

1. Record Nr.	UNINA9910580194603321
Titolo	ARRAY '22 : oceedings of the 8th ACM SIGPLAN International Workshop on Libraries, Languages and Compilers for Array Programming : June 13, 2022, San Diego, CA, USA // edited by Troels Henriksen and Tze Meng Low
Pubbl/distr/stampa	New York : , : Association for Computing Machinery, , 2022
Descrizione fisica	1 online resource (57 pages) : illustrations
Collana	ACM Conferences
Disciplina	005.7565
Soggetti	Compilers (Computer programs) Computer science Functional linguistics Parallel programs (Computer programs) APL (Computer program language)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Sommario/riassunto	Array-oriented programming offers a unique blend of programmer productivity and high-performance parallel execution. As an abstraction, it directly mirrors high-level mathematical constructions commonly used in many fields from natural sciences through engineering to financial modeling. As a language feature, it exposes regular control flow, exhibits structured data dependencies, and lends itself to many types of program analysis. Furthermore, many modern computer architectures, particularly highly parallel architectures such as GPUs and FPGAs, lend themselves to efficiently executing array operations.