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- ***Profilo scientifico, con indicazione dei campi di interesse***

- *Professore associato di Fisica Sperimentale (FIS/01) presso di Dipartimento di Scienze Matematiche e Informatiche, Scienze Fisiche e Scienze della Terra (Dipartimento MIFT) dell'Università degli Studi di Messina.*
- *Docente di Fisica nel Corso di Laurea in Matematica e nel Corso di Laurea in Informatica, curriculum Tecnologie Informatiche e curriculum Data Analysis, dell'Università degli Studi di Messina.*

Ha svolto attività di ricerca sperimentale presso il laboratorio di Spettroscopia dielettrica e acustica dell'Università di Messina e presso altri atenei e centri di ricerca in Italia e all'estero sulle proprietà dei materiali a conduzione ionica e sui liquidi glass-forming: Chalmers University of Technology, Universidad Autonoma Madrid, Arizona State University, Texas Tech University, Università di Pavia, Università di Muenster, Università di Colonia, Università di Bath.

Campi di interesse:

- *Fisica con software Open Source*
- *Acoustic trapping*
- *Sviluppo di applicazioni per controllo di strumentazione scientifica ed elaborazione di dati sperimentali con software libero di calcolo scientifico*

- *Conducibilità elettrica e costante dielettrica di materiali amorfi e liquidi ionici in funzione della frequenza e della temperatura*
- *Proprietà dinamiche e strutturali di sostanze anfifiliche e loro miscele*
- *Rilassamenti dielettrici e meccanici in materiali liquidi e solidi*

- **Elenco delle pubblicazioni**

- o [Optical calibration of holographic acoustic tweezers](#), Sonia Marrara, David Bronte Ciriza, Alessandro Magazzù, Roberto Caruso, Giuseppe Lupò, Rosalba Saija, Antonino Foti, Pietro Giuseppe Gucciardi, Andrea Mandanici, Onofrio Maria Maragò and Maria Grazia Donato, *IEEE Transactions on Instrumentation and Measurement*, 2023, DOI: 10.1109/TIM.2023.3282303
- o [Simple Physics with Python: A Workbook on Introductory Physics with Open-Source Software](#), A. Mandanici, G. Mandaglio, V. Conti Nibali, and G. Fiumara, *Computing in Science and Engineering*, March/April 2022, DOI: 10.1109/MCSE.2022.3160011
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- o *Experiments and data analysis on one-dimensional motion with Raspberry Pi and Python*, A. Mandanici and G. Mandaglio, *Physics Education*, vol. 55, no. 3 (2020), DOI: 10.1088/1361-6552/ab73d2
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- o *A trace of the Johari-Goldstein relaxation in the mechanical response of supercooled ethylcyclohexane?*, A. Mandanici, M. Cutroni, *Materials Science and Engineering A*, 521-522, 279-282 (2009), DOI: 10.1016/j.msea.2008.09.152
- o *Mechanical relaxation in a ternary silver borate below the glass transition temperature and corresponding features of the electrical response*, A. Mandanici, A. Raimondo, M. Cutroni, M. Federico, F. Rocca, *Materials Science and Engineering A*, 521-522, 276-278 (2009), DOI: 10.1016/j.msea.2008.09.148

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