

CV **Ciro Aprea**

Laureato con lode in Ingegneria Meccanica presso l'Università degli Studi di Napoli Federico II, attualmente è professore ordinario nel settore "Fisica Tecnica Industriale". I suoi interessi di ricerca riguardano la valutazione sperimentale delle prestazioni energetiche di impianti frigoriferi a compressione operanti con fluidi sostitutivi dei CFC e degli HCFC, la valutazione sperimentale dei coefficienti di scambio termico nell'evaporazione e nella condensazione di miscele non azeotrope in impianti a compressione di vapore, la modellistica di evaporatori e condensatori ad aria in presenza di miscele non azeotrope, la valutazione sperimentale delle prestazioni di sistemi di espansione meccanici ed elettronici negli impianti frigoriferi a compressione in presenza di perdite di miscele non azeotrope, lo studio analitico, numerico e sperimentale di transitori veloci in evaporatori ad aria, la valutazione sperimentale delle prestazioni di impianti frigoriferi a compressore centrifugo impiegando fluidi a basso impatto ambientale, l'analisi sperimentale di sistemi innovativi per il controllo della potenza frigorifera negli impianti a compressione di vapore e la messa a punto degli opportuni algoritmi, i sistemi frigoriferi ad autocascata per il raggiungimento di temperature molto basse fino a -150°C (progettazione, analisi sperimentale delle prestazioni e definizione della miscela evolvente del tipo HFC), l'analisi sperimentale delle prestazioni di cicli frigoriferi transcritici a compressione di vapore operanti con l'anidride carbonica quale fluido di lavoro, i cicli frigoriferi basati sull'effetto magnetocalorico ed, in generale, la refrigerazione a stato solido. E' autore di oltre 150 articoli pubblicati sia su riviste internazionali sia in atti di convegni internazionali. Attualmente tiene i corsi di Energetica, di Tecnica del Freddo e di Impianti di Condizionamento". È coordinatore scientifico di progetti di ricerca ed è responsabile di svariate convenzioni di ricerca con aziende tra cui RC Condizionatori, Pavia – Angelantoni Industrie, Massa Martana (PG) – CO.PRO., S. Marco Evangelista (CE) – Denso Thermal System, Poirino (TO) – Telecom Italia, Roma, Leonardo Sistemi Avionici e Spaziali. È revisore di articoli scientifici, tra le altre, per le riviste "Applied Thermal Engineering", "International Journal of Refrigeration", "Energy", "Applied Energy", "International Journal of Thermal Sciences", "Energy Conversion and Management", "Heat and Mass Transfer". È membro dell'Editorial Board delle riviste internazionale "Entropy" e "Journal of Energy". E' autore di quattro brevetti nazionali e di un brevetto internazionale per invenzione industriale. È Delegato del Rettore per le Politiche di Sostenibilità. È Ufficiale Superiore della Riserva Selezionata dell'Esercito Italiano. È Cavaliere dell'Ordine al Merito della Repubblica Italiana. Il suo nome è indicizzato sui principali database scientifici ([Scopus](#) , [ORCID](#), [Google Scholar](#))

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