

# Annick De Backer

## List of Publications by Year in descending order

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Version: 2024-02-01

21  
papers

778  
citations

687363

13  
h-index

794594

19  
g-index

24  
all docs

24  
docs citations

24  
times ranked

1409  
citing authors

#	ARTICLE	IF	CITATIONS
1	In situ study of the formation mechanism of two-dimensional superlattices from PbSe nanocrystals. <i>Nature Materials</i> , 2016, 15, 1248-1254.	27.5	199
2	Measuring Lattice Strain in Three Dimensions through Electron Microscopy. <i>Nano Letters</i> , 2015, 15, 6996-7001.	9.1	110
3	Three-Dimensional Elemental Mapping at the Atomic Scale in Bimetallic Nanocrystals. <i>Nano Letters</i> , 2013, 13, 4236-4241.	9.1	101
4	Three-Dimensional Quantification of the Facet Evolution of Pt Nanoparticles in a Variable Gaseous Environment. <i>Nano Letters</i> , 2019, 19, 477-481.	9.1	93
5	Unscrambling Mixed Elements using High Angle Annular Dark Field Scanning Transmission Electron Microscopy. <i>Physical Review Letters</i> , 2016, 116, 246101.	7.8	45
6	Locating and Controlling the Zn Content in In(Zn)P Quantum Dots. <i>Chemistry of Materials</i> , 2020, 32, 557-565.	6.7	40
7	Advanced electron crystallography through model-based imaging. <i>IUCr</i> , 2016, 3, 71-83.	2.2	36
8	Hybrid statistics-simulations based method for atom-counting from ADF STEM images. <i>Ultramicroscopy</i> , 2017, 177, 69-77.	1.9	30
9	Measuring Dynamic Structural Changes of Nanoparticles at the Atomic Scale Using Scanning Transmission Electron Microscopy. <i>Physical Review Letters</i> , 2020, 124, 106105.	7.8	20
10	Recent Advances in Transmission Electron Microscopy for Materials Science at the EMAT Lab of the University of Antwerp. <i>Materials</i> , 2018, 11, 1304.	2.9	19
11	Interface Pattern Engineering in Core-Shell Upconverting Nanocrystals: Shedding Light on Critical Parameters and Consequences for the Photoluminescence Properties. <i>Small</i> , 2021, 17, e2104441.	10.0	17
12	Control of Knock-On Damage for 3D Atomic Scale Quantification of Nanostructures: Making Every Electron Count in Scanning Transmission Electron Microscopy. <i>Physical Review Letters</i> , 2019, 122, 066101.	7.8	14
13	Three-dimensional atomic structure of supported Au nanoparticles at high temperature. <i>Nanoscale</i> , 2021, 13, 1770-1776.	5.6	13
14	The atomic lensing model: New opportunities for atom-by-atom metrology of heterogeneous nanomaterials. <i>Ultramicroscopy</i> , 2019, 203, 155-162.	1.9	12
15	Recent breakthroughs in scanning transmission electron microscopy of small species. <i>Advances in Physics: X</i> , 2018, 3, 1480420.	4.1	11
16	Quantifying a Heterogeneous Ru Catalyst on Carbon Black Using ADF STEM. <i>Particle and Particle Systems Characterization</i> , 2016, 33, 438-444.	2.3	9
17	Quantifying Strain and Dislocation Density at Nanocube Interfaces after Assembly and Epitaxy. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 8788-8794.	8.0	4
18	Modelling ADF STEM images using elliptical Gaussian peaks and its effects on the quantification of structure parameters in the presence of sample tilt. <i>Ultramicroscopy</i> , 2021, 230, 113391.	1.9	3

#	ARTICLE	IF	CITATIONS
19	Hidden Markov model for atom-counting from sequential ADF STEM images: Methodology, possibilities and limitations. Ultramicroscopy, 2020, 219, 113131.	1.9	2
20	General conclusions and future perspectives. Advances in Imaging and Electron Physics, 2021, , 243-253.	0.2	0
21	Interface Pattern Engineering in Core-Shell Upconverting Nanocrystals: Shedding Light on Critical Parameters and Consequences for the Photoluminescence Properties (Small 47/2021). Small, 2021, 17, 2170246.	10.0	0