

# Rayko Ivanov Stantchev

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2645342/publications.pdf>

Version: 2024-02-01

27  
papers

1,123  
citations

623734

14  
h-index

752698

20  
g-index

27  
all docs

27  
docs citations

27  
times ranked

1068  
citing authors

#	ARTICLE	IF	CITATIONS
1	Terahertz (THz) biophotonics technology: Instrumentation, techniques, and biomedical applications. Chemical Physics Reviews, 2022, 3, .	5.7	42
2	Deep THz modulation at Fabry-Perot resonances using graphene in periodic microslits. Optics Express, 2021, 29, 6199.	3.4	7
3	Real-time terahertz imaging with a single-pixel detector. , 2021, , .		0
4	Exploiting Total Internal Reflection Geometry for Terahertz Devices and Enhanced Sample Characterization. Advanced Optical Materials, 2020, 8, 1900535.	7.3	19
5	Objective and efficient terahertz signal denoising by transfer function reconstruction. APL Photonics, 2020, 5, .	5.7	9
6	Super Sub-Nyquist Single-Pixel Imaging by Total Variation Ascending Ordering of the Hadamard Basis. Scientific Reports, 2020, 10, 9338.	3.3	23
7	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
8	Real-time terahertz imaging with a single-pixel detector. Nature Communications, 2020, 11, 2535.	12.8	225
9	In vivo estimation of water diffusivity in occluded human skin using terahertz reflection spectroscopy. Journal of Biophotonics, 2019, 12, e201800145.	2.3	31
10	In Vivo Terahertz Skin Imaging for Scar Treatment Evaluation. , 2019, , .		0
11	Towards real-time THz imaging with single-pixel detectors. , 2019, , .		0
12	THz Instrumentation and Analysis Techniques for Biomedical Research. , 2019, , .		0
13	In vivo terahertz imaging to evaluate scar treatment strategies: silicone gel sheeting. Biomedical Optics Express, 2019, 10, 3584.	2.9	35
14	Non-destructive plasma frequency measurement for a semiconductor thin film using broadband surface plasmon polaritons. Optics Communications, 2018, 410, 926-929.	2.1	5
15	Graphene controlled Brewster angle device for ultra broadband terahertz modulation. Nature Communications, 2018, 9, 4909.	12.8	117
16	Total Internal Reflection THz Devices for High Speed Imaging. , 2018, , .		1
17	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
18	Subwavelength hyperspectral THz studies of articular cartilage. Scientific Reports, 2018, 8, 6924.	3.3	22

#	ARTICLE	IF	CITATIONS
19	THz in vivo measurements: the effects of pressure on skin reflectivity. Biomedical Optics Express, 2018, 9, 6467.	2.9	37
20	Graphene-loaded metal wire grating for deep and broadband THz modulation in total internal reflection geometry. Photonics Research, 2018, 6, 1151.	7.0	20
21	Compressed sensing with near-field THz radiation. Optica, 2017, 4, 989.	9.3	124
22	Detection of defects on the surface of a semiconductor by terahertz surface plasmon polaritons. Applied Optics, 2016, 55, 4139.	2.1	8
23	Subwavelength Terahertz Imaging of Graphene Photoconductivity. Nano Letters, 2016, 16, 7019-7024.	9.1	27
24	Noninvasive, near-field terahertz imaging of hidden objects using a single-pixel detector. Science Advances, 2016, 2, e1600190.	10.3	336
25	Investigation of terahertz surface plasmon modulation with optical injection of free carriers. Optical Engineering, 2016, 55, 064109.	1.0	3
26	Spatial Terahertz-Light Modulators for Single-Pixel Cameras. , 0, , .		0
27	Rapid Imaging of Pulsed Terahertz Radiation with Spatial Light Modulators and Neural Networks. ACS Photonics, 0, , .	6.6	10