: 50/60
- 12/1979 Laurea di Dottore in Ingegneria Meccanica, indirizzo Bioingegneristico presso il Politecnico di Milano. Titolo della tesi: "Studio teorico sperimentale di un ossigenatore a membrana a capillari di gas". Votazione: 99/100
- 4/1980 Esame di Stato per l'abilitazione alla Professione di Ingegnere (Classe Ingegneria Industriale). Votazione: 98/100.
- 1982-1983 Visiting Scientist presso il "Fluid Mechanics Laboratory", Massachusetts Institute of Technology, Cambridge, Massachusetts (USA) e presso il "Department of Vascular Pathology", Brigham and Women's Hospital, Boston, Massachusetts (USA).

Esperienza professionale

- 1980-1981 Frequentatore volontario del Laboratorio di Bioingegneria del Politecnico di Milano.
- 1981-1982 Svolgimento del Servizio Civile presso il Laboratorio di Farmacologia Cardiovascolare dell'Istituto di Ricerche Farmacologiche "Mario Negri", sede di Milano.
- 1984-1987 Ricercatore presso il Laboratorio di Malattie Renali dell'Istituto di Ricerche Farmacologiche "Mario Negri", Bergamo.
- 1987-1990 Responsabile dell'Unità di Bioingegneria - Istituto di Ricerche Farmacologiche "Mario Negri", Bergamo.
- 1990-1999 Capo del Laboratorio di Bioingegneria - Istituto di Ricerche Farmacologiche "Mario Negri", Bergamo.
- 1999-2007 Capo del Dipartimento di Bioingegneria dell'Istituto di Ricerche Farmacologiche "Mario Negri", Bergamo.
- 2007-2011 Ricercatore non confermato, Facoltà di Ingegneria, Università degli Studi di Bergamo, Dalmine (BG).
- 2011-2014 Ricercatore confermato a tempo definito, Dipartimento di Ingegneria Industriale, Università degli Studi di Bergamo, Dalmine (BG).

- 2015-2019 Professore Associato, SSD ING-IND/34 - Dipartimento di Ingegneria Gestionale, dell'Informazione e della Produzione (DIGIP), Università degli Studi di Bergamo, Dalmine (BG).
- Dal 2019 Professore Ordinario, SSD ING-IND/34 - Dipartimento di Ingegneria Gestionale, dell'Informazione e della Produzione (DIGIP), Università degli Studi di Bergamo, Dalmine (BG).

Attività didattica

- AS 1983/84 Docente incaricato per l'insegnamento di "Meccanica e Macchine", Istituto Tecnico Industriale di Stato "P. Paleocapa", Bergamo.
- AS 1984/85 Docente incaricato per l'insegnamento di "Meccanica e Macchine", Istituto Tecnico Industriale di Stato di Treviglio (BG).
- 1997 - 2002 Professore incaricato del corso di "Organi Artificiali e Protesi" (due moduli didattici) - Corso di Laurea in Ingegneria Biomedica, Politecnico di Milano, Campus Leonardo
- 2003 - 2007 Professore incaricato del corso di "Ingegneria dei Tessuti" (5 CFU) - Corso di Laurea in Ingegneria Biomedica, Politecnico di Milano, Facoltà di Ingegneria dei Sistemi.
- 2007 - 2010 Docente incaricato del corso di "Biomacchine" (6 CFU) - Corso di Laurea Triennale in Ingegneria Meccanica e Ingegneria Informatica (indirizzo Ingegneria Biomedica), Università di Bergamo.
- 2007 - 2010 Docente incaricato del corso di "Fenomeni di Trasporto nei Sistemi Biologici" (6 CFU) - Corso di Laurea Triennale in Ingegneria Meccanica e Ingegneria Informatica (indirizzo Ingegneria Biomedica), Università di Bergamo.
- 2011 - 2015 Docente incaricato del corso di "Applicazioni Ingegneristiche in Ambito Biomedico" (6 CFU) - Corso di Laurea Triennale in Ingegneria Meccanica e Ingegneria Informatica, Università di Bergamo.
- AA 2016/17 Docente incaricato del corso di "Fondamenti di fisiologia" (6 CFU) - Corso di Laurea Triennale in Ingegneria delle Tecnologie per la Salute, Università di Bergamo.
- Dal 2018 Docente incaricato del corso integrato: "Applicazioni Ingegneristiche in Ambito Biomedico" (modulo da 6 CFU) e "Dispositivi Medicali e Diagnostici" (modulo da 9 CFU) - Docente incaricato per le esercitazioni del corso "Fondamenti di fisiologia" - Corso di Laurea Triennale in Ingegneria delle Tecnologie per la Salute, Università di Bergamo. Docente incaricato modulo di "Medical Image Processing" (3 CFU) - Corso di Laurea in Medicina e Chirurgia presso Ospedale Giovanni XXIII di Bergamo, Università di Bergamo e Università di Milano Bicocca.

Produzione scientifica

Autore, coautore o collaboratore di 208 pubblicazioni su riviste scientifiche internazionali (PubMed.gov). Numero di citazioni = 11412 (Scopus); 17195 (Google Scholar).
H Index = 56 (Scopus); H Index = 67 (Google Scholar).

Appartenenza a comitati Editoriali

- 1997 - 2001 Membro dell'Editorial Board dell' "American Journal of Physiology - Renal Physiology".
- 1999 - 2003 Membro dell'Editorial Board della rivista "Drugs of Today".
- dal 2014 Editor-in-Chief della rivista "The International Journal of Artificial Organs"
- Official Journal dell'European Society of Artificial Organs.

Appartenenza a società scientifiche

- dal 1992 Corresponding member dell' "American Society of Nephrology"
- dal 2011 Membro della "European Society of Biomechanics"
- dal 2014 Membro della "European Society of Artificial Organs"

Revisioni scientifiche

- dal 1985 Attività di revisione di articoli scientifici per riviste internazionali nel settore della ricerca biomedica tra cui: Artificial Organs, The International Journal of Artificial Organs, Biomaterials, American Journal of Physiology, Journal of Clinical Investigation, Kidney International, Journal of the American Society of Nephrology, Journal of Biomechanical Engineering, Journal of Biomechanics, PLoS One.

Supervisione di lavori di tesi

- dal 1986 Relatore o correlatore di 26 tesi di laurea svolte da studenti dei corsi di Ingegneria, Fisica, Biologia e Informatica. Tutor di 8 studenti di Ph.D. in Biofisica e in Ingegneria Biomedica (Politecnico di Milano - Open University, London - Eindhoven Technical University - Maastricht Medical School).

Principali aree di interesse

- Fenomeni di trasporto nei sistemi biologici (filtrazione glomerulare di acqua e di macromolecole, caratterizzazione del moto del sangue in grossi vasi e nella microcircolazione in condizioni fisiologiche e patologiche).
- Effetto dello sforzo di taglio dovuto al moto del sangue sulla funzionalità delle cellule endoteliali in sistemi di coltura *in vitro* in condizioni di moto controllate.
- Studio delle alterazioni fisico-chimiche associate allo sviluppo del danno glomerulare nell'insufficienza renale progressiva nell'uomo (analisi morfometrica dell'ultrastruttura del capillare glomerulare e delle alterazioni patologiche).
- Modelli matematici della filtrazione glomerulare dell'acqua e delle macromolecole per l'analisi dei dati sperimentali e delle valutazioni cliniche.

- Analisi di immagini biomediche provenienti da DSA, TC e MR per la ricostruzione tridimensionale di vasi arteriosi e la realizzazione di modelli geometrici per lo studio della fluidodinamica e la quantificazione volumetrica.
- Analisi fluidodinamica computazionale del moto del sangue in vasi arteriosi in condizioni fisiologiche e patologiche mediante l'impiego di modelli tridimensionali specifici del paziente e di indagini Eco-Doppler.
- Tecniche sperimentali per l'ingegneria dei tessuti. Manipolazione in vitro di cellule vascolari e di cellule epiteliali. Utilizzo di sistemi di perfusione e microfluidici.
- Tecniche per l'analisi strutturale (microscopia ottica, in fluorescenza e confocale) e ultrastrutturale (microscopia elettronica TEM e SEM) di preparati istologici e di biomateriali, con relative tecniche di analisi di immagine e metodi morfometrici di quantificazione.
- Sviluppo e implementazione di sistemi informativi per la gestione di dati clinici e di basi di dati relative a studi clinici controllati e alla pratica clinica convenzionale.

Partecipazione a progetti di ricerca finanziati

- 1999-01 Responsabile del progetto di ricerca *"Sviluppo di un sistema per immunisolamento delle isole pancreatiche"* del Dipartimento di Bioingegneria dell'Istituto Mario Negri finanziato dalla Compagnia di San Paolo - Torino
- 2002-06 Responsabile dell'Unità - Istituto Mario Negri del progetto FIRB – RBNE01EBES dal titolo *"Impiego delle tecniche di ingegneria tissutale nello sviluppo di protesi vascolari cellularizzate"* finanziato dal MIUR.
- 2003-04 Responsabile del progetto di ricerca dal titolo *"Identificazione e utilizzo di cellule staminali del tessuto esocrino pancreatico per la cura del diabete insulino dipendente"* del Dipartimento di Bioingegneria dell'Istituto Mario Negri finanziato dalla Fondazione CARIPLO di Milano.
- 2003-06 Responsabile dell'Unità - Istituto Mario Negri del progetto STREP del 6° Programma Quadro della Commissione Europea dal titolo *"BARP+, Development of a Bioartificial Pancreas for Type I Diabetes Therapy"*.
- 2004-07 Responsabile del progetto di ricerca *"Sviluppo del pancreas bioartificiale"* del Dipartimento di Bioingegneria dell'Istituto Mario Negri finanziato dalla Compagnia di San Paolo - Torino
- 2005-09 Responsabile dell'Unità - Istituto Mario Negri del Progetto Integrato (IP) del 6° Programma Quadro della Commissione Europea dal titolo: *"STEPS, A Systems Approach to Tissue Engineering Processes and Products"*.
- 2008-11 Coordinatore progetto di ricerca – 7° Programma Quadro Commissione Europea dal titolo *"ARCH – Patient specific image-based computational modelling for improvement of acute and long-term outcomes of vascular access for hemodialysis "* Project n. 224390 - FP7-ICT-2007-2
- 2011-16 Responsabile ricerca Ingegneria dei Tessuti – Progetto di ricerca ERC *"RESET - Dreaming of no more renal dialysis: How self-derived tissue and cells can replace renal function"* Project n. 268632.
- 2012-16 Responsabile del progetto di informatizzazione della cartella clinica *"D@se -*

- "Dossier Sanitario Elettronico Aziendale", Azienda Ospedaliera Giovanni XXIII, Bergamo.
- 2013-18 Coordinatore scientifico del progetto "Smart Aging" (Piattaforma di servizi per acquisizione e elaborazione di dati personali per il prolungamento della vita attiva e il miglioramento del benessere, della cura e della prevenzione nella popolazione anziana) Bando MIUR - Smart Cities Nazionale – Progetto n. 00442.
- 2014-17 Partner di ricerca del progetto Life+Environment Policy and Governance - COBRA: "Cementitious Brake Control". WP Leader
- 2015-18 Partner di ricerca del progetto HORIZONT 2020 - Lowbrasys: "A Low environmental impact BRAke SYStem".
- 2016 -20 Partner di ricerca del progetto HORIZON 2020 – NICHOD: "Mechanobiology of nuclear import of transcription factors modelled within a bioengineered stem cell niche".
- 2018-20 Partner di ricerca del progetto ERC-2018-PoC - MOAB - Miniaturised optically accessible bioreactor for drug discovery and biological research.
- 2018-20 Partner di ricerca del progetto FONDAZIONE CARIPLO - SILKELASTOGRAFT: " A novel compliance-matching silk fibroin/polyurethane graft for in situ vascular tissue engineering"
- 2019-20 Reviewer del progetto HORIZON H2020 AMD-766884-3 - ORCHID: "Organ on chip in development"
- 2019-21 Partner di ricerca del progetto CALL HUB RICERCA E INNOVAZIONE - "Forme Avanzate di Gestione dei fanghi di depurazione in un Hub Innovativo Lombardo FANGHI"
- 2021-24 nPETS Horizon 2020 - NANOPARTICLE EMISSIONS FROM THE TRANSPORT SECTOR: HEALTH AND POLICY IMPACTS.

Comunicazioni scientifiche a convegni su invito (ultimi 10 anni)

- 2021 24th European Vasculare Course (EVC) - Creating arteriovenous fistulas using VasQ™ External Support
- 2021 12TH Congress Of The Vascular Access Society (Vas) - Longitudinal MRI-based 3D geometric model and CFD analysis reveals flow instability that can be limited by an external support device
- 2021 VASA 2021 Spring Virtual Conference - Of Flow and Fistulae: Back to the Future
- 2021 EU Green Week 2021 - Exhaust & non-exhaust emissions: putting transport research & health impacts in perspective
- 2021 58th ERA-EDTA Congress - How can physicians improve AV fistula patency?
- 2021 10th ICTHIC VIRTUAL CONFERENCE - Are the new technologies useful to medicine or the opposite?

- 2020 MINDRAY - Advanced Vascular Webinar - The relevance of Wall Shear Stress And new prospectives.
- 2019 EUREKA Pisa - Ecografia procedurale e gestione dell'accesso vascolare. Strategie vincenti per la rinascita professionale del nefrologo (Modelli computazionali)
- 2019 3rd International Symposium on Functional Renal Imaging - University of Nottingham
- 2019 27th ANNUAL MEETING ISMCS - International Society for Mechanical Circulatory Support Bologna, Italia.
- 2019 25th Congress of the European Society of Biomechanics ESB - Vienna (Morphological and hemodynamic changes in a patientspecific arteriovenous fistula for hemodialysis) e (A 3d model of glomerular capillary membrane)
- 2019 TERMIS European Chapter Meeting, Rhodes Greece - Tissue Engineering Therapies: From Concept to Clinical Translation & Commercialisation (Response of mesenchymal stem cells to flow in the nichoid 3D microstructured substrate)
- 2019 11th Congress of the Vascular Access Society – VAS – Rotterdam, The Netherland (Hemodynamic factors involved in vascular remodeling of AVFs: what can we learn from physics?)
- 2019 Winter School - European Society of Artificial Organs - ESAO - Baden, Austria Opening ((Bio)artificial Organs: Future Developments from an Editor's Point of View)
- 2018 XLV Congress of the European Society of Artificial Organs - ESAO - Madrid – Spain (Modifications and optimisation of well-stablised treatment options in Renal Failure)
- 2018 XXIII Congresso Nazionale della Federazione delle Associazioni dei Dirigenti Ospedalieri Internisti - FADOI - Bologna (La filtrazione glomerulare fra fisiologia e patologia renale)
- 2017 10th Congress of the Vascular Access Society – VAS – Lubljana, Slovenia (Hemodynamic shear stress, endothelial cell activation and intimal hyperplasia in hemodialysis vascular access)
- 2017 44th Congress of the European Society of Artificial Organs - ESAO - Vienna (Vascular access in hemodialysis patients: from numerical modeling to vascular biology)
- 2017 European Vascular Course – EVC – Maastricht, The Netherland (Is shear stress a key factor for AVF maturation?)
- 2016 Congress of the European Society of Biomechanics – ESB - Lion, France (Numerical strategies for blood flow analysis in the vascular access for haemodialysis)
- 2016 57° Congresso Nazionale della Società Italiana di Nefrologia – SIN - Milano (Imaging e quantificazione nella fisiopatologia renale)
- 2016 Società Italiana di Nefrologia VI Convegno Nazionale, Gruppo di Studio degli accessi vascolari - Lucca (Ruolo potenziale dell'analisi fluidodinamica)

- computazionale nella prevenzione del fallimento precoce)
- 2016 VASA, Vascular Access Society of the Americas – Chicago, IL, USA (Arterial Venous Fistula Maturation)
- 2015 XV Convegno Nazionale Associazione Italiana Ingegneri Clinici – AIIC – Cagliari (Il corso di laurea in Ingegneria Medica: l'esperienza dell'Università di Bergamo)
- 2015 Vascular Access Meeting - Duisburg – Germany (Computational model for surgical planning of vascular access)
- 2015 42nd Congress of the European Society of Artificial Organs - Leuven – Belgium (Computational fluid dynamic strategies for the study of blood flow in the vascular access for hemodialysis)
- 2015 Workshop on "Hemodialysis Vascular Access: Taking the next steps" – National Institutes of Health – NIH - Bethesda, MD, USA (Hemodynamic Changes and Vascular Access Outcomes)
- 2015 8° Congresso SINSEC Nazionale, International Neurosonology Conference - Milano (Il ruolo dell'emodinamica nella progressione della placca. Il punto di vista dell'Ingegnere)
- 2015 9th Congress of the Vascular Access Society - VAS – Barcelona, Spain (Computational model for surgical planning of vascular access)
- 2014 41st Annual ESAO Congress European Society for Artificial Organs - ESAO - Roma (Kidney tissue engineering based on decellularized matrix scaffolds)
- 2014 18th European Vascular Course – EVC – Maastricht, The Netherlands (Computational model for prediction of fistula outcome)
- 2014 5° Convegno nazionale Gruppo di Studio sugli Accessi Vascolari, SIN - Trento (Utilità dei modelli di fluidodinamica computazionale nel circolo periferico)
- 2014 Tissue Engineering & Regenerative Medicine International Society European Chapter Meeting - Genova (Three dimensional Porcine Kidney Scaffolds for Renal Tissue Engineering)
- 2013 Tissue Engineering and Regenerative Medicine International Society, TERMIS-Asian Pacific conference - Shanghai and Wuzhen, China (Recellularization of three-dimensional kidney scaffolds with embryonic stem cells)
- 2013 31th Annual Meeting of the International Society of Blood Purification - Bologna (Surgical planning of vascular access surgery in hemodialysis by computational modeling for patient-specific prediction of clinical outcome)
- 2013 American Society of Nephrology, ASN Kidney Week 2013 – Atlanta, GA, USA (Changes in Endothelial and Smooth Muscle Cells Morphology by Patient-Specific Disturbed Flow Patterns Derived from Autologous Arteriovenous Fistulae)
- 2012 Annual Congress of the American society of Nephrology – ASN- San Diego, CA (Upstream Hemodynamics and Vascular Remodeling in Dialysis Access Stenosis)
- 2011 7th International Biofluid Mechanics Symposium – Ein Bokek, Israel (Patient specific multi-scale hemodynamic computational model for planning vascular

access surgery in hemodialysis patients)

- 2011 Corso teorico-pratico avanzato di eco color doppler carotideo e vertebrale - Milano (Utilizzo della fluidodinamica computazionale per l'analisi dei fattori emodinamici)
- 2011 7th International Conference on Polymer and Textile Biotechnology - Milan (Electrospun fibroin vascular graft for the in vivo regeneration of small caliber blood vessels)
- 2010 14th European Vascular Course, EVC – Maastricht, The Netherland (H2020 ARCH - Introduction and project outline)
- 2010 SIAPAV, Società Italiana di Angiologia e Patologia Vascolare - Padova (Shear Stress e Danno Vascolare)
- 2010 3° Congresso Nazionale CO.R.TE. 2010 - Roma (Le Terapie Cellulari Modelli di costo-efficacia nel trattamento delle ulcere del piede diabetico)
- 2009 University of Cincinnati - Vascular Access Conference –Cincinnati, OH, USA (Predictive computational models for vascular access function in hemodialysis patients)

Conoscenza delle lingue straniere

- Buona conoscenza della lingua inglese parlata e scritta.
- Conoscenza scolastica della lingua francese.

Collaborazioni Internazionali

Prof. Forbes C. Dewey, Department of Mechanical Engineering, Massachusetts Institute of Technology - Cambridge, Massachusetts (USA)

Prof. William M. Deen, Department of Chemical Engineering, Massachusetts Institute of Technology - Cambridge, Massachusetts (USA)

Prof. Robert N. Nerem, Institute for Bioengineering and Bioscience, Georgia Institute of Technology - Atlanta, Georgia (USA)

Prof. David Steinman, Mechanical & Industrial Engineering, University of Toronto - Toronto, Canada

Prof. Frans Van de Vosse – TUe Eindhoven – The Netherlands

LISTA delle PUBBLICAZIONI

1. Micro structured tools for cell modeling in the fourth dimension. Raimondi MT, Barzaghinia B, Bocconia A, Concia C, Martinellia C, Nardinia A, Testaa C, Carellie S, Cerullo G, Chirico G, Gottardi R, Osellame R, **Remuzzi A**, Laganà M and Jacchetti E. SPIE Optical Metrology, 2021.
2. Insights into Glomerular Filtration and Albuminuria. **Remuzzi A** and Remuzzi G. The New England Journal of Medicine 385;5 July 29, 2021. Correspondence.
3. Basic principles and new advances in kidney imaging. Caroli A, **Remuzzi A** and Lerman L.O. Kidney International 2021. MINI REVIEW.
4. Influence of Culture Substrates on Morphology and Function of Pulmonary Alveolar Cells In Vitro. Campiglio CE, Figliuzzi M, Silvani S, Tironi M, Conti S, Boschetti F and **Remuzzi A**. Biomolecules 2021, 11, 675.
5. Does MRI trump pathology? A new era for staging and monitoring of kidney fibrosis Caroli A, **Remuzzi A** and Remuzzi G. Kidney International (2020) 97, 442–444. PMID: 33984338
6. Copper-dependent biological effects of particulate matter produced by brake systems on lung alveolar cells. Figliuzzi M, Tironi M, Longaretti L, Mancini A, Teoldi F, Sangalli F, **Remuzzi A**. Arch Toxicol 2020 Sep;94(9):2965-2979. PMID: 32577786
7. Functional Magnetic Resonance Imaging Versus Kidney Biopsy to Assess Response to Therapy in Nephrotic Syndrome: A Case Report. Caroli A, **Remuzzi A**, Ruggiero B, Carrara C, Rizzo P, Brambilla P, Ruggenenti P and Remuzzi G. Kidney Med. 2020 2(6):804-809.
8. A novel hybrid silk-fibroin/polyurethane three-layered vascular graft: towards in situ tissue-engineered vascular accesses for haemodialysis. Van Uden S, Vanerio N, Catto V, Bonandrini B, Tironi M, Figliuzzi M, **Remuzzi A**, Kock L, Redaelli ACL, Greco FG and Riboldi SA. Biomedical Materials 2019, Volume 14, Number 2.
9. Protective Effect of Human Mesenchymal Stem Cells on the Survival of Pancreatic Islets. Fumagalli G, Monfrini M, Donzelli E, Rodriguez-Menendez V, Bonandrini B, Figliuzzi M, **Remuzzi A**, D'Amico G, Cavaletti G, Scuteri A. International Journal of Stem Cells Vol. 13, No. 1, 2020
10. A Novel Hybrid Silk Fibroin/Polyurethane Arteriovenous Graft for Hemodialysis: Proof-of-Concept Animal Study in an Ovine Model. Riboldi SA, Tozzi M, Bagardi M, Ravasio G, Cigalino G, Crippa L, Piccolo S, Nahal A, Spandri M, Catto V, Tironi M, Greco FG, **Remuzzi A** and Acocella F. Adv. Healthcare Mater. 2020, 9, 2000794.
11. Effect of the 3D Artificial Nichoid on the Morphology and Mechanobiological Response of Mesenchymal Stem Cells Cultured In Vitro. **Remuzzi A**, Bonandrini B, Tironi M, Longaretti L, Figliuzzi M, Conti S, Zandrini T, Osellame R, Cerullo G and Raimondi MT. Cells 2020, 9, 1873.
12. Arteriovenous access in hemodialysis: A multidisciplinary perspective for future solutions. Stegmayr B, Willems C, Groth T, Martins A, Neves NM, Mottaghy K, **Remuzzi A** and Walpoth B. The International Journal of Artificial Organs 2021, Vol. 44(1) 3–16. REVIEW.

13. Role of ultrastructural determinants of glomerular permeability in ultrafiltration function loss. **Remuzzi A**, Conti S, Ene-Iordache B, Tomasoni S, Rizzo P, Benigni A and Remuzzi G. JCI Insight. 2020;5(13):e137249.
14. COVID-19 and Italy: what next? **Remuzzi A**, Remuzzi G. Lancet. 2020 Apr 11;395(10231):1225-1228. PMID: 32178769. Review.
15. Preliminary detection of lung hypoperfusion in discharged Covid-19 patients during recovery. Patelli G, Paganoni S, Besana F, Codazzi F, Ronzoni M, Manini S, **Remuzzi A**. Eur J Radiol. 2020 Aug;129:109121. PMID: 32540586.
16. Correction to: Phase-contrast magnetic resonance imaging to assess renal perfusion: a systematic review and statement paper. Villa G, Ringgaard S, Hermann I, Noble R, Brambilla P, Khatir DS, Zöllner FG, Francis ST, Selby NM, **Remuzzi A**, Caroli A. MAGMA. 2020 Oct;33(5):747. PMID: 32529448.
17. A Novel Hybrid Silk Fibroin/Polyurethane Arteriovenous Graft for Hemodialysis: Proof-of-Concept Animal Study in an Ovine Model. Riboldi SA, Tozzi M, Bagardi M, Ravasio G, Cigalino G, Crippa L, Piccolo S, Nahal A, Spandri M, Catto V, Tironi M, Greco FG, **Remuzzi A**, Acocella F. Adv Healthc Mater. 2020 Oct;9(20):e2000794. PMID: 32914588
18. Copper-dependent biological effects of particulate matter produced by brake systems on lung alveolar cells. Figliuzzi M, Tironi M, Longaretti L, Mancini A, Teoldi F, Sangalli F, **Remuzzi A**. Arch Toxicol. 2020 Sep;94(9):2965-2979. PMID: 32577786
19. Functional Magnetic Resonance Imaging Versus Kidney Biopsy to Assess Response to Therapy in Nephrotic Syndrome: A Case Report. Caroli A, **Remuzzi A**, Ruggiero B, Carrara C, Rizzo P, Brambilla P, Ruggenenti P, Remuzzi G. Kidney Med. 2020 Oct 23;2(6):804-809. PMID: 33319205
20. Effect of the 3D Artificial Nichoid on the Morphology and Mechanobiological Response of Mesenchymal Stem Cells Cultured In Vitro. **Remuzzi A**, Bonandrini B, Tironi M, Longaretti L, Figliuzzi M, Conti S, Zandrini T, Osellame R, Cerullo G, Raimondi MT. Cells. 2020 Aug 11;9(8):1873. PMID: 32796521
21. Role of ultrastructural determinants of glomerular permeability in ultrafiltration function loss. **Remuzzi A**, Conti S, Ene-Iordache B, Tomasoni S, Rizzo P, Benigni A, Remuzzi G. JCI Insight. 2020 Jul 9;5(13):e137249. PMID: 32641585
22. Arteriovenous access in hemodialysis: A multidisciplinary perspective for future solutions. Stegmayr B, Willems C, Groth T, Martins A, Neves NM, Mottaghy K, **Remuzzi A**, Walpoth B. Int J Artif Organs. 2021 Jan;44(1):3-16. PMID: 32438852
23. Does MRI trump pathology? A new era for staging and monitoring of kidney fibrosis. Caroli A, **Remuzzi A**, Remuzzi G. Kidney Int. 2020 Mar;97(3):442-444. PMID: 31902648
24. Protective Effect of Human Mesenchymal Stem Cells on the Survival of Pancreatic Islets. Fumagalli G, Monfrini M, Donzelli E, Rodriguez-Menendez V, Bonandrini B, Figliuzzi M, **Remuzzi A**, D'Amico G, Cavaletti G, Scuteri A. Int J Stem Cells. 2020 Mar 30;13(1):116-126. PMID: 31887847
25. Phase-contrast magnetic resonance imaging to assess renal perfusion: a systematic review and statement paper. Villa G, Ringgaard S, Hermann I, Noble R, Brambilla P, Khatir DS, Zöllner FG, Francis ST, Selby NM, **Remuzzi A**, Caroli A. MAGMA. 2020 Feb;33(1):3-21. PMID: 31422518

26. Engineering the vasculature of decellularized rat kidney scaffolds using human induced pluripotent stem cell-derived endothelial cells. Ciampi O, Bonandrini B, Derosas M, Conti S, Rizzo P, Benedetti V, Figliuzzi M, **Remuzzi A**, Benigni A, Remuzzi G, Tomasoni S. *Sci Rep*. 2019 May 29;9(1):8001. PMID: 31142801
27. Toxicological evaluation of airborne particulate matter. Are cell culture technologies ready to replace animal testing? Silvani S, Figliuzzi M, **Remuzzi A**. *J Appl Toxicol*. 2019 Nov;39(11):1484-1491. doi: 10.1002/jat.3804. PMID: 31025406 Review.
28. Octreotide-LAR in later-stage autosomal dominant polycystic kidney disease (ALADIN 2): A randomized, double-blind, placebo-controlled, multicenter trial. Perico N, Ruggenenti P, Perna A, Caroli A, Trillini M, Sironi S, Pisani A, Riccio E, Imbriaco M, Dugo M, Morana G, Granata A, Figuera M, Gaspari F, Carrara F, Rubis N, Villa A, Gamba S, Prandini S, Cortinovis M, **Remuzzi A**, Remuzzi G; ALADIN 2 Study Group. *PLoS Med*. 2019 Apr 5;16(4):e1002777. PMID: 30951521. Clinical Trial.
29. A novel hybrid silk-fibroin/polyurethane three-layered vascular graft: towards in situ tissue-engineered vascular accesses for haemodialysis. van Uden S, Vanerio N, Catto V, Bonandrini B, Tironi M, Figliuzzi M, **Remuzzi A**, Kock L, Redaelli ACL, Greco FG, Riboldi SA. *Biomed Mater*. 2019 Jan 30;14(2):025007. PMID: 30620939
30. Bioengineering Organs for Blood Detoxification. Legallais C, Kim D, Mihaila SM, Mihajlovic M, Figliuzzi M, Bonandrini B, Salerno S, Yousef Yengej FA, Rookmaaker MB, Sanchez Romero N, Sainz-Arnal P, Pereira U, Pasqua M, Gerritsen KGF, Verhaar MC, **Remuzzi A**, Baptista PM, De Bartolo L, Masereeuw R, Stamatialis D. *Adv Healthc Mater*. 2018 Nov;7(21):e1800430. PMID: 30230709 Review.
31. Toward longitudinal studies of hemodynamically induced vessel wall remodeling. Bozzetto M, Brambilla P, Rota S, Ene-Iordache B, Sironi S, Remuzzi G, **Remuzzi A**. *Int J Artif Organs*. 2018 Nov;41(11):714-722. PMID: 29998758
32. Decellularized kidney matrix as functional material for whole organ tissue engineering. Figliuzzi M, Bonandrini B, **Remuzzi A**. *J Appl Biomater Funct Mater*. 2017 Nov 10;15(4):e326-e333. PMID: 29131298 Review.
33. Biological and Physical Factors Involved in the Maturation of Arteriovenous Fistula for Hemodialysis. **Remuzzi A**, Bozzetto M. *Cardiovasc Eng Technol*. 2017 Sep;8(3):273-279. PMID: 28752375 Review.
34. Blood Flow in Idealized Vascular Access for Hemodialysis: A Review of Computational Studies. Ene-Iordache B, **Remuzzi A**. *Cardiovasc Eng Technol*. 2017 Sep;8(3):295-312. PMID: 28664239 Review.
35. Kidney volume measurement methods for clinical studies on autosomal dominant polycystic kidney disease. Sharma K, Caroli A, Quach LV, Petzold K, Bozzetto M, Serra AL, Remuzzi G, **Remuzzi A**. *PLoS One*. 2017 May 30;12(5):e0178488. PMID: 28558028
36. Automatic Segmentation of Kidneys using Deep Learning for Total Kidney Volume Quantification in Autosomal Dominant Polycystic Kidney Disease. Sharma K, Rupprecht C, Caroli A, Aparicio MC, **Remuzzi A**, Baust M, Navab N. *Sci Rep*. 2017 May 17;7(1):2049. PMID: 28515418
37. Is shear stress the key factor for AVF maturation? **Remuzzi A**, Bozzetto M, Brambilla P. *J Vasc Access*. 2017 Mar 6;18(Suppl. 1):10-14. PMID: 28297046 Review.

38. Clinical use of computational modeling for surgical planning of arteriovenous fistula for hemodialysis. Bozzetto M, Rota S, Vigo V, Casucci F, Lomonte C, Morale W, Senatore M, Tazza L, Lodi M, Remuzzi G, **Remuzzi A**. BMC Med Inform Decis Mak. 2017 Mar 14;17(1):26. PMID: 28288599
39. Experimental Evaluation of Kidney Regeneration by Organ Scaffold Recellularization. **Remuzzi A**, Figliuzzi M, Bonandrini B, Silvani S, Azzollini N, Nossa R, Benigni A, Remuzzi G. Sci Rep. 2017 Mar 7;7:43502. PMID: 28266553
40. Artificial organs: current status and future directions. **Remuzzi A**. Int J Artif Organs. 2017 Feb 11;39(12):587-589. PMID: 28194748
41. Therapeutic potential of Mesenchymal Stem Cells for the treatment of diabetic peripheral neuropathy. Monfrini M, Donzelli E, Rodriguez-Menendez V, Ballarini E, Carozzi VA, Chiorazzi A, Meregalli C, Canta A, Oggioni N, Crippa L, Avezza F, Silvani S, Bonandrini B, Figliuzzi M, **Remuzzi A**, Porretta-Serapiglia C, Bianchi R, Lauria G, Tredici G, Cavaletti G, Scuteri A. Exp Neurol. 2017 Feb;288:75-84. PMID: 27851902
42. Two-photon polymerized "nichoid" substrates maintain function of pluripotent stem cells when expanded under feeder-free conditions. Nava MM, Piuma A, Figliuzzi M, Cattaneo I, Bonandrini B, Zandrini T, Cerullo G, Osellame R, **Remuzzi A**, Raimondi MT. Stem Cell Res Ther. 2016 Sep 9;7(1):132. PMID: 27613598
43. Updating the journal sections for the evolution of research and clinical applications in artificial organs. **Remuzzi A**. Int J Artif Organs. 2016 Aug 19;39(6):261-4. PMID: 27515858
44. Chronic kidney disease and cardiovascular risk in six regions of the world (ISN-KDDC): a cross-sectional study. Ene-Iordache B, Perico N, Bikbov B, Carminati S, **Remuzzi A**, Perna A, Islam N, Bravo RF, Alekovic-Halilovic M, Zou H, Zhang L, Gouda Z, Tchokhanelidze I, Abraham G, Mahdavi-Mazdeh M, Gallieni M, Codreanu I, Togtokh A, Sharma SK, Koirala P, Uprety S, Ulasi I, Remuzzi G. Lancet Glob Health. 2016 May;4(5):e307-19. PMID: 27102194
45. Effect of Sirolimus on Disease Progression in Patients with Autosomal Dominant Polycystic Kidney Disease and CKD Stages 3b-4. Ruggenenti P, Gentile G, Perico N, Perna A, Barcella L, Trillini M, Cortinovis M, Ferrer Siles CP, Reyes Loeza JA, Aparicio MC, Fasolini G, Gaspari F, Martinetti D, Carrara F, Rubis N, Prandini S, Caroli A, Sharma K, Antiga L, **Remuzzi A**, Remuzzi G; SIRENA 2 Study Group. Clin J Am Soc Nephrol. 2016 May 6;11(5):785-94. PMID: 26912555
46. Long-term Effects of Octreotide on Liver Volume in Patients With Polycystic Kidney and Liver Disease. Pisani A, Sabbatini M, Imbriaco M, Riccio E, Rubis N, Prinster A, Perna A, Liuzzi R, Spinelli L, Santangelo M, Remuzzi G, Ruggenenti P; ALADIN Study Group. Clin Gastroenterol Hepatol. 2016 Jul;14(7):1022-1030.e4. PMID: 26844873
47. The molecular mechanisms of hemodialysis vascular access failure. Brahmabhatt A, **Remuzzi A**, Franzoni M, Misra S. Kidney Int. 2016 Feb;89(2):303-316. PMID: 26806833 Review.
48. Design of a cone-and-plate device for controlled realistic shear stress stimulation on endothelial cell monolayers. Franzoni M, Cattaneo I, Ene-Iordache B, Oldani A, Righettini P, **Remuzzi A**. Cytotechnology. 2016 Oct;68(5):1885-96. PMID: 26754843
49. Transitional Flow in the Venous Side of Patient-Specific Arteriovenous Fistulae for Hemodialysis. Bozzetto M, Ene-Iordache B, **Remuzzi A**. Ann Biomed Eng. 2016 Aug;44(8):2388-2401. PMID: 26698581 Clinical Trial.

50. Endothelial cell activation by hemodynamic shear stress derived from arteriovenous fistula for hemodialysis access. Franzoni M, Cattaneo I, Longaretti L, Figliuzzi M, Ene-Iordache B, **Remuzzi A**. *Am J Physiol Heart Circ Physiol*. 2016 Jan 1;310(1):H49-59. PMID: 26497959
51. Regression of Renal Disease by Angiotensin II Antagonism Is Caused by Regeneration of Kidney Vasculature. **Remuzzi A**, Sangalli F, Macconi D, Tomasoni S, Cattaneo I, Rizzo P, Bonandrini B, Bresciani E, Longaretti L, Gagliardini E, Conti S, Benigni A, Remuzzi G. *J Am Soc Nephrol*. 2016 Mar;27(3):699-705. PMID: 26116358
52. Small diameter electrospun silk fibroin vascular grafts: Mechanical properties, in vitro biodegradability, and in vivo biocompatibility. Catto V, Farè S, Cattaneo I, Figliuzzi M, Alessandrino A, Freddi G, **Remuzzi A**, Tanzi MC. *Mater Sci Eng C Mater Biol Appl*. 2015 Sep;54:101-11. PMID: 26046273
53. Disturbed flow in a patient-specific arteriovenous fistula for hemodialysis: Multidirectional and reciprocating near-wall flow patterns. Ene-Iordache B, Semperboni C, Dubini G, **Remuzzi A**. *J Biomech*. 2015 Jul 16;48(10):2195-200. PMID: 25920898
54. pyNS: an open-source framework for 0D haemodynamic modelling. Manini S, Antiga L, Botti L, **Remuzzi A**. *Ann Biomed Eng*. 2015 Jun;43(6):1461-73. doi: 10.1007/s10439-014-1234-y. PMID: 25549775
55. Effects of MCP-1 inhibition by bindarit therapy in a rat model of polycystic kidney disease. Zoja C, Corna D, Locatelli M, Rottoli D, Pezzotta A, Morigi M, Zanchi C, Buelli S, Guglielmotti A, Perico N, **Remuzzi A**, Remuzzi G. *Nephron*. 2015;129(1):52-61. PMID: 25531096
56. Renal bioengineering with scaffolds generated from rat and pig kidneys. Figliuzzi M, Remuzzi G, **Remuzzi A**. *Nephron Exp Nephrol*. 2014;126(2):113. PMID: 24854652 Review.
57. Computational model for prediction of fistula outcome. **Remuzzi A**, Manini S. *J Vasc Access*. 2014;15 Suppl 7:S64-9. PMID: 24817458
58. Letter from the editor in chief. **Remuzzi A**. *Int J Artif Organs*. 2014 Apr;37(4):275-6. PMID: 24811181
59. Mesenchymal stem cells help pancreatic islet transplantation to control type 1 diabetes. Figliuzzi M, Bonandrini B, Silvani S, **Remuzzi A**. *World J Stem Cells*. 2014 Apr 26;6(2):163-72. PMID: 24772243 Review.
60. A double mechanism for the mesenchymal stem cells' positive effect on pancreatic islets. Scuteri A, Donzelli E, Rodriguez-Menendez V, Ravasi M, Monfrini M, Bonandrini B, Figliuzzi M, **Remuzzi A**, Tredici G. *PLoS One*. 2014 Jan 8;9(1):e84309. PMID: 24416216
61. Recellularization of well-preserved acellular kidney scaffold using embryonic stem cells. Bonandrini B, Figliuzzi M, Papadimou E, Morigi M, Perico N, Casiraghi F, Dipl C, Sangalli F, Conti S, Benigni A, **Remuzzi A**, Remuzzi G. *Tissue Eng Part A*. 2014 May;20(9-10):1486-98. PMID: 24320825
62. Islet transplantation and insulin administration relieve long-term complications and rescue the residual endogenous pancreatic β cells. Figliuzzi M, Bianchi R, Cavagnini C, Lombardi R, Porretta-Serapiglia C, Lauria G, Avezza F, Canta A, Carozzi V,

- Chiorazzi A, Marmioli P, Meregalli C, Oggioni N, Sala B, Cavaletti G, **Remuzzi A**. *Am J Pathol*. 2013 Nov;183(5):1527-38. PMID: 24160324
63. Novel paradigms for dialysis vascular access: upstream hemodynamics and vascular remodeling in dialysis access stenosis. **Remuzzi A**, Ene-Iordache B. *Clin J Am Soc Nephrol*. 2013 Dec;8(12):2186-93. PMID: 23990161. Review.
64. Effect of longacting somatostatin analogue on kidney and cyst growth in autosomal dominant polycystic kidney disease (ALADIN): a randomised, placebo-controlled, multicentre trial. Caroli A, Perico N, Perna A, Antiga L, Brambilla P, Pisani A, Visciano B, Imbriaco M, Messa P, Cerutti R, Dugo M, Cancian L, Buongiorno E, De Pascalis A, Gaspari F, Carrara F, Rubis N, Prandini S, **Remuzzi A**, Remuzzi G, Ruggenenti P; ALADIN study group. *Lancet*. 2013 Nov 2;382(9903):1485-95. PMID: 23972263
Clinical Trial.
65. Prevention of inappropriate prescribing in hospitalized older patients using a computerized prescription support system (INTERcheck(®)). Ghibelli S, Marengoni A, Djade CD, Nobili A, Tettamanti M, Franchi C, Caccia S, Giovarruscio F, **Remuzzi A**, Pasina L. *Drugs Aging*. 2013 Oct;30(10):821-8. PMID: 23943248
66. ADAMTS13 predicts renal and cardiovascular events in type 2 diabetic patients and response to therapy. Rurali E, Noris M, Chianca A, Donadelli R, Banterla F, Galbusera M, Gherardi G, Gastoldi S, Parvanova A, Iliev I, Bossi A, Haefliger C, Trevisan R, Remuzzi G, Ruggenenti P; BENEDICT Study Group. *Diabetes*. 2013 Oct;62(10):3599-609. PMID: 23733198
67. Validation of a patient-specific hemodynamic computational model for surgical planning of vascular access in hemodialysis patients. Caroli A, Manini S, Antiga L, Passera K, Ene-Iordache B, Rota S, Remuzzi G, Bode A, Leermakers J, van de Vosse FN, Vanholder R, Malovrh M, Tordoir J, **Remuzzi A**; ARCH project Consortium. *Kidney Int*. 2013 Dec;84(6):1237-45. PMID: 23715122
68. An opto-structural method to estimate the stress-strain field induced by cell contraction on substrates of controlled stiffness in vitro. Raimondi MT, Balconi G, Boschetti F, Di Metri A, Azmi Mohammed SA, Quaglini V, Araneo L, Galv ez BG, Lupi M, Latini R, **Remuzzi A**. *J Appl Biomater Funct Mater*. 2013 Dec 16;11(3):e143-50. PMID: 23413127
69. In vivo regeneration of elastic lamina on fibroin biodegradable vascular scaffold. Cattaneo I, Figliuzzi M, Azzollini N, Catto V, Far  S, Tanzi MC, Alessandrino A, Freddi G, **Remuzzi A**. *Int J Artif Organs*. 2013 Mar;36(3):166-74. PMID: 23404641
70. Computational model for simulation of vascular adaptation following vascular access surgery in haemodialysis patients. Manini S, Passera K, Huberts W, Botti L, Antiga L, **Remuzzi A**. *Comput Methods Biomech Biomed Engin*. 2014;17(12):1358-67. PMID: 23281788
71. Isolation of Langerhans islets by dielectrophoresis. Burgarella S, Merlo S, Figliuzzi M, **Remuzzi A**. *Electrophoresis*. 2013 Apr;34(7):1068-75. PMID: 23161152
72. Patient-specific model of arterial circulation for surgical planning of vascular access. Passera K, Manini S, Antiga L, **Remuzzi A**. *J Vasc Access*. 2013 Apr-Jun;14(2):180-92. PMID: 23032951
73. Measurable urinary albumin predicts cardiovascular risk among normoalbuminuric patients with type 2 diabetes. Ruggenenti P, Porrini E, Motterlini N, Perna A, Ilieva AP, Iliev IP, Dodesini AR, Trevisan R, Bossi A, Sampietro G, Capitoni E, Gaspari F,

- Rubis N, Ene-Iordache B, Remuzzi G; BENEDICT Study Investigators. *J Am Soc Nephrol*. 2012 Oct;23(10):1717-24. PMID: 22935482 Clinical Trial.
74. Effect of anastomosis angle on the localization of disturbed flow in 'side-to-end' fistulae for haemodialysis access. Ene-Iordache B, Cattaneo L, Dubini G, **Remuzzi A**. *Nephrol Dial Transplant*. 2013 Apr;28(4):997-1005. PMID: 22785110
75. Regenerative medicine as applied to general surgery. Orlando G, Wood KJ, De Coppi P, Baptista PM, Binder KW, Bitar KN, Breuer C, Burnett L, Christ G, Farney A, Figliuzzi M, Holmes JH 4th, Koch K, Macchiarini P, Mirmalek Sani SH, Opara E, **Remuzzi A**, Rogers J, Saul JM, Seliktar D, Shapira-Schweitzer K, Smith T, Solomon D, Van Dyke M, Yoo JJ, Zhang Y, Atala A, Stratta RJ, Soker S. *Ann Surg*. 2012 May;255(5):867-80. PMID: 22330032. Review.
76. Heparin in pregnant women with previous placenta-mediated pregnancy complications: a prospective, randomized, multicenter, controlled clinical trial. Martinelli I, Ruggenenti P, Cetin I, Pardi G, Perna A, Vergani P, Acaia B, Facchinetti F, La Sala GB, Bozzo M, Rampello S, Marozio L, Diadei O, Gherardi G, Carminati S, Remuzzi G, Mannucci PM; HAPPY Study Group. *Blood*. 2012 Apr 5;119(14):3269-75. PMID: 22289887 Clinical Trial.
77. Shear stress reverses dome formation in confluent renal tubular cells. Cattaneo I, Condorelli L, Terrinoni AR, Antiga L, Sangalli F, **Remuzzi A**. *Cell Physiol Biochem*. 2011;28(4):673-82. PMID: 22178879
78. Effects of manidipine and delapril in hypertensive patients with type 2 diabetes mellitus: the delapril and manidipine for nephroprotection in diabetes (DEMAND) randomized clinical trial. Ruggenenti P, Lauria G, Iliev IP, Fassi A, Ilieva AP, Rota S, Chiurchiu C, Barlovic DP, Sghirlanzoni A, Lombardi R, Penza P, Cavaletti G, Piatti ML, Frigeni B, Filippini M, Rubis N, Noris G, Motterlini N, Ene-Iordache B, Gaspari F, Perna A, Zaletel J, Bossi A, Dodesini AR, Trevisan R, Remuzzi G; DEMAND Study Investigators. *Hypertension*. 2011 Nov;58(5):776-83. PMID: 21931073 Clinical Trial.
79. Phosphate may promote CKD progression and attenuate renoprotective effect of ACE inhibition. Zoccali C, Ruggenenti P, Perna A, Leonardis D, Tripepi R, Tripepi G, Mallamaci F, Remuzzi G; REIN Study Group. *J Am Soc Nephrol*. 2011 Oct;22(10):1923-30. PMID: 21852581
80. Disturbed flow in radial-cephalic arteriovenous fistulae for haemodialysis: low and oscillating shear stress locates the sites of stenosis. Ene-Iordache B, **Remuzzi A**. *Nephrol Dial Transplant*. 2012 Jan;27(1):358-68. PMID: 21771751
81. Inhibiting angiotensin-converting enzyme promotes renal repair by limiting progenitor cell proliferation and restoring the glomerular architecture. Benigni A, Morigi M, Rizzo P, Gagliardini E, Rota C, Abbate M, Ghezzi S, **Remuzzi A**, Remuzzi G. *Am J Pathol*. 2011 Aug;179(2):628-38. PMID: 21718676
82. Intermediate volume on computed tomography imaging defines a fibrotic compartment that predicts glomerular filtration rate decline in autosomal dominant polycystic kidney disease patients. Caroli A, Antiga L, Conti S, Sonzogni A, Fasolini G, Ondei P, Perico N, Remuzzi G, **Remuzzi A**. *Am J Pathol*. 2011 Aug;179(2):619-27. PMID: 21683674
83. Clinical study protocol for the ARCH project - computational modeling for improvement of outcome after vascular access creation. Bode A, Caroli A, Huberts W, Plancken N, Antiga L, Bosboom M, **Remuzzi A**, Tordoir J; ARCH project consortium. *J Vasc Access*. 2011 Oct-Dec;12(4):369-76. PMID: 21667457

84. The Remission Clinic approach to halt the progression of kidney disease. Remission Clinic Task Force; Clinical Research Center "Aldo e Cele Daccò" (Collaborators: Ruggenenti P, Remuzzi A, Giuseppe Remuzzi, Elena Perticucci, Roberto Trevisan, Alessandro Dodesini, Vincenzo Gambarà, Bogdan Ene-Iordache, Sergio Carminati, Nadia Rubis, Giulia Gherardi, Annalisa Perna, Paolo Cravedi) *J Nephrol*. 2011 May-Jun;24(3):274-81. PMID: 21534237
85. Effect of ACE inhibition on glomerular permselectivity and tubular albumin concentration in the renal ablation model. Sangalli F, Carrara F, Gaspari F, Corna D, Zoja C, Botti L, Remuzzi G, Remuzzi A. *Am J Physiol Renal Physiol*. 2011 Jun;300(6):F1291-300. PMID: 21454255
86. Geometry of the internal carotid artery and recurrent patterns in location, orientation, and rupture status of lateral aneurysms: an image-based computational study. Piccinelli M, Bacigaluppi S, Boccardi E, Ene-Iordache B, Remuzzi A, Veneziani A, Antiga L. *Neurosurgery*. 2011 May;68(5):1270-85; discussion 1285. PMID: 21273931
87. Effects of verapamil added-on trandolapril therapy in hypertensive type 2 diabetes patients with microalbuminuria: the BENEDICT-B randomized trial. Ruggenenti P, Fassi A, Ilieva A, Iliev IP, Chiurciu C, Rubis N, Gherardi G, Ene-Iordache B, Gaspari F, Perna A, Cravedi P, Bossi A, Trevisan R, Motterlini N, Remuzzi G; BENEDICT-B Study Investigators. *J Hypertens*. 2011 Feb;29(2):207-16. PMID: 21243736 Clinical Trial.
88. Effect of inborn pancreatic islet deficit in the Munich Wistar Frömter rat. Figliuzzi M, Bonandrini B, Cattaneo I, Remuzzi G, Remuzzi A. *Islets*. 2010 Sep-Oct;2(5):318-22. PMID: 21099330
89. Imaging of the porous ultrastructure of the glomerular epithelial filtration slit. Gagliardini E, Conti S, Benigni A, Remuzzi G, Remuzzi A. *J Am Soc Nephrol*. 2010 Dec;21(12):2081-9. PMID: 21030599
90. Burden of CKD, proteinuria, and cardiovascular risk among Chinese, Mongolian, and Nepalese participants in the International Society of Nephrology screening programs. Sharma SK, Zou H, Togtokh A, Ene-Iordache B, Carminati S, Remuzzi A, Wiebe N, Ayyalasomayajula B, Perico N, Remuzzi G, Tonelli M. *Am J Kidney Dis*. 2010 Nov;56(5):915-27. PMID: 20888105
91. Comment on: Robertson (2010) Islet transplantation a decade later and strategies for filling a half-full glass. *Diabetes*;59:1285-1291. Cravedi P, Remuzzi A, Remuzzi G. *Diabetes*. 2010 Sep;59(9):e13; author reply e14. PMID: 20805375
92. Sirolimus therapy to halt the progression of ADPKD. Perico N, Antiga L, Caroli A, Ruggenenti P, Fasolini G, Cafaro M, Ondei P, Rubis N, Diadei O, Gherardi G, Prandini S, Panozo A, Bravo RF, Carminati S, De Leon FR, Gaspari F, Cortinovia M, Motterlini N, Ene-Iordache B, Remuzzi A, Remuzzi G. *J Am Soc Nephrol*. 2010 Jun;21(6):1031-40. PMID: 20466742 Clinical Trial.
93. Reducing polycystic liver volume in ADPKD: effects of somatostatin analogue octreotide. Caroli A, Antiga L, Cafaro M, Fasolini G, Remuzzi A, Remuzzi G, Ruggenenti P. *Clin J Am Soc Nephrol*. 2010 May;5(5):783-9. PMID: 20185596 Clinical Trial.
94. Effect of islet transplantation on metabolic glucose control in rats with diabetes. Cornolti R, Cattaneo I, Trudu M, Figliuzzi M, Remuzzi A. *Diabetes Technol Ther*. 2009 Dec;11(12):805-11. PMID: 20001682

95. Regression of diabetic complications by islet transplantation in the rat. Remuzzi A, Cornolti R, Bianchi R, Figliuzzi M, Porretta-Serapiglia C, Oggioni N, Carozzi V, Crippa L, Avezza F, Fiordaliso F, Salio M, Lauria G, Lombardi R, Cavaletti G. *Diabetologia*. 2009 Dec;52(12):2653-61. PMID: 19789851
96. Impact of the PPAR-gamma2 Pro12Ala polymorphism and ACE inhibitor therapy on new-onset microalbuminuria in type 2 diabetes: evidence from BENEDICT. De Cosmo S, Motterlini N, Prudente S, Pellegrini F, Trevisan R, Bossi A, Remuzzi G, Trischitta V, Ruggenenti P; BENEDICT Study Group. *Diabetes*. 2009 Dec;58(12):2920-9. PMID: 19720797 *Clinical Trial*.
97. Unlike each drug alone, lisinopril if combined with avosentan promotes regression of renal lesions in experimental diabetes. Gagliardini E, Corna D, Zoja C, Sangalli F, Carrara F, Rossi M, Conti S, Rottoli D, Longaretti L, Remuzzi A, Remuzzi G, Benigni A. *Am J Physiol Renal Physiol*. 2009 Nov;297(5):F1448-56. PMID: 19675181
98. Determination of cardiovascular mechanics evolution in the presence of the arteriovenous fistula. Casagrande G, Lanzarone E, Miglietta F, Remuzzi A, Fumero R, Costantino ML. *ASAIO J*. 2009 Sep-Oct;55(5):484-93. PMID: 19672193
99. Bone marrow-derived mesenchymal stem cells improve islet graft function in diabetic rats. Figliuzzi M, Cornolti R, Perico N, Rota C, Morigi M, Remuzzi G, Remuzzi A, Benigni A. *Transplant Proc*. 2009 Jun;41(5):1797-800. PMID: 19545731
100. Effect of micro- and macroencapsulation on oxygen consumption by pancreatic islets. Cornolti R, Figliuzzi M, Remuzzi A. *Cell Transplant*. 2009;18(2):195-201. PMID: 19499707
101. A framework for geometric analysis of vascular structures: application to cerebral aneurysms. Piccinelli M, Veneziani A, Steinman DA, Remuzzi A, Antiga L. *IEEE Trans Med Imaging*. 2009 Aug;28(8):1141-55. PMID: 19447701
102. Developing regulatory-compliant electronic case report forms for clinical trials: experience with the demand trial. Ene-Iordache B, Carminati S, Antiga L, Rubis N, Ruggenenti P, Remuzzi G, Remuzzi A. *J Am Med Inform Assoc*. 2009 May-Jun;16(3):404-8. PMID: 19261946
103. Podocyte repopulation contributes to regression of glomerular injury induced by ACE inhibition. Macconi D, Sangalli F, Bonomelli M, Conti S, Condorelli L, Gagliardini E, Remuzzi G, Remuzzi A. *Am J Pathol*. 2009 Mar;174(3):797-807. PMID: 19164508
104. An image-based modeling framework for patient-specific computational hemodynamics. Antiga L, Piccinelli M, Botti L, Ene-Iordache B, Remuzzi A, Steinman DA. *Med Biol Eng Comput*. 2008 Nov;46(11):1097-112. PMID: 19002516 *Review*.
105. Islet transplantation: need for a time-out? Cravedi P, Mannon RB, Ruggenenti P, Remuzzi A, Remuzzi G. *Nat Clin Pract Nephrol*. 2008 Dec;4(12):660-1. PMID: 18813231
106. Assessment of in vitro differentiation of bovine pancreatic tissue in insulin-expressing cells. Figliuzzi M, Adobati F, Cornolti R, Cassis P, Remuzzi G, Remuzzi A. *JOP*. 2008 Sep 2;9(5):601-11. PMID: 18762691
107. Human bone marrow mesenchymal stem cells accelerate recovery of acute renal injury and prolong survival in mice. Morigi M, Introna M, Imberti B, Corna D, Abbate M, Rota C, Rottoli D, Benigni A, Perico N, Zoja C, Rambaldi A, Remuzzi A, Remuzzi G. *Stem Cells*. 2008 Aug;26(8):2075-82. PMID: 18499895

108. Rotating versus perfusion bioreactor for the culture of engineered vascular constructs based on hyaluronic acid. Arrigoni C, Chittò A, Mantero S, Remuzzi A. *Biotechnol Bioeng*. 2008 Aug 1;100(5):988-97. PMID: 18383121
109. Decision time for pancreatic islet-cell transplantation. Ruggenenti P, Remuzzi A, Remuzzi G. *Lancet*. 2008 Mar 15;371(9616):883-4. doi: 10.1016/S0140-6736(08)60395-5. PMID: 18342671.
110. Albumin concentration in the Bowman's capsule: multiphoton microscopy vs micropuncture technique. Remuzzi A, Sangalli F, Fassi A, Remuzzi G. *Kidney Int*. 2007 Dec;72(11):1410-1; author reply 1411. PMID: 18004314
111. Effects of rosuvastatin on glomerular capillary size-selectivity function in rats with renal mass ablation. Corna D, Sangalli F, Cattaneo D, Carrara F, Gaspari F, Remuzzi A, Zoja C, Benigni A, Perico N, Remuzzi G. *Am J Nephrol*. 2007;27(6):630-8. PMID: 17851231
112. Computed tomography evaluation of autosomal dominant polycystic kidney disease progression: a progress report. Antiga L, Piccinelli M, Fasolini G, Ene-Iordache B, Ondei P, Bruno S, Remuzzi G, Remuzzi A. *Clin J Am Soc Nephrol*. 2006 Jul;1(4):754-60. PMID: 17699283
113. Potential protective effects of telmisartan on renal function deterioration. Remuzzi A, Remuzzi G. *J Renin Angiotensin Aldosterone Syst*. 2006 Dec;7(4):185-91. PMID: 17318786 Review.
114. Vitamin D, insulin resistance, and renal disease. Remuzzi A. *Kidney Int*. 2007 Jan;71(2):96-8. PMID: 17213855
115. Blood pressure and cholesterol levels in an Italian outpatient cohort of type 2 diabetic patients: comparison with the general population. Dodesini AR, Lepore G, Neotti C, Ene-Iordache B, Remuzzi A, Trevisan R. *Nutr Metab Cardiovasc Dis*. 2006 Sep;16(6):e1-3. PMID: 16935695
116. Vascular tissue engineering. Arrigoni C, Camozzi D, Remuzzi A. *Cell Transplant*. 2006;15 Suppl 1:S119-25. PMID: 16826804 Review.
117. Biocompatibility and function of microencapsulated pancreatic islets. Figliuzzi M, Plati T, Cornolti R, Adobati F, Fagiani A, Rossi L, Remuzzi G, Remuzzi A. *Acta Biomater*. 2006 Mar;2(2):221-7. PMID: 16701881
118. Permselective dysfunction of podocyte-podocyte contact upon angiotensin II unravels the molecular target for renoprotective intervention. Macconi D, Abbate M, Morigi M, Angioletti S, Mister M, Buelli S, Bonomelli M, Mundel P, Endlich K, Remuzzi A, Remuzzi G. *Am J Pathol*. 2006 Apr;168(4):1073-85. PMID: 16565484 Free PMC article.
119. Mechanisms of progression and regression of renal lesions of chronic nephropathies and diabetes. Remuzzi G, Benigni A, Remuzzi A. *J Clin Invest*. 2006 Feb;116(2):288-96. PMID: 16453013 Review.
120. Pathophysiologic implications of reduced podocyte number in a rat model of progressive glomerular injury. Macconi D, Bonomelli M, Benigni A, Plati T, Sangalli F, Longaretti L, Conti S, Kawachi H, Hill P, Remuzzi G, Remuzzi A. *Am J Pathol*. 2006 Jan;168(1):42-54. PMID: 16400008

121. ACE inhibition reduces glomerulosclerosis and regenerates glomerular tissue in a model of progressive renal disease. Remuzzi A, Gagliardini E, Sangalli F, Bonomelli M, Piccinelli M, Benigni A, Remuzzi G. *Kidney Int.* 2006 Apr;69(7):1124-30. PMID: 16395266
122. The effect of sodium ascorbate on the mechanical properties of hyaluronan-based vascular constructs. Arrigoni C, Camozzi D, Imberti B, Mantero S, Remuzzi A. *Biomaterials.* 2006 Feb;27(4):623-30. PMID: 16048730
123. Safety and efficacy of long-acting somatostatin treatment in autosomal-dominant polycystic kidney disease. Ruggenenti P, Remuzzi A, Ondei P, Fasolini G, Antiga L, Ene-Iordache B, Remuzzi G, Epstein FH. *Kidney Int.* 2005 Jul;68(1):206-16. PMID: 15954910 *Clinical Trial.*
124. Subcutaneous xenotransplantation of bovine pancreatic islets. Figliuzzi M, Cornolti R, Plati T, Rajan N, Adobati F, Remuzzi G, Remuzzi A. *Biomaterials.* 2005 Oct;26(28):5640-7. PMID: 15878369
125. Is regression of chronic nephropathies a therapeutic target? Remuzzi G, Remuzzi A. *J Am Soc Nephrol.* 2005 Apr;16(4):840-2. PMID: 15772248 *Review.*
126. The effect of media perfusion on three-dimensional cultures of human chondrocytes: integration of experimental and computational approaches. Raimondi MT, Boschetti F, Falcone L, Migliavacca F, Remuzzi A, Dubini G. *Biorheology.* 2004;41(3-4):401-10. PMID: 15299272
127. Vascular smooth muscle cells on hyaluronic acid: culture and mechanical characterization of an engineered vascular construct. Remuzzi A, Mantero S, Colombo M, Morigi M, Binda E, Camozzi D, Imberti B. *Tissue Eng.* 2004 May-Jun;10(5-6):699-710. PMID: 15265287
128. Pharmacological and clinical profile of valsartan. Remuzzi A, Perico N, Remuzzi G. *Drugs Today (Barc).* 1998 Nov;34(11):973-86. PMID: 14743265
129. A comparative evaluation of chondrocyte/scaffold constructs for cartilage tissue engineering. Raimondi MT, Falcone L, Colombo M, Remuzzi A, Marinoni E, Marazzi M, Rapisarda V, Pietrabissa R. *J Appl Biomater Biomech.* 2004 Jan-Apr;2(1):55-64. PMID: 20803451
130. Mechanobiology of engineered cartilage cultured under a quantified fluid-dynamic environment. Raimondi MT, Boschetti F, Falcone L, Fiore GB, Remuzzi A, Marinoni E, Marazzi M, Pietrabissa R. *Biomech Model Mechanobiol.* 2002 Jun;1(1):69-82. doi: 10.1007/s10237-002-0007-y. PMID: 14586708
131. The response of endothelial cells to fluid shear stress using a co-culture model of the arterial wall. Imberti B, Seliktar D, Nerem RM, Remuzzi A. *Endothelium.* 2002;9(1):11-23. PMID: 12901357
132. Computational geometry for patient-specific reconstruction and meshing of blood vessels from MR and CT angiography. Antiga L, Ene-Iordache B, Remuzzi A. *IEEE Trans Med Imaging.* 2003 May;22(5):674-84. PMID: 12846436
133. Radial artery remodeling in response to shear stress increase within arteriovenous fistula for hemodialysis access. Ene-Iordache B, Mosconi L, Antiga L, Bruno S, Anghileri A, Remuzzi G, Remuzzi A. *Endothelium.* 2003;10(2):95-102. PMID: 12791517

134. Effects of combined ACE inhibitor and angiotensin II antagonist treatment in human chronic nephropathies. Campbell R, Sangalli F, Peticucci E, Aros C, Viscarra C, Perna A, Remuzzi A, Bertocchi F, Fagiani L, Remuzzi G, Ruggenenti P. *Kidney Int.* 2003 Mar;63(3):1094-103. PMID: 12631093 Clinical Trial.
135. Radial artery wall shear stress evaluation in patients with arteriovenous fistula for hemodialysis access. Remuzzi A, Ene-Iordache B, Mosconi L, Bruno S, Anghileri A, Antiga L, Remuzzi G. *Biorheology.* 2003;40(1-3):423-30. PMID: 12454436
136. Effect of high dose ramipril with or without indomethacin on glomerular selectivity. Pisoni R, Ruggenenti P, Sangalli F, Lepre MS, Remuzzi A, Remuzzi G. *Kidney Int.* 2002 Sep;62(3):1010-9. PMID: 12164885 Clinical Trial.
137. Effect of angiotensin II antagonism on the regression of kidney disease in the rat. Remuzzi A, Gagliardini E, Donadoni C, Fassi A, Sangalli F, Lepre MS, Remuzzi G, Benigni A. *Kidney Int.* 2002 Sep;62(3):885-94. PMID: 12164870
138. Effect of hemodynamic conditions on arteriovenous fistula for hemodialysis access. Ene-Iordache B, Bruno S, Remuzzi A, Remuzzi G. *Contrib Nephrol.* 2002;(137):54-9. PMID: 12101991
139. Geometric reconstruction for computational mesh generation of arterial bifurcations from CT angiography. Antiga L, Ene-Iordache B, Caverni L, Cornalba GP, Remuzzi A. *Comput Med Imaging Graph.* 2002 Jul-Aug;26(4):227-35. PMID: 12074917
140. Angiotensin-converting enzyme inhibition prevents glomerular-tubule disconnection and atrophy in passive Heymann nephritis, an effect not observed with a calcium antagonist. Benigni A, Gagliardini E, Remuzzi A, Corna D, Remuzzi G. *Am J Pathol.* 2001 Nov;159(5):1743-50. PMID: 11696435
141. Automatic generation of glomerular capillary topological organization. Antiga L, Ene-Iordache B, Remuzzi G, Remuzzi A. *Microvasc Res.* 2001 Nov;62(3):346-54. PMID: 11678637
142. Verotoxin-1-induced up-regulation of adhesive molecules renders microvascular endothelial cells thrombogenic at high shear stress. Morigi M, Galbusera M, Binda E, Imberti B, Gastoldi S, Remuzzi A, Zoja C, Remuzzi G. *Blood.* 2001 Sep 15;98(6):1828-35. PMID: 11535517
143. Computational fluid dynamics of a vascular access case for hemodialysis. Ene-Iordache B, Mosconi L, Remuzzi G, Remuzzi A. *J Biomech Eng.* 2001 Jun;123(3):284-92. PMID: 11476373
144. Post-transplant renal artery stenosis: the hemodynamic response to revascularization. Ruggenenti P, Mosconi L, Bruno S, Remuzzi A, Sangalli F, Lepre MS, Agazzi R, Nani R, Fasolini G, Remuzzi G. *Kidney Int.* 2001 Jul;60(1):309-18. PMID: 11422766
145. Ringtail in suckling Munich Wistar Fromter rats: a histopathologic study. Crippa L, Gobbi A, Ceruti RM, Clifford CB, Remuzzi A, Scanziani E. *Comp Med.* 2000 Oct;50(5):536-9. PMID: 11099138
146. Influence of donor age on bovine pancreatic islet isolation. Figliuzzi M, Zappella S, Morigi M, Rossi P, Marchetti P, Remuzzi A. *Transplantation.* 2000 Oct 15;70(7):1032-7. PMID: 11045639
147. Localization of cerebral arteriovenous malformations using digital angiography.

Vitali A, Salmoiraghi P, Butti I, Pompei L, Sarti E, Caverni L, Petroboni E, Merli R, Remuzzi A. *Med Phys.* 2000 Sep;27(9):2024-30. PMID: 11011729

148. A novel interpretation of the role of von Willebrand factor in thrombotic microangiopathies based on platelet adhesion studies at high shear rate flow. Galbusera M, Remuzzi A, Benigni A, Rossi C, Remuzzi G. *Am J Kidney Dis.* 2000 Oct;36(4):695-702. PMID: 11007670
149. Shear stress-induced cytoskeleton rearrangement mediates NF-kappaB-dependent endothelial expression of ICAM-1. Imberti B, Morigi M, Zoja C, Angioletti S, Abbate M, Remuzzi A, Remuzzi G. *Microvasc Res.* 2000 Sep;60(2):182-8. PMID: 10964593
150. Shear stress downregulation of platelet-derived growth factor receptor-beta and matrix metalloprotease-2 is associated with inhibition of smooth muscle cell invasion and migration. Palumbo R, Gaetano C, Melillo G, Toschi E, Remuzzi A, Capogrossi MC. *Circulation.* 2000 Jul 11;102(2):225-30. PMID: 10889135
151. Effect of angiotensin-converting enzyme inhibition on glomerular basement membrane permeability and distribution of zonula occludens-1 in MWF rats. Macconi D, Ghilardi M, Bonassi ME, Mohamed EI, Abbate M, Colombi F, Remuzzi G, Remuzzi A. *J Am Soc Nephrol.* 2000 Mar;11(3):477-89. PMID: 10703671
152. ACE inhibition improves glomerular size selectivity in patients with idiopathic membranous nephropathy and persistent nephrotic syndrome. Ruggenenti P, Mosconi L, Vendramin G, Moriggi M, Remuzzi A, Sangalli F, Remuzzi G. *Am J Kidney Dis.* 2000 Mar;35(3):381-91. PMID: 10692263 Clinical Trial.
153. Angiotensin-converting enzyme inhibition prevents loss of glomerular hydraulic permeability in passive heyman nephritis. Remuzzi A, Monaci N, Bonassi ME, Corna D, Zoja C, Mohammed EI, Remuzzi G. *Lab Invest.* 1999 Dec;79(12):1501-10. PMID: 10616201
154. ACE inhibition induces regression of proteinuria and halts progression of renal damage in a genetic model of progressive nephropathy. Remuzzi A, Fassi A, Bertani T, Perico N, Remuzzi G. *Am J Kidney Dis.* 1999 Oct;34(4):626-32. PMID: 10516341
155. Xenogeneic serum promotes leukocyte-endothelium interaction under flow through two temporally distinct pathways: role of complement and nuclear factor-kappaB. Morigi M, Zoja C, Colleoni S, Angioletti S, Imberti B, Donadelli R, Remuzzi A, Remuzzi G. *J Am Soc Nephrol.* 1999 Oct;10(10):2197-207. PMID: 10505697
156. Adhesion of tumor cells under flow. Remuzzi A, Giavazzi R. *Methods Mol Biol.* 1999;96:153-7. PMID: 10098133 Review.
157. ACE inhibition and ANG II receptor blockade improve glomerular size-selectivity in IgA nephropathy. Remuzzi A, Perico N, Sangalli F, Vendramin G, Moriggi M, Ruggenenti P, Remuzzi G. *Am J Physiol.* 1999 Mar;276(3):F457-66. PMID: 10070170 Clinical Trial.
158. Glomerular size-selective dysfunction in NIDDM is not ameliorated by ACE inhibition or by calcium channel blockade. Ruggenenti P, Mosconi L, Sangalli F, Casiraghi F, Gambarà V, Remuzzi G, Remuzzi A. *Kidney Int.* 1999 Mar;55(3):984-94. PMID: 10027935 Clinical Trial.
159. Beneficial effects of calcium channel blockade on acute glomerular hemodynamic changes induced by cyclosporine. Fassi A, Sangalli F, Colombi F, Perico N, Remuzzi G, Remuzzi A. *Am J Kidney Dis.* 1999 Feb;33(2):267-75. PMID: 10023637

160. The antiproteinuric effect of angiotensin antagonism in human IgA nephropathy is potentiated by indomethacin. Perico N, Remuzzi A, Sangalli F, Azzollini N, Mister M, Ruggenenti P, Remuzzi G. *J Am Soc Nephrol.* 1998 Dec;9(12):2308-17. PMID: 9848785 Clinical Trial.
161. Xenogeneic human serum promotes leukocyte adhesion to porcine endothelium under flow conditions, possibly through the activation of the transcription factor NF-kappa B. Morigi M, Zoja C, Colleoni S, Angioletti S, Imberti B, Remuzzi A, Remuzzi G. *Xenotransplantation.* 1998 Feb;5(1):57-60. PMID: 9507734
162. Assessment of glomerular size-selective function with fractional clearance of neutral dextran. Remuzzi A, Remuzzi G. *J Lab Clin Med.* 1998 Nov;132(5):360-2. PMID: 9823928 Review.
163. Progressive glomerular injury in the MWF rat is predicted by inborn nephron deficit. Fassi A, Sangalli F, Maffi R, Colombi F, Mohamed EI, Brenner BM, Remuzzi G, Remuzzi A. *J Am Soc Nephrol.* 1998 Aug;9(8):1399-406. PMID: 9697661
164. Leukocyte-endothelial interaction is augmented by high glucose concentrations and hyperglycemia in a NF-kB-dependent fashion. Morigi M, Angioletti S, Imberti B, Donadelli R, Micheletti G, Figliuzzi M, Remuzzi A, Zoja C, Remuzzi G. *J Clin Invest.* 1998 May 1;101(9):1905-15. PMID: 9576755
165. Identification of a novel gene--SSK1--in human endothelial cells exposed to shear stress. Donadelli R, Benatti L, Remuzzi A, Morigi M, Gullans SR, Benigni A, Remuzzi G, Noris M. *Biochem Biophys Res Commun.* 1998 May 29;246(3):881-7. PMID: 9618306
166. Prevention of renal injury in diabetic MWF rats by angiotensin II antagonism. Remuzzi A, Fassi A, Sangalli F, Malanchini B, Mohamed EI, Bertani T, Remuzzi G. *Exp Nephrol.* 1998 Jan-Feb;6(1):28-38. PMID: 9523171
167. Numerical analysis of viscous flow through fibrous media: a model for glomerular basement membrane permeability. Palassini M, Remuzzi A. *Am J Physiol.* 1998 Jan;274(1):F223-31. PMID: 9458843
168. Selective dietary restriction of protein and calorie intakes prevents spontaneous proteinuria in male MWF rats. Macconi D, Laurens W, Paris S, Battaglia C, Bertani T, Remuzzi G, Remuzzi A. *Exp Nephrol.* 1997 Sep-Oct;5(5):404-13. PMID: 9386977
169. Fluid shear stress modulates von Willebrand factor release from human vascular endothelium. Galbusera M, Zoja C, Donadelli R, Paris S, Morigi M, Benigni A, Figliuzzi M, Remuzzi G, Remuzzi A. *Blood.* 1997 Aug 15;90(4):1558-64. PMID: 9269774
170. Cyclosporine enhances leukocyte adhesion to vascular endothelium under physiologic flow conditions. Gallego MJ, Zoja C, Morigi M, Micheletti G, Imberti B, Foppolo M, Remuzzi A, Remuzzi G. *Am J Kidney Dis.* 1996 Jul;28(1):23-31. PMID: 8712218
171. Angiotensin II modulates glomerular capillary permselectivity in rat isolated perfused kidney. Lapinski R, Perico N, Remuzzi A, Sangalli F, Benigni A, Remuzzi G. *J Am Soc Nephrol.* 1996 May;7(5):653-60. PMID: 8738798
172. Impact of renin-angiotensin system blockade on structure and function of glomerular membrane components in animal models of kidney disease. Remuzzi A, Mohamed EI. *Exp Nephrol.* 1996;4 Suppl 1:27-33. PMID: 9001894 Review.

173. Comparison of the effects of angiotensin-converting enzyme inhibition and angiotensin II receptor blockade on the evolution of spontaneous glomerular injury in male MWF/Ztm rats. Remuzzi A, Malanchini B, Battaglia C, Bertani T, Remuzzi G. *Exp Nephrol*. 1996 Jan-Feb;4(1):19-25. PMID: 8788596
174. Verotoxin-1 promotes leukocyte adhesion to cultured endothelial cells under physiologic flow conditions. Morigi M, Micheletti G, Figliuzzi M, Imberti B, Karmali MA, Remuzzi A, Remuzzi G, Zoja C. *Blood*. 1995 Dec 15;86(12):4553-8. PMID: 8541545
175. Clinical coagulation laboratory and oral anticoagulant therapy treatment. Instrumentation and methodology. Barbui T, Finazzi G, Remuzzi A. *Thromb Haemost*. 1995 Jul;74(1):511-4. PMID: 8578515
176. PAF mediates neutrophil adhesion to thrombin or TNF-stimulated endothelial cells under shear stress. Macconi D, Foppolo M, Paris S, Noris M, Aiello S, Remuzzi G, Remuzzi A. *Am J Physiol*. 1995 Jul;269(1 Pt 1):C42-7. PMID: 7631759
177. Three-dimensional analysis of glomerular morphology in patients with subtotal nephrectomy. Remuzzi A, Mazerska M, Gephardt GN, Novick AC, Brenner BM, Remuzzi G. *Kidney Int*. 1995 Jul;48(1):155-62. PMID: 7564072
178. Mathematical description of transport of water and macromolecules through the glomerular capillary wall. Remuzzi A. *Curr Opin Nephrol Hypertens*. 1995 Jul;4(4):343-8. PMID: 7552101 Review.
179. Capillary network structure does not affect theoretical analysis of glomerular size selectivity. Remuzzi A, Ene-Iordache B. *Am J Physiol*. 1995 May;268(5 Pt 2):F972-9. PMID: 7771527
180. ACE inhibition prevents renal failure and death in uninephrectomized MWF/Ztm rats. Remuzzi A, Benigni A, Malanchini B, Bruzzi I, Foglieni C, Remuzzi G. *Kidney Int*. 1995 May;47(5):1319-26. PMID: 7637261
181. The effects of nonsteroidal anti-inflammatory drugs on glomerular filtration of proteins and their therapeutic utility. Remuzzi A, Remuzzi G. *Semin Nephrol*. 1995 May;15(3):236-43. PMID: 7631050 Review.
182. Direct podocyte damage in the single nephron leads to albuminuria in vivo. Laurens W, Battaglia C, Foglieni C, De Vos R, Malanchini B, Van Damme B, Vanrenterghem Y, Remuzzi G, Remuzzi A. *Kidney Int*. 1995 Apr;47(4):1078-86. PMID: 7783404
183. Fluid shear stress modulates surface expression of adhesion molecules by endothelial cells. Morigi M, Zoja C, Figliuzzi M, Foppolo M, Micheletti G, Bontempelli M, Saronni M, Remuzzi G, Remuzzi A. *Blood*. 1995 Apr 1;85(7):1696-703. PMID: 7535583
184. Nitric oxide synthesis by cultured endothelial cells is modulated by flow conditions. Noris M, Morigi M, Donadelli R, Aiello S, Foppolo M, Todeschini M, Orisio S, Remuzzi G, Remuzzi A. *Circ Res*. 1995 Apr;76(4):536-43. PMID: 7534657
185. Numerical analysis of blood flow in reconstructed glomerular capillary segments. Iordache BE, Remuzzi A. *Microvasc Res*. 1995 Jan;49(1):1-11. PMID: 7746158
186. Effects of angiotensin-converting enzyme inhibition on glomerular capillary wall ultrastructure in MWF/Ztm rats. Iordache BE, Imberti O, Foglieni C, Remuzzi G, Bertani T, Remuzzi A. *J Am Soc Nephrol*. 1994 Dec;5(6):1378-84. PMID: 7894005

187. Recombinant versus high-sensitivity conventional thromboplastin: a randomized clinical study in patients on oral anticoagulation. Finazzi G, Falanga A, Galli M, Cortelazzo S, Remuzzi A, Barbui T. *Thromb Haemost.* 1994 Dec;72(6):804-7. PMID: 7740445 Clinical Trial.
188. Dissociation between antiproteinuric and antihypertensive effect of angiotensin converting enzyme inhibitors in rats. Remuzzi A, Imberti O, Puntorieri S, Malanchini B, Macconi D, Magrini L, Bertani T, Remuzzi G. *Am J Physiol.* 1994 Dec;267(6 Pt 2):F1034-44. PMID: 7528985
189. Cytokines and cell adhesion molecules in tumor-endothelial cell interaction and metastasis. Chirivi RG, Nicoletti MI, Remuzzi A, Giavazzi R. *Cell Adhes Commun.* 1994 Jul;2(3):219-24. PMID: 7827958 Review.
190. Glomerular perm-selective function. Remuzzi A, Remuzzi G. *Kidney Int.* 1994 Feb;45(2):398-402. PMID: 8164425 Review.
191. Rolling and adhesion of human tumor cells on vascular endothelium under physiological flow conditions. Giavazzi R, Foppolo M, Dossi R, Remuzzi A. *J Clin Invest.* 1993 Dec;92(6):3038-44. PMID: 7504697
192. Short- and long-term effect of angiotensin II receptor blockade in rats with experimental diabetes. Remuzzi A, Perico N, Amuchastegui CS, Malanchini B, Mazerska M, Battaglia C, Bertani T, Remuzzi G. *J Am Soc Nephrol.* 1993 Jul;4(1):40-9. PMID: 8400068
193. Thrombotic and hemorrhagic complications in patients with mechanical heart valve prosthesis attending an anticoagulation clinic. Cortelazzo S, Finazzi G, Viero P, Galli M, Remuzzi A, Parenzan L, Barbui T. *Thromb Haemost.* 1993 Apr 1;69(4):316-20. PMID: 8497842
194. Supernatant of endothelial cells exposed to laminar flow inhibits mesangial cell proliferation. Morigi M, Zoja C, Figliuzzi M, Remuzzi G, Remuzzi A. *Am J Physiol.* 1993 Apr;264(4 Pt 1):C1080-3. PMID: 8476014
195. Albumin treatment reduces in vitro platelet deposition to PMMA dialysis membrane. Remuzzi A, Boccardo P. *Int J Artif Organs.* 1993 Mar;16(3):128-31. PMID: 8314634
196. Pathophysiologic implications of proteinuria in a rat model of progressive glomerular injury. Remuzzi A, Puntorieri S, Alfano M, Macconi D, Abbate M, Bertani T, Remuzzi G. *Lab Invest.* 1992 Nov;67(5):572-9. PMID: 1434536
197. Three-dimensional reconstructed glomerular capillary network: blood flow distribution and local filtration. Remuzzi A, Brenner BM, Pata V, Tebaldi G, Mariano R, Belloro A, Remuzzi G. *Am J Physiol.* 1992 Sep;263(3 Pt 2):F562-72. PMID: 1415586
198. Renal protective effect of angiotensin-converting enzyme inhibition in aging rats. Zoja C, Remuzzi A, Corna D, Perico N, Bertani T, Remuzzi G. *Am J Med.* 1992 Apr 27;92(4B):60S-63S. PMID: 1580281
199. Nature and extent of glomerular injury induced by cyclosporine in heart transplant patients. Bertani T, Ferrazzi P, Schieppati A, Ruggenti P, Gamba A, Parenzan L, Mecca G, Perico N, Imberti O, Remuzzi A, et al. *Kidney Int.* 1991 Aug;40(2):243-50. PMID: 1942772

200. Platelet-activating factor alters glomerular barrier size selectivity for macromolecules in rats. Perico N, Remuzzi A, Dadan J, Battaglia C, Remuzzi G. *Am J Physiol*. 1991 Jul;261(1 Pt 2):F85-90. PMID: 1713421
201. Angiotensin converting enzyme inhibition improves glomerular size-selectivity in IgA nephropathy. Remuzzi A, Peticucci E, Ruggenti P, Mosconi L, Limonta M, Remuzzi G. *Kidney Int*. 1991 Jun;39(6):1267-73. PMID: 1716713
202. Morphometrical analysis of glomerular changes induced by cyclosporine in the rat. Perico N, Remuzzi A, Imberti O, Cavallotti D, Bertani T, Remuzzi G. *Am J Kidney Dis*. 1991 May;17(5):537-43. PMID: 2024655
203. Renoprotective effect of low iron diet and its consequence on glomerular hemodynamics. Remuzzi A, Puntorieri S, Brugnetti B, Bertani T, Remuzzi G. *Kidney Int*. 1991 Apr;39(4):647-52. PMID: 2051721
204. Low-protein diet and glomerular size-selective function in membranous glomerulopathy. Remuzzi A, Peticucci E, Battaglia C, D'Amico G, Gentile MG, Remuzzi G. *Am J Kidney Dis*. 1991 Mar;17(3):317-22. PMID: 1996576 Clinical Trial.
205. In vitro platelet adhesion to dialysis membranes. Remuzzi A, Boccardo P, Benigni A. *Nephrol Dial Transplant*. 1991;6 Suppl 2:36-9. PMID: 1866066
206. Three-dimensional morphometric analysis of segmental glomerulosclerosis in the rat. Remuzzi A, Pergolizzi R, Mauer MS, Bertani T. *Kidney Int*. 1990 Nov;38(5):851-6. PMID: 2266668
207. Glomerular response to hyperglycemia in human diabetic nephropathy. Remuzzi A, Viberti G, Ruggenti P, Battaglia C, Pagni R, Remuzzi G. *Am J Physiol*. 1990 Oct;259(4 Pt 2):F545-52. PMID: 2221091
208. Angiotensin converting enzyme inhibition ameliorates glomerular filtration of macromolecules and water and lessens glomerular injury in the rat. Remuzzi A, Puntorieri S, Battaglia C, Bertani T, Remuzzi G. *J Clin Invest*. 1990 Feb;85(2):541-9. doi: 10.1172/JCI114470. PMID: 1688888 Free PMC article.
209. Angiotensin-converting enzyme inhibition ameliorates the defect in glomerular size selectivity in hyponatremic hypertensive syndrome. Remuzzi A, Schieppati A, Battaglia C, Remuzzi G. *Am J Kidney Dis*. 1989 Sep;14(3):170-7. PMID: 2476029
210. Theoretical effects of network structure on glomerular filtration of macromolecules. Remuzzi A, Deen WM. *Am J Physiol*. 1989 Jul;257(1 Pt 2):F152-8. PMID: 2750920
211. Sex related differences in glomerular ultrafiltration and proteinuria in Munich-Wistar rats. Remuzzi A, Puntorieri S, Mazzoleni A, Remuzzi G. *Kidney Int*. 1988 Oct;34(4):481-6. PMID: 3199667
212. Low-protein diet prevents glomerular damage in experimental nephrosis. Zoja C, Remuzzi A, Remuzzi G. *Contrib Nephrol*. 1988;60:94-100. PMID: 3345678
213. Glomerular size selectivity in nephrotic rats exposed to diets with different protein content. Remuzzi A, Battaglia C, Rossi L, Zoja C, Remuzzi G. *Am J Physiol*. 1987 Aug;253(2 Pt 2):F318-27. PMID: 3618794
214. Proteinuria and glomerulosclerosis. New clues from experimental models. Remuzzi A, Remuzzi G. *Contrib Nephrol*. 1987;55:50-9. PMID: 3549154 Review.

215. Role of renal prostaglandins in normal and nephrotic rats with diet-induced hyperfiltration. Benigni A, Zoja C, Remuzzi A, Orisio S, Piccinelli A, Remuzzi G. *J Lab Clin Med.* 1986 Sep;108(3):230-40. PMID: 3462281
216. Theoretical effects of a distribution of capillary dimensions on glomerular ultrafiltration. Remuzzi A, Deen WM. *Microvasc Res.* 1986 Jul;32(1):131-44. PMID: 3736445
217. Turbulent fluid shear stress induces vascular endothelial cell turnover in vitro. Davies PF, Remuzzi A, Gordon EJ, Dewey CF Jr, Gimbrone MA Jr. *Proc Natl Acad Sci U S A.* 1986 Apr;83(7):2114-7. PMID: 3457378 Free PMC article.
218. Platelet adhesion to subendothelium--effect of shear rate, hematocrit and platelet count on the dynamic equilibrium between platelets adhering to and detaching from the surface. Remuzzi A, Languino LR, Costantini V, Guardabasso V, de Gaetano G, Dejana E. *Thromb Haemost.* 1985 Dec 17;54(4):857-61. PMID: 4089819
219. Low-protein diet prevents glomerular damage in adriamycin-treated rats. Remuzzi G, Zoja C, Remuzzi A, Rossini M, Battaglia C, Brogгинi M, Bertani T. *Kidney Int.* 1985 Jul;28(1):21-7. PMID: 4046323
220. Human platelet adhesion to subendothelium under controlled hemodynamic conditions: a methodological approach. Dejana E, Remuzzi A, Languino LR, Costantini V, Lauri D, Zanetti A, de Gaetano G. *Methods Find Exp Clin Pharmacol.* 1985 Mar;7(3):153-9. PMID: 4010388
221. Orientation of endothelial cells in shear fields in vitro. Remuzzi A, Dewey CF Jr, Davies PF, Gimbrone MA Jr. *Biorheology.* 1984;21(4):617-30. PMID: 6487771

Capitoli di Libri

- 1 Perico N, **Remuzzi A**, Remuzzi G. Brenner and Rector's Vol.2 p 1780 Mechanisms and Consequence of Proteinuria, Di Karl Skorecki, Glenn M. Chertow, Philip A. Marsden, Maarten W. Taal, Alan S. L. Yu, Valerie Luyckx Editors, Elsevier, ISBN 978-1-4557-4836-5.
- 2 **Remuzzi A**, Bonandrini B, Figliuzzi M (2013). Dall'ingegneria dei tessuti alla rigenerazione di organi. Gruppo Nazionale di Bioingegneria Vol. 32 pag. 309-323. Approccio integrato per la medicina rigenerativa, Patron Editore, ISBN 8855532419.
- 3 Perico N, **Remuzzi A**, Remuzzi G (2011). Mechanisms and Consequences of Proteinuria. In: Brenner and Rector's The Kidney. p. 1972-1999, Philadelphia:Elsevier/Saunders, ISBN:978-1-4160-6193-9.
- 4 **Remuzzi A** (2009). Applicazioni cliniche dell'ingegneria dei tessuti. Collana di Ingegneria Biomedica Vol. 15 Cap. 5 pag. 147-192. Fondamenti di ingegneria dei tessuti per la medicina rigenerativa, Patron Editore, ISBN: 8855530392.
- 5 **Remuzzi A**, Mantero S. (2002). Ingegneria del tessuto vascolare. Gruppo Nazionale di Bioingegneria Vol 21 pag. 255-276. Ingegneria dei tessuti Biologici, Patron Editore, ISBN 555-26642.

- 6 **Remuzzi A** (2001). Trasporto dell'ossigenonei tessuti Biologici. Gruppo Nazionale di Bioingegneria Vol. 20 pag. 113-122. Bioingegneria del sistema Respiratorio, Patron Editore, ISBN 55526049.
- 7 **Remuzzi A.**, Giavazzi R. (1999). Methods in molecular biology, Vol. 96: Adhesion protein Protocols. Edited by E. Dejana e M. Corada. Humana Press Inc., Totowa, NJ 96: 153-7, 1999.
- 8 **Remuzzi A** (1997). Modelli teorici della filtrazione glomerulare di acqua e macromolecole. Gruppo Nazionale di Bioingegneria Vol 16 pag. 301-323. Meccanica nei tessuti Biologici, Patron Editore, ISBN 5552416X.

Bergamo, Novembre 2021

Andrea Remuzzi