



IEEE TRANSACTIONS ON TERAHERTZ SCIENCE AND TECHNOLOGY

"EXPANDING THE USE OF THE ELECTROMAGNETIC SPECTRUM"

The IEEE Microwave Theory and Techniques Society (MTT) is pleased to announce the introduction of a new journal specifically aimed at the frequency range between 300 GHz and 10 THz:

IEEE Transactions on Terahertz Science and Technology -
"Expanding the use of the Electromagnetic Spectrum"

The transactions covers a wide range of activities and developments in terahertz science and applications, while at the same time, helping to bridge the technology gap between the RF and photonics communities. The journal targets high impact papers with broad appeal to the rapidly expanding terahertz community. The high standards of the MTT transactions will be maintained, but the scope of the transactions will extend to fields and activities that are outside of the traditional RF and microwave society. A personal goal of the editor-in-chief is to enrich the readers' experience by exposure to cross-disciplinary developments in the field that they might otherwise miss.

The **IEEE Transactions on Terahertz Science and Technology** brings together in a single focused journal, the very broad range of topics and technologies that encompass THz techniques and applications. The editorial board is organized by topic area and has a primary goal of reviewing submitted papers and deciding on publication status within three months. Accepted papers will be posted on-line through IEEE *Xplore* within approximately six weeks of final acceptance. This rapid posting of high-quality papers will bring new ideas more quickly to the fore and stimulate discussion and distribution without compromising the peer review process. In keeping with the varied scope of the THz field, the topical editors of the transactions will frequently re-evaluate their emphasis and update their committee members to intelligently respond to trends and to the suggestions of the transactions contributors and readers.

The **Inaugural Issue** – Volume 1, Number 1, is September 2011. This archival quality release gives the reader a broad introduction to the THz field and contains a large number of overview and review papers on THz technologies and applications from notable researchers. Subsequent issues are open to all relevant contributions. At regular intervals the journal will also highlight papers from a variety of THz conferences and workshops. A special feature each month called "THz Pioneers" will highlight career contributions from researchers who have had a major impact on the field.

The paper submission, review and revision sequence follows a widely utilized IEEE electronic process (Scholar One) accessible through <http://www.thz.ieee.org>. The site is now open for submissions. Please plan to take advantage of this new and dedicated THz journal to highlight your current and future research.

For questions or further details contact us at thzedit@nist.gov.

Topics for the transactions include all areas of THz science, technology, instruments and applications and are broken out into specific editorial domains as follows (responsible Topical Editor in *italics*):

1. THz applications in astronomy, space, and environmental science (*Chris Walker, Univ. of Arizona, USA*)
2. THz applications in biology and medicine (*Gian Piero Gallerano, ENEA Frascati, Italy*)
3. THz applications in chemistry and spectroscopy (*P. Uhd Jepsen, Tech. Univ. of Denmark*)
4. THz plasma science and instruments (*Stefano Alberti, Ecole Polytechnique Fed. de Lausanne, Switzerland*)
5. THz radar and communications (*Erich Grossman, NIST Boulder, USA*)
6. THz industrial and non-destructive evaluation (*Martin Koch, Marburg Univ., Germany*)
7. THz devices and components (*Imran Mehdi, JPL and Jack East, Univ. of Michigan, USA*)
8. THz photonics (*Giles Davies, Univ. of Leeds, UK*)
9. THz nonlinear optics, optical based sources and imaging (*Kodo Kawase, Nagoya Univ., Japan and Rene Beigang, Fraunhofer IPM, Germany*)
10. THz beam formers and guided structures (*Nuria Llombart-Juan, Univ. Complutense de Madrid, Spain*)
11. THz modeling and analysis techniques (*Gun-Sik Park, Seoul National Univ., Republic of Korea*)

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SPECIAL INAUGURAL ISSUE

Invited Keynote Paper Topics

Corresponding Authors

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THz Solid-State Integrated Circuit Amplifiers: An Overview	<i>Lorene Samoska, JPL, USA</i>
THz MMICs using InP High Electron Mobility Transistors.....	<i>William Deal, NGC, USA</i>
THz Low Power Sources: Technology, Performance and Capabilities.....	<i>Goutam Chattopadhyay, JPL, USA</i>
THz Vacuum Electronic Sources for High Power Coherent Radiation	<i>John Booske, U. Wisconsin, USA</i>
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THz Coherent Detector Arrays	<i>Chris Groppi, Arizona State, USA</i>
THz Photon Detection with Nanobolometers	<i>Boris Karasik, JPL, USA</i>
THz Antenna Coupled Kinetic Inductance Detectors	<i>Andrea Neto, TU Delft, Netherlands</i>
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