

Sara Bals

List of Publications by Citations

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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	Highly Luminescent Cesium Lead Halide Perovskite Nanocrystals with Tunable Composition and Thickness by Ultrasonication. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 13887-13892	16.4	466
438	Highly Emissive Divalent-Ion-Doped Colloidal CsPbMBr Perovskite Nanocrystals through Cation Exchange. <i>Journal of the American Chemical Society</i> , 2017 , 139, 4087-4097	16.4	452
437	Dopant-induced electron localization drives CO reduction to C hydrocarbons. <i>Nature Chemistry</i> , 2018 , 10, 974-980	17.6	435
436	The ASTRA Toolbox: A platform for advanced algorithm development in electron tomography. <i>Ultramicroscopy</i> , 2015 , 157, 35-47	3.1	409
435	Electronically coupled complementary interfaces between perovskite band insulators. <i>Nature Materials</i> , 2006 , 5, 556-60	27	309
434	Long-range orientation and atomic attachment of nanocrystals in 2D honeycomb superlattices. <i>Science</i> , 2014 , 344, 1377-80	33.3	303
433	Atomic-scale determination of surface facets in gold nanorods. <i>Nature Materials</i> , 2012 , 11, 930-5	27	268
432	Hydrophobic interactions modulate self-assembly of nanoparticles. <i>ACS Nano</i> , 2012 , 6, 11059-65	16.7	257
431	3D imaging of nanomaterials by discrete tomography. <i>Ultramicroscopy</i> , 2009 , 109, 730-40	3.1	230
430	State of the Art and Prospects for Halide Perovskite Nanocrystals. <i>ACS Nano</i> , 2021 , 15, 10775-10981	16.7	222
429	Low-dimensional semiconductor superlattices formed by geometric control over nanocrystal attachment. <i>Nano Letters</i> , 2013 , 13, 2317-23	11.5	196
428	From Precursor Powders to CsPbX Perovskite Nanowires: One-Pot Synthesis, Growth Mechanism, and Oriented Self-Assembly. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 13887-13892	16.4	189
427	High-Yield Seeded Growth of Monodisperse Pentatwinned Gold Nanoparticles through Thermally Induced Seed Twinning. <i>Journal of the American Chemical Society</i> , 2017 , 139, 107-110	16.4	182
426	Electron tomography based on a total variation minimization reconstruction technique. <i>Ultramicroscopy</i> , 2012 , 113, 120-130	3.1	172
425	Quantitative atomic resolution mapping using high-angle annular dark field scanning transmission electron microscopy. <i>Ultramicroscopy</i> , 2009 , 109, 1236-44	3.1	167
424	In situ study of the formation mechanism of two-dimensional superlattices from PbSe nanocrystals. <i>Nature Materials</i> , 2016 , 15, 1248-1254	27	156
423	Design of zeolite by inverse sigma transformation. <i>Nature Materials</i> , 2012 , 11, 1059-64	27	143

422	Tailoring ZnSe-CdSe colloidal quantum dots via cation exchange: from core/shell to alloy nanocrystals. <i>ACS Nano</i> , 2013 , 7, 7913-30	16.7	138
421	Anisotropic Cation Exchange in PbSe/CdSe Core/Shell Nanocrystals of Different Geometry. <i>Chemistry of Materials</i> , 2012 , 24, 294-302	9.6	132
420	Au@Ag Nanoparticles: Halides Stabilize {100} Facets. <i>Journal of Physical Chemistry Letters</i> , 2013 , 4, 2209-2216	12.16	126
419	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> , 2018 , 115, 3225-3230	11.5	124
418	Gel-based morphological design of zirconium metal-organic frameworks. <i>Chemical Science</i> , 2017 , 8, 3939-3948	12.3	
417	Three-dimensional atomic imaging of colloidal core-shell nanocrystals. <i>Nano Letters</i> , 2011 , 11, 3420-4	11.5	123
416	Monitoring galvanic replacement through three-dimensional morphological and chemical mapping. <i>Nano Letters</i> , 2014 , 14, 3220-6	11.5	122
415	Polyethylene glycol conjugated polymeric nanocapsules for targeted delivery of quercetin to folate-expressing cancer cells in vitro and in vivo. <i>ACS Nano</i> , 2014 , 8, 1384-401	16.7	122
414	Molecular shape-selectivity of MFI zeolite nanosheets in n-decane isomerization and hydrocracking. <i>Journal of Catalysis</i> , 2013 , 300, 70-80	7.3	118
413	Well shaped MnO ₂ nano-octahedra with anomalous magnetic behavior and enhanced photodecomposition properties. <i>Small</i> , 2011 , 7, 475-83	11	117
412	Magnetic Drug Targeting: Preclinical in Vivo Studies, Mathematical Modeling, and Extrapolation to Humans. <i>Nano Letters</i> , 2016 , 16, 5652-60	11.5	116
411	A generalized electrochemical aggregative growth mechanism. <i>Journal of the American Chemical Society</i> , 2013 , 135, 11550-61	16.4	116
410	Luminescent CuInS ₂ Quantum Dots by Partial Cation Exchange in Cu ₂ S Nanocrystals. <i>Chemistry of Materials</i> , 2015 , 27, 621-628	9.6	109
409	End-to-End Assembly of Shape-Controlled Nanocrystals via a Nanowelding Approach Mediated by Gold Domains. <i>Advanced Materials</i> , 2009 , 21, 550-4	24	106
408	Controlled Living Nanowire Growth: Precise Control over the Morphology and Optical Properties of AgAuAg Bimetallic Nanowires. <i>Nano Letters</i> , 2015 , 15, 5427-37	11.5	105
407	Spontaneous Self-Assembly of Perovskite Nanocrystals into Electronically Coupled Supercrystals: Toward Filling the Green Gap. <i>Advanced Materials</i> , 2018 , 30, e1801117	24	105
406	Procedure to count atoms with trustworthy single-atom sensitivity. <i>Physical Review B</i> , 2013 , 87,	3.3	105
405	Templated Growth of Surface Enhanced Raman Scattering-Active Branched Gold Nanoparticles within Radial Mesoporous Silica Shells. <i>ACS Nano</i> , 2015 , 9, 10489-97	16.7	103

404	Highly selective gas separation membrane using in situ amorphised metal-organic frameworks. <i>Energy and Environmental Science</i> , 2017 , 10, 2342-2351	35.4	100
403	New Insights into the Early Stages of Nanoparticle Electrodeposition. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 2322-2329	3.8	97
402	Encapsulation of Single Plasmonic Nanoparticles within ZIF-8 and SERS Analysis of the MOF Flexibility. <i>Small</i> , 2016 , 12, 3935-43	11	96
401	Advanced electron microscopy for advanced materials. <i>Advanced Materials</i> , 2012 , 24, 5655-75	24	95
400	Tunable porous nanoallotropes prepared by post-assembly etching of binary nanoparticle superlattices. <i>Science</i> , 2017 , 358, 514-518	33.3	92
399	Optimized fabrication of high-quality La _{0.67} Sr _{0.33} MnO ₃ thin films considering all essential characteristics. <i>Journal Physics D: Applied Physics</i> , 2011 , 44, 205001	3	92
398	Atomic scale dynamics of ultrasmall germanium clusters. <i>Nature Communications</i> , 2012 , 3, 897	17.4	89
397	N-doped ordered mesoporous carbons prepared by a two-step nanocasting strategy as highly active and selective electrocatalysts for the reduction of O ₂ to H ₂ O ₂ . <i>Applied Catalysis B: Environmental</i> , 2015 , 176-177, 212-224	21.8	87
396	Three-dimensional elemental mapping at the atomic scale in bimetallic nanocrystals. <i>Nano Letters</i> , 2013 , 13, 4236-41	11.5	86
395	Femtosecond Laser-Controlled Tip-to-Tip Assembly and Welding of Gold Nanorods. <i>Nano Letters</i> , 2015 , 15, 8282-8	11.5	86
394	Near-Infrared Emitting CuInSe ₂ /CuInS ₂ Dot Core/Rod Shell Heteronanorods by Sequential Cation Exchange. <i>ACS Nano</i> , 2015 , 9, 11430-8	16.7	84
393	Measuring Lattice Strain in Three Dimensions through Electron Microscopy. <i>Nano Letters</i> , 2015 , 15, 6996-7001	11.5	84
392	Three-dimensional valency mapping in ceria nanocrystals. <i>ACS Nano</i> , 2014 , 8, 10878-84	16.7	84
391	Measuring porosity at the nanoscale by quantitative electron tomography. <i>Nano Letters</i> , 2010 , 10, 5014-9	11.5	82
390	Quantitative Three-Dimensional Reconstruction of Catalyst Particles for Bamboo-like Carbon Nanotubes. <i>Nano Letters</i> , 2007 , 7, 3669-3674	11.5	82
389	Edge stabilization in reduced-dimensional perovskites. <i>Nature Communications</i> , 2020 , 11, 170	17.4	79
388	Micelle-directed chiral seeded growth on anisotropic gold nanocrystals. <i>Science</i> , 2020 , 368, 1472-1477	33.3	78
387	Steric hindrance induces crosslike self-assembly of gold nanodumbbells. <i>Nano Letters</i> , 2012 , 12, 4380-4	11.5	78

386	Defect Engineering in Oxide Heterostructures by Enhanced Oxygen Surface Exchange. <i>Advanced Functional Materials</i> , 2013 , 23, 5240-5248	15.6	78
385	Galvanic Replacement Coupled to Seeded Growth as a Route for Shape-Controlled Synthesis of Plasmonic Nanorattles. <i>Journal of the American Chemical Society</i> , 2016 , 138, 11453-6	16.4	75
384	The role of MOFs in Thin-Film Nanocomposite (TFN) membranes. <i>Journal of Membrane Science</i> , 2018 , 563, 938-948	9.6	74
383	Fluorescent nanodiamonds embedded in biocompatible translucent shells. <i>Small</i> , 2014 , 10, 1106-15	11	74
382	Nanostructured materials for solid-state hydrogen storage: A review of the achievement of COST Action MP1103. <i>International Journal of Hydrogen Energy</i> , 2016 , 41, 14404-14428	6.7	74
381	Statistical estimation of atomic positions from exit wave reconstruction with a precision in the picometer range. <i>Physical Review Letters</i> , 2006 , 96, 096106	7.4	73
380	High-quality sample preparation by low kV FIB thinning for analytical TEM measurements. <i>Microscopy and Microanalysis</i> , 2007 , 13, 80-6	0.5	73
379	Independent tuning of size and coverage of supported Pt nanoparticles using atomic layer deposition. <i>Nature Communications</i> , 2017 , 8, 1074	17.4	72
378	Plasmonic Nanorods with Boosted Refractive Index Susceptibility and SERS Efficiency: A Multifunctional Platform for Hydrogen Sensing and Monitoring of Catalytic Reactions. <i>Chemistry of Materials</i> , 2016 , 28, 9169-9180	9.6	71
377	Solution-Processable Ultrathin Size- and Shape-Controlled Colloidal Cu ₂ S Nanosheets. <i>Chemistry of Materials</i> , 2015 , 27, 283-291	9.6	70
376	Advanced reconstruction algorithms for electron tomography: from comparison to combination. <i>Ultramicroscopy</i> , 2013 , 127, 40-7	3.1	67
375	Shape control in ZIF-8 nanocrystals and metal nanoparticles@ZIF-8 heterostructures. <i>Nanoscale</i> , 2017 , 9, 16645-16651	7.7	67
374	Correction of non-linear thickness effects in HAADF STEM electron tomography. <i>Ultramicroscopy</i> , 2012 , 116, 8-12	3.1	65
373	Quantitative three-dimensional modeling of zeolite through discrete electron tomography. <i>Journal of the American Chemical Society</i> , 2009 , 131, 4769-73	16.4	64
372	Interplay between Surface Chemistry, Precursor Reactivity, and Temperature Determines Outcome of ZnS Shelling Reactions on CuInS Nanocrystals. <i>Chemistry of Materials</i> , 2018 , 30, 2400-2413	9.6	63
371	Combined TiO ₂ /SiO ₂ mesoporous photocatalysts with location and phase controllable TiO ₂ nanoparticles. <i>Applied Catalysis B: Environmental</i> , 2009 , 88, 515-524	21.8	63
370	Preventing the Reconstruction of the Polar Discontinuity at Oxide Heterointerfaces. <i>Advanced Functional Materials</i> , 2012 , 22, 2235-2240	15.6	61
369	Comprehensive Study of the Electrodeposition of Nickel Nanostructures from Deep Eutectic Solvents: Self-Limiting Growth by Electrolysis of Residual Water. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 9337-9347	3.8	60

368	Gold nanoclusters with bright near-infrared photoluminescence. <i>Nanoscale</i> , 2018 , 10, 3792-3798	7.7	60
367	Catalyst Design by NH ₄ OH Treatment of USY Zeolite. <i>Advanced Functional Materials</i> , 2015 , 25, 7130-7144	45.6	60
366	Chemical Cutting of Perovskite Nanowires into Single-Photon Emissive Low-Aspect-Ratio CsPbX (X=Cl, Br, I) Nanorods. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 16094-16098	16.4	60
365	Disconnecting Symmetry Breaking from Seeded Growth for the Reproducible Synthesis of High Quality Gold Nanorods. <i>ACS Nano</i> , 2019 , 13, 4424-4435	16.7	59
364	Collective Plasmonic Properties in Few-Layer Gold Nanorod Supercrystals. <i>ACS Photonics</i> , 2015 , 2, 1482-1488	14.8	58
363	Conceptual Frame Rationalizing the Self-Stabilization of H-USY Zeolites in Hot Liquid Water. <i>ACS Catalysis</i> , 2015 , 5, 754-768	13.1	58
362	Single-site metal-organic framework catalysts for the oxidative coupling of arenes C-H/C-H activation. <i>Chemical Science</i> , 2019 , 10, 3616-3622	9.4	58
361	Three-Dimensional Quantification of the Facet Evolution of Pt Nanoparticles in a Variable Gaseous Environment. <i>Nano Letters</i> , 2019 , 19, 477-481	11.5	58
360	Gold Nanostar-Coated Polystyrene Beads as Multifunctional Nanoprobes for SERS Bioimaging. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 20860-20868	3.8	57
359	Nanorattles with tailored electric field enhancement. <i>Nanoscale</i> , 2017 , 9, 9376-9385	7.7	56
358	Gallium oxide nanorods: novel, template-free synthesis and high catalytic activity in epoxidation reactions. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 1585-9	16.4	56
357	Direct determination of polarity, faceting, and core location in colloidal core/shell wurtzite semiconductor nanocrystals. <i>ACS Nano</i> , 2012 , 6, 6453-61	16.7	56
356	A New Approach for Electron Tomography: Annular Dark-Field Transmission Electron Microscopy. <i>Advanced Materials</i> , 2006 , 18, 892-895	24	56
355	A Facet-Specific Quantum Dot Passivation Strategy for Colloid Management and Efficient Infrared Photovoltaics. <i>Advanced Materials</i> , 2019 , 31, e1805580	24	55
354	A Titanium(IV)-Based Metal-Organic Framework Featuring Defect-Rich Ti-O Sheets as an Oxidative Desulfurization Catalyst. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 9160-9165	16.4	53
353	3D Magnetic Induction Maps of Nanoscale Materials Revealed by Electron Holographic Tomography. <i>Chemistry of Materials</i> , 2015 , 27, 6771-6778	9.6	53
352	A simple road for the transformation of few-layer graphene into MWNTs. <i>Journal of the American Chemical Society</i> , 2012 , 134, 13310-5	16.4	53
351	The Role of Nanocluster Aggregation, Coalescence, and Recrystallization in the Electrochemical Deposition of Platinum Nanostructures. <i>Chemistry of Materials</i> , 2014 , 26, 2396-2406	9.6	52

350	Three-dimensional characterization of helical silver nanochains mediated by protein assemblies. <i>Advanced Materials</i> , 2010 , 22, 2193-7	24	52
349	Three-dimensional characterization of noble-metal nanoparticles and their assemblies by electron tomography. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 10600-10	16.4	51
348	Tuning the Pore Size of Ink-Bottle Mesopores by Atomic Layer Deposition. <i>Chemistry of Materials</i> , 2012 , 24, 1992-1994	9.6	51
347	Electrodeposition of Ag nanoparticles onto carbon coated TEM grids A direct approach to study early stages of nucleation. <i>Electrochemistry Communications</i> , 2010 , 12, 1706-1709	5.1	51
346	The uptake and elimination of ZnO and CuO nanoparticles in <i>Daphnia magna</i> under chronic exposure scenarios. <i>Water Research</i> , 2015 , 68, 249-61	12.5	50
345	Fully Inorganic Ruddlesden-Popper Double Cl-I and Triple Cl-Br-I Lead Halide Perovskite Nanocrystals. <i>Chemistry of Materials</i> , 2019 , 31, 2182-2190	9.6	49
344	Crystallographic shear structures as a route to anion-deficient perovskites. <i>Angewandte Chemie - International Edition</i> , 2006 , 45, 6697-700	16.4	49
343	Starke Lumineszenz in Nanokristallen aus Caesiumbleihalogenid- Perowskit mit durchstimmbarer Zusammensetzung und Dicke mittels Ultraschalldispersion. <i>Angewandte Chemie</i> , 2016 , 128, 14091-14096	3.6	48
342	Multifunctional self-assembled composite colloids and their application to SERS detection. <i>Nanoscale</i> , 2015 , 7, 10377-81	7.7	47
341	Single Particle Deformation and Analysis of Silica-Coated Gold Nanorods before and after Femtosecond Laser Pulse Excitation. <i>Nano Letters</i> , 2016 , 16, 1818-25	11.5	47
340	Supracrystalline Colloidal Eggs: Epitaxial Growth and Freestanding Three-Dimensional Supracrystals in Nanoscaled Colloidosomes. <i>Journal of the American Chemical Society</i> , 2016 , 138, 3493-500	16.4	47
339	Toward High-Temperature Stability of PTB7-Based Bulk Heterojunction Solar Cells: Impact of Fullerene Size and Solvent Additive. <i>Advanced Energy Materials</i> , 2017 , 7, 1601486	21.8	46
338	Dimethylformamide-mediated synthesis of water-soluble platinum nanodendrites for ethanol oxidation electrocatalysis. <i>Nanoscale</i> , 2013 , 5, 4776-84	7.7	46
337	Direct Observation of Luminescent Silver Clusters Confined in Faujasite Zeolites. <i>ACS Nano</i> , 2016 , 10, 7604-11	16.7	45
336	Atomic layer deposition-based synthesis of photoactive TiO ₂ nanoparticle chains by using carbon nanotubes as sacrificial templates. <i>RSC Advances</i> , 2014 , 4, 11648	3.7	45
335	Three-dimensional analysis of carbon nanotube networks in interconnects by electron tomography without missing wedge artifacts. <i>Microscopy and Microanalysis</i> , 2010 , 16, 210-7	0.5	45
334	Seedless Synthesis of Single Crystalline Au Nanoparticles with Unusual Shapes and Tunable LSPR in the near-IR. <i>Chemistry of Materials</i> , 2012 , 24, 1393-1399	9.6	44
333	Annular dark field imaging in a TEM. <i>Solid State Communications</i> , 2004 , 130, 675-680	1.6	44

332	Manganese-Doping-Induced Quantum Confinement within Host Perovskite Nanocrystals through Ruddlesden-Popper Defects. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 6794-6799	16.4	44
331	Synthesis of Janus plasmonic-magnetic, star-sphere nanoparticles, and their application in SERS detection. <i>Faraday Discussions</i> , 2016 , 191, 47-59	3.6	43
330	Atomic resolution monitoring of cation exchange in CdSe-PbSe heteronanocrystals during epitaxial solid-solid-vapor growth. <i>Nano Letters</i> , 2014 , 14, 3661-7	11.5	43
329	Triple-Modal Imaging of Magnetically-Targeted Nanocapsules in Solid Tumours In Vivo. <i>Theranostics</i> , 2016 , 6, 342-56	12.1	43
328	Janus gold nanoparticles obtained via spontaneous binary polymer shell segregation. <i>Chemical Communications</i> , 2016 , 52, 4278-81	5.8	42
327	Cuboidal Supraparticles Self-Assembled from Cubic CsPbBr Perovskite Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 15706-15712	3.8	42
326	Synthesis of Highly Luminescent Silica-Coated CdSe/CdS Nanorods. <i>Chemistry of Materials</i> , 2013 , 25, 3427-3434	9.6	42
325	3D characterization of heat-induced morphological changes of Au nanostars by fast in situ electron tomography. <i>Nanoscale</i> , 2018 , 10, 22792-22801	7.7	42
324	A Framework to Account for Sedimentation and Diffusion in Particle-Cell Interactions. <i>Langmuir</i> , 2016 , 32, 12394-12402	4	41
323	Chemistry of Shape-Controlled Iron Oxide Nanocrystal Formation. <i>ACS Nano</i> , 2019 , 13, 152-162	16.7	41
322	Interfacial Oxidation and Photoluminescence of InP-Based Core/Shell Quantum Dots. <i>Chemistry of Materials</i> , 2018 , 30, 6877-6883	9.6	41
321	Atomic layer deposition-based tuning of the pore size in mesoporous thin films studied by in situ grazing incidence small angle X-ray scattering. <i>Nanoscale</i> , 2014 , 6, 14991-8	7.7	40
320	The properties of SIRT, TVM, and DART for 3D imaging of tubular domains in nanocomposite thin-films and sections. <i>Ultramicroscopy</i> , 2014 , 147, 137-48	3.1	40
319	Fe Deficiencies, FeO Subdomains, and Structural Defects Favor Magnetic Hyperthermia Performance of Iron Oxide Nanocubes into Intracellular Environment. <i>Nano Letters</i> , 2018 , 18, 6856-6866 ^{11.5}	11.5	40
318	Reversible Clustering of Gold Nanoparticles under Confinement. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 3183-3186	16.4	39
317	Unscrambling Mixed Elements using High Angle Annular Dark Field Scanning Transmission Electron Microscopy. <i>Physical Review Letters</i> , 2016 , 116, 246101	7.4	39
316	Electrochemical Behavior of Electrodeposited Nanoporous Pt Catalysts for the Oxygen Reduction Reaction. <i>ACS Catalysis</i> , 2016 , 6, 5856-5864	13.1	39
315	Conformal and atomic characterization of ultrathin CdSe platelets with a helical shape. <i>Nano Letters</i> , 2014 , 14, 6257-62	11.5	39

314	Multiple dot-in-rod PbS/CdS heterostructures with high photoluminescence quantum yield in the near-infrared. <i>Journal of the American Chemical Society</i> , 2012 , 134, 5484-7	16.4	39
313	Near-Infrared-Emitting CuInS/ZnS Dot-in-Rod Colloidal Heteronanorods by Seeded Growth. <i>Journal of the American Chemical Society</i> , 2018 , 140, 5755-5763	16.4	38
312	Plasmon Mapping in Au@Ag Nanocube Assemblies. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 15356-15362	3.6	38
311	The uptake of ZnO and CuO nanoparticles in the water-flea <i>Daphnia magna</i> under acute exposure scenarios. <i>Environmental Pollution</i> , 2014 , 194, 130-137	9.3	38
310	Pd-catalyzed decarboxylation of glutamic acid and pyroglutamic acid to bio-based 2-pyrrolidone. <i>Green Chemistry</i> , 2015 , 17, 2263-2270	10	38
309	A practical method to determine the effective resolution in incoherent experimental electron tomography. <i>Ultramicroscopy</i> , 2011 , 111, 330-6	3.1	38
308	Ligand-Induced Shape Transformation of PbSe Nanocrystals. <i>Chemistry of Materials</i> , 2017 , 29, 4122-4128	9.6	37
307	Accurate segmentation of dense nanoparticles by partially discrete electron tomography. <i>Ultramicroscopy</i> , 2012 , 114, 96-105	3.1	37
306	Quantitative determination of residual silver distribution in nanoporous gold and its influence on structure and catalytic performance. <i>Journal of Catalysis</i> , 2017 , 352, 52-58	7.3	36
305	Silver-polymer core-shell nanoparticles for ultrastable plasmon-enhanced photocatalysis. <i>Applied Catalysis B: Environmental</i> , 2017 , 200, 31-38	21.8	35
304	Sol-gel hot injection synthesis of ZnO nanoparticles into a porous silica matrix and reaction mechanism. <i>Materials and Design</i> , 2017 , 119, 270-276	8.1	35
303	Barrier efficiency of sponge-like La ₂ Zr ₂ O ₇ buffer layers for YBCO-coated conductors. <i>Superconductor Science and Technology</i> , 2011 , 24, 065019	3.1	35
302	Governing the morphology of Pt-Au heteronanocrystals with improved electrocatalytic performance. <i>Nanoscale</i> , 2015 , 7, 8739-47	7.7	34
301	Thermal Stability of Gold/Palladium Octopods Studied in Situ in 3D: Understanding Design Rules for Thermally Stable Metal Nanoparticles. <i>ACS Nano</i> , 2019 , 13, 6522-6530	16.7	33
300	Plasmonic Rainbow Photocatalyst with broadband solar light response for environmental applications. <i>Applied Catalysis B: Environmental</i> , 2016 , 188, 147-153	21.8	33
299	Photocatalytic acetaldehyde oxidation in air using spacious TiO ₂ films prepared by atomic layer deposition on supported carbonaceous sacrificial templates. <i>Applied Catalysis B: Environmental</i> , 2014 , 160-161, 204-210	21.8	33
298	Production of large graphene sheets by exfoliation of graphite under high power ultrasound in the presence of tiopronin. <i>Chemical Communications</i> , 2012 , 48, 12159-61	5.8	33
297	Stabilization and Encapsulation of Gold Nanostars Mediated by Dithiols. <i>Small</i> , 2015 , 11, 4314-20	11	32

296	Electronic reconstruction at n-type SrTiO ₃ /LaAlO ₃ interfaces. <i>Physical Review B</i> , 2010 , 81,	3.3	32
295	Three-dimensional atomic models from a single projection using Z-contrast imaging: verification by electron tomography and opportunities. <i>Nanoscale</i> , 2017 , 9, 8791-8798	7.7	31
294	Quantitative 3D analysis of huge nanoparticle assemblies. <i>Nanoscale</i> , 2016 , 8, 292-9	7.7	31
293	Evaluation of top, angle, and side cleaned FIB samples for TEM analysis. <i>Microscopy Research and Technique</i> , 2007 , 70, 1060-71	2.8	31
292	Self-organization of highly symmetric nanoassemblies: a matter of competition. <i>ACS Nano</i> , 2014 , 8, 3869-3875	1.7	30
291	Tuning of PCDTBT:PC71BM blend nanoparticles for eco-friendly processing of polymer solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2017 , 159, 179-188	6.4	30
290	Plasmonic nanodiamonds: targeted core-shell type nanoparticles for cancer cell thermoablation. <i>Advanced Healthcare Materials</i> , 2015 , 4, 460-8	10.1	30
289	Self-Assembly of Pluronic F127-Silica Spherical Core-Shell Nanoparticles in Cubic Close-Packed Structures. <i>Chemistry of Materials</i> , 2015 , 27, 5161-5169	9.6	29
288	Hydride destabilization in core-shell nanoparticles. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 2115-2123	6.7	29
287	LaFeO ₃ Nanofibers for High Detection of Sulfur-Containing Gases. <i>ACS Sustainable Chemistry and Engineering</i> , 2019 , 7, 6023-6032	8.3	28
286	Shelf Life Degradation of Bulk Heterojunction Solar Cells: Intrinsic Evolution of Charge Transfer Complex. <i>Advanced Energy Materials</i> , 2015 , 5, 1401997	21.8	28
285	Co-Fe nanodumbbells: synthesis, structure, and magnetic properties. <i>Nano Letters</i> , 2014 , 14, 2747-54	11.5	28
284	The Remarkable and Intriguing Resistance to Oxidation of 2D Ordered hcp Co Nanocrystals. A New Intrinsic Property. <i>Chemistry of Materials</i> , 2009 , 21, 2335-2338	9.6	28
283	Modulation-free phase in heavily Pb-doped (Bi,Pb)2212 crystals. <i>Physica C: Superconductivity and Its Applications</i> , 2003 , 399, 1-7	1.3	28
282	TEM of ultra-thin DyBa ₂ Cu ₃ O _{7-x} films deposited on TiO ₂ terminated SrTiO ₃ . <i>Physica C: Superconductivity and Its Applications</i> , 2001 , 355, 225-230	1.3	28
281	Quantitative Tomography of Organic Photovoltaic Blends at the Nanoscale. <i>Nano Letters</i> , 2015 , 15, 6634-6642	1.5	27
280	S,O-Functionalized Metal-Organic Frameworks as Heterogeneous Single-Site Catalysts for the Oxidative Alkenylation of Arenes via C-H activation. <i>ACS Catalysis</i> , 2020 , 10, 5077-5085	13.1	27
279	Composite Supraparticles with Tunable Light Emission. <i>ACS Nano</i> , 2017 , 11, 9136-9142	16.7	27

278	Compositional changes of Pd-Au bimetallic nanoclusters upon hydrogenation. <i>Physical Review B</i> , 2009 , 80,	3.3	27
277	Superconducting single-phase Sr _{1-x} LaxCuO ₂ thin films with improved crystallinity grown by pulsed laser deposition. <i>Applied Physics Letters</i> , 2006 , 89, 092504	3.4	27
276	Advanced electron crystallography through model-based imaging. <i>IUCrJ</i> , 2016 , 3, 71-83	4.7	27
275	Structure and vacancy distribution in copper telluride nanoparticles influence plasmonic activity in the near-infrared. <i>Nature Communications</i> , 2017 , 8, 14925	17.4	26
274	Disentangling the effect of seed size and crystal habit on gold nanoparticle seeded growth. <i>Chemical Communications</i> , 2017 , 53, 11360-11363	5.8	26
273	Gas-phase synthesis of Mg-Ti nanoparticles for solid-state hydrogen storage. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 141-8	3.6	26
272	A protecting group approach toward synthesis of Au-silica Janus nanostars. <i>Chemical Communications</i> , 2014 , 50, 79-81	5.8	26
271	Mono- and Multilayer Silicene-Type Honeycomb Lattices by Oriented Attachment of PbSe Nanocrystals: Synthesis, Structural Characterization, and Analysis of the Disorder. <i>Chemistry of Materials</i> , 2018 , 30, 4831-4837	9.6	26
270	Air- and water-resistant noble metal coated ferromagnetic cobalt nanorods. <i>ACS Nano</i> , 2015 , 9, 2792-8046.7	4.7	25
269	Porous nanostructured metal oxides synthesized through atomic layer deposition on a carbonaceous template followed by calcination. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 2642-2649	13	25
268	Plasmonic gold-embedded TiO ₂ thin films as photocatalytic self-cleaning coatings. <i>Applied Catalysis B: Environmental</i> , 2020 , 267, 118654	21.8	25
267	High resolution electron tomography. <i>Current Opinion in Solid State and Materials Science</i> , 2013 , 17, 107-114	11.4	25
266	Shape Control of Colloidal Cu S Polyhedral Nanocrystals by Tuning the Nucleation Rates. <i>Chemistry of Materials</i> , 2016 , 28, 6705-6715	9.6	25
265	Chemical Cutting of Perovskite Nanowires into Single-Photon Emissive Low-Aspect-Ratio CsPbX ₃ (X=Cl, Br, I) Nanorods. <i>Angewandte Chemie</i> , 2018 , 130, 16326-16330	3.6	25
264	Vapor Phase Fabrication of Nanoheterostructures Based on ZnO for Photoelectrochemical Water Splitting. <i>Advanced Materials Interfaces</i> , 2017 , 4, 1700161	4.6	24
263	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> , 2019 , 9, 9953-9963	13.1	24
262	Nanoscale mapping by electron energy-loss spectroscopy reveals evolution of organic solar cell contact selectivity. <i>Organic Electronics</i> , 2015 , 16, 227-233	3.5	24
261	Deactivation of Sn-Beta during carbohydrate conversion. <i>Applied Catalysis A: General</i> , 2018 , 564, 113-122.1	5.1	24

260	Exciton Fine Structure and Lattice Dynamics in InP/ZnSe Core/Shell Quantum Dots. <i>ACS Photonics</i> , 2018 , 5, 3353-3362	6.3	24
259	TEM sample preparation by FIB for carbon nanotube interconnects. <i>Ultramicroscopy</i> , 2009 , 109, 1353-9	3.1	24
258	Assisted spray pyrolysis production and characterisation of ZnO nanoparticles with narrow size distribution. <i>Journal of Nanoparticle Research</i> , 2010 , 12, 615-622	2.3	24
257	On the use of TEM in the characterization of nanocomposites. <i>Materials Letters</i> , 2007 , 61, 3446-3450	3.3	24
256	Square-Centimeter-Sized High-Efficiency Polymer Solar Cells: How the Processing Atmosphere and Film Quality Influence Performance at Large Scale. <i>Advanced Energy Materials</i> , 2016 , 6, 1600290	21.8	24
255	Automated discrete electron tomography - Towards routine high-fidelity reconstruction of nanomaterials. <i>Ultramicroscopy</i> , 2017 , 175, 87-96	3.1	23
254	Heterogeneous TiO/VO/Carbon Nanotube Electrodes for Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 8055-8064	9.5	23
253	Gas phase photocatalytic spiral reactor for fast and efficient pollutant degradation. <i>Chemical Engineering Journal</i> , 2017 , 316, 850-856	14.7	23
252	The influence of branched alkyl side chains in ADA oligothiophenes on the photovoltaic performance and morphology of solution-processed bulk-heterojunction solar cells. <i>Organic Chemistry Frontiers</i> , 2017 , 4, 1561-1573	5.2	23
251	A bimodal tomographic reconstruction technique combining EDS-STEM and HAADF-STEM. <i>Ultramicroscopy</i> , 2017 , 174, 35-45	3.1	23
250	Electron Transfer and Near-Field Mechanisms in Plasmonic Gold-Nanoparticle-Modified TiO ₂ Photocatalytic Systems. <i>ACS Applied Nano Materials</i> , 2019 , 2, 4067-4074	5.6	23
249	Atomic Structure of Wurtzite CdSe (Core)/CdS (Giant Shell) Nanobullets Related to Epitaxy and Growth. <i>Journal of the American Chemical Society</i> , 2016 , 138, 14288-14293	16.4	23
248	Enhanced electrochemical performance of Li-rich cathode materials through microstructural control. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 23112-23122	3.6	23
247	Quantitative Structure Determination of Large Three-Dimensional Nanoparticle Assemblies. <i>Particle and Particle Systems Characterization</i> , 2013 , 30, 84-88	3.1	23
246	Bottom-Up Mechanical Nanometrology of Granular Ag Nanoparticles Thin Films. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 22434-22441	3.8	23
245	Hydrogen adsorption properties of platinum decorated hierarchically structured templated carbons. <i>Microporous and Mesoporous Materials</i> , 2013 , 177, 66-74	5.3	23
244	Transport, magnetic, and structural properties of La _{0.7} Ce _{0.3} MnO ₃ thin films: Evidence for hole-doping. <i>Physical Review B</i> , 2009 , 79,	3.3	23
243	A New Method for Quantitative XEDS Tomography of Complex Heteronanostructures. <i>Particle and Particle Systems Characterization</i> , 2016 , 33, 396-403	3.1	23

242	Hydrophilic Pt nanoflowers: synthesis, crystallographic analysis and catalytic performance. <i>CrystEngComm</i> , 2016 , 18, 3422-3427	3.3	23
241	Halide Perovskite-Lead Chalcogenide Nanocrystal Heterostructures. <i>Journal of the American Chemical Society</i> , 2021 , 143, 1435-1446	16.4	23
240	Imaging Heterogeneously Distributed Photo-Active Traps in Perovskite Single Crystals. <i>Advanced Materials</i> , 2018 , 30, e1705494	24	22
239	Von Vorläuferpulvern zu CsPbX ₃ -Perowskit-Nanodrüsen: Eintopfreaktion, Wachstumsmechanismus und gerichtete Selbstassemblierung. <i>Angewandte Chemie</i> , 2017 , 129, 14075-14080	3.6	22
238	Plasmonic Near-Field Localization of Silver Core-Shell Nanoparticle Assemblies via Wet Chemistry Nanogap Engineering. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 41577-41585	9.5	22
237	Exploring different inelastic projection mechanisms for electron tomography. <i>Ultramicroscopy</i> , 2011 , 111, 1262-7	3.1	22
236	Electrodeposition of Highly Porous Pt Nanoparticles Studied by Quantitative 3D Electron Tomography: Influence of Growth Mechanisms and Potential Cycling on the Active Surface Area. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 16168-16177	9.5	21
235	Quantitative 3D Characterization of Elemental Diffusion Dynamics in Individual Ag@Au Nanoparticles with Different Shapes. <i>ACS Nano</i> , 2019 , 13, 13421-13429	16.7	21
234	Thermally induced structural and morphological changes of CdSe/CdS octapods. <i>Small</i> , 2012 , 8, 937-42	11	21
233	An efficient way of including thermal diffuse scattering in simulation of scanning transmission electron microscopic images. <i>Ultramicroscopy</i> , 2006 , 106, 933-40	3.1	21
232	Locating and Controlling the Zn Content in In(Zn)P Quantum Dots. <i>Chemistry of Materials</i> , 2020 , 32, 557-565	5.65	21
231	Unraveling Structural Information of Turkevich Synthesized Plasmonic Gold-Silver Bimetallic Nanoparticles. <i>Small</i> , 2019 , 15, e1902791	11	20
230	Competing Forces in the Self-Assembly of Coupled ZnO Nanopyramids. <i>ACS Nano</i> , 2015 , 9, 3685-94	16.7	20
229	C ₂ -H Arylation of Indoles Catalyzed by Palladium-Containing Metal-Organic-Framework in β -Valerolactone. <i>ChemSusChem</i> , 2020 , 13, 2786-2791	8.3	20
228	TiO ₂ Films Modified with Au Nanoclusters as Self-Cleaning Surfaces under Visible Light. <i>Nanomaterials</i> , 2018 , 8,	5.4	20
227	Experimental evidence for oxygen sublattice control in polar infinite layer SrCuO ₂ . <i>Physical Review Letters</i> , 2013 , 111, 096102	7.4	20
226	Glycogen as a biodegradable construction nanomaterial for in vivo use. <i>Macromolecular Bioscience</i> , 2012 , 12, 1731-8	5.5	20
225	Synthesis of uniformly dispersed anatase nanoparticles inside mesoporous silica thin films via controlled breakup and crystallization of amorphous TiO ₂ deposited using atomic layer deposition. <i>Nanoscale</i> , 2013 , 5, 5001-8	7.7	20

224	Modelling of synchrotron SAXS patterns of silicalite-1 zeolite during crystallization. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 4318-25	3.6	20
223	Binary icosahedral clusters of hard spheres in spherical confinement. <i>Nature Physics</i> , 2021 , 17, 128-134	16.2	20
222	On the Control and Effect of Water Content during the Electrodeposition of Ni Nanostructures from Deep Eutectic Solvents. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 23129-23142	3.8	20
221	Direct synthesis of antimicrobial coatings based on tailored bi-elemental nanoparticles. <i>APL Materials</i> , 2017 , 5, 036105	5.7	19
220	PdPb-Catalyzed Decarboxylation of Proline to Pyrrolidine: Highly Selective Formation of a Biobased Amine in Water. <i>ACS Catalysis</i> , 2016 , 6, 7303-7310	13.1	19
219	Ultrastructure and composition of cell wall appositions in the roots of <i>Asplenium</i> (Polypodiales). <i>Micron</i> , 2011 , 42, 863-70	2.3	19
218	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 & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2004 , 22, 1565		19
217	Electron tomography based on highly limited data using a neural network reconstruction technique. <i>Ultramicroscopy</i> , 2015 , 158, 81-8	3.1	18
216	Controlling the formation and stability of ultra-thin nickel silicides - An alloying strategy for preventing agglomeration. <i>Journal of Applied Physics</i> , 2018 , 123, 075303	2.5	18
215	An alternative approach for EFactor measurement using pure element nanoparticles. <i>Ultramicroscopy</i> , 2016 , 164, 11-6	3.1	18
214	Tailoring Cu for Ga Cation Exchange in CuS and CuInS Nanocrystals by Controlling the Ga Precursor Chemistry. <i>ACS Nano</i> , 2019 , 13, 12880-12893	16.7	18
213	Alloy CsCd Pb Br Perovskite Nanocrystals: The Role of Surface Passivation in Preserving Composition and Blue Emission. <i>Chemistry of Materials</i> , 2020 , 32, 10641-10652	9.6	18
212	3D Characterization and Plasmon Mapping of Gold Nanorods Welded by Femtosecond Laser Irradiation. <i>ACS Nano</i> , 2020 , 14, 12558-12570	16.7	18
211	Time evolution studies of dithieno[3,2-b:2',3'-d]pyrrole-based AD _n oligothiophene bulk heterojunctions during solvent vapor annealing towards optimization of photocurrent generation. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 1005-1013	13	17
210	Engineering hepatitis B virus core particles for targeting HER2 receptors in vitro and in vivo. <i>Biomaterials</i> , 2017 , 120, 126-138	15.6	17
209	Mechanistic Insight into the Photocatalytic Working of Fluorinated Anatase {001} Nanosheets. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 26275-26286	3.8	17
208	Encapsulation of Noble Metal Nanoparticles through Seeded Emulsion Polymerization as Highly Stable Plasmonic Systems. <i>Advanced Functional Materials</i> , 2019 , 29, 1809071	15.6	17
207	Silver Ions Direct Twin-Plane Formation during the Overgrowth of Single-Crystal Gold Nanoparticles. <i>ACS Omega</i> , 2016 , 1, 177-181	3.9	17

206	Decoupling the shape parameter to assess gold nanorod uptake by mammalian cells. <i>Nanoscale</i> , 2016 , 8, 16416-16426	7.7	17
205	The reduction of benzylbromide at Ag-Ni deposits prepared by galvanic replacement. <i>Electrochimica Acta</i> , 2016 , 196, 756-768	6.7	17
204	Seeing and measuring in 3D with electrons. <i>Comptes Rendus Physique</i> , 2014 , 15, 140-150	1.4	17
203	Heat-induced transformation of CdSe-CdS-ZnS core-multishell quantum dots by Zn diffusion into inner layers. <i>Chemical Communications</i> , 2015 , 51, 3320-3	5.8	17
202	Growth of R _{1+x} Ba _{2-x} Cu ₃ O ₇ Epitaxial Films Investigated by In Situ Scanning Tunneling Microscopy. <i>Physica Status Solidi A</i> , 2001 , 186, 339-364		17
201	Defect-Directed Growth of Symmetrically Branched Metal Nanocrystals. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 943-950	16.4	17
200	Exploring the Optical and Morphological Properties of Ag and Ag/TiO ₂ Nanocomposites Grown by Supersonic Cluster Beam Deposition. <i>Nanomaterials</i> , 2017 , 7,	5.4	16
199	Small-angle X-ray scattering and light scattering study of hybrid nanoparticles composed of thermoresponsive triblock copolymer F127 and thermoresponsive statistical polyoxazolines with hydrophobic moieties. <i>Journal of Applied Crystallography</i> , 2013 , 46, 1690-1698	3.8	16
198	Nonlinear imaging using annular dark field TEM. <i>Ultramicroscopy</i> , 2005 , 104, 281-9	3.1	16
197	Atomic resolution electron tomography. <i>MRS Bulletin</i> , 2016 , 41, 525-530	3.2	16
196	Facile Morphology-Controlled Synthesis of Organolead Iodide Perovskite Nanocrystals Using Binary Capping Agents. <i>ChemNanoMat</i> , 2017 , 3, 223-227	3.5	15
195	Developing Lattice Matched ZnMgSe Shells on InZnP Quantum Dots for Phosphor Applications. <i>ACS Applied Nano Materials</i> , 2020 , 3, 3859-3867	5.6	15
194	Multimode Electron Tomography as a Tool to Characterize the Internal Structure and Morphology of Gold Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 13522-13528	3.8	15
193	Homogeneous Protein Analysis by Magnetic Core-Shell Nanorod Probes. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 8893-9	9.5	15
192	Near-Edge Ligand Stripping and Robust Radiative Exciton Recombination in CdSe/CdS Core/Crown Nanoplatelets. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 3339-3344	6.4	15
191	Improving the Redox Response Stability of Ceria-Zirconia Nanocatalysts under Harsh Temperature Conditions. <i>Chemistry of Materials</i> , 2017 , 29, 9340-9350	9.6	14
190	Fast Electron Tomography for Nanomaterials. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 27276-27286	3.8	14
189	Nanocrystals of Lead Chalcogenides: A Series of Kinetically Trapped Metastable Nanostructures. <i>Journal of the American Chemical Society</i> , 2020 , 142, 10198-10211	16.4	14

188	Reversible Clustering of Gold Nanoparticles under Confinement. <i>Angewandte Chemie</i> , 2018 , 130, 3237-3240	3.4	14
187	Synthesis of a 3D network of Pt nanowires by atomic layer deposition on a carbonaceous template. <i>Nanoscale</i> , 2014 , 6, 6939-44	7.7	14
186	The effect of microstructure on the hydrogenation of Mg/Fe thin film multilayers. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 17092-17103	6.7	14
185	Low-dose patterning of platinum nanoclusters on carbon nanotubes by focused-electron-beam-induced deposition as studied by TEM. <i>Beilstein Journal of Nanotechnology</i> , 2013 , 4, 77-86	3	14
184	Heterogeneity of silica and glycan-epitope distribution in epidermal idioblast cell walls in <i>Adiantum raddianum</i> laminae. <i>Planta</i> , 2013 , 237, 1453-64	4.7	14
183	Effect of amorphous layers on the interpretation of restored exit waves. <i>Ultramicroscopy</i> , 2009 , 109, 237-46	3.1	14
182	Phase formation and texture of thin nickel germanides on Ge(001) and Ge(111). <i>Journal of Applied Physics</i> , 2016 , 119, 135305	2.5	14
181	Understanding CeO ₂ -Based Nanostructures through Advanced Electron Microscopy in 2D and 3D. <i>Particle and Particle Systems Characterization</i> , 2019 , 36, 1800287	3.1	13
180	Engineering Structural Diversity in Gold Nanocrystals by Ligand-Mediated Interface Control. <i>Chemistry of Materials</i> , 2015 , 27, 8032-8040	9.6	13
179	Band structure quantization in nanometer sized ZnO clusters. <i>Nanoscale</i> , 2013 , 5, 3757-63	7.7	13
178	Catalytic and molecular separation properties of Zeogrids and Zeotiles. <i>Catalysis Today</i> , 2011 , 168, 17-27	5.3	13
177	Why are sputter deposited Nd _{1+x} Ba _{2-x} Cu ₃ O _{7-δ} thin films flatter than NdBa ₂ Cu ₃ O _{7-δ} films?. <i>Applied Physics Letters</i> , 2001 , 79, 3660-3662	3.4	13
176	Bifunctional Nickel/Nitrogen-Doped-Carbon-Supported Copper Electrocatalyst for CO ₂ Reduction. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 1369-1381	3.8	13
175	Formation of Hollow Gold Nanocrystals by Nanosecond Laser Irradiation. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 670-677	6.4	13
174	High-Performance CO-Selective Hybrid Membranes by Exploiting MOF-Breathing Effects. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 2952-2961	9.5	13
173	Influence of the support material and the resulting particle distribution on the deposition of Ag nanoparticles for the electrocatalytic activity of benzyl bromide reduction. <i>Applied Catalysis B: Environmental</i> , 2016 , 181, 542-549	21.8	12
172	Recent Advances in Transmission Electron Microscopy for Materials Science at the EMAT Lab of the University of Antwerp. <i>Materials</i> , 2018 , 11,	3.5	12
171	Highly efficient hyperbranched CNT surfactants: influence of molar mass and functionalization. <i>Langmuir</i> , 2014 , 30, 12200-9	4	12

170	Combination of HAADF-STEM and ADF-STEM Tomography for CoreShell Hybrid Materials. <i>Particle and Particle Systems Characterization</i> , 2015 , 32, 1063-1067	3.1	12
169	Self-assembly of gas-phase synthesized magnesium nanoparticles on room temperature substrates. <i>Materials Research Express</i> , 2015 , 2, 015007	1.7	12
168	Structural characterization of Er-doped Li ₂ O/Al ₂ O ₃ /SiO ₂ glass ceramics. <i>Optical Materials</i> , 2008 , 30, 1183-1188	3.3	12
167	Correlating Structure and Detection Properties in HgTe Nanocrystal Films. <i>Nano Letters</i> , 2021 , 21, 4145-4151	4.5	12
166	Highly porous palladium nanodendrites: wet-chemical synthesis, electron tomography and catalytic activity. <i>Dalton Transactions</i> , 2019 , 48, 3758-3767	4.3	12
165	Postsynthetic High-Alumina Zeolite Crystal Engineering in Organic-Free Hyper-Alkaline Media. <i>Chemistry of Materials</i> , 2017 , 29, 629-638	9.6	11
164	Ligand-Mode Directed Selectivity in CuAg CoreShell Based Gas Diffusion Electrodes for CO ₂ Electroreduction. <i>ACS Catalysis</i> , 2020 , 10, 13468-13478	13.1	11
163	Thermal Stability of CoAu ₁₃ Binary Nanoparticle Superlattices under the Electron Beam. <i>Chemistry of Materials</i> , 2016 , 28, 716-719	9.6	11
162	Zeolite Nanoparticles based bimodal structures: Mechanism and tuning of the porosity and zeolitic properties. <i>Microporous and Mesoporous Materials</i> , 2014 , 185, 204-212	5.3	11
161	Formation and thermal stability of gold-silica nanohybrids: insight into the mechanism and morphology by electron tomography. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 3970-4	16.4	11
160	A New Bi ₄ Mn _{1/3} W _{2/3} O ₈ Cl Sillurivillius Intergrowth: Synthesis and Structural Characterisation by Quantitative Transmission Electron Microscopy. <i>European Journal of Inorganic Chemistry</i> , 2006 , 2006, 1853-1858	2.3	11
159	Transmission electron microscopy on interface engineered superconducting thin films. <i>IEEE Transactions on Applied Superconductivity</i> , 2003 , 13, 2834-2837	1.8	11
158	Interplay of doping and structural modulation in superconducting Bi ₂ Sr _{2-x} LaxCuO _{6+y} thin films. <i>Physical Review B</i> , 2005 , 71,	3.3	11
157	Three dimensional mapping of Fe dopants in ceria nanocrystals using direct spectroscopic electron tomography. <i>Ultramicroscopy</i> , 2016 , 171, 55-62	3.1	11
156	Stabilization effects in binary colloidal Cu and Ag nanoparticle electrodes under electrochemical CO reduction conditions. <i>Nanoscale</i> , 2021 , 13, 4835-4844	7.7	11
155	Tunable Nitrogen-Doped Carbon Nanoparticles from Tannic Acid and Urea and Their Potential for Sustainable Soots. <i>ChemNanoMat</i> , 2017 , 3, 311-318	3.5	10
154	Controlled Growth of Supported ZnO Inverted Nanopyramids with Downward Pointing Tips. <i>Crystal Growth and Design</i> , 2018 , 18, 2579-2587	3.5	10
153	Recent breakthroughs in scanning transmission electron microscopy of small species. <i>Advances in Physics: X</i> , 2018 , 3, 1480420	5.1	10

152	Phase formation in intermixed NiGe thin films: Influence of Ge content and low-temperature nucleation of hexagonal nickel germanides. <i>Microelectronic Engineering</i> , 2014 , 120, 168-173	2.5	10
151	Wet-STEM tomography: principles, potentialities and limitations. <i>Microscopy and Microanalysis</i> , 2014 , 20, 366-75	0.5	10
150	Entrapment of a neutral Tm(III)-based complex with two inner-sphere coordinated water molecules into PEG-stabilized vesicles: towards an alternative strategy to develop high-performance LipoCEST contrast agents for MR imaging. <i>Contrast Media and Molecular Imaging</i> , 2014 , 9, 391-9	3.2	10
149	Transmission electron microscopy investigation of Bi-2223/Ag tapes. <i>Physica C: Superconductivity and Its Applications</i> , 2001 , 353, 251-257	1.3	10
148	Intracellular Fate of Hydrophobic Nanocrystal Self-Assemblies in Tumor Cells. <i>Advanced Functional Materials</i> , 2020 , 30, 2004274	15.6	10
147	Tuning the turnover frequency and selectivity of photocatalytic CO ₂ reduction to CO and methane using platinum and palladium nanoparticles on Ti-Beta zeolites. <i>Chemical Engineering Journal</i> , 2021 , 410, 128234	14.7	10
146	Highly active, selective, and stable Pd single-atom catalyst anchored on N-doped hollow carbon sphere for electrochemical H ₂ O ₂ synthesis under acidic conditions. <i>Journal of Catalysis</i> , 2021 , 393, 313-323	7.3	10
145	Experimental Evaluation of Undersampling Schemes for Electron Tomography of Nanoparticles. <i>Particle and Particle Systems Characterization</i> , 2019 , 36, 1900096	3.1	9
144	Controlled Surface Modification of ZnO Nanostructures with Amorphous TiO ₂ for Photoelectrochemical Water Splitting. <i>Advanced Sustainable Systems</i> , 2019 , 3, 1900046	5.9	9
143	Direct-synthesis method towards copper-containing periodic mesoporous organosilicas: detailed investigation of the copper distribution in the material. <i>Dalton Transactions</i> , 2015 , 44, 9970-9	4.3	9
142	Real-Time Reconstruction of Arbitrary Slices for Quantitative and In Situ 3D Characterization of Nanoparticles. <i>Particle and Particle Systems Characterization</i> , 2020 , 37, 2000073	3.1	9
141	Systematic evaluation of thermal and mechanical stability of different commercial and synthetic photocatalysts in relation to their photocatalytic activity. <i>Microporous and Mesoporous Materials</i> , 2012 , 156, 62-72	5.3	9
140	Direct evidence for the existence of multi-walled carbon nanotubes with hexagonal cross-sections. <i>Carbon</i> , 2012 , 50, 2524-2529	10.4	9
139	Crystallographic Shear Structures as a Route to Anion-Deficient Perovskites. <i>Angewandte Chemie</i> , 2006 , 118, 6849-6852	3.6	9
138	Investigation of (Bi,Pb)2212 crystals: observation of modulation-free phase. <i>Physica C: Superconductivity and Its Applications</i> , 2004 , 401, 270-272	1.3	9
137	Nickel-containing N-doped carbon as effective electrocatalysts for the reduction of CO ₂ to CO in a continuous-flow electrolyzer. <i>Sustainable Energy and Fuels</i> , 2020 , 4, 1296-1311	5.8	9
136	Efficient long-range conduction in cable bacteria through nickel protein wires. <i>Nature Communications</i> , 2021 , 12, 3996	17.4	9
135	Ferroelectric Gating of Narrow Band-Gap Nanocrystal Arrays with Enhanced Light-Matter Coupling. <i>ACS Photonics</i> , 2021 , 8, 259-268	6.3	9

134	Oxidation barrier of Cu and Fe powder by Atomic Layer Deposition. <i>Surface and Coatings Technology</i> , 2018 , 349, 1032-1041	4.4	9
133	Optical enhancement of a printed organic tandem solar cell using diffractive nanostructures. <i>Optics Express</i> , 2018 , 26, A240-A250	3.3	8
132	Phase Transformation of Superparamagnetic Iron Oxide Nanoparticles via Thermal Annealing: Implications for Hyperthermia Applications. <i>ACS Applied Nano Materials</i> , 2019 , 2, 4462-4470	5.6	8
131	Synthesis and Characterization of Photoreactive TiO ₂ /Carbon Nanosheet Composites. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 21031-21037	3.8	8
130	3D porous nanostructured platinum prepared using atomic layer deposition. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 19007-19016	13	8
129	Depth sectioning combined with atom-counting in HAADF STEM to retrieve the 3D atomic structure. <i>Ultramicroscopy</i> , 2017 , 177, 36-42	3.1	8
128	Chabazite: stable cation-exchanger in hyper alkaline concrete pore water. <i>Environmental Science & Technology</i> , 2015 , 49, 2358-65	10.3	8
127	Multimodal imaging of micron-sized iron oxide particles following in vitro and in vivo uptake by stem cells: down to the nanometer scale. <i>Contrast Media and Molecular Imaging</i> , 2014 , 9, 400-8	3.2	8
126	Cyan Emission in Two-Dimensional Colloidal CsCdCl:Sb Ruddlesden-Popper Phase Nanoplatelets. <i>ACS Nano</i> , 2021 ,	16.7	8
125	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	11	8
124	Luminescent Colloidal InSb Quantum Dots from Generated Single-Source Precursor. <i>ACS Nano</i> , 2020 , 14, 13146-13160	16.7	8
123	Layered Silicate Clays as Templates for Anisotropic Gold Nanoparticle Growth. <i>Chemistry of Materials</i> , 2016 , 28, 5131-5139	9.6	8
122	Improving extracellular vesicles visualization: From static to motion. <i>Scientific Reports</i> , 2020 , 10, 6494	4.9	8
121	Fast versus conventional HAADF-STEM tomography of nanoparticles: advantages and challenges. <i>Ultramicroscopy</i> , 2021 , 221, 113191	3.1	8
120	Synthesis of an IWW-type germanosilicate zeolite using 5-azonia-spiro[4,4]nonane as a structure directing agent. <i>New Journal of Chemistry</i> , 2016 , 40, 4319-4324	3.6	7
119	Annular dark-field transmission electron microscopy for low contrast materials. <i>Microscopy and Microanalysis</i> , 2013 , 19, 629-34	0.5	7
118	Atomic scale investigation of a PbTiO ₃ /SrRuO ₃ /DyScO ₃ heterostructure. <i>Applied Physics Letters</i> , 2013 , 102, 223106	3.4	7
117	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

116	Post-synthesis bromination of benzene bridged PMO as a way to create a high potential hybrid material. <i>Microporous and Mesoporous Materials</i> , 2016 , 236, 244-249	5.3	7
115	Automatic correction of nonlinear damping effects in HAADF-STEM tomography for nanomaterials of discrete compositions. <i>Ultramicroscopy</i> , 2018 , 184, 57-65	3.1	7
114	Advanced electron tomography of nanoparticle assemblies. <i>Europhysics Letters</i> , 2017 , 119, 38001	1.6	6
113	Corrosion protection of Cu by atomic layer deposition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2019 , 37, 060902	2.9	6
112	Surface Functionalization of Grown-on-Tip ZnO Nanopyramids: From Fabrication to Light-Triggered Applications. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 15881-15890	9.5	6
111	Characterization of silver-polymer core-shell nanoparticles using electron microscopy. <i>Nanoscale</i> , 2018 , 10, 9186-9191	7.7	6
110	Interplay of Interfacial Layers and Blend Composition To Reduce Thermal Degradation of Polymer Solar Cells at High Temperature. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 3874-3884	9.5	6
109	Designing Diameter-Modulated Heterostructure Nanowires of PbTe/Te by Controlled Dewetting. <i>Nano Letters</i> , 2017 , 17, 7226-7233	11.5	6
108	Enhanced self-assembly of metal oxides and metal-organic frameworks from precursors with magnetohydrodynamically induced long-lived collective spin states. <i>Advanced Materials</i> , 2014 , 26, 5173-5184	3.4	6
107	Tuning of the size and the lattice parameter of ion-beam synthesized Pb nanoparticles embedded in Si. <i>Journal Physics D: Applied Physics</i> , 2012 , 45, 035301	3	6
106	Smart heating profiles for the synthesis of benzene bridged periodic mesoporous organosilicas. <i>Chemical Engineering Journal</i> , 2011 , 175, 585-591	14.7	6
105	An Expanded Surface-Enhanced Raman Scattering Tags Library by Combinatorial Encapsulation of Reporter Molecules in Metal Nanoshells. <i>ACS Nano</i> , 2020 , 14, 14655-14664	16.7	6
104	Tuning Size and Seed Position in Small Silver Nanorods 2020 , 2, 1246-1250		6
103	Selectivity in the Ligand Functionalization of Photocatalytic Metal Oxide Nanoparticles for Phase Transfer and Self-Assembly Applications. <i>Chemistry - A European Journal</i> , 2021 , 27, 9011-9021	4.8	6
102	Deposition of aminosilane coatings on porous Al ₂ O ₃ microspheres by means of dielectric barrier discharges. <i>Plasma Processes and Polymers</i> , 2017 , 14, 1600211	3.4	5
101	New insights into the mesophase transformation of ethane-bridged PMOs by the influence of different counterions under basic conditions. <i>RSC Advances</i> , 2015 , 5, 5553-5562	3.7	5
100	The Influence of Acids on Tuning the Pore Size of Mesoporous TiO ₂ Templated by Non-Ionic Block Copolymers. <i>European Journal of Inorganic Chemistry</i> , 2018 , 2018, 62-65	2.3	5
99	Homopolymers as nanocarriers for the loading of block copolymer micelles with metal salts: a facile way to large-scale ordered arrays of transition-metal nanoparticles. <i>Journal of Materials Chemistry C</i> , 2014 , 2, 701-707	7.1	5

98	Novel method to synthesize highly ordered ethane-bridged PMOs under mild acidic conditions: Taking advantages of phosphoric acid. <i>Microporous and Mesoporous Materials</i> , 2015 , 207, 61-70	5.3	5
97	In Situ Study of ALD Processes Using Synchrotron-based X-ray Fluorescence and Scattering Techniques. <i>ECS Transactions</i> , 2013 , 50, 35-42	1	5
96	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> , 2002 , 372-376, 675-678	1.3	5
95	Seeded Growth Combined with Cation Exchange for the Synthesis of Anisotropic Cu S/ZnS, Cu S, and CuInS Nanorods. <i>Chemistry of Materials</i> , 2021 , 33, 102-116	9.6	5
94	Gold and Silver-Catalyzed Reductive Amination of Aromatic Carboxylic Acids to Benzylic Amines. <i>ACS Catalysis</i> , 2021 , 11, 7672-7684	13.1	5
93	Synthesis of aluminum-containing hierarchical mesoporous materials with columnar mesopore ordering by evaporation induced self-assembly. <i>Microporous and Mesoporous Materials</i> , 2016 , 234, 186-195	5.3	5
92	Chemical and Structural Configuration of Pt-Doped Metal Oxide Thin Films Prepared by Atomic Layer Deposition. <i>Chemistry of Materials</i> , 2019 , 31, 9673-9683	9.6	5
91	Deep learning-based denoising for improved dose efficiency in EDX tomography of nanoparticles. <i>Nanoscale</i> , 2021 , 13, 12242-12249	7.7	5
90	Enhanced CO ₂ electroreduction with metal-nitrogen-doped carbons in a continuous flow reactor. <i>Journal of CO₂ Utilization</i> , 2021 , 50, 101583	7.6	5
89	Mapping Composition-Selectivity Relationships of Supported Sub-10 nm Cu-Ag Nanocrystals for High-Rate CO Electroreduction. <i>ACS Nano</i> , 2021 , 15, 14858-14872	16.7	5
88	Pore REconstruction and Segmentation (PORES) method for improved porosity quantification of nanoporous materials. <i>Ultramicroscopy</i> , 2015 , 148, 10-19	3.1	4
87	Self-assembly of Janus Au:Fe ₃ O ₄ branched nanoparticles. From organized clusters to stimuli-responsive nanogel suprastructures. <i>Nanoscale Advances</i> , 2020 , 2, 2525-2530	5.1	4
86	Do Binary Supracrystals Enhance the Crystal Stability?. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 13515-13521	3.8	4
85	Understanding the Effect of Iodide Ions on the Morphology of Gold Nanorods. <i>Particle and Particle Systems Characterization</i> , 2018 , 35, 1800051	3.1	4
84	Quantitative electron tomography: the effect of the three-dimensional point spread function. <i>Ultramicroscopy</i> , 2013 , 135, 1-5	3.1	4
83	Optimisation of superconducting thin films by TEM. <i>Physica C: Superconductivity and Its Applications</i> , 2002 , 372-376, 711-714	1.3	4
82	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> , 2021 , 5, e2101150	12.8	4
81	Controlled Alloying of Au@Ag CoreShell Nanorods Induced by Femtosecond Laser Irradiation. <i>Advanced Optical Materials</i> , 2021 , 9, 2002134	8.1	4

80	Combined Macroscopic, Nanoscopic, and Atomic-Scale Characterization of GoldRuthenium Bimetallic Catalysts for Octanol Oxidation. <i>Particle and Particle Systems Characterization</i> , 2016 , 33, 419-437	3.1	4
79	A simple method to clean ligand contamination on TEM grids. <i>Ultramicroscopy</i> , 2021 , 221, 113195	3.1	4
78	Three-dimensional atomic structure of supported Au nanoparticles at high temperature. <i>Nanoscale</i> , 2021 , 13, 1770-1776	7.7	4
77	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> , 2021 , 9, 15704-15713	13	4
76	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> , 2021 ,	16.4	4
75	Direct Solar Energy-Mediated Synthesis of Tertiary Benzylic Alcohols Using a Metal-Free Heterogeneous Photocatalyst. <i>ACS Sustainable Chemistry and Engineering</i> , 2022 , 10, 530-540	8.3	4
74	Morphological and chemical transformations of single silica-coated CdSe/CdS nanorods upon fs-laser excitation. <i>Nanoscale</i> , 2017 , 9, 4810-4818	7.7	3
73	Artifact Reduction Based on Sinogram Interpolation for the 3D Reconstruction of Nanoparticles Using Electron Tomography. <i>Particle and Particle Systems Characterization</i> , 2017 , 34, 1700287	3.1	3
72	Direct Correlation of Nanoscale Morphology and Device Performance to Study Photocurrent Generation in Donor-Enriched Phases of Polymer Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 28404-28415	9.5	3
71	A combined 3D and 2D light scattering study on aqueous colloidal model systems with tunable interactions. <i>Soft Matter</i> , 2016 , 12, 8485-8494	3.6	3
70	Formation and Thermal Stability of GoldSilica Nanohybrids: Insight into the Mechanism and Morphology by Electron Tomography. <i>Angewandte Chemie</i> , 2014 , 126, 4051-4055	3.6	3
69	Single-step alcohol-free synthesis of core-shell nanoparticles of casein micelles and silica. <i>RSC Advances</i> , 2014 , 4, 25650-25657	3.7	3
68	Electron Tomography 2012 , 253-279		3
67	Optimized 3D Reconstruction of Large, Compact Assemblies of Metallic Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 26240-26246	3.8	3
66	Nanoparticle-Mediated Molecular Reprogramming of Immune Checkpoint Interactions for Cancer Immunotherapy. <i>ACS Nano</i> , 2021 ,	16.7	3
65	Defect-Directed Growth of Symmetrically Branched Metal Nanocrystals. <i>Angewandte Chemie</i> , 2020 , 132, 953-960	3.6	3
64	Quantitative 3D real-space analysis of Laves phase supraparticles. <i>Nature Communications</i> , 2021 , 12, 3980	17.4	3
63	3D Atomic-Scale Dynamics of Laser-Light-Induced Restructuring of Nanoparticles Unraveled by Electron Tomography. <i>Advanced Materials</i> , 2021 , 33, e2100972	24	3

62	Three-Dimensional Nanoparticle Transformations Captured by an Electron Microscope. <i>Accounts of Chemical Research</i> , 2021 , 54, 1189-1199	24.3	3
61	From CdSe Nanoplatelets to Quantum Rings by Thermochemical Edge Reconfiguration. <i>Chemistry of Materials</i> , 2021 , 33, 6853-6859	9.6	3
60	The design of magneto-plasmonic nanostructures formed by magnetic Prussian Blue-type nanocrystals decorated with Au nanoparticles. <i>Chemical Communications</i> , 2021 , 57, 1903-1906	5.8	3
59	Mangan-Dotierung von Perowskit-Nanokristallen: Quanteneinschränkung Aufgrund von Ruddlesden-Popper-Defekten. <i>Angewandte Chemie</i> , 2020 , 132, 6860-6865	3.6	3
58	Quantifying Strain and Dislocation Density at Nanocube Interfaces after Assembly and Epitaxy. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 8788-8794	9.5	2
57	Preparation and study of 2-D semiconductors with Dirac type bands due to the honeycomb nanogeometry 2014 ,		2
56	Ultra-High Resolution Electron Tomography for Materials Science: a Roadmap. <i>Microscopy and Microanalysis</i> , 2011 , 17, 934-935	0.5	2
55	Strain relaxation and dislocation filtering in metamorphic HBT and HEMT structures grown on GaAs substrates by MBE		2
54	Two-Dimensional CdSe-PbSe Heterostructures and PbSe Nanoplatelets: Formation, Atomic Structure, and Optical Properties.. <i>Journal of Physical Chemistry C</i> , 2022 , 126, 1513-1522	3.8	2
53	Kinetic Regulation of the Synthesis of Pentatwinned Gold Nanorods below Room Temperature. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 23937-23944	3.8	2
52	Al ₂ O ₃ -Supported Transition Metals for Plasma-Catalytic NH ₃ Synthesis in a DBD Plasma: Metal Activity and Insights into Mechanisms. <i>Catalysts</i> , 2021 , 11, 1230	4	2
51	Size-controlled electrodeposition of Cu nanoparticles on gas diffusion electrodes in methanesulfonic acid solution. <i>Journal of Applied Electrochemistry</i> , 2021 , 51, 317-330	2.6	2
50	Understanding and Controlling the Crystallization Process in Reconfigurable Plasmonic Superlattices. <i>ACS Nano</i> , 2021 , 15, 4916-4926	16.7	2
49	Spherical core-shell alumina support particles for model platinum catalysts. <i>Nanoscale</i> , 2021 , 13, 4221-4232		2
48	Phase Transformation Behavior of a Two-Dimensional Zeolite. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 10230-10235	16.4	1
47	The superconducting proximity effect in epitaxial Al/Pb nanocomposites. <i>Superconductor Science and Technology</i> , 2014 , 27, 015008	3.1	1
46	Dreidimensionale Charakterisierung von Edelmetall-Nanopartikeln und deren Anordnungen mithilfe von Elektronentomographie. <i>Angewandte Chemie</i> , 2014 , 126, 10774-10784	3.6	1
45	Atomic Resolution Mapping Using Quantitative High-angle Annular Dark Field Scanning Transmission Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2009 , 15, 464-465	0.5	1

44	Catalytic upcycling of PVC waste-derived phthalate esters into safe, hydrogenated plasticizers. <i>Green Chemistry</i> , 2022 , 24, 754-766	10	1
43	Mixed (Sr _{1-x} Cax) ₃₃ Bi ₂₄ Al ₄₈ O ₁₄₁ fullerenoids: the defect structure analysed by (S)TEM techniques. <i>International Journal of Materials Research</i> , 2006 , 97, 978-984	0.5	1
42	Shape from projections via differentiable forward projector for computed tomography. <i>Ultramicroscopy</i> , 2021 , 224, 113239	3.1	1
41	The Influence of Size, Shape, and Twin Boundaries on Heat-Induced Alloying in Individual Au@Ag Core-Shell Nanoparticles. <i>Small</i> , 2021 , 17, e2102348	11	1
40	Grain Boundaries as a Diffusion-Limiting Factor in Lithium-Rich NMC Cathodes for High-Energy Lithium-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2021 , 4, 6777-6786	6.1	1
39	Nd-Doped Lanthanum Oxochloride Nanocrystals as Nanothermometers. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 19887-19896	3.8	1
38	Inverse heavy-atom effect in near infrared photoluminescent gold nanoclusters. <i>Nanoscale</i> , 2021 , 13, 10462-10467	7.7	1
37	Metal-Polymer Heterojunction in Colloidal-Phase Plasmonic Catalysis.. <i>Journal of Physical Chemistry Letters</i> , 2022 , 2264-2272	6.4	1
36	Quantification of the Helical Morphology of Chiral Gold Nanorods. 2022 , 4, 642-649		1
35	Investigating Reaction Intermediates during the Seedless Growth of Gold Nanostars Using Electron Tomography.. <i>ACS Nano</i> , 2022 ,	16.7	1
34	Phase Transformation Behavior of a Two-Dimensional Zeolite. <i>Angewandte Chemie</i> , 2019 , 131, 10336-10341	3.6	0
33	Quantitative 3D analysis of huge nanoparticles assemblies 2016 , 55-56		0
32	Electron tomography based on highly limited data using a neural network reconstruction technique 2016 , 15-16		0
31	3D arrangement of epitaxial graphene conformally grown on porousified crystalline SiC. <i>Carbon</i> , 2022 , 189, 210-218	10.4	0
30	Novel Approaches for Electron Tomography to Investigate the Structure and Stability of Nanomaterials in 3 Dimensions.. <i>Microscopy and Microanalysis</i> , 2020 , 26, 1128-1130	0.5	0
29	3D Atomic Scale Quantification of Nanostructures and their Dynamics Using Model-based STEM. <i>Microscopy and Microanalysis</i> , 2020 , 26, 2606-2608	0.5	0
28	Effectiveness of reducing the influence of CTAB at the surface of metal nanoparticles during in situ heating studies by TEM. <i>Micron</i> , 2021 , 144, 103036	2.3	0
27	The atomic lensing model: extending HAADF STEM atom counting from homogeneous to heterogeneous nanostructures 2016 , 499-500		0

26	Multi ADF detector tomography for 3D characterization of heterostructures 2016 , 59-60		o
25	Spectral Electron Tomography as a Quantitative Technique to Investigate Functional Nanomaterials. <i>Microscopy and Microanalysis</i> , 2016 , 22, 274-275	0.5	o
24	Multimode Electron Tomography sheds light on synthesis, structure, and properties of complex metal-based nanoparticles.. <i>Advanced Materials</i> , 2022 , e2110394	24	o
23	Advanced characterization of colloidal semiconductor nanocrystals by 2D and 3D electron microscopy 2016 , 558-559		
22	Non-destructive nanoparticle characterisation using a minimum electron dose in quantitative ADF STEM: how low can one go? 2016 , 509-510		
21	Discrete spectroscopic electron tomography: using prior knowledge of reference spectra during the reconstruction 2016 , 976-977		
20	Electron tomography combined with electron diffraction reveals the dissolution and phase transformation of KFI to CHA zeolites 2016 , 698-699		
19	Electron microscopy investigations of cation exchange in colloidal PbSe/CdSe nanocrystals 2016 , 37-38		
18	3D structure and chemical composition reconstructed simultaneously from HAADF-STEM images and EDS-STEM maps 2016 , 81-82		
17	Quantification of 3D Atomic Structures and Their Dynamics by Atom-Counting from an ADF STEM Image. <i>Microscopy and Microanalysis</i> , 2019 , 25, 1808-1809	0.5	
16	Materials Science Applications of Aberration Corrected TEM and/or STEM. <i>Microscopy and Microanalysis</i> , 2015 , 21, 1131-1132	0.5	
15	Structural and electrical characterization of carbon nanotube interconnects by combined transmission electron microscopy and scanning spreading resistance microscopy. <i>Materials Research Society Symposia Proceedings</i> , 2011 , 1349, 140401		
14	Redeposition and differential sputtering of La in transmission electron microscopy samples of LaAlO ₃ /SrTiO ₃ multilayers prepared by focused ion beam. <i>Journal of Microscopy</i> , 2008 , 231, 359-63	1.9	
13	Quantitative Electron Microscopy of (Bi,Pb) ₂ Sr ₂ Ca ₂ Cu ₃ O ₁₀ + δ Ag Multifilament Tapes During Initial Stages of Annealing. <i>Journal of the American Ceramic Society</i> , 2005 , 88, 431-436	3.8	
12	New electron diffraction technique using Cs-corrected annular LACDIF: comparison with electron precession 2008 , 29-30		
11	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> , 2021 , 17, 2170246	11	
10	Discrete tomography in materials science: less is more? 2008 , 291-292		
9	The benefits of statistical parameter estimation theory for quantitative interpretation of electron microscopy data 2008 , 97-98		

- 8 DART explained: how to carry out a discrete tomography reconstruction **2008**, 295-296
- 7 A new method for quantitative XEDS tomography of complex hetero-nanostructures **2016**, 789-790
- 6 Characterization of Janus gold nanoparticles obtained via spontaneous binary polymer shell segregation **2016**, 690-691
- 5 Investigating lattice strain in Au nanodecahedrons **2016**, 11-12
- 4 Advanced Electron Tomography of Assemblies of Nanoparticles **2016**, 25-26
- 3 Self-assembled Supraparticles by Spherical Confinement **2016**, 115-116
- 2 The Influence of Acids on Tuning the Pore Size of Mesoporous TiO₂ Templated by Non-Ionic Block Copolymers. *European Journal of Inorganic Chemistry*, **2018**, 2018, 4932-4932 2.3
- 1 Fast electron low dose tomography for beam sensitive materials. *Microscopy and Microanalysis*, **2021**, 27, 2116-2118 0.5