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Spintronics XVII (OP111)

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For years the spin degree of freedom has been directly used as an information support in nanometer-scale devices. Today applications mostly concern the huge market of information storage, read heads, nonvolatile magnetic memories (MRAMs), or magnetic logic units. Recent developments are being considered for spin-based logic or quantum computing. New topics are emerging in frontier fields, e.g. topological spin structures, topological insulators, Majorana fermions, antiferromagnetic spintronics, spin photonics and spin optics, ultra-fast phenomena and THz emission or spin-caloric phenomena. These advances make use of the fascinating developments of new materials.

The purpose of the conference is to provide a broad overview of the state-of-the-art and perspectives, bringing together experts from different communities: fundamental physics (experimental and theoretical), materials science and chemistry, fabrication processes and industrial developments, etc. Contributions for this conference are encouraged in particular in the following areas:

- spin-coherence, semiconductor spin physics, quantum wells and quantum dots
- magnetic nanostructures, micromagnetism, spin-precession, and magnonics
- spin-injection, spin-transfer, spin-Hall and related effects
- new materials (graphene and chalcogenides, oxides, organics, etc.)
- topological matter, topological spin textures
- new structures and emerging applications (magnetoresistive devices, MRAMs, spin logic, ultra-fast memories, etc.)
- neuromorphic computing
- spin photonics, spin lasers, THz emission, and spin optics
- superconducting spintronics.



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Abstracts due	7 February 2024
Registration opens	April 2024
Authors notified and program posts online	29 April 2024
Submission system opens for manuscripts and poster PDFs*	17 June 2024
Poster PDFs due for spie.org preview and publication	24 July 2024
Manuscripts due	31 July 2024
Advance upload deadline for oral presentation slides**	16 August 2024

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What you will need to submit

- Title
- · Author(s) information
- Speaker biography (1000-character max including spaces)
- Abstract for technical review (200-300 words; text only)
- Summary of abstract for display in the program (50-150 words; text only)
- Keywords used in search for your paper (optional)
- Check the individual conference call for papers for additional requirements (i.e. extended abstract PDF upload for review or instructions for award competitions)

Note: Only original material should be submitted. Commercial papers, papers with no new research/development content, and papers with proprietary restrictions will not be accepted for presentation.

How to submit your abstract

- Visit the conference page: www.spie.org/op111call
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- Obtain funding for registration fees, travel, and accommodations
- · Attend the meeting
- Present at the scheduled time

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