Record Nr.	UNINA9910632998403321
Titolo	Silicon-germanium heterojunction bipolar transistors for mm-wave systems : technology, modeling and circuit applications / / Niccolo Rinaldi and Niccolo Rinaldi, editors
Pubbl/distr/stampa	Gistrup, Denmark : , : River Publishers, , [2018] ©2018
ISBN	1-00-333951-4 1-000-79128-9 1-003-33951-4 1-000-79440-7 87-93519-60-5
Edizione	[1st ed.]
Descrizione fisica	1 online resource (378 pages)
Collana	River Publishers Series in Electronic Materials and Devices
Disciplina	621.381528
Soggetti	Bipolar transistors Digital communications Silicon alloys
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Sommario/riassunto	The semiconductor industry is a fundamental building block of the new economy, there is no area of modern life untouched by the progress of nanoelectronics. The electronic chip is becomingan ever-increasing portion of system solutions, starting initially from less than 5% in the 1970 microcomputer era, to more than 60% of the final cost of a mobile telephone, 50% of the price of a personal computer (representing nearly 100% of the functionalities) and 30% of the price of a monitor in the early 2000's.Interest in utilizing the (sub-)mm-wave frequency spectrum for commercial and research applications has also been steadily increasing. Such applications, which constitute a diverse but sizeable future market, span a large variety of areas such as health, material science, mass transit, industrial automation, communications, and space exploration.Silicon-Germanium Heterojunction Bipolar

1.

		Transistors for mm-Wave Systems Technology, Modeling and Circuit Applications provides an overview of results of the DOTSEVEN EU research project, and as such focusses on key material developments for mm-Wave Device Technology. It starts with the motivation at the beginning of the project and a summary of its major achievements. The subsequent chapters provide a detailed description of the obtained research results in the various areas of process development, device simulation, compact device modeling, experimental characterization, reliability, (sub-)mm-wave circuit design and systems.
2.	Record Nr.	UNINA9910879580503321
	Titolo	Cytokine Storm Syndrome / / edited by Randy Q. Cron, Edward M. Behrens
	Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2024
	ISBN	3-031-59815-6
	Edizione	[2nd ed. 2024.]
	Descrizione fisica	1 online resource (609 pages)
	Collana	Advances in Experimental Medicine and Biology, , 2214-8019 ; ; 1448
	Disciplina	616.079
	Soggetti	Immunology
		Molecular genetics
		Diseases
		Cytokines Molecular Genetics
		Cytokines and Growth Factors
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di bibliografia	Includes bibliographical references and index.
	Nota di contenuto	<ol> <li>Cytokines in cytokine storm syndromes 2. History of HLH 3.</li> <li>The history of macrophage activation syndrome in autoimmune diseases 4. Clinical features of cytokine storm syndromes 5.</li> <li>Laboratory features and pathology of cytokine storm syndromes 6.</li> <li>Criteria for cytokine storm syndromes 7. Familial HLH genetics 8.</li> <li>Secondary HLH genetics 9. Genetics of macrophage activation</li> </ol>

syndrome in systemic juvenile idiopathic arthritis -- 10. CD8+ T cell biology in cytokine storm syndromes -- 11. Immunology of cytokine storm syndromes: Natural killer cells -- 12. Myeloid cells in the immunopathogenesis of cytokine storm syndrome -- 13. Cytokine storm -- 14. Primary immunodeficiencies -- 15. Infectious triggers of cytokine storm syndromes: Herpes virus family (non-EBV) -- 16. CSS associated with Epstein Barr Virus -- 17. Hemorrhagic Fever and other viruses -- 18. Cytokine storm syndrome as a manifestation of primary HIV infection -- 19. Bacteria-associated cytokine storm syndrome --20. Zoonoticbacterial infections triggering cytokine storm syndrome --21. Parasitic and fungal triggers -- 22. COVID-19 pneumonia and cytokine storm syndrome -- 23. Cytokine storm associated with Systemic Juvenile Idiopathic Arthritis -- 24. Systemic lupus erythematosus -- 25. Kawasaki disease -- 26. The intersections of autoinflammation and cytokine storm -- 27. Other rheumatic triggers -- 28. Multisystem Inflammatory Syndrome in children -- 29. Hemophagocytic lymphohistiocytosis in the context of hematological malignancies and solid tumors -- 30. Cytokine storm and sepsisinduced Multiple Organ Dysfunction Syndrome -- 31. The cytokine storm of Multicentric Castleman Disease -- 32. Cytokine storm syndromes associated with pregnancy and therapeutics -- 33. fHLH models -- 34. sHLH models -- 35. Etoposide therapy of CSS -- 36. IL-1 family blockade -- 37. IL-6 blockade -- 38. IFNy blockade -- 39. JAK inhibitors -- 40. Other immunomodulatory HLH treatments -- 41. Salvage therapy for HLH.

Sommario/riassunto

Cytokine Storm Syndromes, including HLH and MAS, are frequently fatal disorders, particularly if not recognized early and treated during presentation. The genetics of Cytokine Storm Syndromes are being defined with many of the risk alleles giving rise to mutations in the perforin-mediated cytolytic pathway used by CD8 cytotoxic T cells and natural killer cells. These are being studied using murine models. Up to 10% of the general population may carry risk alleles for developing Cytokine Storm Syndromes, and Cytokine Storm Syndromes are being increasingly recognized around the world in pediatric and adult hospitals. A variety of infectious, rheumatic, and oncologic triggers are commonly associated with Cytokine Storm Syndromes, but understanding this disorder is critical for all researchers and physicians to ensure timely and appropriate therapy. This second edition addresses all aspects of the disorder, from genetics, pathophysiology, and ongoing research, to clinical presentations, risk factors and treatment. New-to-this-edition features include dedicated chapters on severe COVID-19 CSS, and post-COVID CSS of multi-system inflammatory syndrome in children (MIS-C). In addition, novel topics including CSS associated with Castleman disease, pregnancy, therapeutics, transplantation, and cardiac bypass, as well as treatment with JAK inhibitors are addressed. .