

# Caterina E Ducati

## List of Publications by Year in descending order

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189  
papers

17,326  
citations

18436

62  
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14156

128  
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197  
docs citations

197  
times ranked

23345  
citing authors

#	ARTICLE	IF	CITATIONS
1	Maximizing and stabilizing luminescence from halide perovskites with potassium passivation. <i>Nature</i> , 2018, 555, 497-501.	13.7	1,336
2	Growth process conditions of vertically aligned carbon nanotubes using plasma enhanced chemical vapor deposition. <i>Journal of Applied Physics</i> , 2001, 90, 5308-5317.	1.1	1,034
3	Highly Efficient Perovskite Nanocrystal Light-Emitting Diodes Enabled by a Universal Crosslinking Method. <i>Advanced Materials</i> , 2016, 28, 3528-3534.	11.1	782
4	In situ Observations of Catalyst Dynamics during Surface-Bound Carbon Nanotube Nucleation. <i>Nano Letters</i> , 2007, 7, 602-608.	4.5	662
5	SnO <sub>2</sub> -Based Dye-Sensitized Hybrid Solar Cells Exhibiting Near Unity Absorbed Photon-to-Electron Conversion Efficiency. <i>Nano Letters</i> , 2010, 10, 1259-1265.	4.5	495
6	Three-dimensional imaging of localized surface plasmon resonances of metal nanoparticles. <i>Nature</i> , 2013, 502, 80-84.	13.7	450
7	A Bicontinuous Double Gyroid Hybrid Solar Cell. <i>Nano Letters</i> , 2009, 9, 2807-2812.	4.5	446
8	Efficient perovskite solar cells by metal ion doping. <i>Energy and Environmental Science</i> , 2016, 9, 2892-2901.	15.6	372
9	Low-temperature growth of carbon nanotubes by plasma-enhanced chemical vapor deposition. <i>Applied Physics Letters</i> , 2003, 83, 135-137.	1.5	364
10	Perovskite Crystals for Tunable White Light Emission. <i>Chemistry of Materials</i> , 2015, 27, 8066-8075.	3.2	362
11	Carbon with hierarchical pores from carbonized metal-organic frameworks for lithium sulphur batteries. <i>Chemical Communications</i> , 2013, 49, 2192.	2.2	354
12	Bulk fatigue induced by surface reconstruction in layered Ni-rich cathodes for Li-ion batteries. <i>Nature Materials</i> , 2021, 20, 84-92.	13.3	349
13	Hierarchical TiO <sub>2</sub> Photoanode for Dye-Sensitized Solar Cells. <i>Nano Letters</i> , 2010, 10, 2562-2567.	4.5	331
14	Fully inkjet-printed two-dimensional material field-effect heterojunctions for wearable and textile electronics. <i>Nature Communications</i> , 2017, 8, 1202.	5.8	324
15	Catalytic Chemical Vapor Deposition of Single-Wall Carbon Nanotubes at Low Temperatures. <i>Nano Letters</i> , 2006, 6, 1107-1112.	4.5	297
16	DNA Origami Nanopores. <i>Nano Letters</i> , 2012, 12, 512-517.	4.5	267
17	In Situ Characterization of Alloy Catalysts for Low-Temperature Graphene Growth. <i>Nano Letters</i> , 2011, 11, 4154-4160.	4.5	258
18	Encapsulation for long-term stability enhancement of perovskite solar cells. <i>Nano Energy</i> , 2016, 30, 162-172.	8.2	258

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19	Performance-limiting nanoscale trap clusters at grain junctions in halide perovskites. <i>Nature</i> , 2020, 580, 360-366.	13.7	255
20	Ledge-flow-controlled catalyst interface dynamics during Si nanowire growth. <i>Nature Materials</i> , 2008, 7, 372-375.	13.3	248
21	Gold catalyzed growth of silicon nanowires by plasma enhanced chemical vapor deposition. <i>Journal of Applied Physics</i> , 2003, 94, 6005-6012.	1.1	247
22	Hybrid glasses from strong and fragile metal-organic framework liquids. <i>Nature Communications</i> , 2015, 6, 8079.	5.8	242
23	In-situ X-ray Photoelectron Spectroscopy Study of Catalyst-Support Interactions and Growth of Carbon Nanotube Forests. <i>Journal of Physical Chemistry C</i> , 2008, 112, 12207-12213.	1.5	240
24	Giant and reversible extrinsic magnetocaloric effects in La <sub>0.7</sub> Ca <sub>0.3</sub> MnO <sub>3</sub> films due to strain. <i>Nature Materials</i> , 2013, 12, 52-58.	13.3	226
25	Solid Electrolyte Interphase Growth and Capacity Loss in Silicon Electrodes. <i>Journal of the American Chemical Society</i> , 2016, 138, 7918-7931.	6.6	189
26	The Phase of Iron Catalyst Nanoparticles during Carbon Nanotube Growth. <i>Chemistry of Materials</i> , 2012, 24, 4633-4640.	3.2	180
27	Temperature selective growth of carbon nanotubes by chemical vapor deposition. <i>Journal of Applied Physics</i> , 2002, 92, 3299-3303.	1.1	178
28	State of Transition Metal Catalysts During Carbon Nanotube Growth. <i>Journal of Physical Chemistry C</i> , 2009, 113, 1648-1656.	1.5	166
29	Binder free three-dimensional sulphur/few-layer graphene foam cathode with enhanced high-rate capability for rechargeable lithium sulphur batteries. <i>Nanoscale</i> , 2014, 6, 5746-5753.	2.8	166
30	Direct growth of aligned carbon nanotube field emitter arrays onto plastic substrates. <i>Applied Physics Letters</i> , 2003, 83, 4661-4663.	1.5	164
31	Block Copolymer Morphologies in Dye-Sensitized Solar Cells: Probing the Photovoltaic Structure-Function Relation. <i>Nano Letters</i> , 2009, 9, 2813-2819.	4.5	163
32	The Parameter Space of Graphene Chemical Vapor Deposition on Polycrystalline Cu. <i>Journal of Physical Chemistry C</i> , 2012, 116, 22492-22501.	1.5	155
33	Self-Cleaning Antireflective Optical Coatings. <i>Nano Letters</i> , 2013, 13, 5329-5335.	4.5	155
34	Field emission from short and stubby vertically aligned carbon nanotubes. <i>Applied Physics Letters</i> , 2001, 79, 2079-2081.	1.5	150
35	Growth of Ultrahigh Density Vertically Aligned Carbon Nanotube Forests for Interconnects. <i>ACS Nano</i> , 2010, 4, 7431-7436.	7.3	136
36	Lead Telluride Quantum Dot Solar Cells Displaying External Quantum Efficiencies Exceeding 120%. <i>Nano Letters</i> , 2015, 15, 7987-7993.	4.5	130

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37	Potassium- and Rubidium-Passivated Alloyed Perovskite Films: Optoelectronic Properties and Moisture Stability. <i>ACS Energy Letters</i> , 2018, 3, 2671-2678.	8.8	126
38	Hierarchical bicontinuous porosity in metal-organic frameworks templated from functional block co-oligomer micelles. <i>Chemical Science</i> , 2013, 4, 3573.	3.7	124
39	Multiple-exciton generation in lead selenide nanorod solar cells with external quantum efficiencies exceeding 120%. <i>Nature Communications</i> , 2015, 6, 8259.	5.8	120
40	Advanced Lithium-Sulfur Batteries Enabled by a Bio-Inspired Polysulfide Adsorptive Brush. <i>Advanced Functional Materials</i> , 2016, 26, 8418-8426.	7.8	120
41	A simple low temperature synthesis route for ZnO-MgO core-shell nanowires. <i>Nanotechnology</i> , 2008, 19, 465603.	1.3	111
42	Cyclic Supersaturation and Triple Phase Boundary Dynamics in Germanium Nanowire Growth. <i>Journal of Physical Chemistry C</i> , 2011, 115, 4413-4417.	1.5	111
43	Surface Structure, Hydration, and Cationic Sites of Nanohydroxyapatite: UHR-TEM, IR, and Microgravimetric Studies. <i>Journal of Physical Chemistry C</i> , 2007, 111, 4027-4035.	1.5	108
44	Block copolymer directed synthesis of mesoporous TiO <sub>2</sub> for dye-sensitized solar cells. <i>Soft Matter</i> , 2009, 5, 134-139.	1.2	108
45	Interface and Composition Analysis on Perovskite Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 26176-26183.	4.0	107
46	The role of the catalytic particle in the growth of carbon nanotubes by plasma enhanced chemical vapor deposition. <i>Journal of Applied Physics</i> , 2004, 95, 6387-6391.	1.1	105
47	Ion Migration-Induced Amorphization and Phase Segregation as a Degradation Mechanism in Planar Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2020, 10, 2000310.	10.2	103
48	Improved conductivity in dye-sensitized solar cells through block-copolymer confined TiO <sub>2</sub> crystallisation. <i>Energy and Environmental Science</i> , 2011, 4, 225-233.	15.6	88
49	Low-temperature synthesis of ZnSe nanowires and nanosaws by catalyst-assisted molecular-beam epitaxy. <i>Applied Physics Letters</i> , 2005, 86, 153103.	1.5	87
50	Efficient ZnO Nanowire Solid-State Dye-Sensitized Solar Cells Using Organic Dyes and Core-shell Nanostructures. <i>Journal of Physical Chemistry C</i> , 2009, 113, 18515-18522.	1.5	85
51	The influence of the precursor clusters on the structural and morphological evolution of nanostructured TiO <sub>2</sub> under thermal annealing. <i>Nanotechnology</i> , 2003, 14, 1168-1173.	1.3	83
52	Perovskite-molecule composite thin films for efficient and stable light-emitting diodes. <i>Nature Communications</i> , 2020, 11, 891.	5.8	83
53	Low-temperature plasma enhanced chemical vapour deposition of carbon nanotubes. <i>Diamond and Related Materials</i> , 2004, 13, 1171-1176.	1.8	81
54	Engineering the nanocrystalline structure of TiO <sub>2</sub> films by aerodynamically filtered cluster deposition. <i>Applied Physics Letters</i> , 2002, 81, 3052-3054.	1.5	78

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55	Negatively curved spongy carbon. <i>Applied Physics Letters</i> , 2002, 81, 3359-3361.	1.5	76
56	Hierarchical assemblies of bismuth titanate complex architectures and their visible-light photocatalytic activities. <i>Journal of Materials Chemistry</i> , 2010, 20, 2418.	6.7	69
57	Stability and Dark Hysteresis Correlate in NiO-Based Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2019, 9, 1901642.	10.2	69
58	Template Nanowires for Spintronics Applications: Nanomagnet Microwave Resonators Functioning in Zero Applied Magnetic Field. <i>Nano Letters</i> , 2008, 8, 3683-3687.	4.5	67
59	Characterising degradation of perovskite solar cells through in-situ and operando electron microscopy. <i>Nano Energy</i> , 2018, 47, 243-256.	8.2	67
60	Formation of Metastable Liquid Catalyst during Subeutectic Growth of Germanium Nanowires. <i>Nano Letters</i> , 2010, 10, 2972-2976.	4.5	65
61	Hyperbranched Quasi-1D Nanostructures for Solid-State Dye-Sensitized Solar Cells. <i>ACS Nano</i> , 2013, 7, 10023-10031.	7.3	65
62	Solution-phase synthesis of single-crystalline Bi <sub>12</sub> TiO <sub>20</sub> nanowires with photocatalytic properties. <i>Chemical Communications</i> , 2009, , 3937.	2.2	62
63	Low temperature synthesis of carbon nanofibres on carbon fibre matrices. <i>Carbon</i> , 2005, 43, 2643-2648.	5.4	60
64	Support-Catalyst-Gas Interactions during Carbon Nanotube Growth on Metallic Ta Films. <i>Journal of Physical Chemistry C</i> , 2011, 115, 4359-4369.	1.5	60
65	Photon Reabsorption in Mixed CsPbCl <sub>3</sub> :CsPbI <sub>3</sub> Perovskite Nanocrystal Films for Light-Emitting Diodes. <i>Journal of Physical Chemistry C</i> , 2017, 121, 3790-3796.	1.5	57
66	3D Visualization of the Iron Oxidation State in FeO/Fe <sub>3</sub> O <sub>4</sub> Core-Shell Nanocubes from Electron Energy Loss Tomography. <i>Nano Letters</i> , 2016, 16, 5068-5073.	4.5	56
67	Fabrication and Morphological Characterization of High-Efficiency Blade-Coated Perovskite Solar Modules. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 25195-25204.	4.0	53
68	Libraries of cluster-assembled titania films for chemical sensing. <i>Applied Physics Letters</i> , 2005, 87, 103108.	1.5	52
69	Local Versus Long-Range Diffusion Effects of Photoexcited States on Radiative Recombination in Organic-Inorganic Lead Halide Perovskites. <i>Advanced Science</i> , 2015, 2, 1500136.	5.6	50
70	The structure of negatively curved spongy carbon. <i>Diamond and Related Materials</i> , 2003, 12, 768-773.	1.8	49
71	Crystallinity in apatites: how can a truly disordered fraction be distinguished from nanosize crystalline domains?. <i>Journal of Materials Science: Materials in Medicine</i> , 2006, 17, 1079-1087.	1.7	49
72	Nanoscale Tunable Proton/Hydrogen Sensing: Evidence for Surface-Adsorbed Hydrogen Atom on Architected Palladium Nanoparticles. <i>Journal of the American Chemical Society</i> , 2007, 129, 6068-6069.	6.6	49

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73	Multicomponent Signal Unmixing from Nanoheterostructures: Overcoming the Traditional Challenges of Nanoscale X-ray Analysis via Machine Learning. <i>Nano Letters</i> , 2015, 15, 2716-2720.	4.5	49
74	Integration of plasmonic Au nanoparticles in TiO <sub>2</sub> hierarchical structures in a single-step pulsed laser co-deposition. <i>Materials and Design</i> , 2018, 156, 311-319.	3.3	49
75	Compressed sensing electron tomography of needle-shaped biological specimens – Potential for improved reconstruction fidelity with reduced dose. <i>Ultramicroscopy</i> , 2016, 160, 230-238.	0.8	47
76	Synthesis and optical properties of silicon nanowires grown by different methods. <i>Applied Physics A: Materials Science and Processing</i> , 2006, 85, 247-253.	1.1	45
77	Crystallographic Order in Multi-Walled Carbon Nanotubes Synthesized in the Presence of Nitrogen. <i>Small</i> , 2006, 2, 774-784.	5.2	44
78	Growth of aligned millimeter-long carbon nanotube by chemical vapor deposition. <i>Diamond and Related Materials</i> , 2008, 17, 1447-1451.	1.8	44
79	Growth of high-density vertically aligned arrays of carbon nanotubes by plasma-assisted catalyst pretreatment. <i>Applied Physics Letters</i> , 2009, 95, .	1.5	43
80	Bottom-up engineering of the surface roughness of nanostructured cubic zirconia to control cell adhesion. <i>Nanotechnology</i> , 2012, 23, 475101.	1.3	43
81	Increased Affinity of Small Gold Particles for Glycerol Oxidation over Au/TiO <sub>2</sub> Probed by NMR Relaxation Methods. <i>ACS Catalysis</i> , 2017, 7, 4235-4241.	5.5	43
82	Upscaling Inverted Perovskite Solar Cells: Optimization of Laser Scribing for Highly Efficient Mini-Modules. <i>Micromachines</i> , 2020, 11, 1127.	1.4	42
83	Twin Plane Re-entrant Mechanism for Catalytic Nanowire Growth. <i>Nano Letters</i> , 2014, 14, 1288-1292.	4.5	41
84	Quasi-1D hyperbranched WO <sub>3</sub> nanostructures for low-voltage photoelectrochemical water splitting. <i>Journal of Materials Chemistry A</i> , 2015, 3, 6110-6117.	5.2	41
85	Effects of pre-treatment and plasma enhancement on chemical vapor deposition of carbon nanotubes from ultra-thin catalyst films. <i>Diamond and Related Materials</i> , 2006, 15, 1029-1035.	1.8	40
86	Monolithic route to efficient dye-sensitized solar cells employing diblock copolymers for mesoporous TiO <sub>2</sub> . <i>Journal of Materials Chemistry</i> , 2010, 20, 1261-1268.	6.7	40
87	Nanostructured Ag <sub>4</sub> O <sub>4</sub> films with enhanced antibacterial activity. <i>Nanotechnology</i> , 2008, 19, 475602.	1.3	38
88	Synthesis, Characterization, and Morphological Control of Cs <sub>2</sub> CuCl <sub>4</sub> Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2019, 123, 16951-16956.	1.5	38
89	Use of plasma treatment to grow carbon nanotube forests on TiN substrate. <i>Journal of Applied Physics</i> , 2011, 109, .	1.1	37
90	A Praline-Like Flexible Interlayer with Highly Mounted Polysulfide Anchors for Lithium-Sulfur Batteries. <i>Small</i> , 2017, 13, 1700357.	5.2	37

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91	Sequentially Deposited versus Conventional Nonfullerene Organic Solar Cells: Interfacial Trap States, Vertical Stratification, and Exciton Dissociation. <i>Advanced Energy Materials</i> , 2019, 9, 1902145.	10.2	36
92	Controlling the Growth Kinetics and Optoelectronic Properties of 2D/3D Lead-Tin Perovskite Heterojunctions. <i>Advanced Materials</i> , 2019, 31, e1905247.	11.1	36
93	Multiwalled carbon nanotubes functionalized with maleated poly(propylene) by a dry mechano-chemical process. <i>Polymer</i> , 2012, 53, 291-299.	1.8	35
94	Nanostructured high valence silver oxide produced by pulsed laser deposition. <i>Applied Surface Science</i> , 2009, 255, 5248-5251.	3.1	34
95	Transformation of molten SnCl <sub>2</sub> to SnO <sub>2</sub> nano-single crystals. <i>Ceramics International</i> , 2014, 40, 8533-8538.	2.3	34
96	Influence of cluster-assembly parameters on the field emission properties of nanostructured carbon films. <i>Journal of Applied Physics</i> , 2002, 92, 5482-5489.	1.1	32
97	Nickel Formate Route to the Growth of Carbon Nanotubes. <i>Journal of Physical Chemistry B</i> , 2004, 108, 18446-18450.	1.2	32
98	Selective growth of ZnSe and ZnCdSe nanowires by molecular beam epitaxy. <i>Nanotechnology</i> , 2005, 16, S139-S142.	1.3	32
99	Unveiling the Chemical Composition of Halide Perovskite Films Using Multivariate Statistical Analyses. <i>ACS Applied Energy Materials</i> , 2018, 1, 7174-7181.	2.5	31
100	The real TiO <sub>2</sub> /HTM interface of solid-state dye solar cells: role of trapped states from a multiscale modelling perspective. <i>Nanoscale</i> , 2015, 7, 1136-1144.	2.8	30
101	Electronic properties and applications of cluster-assembled carbon films. <i>Journal of Materials Science: Materials in Electronics</i> , 2006, 17, 427-441.	1.1	29
102	Non-Equilibrium Synthesis of Highly Active Nanostructured, Oxygen-Incorporated Amorphous Molybdenum Sulfide HER Electrocatalyst. <i>Small</i> , 2020, 16, e2004047.	5.2	29
103	Elucidating and Mitigating Degradation Processes in Perovskite Light-Emitting Diodes. <i>Advanced Energy Materials</i> , 2020, 10, 2002676.	10.2	28
104	Beyond 17% stable perovskite solar module via polaron arrangement of tuned polymeric hole transport layer. <i>Nano Energy</i> , 2021, 82, 105685.	8.2	28
105	Polymer Crystallization as a Tool To Pattern Hybrid Nanostructures: Growth of 12 nm ZnO Arrays in Poly(3-hexylthiophene). <i>Nano Letters</i> , 2013, 13, 4499-4504.	4.5	27
106	Metastable Crystalline AuGe Catalysts Formed During Isothermal Germanium Nanowire Growth. <i>Physical Review Letters</i> , 2012, 108, 255702.	2.9	26
107	In Situ Observation of the Effect of Nitrogen on Carbon Nanotube Synthesis. <i>Chemistry of Materials</i> , 2013, 25, 2921-2923.	3.2	26
108	Investigation of the Inner Environment of Carbon Nanotubes with a Fullerene-Nitroxide Probe. <i>Small</i> , 2008, 4, 350-356.	5.2	25

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109	Hafnia nanoparticles "a model system for graphene growth on a dielectric. <i>Physica Status Solidi - Rapid Research Letters</i> , 2011, 5, 341-343.	1.2	25
110	Nanoscale electron tomography and atomic scale high-resolution electron microscopy of nanoparticles and nanoclusters: A short survey Nanoscale electron tomography and atomic scale high-resolution electron microscopy of nanoparticles and nanoclusters: A short survey <i>Progress in Natural Science: Materials International</i> , 2013, 23, 222-234.	1.8	25
111	Some Turning Points in the Chemical Electron Microscopic Study of Heterogeneous Catalysts. <i>ChemCatChem</i> , 2013, 5, 2560-2579.	1.8	25
112	High-density remote plasma sputtering of high-dielectric-constant amorphous hafnium oxide films. <i>Physica Status Solidi (B): Basic Research</i> , 2013, 250, 957-967.	0.7	25
113	Manipulating Color Emission in 2D Hybrid Perovskites by Fine Tuning Halide Segregation: A Transparent Green Emitter. <i>Advanced Materials</i> , 2022, 34, e2105942.	11.1	24
114	High-rate production of functional nanostructured films and devices by coupling flame spray pyrolysis with supersonic expansion. <i>Nanotechnology</i> , 2012, 23, 185603.	1.3	23
115	Correlating Microstructure and Activity for Polysulfide Reduction and Oxidation at WS <sub>2</sub> Electrocatalysts. <i>Journal of the Electrochemical Society</i> , 2013, 160, A757-A768.	1.3	23
116	Wet catalyst assisted growth of carbon nanofibers on complex three-dimensional substrates. <i>Diamond and Related Materials</i> , 2005, 14, 733-738.	1.8	22
117	Deterministic shape-selective synthesis of nanowires, nanoribbons and nanosaws by steady-state vapour-transport. <i>Nanotechnology</i> , 2006, 17, 1046-1051.	1.3	22
118	Producing hierarchical porous carbon monoliths from hydrometallurgical recycling of spent lead acid battery for application in lithium ion batteries. <i>Green Chemistry</i> , 2015, 17, 4637-4646.	4.6	22
119	Nanostructured CN <sub>x</sub> (0 < x < 0.2) films grown by supersonic cluster beam deposition. <i>Carbon</i> , 2005, 43, 1460-1469.	5.4	21
120	In Situ Heat-Induced Replacement of GaAs Nanowires by Au. <i>Nano Letters</i> , 2016, 16, 3051-3057.	4.5	21
121	Elemental Mapping of Perovskite Solar Cells by Using Multivariate Analysis: An Insight into Degradation Processes. <i>ChemSusChem</i> , 2016, 9, 2673-2678.	3.6	21
122	Electron Microscopy Characterization of P3 Lines and Laser Scribing-Induced Perovskite Decomposition in Perovskite Solar Modules. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 45646-45655.	4.0	21
123	Emission Properties and Ultrafast Carrier Dynamics of CsPbCl <sub>3</sub> Perovskite Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2019, 123, 2651-2657.	1.5	21
124	Aerosol Assisted Solvent Treatment: A Universal Method for Performance and Stability Enhancements in Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2021, 11, 2101420.	10.2	21
125	Nanostructure of Gasification Charcoal (Biochar). <i>Environmental Science &amp; Technology</i> , 2019, 53, 3538-3546.	4.6	20
126	Comparison of the ionic conductivity properties of microporous and mesoporous MOFs infiltrated with a Na-ion containing IL mixture. <i>Dalton Transactions</i> , 2020, 49, 15914-15924.	1.6	20

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127	Manipulation and tracking of superparamagnetic nanoparticles using MRI. <i>Nanotechnology</i> , 2008, 19, 395102.	1.3	19
128	Low temperature crystallisation of mesoporous TiO <sub>2</sub> . <i>Nanoscale</i> , 2013, 5, 10518.	2.8	19
129	Towards an electronic grade nanoparticle-assembled silicon thin film by ballistic deposition at room temperature: the deposition method, and structural and electronic properties. <i>Journal of Materials Chemistry C</i> , 2017, 5, 3725-3735.	2.7	19
130	Nanometric Chemical Analysis of Beam-Sensitive Materials: A Case Study of STEM-EDX on Perovskite Solar Cells. <i>Small Methods</i> , 2021, 5, e2000835.	4.6	19
131	Improved Electrical Performance of Perovskite Photovoltaic Mini-Modules through Controlled PbI <sub>2</sub> Formation Using Nanosecond Laser Pulses for P3 Patterning. <i>Energy Technology</i> , 2021, 9, 2000969.	1.8	19
132	Chemical vapour deposition of freestanding sub-60-nm graphene gyroids. <i>Applied Physics Letters</i> , 2017, 111, .	1.5	18
133	The influence of electrochemical cycling protocols on capacity loss in nickel-rich lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2021, 9, 23582-23596.	5.2	17
134	Enhanced Subthreshold Slopes in Large Diameter Single Wall Carbon Nanotube Field Effect Transistors. <i>IEEE Nanotechnology Magazine</i> , 2008, 7, 458-462.	1.1	16
135	Porosity in a single crystal. <i>Nature</i> , 2013, 495, 180-181.	13.7	16
136	Nanoscale Analysis of a Hierarchical Hybrid Solar Cell in 3D. <i>Advanced Functional Materials</i> , 2014, 24, 3043-3050.	7.8	16
137	Exploring the benefits of electron tomography to characterize the precise morphology of core-shell Au@Ag nanoparticles and its implications on their plasmonic properties. <i>Nanoscale</i> , 2014, 6, 12696-12702.	2.8	16
138	Blind source separation aided characterization of the $\epsilon'$ strengthening phase in an advanced nickel-based superalloy by spectroscopic 4D electron microscopy. <i>Acta Materialia</i> , 2016, 107, 229-238.	3.8	16
139	Controlling multipolar surface plasmon excitation through the azimuthal phase structure of electron vortex beams. <i>Physical Review B</i> , 2016, 93, .	1.1	16
140	Attaining High Photovoltaic Efficiency and Stability with Multidimensional Perovskites. <i>ChemSusChem</i> , 2018, 11, 4193-4202.	3.6	16
141	Hyperbranched TiO <sub>2</sub> -CdS nano-heterostructures for highly efficient photoelectrochemical photoanodes. <i>Nanotechnology</i> , 2018, 29, 335404.	1.3	16
142	Low-Temperature Self-Assembly of Novel Encapsulated Compound Nanowires. <i>Advanced Materials</i> , 2002, 14, 1821-1824.	11.1	15
143	Tantalum-oxide catalysed chemical vapour deposition of single- and multi-walled carbon nanotubes. <i>RSC Advances</i> , 2013, 3, 4086.	1.7	15
144	Ruthenium-coated ruthenium oxide nanorods. <i>Applied Physics Letters</i> , 2004, 85, 5385-5387.	1.5	14

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145	Titanium fullerenoid oxides. Applied Physics Letters, 2005, 87, 201906.	1.5	14
146	Nickel nanoparticles effect on the electrochemical energy storage properties of carbon nanocomposite films. Nanotechnology, 2014, 25, 435401.	1.3	14
147	Hydrogen production by photocatalytic membranes fabricated by supersonic cluster beam deposition on glass fiber filters. International Journal of Hydrogen Energy, 2014, 39, 13098-13104.	3.8	14
148	Vertically Oriented TiO <sub>x</sub> N <sub>y</sub> Nanopillar Arrays with Embedded Ag Nanoparticles for Visible-Light Photocatalysis. Langmuir, 2012, 28, 5427-5431.	1.6	13
149	Unveiling the Interaction Mechanisms of Electron and X-ray Radiation with Halide Perovskite Semiconductors using Scanning Nanoprobe Diffraction. Advanced Materials, 2022, 34, e2200383.	11.1	13
150	Controlling the Catalyst During Carbon Nanotube Growth. Journal of Nanoscience and Nanotechnology, 2008, 8, 6105-6111.	0.9	12
151	Deciphering the <i>In Situ</i> Surface Reconstruction of Supercapacitive Bimetallic Ni-Co Oxyphosphide during Electrochemical Activation Using Multivariate Statistical Analyses. ACS Applied Energy Materials, 2022, 5, 7661-7673.	2.5	12
152	Integration of a technique for the deposition of nanostructured films with MEMS-based microfabrication technologies: Application to micro gas sensors. Microelectronic Engineering, 2009, 86, 1247-1249.	1.1	11
153	Catalyst Composition and Impurity-Dependent Kinetics of Nanowire Heteroepitaxy. ACS Nano, 2013, 7, 7689-7697.	7.3	11
154	Tribological coatings for complex mechanical elements produced by supersonic cluster beam deposition of metal dichalcogenide nanoparticles. Journal Physics D: Applied Physics, 2015, 48, 265302.	1.3	11
155	Nanocrystalline Metal/Carbon Composites Produced by Supersonic Cluster Beam Deposition. Journal of Nanoscience and Nanotechnology, 2005, 5, 1072-1080.	0.9	10
156	Investigating the photo-oxidation of model indoor air pollutants using field asymmetric ion mobility spectrometry. Journal of Photochemistry and Photobiology A: Chemistry, 2015, 312, 1-7.	2.0	10
157	Shape-selective synthesis of II-VI semiconductor nanowires. Physica Status Solidi (B): Basic Research, 2006, 243, 3301-3305.	0.7	9
158	Flying and Crawling Modes during Surface-Bound Single Wall Carbon Nanotube Growth. Journal of Physical Chemistry C, 2007, 111, 17249-17253.	1.5	9
159	Catalyst design for the growth of highly packed nanotube forests. Physica Status Solidi (B): Basic Research, 2011, 248, 2528-2531.	0.7	8
160	Bulk synthesis of graphene-like materials possessing turbostratic graphite and graphene nanodomains via combustion of magnesium in carbon dioxide. Carbon, 2019, 149, 582-586.	5.4	8
161	Self-assembly of novel nanowires by thermolysis of fullerene and transition metal thin films. Nanotechnology, 2004, 15, 601-608.	1.3	7
162	Catalytic and seeded shape-selective synthesis of II-VI semiconductor nanowires. Physica E: Low-Dimensional Systems and Nanostructures, 2007, 37, 138-141.	1.3	7

#	ARTICLE	IF	CITATIONS
163	Photoemission investigations on nanostructured TiO <sub>2</sub> grown by cluster assembling. <i>Surface Science</i> , 2007, 601, 2688-2691.	0.8	7
164	Nanostructured Refractory Metal Oxide Films Produced by a Pulsed Microplasma Cluster Source as Active Layers in Microfabricated Gas Sensors. <i>Japanese Journal of Applied Physics</i> , 2011, 50, 01AK01.	0.8	7
165	Effect of Size on the Luminescent Efficiency of Perovskite Nanocrystals. <i>ACS Applied Energy Materials</i> , 2019, 2, 6998-7004.	2.5	7
166	Improving Quantitative EDS Chemical Analysis of Alloy Nanoparticles by PCA Denoising: Part I, Reducing Reconstruction Bias. <i>Microscopy and Microanalysis</i> , 2022, 28, 338-349.	0.2	7
167	Optical emission from focused ion beam milled halide perovskite device cross-sections. <i>Microscopy Research and Technique</i> , 2022, 85, 2351-2355.	1.2	7
168	Continuous flow chemical vapour deposition of carbon nanotube sea urchins. <i>Nanoscale</i> , 2018, 10, 7780-7791.	2.8	6
169	Tuning the photoelectrochemical properties of hierarchical TiO <sub>2</sub> nanostructures by control of pulsed laser deposition and annealing in reducing conditions. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 26639-26651.	3.8	5
170	Li-S-Batteries: Advanced Lithium-Sulfur Batteries Enabled by a Bio-Inspired Polysulfide Adsorptive Brush ( <i>Adv. Funct. Mater.</i> 46/2016). <i>Advanced Functional Materials</i> , 2016, 26, 8564-8564.	7.8	4
171	Transparent Films Made of Highly Scattering Particles. <i>Langmuir</i> , 2020, 36, 911-918.	1.6	4
172	Photoluminescence: Local Versus Long-Range Diffusion Effects of Photoexcited States on Radiative Recombination in Organic-Inorganic Lead Halide Perovskites ( <i>Adv. Sci.</i> 9/2015). <i>Advanced Science</i> , 2015, 2, .	5.6	3
173	Analysis of structural distortion in Eshelby twisted InP nanowires by scanning precession electron diffraction. <i>Nano Research</i> , 2019, 12, 939-946.	5.8	3
174	Improving Quantitative EDS Chemical Analysis of Alloy Nanoparticles by PCA Denoising: Part II. Uncertainty Intervals. <i>Microscopy and Microanalysis</i> , 2022, 28, 723-731.	0.2	3
175	A simple method for the synthesis of silicon carbide nanorods. <i>Journal of Nanoscience and Nanotechnology</i> , 2002, 2, 453-6.	0.9	3
176	Multiscale simulation of solid state dye sensitized solar cells including morphology effects. , 2014, , .		1
177	Analyzing the Photo-oxidation of 2-propanol at Indoor Air Level Concentrations Using Field Asymmetric Ion Mobility Spectrometry. <i>Journal of Visualized Experiments</i> , 2018, , .	0.2	1
178	Organic Solar Cells: Sequentially Deposited versus Conventional Nonfullerene Organic Solar Cells: Interfacial Trap States, Vertical Stratification, and Exciton Dissociation ( <i>Adv. Energy Mater.</i> 47/2019). <i>Advanced Energy Materials</i> , 2019, 9, 1970185.	10.2	1
179	Sodium Diffusion from P1 Lines Passivates Perovskite Solar Modules. , 0, , .		1
180	INORGANIC NANOWIRES. Series on Iraq War and Its Consequences, 2007, , 33-53.	0.1	1

#	ARTICLE	IF	CITATIONS
181	Aerosol Jet Printing as a Versatile Sample Preparation Method for <i>Operando</i> Electrochemical TEM Microdevices. <i>Advanced Materials Interfaces</i> , 2022, 9, .	1.9	1
182	Nickel Formate Route to the Growth of Carbon Nanotubes.. <i>ChemInform</i> , 2005, 36, no.	0.1	0
183	Crystallographic Order in Multi-Walled Carbon Nanotubes Synthesized in the Presence of Nitrogen. <i>Small</i> , 2008, 4, 306-306.	5.2	0
184	Catalyst Dynamics during Carbon Nanotube and Si Nanowire CVD. <i>Microscopy and Microanalysis</i> , 2008, 14, 206-207.	0.2	0
185	Overcoming Traditional Challenges in Nano-scale X-ray Characterization Using Independent Component Analysis. <i>Microscopy and Microanalysis</i> , 2015, 21, 1227-1228.	0.2	0
186	Self-Assembly of rGO Coated Nanorods into Aligned Thick Films. <i>Advanced Materials Interfaces</i> , 2019, 6, 1900219.	1.9	0
187	Scaling Up of Perovskite Solar Modules: from materials to design optimization. , 0, , .		0
188	Nanoscale Heterogeneities Limit Optoelectronic Performance in Halide Perovskites. , 0, , .		0
189	Manipulating Two-Dimensional Hybrid Perovskites Optoelectronic Properties and Phase Segregation by Halides Compositional Engineering. , 0, , .		0