Rayko Ivanov Stantchev

List of Publications by Year
in descending order

27	1,123	623734	752698
papers	citations	14 h-index	20 g-index

27	27	27	1068
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Noninvasive, near-field terahertz imaging of hidden objects using a single-pixel detector. Science Advances, 2016, 2, e1600190.	10.3	336
2	Real-time terahertz imaging with a single-pixel detector. Nature Communications, 2020, 11, 2535.	12.8	225
3	Compressed sensing with near-field THz radiation. Optica, 2017, 4, 989.	9.3	124
4	Graphene controlled Brewster angle device for ultra broadband terahertz modulation. Nature Communications, 2018, 9, 4909.	12.8	117
5	Terahertz (THz) biophotonics technology: Instrumentation, techniques, and biomedical applications. Chemical Physics Reviews, 2022, 3, .	5.7	42
6	THz in vivo measurements: the effects of pressure on skin reflectivity. Biomedical Optics Express, 2018, 9, 6467.	2.9	37
7	In vivo terahertz imaging to evaluate scar treatment strategies: silicone gel sheeting. Biomedical Optics Express, 2019, 10, 3584.	2.9	35
8	In vivo estimation of water diffusivity in occluded human skin using terahertz reflection spectroscopy. Journal of Biophotonics, 2019, 12, e201800145.	2.3	31
9	Subwavelength Terahertz Imaging of Graphene Photoconductivity. Nano Letters, 2016, 16, 7019-7024.	9.1	27
10	Super Sub-Nyquist Single-Pixel Imaging by Total Variation Ascending Ordering of the Hadamard Basis. Scientific Reports, 2020, 10, 9338.	3.3	23
11	Subwavelength hyperspectral THz studies of articular cartilage. Scientific Reports, 2018, 8, 6924.	3.3	22
12	Highly Sensitive Terahertz Thin-Film Total Internal Reflection Spectroscopy Reveals in Situ Photoinduced Structural Changes in Methylammonium Lead Halide Perovskites. Journal of Physical Chemistry C, 2018, 122, 17552-17558.	3.1	21
13	Graphene-loaded metal wire grating for deep and broadband THz modulation in total internal reflection geometry. Photonics Research, 2018, 6, 1151.	7.0	20
14	Exploiting Total Internal Reflection Geometry for Terahertz Devices and Enhanced Sample Characterization. Advanced Optical Materials, 2020, 8, 1900535.	7.3	19
15	Rapid Imaging of Pulsed Terahertz Radiation with Spatial Light Modulators and Neural Networks. ACS Photonics, 0, , .	6.6	10
16	Objective and efficient terahertz signal denoising by transfer function reconstruction. APL Photonics, 2020, 5, .	5.7	9
17	Detection of defects on the surface of a semiconductor by terahertz surface plasmon polaritons. Applied Optics, 2016, 55, 4139.	2.1	8
18	Deep THz modulation at Fabry-Perot resonances using graphene in periodic microslits. Optics Express, 2021, 29, 6199.	3.4	7

#	Article	IF	Citations
19	Non-destructive plasma frequency measurement for a semiconductor thin film using broadband surface plasmon polaritons. Optics Communications, 2018, 410, 926-929.	2.1	5
20	Investigation of terahertz surface plasmon modulation with optical injection of free carriers. Optical Engineering, 2016, 55, 064109.	1.0	3
21	Total Internal Reflection THz Devices for High Speed Imaging. , 2018, , .		1
22	Total Internal Reflection Geometry: Exploiting Total Internal Reflection Geometry for Terahertz Devices and Enhanced Sample Characterization (Advanced Optical Materials 3/2020). Advanced Optical Materials, 2020, 8, 2070012.	7.3	1
23	In Vivo Terahertz Skin Imaging for Scar Treatment Evaluation. , 2019, , .		0
24	Towards real-time THz imaging with single-pixel detectors. , 2019, , .		0
25	THz Instrumentation and Analysis Techniques for Biomedical Research. , 2019, , .		0
26	Spatial Terahertz-Light Modulators for Single-Pixel Cameras. , 0, , .		0
27	Real-time terahertz imaging with a single-pixel detector. , 2021, , .		0