Giulia Grancini

List of Publications by Year in Descending Order

113 papers	18,426 citations	47 h-index	131 g-index
131 ext. papers	20,847 ext. citations	14.4 avg, IF	6.93 L-index

#	Paper	IF	Citations
113	A step beyond in steady-state and time-resolved electro-optical spectroscopy: Demonstration of a customized simple, compact, low-cost, fiber-based interferometer system.. *Structural Dynamics*, **2022**, 9, 011101	3.2	0
112	Revealing Weak Dimensional Confinement Effects in Excitonic Silver/Bismuth Double Perovskites.. *Jacs Au*, **2022**, 2, 136-149		2
111	COVID-19 vaccinations: The unknowns, challenges, and hopes. *Journal of Medical Virology*, **2021**,	19.7	12
110	23.7% Efficient inverted perovskite solar cells by dual interfacial modification. *Science Advances*, **2021**, 7, eabj7930	14.3	50
109	Manipulating Color Emission in 2D Hybrid Perovskites by Fine Tuning Halide Segregation: A Transparent Green Emitter. *Advanced Materials*, **2021**, 34, e2105942	24	4
108	Two-Step Thermal Annealing: An Effective Route for 15 % Efficient Quasi-2D Perovskite Solar Cells. *ChemPlusChem*, **2021**, 86, 1044-1048	2.8	3
107	All-Inorganic Cesium-Based Hybrid Perovskites for Efficient and Stable Solar Cells and Modules. *Advanced Energy Materials*, **2021**, 11, 2100672	21.8	18
106	Two-Step Thermal Annealing: An Effective Route for 15 % Efficient Quasi-2D Perovskite Solar Cells. *ChemPlusChem*, **2021**, 86, 1040-1041	2.8	
105	2D/3D perovskite engineering eliminates interfacial recombination losses in hybrid perovskite solar cells. *CheM*, **2021**, 7, 1903-1916	16.2	32
104	Lead or no lead? Availability, toxicity, sustainability and environmental impact of lead-free perovskite solar cells. *Journal of Materials Chemistry C*, **2021**, 9, 67-76	7.1	47
103	Solution-processed two-dimensional materials for next-generation photovoltaics. *Chemical Society Reviews*, **2021**, 50, 11870-11965	58.5	21
102	Accelerated Thermal Aging Effects on Carbon-Based Perovskite Solar Cells: A Joint Experimental and Theoretical Analysis. *Solar Rrl*, **2021**, 5, 2000759	7.1	2
101	Spatial Charge Separation as the Origin of Anomalous Stark Effect in Fluorous 2D Hybrid Perovskites. *Advanced Functional Materials*, **2020**, 30, 2000228	15.6	6
100	Dealing with Lead in Hybrid Perovskite: A Challenge to Tackle for a Bright Future of This Technology?. *Advanced Energy Materials*, **2020**, 10, 2001471	21.8	28
99	Vacuum-Induced Degradation of 2D Perovskites. *Frontiers in Chemistry*, **2020**, 8, 66	5	14
98	Halide perovskites: current issues and new strategies to push material and device stability. *JPhys Energy*, **2020**, 2, 021005	4.9	21
97	In Situ Analysis Reveals the Role of 2D Perovskite in Preventing Thermal-Induced Degradation in 2D/3D Perovskite Interfaces. *Nano Letters*, **2020**, 20, 3992-3998	11.5	41

96	Band-bending induced passivation: high performance and stable perovskite solar cells using a perhydropoly(silazane) precursor. *Energy and Environmental Science*, **2020**, 13, 1222-1230	35.4	72
95	Green-Emitting Lead-Free CsSnBr Zero-Dimensional Perovskite Nanocrystals with Improved Air Stability. *Journal of Physical Chemistry Letters*, **2020**, 11, 618-623	6.4	26
94	Exploring the role of halide mixing in lead-free BZA2SnX4 two dimensional hybrid perovskites. *Journal of Materials Chemistry A*, **2020**, 8, 1875-1886	13	13
93	Dynamical evolution of the 2D/3D interface: a hidden driver behind perovskite solar cell instability. *Journal of Materials Chemistry A*, **2020**, 8, 2343-2348	13	60
92	Lead-Free Double Perovskites for Perovskite Solar Cells. *Solar Rrl*, **2020**, 4, 1900306	7.1	64
91	Borderless collaboration is needed for COVID-19-A disease that knows no borders. *Infection Control and Hospital Epidemiology*, **2020**, 41, 1245-1246	2	51
90	Crystal Orientation Drives the Interface Physics at Two/Three-Dimensional Hybrid Perovskites. *Journal of Physical Chemistry Letters*, **2019**, 10, 5713-5720	6.4	29
89	Copper sulfide nanoparticles as hole-transporting-material in a fully-inorganic blocking layers n-i-p perovskite solar cells: Application and working insights. *Applied Surface Science*, **2019**, 478, 607-614	6.7	27
88	Saddle-like, □conjugated, cyclooctatetrathiophene-based, hole-transporting material for perovskite solar cells. *Journal of Materials Chemistry C*, **2019**, 7, 6656-6663	7.1	21
87	Improved efficiency and reduced hysteresis in ultra-stable fully printable mesoscopic perovskite solar cells through incorporation of CuSCN into the perovskite layer. *Journal of Materials Chemistry A*, **2019**, 7, 8073-8077	13	32
86	Non-Planar and Flexible Hole-Transporting Materials from Bis-Xanthene and Bis-Thioxanthene Units for Perovskite Solar Cells. *Helvetica Chimica Acta*, **2019**, 102, e1900056	2	3
85	Pushing the limit of Cs incorporation into FAPbBr3 perovskite to enhance solar cells performances. *APL Materials*, **2019**, 7, 041110	5.7	21
84	Fluorination of Organic Spacer Impacts on the Structural and Optical Response of 2D Perovskites. *Frontiers in Chemistry*, **2019**, 7, 946	5	9
83	A new era for solar energy: hybrid perovskite rocks **2019**, 24-31		3
82	Dimensional tailoring of hybrid perovskites for photovoltaics. *Nature Reviews Materials*, **2019**, 4, 4-22	73.3	440
81	Auto-passivation of crystal defects in hybrid imidazolium/methylammonium lead iodide films by fumigation with methylamine affords high efficiency perovskite solar cells. *Nano Energy*, **2019**, 58, 105-111	17.1	48
80	Co-Solvent Effect in the Processing of the Perovskite:Fullerene Blend Films for Electron Transport Layer-Free Solar Cells. *Journal of Physical Chemistry C*, **2018**, 122, 2512-2520	3.8	16
79	Selective growth of layered perovskites for stable and efficient photovoltaics. *Energy and Environmental Science*, **2018**, 11, 952-959	35.4	233

78	Influence of Charge Transport Layers on Open-Circuit Voltage and Hysteresis in Perovskite Solar Cells. *Joule*, **2018**, 2, 788-798	27.8	147
77	A Facile Preparative Route of Nanoscale Perovskites over Mesoporous Metal Oxide Films and Their Applications to Photosensitizers and Light Emitters. *Advanced Functional Materials*, **2018**, 28, 1803801	15.6	13
76	Picosecond Capture of Photoexcited Electrons Improves Photovoltaic Conversion in MAPbI :C -Doped Planar and Mesoporous Solar Cells. *Advanced Materials*, **2018**, 30, e1801496	24	13
75	Water-Repellent Low-Dimensional Fluorous Perovskite as Interfacial Coating for 20% Efficient Solar Cells. *Nano Letters*, **2018**, 18, 5467-5474	11.5	88
74	Fashioning Fluorous Organic Spacers for Tunable and Stable Layered Hybrid Perovskites. *Chemistry of Materials*, **2018**, 30, 8211-8220	9.6	27
73	Analysis of Photocarrier Dynamics at Interfaces in Perovskite Solar Cells by Time-Resolved Photoluminescence. *Journal of Physical Chemistry C*, **2018**, 122, 26805-26815	3.8	39
72	Hysteresis-Free Lead-Free Double-Perovskite Solar Cells by Interface Engineering. *ACS Energy Letters*, **2018**, 3, 1781-1786	20.1	131
71	Optimization of Stable Quasi-Cubic FAxMA1PbI3 Perovskite Structure for Solar Cells with Efficiency beyond 20%. *ACS Energy Letters*, **2017**, 2, 802-806	20.1	124
70	Femtosecond Charge-Injection Dynamics at Hybrid Perovskite Interfaces. *ChemPhysChem*, **2017**, 18, 2381-2389	3.2	21
69	One-Year stable perovskite solar cells by 2D/3D interface engineering. *Nature Communications*, **2017**, 8, 15684	17.4	1253
68	From Nano- to Micrometer Scale: The Role of Antisolvent Treatment on High Performance Perovskite Solar Cells. *Chemistry of Materials*, **2017**, 29, 3490-3498	9.6	194
67	Molecular engineering of face-on oriented dopant-free hole transporting material for perovskite solar cells with 19% PCE. *Journal of Materials Chemistry A*, **2017**, 5, 7811-7815	13	171
66	Lattice Distortions Drive ElectronHole Correlation within Micrometer-Size Lead-Iodide Perovskite Crystals. *ACS Energy Letters*, **2017**, 2, 265-269	20.1	15
65	Highly efficient perovskite solar cells with a compositionally engineered perovskite/hole transporting material interface. *Energy and Environmental Science*, **2017**, 10, 621-627	35.4	350
64	Molecularly Engineered Phthalocyanines as Hole-Transporting Materials in Perovskite Solar Cells Reaching Power Conversion Efficiency of 17.5%. *Advanced Energy Materials*, **2017**, 7, 1601733	21.8	79
63	Low-Cost TiS2 as Hole-Transport Material for Perovskite Solar Cells. *Small Methods*, **2017**, 1, 1700250	12.8	35
62	Dopant-Free Hole-Transporting Materials for Stable and Efficient Perovskite Solar Cells. *Advanced Materials*, **2017**, 29, 1606555	24	151
61	Large guanidinium cation mixed with methylammonium in lead iodide perovskites for 19% efficient solar cells. *Nature Energy*, **2017**, 2, 972-979	62.3	339

60	Low-Cost Perovskite Solar Cells Employing Dimethoxydiphenylamine-Substituted Bistricyclic Aromatic Enes as Hole Transport Materials. *ChemSusChem*, **2017**, 10, 3825-3832	8.3	30
59	High-Efficiency Perovskite Solar Cells Using Molecularly Engineered, Thiophene-Rich, Hole-Transporting Materials: Influence of Alkyl Chain Length on Power Conversion Efficiency. *Advanced Energy Materials*, **2017**, 7, 1601674	21.8	111
58	Molecular Engineering of Iridium Blue Emitters Using Aryl N-Heterocyclic Carbene Ligands. *European Journal of Inorganic Chemistry*, **2016**, 2016, 5089-5097	2.3	12
57	Beneficial Role of Reduced Graphene Oxide for Electron Extraction in Highly Efficient Perovskite Solar Cells. *ChemSusChem*, **2016**, 9, 3040-3044	8.3	56
56	Copper Thiocyanate Inorganic Hole-Transporting Material for High-Efficiency Perovskite Solar Cells. *ACS Energy Letters*, **2016**, 1, 1112-1117	20.1	98
55	Ion Migration and the Role of Preconditioning Cycles in the Stabilization of the J V Characteristics of Inverted Hybrid Perovskite Solar Cells. *Advanced Energy Materials*, **2016**, 6, 1501453	21.8	139
54	An efficient perovskite solar cell with symmetrical Zn(ii) phthalocyanine infiltrated buffering porous AlO as the hybrid interfacial hole-transporting layer. *Physical Chemistry Chemical Physics*, **2016**, 18, 27083-27089	3.6	31
53	Intrinsic Halide Segregation at Nanometer Scale Determines the High Efficiency of Mixed Cation/Mixed Halide Perovskite Solar Cells. *Journal of the American Chemical Society*, **2016**, 138, 15821-15824	16.4	141
52	Enhanced TiO2/MAPbI3 Electronic Coupling by Interface Modification with PbI2. *Chemistry of Materials*, **2016**, 28, 3612-3615	9.6	54
51	Donor- donor type hole transporting materials: marked bridge effects on optoelectronic properties, solid-state structure, and perovskite solar cell efficiency. *Chemical Science*, **2016**, 7, 6068-6075	9.4	71
50	Carrier trapping and recombination: the role of defect physics in enhancing the open circuit voltage of metal halide perovskite solar cells. *Energy and Environmental Science*, **2016**, 9, 3472-3481	35.4	317
49	Vibrational Response of Methylammonium Lead Iodide: From Cation Dynamics to Phonon-Phonon Interactions. *ChemSusChem*, **2016**, 9, 2994-3004	8.3	38
48	Exceedingly Cheap Perovskite Solar Cells Using Iron Pyrite Hole Transport Materials. *ChemistrySelect*, **2016**, 1, 5316-5319	1.8	18
47	PbI-HMPA Complex Pretreatment for Highly Reproducible and Efficient CHNHPbI Perovskite Solar Cells. *Journal of the American Chemical Society*, **2016**, 138, 14380-14387	16.4	83
46	The Importance of Moisture in Hybrid Lead Halide Perovskite Thin Film Fabrication. *ACS Nano*, **2015** , 9, 9380-93	16.7	366
45	Modulating Exciton Dynamics in Composite Nanocrystals for Excitonic Solar Cells. *Journal of Physical Chemistry Letters*, **2015**, 6, 2489-95	6.4	18
44	Hyperbranched quasi-1D TiO2 nanostructure for hybrid organic-inorganic solar cells. *ACS Applied Materials & Interfaces*, **2015**, 7, 7451-5	9.5	11
43	High efficiency methylammonium lead triiodide perovskite solar cells: the relevance of non-stoichiometric precursors. *Energy and Environmental Science*, **2015**, 8, 3550-3556	35.4	335

42	Role of Microstructure in the Electron-Hole Interaction of Hybrid Lead-Halide Perovskites. *Nature Photonics*, **2015**, 9, 695-701	33.9	203
41	CHNHPbI perovskite single crystals: surface photophysics and their interaction with the environment. *Chemical Science*, **2015**, 6, 7305-7310	9.4	171
40	Modulating the Electron-Hole Interaction in a Hybrid Lead Halide Perovskite with an Electric Field. *Journal of the American Chemical Society*, **2015**, 137, 15451-9	16.4	51
39	The Role of Higher Lying Electronic States in Charge Photogeneration in Organic Solar Cells. *Advanced Functional Materials*, **2015**, 25, 6893-6899	15.6	3
38	Mapping Electric Field-Induced Switchable Poling and Structural Degradation in Hybrid Lead Halide Perovskite Thin Films. *Advanced Energy Materials*, **2015**, 5, 1500962	21.8	179
37	Femtosecond to Microsecond Dynamics of Soret-Band Excited Corroles. *Journal of Physical Chemistry C*, **2015**, 119, 28691-28700	3.8	19
36	Molecular packing and electronic processes in amorphous-like polymer bulk heterojunction solar cells with fullerene intercalation. *Scientific Reports*, **2014**, 4, 5211	4.9	28
35	Supramolecular halogen bond passivation of organic-inorganic halide perovskite solar cells. *Nano Letters*, **2014**, 14, 3247-54	11.5	527
34	Room-temperature treatments for all-inorganic nanocrystal solar cell devices. *Thin Solid Films*, **2014** , 560, 44-48	2.2	4
33	The Raman Spectrum of the CH3NH3PbI3 Hybrid Perovskite: Interplay of Theory and Experiment. *Journal of Physical Chemistry Letters*, **2014**, 5, 279-84	6.4	476
32	The critical role of interfacial dynamics in the stability of organic photovoltaic devices. *Physical Chemistry Chemical Physics*, **2014**, 16, 8294-300	3.6	15
31	Three-dimensional self-assembly of networked branched TiO▯nanocrystal scaffolds for efficient room-temperature processed depleted bulk heterojunction solar cells. *ACS Applied Materials & Interfaces*, **2014**, 6, 5026-33	9.5	6
30	The Impact of the Crystallization Processes on the Structural and Optical Properties of Hybrid Perovskite Films for Photovoltaics. *Journal of Physical Chemistry Letters*, **2014**, 5, 3836-42	6.4	218
29	Excitons versus free charges in organo-lead tri-halide perovskites. *Nature Communications*, **2014**, 5, 3586	17.4	1231
28	Reply to ▯Measuring internal quantum efficiency to demonstrate hot exciton dissociation▯ *Nature Materials*, **2013**, 12, 594-5	27	14
27	Electron-hole diffusion lengths exceeding 1 micrometer in an organometal trihalide perovskite absorber. *Science*, **2013**, 342, 341-4	33.3	7280
26	Panchromatic "Dye-Doped" Polymer Solar Cells: From Femtosecond Energy Relays to Enhanced Photo-Response. *Journal of Physical Chemistry Letters*, **2013**, 4, 442-7	6.4	13
25	Hot exciton dissociation in polymer solar cells. *Nature Materials*, **2013**, 12, 29-33	27	496

24	Polymerization inhibition by triplet state absorption for nanoscale lithography. *Advanced Materials*, **2013**, 25, 904-9	24	46
23	Fabrication of flexible all-inorganic nanocrystal solar cells by room-temperature processing. *Energy and Environmental Science*, **2013**, 6, 1565	35.4	29
22	Charge photogeneration in donor-acceptor conjugated materials: influence of excess excitation energy and chain length. *Journal of the American Chemical Society*, **2013**, 135, 4282-90	16.4	55
21	Ultrafast energy transfer in ultrathin organic donor/acceptor blend. *Scientific Reports*, **2013**, 3, 2073	4.9	34
20	Effect of polymer morphology on P3HT-based solid-state dye sensitized solar cells: an ultrafast spectroscopic investigation. *Optics Express*, **2013**, 21 Suppl 3, A469-74	3.3	15
19	Ultrafast exciton dissociation at donor/acceptor interfaces **2013**,		1
18	Hot Exciton Dissociation at Organic Interfaces. *Materials Research Society Symposia Proceedings*, **2013**, 1537, 1		
17	Ultrafast Charge Separation in Low Band-Gap Polymer Blend for Photovoltaics. *EPJ Web of Conferences*, **2013**, 41, 04010	0.3	1
16	Ultrafast spectroscopic imaging of exfoliated graphene. *Physica Status Solidi (B): Basic Research*, **2012**, 249, 2497-2499	1.3	6
15	Ultrafast internal conversion in a low band gap polymer for photovoltaics: experimental and theoretical study. *Physical Chemistry Chemical Physics*, **2012**, 14, 6367-74	3.6	39
14	Dynamic Microscopy Study of Ultrafast Charge Transfer in a Hybrid P3HT/Hyperbranched CdSe Nanoparticle Blend for Photovoltaics. *Journal of Physical Chemistry Letters*, **2012**, 3, 517-23	6.4	38
13	Influence of Blend Composition on Ultrafast Charge Generation and Recombination Dynamics in Low Band Gap Polymer-Based Organic Photovoltaics. *Journal of Physical Chemistry C*, **2012**, 116, 9838-9844	3.8	25
12	Confocal ultrafast pump-probe spectroscopy: a new technique to explore nanoscale composites. *Nanoscale*, **2012**, 4, 2219-26	7.7	26
11	Boosting Infrared Light Harvesting by Molecular Functionalization of Metal Oxide/Polymer Interfaces in Efficient Hybrid Solar Cells. *Advanced Functional Materials*, **2012**, 22, 2160-2166	15.6	46
10	Transient Absorption Imaging of P3HT:PCBM Photovoltaic Blend: Evidence For Interfacial Charge Transfer State. *Journal of Physical Chemistry Letters*, **2011**, 2, 1099-1105	6.4	161
9	Pump-probe spectroscopy in organic semiconductors: monitoring fundamental processes of relevance in optoelectronics. *Advanced Materials*, **2011**, 23, 5468-85	24	112
8	Sub-micrometer charge modulation microscopy of a high mobility polymeric n-channel field-effect transistor. *Advanced Materials*, **2011**, 23, 5086-90	24	53
7	Investigation of Local Dynamics on the Sub-micron Scale in Organic Blends Using an Ultrafast Confocal Microscope. *Materials Research Society Symposia Proceedings*, **2010**, 1270, 1		

6	Fiber-format stimulated-Raman-scattering microscopy from a single laser oscillator. *Optics Letters*, **2010**, 35, 226-8	3	75
5	Nanoscale imaging of the interface dynamics in polymer blends by femtosecond pump-probe confocal microscopy. *Advanced Materials*, **2010**, 22, 3048-51	24	31
4	Dependence of the two-photon photoluminescence yield of gold nanostructures on the laser pulse duration. *Physical Review B*, **2009**, 80,	3.3	77
3	Ultrafast Confocal Microscope for Functional Imaging of Organic Thin Films. *Springer Proceedings in Physics*, **2009**, 161-165	0.2	
2	Bi-functional interfaces by poly(ionic liquid) treatment in efficient pin and nip perovskite solar cells. *Energy and Environmental Science*,	35.4	21
1	From Bulk to Surface Passivation: Double Role of Chlorine-Doping for Boosting Efficiency of FAPbI 3 -rich Perovskite Solar Cells. *Solar Rrl*,2200038	7.1	3