

# Curriculum Vitae Europass



## Informazioni personali

Nome / Cognome

Indirizzo

Telefono

Email

Nazionalità

Data di nascita

Sesso

Madrelingua

*Autovalutazione  
Livello europeo<sup>(\*)</sup>*

Inglese

Tedesco

**Andrea/Nobili**

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Italiana

11 Giugno, 1974

Maschio

**Italiano**



	Comprensione		Parlato		Scritto	
	Ascolto	Lettura	Interazione	Produzione orale	C2	C2
Inglese	C2 Livello avanzato					
Tedesco	A2 Livello elementare					

*(\*) Quadro comune europeo di riferimento per le lingue (ERL)*

## Percorso formativo

2003

Dottorato in Ingegneria dei Materiali, Università di Modena e Reggio Emilia, con una tesi sulla interazione magneto-elastica

1996

Diploma di laurea cum laude in Ingegneria Meccanica, Università di Modena e Reggio Emilia

## Posizione accademica

2008 - 2019

Ricercatore Universitario di Ruolo presso il Dipartimento di Ingegneria “Enzo Ferrari”, Modena

2019 - oggi

Professore Associato presso il Dipartimento di Ingegneria “Enzo Ferrari”, Modena

## Attività Scientifica

ORCID 0000-0002-9657-5903 Codice Scopus 9846201500

## Indici quantitativi

Scopus H-index 12 Citazioni Scopus 468 Documenti Scopus 46

Numero medio di citazioni per pubblicazione (Scopus) 10.17

Web of Science H-index 11 Citazioni WoS 386 senza auto-citazioni 295 Documenti WoS 40

Numero medio di citazioni per pubblicazione (WoS) 9.65

## Pubblicazioni su Rivista Internazionale Scopus e/o Web of Science

1. A Nobili, V Volpini, and C Signorini. Antiplane Stoneley waves propagating at the interface between two couple stress elastic materials. *Acta Mechanica*. accepted, IF=2.102 (Scopus cites:NA)
2. E Radi, G Bianchi, and A Nobili. Bounds to the pull-in voltage of a MEMS/NEMS beam with surface elasticity. *Applied Mathematical Modelling*, 91:1211–1226, 2021. IF=3.633 (Scopus cites:NA)
3. G Mikhasev and A Nobili. On the solution of the purely nonlocal theory of beam elasticity as a limiting case of the two-phase theory. *International Journal of Solids and Structures*, 190:47–57, 2020. IF=3.123 (Scopus cites:2)
4. C Signorini, A Sola, B Malchiodi, A Nobili, and A Gatto. Failure mechanism of silica coated polypropylene fibres for fibre reinforced concrete (FRC). *Construction and Building Materials*, 236:117549, 2020. IF=4.419 (Scopus cites:7)
5. A Nobili, E Radi, and C Signorini. A new Rayleigh-like wave in guided propagation of antiplane waves in couple stress materials. *Proceedings of the Royal Society A*, 476(2235):20190822, 2020. IF=2.741 (Scopus cites:1)
6. C Signorini, A Nobili, A Sola, and M Messori. Designing epoxy viscosity for optimal mechanical performance of coated glass textile reinforced mortar (gtrm) composites. *Construction and Building Materials*, 233:117325, 2020. IF=4.419 (Scopus cites:7)
7. A Nobili, E Radi, and A Vellender. Diffraction of antiplane shear waves and stress concentration in a cracked couple stress elastic material with micro inertia. *Journal of the Mechanics and Physics of Solids*, 124:663–680, 2019. IF=5.000 (Scopus cites:4)
8. C Signorini, A Nobili, and C Siligardi. Sustainable mineral coating of alkali-resistant glass fibres in textile-reinforced mortar composites for structural purposes. *Journal of Composite Materials*, 53(28-30):4203–4213, 2019. IF=1.972 (Scopus cites:7)
9. M Messori, A Nobili, A Signorini, and A Sola. Effect of high temperature exposure on epoxy-coated glass textile reinforced mortar (GTRM) composites. *Construction and Building Materials*, 212:765 – 774, 2019. IF=4.419 (Scopus cites:7)
10. C Signorini, A Sola, A Nobili, and C Siligardi. Lime-cement textile reinforced mortar (TRM) with modified interphase. *Journal of applied biomaterials & functional materials*, 17(1):2280800019827823, 2019. IF=2.000 (Scopus cites:7)
11. B Erbaş, J Kaplunov, A Nobili, and G Kılıç. Dispersion of elastic waves in a layer interacting with a Winkler foundation. *The Journal of the Acoustical Society of America*, 144(5):2918–2925, 2018. IF=1.908 (Scopus cites:1)
12. C Signorini, A Nobili, and FO Falope. Mechanical performance and crack pattern analysis of aged carbon fabric cementitious matrix (CFRCM) composites. *Composite Structures*, 202:1114–1120, 2018. IF=5.138 (Scopus cites:9)
13. M Messori, A Nobili, C Signorini, and A Sola. Mechanical performance of epoxy coated AR-glass fabric Textile Reinforced Mortar: Influence of coating thickness and formulation. *Composites Part B: Engineering*, 149:135–143, 2018. IF=7.635 (Scopus cites:13)
14. A Nobili and Danila A Prikazchikov. Explicit formulation for the Rayleigh wave field induced by surface stresses in an orthorhombic half-plane. *European Journal of Mechanics-A/Solids*, 70:86–94, 2018. IF=3.786 (Scopus cites:10)

15. C Signorini, A Nobile, EI Cedillo Gonzalez, and C Siligardi. Silica coating for interphase bond enhancement of carbon and AR-glass textile reinforced mortar (TRM). *Composites Part B: Engineering*, 141:191–202, 2018. IF=7.635 (Scopus cites:18)
16. L Lanzoni, E Radi, and A Nobile. Stress and pressure fields around two wellbores in a poroelastic medium. *Meccanica*, 53(3):639–657, 2018. IF=2.153 (Scopus cites:3)
17. A Nobile, E Radi, and L Lanzoni. Flexural edge waves generated by steady-state propagation of a loaded rectilinear crack in an elastically supported thin plate. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, 473(2204):20170265, 2017. IF=2.741 (Scopus cites:4)
18. J Kaplunov and A Nobile. The edge waves on a Kirchhoff plate bilaterally supported by a two-parameter elastic foundation. *Journal of Vibration and Control*, 23(12):2014–2022, 2017. IF=2.169 (Scopus cites:12)
19. A Nobile and C Signorini. On the effect of curing time and environmental exposure on impregnated carbon fabric reinforced cementitious matrix (CFRCM) composite with design considerations. *Composites Part B: Engineering*, 112:300–313, 2017. IF=7.635 (Scopus cites:23)
20. A Nobile and FO Falope. Impregnated carbon fabric-reinforced cementitious matrix composite for rehabilitation of the Finale Emilia hospital roofs: Case study. *Journal of composites for construction*, 21(4):05017001, 2017. IF=2.606 (Scopus cites:16)
21. J. Kaplunov and A. Nobile. Multi-parametric analysis of strongly inhomogeneous periodic waveguides with internal cutoff frequencies. *Mathematical Methods in the Applied Sciences*, 40(9):3381–3392, 2017. IF=1.77 (Scopus cites:8)
22. J Kaplunov and A Nobile. A robust approach for analysing dispersion of elastic waves in an orthotropic cylindrical shell. *Journal of Sound and Vibration*, 401:23–35, 2017. IF=3.123 (Scopus cites:13)
23. M Destrade, YB Fu, and A Nobile. Edge wrinkling in elastically supported pre-stressed incompressible isotropic plates. *Proceedings of the Royal Society of London A: Mathematical, Physical and Engineering Sciences*, 472(2193), 2016. IF=2.741 (Scopus cites:11)
24. J. Kaplunov and A. Nobile. Multi-parametric analysis of strongly inhomogeneous periodic waveguides with internal cutoff frequencies. *Mathematical Methods in the Applied Sciences*, 2016. IF=1.77 (Scopus cites:8)
25. A Kudaibergenov, A Nobile, and L Prikazchikova. On low-frequency vibrations of a composite string with contrast properties for energy scavenging fabric devices. *Journal of Mechanics of Materials and Structures*, 11(3):231–243, 2016. IF=1.094 (Scopus cites:14)
26. A Nobile, E Radi, and L Lanzoni. On the effect of the backup plate stiffness on the brittle failure of a ceramic armor. *Acta Mechanica*, 227(1):159–172, 2016. IF=2.102 (Scopus cites:5)
27. L Lanzoni, A Nobile, E Radi, and A Sorzia. Failure mechanism of FRC slabs on non-local ground. *Meccanica*, 51(10):2473–2492, 2016. IF=2.153 (Scopus cites:4)
28. A Nobile. Durability assessment of impregnated Glass Fabric Reinforced Cementitious Matrix (GFRCM) composites in the alkaline and saline environments. *Construction and Building Materials*, 105:465–471, 2016. IF=4.419 (Scopus cites:29)
29. L Lanzoni, A Nobile, E Radi, and A Sorzia. Axisymmetric loading of an elastic-plastic plate on a general two-parameter foundation. *Journal of Mechanics of Materials and Structures*, 10(4):459–479, 2015. IF=1.094 (Scopus cites:6)
30. A Nobile. On the generalization of the Timoshenko beam model based on the micropolar linear theory: Static case. *Mathematical Problems in Engineering*, 2015, 2015. IF=1.009 (Scopus cites:4)
31. A Nobile and AM Tarantino. Pseudo-spectral methods in one-dimensional magnetostriction. *Meccanica*, 50(1):99–108, 2015. IF=2.153 (Scopus cites:1)
32. A Nobile, E Radi, and L Lanzoni. A cracked infinite Kirchhoff plate supported by a two-parameter elastic foundation. *Journal of the European Ceramic Society*, 34(11):2737 – 2744, 2014. Modelling and Simulation meet Innovation in Ceramics Technology, IF=4.495 (Scopus cites:15)

33. L Lanzoni, E Radi, and A Nobile. Ultimate carrying capacity of elastic-plastic plates on a Pasternak foundation. *Journal of Applied Mechanics*, 81(5):051013, 2014. IF=2.671 (Scopus cites:8)
34. A Nobile and L Lanzoni. On the stability loss for an Euler beam resting on a tensionless Pasternak foundation. *Zeitschrift für angewandte Mathematik und Physik*, pages 1–12, 2013. IF=1.771 (Scopus cites:5)
35. A Nobile, L Lanzoni, and AM Tarantino. Experimental investigation and monitoring of a polypropylene-based fiber reinforced concrete road pavement. *Construction and Building Materials*, 47(0):888 – 895, 2013. IF=4.419 (Scopus cites:60)
36. A. Nobile. Superposition principle for the tensionless contact of a beam resting on a Winkler or a Pasternak foundation. *Journal of Engineering Mechanics*, 139(10):1470–1478, 2013. IF=2.264 (Scopus cites:16)
37. A Nobile. Variational approach to beams resting on two-parameter tensionless elastic foundations. *Journal of Applied Mechanics, Transactions ASME*, 79(2), 2012. IF=2.671 (Scopus cites:21)
38. L Lanzoni, A Nobile, and AM Tarantino. Performance evaluation of a polypropylene-based draw-wired fibre for concrete structures. *Construction and Building Materials*, 28(1):798 – 806, 2012. IF=4.419 (Scopus cites:54)
39. A Nobile and L Lanzoni. Electromechanical instability in layered materials. *Mechanics of Materials*, 42(5):581 – 591, 2010. IF=2.993 (Scopus cites:5)
40. G Napoli and A Nobile. Mechanically induced Helfrich-Hurault effect in lamellar systems. *Phys. Rev. E*, 80:031710, Sep 2009. IF=2.296 (Scopus cites:10)
41. A Nobile and AM Tarantino. Magnetostriction of a hard ferromagnetic and elastic thin-film structure. *Mathematics and Mechanics of Solids*, 13(2):95–123, 2008. IF=2.953 (Scopus cites:7)
42. A Nobile and AM Tarantino. A hard ferromagnetic and elastic beam-plate sandwich structure. *Zeitschrift für Angewandte Mathematik und Physik (ZAMP)*, 58:137–160, 2007. IF=1.771 (Scopus cites:1)
43. AM Tarantino and A Nobile. Finite homogeneous deformations of symmetrically loaded compressible membranes. *Zeitschrift für Angewandte Mathematik und Physik (ZAMP)*, 58:659–678, 2007. IF=1.771 (Scopus cites:8)
44. AM Tarantino and A Nobile. Constitutive branching analysis of cylindrical bodies under in-plane equibiaxial dead-load tractions. *International Journal of Non-Linear Mechanics*, 41(8):958 – 968, 2006. IF=2.313 (Scopus cites:4)
45. A Nobile and AM Tarantino. Unilateral contact problem for aging viscoelastic beams. *Journal of Engineering Mechanics*, 131(12):1229–1238, 2005. IF=2.264 (Scopus cites:4)
46. A Nobile, A Strozzi, and P Vaccari. Exact deflection expressions for a thin solid circular plate loaded by periphery couples. *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*, 215(3):341–351, 2001. IF=1.015 (Scopus cites:4)

## Atti di Convegno

1. A Nobile. Wave propagation in microstructured media for nondestructive testing. XLIX International Summer School – Conference Advanced Problems in Mechanics (APM2021). Keynote lecture within the mini-workshop "Extreme Loading on Structures"
2. A Nobile, E Radi, and G Mishuris. Diffraction and reflection of antiplane shear waves in a cracked couple stress elastic material. In *Conference of the Italian Association of Theoretical and Applied Mechanics*, pages 137–150. Springer, 2019
3. C Signorini, A Nobile, A Sola, and M Messori. Optimal epoxy dilution for epoxy-coated textile reinforced mortar (TRM): An experimental perspective. In *Conference of the Italian Association of Theoretical and Applied Mechanics*, pages 499–511. Springer, 2019

4. C Signorini, A Nobile, A Sola, and M Messori. Influence of epoxy dilution on the mechanical performance of epoxy-coated glass textile reinforced mortar (GTRM) composites: an optimal approach. Lisbon (Portugal), 1-4 July 2019. MECHCOMP 2019, 5th International Conference on Mechanics of Composites
5. A Nobile. Shear wave pattern in the elastodynamic of a cracked half-space with microstructure. Oberwolfach, 3-9 March 2019. MFO Mini-workshop: Mathematical aspects of Nonlinear Wave Propagation in Solid Mechanics. Ref.nr. 1910a
6. A Nobile and E Radi. Antiplane shear waves induced by reduced traction waves applied at the crack faces in a couple stress elastic material. Thessaloniki (Greece), 22-25 September 2019. 12 th HSTAM International Congress on Mechanics
7. E Radi, A Nobile, and G Mishuris. Time-harmonic analysis of antiplane crack in couple stress elastic materials. In *RECENT ADVANCES IN MECHANICS OF SOLIDS AND STRUCTURES RAMSS-2019, Symposium in honour of Professor Davide Bigoni's 60th birthday*, 6-7 June 2019
8. A Nobile. Shear wave pattern in the elastodynamic of a cracked half-space with microstructure. Oberwolfach, 3-9 March 2019. MFO Mini-workshop: Mathematical aspects of Nonlinear Wave Propagation in Solid Mechanics. Ref.nr. 1910a
9. A Nobile. Modello asintotico vicino alla risonanza per la propagazione di onde in un mezzo piano ortorombico. Arezzo (Italy), 24-25 January 2019. 1st Signorini Days. On occasion of Prof.K.R. RAJAGOPAL honoris doctorate
10. L Lanzoni, E Radi, and A Nobile. Stress analysis around a tunnel in a gravitating poroelastic half plane. In *XXII GIMC e IX Riunione GMA*, 2018
11. A Nobile. Near-resonance asymptotic model for wave propagation. Montecatini, 4-6 October 2018. Assemblea GNFM
12. C. Signorini, A Nobile, and C Siligardi. Award selected poster: Sustainable mineral coating of AR-glass fibres in textile reinforced mortar (TRM) composites for structural purposes. Roma La Sapienza, 14-15 May 2018. Zwick 9th Academia Day, Testing of high performance, lightweight and sustainable materials
13. C Signorini and A Nobile. Effect of aggressive environment exposure on mechanical performance of ferrocement and textile reinforced concrete (TRC). Bologna, 4-7 September 2018. International Conference on Composite Structures (ICCS21)
14. A Nobile and D Prikazchikov. Near-resonance asymptotic model for wave propagation in an orthotropic half-plane. In *10th European Solid Mechanics Conference*, Bologna, 2-6 July 2018. European Mechanics Society
15. A Nobile, J Kaplunov, E Radi, and AM Tarantino. On the edge-wave of a thin elastic plate supported by an elastic half-space. Salerno, 4-7 September 2017. XXIII Congresso della Associazione Italiana di Meccanica Teorica e Applicata (AIMETA)
16. L Lanzoni, E Radi, and A Nobile. Shear deformable beams in contact with an elastic half-plane. Urbino, 1-3 Marzo 2017. XXIV IGF Second International Edition
17. C Signorini, S Barbi, A Nobile, and C Siligardi. Mechanical performance of glazed lithium aluminum disilicate (LAS) glass-ceramics. Trento, 26-28 July 2017. Modelling and simulation meet innovation in ceramics technology (CERMODEL)
18. F O Falope, A Nobile, and C Signorini. Effect of accelerated aging of impregnated carbon fabric cementitious matrix (CFRCM) composites under uniaxial tensile tests. Bologna, 4-7 July 2017. International Conference on Mechanics of Composites (MechComp3)
19. A Nobile, M Destrade, and YB Fu. Compression induced instability at the edge of a supported thin elastic structure. Bologna, 12-16 June 2017. Wascom 2017

20. A. Nobili, E Radi, and L Lanzoni. Steady state propagation of a rectilinear crack in a thin elastic plate supported by a Winkler elastic foundation. Padova, 25-29 July 2016. 14th International Conference on Integral Methods in Science and Engineering (IMSE 2016)
21. L Lanzoni, A. Nobili, and E Radi. Stress and pore pressure fields around two boreholes in a poroelastic medium. Lucca, 27-29 June 2016. GIMC-GMA
22. A. Nobili and A. M. Tarantino. Variational approach to generalized Timoshenko beam models based on the micropolar linear theory. Genova, 14-17 September 2015. XXII Congresso della Associazione Italiana di Meccanica Teorica e Applicata (AIMETA)
23. A. Sorzia, L. Lanzoni, A. Nobili, and E. Radi. Elastic-plastic plates on a nonlocal subgrade. Genova, 14-17 Settembre 2015. XXII Congresso della Associazione Italiana di Meccanica Teorica e Applicata (AIMETA)
24. A Nobili. Low frequency homogenization of one-dimensional systems with internal cutoff. Montecatini, 22-24 Ottobre 2015. Assemblea GNFM
25. A. Nobili, E. Radi, and L. Lanzoni. Stress intensity factors for a cracked infinite Kirchhoff plate supported by a two-parameter elastic foundation. Micromech 2014 - Advances in micromechanics of materials, July 2014. Rzeszow, Poland
26. A. Nobili, E. Radi, and L. Lanzoni. Full field solution for a rectilinear crack in an infinite Kirchhoff plate supported by a Pasternak elastic foundation. APM2014 – Advanced Problems in Mechanics, 30 June-5 July 2014. S. Pietersburg, Russia
27. L. Lanzoni, A. Nobili, and E. Radi. On the elasto-static problem for a cracked Kirchhoff plate resting on a elastic Pasternak foundation. Torino, 17-20 September 2013. XXI Congresso della Associazione Italiana di Meccanica Teorica e Applicata (AIMETA)
28. L. Lanzoni, A. Nobili, and E. Radi. The bending stress in a cracked ceramic plate resting on a two-parameter elastic grade. CERMODEL, 10-12 July 2013 2013. Trento, Italy
29. A Nobili and L Lanzoni. On the contact problem of beams resting on tensionless two-parameter foundations. Conselice (Ra), 2012. XX Congresso della Associazione Italiana di Meccanica Teorica e Applicata (AIMETA), Publi&Stampa
30. M. Mancuso and A. Nobili. Improvements of superconvergence in finite element analysis. Brescia, Italy, 11-14 September 2007. AIMETA
31. G. Napoli and A. Nobili. Instabilities in layered materials. Brescia, Italy, 11-14 September 2007. AIMETA
32. A. Nobili. Magnetostriction in a hard ferromagnetic thin-film beam-plate theory. Brescia, Italy, 11-14 September 2007. XVIII Congresso della Associazione Italiana di Meccanica Teorica e Applicata (AIMETA)
33. A. Nobili. Magnetostriction of a saturated hard ferromagnetic beam-plate sandwich structure. Bologna, Italy, 26-28 June 2006. GIMC
34. C. Carciovanni, A. Nobili, R. Santinelli, and A. Narducci. A study of compatibility in high performance cars. Alumotive, 2005

## Organizzazione di eventi scientifici

1. EUROMECH Colloquium 626 "Mechanics of high-contrast elastic composites", chair Nobili/Prikazchikov, venue Keele University (UK), 6-8 Sept. 2021
2. Engineered Materials for Sustainable Structures (EM4SS), chair Frassine/Nobili/Saccomandi/Sevostianov, online webinar, 26-28 Aprile 2021

## Premi scientifici e fellowships

1. Progetto Giovani Ricercatori, Gruppo Nazionale di Fisica Matematica (GNFM), edizione 2017, Titolo del Progetto: "Modelli asintotici per la propagazione di onde superficiali sotto l'applicazione di carichi mobili in regime near-resonance per continui elastici anisotropi", Prot.U UFMBAZ 2017/0000259 08/06/2017
2. Fellowship at the Mathematics Research Centre, School of Computing and Mathematics, Keele University (UK), per il progetto di ricerca congiunto "Development of qualitative multiparametric methods in structural dynamics", Ottobre 2016
3. Progetto Giovani Ricercatori, Gruppo Nazionale di Fisica Matematica (GNFM), edizione 2015, Titolo del Progetto: "Waveguide properties of periodic media and their connection with functionally graded materials and microstructure"
4. IMPAS Summer Fellowship, Agosto-Settembre 2014, Aberystwyth University, Department of Mathematics, Aberystwyth, UK
5. Progetto Giovani Ricercatori, Gruppo Nazionale di Fisica Matematica (GNFM), edizione 2007
6. Progetto Giovani Ricercatori, Gruppo Nazionale di Fisica Matematica (GNFM), edizione 2006

## Appartenenza a Comitati editoriali Internazionali (Editorial Board Membership)

1. Membro dell'editorial board della rivista internazionale Applications in Engineering Science (APPLES), ISSN: 2666-4968, Elsevier
2. Membro dell'editorial board della rivista internazionale Coatings (ISSN 2079-6412), IF=2.350, Q2 in WoS, Scopus
3. Membro dell'editorial board della rivista internazionale Journal of Science and Technology A- Applied Sciences and Engineering (AUJST-A), publisher Anadolu University since 2000

## Invited talks (international)

1. Mini-Workshop su invito: "Mathematical Aspects of Nonlinear Wave Propagation in Solid Mechanics", Oberwolfach, Germany, March 3rd – March 9th 2019
2. Invited talk "Near resonance model for wave propagation in an orthorhombic half-plane", in occasione della Prima edizione dei Signorini Days - Arezzo, 24-25 January 2019 - e del dottorato honoris causa al Prof. R. Rajagopal (Texas, USA) presso l'Università di Perugia
3. "The Finale Emilia Hospital rehabilitation", Sheffield, UK, 7th April 2017, invito del prof. Maurizio Guadagnini
4. "Mathematical Methods in Mechanics and Applied Mathematics", Keele, UK, 5th April 2017, invito del prof. Julius Kaplunov
5. "Nonlinear effects in Elasticity", Aberystwyth, UK, 7th Sept. 2014, invito del prof. Gennady Mishuris
6. "Inflation of membrane tubes", Keele University, UK, Feb 2013, invito del Prof. Yibin Fu
7. "Crack in Kirchhoff plates", Aberystwyth University, UK, July 2013, invito del prof. Gennady Mishuris
8. Mini-Workshop su invito: "The Mathematics of Electro-Active Smart Materials", Oberwolfach, Germany, 24 Febbraio – 1 Marzo 2008

## **Appartenenza a società scientifiche**

1. European Mechanics Society (Euromech), socio dal 2018
2. Gruppo Nazionale della Fisica Matematica (GNFM), settore 3 Meccanica dei solidi continui, membro dal 2002
3. Society for Natural Philosophy (SNP), membro dal 2012
4. Società Italiana di Scienza delle Costruzioni (SISCo), Università La Sapienza, Roma, dall'anno di costituzione

## **Abilitazione Scientifica Nazionale (ASN)**

1. Abilitazione per le funzioni di Professore di I fascia nel settore concorsuale 08/B2 Scienza delle Costruzioni dal 01/10/2018 al 01/10/2024 (art. 16, comma 1, Legge 240/10), BANDO D.D. 1532/2016
2. Abilitazione per le funzioni di Professore di II fascia nel settore concorsuale 08/B2 Scienza delle Costruzioni dal 28/03/2017 al 28/03/2023 (art. 16, comma 1, Legge 240/10), BANDO D.D. 1532/2016

## **Collegi di Dottorato**

1. External examiner a livello di Research Doctorate (PhD) per la candidata Anzhela Shestakova, supervisor Prof. J Kaplunov, titolo della tesi "Development of mathematical models for freight cars subject to dynamic loading", Keele University, UK, June 2015
2. Membro del Collegio Docenti del Dottorato dal titolo "Ingegneria Industriale e del Territorio", DIEF, Università di Modena e Reggio Emilia, dall'AA 2017/18
3. Membro della commissione di valutazione degli studenti in uscita, AA2019/20

## **Attività Didattica**

1. Docenza in titolarità del Corso di "Statica", erogato agli studenti del 1 anno della Laurea Triennale in Ingegneria Civile, presso il Dipartimento di Ingegneria Enzo Ferrari (allora DIEF), Università degli Studi di Modena e Reggio Emilia, negli AA 2008/09 (6 CFU), 2009/10 (6 CFU), 2010/11 (3 CFU), 2011/12 (3 CFU), 2012/13 (3 CFU)
2. Docenza in titolarità del Corso di "Dinamica delle Strutture", erogato agli studenti del 3 anno della Laurea Triennale in Ingegneria Civile e Ambientale, curriculum Civile, presso il Dipartimento di Ingegneria Enzo Ferrari, Università degli Studi di Modena e Reggio Emilia, negli AA 2009/10 (6 CFU), 2010/11 (6 CFU), 2011/12 (9 CFU), 2012/13 (12 CFU), 2013/14 (12 CFU), 2014/15 (12 CFU), 2015/16 (12 CFU), 2016/17 (12 CFU), 2017/18 (12 CFU), 2018/19 (12 CFU), 2019/20 (12 CFU) e 2020/21 (12 CFU)
3. Docenza in titolarità di un modulo all'interno del Corso di "Computational Mechanics/Meccanica Computazionale", erogato in lingua inglese agli studenti del 2 anno della Laurea Magistrale in Ingegneria Civile, presso il Dipartimento di Ingegneria Enzo Ferrari, Università degli Studi di Modena e Reggio Emilia, negli AA 2017/18 (6+6 CFU), 2018/19 (6+6 CFU), 2019/20 (4.5+4.5 CFU) e titolarità dell'intero corso nell'AA 2020/21 (9 CFU)
4. Docenza a contratto del Corso di "Statica", erogato agli studenti del 1 anno della Laurea Triennale in Ingegneria Civile, presso il Dipartimento di Ingegneria e Tecnologia (DET), Università degli Studi della Repubblica di San Marino, negli 2010/11 (3 CFU), 2011/12 (3 CFU), 2012/13 (3 CFU)
5. Docenza a contratto del Corso di "Dinamica delle Strutture", erogato agli studenti del 3 anno della Laurea Triennale in Ingegneria Civile e Ambientale, curriculum Civile, presso il Dipartimento di Ingegneria e Tecnologia (DET), Università degli Studi della Repubblica di San Marino, negli AA 2009/10 (6 CFU), 2010/11 (6 CFU), 2011/12 (9 CFU), 2012/13 (12 CFU), 2013/14 (12 CFU), 2014/15 (12 CFU), 2015/16 (12 CFU), 2016/17 (12 CFU)

6. Docenza a contratto del Corso di "Ingegneria Sismica", erogato agli studenti del 2 anno della Laurea Magistrale in Ingegneria Civile, presso il Dipartimento di Ingegneria e Tecnologia (DET), Università degli Studi della Repubblica di San Marino, nell'AA 2016/17 (9 CFU)
7. Supporto alla didattica, affidato per contratto, per il Corso di "Meccanica dei Materiali e delle Strutture A", erogato agli studenti del 3 anno della Laurea Triennale in Ingegneria Meccanica ed in Ingegneria dei Materiali, docente Prof. Mario Cannarozzi, e per il Corso di "Scienza delle Costruzioni", erogato agli studenti del 3 anno della Laurea Triennale in Ingegneria Ambientale, docente Prof. Angelo Marcello Tarantino, presso il Dipartimento di Ingegneria Meccanica e Civile, Università degli Studi di Modena e Reggio Emilia, negli AA 2003/04 (20 ore), 2004/2005 (25 ore), 2005/2006 (25 ore), 2006/2007 (25 ore), 2007/2008 (25 ore)
8. Supporto alla didattica, affidato per contratto, per il Corso di "Meccanica dei Materiali e delle Strutture B", erogato agli studenti del 1 anno della Laurea Magistrale in Ingegneria Meccanica ed in Ingegneria del Veicolo, docente Prof. Mario Cannarozzi, e per il Corso di "Scienza delle Costruzioni B", erogato agli studenti del 1 anno della Laurea Magistrale in Ingegneria Ambientale, docente Prof. Angelo Marcello Tarantino, presso il Dipartimento di Ingegneria Meccanica e Civile, Università degli Studi di Modena e Reggio Emilia, negli AA 2004/2005 (18 ore), 2005/2006 (20 ore), 2006/2007 (20 ore), 2007/2008 (20 ore)
9. Docenza a contratto del Corso di "Didattica delle Scienze delle Costruzioni con Laboratorio", erogato agli studenti del 2 anno della Scuola di Specializzazione per gli Insegnanti della Scuola Secondaria, classe A016, negli AA 2001/02, II ciclo (60 ore), 2002/03, III ciclo (60 ore), 2003/04, IV ciclo (60 ore), 2004/05, V ciclo (60 ore), 2005/06, VI ciclo (80 ore), 2006/07, VII ciclo (80 ore), 2007/08, VIII ciclo (80 ore), 2008/09, IX ciclo (80 ore)
10. Docenza a contratto del Corso di "Didattica della Tecnologia delle Costruzioni con Laboratorio", erogato agli studenti del 2 anno della Scuola di Specializzazione per gli Insegnanti della Scuola Secondaria, classe A016, negli AA 2004/05, VI ciclo (80 ore), 2005/06, VII ciclo (80 ore), 2006/07, VIII ciclo (80 ore), 2007/08, IX ciclo (80 ore)
11. Docenza in co-titolarità del Corso di "Chassis Design", erogato agli studenti del 2 anno della Laurea Magistrale in Ingegneria del Veicolo, presso il Dipartimento di Ingegneria Enzo Ferrari, Università degli Studi di Modena e Reggio Emilia, negli AA 2004/05 (6 CFU), 2005/06 (6 CFU)
12. Docenza a contratto della Unità Didattica "Dinamica – Progettazione di Intervento Strutturale" all'interno del Corso di formazione post-lauream, "Tecnico esperto nella progettazione e gestione di interventi strutturali" (Riferimento P.A. n° 2012/2437/RER), promosso da R.E.S. – Edili Reggio Emilia Scuola - società cooperativa sociale con sede in Largo Giambellino, 17-18 a Reggio nell'Emilia, presso la sua sede, nell'anno 2013 (20 ore)
13. Docenza a contratto della Unità Didattica "Dinamica delle Strutture" all'interno del Corso di formazione post-lauream, "ESPERTO DI INGEGNERIA DELLA RICOSTRUZIONE", Approvato dalla Regione Emilia Romagna con Delibera Giunta Regionale n. 1142 del 02/08/2013 e cofinanziato dal Fondo Sociale Europeo, Operazione Rif. PA. 2012-2428/RER, codice CUP E86G12000450007, presso la sede di Confimi (APMI Modena), nell'anno 2014 (20 ore)

Voto medio nelle Opinioni degli Studenti (OPIS) sempre superiore ad 8.

Relatore di oltre 50 Tesi di laurea (studenti Magistrali) e tirocini/attività progettuali (studenti Triennali).

## Attività istituzionali

1. Membro della commissione edilizia di Ateneo, dal 2019 ad oggi
2. Membro della commissione paritetica docenti studenti (CPDS) dall' AA 2014/2015 ad oggi
3. Responsabile dell'Assicurazione della Qualità del Corso di Laurea in Ingegneria Civile Ambientale, curriculum Civile, e del corso di Laurea Magistrale in Ingegneria Civile, dall'anno 2013 al 2018
4. Referente Erasmus/Erasmus+ per le destinazioni: Keele (UK), Kiev State University (Bielorussia)
5. Referente per i bilateral agreements con la School of Computing and Mathematics, Keele (UK), il Mathematics Department della Kiev State University (Bielorussia)

## **Finanziamenti**

1. PI della unità di Modena del Progetto H2020-MSCA-RISE-2020, Type of action: MSCA-RISE, Proposal number: 101008140, Proposal acronym: EffectFact, Duration (months): 48, Proposal title: "Effective Factorisation techniques for matrix-functions: Developing theory, numerical methods and impactful applications", Activity: ENG, coordinator Mishuris (Aberystwyth, UK) Data di firma del Grant Agreement 12/12/2020
2. POR FESR 2014-2020, AZIONE 1.2.2 - Progetti di ricerca industriale strategica rivolti agli ambiti prioritari S3, progetto "IMPReSA: Impiego di Materiali Plastici da Riciclo per malte e calcestruzzi Strutturali Alleggeriti", CUP E81F18000310009, responsabile scientifico dell'unità di Modena, costo totale progetto 765 KEuro, periodo 25/7/2019–25/10/2021
3. Fondo di Ateneo per la Ricerca (FAR) 2019, co-PI del progetto "Materiali e strutture innovativi per la progettazione di scaffold per la rigenerazione ossea ottenuti mediante manifattura additiva 3D", importo progetto 7062 Euro
4. Finanziamento annuale individuale delle attività base di ricerca (FIRB) 2017, MIUR, 3.5 KEuro
5. Fondo di Ateneo per la Ricerca (FAR) 2016, PI del progetto "Interphase strength enhancement of glass fabric reinforced composite materials for seismic rehabilitation and retrofitting", importo progetto 3 KEuro
6. Bando Ricerca Applicata per l'innovazione della Fondazione Cassa di Risparmio di Modena, co-PI del progetto "Sviluppo, modellazione e applicazione di sistemi di rinforzo strutturale in materiale composito di fibra di carbonio e resina IPN per l'adeguamento sismico, il ripristino e il consolidamento di edifici civili e industriali: metodologie, prestazioni e failure analysis" (Sime no. 2013.0662). 12 Maggio 2014 – 15 Maggio 2017, costo totale del Progetto 144.2 KEuro
7. Fondo di incentivazione "Offerta formativa in lingua inglese", negli AA 2017/18 e 2018/19
8. Partecipante all'unità locale del PRIN 2017 No. 2017HFPKZY, on "Modelling of constitutive laws for traditional and innovative building materials", P.I. Prof. Carpinteri Andrea
9. Partecipante all'unità locale del PRIN 2015 "Advanced mechanical modeling of new materials and structures for the solution of 2020 Horizon challenges", P.I. Prof. Mariano Di Paola, dal 01-10-2016 al 01-10-2018, contributo MIUR 658 KEuro

## **Attività conto terzi**

1. Nel 2020 ha attivato attività scientifica di consulenza per circa 30 KEuro con industrie locali
2. Ha in atto un accordo quadro con la multinazionale DIAB Group per lo sviluppo di soluzioni innovative per il recupero del rifiuto plastico derivante da lavorazione di pannelli fonoassorbenti mediante incorporazione in materiali da edilizia

## **Brevetti**

1. Co-inventore del brevetto italiano nr.0000262442, richiesta n.202005901362986 (BO2005U000074), depositata il 28 Novembre 2005, per un manufatto di edilizia per la miscela nei calcestruzzi e l'incremento della prestazione meccanica.
2. European Patent n.06124764.9-2303, filing date 24/11/06, title "Building artifact", for designing and manufacturing fibres aiming at reinforcing concrete mixtures
3. Designation as Inventor under Rule 17(3) European Patent Code, patent 06124764.9-2303

## Dichiarazione ai sensi degli artt. 46 e 47 DPR 445/2000

Il sottoscritto Andrea NOBILI, nato a Carpi (MO) il 11/6/1974 e residente a Modena, in via J. S. Bach 34, CAP 41122 Modena, codice fiscale NBLNDR74H11B819N, consapevole che le dichiarazioni mendaci sono punite ai sensi del Codice penale e delle leggi speciali in materia,

DICHIARA, ai sensi degli artt. 46 e 47 DPR 445/2000,

che le dichiarazioni rese in questo curriculum sono conformi al vero.

Modena, 18/11/2020

Il sottoscritto (Andrea NOBILI)

- [1] C. Carcioffi, A. Nobili, R. Santinelli, and A. Narducci. A study of compatibility in high performance cars. Alumotive, 2005.
- [2] M Destrade, YB Fu, and A Nobili. Edge wrinkling in elastically supported pre-stressed incompressible isotropic plates. *Proceedings of the Royal Society of London A: Mathematical, Physical and Engineering Sciences*, 472(2193), 2016. IF=2.741.
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- [5] J. Kaplunov and A. Nobili. Multi-parametric analysis of strongly inhomogeneous periodic waveguides with internal cutoff frequencies. *Mathematical Methods in the Applied Sciences*, 2016. IF=1.77.
- [6] J Kaplunov and A Nobili. The edge waves on a Kirchhoff plate bilaterally supported by a two-parameter elastic foundation. *Journal of Vibration and Control*, 23(12):2014–2022, 2017. IF=2.169.
- [7] J. Kaplunov and A. Nobili. Multi-parametric analysis of strongly inhomogeneous periodic waveguides with internal cutoff frequencies. *Mathematical Methods in the Applied Sciences*, 40(9):3381–3392, 2017. IF=1.77.
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- [12] L Lanzoni, A. Nobili, and E Radi. Stress and pore pressure fields around two boreholes in a poroelastic medium. Lucca, 27-29 June 2016. GIMC-GMA.
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- [27] A. Nobili. Magnetostriction of a saturated hard ferromagnetic beam-plate sandwich structure. Bologna, Italy, 26-28 June 2006. GIMC.
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- [31] A Nobili. Low frequency homogenization of one-dimensional systems with internal cutoff. Montecatini, 22-24 Ottobre 2015. Assemblea GNFM.
- [32] A Nobili. On the generalization of the Timoshenko beam model based on the micropolar linear theory: Static case. *Mathematical Problems in Engineering*, 2015, 2015. IF=1.009.
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