

Curriculum formativo, didattico, scientifico e professionale del candidato**Dichiarazione sostitutiva di certificazioni**

(Art. 46, D.P.R. 28 dicembre 2000 n. 445)

Dichiarazione sostitutiva dell'atto di notorietà

(da sottoscrivere davanti all'impiegato addetto o da presentare o spedire con la fotocopia di un documento di identità)

(Art. 47, D.P.R. 28 dicembre 2000 n. 445)

Estremi del bando di selezione	“Preparazione e caratterizzazione di paste e inchiostri conduttivi biodegradabili” - Responsabile scientifico: prof. Luca Pilia - CUP: B29J23001120005.	
Informazioni aggiornate al	14/04/2025	
Nome e Cognome	Seyed Hossein Mussavi Rizi	

Si raccomanda di indicare con precisione tutti gli elementi valutabili ai sensi del bando di selezione (aggiungere o togliere righe secondo necessità).

Esperienza professionale

Periodo	Ente	Principali attività e responsabilità
2019–2023	Research Assistant, Politecnico di Torino, Italy	Bioglass extrusion, fabrication of microstructured optical fibers, and phosphate-based bioresorbable glasses. Feasibility research on and designs for bioglass 3D printing.
2016–2018	Research Assistant, Shahrood University of Technology, Iran	Fabrication of ceramic matrix composites (ZTA, CNT, LSM) and their rheological and mechanical properties. Lab maintenance and reports.
2012–2013	Intern, Qaem Metal Casting, Iran	Design processes to minimize scrap and subsequent machining

Istruzione, formazione (es. titoli di studio, certificazioni professionali/linguistiche/informatiche)

Data	Titolo / Principali tematiche	Ente
09/2023	PhD, Materials Science and Technology Dissertation “Bioresorbable phosphate glass optical fibers for biomedical applications,” supervised by Professor Davide L. Janner and Professor Nadia G. Boetti	Politecnico di Torino, Torino, Italy
09/2016	M.Sc., Materials Science and Engineering, Ceramics Thesis “Mechanical properties of zirconia-alumina composite thin films reinforced with carbon nanotubes prepared by tape casting method,” supervised by Professor Mojtaba Ghatte.	Shahrood University of Technology, Shahrood, Iran

02/2013	B.Sc., Materials Science and Engineering, Industrial Metallurgy Thesis “Effects of temperature and electric current in electrodeposition on particle size and morphology of nanosilver powders,” supervised by Professor Reza Derakhshandeh-Haghighi	Azad University (Fars Science and Research Branch), Shiraz, Iran
TOEFL iBT	107	Dec 2022

Publicazioni / Convegni

1. "Towards a novel bi-functional bioresorbable micro-structured optical fiber for theranostic applications," Proc. SPIE 12627, Translational Biophotonics: Diagnostics and Therapeutics III, 126271N (11 August 2023); https://doi.org/10.1117/12.2670867 (2023).
2. Bioresorbable phosphate glass microstructured optical fibers with hole and core for biomedicine. (Paper 12573-39), SPIE Optics + Optoelectronics 2023. (2023).
3. Phosphate glass-based microstructured optical fibers with hole and core for biomedical applications , <i>Optical Materials</i> , 131. (2023).
4. Characterization of anode supported micro-tubular solid oxide fuel cells prepared by successive non-aqueous electrophoretic deposition , <i>Journal of Electroceramics</i> , 48, 1–7. (2021).
5. A study of mechanical properties of alumina–zirconia composite films prepared by a combination of tape casting and solution impregnation method , <i>Journal of Australian Ceramics Society</i> , 56, 167–174. (2020).
6. Rheological and mechanical properties of tape-casted zirconia-toughened alumina composite thick films reinforced with multiwalled carbon nanotubes , <i>Journal of Composite Materials</i> , 54(17): 2353–2363. (2020).

Altre attività scientifiche

3D Printing of bioresorbable phosphate glasspolymer composites with FDM technique 2023-2024
Teaching Assistant, Shahrood University of Technology, Iran Led sections for the General Chemistry course; reviewing the course material; going over problem sets; correcting homework, and grading exams. 2013-2014
MDPI – Optical biosensors – Synthesis and sintering of high-entropy ceramics – Photodynamic therapy Properties and functions of medical and dental cement, Faculty of Chemical Engineering and Materials Colloquium Series, Shahrood

University of Technology. 2014 ANOVA for design and analysis of experiments in ceramics, Faculty of Chemical Engineering and Materials Colloquium Series, Shahrood University of Technology. 2014 Workshop on X-ray diffraction for advanced identification and analysis of materials, Faculty of Mining, Petroleum and Geophysics Engineering, Shahrood University of Technology, Shahrood, Iran. 2013

Ulteriori informazioni pertinenti

Skills Technical – Keen knowledge and hands-on experience in glass fabrication, extrusion, and fiber drawing – Familiarity with refractive index measurements, attenuation and loss measurements, optical glass fiber cleaving, and splicing – Proficient in laboratory operating procedures and equipment: operating furnaces, particle size, and zeta potential analyzers, nanoindentation, microhardness, and rheometer instruments – Extensive experience in colloidal, wet, and dry ceramic processing and fabrication methods such as tape casting and screen printing – Familiarity with Thermal analysis (TGA/DTA), Scanning electron microscopy (SEM), X-ray diffraction (XRD), Electrochemical impedance spectroscopy (EIS)
Computation: OriginLab, ImageJ, X’pert, Fusion360, Matlab.Coding: Basic Python. Productivity: MS Office, Latex.

Luogo e data 14/04/2025, Torino