

# Wouter Van den Broek

## List of Publications by Year in descending order

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23  
papers

684  
citations

933447

10  
h-index

713466

21  
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docs citations

23  
times ranked

1424  
citing authors

#	ARTICLE	IF	CITATIONS
1	Improving 4DSTEM measurements of atomic charge and electrostatic potential via energy filtration. <i>Microscopy and Microanalysis</i> , 2021, 27, 1450-1452.	0.4	1
2	Adaptive Scanning in Ptychography through Deep Reinforcement Learning. <i>Microscopy and Microanalysis</i> , 2021, 27, 818-821.	0.4	2
3	Comparison of Ptychography vs. Center-of-mass Analysis of Registered 4D-STEM Series. <i>Microscopy and Microanalysis</i> , 2020, 26, 1898-1900.	0.4	4
4	Overcoming information reduced data and experimentally uncertain parameters in ptychography with regularized optimization. <i>Optics Express</i> , 2020, 28, 28306.	3.4	24
5	Features of Our SEM Transmission Diffraction Sub-stage with 6-axis Sample Control and a Camera with Variable Camera Length. <i>Microscopy and Microanalysis</i> , 2020, 26, 1906-1907.	0.4	1
6	Various Compressed Sensing Setups Evaluated Against Shannon Sampling Under Constraint of Constant Illumination. <i>IEEE Transactions on Computational Imaging</i> , 2019, 5, 502-514.	4.4	8
7	Many Faces of Ni <sub>3</sub> Bi <sub>2</sub> S <sub>2</sub> : Tunable Nanoparticle Morphology via Microwave-Assisted Nanocrystal Conversion. <i>Crystal Growth and Design</i> , 2018, 18, 2202-2209.	3.0	4
8	Modular Design with 2D Topological-Insulator Building Blocks: Optimized Synthesis and Crystal Growth and Crystal and Electronic Structures of Bi <sub>x</sub> Te <sub>(x=2,3)</sub> . <i>Chemistry of Materials</i> , 2017, 29, 1321-1337.	6.7	23
9	Retrieving Atomic Structure from Dynamical Rocking Curve Measurements in both Real and Reciprocal Space. <i>Microscopy and Microanalysis</i> , 2016, 22, 920-921.	0.4	0
10	Inverse dynamical photon scattering (IDPS): an artificial neural network based algorithm for three-dimensional quantitative imaging in optical microscopy. <i>Optics Express</i> , 2016, 24, 7006.	3.4	11
11	A novel quasi-one-dimensional topological insulator in bismuth iodide $\hat{\Gamma}^2$ -Bi <sub>4</sub> I <sub>4</sub> . <i>Nature Materials</i> , 2016, 15, 154-158.	27.5	90
12	New Environment for a Two-Dimensional Topological Insulator with Hexagonal Channels Hosting Diiodido-bismuthate(I) Anions in a Singlet State. <i>Chemistry of Materials</i> , 2016, 28, 665-672.	6.7	10
13	Real-Space Simulation of Electron Scattering in Imperfect Crystals and Reconstruction of the Electrostatic Potential. <i>Microscopy and Microanalysis</i> , 2015, 21, 1883-1884.	0.4	0
14	Measure-by-Wire (MBW). <i>Advances in Imaging and Electron Physics</i> , 2013, 179, 291-346.	0.2	3
15	Quantitative electron tomography: The effect of the three-dimensional point spread function. <i>Ultramicroscopy</i> , 2013, 135, 1-5.	1.9	6
16	Crystal Growth and Real Structure Effects of the First Weak 3D Stacked Topological Insulator Bi <sub>14</sub> Rh <sub>3</sub> I <sub>9</sub> . <i>Chemistry of Materials</i> , 2013, 25, 2359-2364.	6.7	30
17	Method for Retrieval of the Three-Dimensional Object Potential by Inversion of Dynamical Electron Scattering. <i>Physical Review Letters</i> , 2012, 109, 245502.	7.8	53
18	A holographic method to measure the source size broadening in STEM. <i>Ultramicroscopy</i> , 2012, 120, 35-40.	1.9	31

#	ARTICLE	IF	CITATIONS
19	Atomic-scale determination of surface facets in gold nanorods. <i>Nature Materials</i> , 2012, 11, 930-935.	27.5	299
20	Fully Automated Measurement of the Modulation Transfer Function of Charge-Coupled Devices above the Nyquist Frequency. <i>Microscopy and Microanalysis</i> , 2012, 18, 336-342.	0.4	19
21	Introducing measure-by-wire, the systematic use of systems and control theory in transmission electron microscopy. <i>Ultramicroscopy</i> , 2011, 111, 1581-1591.	1.9	14
22	A practical method to determine the effective resolution in incoherent experimental electron tomography. <i>Ultramicroscopy</i> , 2011, 111, 330-336.	1.9	42
23	3D Reconstruction of Ni <sub>4</sub> Ti <sub>3</sub> Precipitates in a Ni <sub>51</sub> Ti <sub>49</sub> Alloy in a FIB/SEM Dual-Beam System. <i>Materials Science Forum</i> , 2008, 583, 277-284.	0.3	9