1. Record Nr. UNISA996465706803316

Titolo	Wired/Wireless Internet Communications [[electronic resource]] : 14th IFIP WG 6.2 International Conference, WWIC 2016, Thessaloniki, Greece, May 25-27, 2016, Proceedings / / edited by Lefteris Mamatas, Ibrahim Matta, Panagiotis Papadimitriou, Yevgeni Koucheryavy
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2016
ISBN	3-319-33936-2
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (XIII, 362 p. 184 illus.)
Collana	Computer Communication Networks and Telecommunications ; ; 9674
Disciplina	004.678
Soggetti	Computer communication systems Application software Software engineering Algorithms Computer system failures Information storage and retrieval Computer Communication Networks Information Systems Applications (incl. Internet) Software Engineering Algorithm Analysis and Problem Complexity System Performance and Evaluation Information Storage and Retrieval
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	High-Performance Wideband SDR Channelizers -- Location Based Transmission Using a Neighbour Aware-Cross Layer MAC for Ad Hoc Networks -- Message Transmission Scheduling on Tandem Multi-hop Lossy Wireless Links -- Influence of Backoff Period in Slotted CSMA/CA of IEEE 802.15.4 -- Multipath TCP Proxy: Unshackling Network Nodes from Today's End-to-End Connection Principle -- SDN-based Source Routing for Scalable Service Chaining in Datacenters -- An Efficient Geographical Addressing Scheme for the Internet -- On the Energy

Inefficiency of MPTCP for Mobile Computing -- Energy for Mobile Devices: A ”Store and Rendezvous” Approach -- Data Aware Communication for Energy Harvesting Sensor Networks -- Scalability of Passive and Active Solutions for Time-Based Ranging in IEEE 802.11 Networks -- A Collaborative Video Download Application Based on Wi-Fi Direct -- Human-in-the-Loop Connectivity Management in Smartphones -- Hardware MIMO Channel Simulator for Cooperative & Heterogeneous 5G Networks with VLC Signals -- Improving Spatial Indexing and Searching for Location-Based DNS Queries -- QoS Multi-tree Based Routing Protocol for Inter-Mesh Infrastructure Communications -- A Variable-Length Network Encoding Protocol for Big Genomic Data -- On the Evolution of Complex Network Topology under Network Churn -- A Reputation-Based Coalition Game to Prevent Smart Insider Jamming Attacks in MANETs -- A Goodness Based Vertical Handoff Algorithm for Heterogeneous Networks -- Routing-Aware Time Slot Allocation Heuristics in Contention-Free Sensor Networks -- System Design and Analysis of UAV-Assisted BLE Wireless Sensor Systems -- Implementing a Broadcast Storm Attack on a Mission-Critical Wireless Sensor Network -- Critical Sensor Density for Event-Driven Data-Gathering in Delay and Lifetime Constrained WSN -- Effective Capacity in Broadcast Channels with Arbitrary Inputs -- Throughput Improvement Using Partially Overlapping Channels in WLAN with Heterogeneous Clients -- Optimal Link Deployment for Minimizing Average Path Length in Chain Networks.

Sommario/riassunto

This book constitutes the refereed proceedings of the 14th IFIP WG 6.2 International Conference on Wired/Wireless Internet Communications, WWIC 2016, held in Thessaloniki, Greece, in May 2016. The 27 papers presented in this volume were carefully reviewed and selected from 54 submissions. The topics addressed are: wireless technologies and systems, middleboxes and addressing, energy efficiency, network applications and tools, network protocols, network modeling, wireless sensor networks, and resource management and optimization.

2. Record Nr. UNINA9910300560303321

Autore	Covey Jacob P
Titolo	Enhanced Optical and Electric Manipulation of a Quantum Gas of KRb Molecules / / by Jacob P. Covey
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	3-319-98107-2
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (257 pages)
Collana	Springer Theses, Recognizing Outstanding Ph.D. Research, , 2190-5053
Disciplina	530.12
Soggetti	Phase transformations (Statistical physics) Condensed matter Atoms Physics Low temperatures Quantum Gases and Condensates Atoms and Molecules in Strong Fields, Laser Matter Interaction Low Temperature Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter1. Introduction -- Chapter2. Experimental Background and Overview -- Chapter 3. Quantum-State Controlled Chemical Reactions and Dipolar Collisions -- Chapter 4. Suppression of Chemical Reactions in a 3D Lattice -- Chapter 5. Quantum Magnetism with Polar Molecules in a 3D Optical Lattice -- Chapter 6. A Low Entropy Quantum Gas of Polar Molecules in a 3D Optical Lattice -- Chapter 7. The New Apparatus – Enhanced Optical and Electric Manipulation of Ultracold Polar Molecules -- Chapter 8. Designing, Building and Testing the New Apparatus -- Chapter 9. Experimental Procedure – Making Molecules in the New Apparatus -- Chapter 10. New Physics with the New Apparatus – High Resolution Optical Detection and Large, Stable Electric Fields -- Chapter 11. Outlook.
Sommario/riassunto	This thesis describes significant advances in experimental capabilities using ultracold polar molecules. While ultracold polar molecules are an

idyllic platform for quantum chemistry and quantum many-body physics, molecular samples prior to this work failed to be quantum degenerate, were plagued by chemical reactions, and lacked any evidence of many-body physics. These limitations were overcome by loading molecules into an optical lattice to control and eliminate collisions and hence chemical reactions. This led to observations of many-body spin dynamics using rotational states as a pseudo-spin, and the realization of quantum magnetism with long-range interactions and strong many-body correlations. Further, a 'quantum synthesis' technique based on atomic insulators allowed the author to increase the filling fraction of the molecules in the lattice to 30%, a substantial advance which corresponds to an entropy-per-molecule entering the quantum degenerate regime and surpasses the so-called percolations threshold where long-range spin propagation is expected. Lastly, this work describes the design, construction, testing, and implementation of a novel apparatus for controlling polar molecules. It provides access to: high-resolution molecular detection and addressing; large, versatile static electric fields; and microwave-frequency electric fields for driving rotational transitions with arbitrary polarization. Further, the yield of molecules in this apparatus has been demonstrated to exceed 10^5, which is a substantial improvement beyond the prior apparatus, and an excellent starting condition for direct evaporative cooling to quantum degeneracy.