

Conferences And Trade Shows Addressing SiC & GaN Power Devices In 2018

With silicon power semiconductor technologies approaching maturity, the power electronics industry is now turning its attention to wide-bandgap semiconductors, particularly SiC and GaN power devices. This technology is now a major topic of discussion at all power electronics conferences as well as a subject garnering attention at various other semiconductor and electronics conferences. A sampling of the conferences where engineers can learn about the latest developments in SiC and GaN power semiconductors is presented here.

March:

[APEC](#)

Applied Power Electronics Conference and Exposition

March 4-8, 2018

San Antonio, TX

Notes: Discussions of SiC and GaN power devices permeate every aspect of APEC these days from the plenary session to the technical paper sessions to the industry sessions. There are even pre-conference tutorials discussing SiC and GaN devices. Plus there are numerous product displays and demos in the exhibit featuring SiC and GaN devices.

[IRPS](#)

International Reliability Physics Symposium

Forum for reporting technological breakthroughs in the area of microelectronics reliability

March 11-15, 2018

Burlingame, CA

Notes: Includes tutorials "SiC Power MOSFETs: Application Benefits and Technology Validation Needs" and "Validating the Robustness of GaN Power Transistors". Technical program includes a session "Wide Bandgap Semiconductors". Workshops include "Synergies between GaN and SiC for reliability development and standardization."

[GOMACTech Conference](#)

Government Microcircuit Applications & Critical Technology Conference

Technologies for Secure Spectrum Access from DC to Light

March 12-15, 2018

Miami, FL

Notes: Call for papers includes "Power Electronics and Emerging Power Technologies" where it states "Submissions are encouraged in the areas of wide and ultra-wide bandgap material development and device results (GaN, SiC, Ga2O3, AlN, and Diamond), pulsed power, wireless power transfer and novel power distribution architectures."

[ARPA-E](#)

Energy Innovation Summit

March 13-15, 2018

Washington, D.C.

Notes: Technology Showcase (the exhibition) includes companies and universities working on SiC and GaN materials, devices and applications.

[CIPS](#)

International Conference on Integrated Power Electronics

March 20-22, 2018

Stuttgart, Germany

April:

[CS International](#)

Connecting, informing and inspiring the compound semiconductor industry

Co-located with PIC International and IoT International

April 10-11, 2018

Sheraton Brussels Airport Hotel

Brussels, Belgium

Notes: Includes session on "Wrestling Market Share From Silicon Power Devices" with talks such as "Shifting Gears: The 'GaN-ification' of Automobiles," "The SiC & GaN Power Semiconductor Market: Forecasts and Drivers," "Exploiting the merits of GaN and SiC," "Accelerated Adoption of Wide Bandgap Devices in Automotive Applications," Status Updates: Volume Manufacturing of High Performance & Scalable GaN Power Devices on 8-inch Diameter QST Platform" "Accelerating the Commercial Application of Compound Semiconductors" and "Fast-Loop Assessment of GaN/AlGaN Epitaxial Layers for Power Applications".

May:

[CS Mantech Conference](#)

International Conference on Compound Semiconductor Manufacturing Technology

Includes Reliability Of Compound Semiconductors (ROCS) Workshop

May 7-10, 2018

Hyatt Regency Austin

Austin, TX

[ISPSD](#)

International Symposium on Power Semiconductor Devices and ICs

Palmer House Hilton Hotel

Chicago, IL

May 13-17, 2018

Notes: Includes short courses on "SiC Device Design & Fabrication," "Vertical GaN Power Devices" and "AlGaIn/GaN Power Device Reliability" plus multiple sessions on SiC and GaN power devices and packaging.

[Compound Semiconductor Week](#)

Joint venue for International Symposium on Compound Semiconductors (ISCS) and the International Conference on Indium Phosphide and Related Materials (IPRM)

May 29- June 1, 2018

Massachusetts Institute of Technology

Cambridge, MA

Notes: Topics include "Power Electronics" and "Wide Bandgap Materials".

June:

[PCIM Europe](#)

June 5-7, 2018

Nuremberg, Germany

Notes: Includes numerous talks on SiC and GaN power devices as well as related product displays and demos.

[SCAPE](#)

International Wide-Bandgap Power Electronics Applications Workshop

Previously known as ISiCPEAW and IWBGPEAW

June 11-12, 2018

Radisson Blu Royal Park Hotel

Stockholm, Sweden

[ITEC](#)

Components, Systems, And Power Electronics—From Technology To Business And Public Policy

June 13-15, 2018

Long Beach, CA

Notes: Includes talk on "Engine Coolant Power Dense 200 kW 1050 V DC Bus SiC Dual Inverter" and panel on "Power Electronics—Applications of Si, SiC, GaN".

[COMPEL](#)

IEEE Workshop on Control and Modeling for Power Electronics

June 25-28, 2018

Padova, Italy

Notes: Workshop places special emphasis on “topologies, modeling methodologies and control techniques for very high-frequency power conversion”.

[PCIM Asia](#)

June 26-28, 2018

Shanghai (Pudong), China

July:

[NSREC](#)

IEEE Nuclear And Space Radiation Effects Conference

July 16-20, 2018

Kona, HI

Notes: Past conferences have included papers discussing radiation hardness of wide-bandgap devices. Exhibit has included one or more GaN power device suppliers.

September:

[EPE and ECCE Europe](#)

European Conference on Power Electronics and Applications and Energy Conversion Congress and Expo Europe

Sept 17-21, 2018

Kipsala International Exhibition Centre

Riga, Latvia

[ECCE](#)

IEEE Energy Conversion Congress & Expo

September 23-27, 2018

Oregon Convention Center

Portland, OR

Notes: There are talks on SiC and GaN power devices spread across the various conference sessions. For more about this conference see How2Power’s special section on [ECCE](#).

October:

[BCICTS](#)

IEEE BiCMOS and Compound Semiconductor Integrated Circuits and Technology Symposium

October 14-17, 2018

Sheraton San Diego Hotel and Marina

San Diego, CA

[WiPDA](#)

IEEE Workshop on Wide Bandgap Power Devices and Applications

October 31-November 2, 2018

Georgia Tech Hotel and Conference Center

Atlanta, GA

Notes: This workshop is described as a "a forum for device scientists, circuit designers, and application engineers from the IEEE Power Electronics and Electron Devices societies to share technology updates, research findings, development experience, and ideas for novel applications."

November:

[Semicon Europa](#)

Semiconductors Drive Smart

Co-located with Electronica

November 13-16, 2018

Messe Munchen

Munich, Germany

December:

[IEDM](#)

IEEE International Electron Devices Meeting

December 1-5, 2018

Hilton San Francisco Union Square

San Francisco, CA

Notes: This conference is an established forum for reporting technological breakthroughs in the areas of semiconductor and electronic device technology, design, manufacturing, physics, and modeling. Past conferences have included papers on SiC and GaN devices. The current call for papers mentions "compound semiconductor and high speed devices" and "power devices".

Know of a conference or tradeshow in 2018 addressing SiC and GaN power devices that is not listed here? Email the [editor](#) to tell How2Power about it.

For further reading, see How2Power's section on [Silicon Carbide and Gallium Nitride Power Technology](#). This section brings you news of SiC and GaN developments along with related design information, supplier data, book reviews, and more.