

IEEE Communications Society
Publications Contents Digest
September/2022





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Cited by: Papers (1)

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Yibing Wang;Hao Wu;Yong Niu;Jianwen Ding;Shiwen Mao;Bo Ai;Zhangdui Zhong;Ning Wang
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Wei Xia;Qianqian Wang;Quanxue Gao;Xiangdong Zhang;Xinbo Gao
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Objective Quality Assessment of Lenslet Light Field Image Based on Focus Stack
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Hadi Amirpour;Antonio M. G. Pinheiro;Elsa Fonseca;Mohammad Ghanbari;Manuela Pereira
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Ke Xu;Xinghao Jiang;Tanfeng Sun
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Dan Li;Changde Du;Haibao Wang;Qiongyi Zhou;Huiguang He
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Dong Huang;Xiaoyi Feng;Haixi Zhang;Zitong Yu;Jinye Peng;Guoying Zhao;Zhaoqiang Xia
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Cited by: Papers (1)
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Wei Huang;Siyuan Zhang;Peng Zhang;Yufei Zha;Yuming Fang;Yanning Zhang
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HTML

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Congxuan Zhang;Zhongkai Zhou;Zhen Chen;Weiming Hu;Ming Li;Shaofeng Jiang
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Jianyu Wang;Bing-Kun Bao;Changsheng Xu
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Junmei Hao;Yujie Dun;Guoshuai Zhao;Yuxia Wu;Xueming Qian
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Feng Ding;Guopu Zhu;Yingcan Li;Xinpeng Zhang;Pradeep K. Atrey;Siwei Lyu
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Speech Driven Talking Face Generation From a Single Image and an Emotion Condition
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Yifan Zuo;Hao Wang;Yuming Fang;Xiaoshui Huang;Xiwu Shang;Qiang Wu
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HTML

Adaptive Label-Aware Graph Convolutional Networks for Cross-Modal Retrieval
Shengsheng Qian;Dizhan Xue;Quan Fang;Changsheng Xu
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Dae Ha Kim;Byung Cheol Song
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HTML

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Changchong Sheng;Xinzhong Zhu;Huiying Xu;Matti Pietikäinen;Li Liu
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Rentao Wan;Jinjia Zhou;Bowen Huang;Hui Zeng;Yibo Fan
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HTML

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HTML

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Shu Yang;Yaowei Wang;Ke Chen;Wei Zeng;Zesong Fei

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HTML

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HTML

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HTML

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HTML

Tensor Product and Tensor-Singular Value Decomposition Based Multi-Exposure Fusion of Images

Haiyong Xu;Gangyi Jiang;Mei Yu;Zhongjie Zhu;Yongqiang Bai;Yang Song;Huifang Sun

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Texture Preserving Photo Style Transfer Network

Hwanbok Mun;Gang-Joon Yoon;Jinjoon Song;Sang Min Yoon

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Soft Warping Based Unsupervised Domain Adaptation for Stereo Matching

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Di Ma;Fan Zhang;David R. Bull

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Image-to-Image Translation: Methods and Applications

Yingxue Pang;Jianxin Lin;Tao Qin;Zhibo Chen

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Orthogonal Low-Rank Projection Learning for Robust Image Feature Extraction

Xiaoqian Zhang;Zhen Tan;Huaijiang Sun;Zungang Wang;Mingwei Qin

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PiSLTRc: Position-Informed Sign Language Transformer With Content-Aware Convolution

Pan Xie;Mengyi Zhao;Xiaohui Hu

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Constrained Tensor Representation Learning for Multi-View Semi-Supervised Subspace Clustering
Yongqiang Tang;Yuan Xie;Chenyang Zhang;Wensheng Zhang
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Joint Contrast Enhancement and Exposure Fusion for Real-World Image Dehazing
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Bohong Yang;Wu Ran;Lin Wang;Hong Lu;Yi-Ping Phoebe Chen
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Tear the Image Into Strips for Style Transfer
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Learning Representation on Optimized High-Order Manifold for Visual Classification
Xueqi Ma;Weifeng Liu;Qi Tian;Yue Gao
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Multi-Density Sketch-to-Image Translation Network
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HTML

Deep Generative Model for Image Inpainting With Local Binary Pattern Learning and Spatial Attention
Haiwei Wu;Jiantao Zhou;Yuanman Li
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HTML

Prior-Guided Multi-View 3D Head Reconstruction
Xueying Wang;Yudong Guo;Zhongqi Yang;Juyong Zhang
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Controllable Facial Caricaturization With Localized Deformation and Personalized Semantic Attentions
Ming Zeng;Yinglin Zheng;Jinpeng Lin;Xuan Cheng;Jing Liao;Zizhao Wu;Wenjin Deng
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HTML

Self-Paced Enhanced Low-Rank Tensor Kernelized Multi-View Subspace Clustering
Yongyong Chen;Shuqin Wang;Xiaolin Xiao;Youfa Liu;Zhongyuan Hua;Yicong Zhou
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Contrastive Attention for Video Anomaly Detection
Shuning Chang;Yanchao Li;Shengmei Shen;Jiashi Feng;Zhiying Zhou
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HTML

AniGAN: Style-Guided Generative Adversarial Networks for Unsupervised Anime Face Generation
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Zikang Yuan;Ken Cheng;Jinhui Tang;Xin Yang
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Bo Zhang;Tao Chen;Bin Wang;Ruoyao Li
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HTML

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Audio Matters in Video Super-Resolution by Implicit Semantic Guidance
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Bridging the Gap Between Semantic Segmentation and Instance Segmentation
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Heterogeneous Contrastive Learning: Encoding Spatial Information for Compact Visual Representations
Xinyue Huo;Lingxi Xie;Longhui Wei;Xiaopeng Zhang;Xin Chen;Hao Li;Zijie Yang;Wengang Zhou;Houqiang Li;Qi Tian
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Sampling and Re-Weighting: Towards Diverse Frame Aware Unsupervised Video Person Re-Identification
Pengyu Xie;Xin Xu;Zheng Wang;Toshihiko Yamasaki
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Facial Chirality: From Visual Self-Reflection to Robust Facial Feature Learning
Ling Lo;Hongxia Xie;Hong-Han Shuai;Wen-Huang Cheng
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Deep Shape-Aware Person Re-Identification for Overcoming Moderate Clothing Changes
Jiaxing Chen;Wei-Shi Zheng;Qize Yang;Jingke Meng;Richang Hong;Qi Tian
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HTML

Underwater Image Enhancement With Lightweight Cascaded Network
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Jinxiang Liu;Yangheng Zhao;Siheng Chen;Ya Zhang
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Rumeng Yi;Yaping Huang
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CroMM-VSR: Cross-Modal Memory Augmented Visual Speech Recognition
Minsu Kim;Joanna Hong;Se Jin Park;Yong Man Ro
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Knowledge-Driven Generative Adversarial Network for Text-to-Image Synthesis
Jun Peng;Yiyi Zhou;Xiaoshuai Sun;Liujuan Cao;Yongjian Wu;Feiyue Huang;Rongrong Ji
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Cited by: Papers (1)
HTML

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A Cloud-Edge Collaboration Framework for Cognitive Service

Chuntao Ding;Ao Zhou;Yunxin Liu;Rong N. Chang;Ching-Hsien Hsu;Shangguang Wang
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A Cooperative Coevolution Genetic Programming Hyper-Heuristics Approach for On-Line Resource Allocation in Container-Based Clouds

Boxiong Tan;Hui Ma;Yi Mei;Mengjie Zhang
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A Reliability-Aware, Delay Guaranteed, and Resource Efficient Placement of Service Function Chains in Softwarized 5G Networks

Prabhu Kaliyammal Thiruvassagam;Vijeth J. Kotagi;C Siva Ram Murthy
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Cited by: Papers (2)
[HTML](#)

A Remote Memory Sharing System for Virtualized Computing Infrastructures

Aram Kocharyan;Brice Ekane;Boris Teabe;Giang Son Tran;Hrachya Astsatryan;Daniel Hagimont
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Nafiseh Sharghivand;Farnaz Derakhshan;Lena Mashayekhy;Leyli Mohammadkhanli
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Authentication and Key Agreement Based on Anonymous Identity for Peer-to-Peer Cloud

Hong Zhong;Chuanwang Zhang;Jie Cui;Yan Xu;Lu Liu
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Dejan Dundjerski;Milo Tomašević
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Glauco H.S. Carvalho;Isaac Woungang;Alagan Anpalagan
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Cited by: Papers (2)
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Lingjuan Lyu;Sid Chi-Kin Chau;Nan Wang;Yifeng Zheng
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Martin Henze;Roman Matzutt;Jens Hiller;Erik Mühmer;Jan Henrik Ziegeldorf;Johannes van der Giet;Klaus Wehrle
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Congestion-Aware Traffic Allocation for Geo-Distributed Data Centers

Xiaoyi Tao;Kaoru Ota;Mianxiong Dong;Wuyunzhaola Borjigin;Heng Qi;Keqiu Li
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Xueqing Huang;Nirwan Ansari
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Cost-Effective App User Allocation in an Edge Computing Environment

Phu Lai;Qiang He;John Grundy;Feifei Chen;Mohamed Abdelrazek;John Hosking;Yun Yang
Publication Year: 2022,Page(s):1701 - 1713
Cited by: Papers (10)
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Dynamic Resource Allocation Method Based on Symbiotic Organism Search Algorithm in Cloud Computing

Ali Belgacem;Kadda Beghdad-Bey;Hassina Nacer

Publication Year: 2022,Page(s):1714 - 1725

Cited by: Papers (1)

[HTML](#)

Dynamic Resource Orchestration for Service Capability Maximization in Fog-Enabled Connected Vehicle Networks

Duc-Nghia Vu;Nhu-Ngoc Dao;Woongsoo Na;Sungrae Cho

Publication Year: 2022,Page(s):1726 - 1737

Cited by: Papers (6)

[HTML](#)

Efficient Multi-Channel Computation Offloading for Mobile Edge Computing: A Game-Theoretic Approach

Shuhui Chu;Zhiyi Fang;Shinan Song;Zhanyang Zhang;Chengxi Gao;Chengzhong Xu

Publication Year: 2022,Page(s):1738 - 1750

Cited by: Papers (4)

[HTML](#)

Efficiently Consolidating Virtual Data Centers for Time-Varying Resource Demands

Chao Guo;Yongcheng Li;Yonghu Yan;Wei Chen;Sanjay Kumar Bose;Gangxiang Shen

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Enabling Cost-Effective, SLO-Aware Machine Learning Inference Serving on Public Cloud

Chengliang Zhang;Minchen Yu;Wei Wang;Feng Yan

Publication Year: 2022,Page(s):1765 - 1779

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Publication Year: 2022,Page(s):1780 - 1791

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FADA: A Cloud-Fog-Edge Architecture and Ontology for Data Acquisition

Huifeng Wu;Yi Yan;Baiping Chen;Feng Hou;Danfeng Sun

Publication Year: 2022,Page(s):1792 - 1805

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Fairness-Efficiency Scheduling for Cloud Computing With Soft Fairness Guarantees

Shanjiang Tang;Ce Yu;Yusen Li

Publication Year: 2022,Page(s):1806 - 1818

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Publication Year: 2022,Page(s):1819 - 1830

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Publication Year: 2022,Page(s):1831 - 1847

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Interference-Aware SaaS User Allocation Game for Edge Computing

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Joint Optimization of VNF Placement and Flow Scheduling in Mobile Core Network

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Learning-Driven Cloud Resource Provision Policy for Content Providers With Competitor

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Less is More: Service Profit Maximization in Geo-Distributed Clouds

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Multi-User Task Offloading to Heterogeneous Processors With Communication Delay and Budget Constraints

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Non-Intrusive and Workflow-Aware Virtual Network Function Scheduling in User-Space

Anthony;Shihabur Rahman Chowdhury;Tim Bai;Raouf

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Jiayi Li;Jianfeng Ma;Yinbin Miao;Ruikang Yang;Ximeng Liu;Kim-Kwang Raymond Choo

Publication Year: 2022,Page(s):2005 - 2019

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Privacy-Preserving Medical Treatment System Through Nondeterministic Finite Automata

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Publication Year: 2022,Page(s):2020 - 2037

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Privacy-Preserving Subgraph Matching Scheme With Authentication in Social Networks

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IEEE Communications Society Information

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[HTML](#)

User Rate Optimization for Fronthaul-Constrained Cell-Free Massive MIMO-OFDM Systems: A Quadratic Transform-Based Approach
Kui Xu;Mouhua Huang;Dongmei Zhang;Xiaochen Xia;Wei Xie;Nan Sha
Publication Year: 2022,Page(s):1244 - 1251
[HTML](#)

Multiple Parallel Federated Learning via Over-the-Air Computation
Gaoxin Shi;Shuaishuai Guo;Jia Ye;Nasir Saeed;Shuping Dang
Publication Year: 2022,Page(s):1252 - 1264
[HTML](#)

Local Re-Encoding for Coded Matrix Multiplication
Xian Su;Jared Parker;Xiaomei Zhong;Xiaodi Fan;Jun Li
Publication Year: 2022,Page(s):1265 - 1279
[HTML](#)

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Selen Gecgel Cetin;Caner Goztepe;Gunes Karabulut Kurt;Halim Yanikomeroglu
Publication Year: 2022,Page(s):1280 - 1294
[HTML](#)

Achievable Rate Analysis and Max-Min SINR Optimization in Intelligent Reflecting Surface Assisted Cell-Free MIMO Uplink
Qurrat-UI-Ain Nadeem;Alessio Zappone;Anas Chaaban
Publication Year: 2022,Page(s):1295 - 1322
[HTML](#)

QoS Aware Robot Trajectory Optimization With IRS-Assisted Millimeter-Wave Communications
Cristian Tatino;Nikolaos Pappas;Di Yuan
Publication Year: 2022,Page(s):1323 - 1336
[HTML](#)

Energy-Efficiency Computation Offloading Strategy in UAV Aided V2X Network With Integrated Sensing and Communication
Qian Liu;Hairong Liang;Rui Luo;Qilie Liu
Publication Year: 2022,Page(s):1337 - 1346
[HTML](#)

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Trung Q. Duong;Long D. Nguyen;Bhaskara Narottama;James Adu Ansere;Dang Van Huynh;Hyundong Shin
Publication Year: 2022,Page(s):1347 - 1359
Cited by: Papers (1)
[HTML](#)

Survey on Digital Twin Edge Networks (DITEN) Toward 6G
Fengxiao Tang;Xuehan Chen;Tiago Koketsu Rodrigues;Ming Zhao;Nei Kato
Publication Year: 2022,Page(s):1360 - 1381
[HTML](#)

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Gürkan Gür;Anshuman Kalla;Chamitha de Alwis;Quoc-Viet Pham;Khac-Hoang Ngo;Madhusanka Liyanage;Pawani Porambage
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[HTML](#)

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Publication Year: 2022,Page(s):1413 - 1427
[HTML](#)

A Parametric Network for the Global Compensation of Physical Layer Linear Impairments in Coherent Optical Communications
Alexandru Frunzä;Vincent Choqueuse;Pascal Morel;Stéphane Azou
Publication Year: 2022,Page(s):1428 - 1444
[HTML](#)

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Publication Year: 2022,Page(s):1445 - 1465
Cited by: Papers (2)
[HTML](#)

Single-Versus Multicarrier Terahertz-Band Communications: A Comparative Study
Simon Tarboush;Hadi Sardeddeen;Mohamed-Slim Alouini;Tareq Y. Al-Naffouri
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[HTML](#)

Fairness-Based Energy-Efficient 3-D Path Planning of a Portable Access Point: A Deep Reinforcement Learning Approach
Nithin Babu;Igor Donevski;Alvaro Valcarce;Petar Popovski;Jimmy Jessen Nielsen;Constantinos B. Papadias
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[HTML](#)

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Xinghua Sun;Wen Zhan;Weihua Liu;Yitong Li;Qi Liu
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[HTML](#)

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Kun-Hsien Lin;Kuang-Hao Liu
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[HTML](#)

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[HTML](#)

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[HTML](#)

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[HTML](#)

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[HTML](#)

Machine Learning for CSI Recreation in the Digital Twin Based on Prior Knowledge
Brenda Vilas Boas;Wolfgang Zirwas;Martin Haardt
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[HTML](#)

Datasets
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Luca Chiaraviglio;Chiara Lodovisi;Daniele Franci;Enrico Grillo;Settimio Pavoncello;Tommaso Aureli;Nicola Blefari-Melazzi;Mohamed-Slim Alouini
Publication Year: 2022,Page(s):1592 - 1614
[HTML](#)

Impact of Antenna Distribution on Spectral and Energy Efficiency of Cell-Free Massive MIMO With Transmit Power Control Algorithms
Masaaki Ito;Issei Kanno;Kosuke Yamazaki;Yoji Kishi;Wei-Yu Chen;Thomas Choi;Andreas F. Molisch
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[HTML](#)

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Yuichi Sei;Akihiko Ohsuga

Publication Year: 2022,Page(s):1630 - 1642

[HTML](#)

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Tongyang Xu;Fan Liu;Christos Masouros;Izzat Darwazeh

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Cited by: [Papers \(1\)](#)

[HTML](#)

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Bo Sun;Bo Tan;Mateen Ashraf;Mikko Valkama;Elena Simona

Lohan

Publication Year: 2022,Page(s):1656 - 1671

[HTML](#)

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Wei Wang;Nan Qi;Luliang Jia;Chunguo Li;Theodoros A. Tsiftsis;Mei

Wang

Publication Year: 2022,Page(s):1672 - 1687

[HTML](#)

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Stefan Farthofer;Matthias Herlich;Christian Maier;Sabrina

Pochaba;Julia Lackner;Peter Dorfinger

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[HTML](#)

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[HTML](#)

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Arani;Halim Yanikomeroglu

Publication Year: 2022,Page(s):1719 - 1736

[HTML](#)