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Editorial: Advances in plasmonics: a European collection

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Editorial on the Research Topic

Advances in plasmonics: a European collection

Plasmonics has become a mature field with impacts on a wealth of disciplines such as physics, chemistry, engineering, and even medicine. Communities working worldwide now need places to meet and discuss details, compare designs, and organise collaborations. One of these places is the Plasmonica workshop taking place in Italy every summer. While organized by the Italian community, the workshop is not restricted to researchers working in Italy but rather extended to many European groups working in the field of Plasmonics and Nano-Optics. The focus of the Plasmonica workshop is on young investigators, from PhD students to postdocs with several years after their PhD completion, who give more than 90% of the oral and poster presentations. Some of the participants in the 2022 edition of the Plasmonica workshop held in Turin have shared their work with us and we have decided that a rapid open-access publication of their recent results and reviews could be useful. This Research Topic showcases an experimental report on near-field imaging by Granchi et al., a computational work on metal nanoparticle properties by Nicoli et al., an enhanced spectroscopy work on proteins by Intze et al., and a brief review on on-chip integrated plasmonic sensors by Hinkov et al. We hope that giving space to young minds in plasmonics will help the community to stay healthy and continue producing relevant scientific and technological outputs.

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