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Altri autori (Persone)	MiaraBernadette StavroulakisG. E (Georgios E.) ValenteVanda
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This volume gathers articles presented at a prominent European conference on smart systems and summarizes the activities carried out by a research and training network supported by the European community. The contributions aim to exhibit new research topics in the areas of materials science, advanced mathematical tools, and elements of control and numerical algorithms relevant to the design and optimization of smart systems.

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