

# Sara Bals

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

439  
papers

16,185  
citations

65  
h-index

106  
g-index

462  
ext. papers

19,085  
ext. citations

9  
avg, IF

6.72  
L-index

#	Paper	IF	Citations
439	Two-Dimensional CdSe-PbSe Heterostructures and PbSe Nanoplatelets: Formation, Atomic Structure, and Optical Properties.. <i>Journal of Physical Chemistry C</i> , <b>2022</b> , 126, 1513-1522	3.8	2
438	Catalytic upcycling of PVC waste-derived phthalate esters into safe, hydrogenated plasticizers. <i>Green Chemistry</i> , <b>2022</b> , 24, 754-766	10	1
437	3D arrangement of epitaxial graphene conformally grown on porousified crystalline SiC. <i>Carbon</i> , <b>2022</b> , 189, 210-218	10.4	0
436	Metal-Polymer Heterojunction in Colloidal-Phase Plasmonic Catalysis.. <i>Journal of Physical Chemistry Letters</i> , <b>2022</b> , 2264-2272	6.4	1
435	Quantification of the Helical Morphology of Chiral Gold Nanorods. <b>2022</b> , 4, 642-649		1
434	Investigating Reaction Intermediates during the Seedless Growth of Gold Nanostars Using Electron Tomography.. <i>ACS Nano</i> , <b>2022</b> ,	16.7	1
433	Direct Solar Energy-Mediated Synthesis of Tertiary Benzylic Alcohols Using a Metal-Free Heterogeneous Photocatalyst. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2022</b> , 10, 530-540	8.3	4
432	Multimode Electron Tomography sheds light on synthesis, structure, and properties of complex metal-based nanoparticles.. <i>Advanced Materials</i> , <b>2022</b> , e2110394	24	0
431	3D Atomic Structure of Supported Metallic Nanoparticles Estimated from 2D ADF STEM Images: A Combination of Atom-Counting and a Local Minima Search Algorithm.. <i>Small Methods</i> , <b>2021</b> , 5, e2101150 <sup>12.8</sup>		4
430	Optimized 3D Reconstruction of Large, Compact Assemblies of Metallic Nanoparticles. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 26240-26246	3.8	3
429	Interface Pattern Engineering in Core-Shell Upconverting Nanocrystals: Shedding Light on Critical Parameters and Consequences for the Photoluminescence Properties (Small 47/2021). <i>Small</i> , <b>2021</b> , 17, 2170246	11	
428	Kinetic Regulation of the Synthesis of Pentatwinned Gold Nanorods below Room Temperature. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 23937-23944	3.8	2
427	Al <sub>2</sub> O <sub>3</sub> -Supported Transition Metals for Plasma-Catalytic NH <sub>3</sub> Synthesis in a DBD Plasma: Metal Activity and Insights into Mechanisms. <i>Catalysts</i> , <b>2021</b> , 11, 1230	4	2
426	Nanoparticle-Mediated Molecular Reprogramming of Immune Checkpoint Interactions for Cancer Immunotherapy. <i>ACS Nano</i> , <b>2021</b> ,	16.7	3
425	Cyan Emission in Two-Dimensional Colloidal CsCdCl:Sb Ruddlesden-Popper Phase Nanoplatelets. <i>ACS Nano</i> , <b>2021</b> ,	16.7	8
424	Interface Pattern Engineering in Core-Shell Upconverting Nanocrystals: Shedding Light on Critical Parameters and Consequences for the Photoluminescence Properties. <i>Small</i> , <b>2021</b> , 17, e2104441	11	8
423	Seeded Growth Combined with Cation Exchange for the Synthesis of Anisotropic Cu S/ZnS, Cu S, and CuInS Nanorods. <i>Chemistry of Materials</i> , <b>2021</b> , 33, 102-116	9.6	5

422	Controlled Alloying of Au@Ag CoreShell Nanorods Induced by Femtosecond Laser Irradiation. <i>Advanced Optical Materials</i> , <b>2021</b> , 9, 2002134	8.1	4
421	Tuning the turnover frequency and selectivity of photocatalytic CO <sub>2</sub> reduction to CO and methane using platinum and palladium nanoparticles on Ti-Beta zeolites. <i>Chemical Engineering Journal</i> , <b>2021</b> , 410, 128234	14.7	10
420	Effectiveness of reducing the influence of CTAB at the surface of metal nanoparticles during in situ heating studies by TEM. <i>Micron</i> , <b>2021</b> , 144, 103036	2.3	0
419	Correlating Structure and Detection Properties in HgTe Nanocrystal Films. <i>Nano Letters</i> , <b>2021</b> , 21, 4145-4151	11.5	12
418	Shape from projections via differentiable forward projector for computed tomography. <i>Ultramicroscopy</i> , <b>2021</b> , 224, 113239	3.1	1
417	Selectivity in the Ligand Functionalization of Photocatalytic Metal Oxide Nanoparticles for Phase Transfer and Self-Assembly Applications. <i>Chemistry - A European Journal</i> , <b>2021</b> , 27, 9011-9021	4.8	6
416	State of the Art and Prospects for Halide Perovskite Nanocrystals. <i>ACS Nano</i> , <b>2021</b> , 15, 10775-10981	16.7	222
415	Gold and Silver-Catalyzed Reductive Amination of Aromatic Carboxylic Acids to Benzylic Amines. <i>ACS Catalysis</i> , <b>2021</b> , 11, 7672-7684	13.1	5
414	Quantitative 3D real-space analysis of Laves phase supraparticles. <i>Nature Communications</i> , <b>2021</b> , 12, 3980	17.4	3
413	Efficient long-range conduction in cable bacteria through nickel protein wires. <i>Nature Communications</i> , <b>2021</b> , 12, 3996	17.4	9
412	3D Atomic-Scale Dynamics of Laser-Light-Induced Restructuring of Nanoparticles Unraveled by Electron Tomography. <i>Advanced Materials</i> , <b>2021</b> , 33, e2100972	24	3
411	The Influence of Size, Shape, and Twin Boundaries on Heat-Induced Alloying in Individual Au@Ag Core-Shell Nanoparticles. <i>Small</i> , <b>2021</b> , 17, e2102348	11	1
410	Grain Boundaries as a Diffusion-Limiting Factor in Lithium-Rich NMC Cathodes for High-Energy Lithium-Ion Batteries. <i>ACS Applied Energy Materials</i> , <b>2021</b> , 4, 6777-6786	6.1	1
409	Fast versus conventional HAADF-STEM tomography of nanoparticles: advantages and challenges. <i>Ultramicroscopy</i> , <b>2021</b> , 221, 113191	3.1	8
408	Highly active, selective, and stable Pd single-atom catalyst anchored on N-doped hollow carbon sphere for electrochemical H <sub>2</sub> O <sub>2</sub> synthesis under acidic conditions. <i>Journal of Catalysis</i> , <b>2021</b> , 393, 313-323	7.3	10
407	A simple method to clean ligand contamination on TEM grids. <i>Ultramicroscopy</i> , <b>2021</b> , 221, 113195	3.1	4
406	Size-controlled electrodeposition of Cu nanoparticles on gas diffusion electrodes in methanesulfonic acid solution. <i>Journal of Applied Electrochemistry</i> , <b>2021</b> , 51, 317-330	2.6	2
405	Binary icosahedral clusters of hard spheres in spherical confinement. <i>Nature Physics</i> , <b>2021</b> , 17, 128-134	16.2	20

404	Ferroelectric Gating of Narrow Band-Gap Nanocrystal Arrays with Enhanced Light-Matter Coupling. <i>ACS Photonics</i> , <b>2021</b> , 8, 259-268	6.3	9
403	Halide Perovskite-Lead Chalcogenide Nanocrystal Heterostructures. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 1435-1446	16.4	23
402	Deep learning-based denoising for improved dose efficiency in EDX tomography of nanoparticles. <i>Nanoscale</i> , <b>2021</b> , 13, 12242-12249	7.7	5
401	Three-dimensional atomic structure of supported Au nanoparticles at high temperature. <i>Nanoscale</i> , <b>2021</b> , 13, 1770-1776	7.7	4
400	Understanding and Controlling the Crystallization Process in Reconfigurable Plasmonic Superlattices. <i>ACS Nano</i> , <b>2021</b> , 15, 4916-4926	16.7	2
399	Three-Dimensional Nanoparticle Transformations Captured by an Electron Microscope. <i>Accounts of Chemical Research</i> , <b>2021</b> , 54, 1189-1199	24.3	3
398	Fast electron low dose tomography for beam sensitive materials. <i>Microscopy and Microanalysis</i> , <b>2021</b> , 27, 2116-2118	0.5	
397	Enhanced CO <sub>2</sub> electroreduction with metal-nitrogen-doped carbons in a continuous flow reactor. <i>Journal of CO<sub>2</sub> Utilization</i> , <b>2021</b> , 50, 101583	7.6	5
396	From CdSe Nanoplatelets to Quantum Rings by Thermochemical Edge Reconfiguration. <i>Chemistry of Materials</i> , <b>2021</b> , 33, 6853-6859	9.6	3
395	Mapping Composition-Selectivity Relationships of Supported Sub-10 nm Cu-Ag Nanocrystals for High-Rate CO Electroreduction. <i>ACS Nano</i> , <b>2021</b> , 15, 14858-14872	16.7	5
394	Nd-Doped Lanthanum Oxychloride Nanocrystals as Nanothermometers. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 19887-19896	3.8	1
393	Spherical core-shell alumina support particles for model platinum catalysts. <i>Nanoscale</i> , <b>2021</b> , 13, 4221-4232	7.7	2
392	The design of magneto-plasmonic nanostructures formed by magnetic Prussian Blue-type nanocrystals decorated with Au nanoparticles. <i>Chemical Communications</i> , <b>2021</b> , 57, 1903-1906	5.8	3
391	Ultrafast reproducible synthesis of a Ag-nanocluster@MOF composite and its superior visible-photocatalytic activity in batch and in continuous flow. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 15704-15713	13	4
390	Inverse heavy-atom effect in near infrared photoluminescent gold nanoclusters. <i>Nanoscale</i> , <b>2021</b> , 13, 10462-10467	7.7	1
389	Stabilization effects in binary colloidal Cu and Ag nanoparticle electrodes under electrochemical CO reduction conditions. <i>Nanoscale</i> , <b>2021</b> , 13, 4835-4844	7.7	11
388	Creation of Exclusive Artificial Cluster Defects by Selective Metal Removal in the (Zn, Zr) Mixed-Metal UiO-66. <i>Journal of the American Chemical Society</i> , <b>2021</b> ,	16.4	4
387	Fast Electron Tomography for Nanomaterials. <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 27276-27286	3.8	14

386	Ligand-Mode Directed Selectivity in Cu <sub>2</sub> S Core-Shell Based Gas Diffusion Electrodes for CO <sub>2</sub> Electroreduction. <i>ACS Catalysis</i> , <b>2020</b> , 10, 13468-13478	13.1	11
385	Nanocrystals of Lead Chalcogenides: A Series of Kinetically Trapped Metastable Nanostructures. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 10198-10211	16.4	14
384	Direct Correlation of Nanoscale Morphology and Device Performance to Study Photocurrent Generation in Donor-Enriched Phases of Polymer Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 28404-28415	9.5	3
383	Real-Time Reconstruction of Arbitrary Slices for Quantitative and In Situ 3D Characterization of Nanoparticles. <i>Particle and Particle Systems Characterization</i> , <b>2020</b> , 37, 2000073	3.1	9
382	Developing Lattice Matched ZnMgSe Shells on InZnP Quantum Dots for Phosphor Applications. <i>ACS Applied Nano Materials</i> , <b>2020</b> , 3, 3859-3867	5.6	15
381	Micelle-directed chiral seeded growth on anisotropic gold nanocrystals. <i>Science</i> , <b>2020</b> , 368, 1472-1477	33.3	78
380	C2-H Arylation of Indoles Catalyzed by Palladium-Containing Metal-Organic-Framework in $\gamma$ -Valerolactone. <i>ChemSusChem</i> , <b>2020</b> , 13, 2786-2791	8.3	20
379	Plasmonic gold-embedded TiO <sub>2</sub> thin films as photocatalytic self-cleaning coatings. <i>Applied Catalysis B: Environmental</i> , <b>2020</b> , 267, 118654	21.8	25
378	Quantifying Strain and Dislocation Density at Nanocube Interfaces after Assembly and Epitaxy. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 8788-8794	9.5	2
377	S,O-Functionalized Metal-Organic Frameworks as Heterogeneous Single-Site Catalysts for the Oxidative Alkenylation of Arenes via C <sub>3</sub> I activation. <i>ACS Catalysis</i> , <b>2020</b> , 10, 5077-5085	13.1	27
376	Self-assembly of Janus Au:Fe <sub>3</sub> O <sub>4</sub> branched nanoparticles. From organized clusters to stimuli-responsive nanogel suprastructures. <i>Nanoscale Advances</i> , <b>2020</b> , 2, 2525-2530	5.1	4
375	Defect-Directed Growth of Symmetrically Branched Metal Nanocrystals. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 943-950	16.4	17
374	Bifunctional Nickel-Nitrogen-Doped-Carbon-Supported Copper Electrocatalyst for CO <sub>2</sub> Reduction. <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 1369-1381	3.8	13
373	Formation of Hollow Gold Nanocrystals by Nanosecond Laser Irradiation. <i>Journal of Physical Chemistry Letters</i> , <b>2020</b> , 11, 670-677	6.4	13
372	Nickel-containing N-doped carbon as effective electrocatalysts for the reduction of CO <sub>2</sub> to CO in a continuous-flow electrolyzer. <i>Sustainable Energy and Fuels</i> , <b>2020</b> , 4, 1296-1311	5.8	9
371	Edge stabilization in reduced-dimensional perovskites. <i>Nature Communications</i> , <b>2020</b> , 11, 170	17.4	79
370	High-Performance CO-Selective Hybrid Membranes by Exploiting MOF-Breathing Effects. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 2952-2961	9.5	13
369	Defect-Directed Growth of Symmetrically Branched Metal Nanocrystals. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 953-960	3.6	3

368	Locating and Controlling the Zn Content in In(Zn)P Quantum Dots. <i>Chemistry of Materials</i> , <b>2020</b> , 32, 557-565	5.6	21
367	Alloy CsCd Pb Br Perovskite Nanocrystals: The Role of Surface Passivation in Preserving Composition and Blue Emission. <i>Chemistry of Materials</i> , <b>2020</b> , 32, 10641-10652	9.6	18
366	3D Characterization and Plasmon Mapping of Gold Nanorods Welded by Femtosecond Laser Irradiation. <i>ACS Nano</i> , <b>2020</b> , 14, 12558-12570	16.7	18
365	Novel Approaches for Electron Tomography to Investigate the Structure and Stability of Nanomaterials in 3 Dimensions.. <i>Microscopy and Microanalysis</i> , <b>2020</b> , 26, 1128-1130	0.5	0
364	3D Atomic Scale Quantification of Nanostructures and their Dynamics Using Model-based STEM. <i>Microscopy and Microanalysis</i> , <b>2020</b> , 26, 2606-2608	0.5	0
363	An Expanded Surface-Enhanced Raman Scattering Tags Library by Combinatorial Encapsulation of Reporter Molecules in Metal Nanoshells. <i>ACS Nano</i> , <b>2020</b> , 14, 14655-14664	16.7	6
362	Tuning Size and Seed Position in Small Silver Nanorods <b>2020</b> , 2, 1246-1250		6
361	Luminescent Colloidal InSb Quantum Dots from Generated Single-Source Precursor. <i>ACS Nano</i> , <b>2020</b> , 14, 13146-13160	16.7	8
360	Intracellular Fate of Hydrophobic Nanocrystal Self-Assemblies in Tumor Cells. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 2004274	15.6	10
359	Improving extracellular vesicles visualization: From static to motion. <i>Scientific Reports</i> , <b>2020</b> , 10, 6494	4.9	8
358	Near-Edge Ligand Stripping and Robust Radiative Exciton Recombination in CdSe/CdS Core/Crown Nanoplatelets. <i>Journal of Physical Chemistry Letters</i> , <b>2020</b> , 11, 3339-3344	6.4	15
357	Mangan-Dotierung von Perowskit-Nanokristallen: Quanteneinschränkung Aufgrund von Ruddlesden-Popper-Defekten. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 6860-6865	3.6	3
356	Manganese-Doping-Induced Quantum Confinement within Host Perovskite Nanocrystals through Ruddlesden-Popper Defects. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 6794-6799	16.4	44
355	Unraveling Structural Information of Turkevich Synthesized Plasmonic Gold-Silver Bimetallic Nanoparticles. <i>Small</i> , <b>2019</b> , 15, e1902791	11	20
354	Pt/ZrO Prepared by Atomic Trapping: An Efficient Catalyst for the Conversion of Glycerol to Lactic Acid with Concomitant Transfer Hydrogenation of Cyclohexene. <i>ACS Catalysis</i> , <b>2019</b> , 9, 9953-9963	13.1	24
353	Corrosion protection of Cu by atomic layer deposition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2019</b> , 37, 060902	2.9	6
352	Phase Transformation Behavior of a Two-Dimensional Zeolite. <i>Angewandte Chemie</i> , <b>2019</b> , 131, 10336-10341	3.1	0
351	Electron Transfer and Near-Field Mechanisms in Plasmonic Gold-Nanoparticle-Modified TiO <sub>2</sub> Photocatalytic Systems. <i>ACS Applied Nano Materials</i> , <b>2019</b> , 2, 4067-4074	5.6	23

350	Experimental Evaluation of Undersampling Schemes for Electron Tomography of Nanoparticles. <i>Particle and Particle Systems Characterization</i> , <b>2019</b> , 36, 1900096	3.1	9
349	Controlled Surface Modification of ZnO Nanostructures with Amorphous TiO <sub>2</sub> for Photoelectrochemical Water Splitting. <i>Advanced Sustainable Systems</i> , <b>2019</b> , 3, 1900046	5.9	9
348	Phase Transformation Behavior of a Two-Dimensional Zeolite. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 10230-10235	16.4	1
347	Thermal Stability of Gold/Palladium Octopods Studied in Situ in 3D: Understanding Design Rules for Thermally Stable Metal Nanoparticles. <i>ACS Nano</i> , <b>2019</b> , 13, 6522-6530	16.7	33
346	Surface Functionalization of Grown-on-Tip ZnO Nanopyramids: From Fabrication to Light-Triggered Applications. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 15881-15890	9.5	6
345	A Titanium(IV)-Based Metal-Organic Framework Featuring Defect-Rich Ti-O Sheets as an Oxidative Desulfurization Catalyst. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 9160-9165	16.4	53
344	Understanding CeO <sub>2</sub> -Based Nanostructures through Advanced Electron Microscopy in 2D and 3D. <i>Particle and Particle Systems Characterization</i> , <b>2019</b> , 36, 1800287	3.1	13
343	Fully Inorganic Ruddlesden-Popper Double Cl-I and Triple Cl-Br-I Lead Halide Perovskite Nanocrystals. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 2182-2190	9.6	49
342	A Facet-Specific Quantum Dot Passivation Strategy for Colloid Management and Efficient Infrared Photovoltaics. <i>Advanced Materials</i> , <b>2019</b> , 31, e1805580	24	55
341	Disconnecting Symmetry Breaking from Seeded Growth for the Reproducible Synthesis of High Quality Gold Nanorods. <i>ACS Nano</i> , <b>2019</b> , 13, 4424-4435	16.7	59
340	Encapsulation of Noble Metal Nanoparticles through Seeded Emulsion Polymerization as Highly Stable Plasmonic Systems. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1809071	15.6	17
339	LaFeO <sub>3</sub> Nanofibers for High Detection of Sulfur-Containing Gases. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2019</b> , 7, 6023-6032	8.3	28
338	Quantification of 3D Atomic Structures and Their Dynamics by Atom-Counting from an ADF STEM Image. <i>Microscopy and Microanalysis</i> , <b>2019</b> , 25, 1808-1809	0.5	
337	Phase Transformation of Superparamagnetic Iron Oxide Nanoparticles via Thermal Annealing: Implications for Hyperthermia Applications. <i>ACS Applied Nano Materials</i> , <b>2019</b> , 2, 4462-4470	5.6	8
336	Tailoring Cu for Ga Cation Exchange in CuS and CuInS Nanocrystals by Controlling the Ga Precursor Chemistry. <i>ACS Nano</i> , <b>2019</b> , 13, 12880-12893	16.7	18
335	Quantitative 3D Characterization of Elemental Diffusion Dynamics in Individual Ag@Au Nanoparticles with Different Shapes. <i>ACS Nano</i> , <b>2019</b> , 13, 13421-13429	16.7	21
334	Single-site metal-organic framework catalysts for the oxidative coupling of arenes C-H/C-H activation. <i>Chemical Science</i> , <b>2019</b> , 10, 3616-3622	9.4	58
333	Highly porous palladium nanodendrites: wet-chemical synthesis, electron tomography and catalytic activity. <i>Dalton Transactions</i> , <b>2019</b> , 48, 3758-3767	4.3	12

332	Chemical and Structural Configuration of Pt-Doped Metal Oxide Thin Films Prepared by Atomic Layer Deposition. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 9673-9683	9.6	5
331	Chemistry of Shape-Controlled Iron Oxide Nanocrystal Formation. <i>ACS Nano</i> , <b>2019</b> , 13, 152-162	16.7	41
330	Three-Dimensional Quantification of the Facet Evolution of Pt Nanoparticles in a Variable Gaseous Environment. <i>Nano Letters</i> , <b>2019</b> , 19, 477-481	11.5	58
329	Controlling the formation and stability of ultra-thin nickel silicides - An alloying strategy for preventing agglomeration. <i>Journal of Applied Physics</i> , <b>2018</b> , 123, 075303	2.5	18
328	Controlled Growth of Supported ZnO Inverted Nanopyramids with Downward Pointing Tips. <i>Crystal Growth and Design</i> , <b>2018</b> , 18, 2579-2587	3.5	10
327	Characterization of silver-polymer core-shell nanoparticles using electron microscopy. <i>Nanoscale</i> , <b>2018</b> , 10, 9186-9191	7.7	6
326	Imaging Heterogeneously Distributed Photo-Active Traps in Perovskite Single Crystals. <i>Advanced Materials</i> , <b>2018</b> , 30, e1705494	24	22
325	Reversible Clustering of Gold Nanoparticles under Confinement. <i>Angewandte Chemie</i> , <b>2018</b> , 130, 3237-3240	3.40	14
324	Do Binary Supracrystals Enhance the Crystal Stability?. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 13515-13521	3.5214	
323	Reversible Clustering of Gold Nanoparticles under Confinement. <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 3183-3186	16.4	39
322	Multimode Electron Tomography as a Tool to Characterize the Internal Structure and Morphology of Gold Nanoparticles. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 13522-13528	3.8	15
321	The Influence of Acids on Tuning the Pore Size of Mesoporous TiO <sub>2</sub> Templated by Non-Ionic Block Copolymers. <i>European Journal of Inorganic Chemistry</i> , <b>2018</b> , 2018, 62-65	2.3	5
320	Interplay of Interfacial Layers and Blend Composition To Reduce Thermal Degradation of Polymer Solar Cells at High Temperature. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 3874-3884	9.5	6
319	Gold nanoclusters with bright near-infrared photoluminescence. <i>Nanoscale</i> , <b>2018</b> , 10, 3792-3798	7.7	60
318	Near-Infrared-Emitting CuInS/ZnS Dot-in-Rod Colloidal Heteronanorods by Seeded Growth. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 5755-5763	16.4	38
317	Interplay between Surface Chemistry, Precursor Reactivity, and Temperature Determines Outcome of ZnS Shelling Reactions on CuInS Nanocrystals. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 2400-2413	9.6	63
316	Detection of amyloid fibrils in Parkinson's disease using plasmonic chirality. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 3225-3230	11.5	124
315	The role of MOFs in Thin-Film Nanocomposite (TFN) membranes. <i>Journal of Membrane Science</i> , <b>2018</b> , 563, 938-948	9.6	74



314	Recent Advances in Transmission Electron Microscopy for Materials Science at the EMAT Lab of the University of Antwerp. <i>Materials</i> , <b>2018</b> , 11,	3.5	12
313	Optical enhancement of a printed organic tandem solar cell using diffractive nanostructures. <i>Optics Express</i> , <b>2018</b> , 26, A240-A250	3.3	8
312	Deactivation of Sn-Beta during carbohydrate conversion. <i>Applied Catalysis A: General</i> , <b>2018</b> , 564, 113-122	5.1	24
311	TiO <sub>2</sub> Films Modified with Au Nanoclusters as Self-Cleaning Surfaces under Visible Light. <i>Nanomaterials</i> , <b>2018</b> , 8,	5.4	20
310	Dopant-induced electron localization drives CO reduction to C hydrocarbons. <i>Nature Chemistry</i> , <b>2018</b> , 10, 974-980	17.6	435
309	Exciton Fine Structure and Lattice Dynamics in InP/ZnSe Core/Shell Quantum Dots. <i>ACS Photonics</i> , <b>2018</b> , 5, 3353-3362	6.3	24
308	Enhanced electrochemical performance of Li-rich cathode materials through microstructural control. <i>Physical Chemistry Chemical Physics</i> , <b>2018</b> , 20, 23112-23122	3.6	23
307	Recent breakthroughs in scanning transmission electron microscopy of small species. <i>Advances in Physics: X</i> , <b>2018</b> , 3, 1480420	5.1	10
306	Spontaneous Self-Assembly of Perovskite Nanocrystals into Electronically Coupled Supercrystals: Toward Filling the Green Gap. <i>Advanced Materials</i> , <b>2018</b> , 30, e1801117	24	105
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161	Catalyst Design by NH <sub>4</sub> OH Treatment of USY Zeolite. <i>Advanced Functional Materials</i> , <b>2015</b> , 25, 7130-7144	15.6	60
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151	Chabazite: stable cation-exchanger in hyper alkaline concrete pore water. <i>Environmental Science &amp; Technology</i> , <b>2015</b> , 49, 2358-65	10.3	8
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149	Fluorescent nanodiamonds embedded in biocompatible translucent shells. <i>Small</i> , <b>2014</b> , 10, 1106-15	11	74
148	Atomic resolution monitoring of cation exchange in CdSe-PbSe heteronanocrystals during epitaxial solid-solid-vapor growth. <i>Nano Letters</i> , <b>2014</b> , 14, 3661-7	11.5	43
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22	A New Approach for Electron Tomography: Annular Dark-Field Transmission Electron Microscopy. <i>Advanced Materials</i> , <b>2006</b> , 18, 892-895	24	56
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20	Statistical estimation of atomic positions from exit wave reconstruction with a precision in the picometer range. <i>Physical Review Letters</i> , <b>2006</b> , 96, 096106	7.4	73
19	Electronically coupled complementary interfaces between perovskite band insulators. <i>Nature Materials</i> , <b>2006</b> , 5, 556-60	27	309
18	An efficient way of including thermal diffuse scattering in simulation of scanning transmission electron microscopic images. <i>Ultramicroscopy</i> , <b>2006</b> , 106, 933-40	3.1	21
17	Mixed (Sr <sub>1-x</sub> Cax) <sub>33</sub> Bi <sub>24</sub> Al <sub>48</sub> O <sub>141</sub> fullerenoids: the defect structure analysed by (S)TEM techniques. <i>International Journal of Materials Research</i> , <b>2006</b> , 97, 978-984	0.5	1
16	Nonlinear imaging using annular dark field TEM. <i>Ultramicroscopy</i> , <b>2005</b> , 104, 281-9	3.1	16
15	Quantitative Electron Microscopy of (Bi,Pb) <sub>2</sub> Sr <sub>2</sub> Ca <sub>2</sub> Cu <sub>3</sub> O <sub>10+x</sub> Ag Multifilament Tapes During Initial Stages of Annealing. <i>Journal of the American Ceramic Society</i> , <b>2005</b> , 88, 431-436	3.8	
14	Interplay of doping and structural modulation in superconducting Bi <sub>2</sub> Sr <sub>2-x</sub> LaxCuO <sub>6+y</sub> thin films. <i>Physical Review B</i> , <b>2005</b> , 71,	3.3	11
13	Comparison of As- and P-based metamorphic buffers for high performance InP heterojunction bipolar transistor and high electron mobility transistor applications. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>2004</b> , 22, 1565		19
12	Annular dark field imaging in a TEM. <i>Solid State Communications</i> , <b>2004</b> , 130, 675-680	1.6	44
11	Investigation of (Bi,Pb) <sub>2</sub> 212 crystals: observation of modulation-free phase. <i>Physica C: Superconductivity and Its Applications</i> , <b>2004</b> , 401, 270-272	1.3	9
10	Modulation-free phase in heavily Pb-doped (Bi,Pb) <sub>2</sub> 212 crystals. <i>Physica C: Superconductivity and Its Applications</i> , <b>2003</b> , 399, 1-7	1.3	28
9	Transmission electron microscopy on interface engineered superconducting thin films. <i>IEEE Transactions on Applied Superconductivity</i> , <b>2003</b> , 13, 2834-2837	1.8	11

8	Role of Nd/Ba substitution on the growth mode and on the structural properties of Nd-rich $\text{Re}_1(\text{Nd}_x\text{Ba}_{2-x})\text{Cu}_3\text{O}_7$ (Re=Nd, Y) thin films. <i>Physica C: Superconductivity and Its Applications</i> , <b>2002</b> , 372-376, 675-678	1.3	5
7	Optimisation of superconducting thin films by TEM. <i>Physica C: Superconductivity and Its Applications</i> , <b>2002</b> , 372-376, 711-714	1.3	4
6	Transmission electron microscopy investigation of Bi-2223/Ag tapes. <i>Physica C: Superconductivity and Its Applications</i> , <b>2001</b> , 353, 251-257	1.3	10
5	TEM of ultra-thin $\text{DyBa}_2\text{Cu}_3\text{O}_7$ films deposited on $\text{TiO}_2$ terminated $\text{SrTiO}_3$ . <i>Physica C: Superconductivity and Its Applications</i> , <b>2001</b> , 355, 225-230	1.3	28
4	Growth of $\text{R}_{1-x}\text{Ba}_2\text{Cu}_3\text{O}_7$ Epitaxial Films Investigated by In Situ Scanning Tunneling Microscopy. <i>Physica Status Solidi A</i> , <b>2001</b> , 186, 339-364		17
3	Why are sputter deposited $\text{Nd}_{1+x}\text{Ba}_2\text{Cu}_3\text{O}_7$ thin films flatter than $\text{NdBa}_2\text{Cu}_3\text{O}_7$ films?. <i>Applied Physics Letters</i> , <b>2001</b> , 79, 3660-3662	3.4	13
2	Strain relaxation and dislocation filtering in metamorphic HBT and HEMT structures grown on GaAs substrates by MBE		2
1	Third-Order Nonlinear Optical Properties and Saturation of Two-Photon Absorption in Lead-Free Double Perovskite Nanocrystals under Femtosecond Excitation. <i>ACS Photonics</i> ,	6.3	7