

# Matteo Chiesa

## List of Publications by Year in descending order

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199  
papers

5,477  
citations

101535

36  
h-index

95259

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. <i>Nature Materials</i> , 2011, 10, 532-538.	27.5	987
2	A frequency-domain thermorefectance method for the characterization of thermal properties. <i>Review of Scientific Instruments</i> , 2009, 80, 094901.	1.3	323
3	Numerical simulation of particulate flow by the Eulerian-Lagrangian and the Eulerian-Eulerian approach with application to a fluidized bed. <i>Computers and Chemical Engineering</i> , 2005, 29, 291-304.	3.8	168
4	Comparative net energy analysis of renewable electricity and carbon capture and storage. <i>Nature Energy</i> , 2019, 4, 456-465.	39.5	148
5	An optical pump-probe technique for measuring the thermal conductivity of liquids. <i>Review of Scientific Instruments</i> , 2008, 79, 064902.	1.3	147
6	Photovoltaic-thermoelectric hybrid systems: A general optimization methodology. <i>Applied Physics Letters</i> , 2008, 92, .	3.3	140
7	Modeling and optimization of solar thermoelectric generators for terrestrial applications. <i>Solar Energy</i> , 2012, 86, 1338-1350.	6.1	129
8	Surface and Bulk Effects in Photochemical Reactions and Photomechanical Effects in Dynamic Molecular Crystals. <i>Journal of the American Chemical Society</i> , 2015, 137, 13866-13875.	13.7	109
9	Solar-assisted Post-combustion Carbon Capture feasibility study. <i>Applied Energy</i> , 2012, 92, 668-676.	10.1	100
10	Characterization of thin metal films via frequency-domain thermorefectance. <i>Journal of Applied Physics</i> , 2010, 107, .	2.5	99
11	Evaluation of using thermoelectric coolers in a dehumidification system to generate freshwater from ambient air. <i>Chemical Engineering Science</i> , 2011, 66, 2491-2501.	3.8	88
12	A method to provide rapid in situ determination of tip radius in dynamic atomic force microscopy. <i>Review of Scientific Instruments</i> , 2012, 83, 043707.	1.3	81
13	Probing the Gold Nanorod-Ligand-Solvent Interface by Plasmonic Absorption and Thermal Decay. <i>Journal of Physical Chemistry C</i> , 2008, 112, 13320-13323.	3.1	79
14	Tracking-integrated systems for concentrating photovoltaics. <i>Nature Energy</i> , 2016, 1, .	39.5	79
15	Efficient fracture assessment of pipelines. A constraint-corrected SENT specimen approach. <i>Engineering Fracture Mechanics</i> , 2001, 68, 527-547.	4.3	75
16	Thermal conductance imaging of graphene contacts. <i>Journal of Applied Physics</i> , 2014, 116, .	2.5	69
17	A nanoscopic approach to studying evolution in graphene wettability. <i>Carbon</i> , 2014, 80, 784-792.	10.3	64
18	Evaluating the factors that led to low-priced solar electricity projects in the Middle East. <i>Nature Energy</i> , 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. <i>Applied Energy</i> , 2010, 87, 3766-3778.	10.1	62
20	Single element spectral splitting solar concentrator for multiple cells CPV system. <i>Optics Express</i> , 2012, 20, 9004.	3.4	62
21	Local characterization of austenite and ferrite phases in duplex stainless steel using MFM and nanoindentation. <i>Journal of Materials Research</i> , 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. <i>Solar Energy</i> , 2013, 89, 1-16.	6.1	59
23	Densification modeling of fused silica under nanoindentation. <i>Journal of Non-Crystalline Solids</i> , 2012, 358, 392-398.	3.1	58
24	Time dependent wettability of graphite upon ambient exposure: The role of water adsorption. <i>Journal of Chemical Physics</i> , 2014, 141, 084709.	3.0	55
25	Integration of solar energy in coal-fired power plants retrofitted with carbon capture: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2014, 38, 1029-1044.	16.4	55
26	Experimentally validated model for atmospheric water generation using a solar assisted desiccant dehumidification system. <i>Energy and Buildings</i> , 2014, 77, 236-246.	6.7	55
27	Measuring the true height of water films on surfaces. <i>Nanotechnology</i> , 2011, 22, 465705.	2.6	54
28	Potential for solar-assisted post-combustion carbon capture in Australia. <i>Applied Energy</i> , 2013, 111, 175-185.	10.1	54
29	Experimental investigation of nanofluid shear and longitudinal viscosities. <i>Applied Physics Letters</i> , 2008, 92, 244107.	3.3	52
30	Revealing Amphiphilic Nanodomains of Anti-Biofouling Polymer Coatings. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 4705-4712.	8.0	51
31	Nanoscale Capillary Interactions in Dynamic Atomic Force Microscopy. <i>Journal of Physical Chemistry C</i> , 2012, 116, 7757-7766.	3.1	42
32	Advances in anti-scale magnetic water treatment. <i>Environmental Science: Water Research and Technology</i> , 2015, 1, 408-425.	2.4	40
33	Systematic Multidimensional Quantification of Nanoscale Systems From Bimodal Atomic Force Microscopy Data. <i>ACS Nano</i> , 2016, 10, 6265-6272.	14.6	39
34	Solar assisted method for recovery of bitumen from oil sand. <i>Applied Energy</i> , 2009, 86, 1437-1441.	10.1	38
35	Diode behavior in ultra-thin low temperature ALD grown zinc-oxide on silicon. <i>AIP Advances</i> , 2013, 3, .	1.3	38
36	Multifrequency AFM: from origins to convergence. <i>Nanoscale</i> , 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. <i>Solar Energy</i> , 2012, 86, 1816-1825.	6.1	34
38	Performance of a 100 kWth Concentrated Solar Beam-Down Optical Experiment. <i>Journal of Solar Energy Engineering, Transactions of the ASME</i> , 2014, 136, .	1.8	34
39	Direct Measurement of the Magnitude of the van der Waals Interaction of Single and Multilayer Graphene. <i>Langmuir</i> , 2018, 34, 12335-12343.	3.5	33
40	A cooling change-point model of community-aggregate electrical load. <i>Energy and Buildings</i> , 2011, 43, 28-37.	6.7	31
41	How to achieve high electrical conductivity in aligned carbon nanotube polymer composites. <i>Carbon</i> , 2013, 64, 150-157.	10.3	30
42	How localized are energy dissipation processes in nanoscale interactions?. <i>Nanotechnology</i> , 2011, 22, 345401.	2.6	28
43	Size Dependent Transitions in Nanoscale Dissipation. <i>Journal of Physical Chemistry C</i> , 2013, 117, 10615-10622.	3.1	28
44	Solar repowering of PCC-retrofitted power plants; solar thermal plant dynamic modelling and control strategies. <i>Solar Energy</i> , 2015, 119, 507-530.	6.1	28
45	Random lasers from photonic crystal wings of butterfly and moth for speckle-free imaging. <i>Optics Express</i> , 2021, 29, 2065.	3.4	28
46	Quantifying dissipative contributions in nanoscale interactions. <i>Nanoscale</i> , 2012, 4, 792-800.	5.6	27
47	Minimal Invasiveness and Spectroscopy-Like Footprints for the Characterization of Heterogeneous Nanoscale Wetting in Ambient Conditions. <i>Journal of Physical Chemistry C</i> , 2013, 117, 20819-20825.	3.1	27
48	Utility solar prices will continue to drop all over the world even without subsidies. <i>Nature Energy</i> , 2019, 4, 833-834.	39.5	27
49	Enhanced electrical properties of vertically aligned carbon nanotube-epoxy nanocomposites with high packing density. <i>Nanoscale Research Letters</i> , 2012, 7, 630.	5.7	26
50	Relating Photoelectrochemistry and Wettability of Sputtered Cu- and N-Doped TiO <sub>2</sub> Thin Films via an Integrated Approach. <i>Journal of Physical Chemistry C</i> , 2018, 122, 12369-12376.	3.1	26
51	Simulation of turbulent electrocoalescence. <i>Chemical Engineering Science</i> , 2006, 61, 4540-4549.	3.8	25
52	Improved transparency switching in paraffin/PDMS composites. <i>Journal of Materials Chemistry C</i> , 2015, 3, 1371-1377.	5.5	25
53	Insights into graphene wettability transparency by locally probing its surface free energy. <i>Nanoscale</i> , 2019, 11, 7944-7951.	5.6	25
54	The aging of a surface and the evolution of conservative and dissipative nanoscale interactions. <i>Journal of Chemical Physics</i> , 2013, 139, 084708.	3.0	24

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55	Effective AFM cantilever tip size: methods for <i>in-situ</i> determination. <i>Measurement Science and Technology</i> , 2015, 26, 015002.	2.6	24
56	Water wettability of graphene: interplay between the interfacial water structure and the electronic structure. <i>RSC Advances</i> , 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. <i>Journal of Applied Physics</i> , 2008, 103, 083529.	2.5	23
58	Rapid quantitative chemical mapping of surfaces with sub-2 nm resolution. <i>Nanoscale</i> , 2016, 8, 9688-9694.	5.6	23
59	A novel process for direct solvent regeneration via solar thermal energy for carbon capture. <i>Renewable Energy</i> , 2017, 104, 60-75.	8.9	23
60	The evolution in graphitic surface wettability with first-principles quantum simulations: the counterintuitive role of water. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 22636-22644.	2.8	23
61	Direct Observation of Photoinduced <i>trans</i> → <i>cis</i> Isomerization on Azobenzene Single Crystal. <i>Crystal Growth and Design</i> , 2017, 17, 3306-3312.	3.0	22
62	Water-mediated height artifacts in dynamic atomic force microscopy. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 16080.	2.8	21
63	Innovating carbon-capture biotechnologies through ecosystem-inspired solutions. <i>One Earth</i> , 2021, 4, 49-59.	6.8	21
64	Hydrophilicity of a Single DNA Molecule. <i>Journal of Physical Chemistry C</i> , 2012, 116, 2807-2818.	3.1	20
65	Enhanced photoelectrochemical performance of atomic layer deposited Hf-doped ZnO. <i>Surface and Coatings Technology</i> , 2020, 385, 125352.	4.8	20
66	Subharmonic excitation in amplitude modulation atomic force microscopy in the presence of adsorbed water layers. <i>Journal of Applied Physics</i> , 2011, 110, .	2.5	19
67	Direct growth of single-layer terminated vertical graphene array on germanium by plasma enhanced chemical vapor deposition. <i>Carbon</i> , 2019, 155, 320-325.	10.3	19
68	A review of focused ion beam applications in optical fibers. <i>Nanotechnology</i> , 2021, 32, 472004.	2.6	19
69	Long-Lasting Non-hydrogenated Dark Titanium Dioxide: Medium Vacuum Anneal for Enhanced Visible Activity of Modified Multiphase Photocatalysts. <i>ChemCatChem</i> , 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?. <i>Progress in Photovoltaics: Research and Applications</i> , 2021, 29, 638-648.	8.1	17
71	Characterization of multi-walled carbon nanotube-polymer nanocomposites by scanning spreading resistance microscopy. <i>Nanotechnology</i> , 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. <i>Journal of Chemical Physics</i> , 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. <i>Nanotechnology</i> , 2013, 24, 225703.	2.6	16
74	Effect of surface transport properties on the performance of carbon plastic electrodes for flow battery applications. <i>Electrochimica Acta</i> , 2014, 148, 104-110.	5.2	16
75	Probing anodic oxidation kinetics and nanoscale heterogeneity within TiO <sub>2</sub> films by Conductive Atomic Force Microscopy and combined techniques. <i>Electrochimica Acta</i> , 2014, 129, 203-210.	5.2	16
76	Thickness-Dependent Resonant Raman and Photoluminescence Spectra of Indium Selenide and Indium Selenide/Graphene Heterostructures. <i>Journal of Physical Chemistry C</i> , 2019, 123, 15345-15353.	3.1	16
77	Integrated Nano- and Macroscale Investigation of Photoinduced Hydrophilicity in TiO <sub>2</sub> Thin Films. <i>Langmuir</i> , 2016, 32, 11813-11818.	3.5	15
78	High-Temperature Defect-Induced Hopping Conduction in Multilayered Germanium Sulfide for Optoelectronic Applications in Harsh Environments. <i>ACS Applied Nano Materials</i> , 2019, 2, 2169-2175.	5.0	15
79	Nanoscale Thermal Analysis of Multiphase Polymer Nanocomposites. <i>Journal of Physical Chemistry C</i> , 2012, 116, 8849-8856.	3.1	14
80	Nanoscale Investigation of Photoinduced Hydrophilicity Variations in Anatase and Rutile Nanopowders. <i>Langmuir</i> , 2013, 29, 14512-14518.	3.5	14
81	Morphology dependent electrical transport behavior in gold nanostructures. <i>Thin Solid Films</i> , 2011, 520, 656-661.	1.8	13
82	Effect of surface conditions and strain hardening on the passivity breakdown of 304 stainless steel. <i>Journal of Materials Research</i> , 2012, 27, 1580-1588.	2.6	13
83	Disentangling viscosity and hysteretic dissipative components in dynamic nanoscale interactions. <i>Journal Physics D: Applied Physics</i> , 2012, 45, 012002.	2.8	12
84	Energy dissipation distributions and dissipative atomic processes in amplitude modulation atomic force microscopy. <i>Nanotechnology</i> , 2012, 23, 125401.	2.6	12
85	Single-cycle atomic force microscope force reconstruction: resolving time-dependent interactions. <i>New Journal of Physics</i> , 2013, 15, 083034.	2.9	12
86	Ion Exchange and DNA Molecular Dip Sticks: Studying the Nanoscale Surface Wetting of Muscovite Mica. <i>Journal of Physical Chemistry C</i> , 2014, 118, 4695-4701.	3.1	12
87	Periodicity in bimodal atomic force microscopy. <i>Journal of Applied Physics</i> , 2015, 118, 044905.	2.5	12
88	Impact of short duration, high-flow H <sub>2</sub> annealing on graphene synthesis and surface morphology with high spatial resolution assessment of coverage. <i>Carbon</i> , 2017, 125, 318-326.	10.3	12
89	Investigating the effect of suspensions nanostructure on the thermophysical properties of nanofluids. <i>Journal of Applied Physics</i> , 2012, 112, .	2.5	11
90	Heterogeneous Dissipation and Size Dependencies of Dissipative Processes in Nanoscale Interactions. <i>Langmuir</i> , 2013, 29, 2200-2206.	3.5	11

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

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109	Underlying Mechanism of Time Dependent Surface Properties of Calcite (CaCO <sub>3</sub> ): 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 (CaCO <sub>3</sub> ) 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 <sub>2</sub> 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 MoS <sub>2</sub> 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. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 19664-19671.	2.8	7
128	Rethinking the role of solar energy under location specific constraints. <i>Energy</i> , 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. <i>Review of Scientific Instruments</i> , 2020, 91, 023907.	1.3	7
130	A model for improved solar irradiation measurement at low flux. <i>Solar Energy</i> , 2012, 86, 837-844.	6.1	6
131	Quantifying electrostatic force contributions in electrically biased nanoscale interactions. <i>Journal of Applied Physics</i> , 2014, 115, .	2.5	6
132	Efficiency enhancement in two-cell CIGS photovoltaic system with low-cost optical spectral splitter. <i>Optics Express</i> , 2016, 24, A222.	3.4	6
133	Superposition of semiconductor and semi-metal properties of self-assembled 2D SnTiS <sub>3</sub> heterostructures. <i>Npj 2D Materials and Applications</i> , 2020, 4, .	7.9	6
134	MnO <sub>1.88</sub> /R-MnO <sub>2</sub> /Ti <sub>3</sub> C <sub>2</sub> (OH/F) <sub>x</sub> composite electrodes for high-performance pseudo-supercapacitors prepared from reduced MXenes. <i>New Journal of Chemistry</i> , 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). <i>Renewable Energy</i> , 2022, 181, 640-652.	8.9	6
136	Detrimental Effect of Silicon Nanoparticles on P3HT:PCBM-Based OPV Devices. <i>Macromolecular Chemistry and Physics</i> , 2015, 216, 1155-1160.	2.2	5
137	Surface alteration of calcite: interpreting macroscopic observations by means of AFM. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 25634-25642.	2.8	5
138	Discerning the Contribution of Morphology and Chemistry in Wettability Studies. <i>Journal of Physical Chemistry A</i> , 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. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 4130-4137.	2.8	5
141	Study of laser actions by bird's feathers with photonic crystals. <i>Scientific Reports</i> , 2021, 11, 2430.	3.3	5
142	Predicting Energy Demand in Semi-Remote Arctic Locations. <i>Energies</i> , 2021, 14, 798.	3.1	5
143	Uncovering Contributing Factors to Interruptions in the Power Grid: An Arctic Case. <i>Energies</i> , 2022, 15, 305.	3.1	5
144	Rapid Colorimetric pH-Responsive Gold Nanocomposite Hydrogels for Sensing Applications. <i>Nanomaterials</i> , 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 "Toolbox" 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 SnTiS <sub>3</sub> 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 metal-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 multidimensional <sup>2</sup> carbon 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. <i>Molecules</i> , 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. <i>Energies</i> , 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. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2010, 268, 568-572.	1.4	1
167	Identification and quantification of the dissipative mechanisms involved in the radial permanent deformation of carbon nanotubes. <i>Journal Physics D: Applied Physics</i> , 2012, 45, 335402.	2.8	1
168	High Efficiency Solar to Electric Energy Conversion through Spectrum Splitting and Multi-channel Full Spectrum Harvesting. <i>Materials Research Society Symposia Proceedings</i> , 2013, 1493, 31-36.	0.1	1
169	Two-axes spectral splitting optical concentrator based on single plastic element. , 2014, , .		1
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