Matteo Chiesa

List of Publications by Year
in descending order

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199 papers	5,477 citations	101543 36 h-index	95266 68 g-index
203 all docs	203 docs citations	203 times ranked	6784 citing authors

#	Article	IF	Citations
1	High-performance flat-panel solar thermoelectric generators with high thermal concentration. Nature Materials, 2011, 10, 532-538.	27.5	987
2	A frequency-domain thermoreflectance method for the characterization of thermal properties. Review of Scientific Instruments, 2009, 80, 094901.	1.3	323
3	Numerical simulation of particulate flow by the Eulerianâ€“Lagrangian and the Eulerianâ€“Eulerian approach with application to a fluidized bed. Computers and Chemical Engineering, 2005, 29, 291-304.	3.8	168
4	Comparative net energy analysis of renewable electricity and carbon capture and storage. Nature Energy, 2019, 4, 456-465.	39.5	148
5	An optical pump-probe technique for measuring the thermal conductivity of liquids. Review of Scientific Instruments, 2008, 79, 064902.	1.3	147
6	Photovoltaic-thermoelectric hybrid systems: A general optimization methodology. Applied Physics Letters, 2008, 92, .	3.3	140
7	Modeling and optimization of solar thermoelectric generators for terrestrial applications. Solar Energy, 2012, 86, 1338-1350.	6.1	129
8	Surface and Bulk Effects in Photochemical Reactions and Photomechanical Effects in Dynamic Molecular Crystals. Journal of the American Chemical Society, 2015, 137, 13866-13875.	13.7	109
9	Solar-assisted Post-combustion Carbon Capture feasibility study. Applied Energy, 2012, 92, 668-676.	10.1	100
10	Characterization of thin metal films via frequency-domain thermoreflectance. Journal of Applied Physics, 2010, 107, .	2.5	99
11	Evaluation of using thermoelectric coolers in a dehumidification system to generate freshwater from ambient air. Chemical Engineering Science, 2011, 66, 2491-2501.	3.8	88
12	A method to provide rapid in situ determination of tip radius in dynamic atomic force microscopy. Review of Scientific Instruments, 2012, 83, 043707.	1.3	81
13	Probing the Gold Nanorodâ^'Ligandâ^'Solvent Interface by Plasmonic Absorption and Thermal Decay. Journal of Physical Chemistry C, 2008, 112, 13320-13323.	3.1	79
14	Tracking-integrated systems for concentrating photovoltaics. Nature Energy, 2016, 1, .	39.5	79
15	Efficient fracture assessment of pipelines. A constraint-corrected SENT specimen approach. Engineering Fracture Mechanics, 2001, 68, 527-547.	4.3	75
16	Thermal conductance imaging of graphene contacts. Journal of Applied Physics, 2014, 116, .	2.5	69
17	A nanoscopic approach to studying evolution in graphene wettability. Carbon, 2014, 80, 784-792.	10.3	64
18	Evaluating the factors that led to low-priced solar electricity projects in the Middle East. Nature Energy, 2018, 3, 1109-1114.	39.5	63

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19	Systematic comprehensive techno-economic assessment of solar cooling technologies using location-specific climate data. Applied Energy, 2010, 87, 3766-3778.	10.1	62
20	Single element spectral splitting solar concentrator for multiple cells CPV system. Optics Express, 2012, 20, 9004.	3.4	62
21	Local characterization of austenite and ferrite phases in duplex stainless steel using MFM and nanoindentation. Journal of Materials Research, 2012, 27, 1573-1579.	2.6	61
22	Artificial neural network based model for retrieval of the direct normal, diffuse horizontal and global horizontal irradiances using SEVIRI images. Solar Energy, 2013, 89, 1-16.	6.1	59
23	Densification modeling of fused silica under nanoindentation. Journal of Non-Crystalline Solids, 2012, 358, 392-398.	3.1	58
24	Time dependent wettability of graphite upon ambient exposure: The role of water adsorption. Journal of Chemical Physics, 2014, 141, 084709.	3.0	55
25	Integration of solar energy in coal-fired power plants retrofitted with carbon capture: A review. Renewable and Sustainable Energy Reviews, 2014, 38, 1029-1044.	16.4	55
26	Experimentally validated model for atmospheric water generation using a solar assisted desiccant dehumidification system. Energy and Buildings, 2014, 77, 236-246.	6.7	55
27	Measuring the true height of water films on surfaces. Nanotechnology, 2011, 22, 465705.	2.6	54
28	Potential for solar-assisted post-combustion carbon capture in Australia. Applied Energy, 2013, 111, 175-185.	10.1	54
29	Experimental investigation of nanofluid shear and longitudinal viscosities. Applied Physics Letters, 2008, 92, 244107.	3.3	52
30	Revealing Amphiphilic Nanodomains of Anti-Biofouling Polymer Coatings. ACS Applied Materials & Interfaces, 2014, 6, 4705-4712.	8.0	51
31	Nanoscale Capillary Interactions in Dynamic Atomic Force Microscopy. Journal of Physical Chemistry C, 2012, 116, 7757-7766.	3.1	42
32	Advances in anti-scale magnetic water treatment. Environmental Science: Water Research and Technology, 2015, 1, 408-425.	2.4	40
33	Systematic Multidimensional Quantification of Nanoscale Systems From Bimodal Atomic Force Microscopy Data. ACS Nano, 2016, 10, 6265-6272.	14.6	39
34	Solar assisted method for recovery of bitumen from oil sand. Applied Energy, 2009, 86, 1437-1441.	10.1	38
35	Diode behavior in ultra-thin low temperature ALD grown zinc-oxide on silicon. AIP Advances, 2013, 3, .	1.3	38
36	Multifrequency AFM: from origins to convergence. Nanoscale, 2017, 9, 5038-5043.	5.6	37

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37	Assessment and recalibration of the Heliosat-2 method in global horizontal irradiance modeling over the desert environment of the UAE. Solar Energy, 2012, 86, 1816-1825.	6.1	34
38	Performance of a 100 kWth Concentrated Solar Beam-Down Optical Experiment. Journal of Solar Energy Engineering, Transactions of the ASME, 2014, 136, .	1.8	34
39	Direct Measurement of the Magnitude of the van der Waals Interaction of Single and Multilayer Graphene. Langmuir, 2018, 34, 12335-12343.	3.5	33
40	A cooling change-point model of community-aggregate electrical load. Energy and Buildings, 2011, 43, 28-37.	6.7	31
41	How to achieve high electrical conductivity in aligned carbon nanotube polymer composites. Carbon, 2013, 64, 150-157.	10.3	30
42	How localized are energy dissipation processes in nanoscale interactions?. Nanotechnology, 2011, 22, 345401.	2.6	28
43	Size Dependent Transitions in Nanoscale Dissipation. Journal of Physical Chemistry C, 2013, 117, 10615-10622.	3.1	28
44	Solar repowering of PCC-retrofitted power plants; solar thermal plant dynamic modelling and control strategies. Solar Energy, 2015, 119, 507-530.	6.1	28
45	Random lasers from photonic crystal wings of butterfly and moth for speckle-free imaging. Optics Express, 2021, 29, 2065.	3.4	28
46	Quantifying dissipative contributions in nanoscale interactions. Nanoscale, 2012, 4, 792-800.	5.6	27
47	Minimal Invasiveness and Spectroscopy-Like Footprints for the Characterization of Heterogeneous Nanoscale Wetting in Ambient Conditions. Journal of Physical Chemistry C, 2013, 117, 20819-20825.	3.1	27
48	Utility solar prices will continue to drop all over the world even without subsidies. Nature Energy, 2019, 4, 833-834.	39.5	27
49	Enhanced electrical properties of vertically aligned carbon nanotube-epoxy nanocomposites with high packing density. Nanoscale Research Letters, 2012, 7, 630.	5.7	26
50	Relating Photoelectrochemistry and Wettability of Sputtered Cu- and N-Doped TiO₂ Thin Films via an Integrated Approach. Journal of Physical Chemistry C, 2018, 122, 12369-12376.	3.1	26
51	Simulation of turbulent electrocoalescence. Chemical Engineering Science, 2006, 61, 4540-4549.	3.8	25
52	Improved transparency switching in paraffinâ€“PDMS composites. Journal of Materials Chemistry C, 2015, 3, 1371-1377.	5.5	25
53	Insights into graphene wettability transparency by locally probing its surface free energy. Nanoscale, 2019, 11, 7944-7951.	5.6	25
54	The aging of a surface and the evolution of conservative and dissipative nanoscale interactions. Journal of Chemical Physics, 2013, 139, 084708.	3.0	24

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55	Effective AFM cantilever tip size: methods for in-situ determination. Measurement Science and Technology, 2015, 26, 015002.	2.6	24
56	Water wettability of graphene: interplay between the interfacial water structure and the electronic structure. RSC Advances, 2018, 8, 16918-16926.	3.6	24
57	Thermal conductivity of nanoparticle suspensions in insulating media measured with a transient optical grating and a hotwire. Journal of Applied Physics, 2008, 103, 083529.	2.5	23
58	Rapid quantitative chemical mapping of surfaces with sub-2 nm resolution. Nanoscale, 2016, 8, 9688-9694.	5.6	23
59	A novel process for direct solvent regeneration via solar thermal energy for carbon capture. Renewable Energy, 2017, 104, 60-75.	8.9	23
60	The evolution in graphitic surface wettability with first-principles quantum simulations: the counterintuitive role of water. Physical Chemistry Chemical Physics, 2018, 20, 22636-22644.	2.8	23
61	Direct Observation of Photoinduced transâ€“cis Isomerization on Azobenzene Single Crystal. Crystal Growth and Design, 2017, 17, 3306-3312.	3.0	22
62	Water-mediated height artifacts in dynamic atomic force microscopy. Physical Chemistry Chemical Physics, 2012, 14, 16080.	2.8	21
63	Innovating carbon-capture biotechnologies through ecosystem-inspired solutions. One Earth, 2021, 4, 49-59.	6.8	21
64	Hydrophilicity of a Single DNA Molecule. Journal of Physical Chemistry C, 2012, 116, 2807-2818.	3.1	20
65	Enhanced photoelectrochemical performance of atomic layer deposited Hf-doped ZnO. Surface and Coatings Technology, 2020, 385, 125352.	4.8	20
66	Subharmonic excitation in amplitude modulation atomic force microscopy in the presence of adsorbed water layers. Journal of Applied Physics, 2011, 110, .	2.5	19
67	Direct growth of single-layer terminated vertical graphene array on germanium by plasma enhanced chemical vapor deposition. Carbon, 2019, 155, 320-325.	10.3	19
68	A review of focused ion beam applications in optical fibers. Nanotechnology, 2021, 32, 472004.	2.6	19
69	Longâ€Lasting Nonâ€hydrogenated Dark Titanium Dioxide: Medium Vacuum Anneal for Enhanced Visible Activity of Modified Multiphase Photocatalysts. ChemCatChem, 2018, 10, 2949-2954.	3.7	17
70	What is going on with Middle Eastern solar prices, and what does it mean for the rest of us?. Progress in Photovoltaics: Research and Applications, 2021, 29, 638-648.	8.1	17
71	Characterization of multi-walled carbon nanotubeâ€“polymer nanocomposites by scanning spreading resistance microscopy. Nanotechnology, 2012, 23, 405704.	2.6	16
72	The effects of adsorbed water layers on the apparent height of nanostructures in ambient amplitude modulation atomic force microscopy. Journal of Chemical Physics, 2012, 137, 044201.	3.0	16

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73	Dynamic electrostatic force microscopy technique for the study of electrical properties with improved spatial resolution. Nanotechnology, 2013, 24, 225703.	2.6	16
74	Effect of surface transport properties on the performance of carbon plastic electrodes for flow battery applications. Electrochimica Acta, 2014, 148, 104-110.	5.2	16
75	Probing anodic oxidation kinetics and nanoscale heterogeneity within TiO2 films by Conductive Atomic Force Microscopy and combined techniques. Electrochimica Acta, 2014, 129, 203-210.	5.2	16
76	Thickness-Dependent Resonant Raman and Eâ€² Photoluminescence Spectra of Indium Selenide and Indium Selenide/Graphene Heterostructures. Journal of Physical Chemistry C, 2019, 123, 15345-15353.	3.1	16
77	Integrated Nano- and Macroscale Investigation of Photoinduced Hydrophilicity in TiO₂ Thin Films. Langmuir, 2016, 32, 11813-11818.	3.5	15
78	High-Temperature Defect-Induced Hopping Conduction in Multilayered Germanium Sulfide for Optoelectronic Applications in Harsh Environments. ACS Applied Nano Materials, 2019, 2, 2169-2175.	5.0	15
79	Nanoscale Thermal Analysis of Multiphase Polymer Nanocomposites. Journal of Physical Chemistry C, 2012, 116, 8849-8856.	3.1	14
80	Nanoscale Investigation of Photoinduced Hydrophilicity Variations in Anatase and Rutile Nanopowders. Langmuir, 2013, 29, 14512-14518.	3.5	14
81	Morphology dependent electrical transport behavior in gold nanostructures. Thin Solid Films, 2011, 520, 656-661.	1.8	13
82	Effect of surface conditions and strain hardening on the passivity breakdown of 304 stainless steel. Journal of Materials Research, 2012, 27, 1580-1588.	2.6	13
83	Disentangling viscosity and hysteretic dissipative components in dynamic nanoscale interactions. Journal Physics D: Applied Physics, 2012, 45, 012002.	2.8	12
84	Energy dissipation distributions and dissipative atomic processes in amplitude modulation atomic force microscopy. Nanotechnology, 2012, 23, 125401.	2.6	12
85	Single-cycle atomic force microscope force reconstruction: resolving time-dependent interactions. New Journal of Physics, 2013, 15, 083034.	2.9	12
86	Ion Exchange and DNA Molecular Dip Sticks: Studying the Nanoscale Surface Wetting of Muscovite Mica. Journal of Physical Chemistry C, 2014, 118, 4695-4701.	3.1	12
87	Periodicity in bimodal atomic force microscopy. Journal of Applied Physics, 2015, 118, 044905.	2.5	12
88	Impact of short duration, high-flow H2 annealing on graphene synthesis and surface morphology with high spatial resolution assessment of coverage. Carbon, 2017, 125, 318-326.	10.3	12
89	Investigating the effect of suspensions nanostructure on the thermophysical properties of nanofluids. Journal of Applied Physics, 2012, 112, .	2.5	11
90	Heterogeneous Dissipation and Size Dependencies of Dissipative Processes in Nanoscale Interactions. Langmuir, 2013, 29, 2200-2206.	3.5	11

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91	Point-focus spectral splitting solar concentrator for multiple cells concentrating photovoltaic system. Journal of Optics (United Kingdom), 2015, 17, 105901.	2.2	11
92	Reconstruction of height of sub-nanometer steps with bimodal atomic force microscopy. Nanotechnology, 2016, 27, 075701.	2.6	11
93	Hybrid graphene metasurface for near-infrared absorbers. Optics Express, 2019, 27, 24866.	3.4	11
94	The additive effect of harmonics on conservative and dissipative interactions. Journal of Applied Physics, 2012, 112, 124901.	2.5	10
95	Elucidation of the wettability of graphene through a multi-length-scale investigation approach. RSC Advances, 2015, 5, 39532-39538.	3.6	10
96	Sun-tracking optical element realized using thermally activated transparency-switching material. Optics Express, 2015, 23, A930.	3.4	10
97	The power laws of nanoscale forces under ambient conditions. Chemical Communications, 2015, 51, 17619-17622.	4.1	10
98	High-concentration photovoltaics for dual-use with agriculture. AIP Conference Proceedings, 2019, , .	0.4	10
99	Machine learning assisted quantification of graphitic surfaces exposure to defined environments. Applied Physics Letters, 2019, 114, .	3.3	10
100	Optoelectronic Tunability of Hf-Doped ZnO for Photovoltaic Applications. Journal of Physical Chemistry C, 2019, 123, 15258-15266.	3.1	10
101	Advances in dynamic AFM: From nanoscale energy dissipation to material properties in the nanoscale. Journal of Applied Physics, 2021, 129, .	2.5	10
102	Detecting and Interpreting Faults in Vulnerable Power Grids With Machine Learning. IEEE Access, 2021, 9, 150686-150699.	4.2	10
103	Quantification of dissipation and deformation in ambient atomic force microscopy. New Journal of Physics, 2012, 14, 073044.	2.9	9
104	Implications of the idea of effective tip shape on nanoindentation unloading curves: AFM measurements and FE simulation. Journal of Materials Research, 2012, 27, 126-131.	2.6	9
105	Investigation of Nanoscale Interactions by Means of Subharmonic Excitation. Journal of Physical Chemistry Letters, 2012, 3, 2125-2129.	4.6	9
106	Conductive scanning probe microscopy of nanostructured Bi₂Te₃. Nanoscale, 2012, 4, 600-606.	5.6	9
107	Nanoscale Hydrophilicity Studies of Gulf Parrotfish (Scarus persicus) Scales. ACS Applied Materials & Interfaces, 2014, 6, 16320-16326.	8.0	9
108	Multi-wall carbon nanostructured paper: characterization and potential applications definition. Materials Research Express, 2015, 2, 095601.	1.6	9

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109	Underlying Mechanism of Time Dependent Surface Properties of Calcite (CaCO₃): A Baseline for Investigations of Reservoirs Wettability. Journal of Physical Chemistry C, 2015, 119, 29038-29043.	3.1	9
110	The Mendeleevâ€“Meyer force project. Nanoscale, 2016, 8, 17400-17406.	5.6	9
111	Understanding the Wettability of Calcite (CaCO₃) Using Higher Spatial Resolution. Energy & Fuels, 2018, 32, 10344-10353.	5.1	9
112	Closed form line spring yield surfaces for deep and shallow cracks: formulation and numerical performance. Computers and Structures, 2002, 80, 533-545.	4.4	8
113	Measurement of the two-photon absorption cross section by means of femtosecond thermal lensing. Applied Optics, 2011, 50, 3240.	2.1	8
114	Effect of temperature on turbulent and laminar flow efficacy analysis of nanofluids. Journal of Applied Physics, 2012, 111, 064319.	2.5	8
115	Energy dissipation in the presence of sub-harmonic excitation in dynamic atomic force microscopy. Europhysics Letters, 2012, 99, 56002.	2.0	8
116	Three-Dimensional Cu(InGa)Se$_{f 2}$ Photovoltaic Cells Simulations: Optimization for Limited-Range Wavelength Applications. IEEE Journal of Photovoltaics, 2013, 3, 1106-1112.	2.5	8
117	Single cycle and transient force measurements in dynamic atomic force microscopy. Nanoscale, 2013, 5, 10776.	5.6	8
118	Numerically assisted nanoindentation analysis. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 560, 267-272.	5.6	8
119	Concentrating Photovoltaics (CPV): The Path Ahead. Green Energy and Technology, 2018, , .	0.6	8
120	Embedded parabolic fiber lens for efficient fiber-to-waveguide coupling fabricated by focused ion beam. JPhys Photonics, 2019, 1, 025004.	4.6	8
121	Tuning the Photoluminescence of Few-Layer MoS₂ Nanosheets by Mechanical Nanostamping for Broadband Optoelectronic Applications. ACS Applied Nano Materials, 2020, 3, 10333-10341.	5.0	8
122	Non-ohmic transport behavior in ultra-thin gold films. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2011, 176, 840-845.	3.5	7
123	Spatial horizons in amplitude and frequency modulation atomic force microscopy. Nanoscale, 2012, 4, 2463.	5.6	7
124	In silico design of solvents for carbon capture with simultaneous optimisation of operating conditions. International Journal of Greenhouse Gas Control, 2014, 30, 179-187.	4.6	7
125	Establishing Nanoscale Heterogeneity with Nanoscale Force Measurements. Journal of Physical Chemistry C, 2015, 119, 18267-18277.	3.1	7
126	General interpretation and theory of apparent height in dynamic atomic force microscopy. RSC Advances, 2015, 5, 80069-80075.	3.6	7

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127	Surface aging investigation by means of an AFM-based methodology and the evolution of conservative nanoscale interactions. Physical Chemistry Chemical Physics, 2018, 20, 19664-19671.	2.8	7
128	Rethinking the role of solar energy under location specific constraints. Energy, 2020, 211, 118838.	8.8	7
129	Rapid discrimination of chemically distinctive surface terminations in 2D material based heterostructures by direct van der Waals identification. Review of Scientific Instruments, 2020, 91, 023907.	1.3	7
130	A model for improved solar irradiation measurement at low flux. Solar Energy, 2012, 86, 837-844.	6.1	6
131	Quantifying electrostatic force contributions in electrically biased nanoscale interactions. Journal of Applied Physics, 2014, 115, .	2.5	6
132	Efficiency enhancement in two-cell CIGS photovoltaic system with low-cost optical spectral splitter. Optics Express, 2016, 24, A222.	3.4	6
133	Superposition of semiconductor and semi-metal properties of self-assembled 2D SnTiS3 heterostructures. Npj 2D Materials and Applications, 2020, 4, .	7.9	6
134	MnO_{1.88}/R-MnO₂/Ti₃C₂(OH/F)_x composite electrodes for high-performance pseudo-supercapacitors prepared from reduced MXenes. New Journal of Chemistry, 2020, 44, 6583-6588.	2.8	6
135	Development of a solar nano-grid for meeting the electricity supply shortage in developing countries (Nigeria as a case study). Renewable Energy, 2022, 181, 640-652.	8.9	6
136	Detrimental Effect of Silicon Nanoparticles on P3HT:PCBM-Based OPV Devices. Macromolecular Chemistry and Physics, 2015, 216, 1155-1160.	2.2	5
137	Surface alteration of calcite: interpreting macroscopic observations by means of AFM. Physical Chemistry Chemical Physics, 2017, 19, 25634-25642.	2.8	5
138	Discerning the Contribution of Morphology and Chemistry in Wettability Studies. Journal of Physical Chemistry A, 2018, 122, 7768-7773.	2.5	5
139	The role of financing in realizing ultra-low solar electricity prices in the Middle East. , 2019, , .		5
140	Explaining doping in material research (Hf substitution in ZnO films) by directly quantifying the van der Waals force. Physical Chemistry Chemical Physics, 2020, 22, 4130-4137.	2.8	5
141	Study of laser actions by birdâ€™s feathers with photonic crystals. Scientific Reports, 2021, 11, 2430.	3.3	5
142	Predicting Energy Demand in Semi-Remote Arctic Locations. Energies, 2021, 14, 798.	3.1	5
143	Uncovering Contributing Factors to Interruptions in the Power Grid: An Arctic Case. Energies, 2022, 15, 305.	3.1	5
144	Rapid Colorimetric pH-Responsive Gold Nanocomposite Hydrogels for Sensing Applications. Nanomaterials, 2022, 12, 1486.	4.1	5

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145	Photothermal phase shift interferometry: an approach for nonlinear absorption measurements. Journal of Optics (United Kingdom), 2012, 14, 015204.	2.2	4
146	Optofluidic approaches to stationary tracking optical concentrator systems. , 2013, , .		4
147	Holistic Characterization of Carbon Nanotube Membrane for Capacitive Deionization Electrodes Application. Materials Research Society Symposia Proceedings, 2015, 1752, 125-130.	0.1	4
148	Predicting the suitability of lateritic soil type for low cost sustainable housing with image recognition and machine learning techniques. Journal of Building Engineering, 2020, 29, 101175.	3.4	4
149	The CPV â€œToolboxâ€• New Approaches to Maximizing Solar Resource Utilization with Application-Oriented Concentrator Photovoltaics. Energies, 2021, 14, 795.	3.1	4
150	Revealing the Quasi-Periodic Crystallographic Structure of Self-Assembled SnTiS₃ Misfit Compound. Journal of Physical Chemistry C, 2021, 125, 9956-9964.	3.1	4
151	Investigating the Ubiquitous Presence of Nanometric Water Films on Surfaces. Journal of Physical Chemistry C, 2021, 125, 15759-15772.	3.1	4
152	A user-friendly FIB lift-out technique to prepare plan-view TEM sample of 2D thin film materials. Ultramicroscopy, 2022, 235, 113496.	1.9	4
153	Influence of Nanoindenter Tip Radius on the Estimation of the Elastic Modulus. Materials Research Society Symposia Proceedings, 2011, 1297, 53.	0.1	3
154	Dust detection over bright surfaces using high-resolution visible SEVIRI images. , 2012, , .		3
155	Modeling crack propagation for advanced 4-point bending testing of metalâ€“dielectric thin film stacks. Engineering Fracture Mechanics, 2012, 96, 490-499.	4.3	3
156	Single element point focus spectral splitting concentrator with CIGS multiple bandgap solar cells. , 2013, , .		3
157	Divergent surface properties of multidimensionalsp²carbon allotropes: the effect of aging phenomena. Nanotechnology, 2016, 27, 295701.	2.6	3
158	Should humans work?. Telecommunications Policy, 2020, 44, 101910.	5.3	3
159	Fabrication of Near-Field Optical Fiber Probes Through Focused Ion Beam. , 2019, , .		3
160	Fracture analysis of strength-mismatched welded wide plates by line spring elements. Engineering Fracture Mechanics, 2001, 68, 987-1001.	4.3	2
161	General Parametrization of Persisting Long-Range Nanoscale Phenomena in Force Measurements Emerging under Ambient Conditions. Journal of Physical Chemistry C, 2015, 119, 13062-13067.	3.1	2
162	Dependence of surface aging on DNA topography investigated in attractive bimodal atomic force microscopy. Physical Chemistry Chemical Physics, 2017, 19, 10231-10236.	2.8	2

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163	Solar concentration, solar resource utilization, and sustainability. , 2020, , .		2
164	Hydration Dynamics and the Future of Small-Amplitude AFM Imaging in Air. Molecules, 2021, 26, 7083.	3.8	2
165	Ultra-Cheap Renewable Energy as an Enabling Technology for Deep Industrial Decarbonization via Capture and Utilization of Process CO2 Emissions. Energies, 2022, 15, 5181.	3.1	2
166	The effect of ion sputtering of silicon substrates on the catalyst morphology and growth of carbon nanotube arrays. Nuclear Instruments & Methods in Physics Research B, 2010, 268, 568-572.	1.4	1
167	Identification and quantification of the dissipative mechanisms involved in the radial permanent deformation of carbon nanotubes. Journal Physics D: Applied Physics, 2012, 45, 335402.	2.8	1
168	High Efficiency Solar to Electric Energy Conversion through Spectrum Splitting and Multi-channel Full Spectrum Harvesting. Materials Research Society Symposia Proceedings, 2013, 1493, 31-36.	0.1	1
169	Two-axes spectral splitting optical concentrator based on single plastic element. , 2014, , .		1
170	Correlation between macro- and nano-scopic measurements of carbon nanostructured paper elastic modulus. Applied Physics Letters, 2015, 107, 031903.	3.3	1
171	Self-tracking concentrator based on switchable transparency and rejected-ray recycling. , 2015, , .		1
172	Automatic outdoor monitoring system for photovoltaic panels. Review of Scientific Instruments, 2016, 87, 055104.	1.3	1
173	Experimental demonstration of a dispersive spectral splitting concentrator for high efficiency photovoltaics. MRS Advances, 2016, 1, 949-955.	0.9	1
174	3D-printed concentrators for tracking-integrated CPV modules. , 2016, , .		1
175	Atomic-Scale Theory of Relative Wettability of Surfaces for Enhanced Oil Recovery. , 2017, , .		1
176	High-Efficiency Solar Cells. Green Energy and Technology, 2018, , 19-31.	0.6	1
177	A solar concentrator based on photonic angular selectivity. AIP Conference Proceedings, 2019, , .	0.4	1
178	Plumbing the depths of the graphene wetting controversy. CheM, 2021, 7, 1409-1411.	11.7	1
179	Formulation and Numerical Performance of an Adaptive Algorithm for Efficient Collision Detection. , 2005, , .		1
180	Do we still care about CPV?. , 2017, , .		1

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181	Realizing High Photovoltaic Power Densities With Tracking-Integrated Concentrator Photovoltaics. Frontiers in Energy Research, 0, 10, .	2.3	1
182	Rheological Study of Y2O3 Nanofluids. , 2011, , .		0
183	Thermal Conductivity Behavior of Yttria Nanofluids. , 2012, , .		0
184	Point Focus Solar Spectral Splitting System for CPV Applications. Materials Research Society Symposia Proceedings, 2013, 1493, 65-69.	0.1	0
185	Reconciling macro- with nano- carrier mobility measurements in organic photovoltaic blends. Applied Physics Letters, 2014, 104, 173905.	3.3	0
186	Switchable transparency optical element for reactive solar tracking. , 2014, , .		0
187	High Resolution DNA Imaging by Dynamic Atomic Force Microscopy: The Effect of the Substrate and Sample Preparation. Materials Research Society Symposia Proceedings, 2014, 1652, 1.	0.1	0
188	Transparency-switching optical element for sun tracking applications. Proceedings of SPIE, 2015, , .	0.8	0
189	High-efficiency solar energy conversion with spectrum splitting prismatic lens (and other) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 5		0
190	What Went Wrong with CPV?. Green Energy and Technology, 2018, , 1-7.	0.6	0
191	What Comes Next for CPV?. Green Energy and Technology, 2018, , 63-68.	0.6	0
192	How can CPV deliver on its promise?. AIP Conference Proceedings, 2018, , .	0.4	0
193	A simple, semi-empirical performance modeling approach for partially transparent tracking-integrated concentrator photovoltaics. , 2021, , .		0
194	Future pathways for concentrator photovoltaics. , 2017, , .		0
195	Spectral management for temperature control in photovoltaic systems. , 2017, , .		0
196	Spectral splitting for thermal management in photovoltaic cells. , 2017, , .		0
197	Tracking Integration for Rooftop CPV. Green Energy and Technology, 2018, , 47-61.	0.6	0
198	Spectral selectivity or nonimaging optics: Which to use for radiative cooling?. , 2018, , .		0

#	Article	IF	Citations
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