



Organic and Flexible Sensors in Applications

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OUR VISION

WE CREATE BENEFIT THROUGH APPLICATION BEYOND CLASSICAL ELECTRONICS

- Cross the Limits of „Classical Electronics“
- Open new fields of Applications for Electronic Devices
- Electronics in previously unexplored fields

OES Value Chain



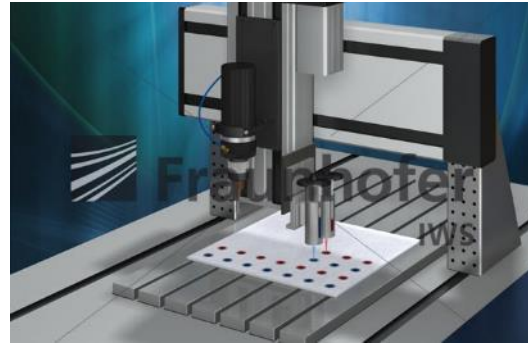
Technologies behind the Applications

New Materials & Synthesis



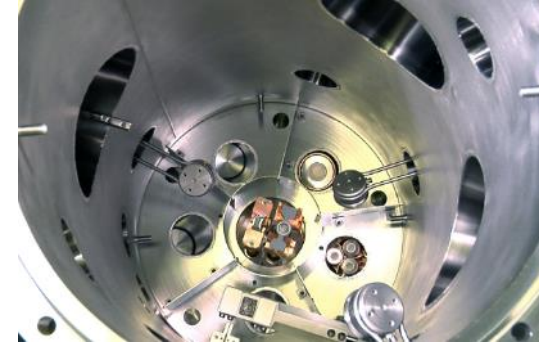
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Printing Processes



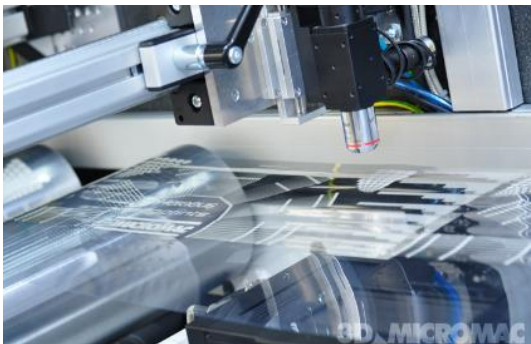
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Vacuum-Processing



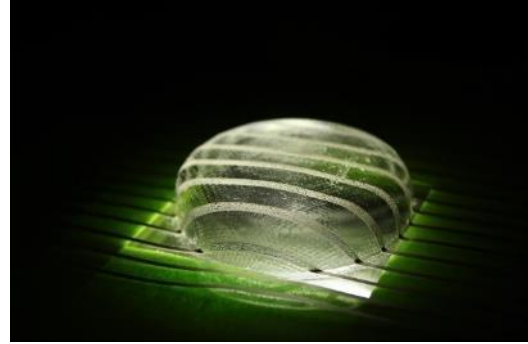
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Laser Micro-Structuring



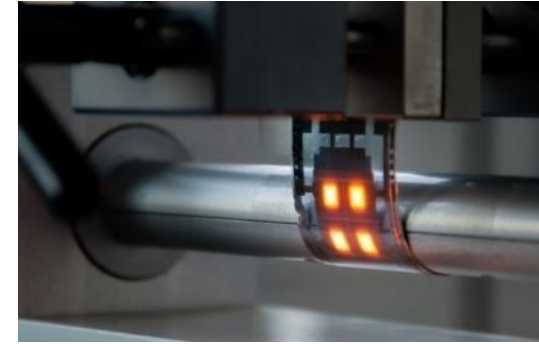
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Thermoformed 3D-Electronics



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Encapsulation & Barriers



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Devices and Applications

flexible displays



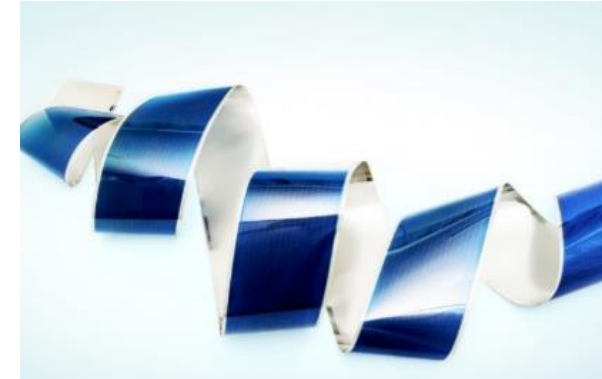
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printed OLED



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flexible solar film

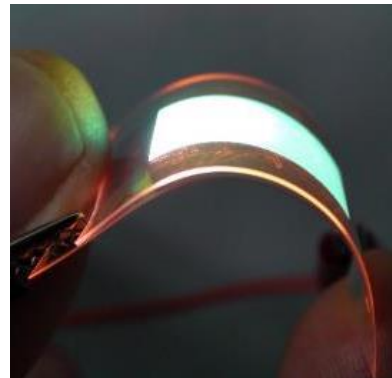


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flexible battery



flexible OLED



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flexible sensors

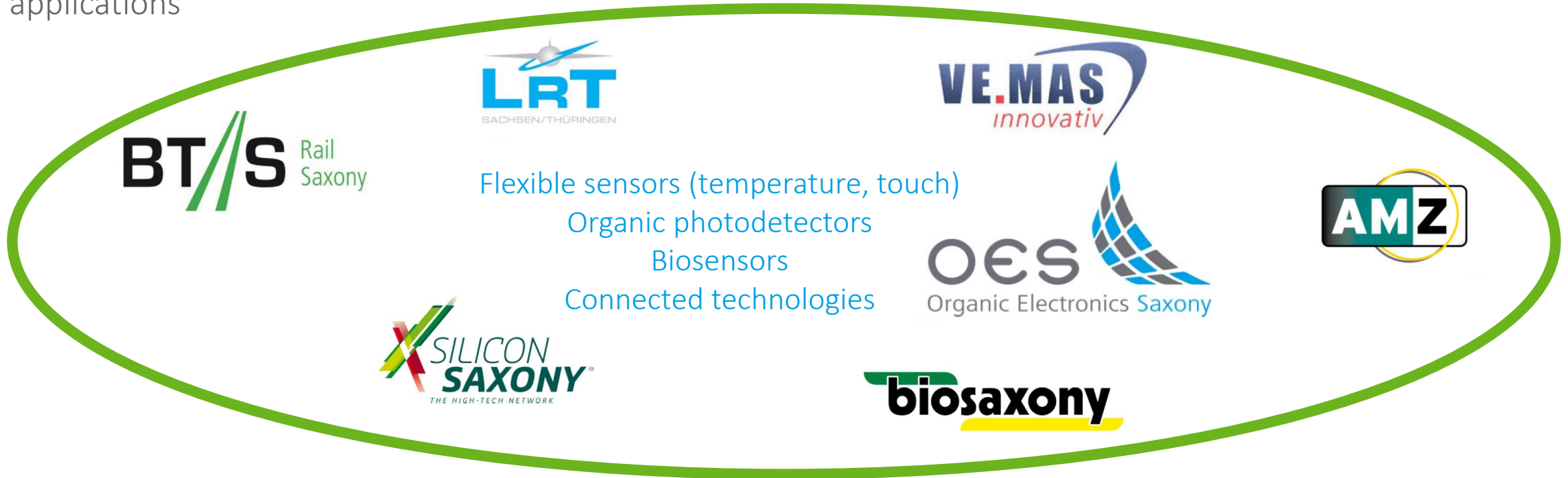


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Sensor activities with flexible organic electronics in Saxony



Cross-Cluster cooperation with Saxony industry and technology clusters to develop and integrate flexible electronics in sensor applications



Sensor activities with flexible organic electronics in Saxony



High-tech Cluster



Organic, flexible, printed electronics



“Classical” electronics



Automotive



Railways



Aviation



Medical/Biotechnology



Engineering/Equipment manufacturing



Technology Supply



Summary

- Various kinds of sensors with flexible/organic technology already available
- Products outperform traditional solutions in price, energy consumption or performance
- New functionalities possible
- Technologies are ready; next steps are integration, implementation, upscaling

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