

Conferences And Trade Shows Addressing SiC & GaN Power Devices In 2017

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.

February:[ARPA-E](#)

Energy Innovation Summit

February 27- March 1, 2017

Gaylord National Resort and Convention Center

National Harbor, MD

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

March:[CS International](#)

Connecting, informing and inspiring the compound semiconductor industry

Co-located with PIC International and IoT International

March 7-8, 2017

Sheraton Brussels Airport Hotel

Brussels, Belgium

Notes: Includes session on "Perfecting Power Electronics" with talks such as "Unleashing the potential of gallium oxide," "High efficiency at high power density: realization of GaN's promise for power electronics," "Driving the GaN Power Device roadmap for large scale adoption," "From Hype to Reality: GaN/Si - where are we today?" "Current topics in electronic devices based on wide band-gap semiconductors for power applications and energy efficiency," "Slashing chip costs with SiC-on-silicon," "Wide bandgap devices: the key to the world's smallest laptop charger," and "Bulk GaN substrate grown by HVPE."

[ECPE SiC & GaN User Forum](#)

Potential of Wide Bandgap Semiconductors in Power Electronic Applications

March 8-9, 2017

Hotel Maritim

Nuremberg, Germany

[GOMACTech Conference](#)

Government Microcircuit Applications & Critical Technology Conference

Technologies for Secure Spectrum Access from DC to Light

March 20-23, 2017

The Grand Sierra Resort

Reno, NV

St. Louis, MO

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."

[APEC](#)

Applied Power Electronics Conference and Exposition

March 26-30, 2017

Tampa, FL

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.

April:

[IRPS](#)

International Reliability Physics Symposium

April 2-6, 2017

Monterey, CA

Notes: Includes workshop on "GaN Power Device Reliability Standardization: Sense and Non-Sense of Silicon JEDEC Testing, What is Next?"

[IWIPP](#)

IEEE International Workshop on Integrated Power Packaging

April 5-7, 2017

Delft University of Technology

Delft, Netherlands

[CICC](#)

Custom Integrated Circuits Conference

April 30-May 3, 2017

Austin, TX

Notes: A past edition of this conference included a talk on "Progress and Future Challenges of Silicon Carbide Devices for Integrated Circuits." The conference also lists "power management circuits and techniques for power generation, conversion, distribution, monitoring and integration..." as a topic of interest.

May:

[Compound Semiconductor Week](#)

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

May 14-18, 2017

Berlin, Germany

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

[PCIM Europe](#)

May 16-18, 2017

Nuremberg, Germany

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

[ROCS](#)

Reliability Of Compound Semiconductors Workshop

Preceding the International Compound Semiconductor MANufacturing TECHNOlogy Conference

May 22, 2017

Hyatt Regency Indian Wells Resort & Spa

Palm Springs, CA

[ISPSD](#)

International Symposium on Power Semiconductor Devices and ICs

Royton Sapporo

Sapporo, Japan

May 28-June 1, 2017

Notes: Call for papers includes "GaN and nitride base compound materials" and "SiC and other materials."

June:

[IFEEC- ECCE Asia](#)

International Future Energy Electronics Conference—ECCE Asia

June 3-7, 2017

Kaohsiung Exhibition Center

Kaohsiung, Taiwan

[ITEC](#)

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

June 22-24, 2017

Dearborn, MI

Notes: Past conferences have included SiC and GaN related talks or courses.

[PCIM Asia](#)

June 27-29, 2017

Shanghai (Pudong), China

Notes: Hot topics for 2017 include "E-Mobility, silicon carbide, wide bandgap, charging stations."

July:

[COMPEL](#)

IEEE Workshop on Control and Modeling for Power Electronics

July 9-12, 2017

Stanford University

Palo Alto, CA

Notes: Workshop places special emphasis on "modeling and control of multi-level converters," "topologies/circuits using wide bandgap devices," and "reliability of switching devices and passive components in modern converter architectures."

[NSREC](#)

IEEE Nuclear And Space Radiation Effects Conference

July 17-21, 2017

The New Orleans Marriott

New Orleans, LA

Notes: Past conferences have included papers discussing radiation hardness of wide-bandgap devices. This year's exhibit includes a GaN power device supplier.

September:

[EPE and ECCE Europe](#)

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

Sept 11-14, 2017

Gromada Airport Hotel and Conference Centre

Warsaw, Poland

October:

[ECCE](#)

IEEE Energy Conversion Congress & Expo

October 1-5, 2017

Duke Energy Convention Center

Cincinnati, OH

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](#).

[CSICS](#)

IEEE Compound Semiconductor IC Symposium

Co-located with IEEE Bipolar/BiCMOS Circuits and Technology Meeting (BCTM)

October 22-25, 2017

Miami Marriott Biscayne Bay

Miami, FL

Notes: Call for papers includes "GaN power conversion devices" and "power conversion and optoelectronic circuit blocks and ICs in III-V, CMOS, SiGe BiCMOS."

November:

[WiPDA](#)

IEEE Workshop on Wide Bandgap Power Devices and Applications

November 6-8, 2017

Sandia National Laboratories

Albuquerque, NM

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.”

[Semicon Europa](#)

Power Electronics Conference

November 14-17, 2017

Messe Munchen

Munich, Germany

Notes: Features talks on SiC and GaN power semiconductors and various power electronics applications.

December:

[IEDM](#)

IEEE International Electron Devices Meeting

Dec 4-6, 2017

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 materials” and “smart -power technologies.”

[Power Electronics Conference](#)

Dec 5, 2017

Hilton Hotel at Munich Airport

Munich, Germany

Notes: One day program focuses on SiC and GaN power semiconductors.

Know of a conference or tradeshow in 2017 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 technology roadmaps.