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Vergani, Giorgio | SAES Getters S.p.A., Lainate, Italy

Wallrabe, Ulrike | University of Freiburg, Germany

## Important Dates

**15 January 2022** ..... submission of abstracts

**06 March 2022** ..... notification of acceptance

**30 April 2022** ..... submission of papers

## Organizer

VDE/VDI Society Microelectronics, Microsystems and Precision Engineering

Stresemannallee 15, 60596 Frankfurt/Main, Germany

[www.vde.com/gmm](http://www.vde.com/gmm)

[gmm@vde.com](mailto:gmm@vde.com)

## Conference Fee

Registration until 30 April 2022	900 €
Registration from 1 May 2022	1050 €
Speakers	550 €
Students	450 €
One day pass	450 €

No additional VAT will be charged.

## Conference Venue

Congress Center

Rosengarten

Rosengartenplatz 2

68161 Mannheim, Germany

Phone: +49 621 4106-0



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## Contact

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## Call for Papers and Invitation for Exhibitors

# ACTUATOR 22

International Conference and Exhibition on New Actuator Systems and Applications

**Congress Center Rosengarten  
Mannheim, Germany  
June 28–30, 2022**

[www.actuator.de](http://www.actuator.de)

Organized by:

Society of Microelectronics, Microsystems and Precision Engineering (VDE/VDI GMM)

**VDE** **VDI** **GMM**

## Announcement

**ACTUATOR 2022**, the **18<sup>th</sup> International Conference** and the **12<sup>th</sup> International Exhibition on New Actuator Systems and Applications**, will take place in Mannheim, Germany, on June 28–30, 2022.

ACTUATOR is a major biennial event bringing together leading experts, suppliers and users in the field of new actuators and low-power electromagnetic drives from all over the world. The invitation to attend ACTUATOR is aimed at executives and researchers from industrial companies as well as institutes, colleges and universities who are interested in the transfer of R&D results into innovative actuator applications and drive technologies.

## The Conference

With about 400 participants from more than 20 countries, the **18<sup>th</sup> International Conference on New Actuator Systems and Applications** has been the most important place to meet leading international specialists, to share their expertise and to start business co-operations in the field of new actuator technologies.

ACTUATOR has been the key forum for actuators based on smart materials and micro technologies as well as their applications in all areas of engineering for thirty years now. Over the years, a huge variety of excellent ideas and results have been reported. A lot of them have been raised from vision to mass product. Among the success stories you will find quite a number of established applications of new actuators, in particular their well-known use in fuel injection, adaptive shock absorbers, nanopositioning, precision engineering like camera lenses and other applications of miniaturized drives.

In this way, ACTUATOR has launched the realization of new product generations with outstanding compactness and high performance properties which so far have not been achieved in conventional technologies. A small wonder that based on this ignition, resulting in gaining access to new markets.

## Event Language

The official conference language is English; there will be no simultaneous translation.

## Conference Focus

### Technological Topics

- Electromagnetic actuators
- Piezoelectric actuators / piezoelectric motors
- Thermal / magnetic shape memory actuators
- Magnetostrictive actuators
- Magnetolectric actuators
- Micro / nano actuators
- Actuators based on ER / MR fluids
- Polymer actuators
- Electroactive polymer devices
- Cooperative / multistable actuators
- Emerging principles / tensegrity / robogami
- Actuator control and electronics
- Pneumatics / hydraulics
- Photonic actuators
- Bio actuators

### Application-oriented Topics

- Active vibration / active noise control
- Aerospace / aviation
- Automation
- Robotics / micro robotics / soft robotics
- Automotive
- Haptic / tactile devices
- Medical devices / medical engineering
- Microfluidic handling
- Micro / nano manipulation and positioning
- Microscopy / scanning probe microscopy
- Information technology
- Manufacturing / micro assembly
- Process engineering
- Biotechnology
- Optics / laser
- Precision engineering

## Call for Papers

Experts from industry and research institutes wishing to present results of their recent research are cordially invited to submit a paper. Accepted papers will be presented in either oral or poster sessions. Authors are requested to specify the preferred kind of presentation, oral (20 min. incl. discussion) or poster.

Please submit a PDF formatted abstract in English with a length of two pages (400 – 600 words) including figures, tables & references showing summary, motivation, approach and results. The paper should be headed by title, authors' names and affiliations.

Please register your paper using the EDAS online registration at [www.actuator.de](http://www.actuator.de). If you have already a personal account, please login with your username and password. Otherwise first create a new account, and then register your paper.

## Paper Review

The Technical Program Committee will review the abstracts and decide upon the acceptance. After acceptance, the authors are asked to submit the full paper with a length of 2 pages, up to 4 pages for publication.

The proceedings will be published by VDE Verlag GmbH; all presented papers will in addition be available on IEEE Xplore®. By submitting your full paper, we assume that you have accepted the copyright-statement: [www.vde.com/typing-instructions](http://www.vde.com/typing-instructions)

## The Exhibition

The **12<sup>th</sup> International Exhibition on New Actuator Systems and Applications** will present components, system approaches and applications of smart actuators and low-power electromagnetic drives based on conventional (electromagnetic) and innovative working principles (new actuators), and associated subjects.

The range of topics also includes measurement techniques, control concepts and circuits, driver components and units, system integration, layout and simulation tools etc.

Within the exhibition area, we will have application-oriented presentations on a product level, besides the in-depth conference programme. This Exhibition Forum provides additional information about the exhibition topics on the product level especially to visitors of the exhibition. Exhibition conditions and more detailed information on the Exhibition Forum may be obtained from the organizer or can be downloaded from the event homepage [www.actuator.de](http://www.actuator.de).

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