

# Andreas Tittl

## List of Publications by Year in descending order

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50  
papers

4,851  
citations

186265

28  
h-index

315739

38  
g-index

50  
all docs

50  
docs citations

50  
times ranked

4731  
citing authors

#	ARTICLE	IF	CITATIONS
1	Imaging-based molecular barcoding with pixelated dielectric metasurfaces. <i>Science</i> , 2018, 360, 1105-1109.	12.6	726
2	Ultrasensitive hyperspectral imaging and biodetection enabled by dielectric metasurfaces. <i>Nature Photonics</i> , 2019, 13, 390-396.	31.4	546
3	A Switchable Mid-Infrared Plasmonic Perfect Absorber with Multispectral Thermal Imaging Capability. <i>Advanced Materials</i> , 2015, 27, 4597-4603.	21.0	487
4	Palladium-Based Plasmonic Perfect Absorber in the Visible Wavelength Range and Its Application to Hydrogen Sensing. <i>Nano Letters</i> , 2011, 11, 4366-4369.	9.1	385
5	Angle-multiplexed all-dielectric metasurfaces for broadband molecular fingerprint retrieval. <i>Science Advances</i> , 2019, 5, eaaw2871.	10.3	294
6	Active Chiral Plasmonics. <i>Nano Letters</i> , 2015, 15, 4255-4260.	9.1	271
7	Resolving molecule-specific information in dynamic lipid membrane processes with multi-resonant infrared metasurfaces. <i>Nature Communications</i> , 2018, 9, 2160.	12.8	176
8	Magnesium as Novel Material for Active Plasmonics in the Visible Wavelength Range. <i>Nano Letters</i> , 2015, 15, 7949-7955.	9.1	162
9	All-Dielectric Programmable Huygens' Metasurfaces. <i>Advanced Functional Materials</i> , 2020, 30, 1910259.	14.9	149
10	Double-layer graphene for enhanced tunable infrared plasmonics. <i>Light: Science and Applications</i> , 2017, 6, e16277-e16277.	16.6	143
11	All-Dielectric Crescent Metasurface Sensor Driven by Bound States in the Continuum. <i>Advanced Functional Materials</i> , 2021, 31, 2104652.	14.9	115
12	Plasmonic Smart Dust for Probing Local Chemical Reactions. <i>Nano Letters</i> , 2013, 13, 1816-1821.	9.1	104
13	Quantitative Angle-Resolved Small-Spot Reflectance Measurements on Plasmonic Perfect Absorbers: Impedance Matching and Disorder Effects. <i>ACS Nano</i> , 2014, 8, 10885-10892.	14.6	103
14	Plasmonic gas and chemical sensing. <i>Nanophotonics</i> , 2014, 3, 157-180.	6.0	98
15	Metasurface-Based Molecular Biosensing Aided by Artificial Intelligence. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 14810-14822.	13.8	89
16	Yttrium Hydride Nanoantennas for Active Plasmonics. <i>Nano Letters</i> , 2014, 14, 1140-1147.	9.1	86
17	Accessible Superchiral Near-Fields Driven by Tailored Electric and Magnetic Resonances in All-Dielectric Nanostructures. <i>ACS Photonics</i> , 2019, 6, 1939-1946.	6.6	82
18	DNA-assembled bimetallic plasmonic nanosensors. <i>Light: Science and Applications</i> , 2014, 3, e226-e226.	16.6	80

#	ARTICLE	IF	CITATIONS
19	Large-Area Low-Cost Tunable Plasmonic Perfect Absorber in the Near Infrared by Colloidal Etching Lithography. <i>Advanced Optical Materials</i> , 2015, 3, 398-403.	7.3	77
20	Large-Area Low-Cost Plasmonic Perfect Absorber Chemical Sensor Fabricated by Laser Interference Lithography. <i>ACS Sensors</i> , 2016, 1, 1148-1154.	7.8	64
21	Spectral shifts in optical nanoantenna-enhanced hydrogen sensors. <i>Optical Materials Express</i> , 2012, 2, 111.	3.0	61
22	Large-area fabrication of TiN nanoantenna arrays for refractory plasmonics in the mid-infrared by femtosecond direct laser writing and interference lithography [Invited]. <i>Optical Materials Express</i> , 2015, 5, 2625.	3.0	60
23	Self-Similar Multiresonant Nanoantenna Arrays for Sensing from Near- to Mid-Infrared. <i>ACS Photonics</i> , 2018, 5, 4903-4911.	6.6	59
24	Fabrication robustness in BIC metasurfaces. <i>Nanophotonics</i> , 2021, 10, 4305-4312.	6.0	57
25	Yttrium hydride nanoantennas for active plasmonics. , 2014, , .		53
26	Optical Metasurfaces for Energy Conversion. <i>Chemical Reviews</i> , 2022, 122, 15082-15176.	47.7	52
27	Quantifying the Limits of Detection of Surface-Enhanced Infrared Spectroscopy with Grating Order-Coupled Nanogap Antennas. <i>ACS Photonics</i> , 2018, 5, 4117-4124.	6.6	46
28	Long-term stability of capped and buffered palladium-nickel thin films and nanostructures for plasmonic hydrogen sensing applications. <i>Optical Materials Express</i> , 2013, 3, 194.	3.0	43
29	Sensitivity engineering in direct contact palladium-gold nano-sandwich hydrogen sensors [Invited]. <i>Optical Materials Express</i> , 2015, 5, 2525.	3.0	31
30	Dual Nanoresonators for Ultrasensitive Chiral Detection. <i>ACS Photonics</i> , 2021, 8, 1754-1762.	6.6	30
31	Anapole-Assisted Absorption Engineering in Arrays of Coupled Amorphous Gallium Phosphide Nanodisks. <i>ACS Photonics</i> , 2021, 8, 1469-1476.	6.6	29
32	Trends in Nanophotonics-Enabled Optofluidic Biosensors. <i>Advanced Optical Materials</i> , 2022, 10, .	7.3	28
33	Metasurface-Enhanced Infrared Spectroscopy: An Abundance of Materials and Functionalities. <i>Advanced Materials</i> , 2023, 35, .	21.0	25
34	Tunable structural colors on display. <i>Light: Science and Applications</i> , 2022, 11, .	16.6	9
35	Plasmonic Absorbers: A Switchable Mid-Infrared Plasmonic Perfect Absorber with Multispectral Thermal Imaging Capability ( <i>Adv. Mater.</i> 31/2015). <i>Advanced Materials</i> , 2015, 27, 4526-4526.	21.0	7
36	Tip Coupling and Array Effects of Gold Nanoantennas in Near-Field Microscopy. <i>ACS Photonics</i> , 2021, 8, 3486-3494.	6.6	7

#	ARTICLE	IF	CITATIONS
37	Metaoberflächenbasierte molekulare Biosensorik unterstützt von künstlicher Intelligenz. Angewandte Chemie, 2019, 131, 14952-14965.	2.0	4
38	Enhanced Circular Dichroism and Chiral Sensing with Bound States in the Continuum. , 2019, , .		4
39	Huygens' Metasurfaces: All-Dielectric Programmable Huygens' Metasurfaces (Adv. Funct. Mater.) Tj ETQq1 1 0.784314 rgBT <sub>3</sub> /Overlo	14.9	3
40	Optical hydrogen sensing with metallic photonic crystals and plasmonic metamaterials. , 2010, , .		2
41	Plasmonic Gas and Chemical Sensing. NATO Science for Peace and Security Series C: Environmental Security, 2015, , 239-272.	0.2	2
42	Programmable Huygensâ€™ metasurfaces for active optical phase control. , 2021, , .		1
43	All-dielectric Metasurfaces for Infrared Absorption Spectroscopy Applications. , 2019, , .		1
44	All-Dielectric High-Q Metasurfaces for Infrared Absorption Spectroscopy Applications. , 2019, , .		0
45	Fabrication tolerance impact on BIC metasurface resonances. , 2021, , .		0
46	Tailoring the Response of Gold Nanoantennas in Optical Near-Field Measurements: Orientation and Field Size. , 2021, , .		0
47	Bound states in the continuum in symmetry broken resonator rings. , 2021, , .		0
48	Radial bound states in the continuum. , 2021, , .		0
49	Mid-IR Nanophotonics for Surface Enhanced Spectroscopy. , 2018, , .		0
50	Duality Symmetry in Hybrid Nanoresonators for Chiral Sensing. , 2020, , .		0