



# IEEE Radio and Wireless Symposium

16-19 January 2022, Caesars Palace Hotel, Las Vegas, NV USA

Paper Deadline  
25 July 2021



IEEE



Part of Radio and Wireless Week

<https://www.radiowirelessweek.org/>

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## Call For Papers

The 2022 IEEE Radio and Wireless Symposium (RWS 2022) will be held during the week of 16 January 2022 in Las Vegas, NV, USA.

RWS 2022 and the 22<sup>nd</sup> IEEE Topical Meeting on Silicon Monolithic Integrated Circuits (SiRF 2022) are co-located and will continue to hold joint sessions. Topical conferences held in parallel provide more focused sessions in the areas of RF Power Amplifiers (PAWR), Wireless Sensors and Sensor Networks (WiSNet), and the IEEE Space Hardware and Radio Conference (SHaRC). The RWS Demonstration Track provides an interactive forum for hands-on demonstration of latest wireless experiments and innovations. There are also special sessions, short courses, and design competition. RWS Papers featuring innovative work are solicited in (but not limited to) the following areas:

### 1. High-speed and Broadband Wireless Technologies

- 3G/4G/5G Wireless Communication Services
- Broadband Fixed Wireless and Last-Mile Access
- Optical Networks Systems and Microwave Photonics
- Ultra-High Data Rate Communications Links - Powerline Communication Technologies
- Ultra-Wideband (UWB) Systems

### 2. Emerging Wireless Technologies and Applications

- Femtocell and Heterogeneous Networks
- Green, Sustainable Wireless Tech. & Networks
- M2M & V2V Technologies & Applications
- Resource Management, Security
- Wireless Security and RFID Technologies
- Wireless Power Transfer
- Quantum Technologies with Microwaves

### 3. Wireless System Architecture and Propagation Channel Modeling

- Ad Hoc Network Techniques for Internetworking
- Distributed Network Architectures and Systems
- Frequency and Channel Allocation Algorithms
- Propagation Considerations and Fading Countermeasures
- Wireless Channel Characterization & Modeling
- Wireless Mesh and Local/Personal/Body Area Networks

### 4. Wireless Digital Signal Processing and Artificial Intelligence

- Digital/Analog Adaptive/Collaborative Signal Processing
- Dynamic Spectrum Sharing, Coexistence, Interoperability
- Interference Mitigation and Cancellation Techniques
- MAC, Networking protocols, Policies, Standardization
- Methods for Signal Integrity and Signal Conditioning
- Artificial Intelligence & Machine Learning in Radio and Wireless
- Spectrum Sensing Technologies

### 5. Applications to Bio-Medical, Environmental, and Internet of Things

- Miniaturization and Integration of Wireless Technologies
- Biological Material Characterization
- Personal Area Networks and Body area Sensor Networks
- Wireless Positioning Technologies & Remote Sensing

### 6. MIMO and Multi-Antenna Communications

- Cooperative/Collaborative Technology
- MIMO, MU-MIMO, Space-Time Processing - Relaying Technologies
- Multi-Beam Smart Antennas

### 7. Antenna Technologies

- Miniaturized, Multi-frequency and Broadband Antennas
- Passive and Active Antennas from RF to THz Frequencies
- Wireless Platform Integrated Antennas

### 8. Transceiver and SDR Technologies

- Digital Transmitters for Sub-6 GHz Wireless
- Low-Power Cost-Effective IoT Solutions
- Multi-Mode Multi-Band Radios
- RF Imperfection Compensation Techniques
- Satellite Communication Systems

### 9. Passive Components & Packaging

- 3D-Packaging, Interconnects, and Applications
- Discrete and Highly Integrated Packaging
- Discrete, Embedded and Distributed Passive Components, Filters Couplers and Signal Separation Devices
- Packaging of MEMS, Biosensors and Organic ICs

### 10. MM-Wave to THz Technology & Applications

- Active and Passive Devices Demonstration
- Architectures for Next-Generation Large-Scale Systems
- High-Capacity Sensing and Imaging Arrays
- Phased Arrays for 5G Communication

### 11. 3D & Novel Engineered Materials

- Additive 3D manufacturing for wireless applications
- Novel Engineered Materials for Antenna, Packaging, Passive Devices and Flexible Electronic Integration

### RWS 2022 General Chair

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Paper submission instructions can be found at <http://www.radiowirelessweek.org/>. Submissions should be formatted according to the submission review template available on the RWW website. Authors should indicate preference for oral or poster presentation. All submissions must be received by **25 July 2021**. All accepted papers will be published in a digest and included in the IEEE Xplore® Digital Library. Submissions will be evaluated based on novelty, significance of the work, technical content, interest to the audience, and quality of writing.