



Tahsin Akalin

Metasurfaces and original design for Terahertz microscopy

IUT A Lille, France
Email: ahsin.Akalin@univ-lille.fr

Metasurfaces are becoming one growing field of research in the domain of controlling electromagnetic waves in different frequency ranges from visible and infrared to terahertz waves. In this talk, I will focus on their design and applications at terahertz frequencies. Among the applications, the state of the art for terahertz near field microscopy will be particularly described and original terahertz probes will be presented.

SHORT BIO:

Tahsin Akalin is currently Associate Professor at IUT A Lille, France. His main research activities concern the control of Terahertz waves. He works on periodic structures including metamaterials and metasurfaces for propagating, filtering, absorbing and radiating structures and the development of a new kind of probes for near field microscopy. He is co-author of more than 150 international communications and one book chapter with more than 30 invited and keynote talks for major conferences. He serves as a reviewer for several journals including Nature Publishing Group. He serves also as a TPC member for several international conferences: IEEE-APMC, IEEE-MMS, Meta' conferences, Photonics Global Conference, IEEE-IRMMW-THz, Surface Plasmon Photonics, OTST, Metamaterials etc. He has organized and chaired several special sessions on THz Plasmonics and Metamaterials for international conferences. He has also given seminars and invited lectures in different Universities around the world (UCLA in USA, Osaka Univ in Japan, UESTC and HKUST in China, Ecole Polytechnique de Montreal in Canada, UPNA in Spain, NTU in Singapore). He is also a co-editor of a Focus issue for the New Journal of Physics on "Terahertz Plasmonics". He is a guest-editor of a special issue on "THz Metamaterials and Applications" for the IEEE-Terahertz Science and Technology journal. He is a co-guest-editor for IOP-Journal of Optics of a special issue on "THz Photonics" and for a special issue on "Terahertz Near Field Microscopy" for IEEE-TST journal.

He is an Editorial Board Member of Scientific Reports (Nature Publishing Group) and Editorial Board member of Applied Metamaterials for EJP. He is an Associate Editor for IET-Electronics Letters. Since 2011, he is a European Microwave Lecturer (EML) for the European Microwave Association (EuMA). He has served as a member of the IEEE French Bureau for MTT and TAP societies. He is Vice President of URSI-France and also Vice-President of commissions B for URSI-France. He serves as an expert for research agencies in different countries.