

Conferences And Trade Shows Addressing SiC & GaN Power Devices In 2022

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:

[ARPA-E](#)

Energy Innovation Summit

March 14-16, 2022

Denver, CO

Notes: In the past, the Technology Showcase (the exhibition) has included companies and universities working on wide-bandgap semiconductor (SiC, GaN and diamond) materials, power devices and applications.

[CIPS](#)

International Conference on Integrated Power Electronics

March 15-17, 2022

Berlin, Germany and Online

[APEC](#)

Applied Power Electronics Conference and Exposition

March 20-24, 2022

Houston, 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.

[GOMACTech Conference](#)

Government Microcircuit Applications & Critical Technology Conference

Technologies for Secure Spectrum Access from DC to Light

March 21-24, 2022

Hyatt Regency Miami

Miami, FL

[IRPS](#)

International Reliability Physics Symposium

March 27-31, 2022

Hilton DFW Lakes Executive Conference Center

Dallas, TX

Notes: "Conference for engineers and scientists to present new and original work in the area of microelectronics reliability". Includes tutorials such as "GaN power devices: challenges for improved stability and reliability" and "Effects of Defects in SiC Epilayers on Device Yield and Reliability".

May:

[CS Mantech Conference](#)

International Conference on Compound Semiconductor Manufacturing Technology

May 9-12, 2022

Monterey Marriott & Conference Center

Monterey, CA

[ROCS](#)

Reliability of Compound Semiconductors Workshop Monterey, CA

May 09, 2022

Monterey Marriott

Monterey, CA

Notes: Topics include "Status of 'Guidelines for Space Qualification of GaN HEMT Technology'," and "Effects of External Strain on GaN-Based HEMTs Under X-Ray Irradiation"

[PCIM Europe](#)

May 10-12, 2022

Nuremberg, Germany

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

[IPEC ECCE Asia](#)

May 15-19, 2022

Hybrid or online-only format

Himeji City Culture and Convention Center

Himeji, Japan

[ISPSD](#)

International Symposium on Power Semiconductor Devices and ICs

Marriott Pinnacle Downtown Hotel

Vancouver, Canada

May 22-26, 2022

Notes: Call for papers includes "GaN and Compound Materials: Device and technology (GaN)" and "SiC and Other Materials".

June:

[Compound Semiconductor Week](#)

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

June 1-3, 2022

University of Michigan in Ann Arbor

Ann Arbor, MI

[ITEC+EATS](#)

IEEE/AIAA Transportation Electrification Conference And Electric Aircraft Technologies Symposium

June 15-17, 2022

Westin Anaheim Resort

Anaheim, CA

Notes: Includes short courses and tutorials on "Challenges And Solutions Of WBG Based Power Electronics For Vehicle Electrification" and "How To Be Mobile With GaN Power Technology".

[GaN Marathon](#)

June 20-22, 2022

Cavalli-Franchetti Palace

Venice, Italy

[COMPEL](#)

IEEE Workshop on Control and Modeling for Power Electronics

June 20-23, 2022

Dan Panorama Tel Aviv Hotel

Tel Aviv, Israel

[CS International](#)

June 28-29, 2022

Sheraton Brussels Airport Hotel

Brussels, Belgium

July:

[NSREC](#)

IEEE Nuclear And Space Radiation Effects Conference

July 18-22, 2022

Utah Valley Conference Center

Provo, UT

Notes: Past conferences have included papers discussing radiation hardness of wide-bandgap devices. Exhibit typically includes multiple vendors offering rad hard GaN power devices.

August:

[PCIM Asia](#)

August 31-September 2, 2022

Shanghai, China

September:

[EPE and ECCE Europe](#)

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

September 5-9, 2022

Hannover Congress Centrum

Hannover, Germany

Notes: Topics include "Active Devices and Components (Wide Bandgap and other New Materials)".

[WiPDA Europe](#)

IEEE Workshop on Wide Bandgap Power Devices and Applications in Europe

September 19-20, 2022

University of Warwick

Coventry, U.K.

[ECSCRM](#)

September ??, 2022

European Conference on Silicon Carbide and Related Materials

October:

[ECCE](#)

IEEE Energy Conversion Congress & Expo

October 9-13, 2022

Huntington Place

Detroit, MI

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](#).

[BCICTS](#)

IEEE BiCMOS and Compound Semiconductor Integrated Circuits and Technology Symposium

Integrated Circuits and Devices in SiGe, GaN, GaAs and other compound semiconductors and related technologies

October 16-19, 2022

Sheraton Phoenix Downtown

Phoenix, AZ

November:

[ICSCRM 2022: 16. International Conference on Silicon Carbide and Related Materials](#)

November 8-9, 2022

Dubai, United Arab Emirates

Notes: Call for papers includes "Devices (Power Switching Devices, RF Power Devices, High-Temperature Devices, Radiation-Resistant Devices, etc.)"

[Bodo's Wide Bandgap Event](#)

November 29, 2022

Munich Airport

Munich, Germany

December:

[IEDM](#)

IEEE International Electron Devices Meeting

December 3-7, 2022

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. "Topics of interest include power devices (diodes, BJTs, FETs, superjunction devices, IGBTs, HEMTs, etc.), and materials (Si, Diamond, SiC, GaAs, GaN, AlN, Ga₂O₃, etc.), manufacturing processes, device design, modeling (TCAD and compact models), physics, and reliability."

Know of a conference or tradeshow in 2022 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.