

Hernán MÃ-guez

List of Publications by Year in descending order

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213
papers

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22132

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213
docs citations

213
times ranked

10158
citing authors

#	ARTICLE	IF	CITATIONS
1	Large-scale synthesis of a silicon photonic crystal with a complete three-dimensional bandgap near 1.5 micrometres. <i>Nature</i> , 2000, 405, 437-440.	13.7	1,512
2	3D Long-range ordering in ein SiO ₂ submicrometer-sphere sintered superstructure. <i>Advanced Materials</i> , 1997, 9, 257-260.	11.1	350
3	Photonic crystal properties of packed submicrometric SiO ₂ spheres. <i>Applied Physics Letters</i> , 1997, 71, 1148-1150.	1.5	334
4	Control of the Photonic Crystal Properties of fcc-Packed Submicrometer SiO ₂ Spheres by Sintering. <i>Advanced Materials</i> , 1998, 10, 480-483.	11.1	309
5	Evidence of FCC Crystallization of SiO ₂ Nanospheres. <i>Langmuir</i> , 1997, 13, 6009-6011.	1.6	293
6	Highly Efficient Perovskite Solar Cells with Tunable Structural Color. <i>Nano Letters</i> , 2015, 15, 1698-1702.	4.5	289
7	Oriented Colloidal-Crystal Thin Films by Spin-Coating Microspheres Dispersed in Volatile Media. <i>Advanced Materials</i> , 2006, 18, 2244-2249.	11.1	273
8	Electrophoretic Deposition To Control Artificial Opal Growth. <i>Langmuir</i> , 1999, 15, 4701-4704.	1.6	270
9	Porous One-Dimensional Photonic Crystals Improve the Power-Conversion Efficiency of Dye-Sensitized Solar Cells. <i>Advanced Materials</i> , 2009, 21, 764-770.	11.1	249
10	Unbroken Perovskite: Interplay of Morphology, Electro-Optical Properties, and Ionic Movement. <i>Advanced Materials</i> , 2016, 28, 5031-5037.	11.1	242
11	Opal Circuits of Light-Planarized Microphotonic Crystal Chips. <i>Advanced Functional Materials</i> , 2002, 12, 425-431.	7.8	217
12	A Polychromic, Fast Response Metallopolymer Gel Photonic Crystal with Solvent and Redox Tunability: A Step Towards Photonic Ink (P-Ink). <i>Advanced Materials</i> , 2003, 15, 503-507.	11.1	207
13	Environmental Effects on the Photophysics of Organic-Inorganic Halide Perovskites. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 2200-2205.	2.1	205
14	Origin of Light-Harvesting Enhancement in Colloidal-Photonic-Crystal-Based Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry B</i> , 2005, 109, 15968-15976.	1.2	201
15	Nanoparticle-Based One-Dimensional Photonic Crystals. <i>Langmuir</i> , 2008, 24, 4430-4434.	1.6	190
16	ABX ₃ Perovskites for Tandem Solar Cells. <i>Joule</i> , 2017, 1, 769-793.	11.7	176
17	Photonic Crystals from Ordered Mesoporous Thin-Film Functional Building Blocks. <i>Advanced Functional Materials</i> , 2007, 17, 1247-1254.	7.8	175
18	CdS photoluminescence inhibition by a photonic structure. <i>Applied Physics Letters</i> , 1998, 73, 1781-1783.	1.5	150

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19	Plasmonic Nanoparticles as Light-Harvesting Enhancers in Perovskite Solar Cells: A User's Guide. ACS Energy Letters, 2016, 1, 323-331.	8.8	143
20	Spectral Response of Opal-Based Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2008, 112, 13-17.	1.5	137
21	Photonic Bandgap Engineering in Germanium Inverse Opals by Chemical Vapor Deposition. Advanced Materials, 2001, 13, 1634-1637.	11.1	131
22	Mechanical stability enhancement by pore size and connectivity control in colloidal crystals by layer-by-layer growth of oxide. Chemical Communications, 2002, , 2736-2737.	2.2	130
23	Dielectric Planar Defects in Colloidal Photonic Crystal Films. Advanced Materials, 2004, 16, 346-349.	11.1	123
24	Towards the synthetic all-optical computer: science fiction or reality?. Journal of Materials Chemistry, 2004, 14, 781-794.	6.7	120
25	Response of Nanoparticle-Based One-Dimensional Photonic Crystals to Ambient Vapor Pressure. Langmuir, 2008, 24, 9135-9139.	1.6	114
26	Porous one dimensional photonic crystals: novel multifunctional materials for environmental and energy applications. Energy and Environmental Science, 2011, 4, 4800.	15.6	114
27	Novel approaches to flexible visible transparent hybrid films for ultraviolet protection. Journal of Polymer Science, Part B: Polymer Physics, 2012, 50, 945-956.	2.4	111
28	Sorption Properties of Mesoporous Multilayer Thin Films. Journal of Physical Chemistry C, 2008, 112, 3157-3163.	1.5	110
29	Origin of Light-Induced Photophysical Effects in Organic Metal Halide Perovskites in the Presence of Oxygen. Journal of Physical Chemistry Letters, 2018, 9, 3891-3896.	2.1	109
30	Absorption Enhancement in Organic-Inorganic Halide Perovskite Films with Embedded Plasmonic Gold Nanoparticles. Journal of Physical Chemistry C, 2015, 119, 18635-18640.	1.5	105
31	Synthesis and Photonic Bandgap Characterization of Polymer Inverse Opals. Advanced Materials, 2001, 13, 393-396.	11.1	101
32	Optical analysis of CH ₃ NH ₃ Sn _x Pb _{1-x} I ₃ absorbers: a roadmap for perovskite-on-perovskite tandem solar cells. Journal of Materials Chemistry A, 2016, 4, 11214-11221.	5.2	101
33	Synthesis of inverse opals. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2002, 202, 281-290.	2.3	100
34	High voltage vacuum-deposited CH ₃ NH ₃ PbI ₃ CH ₃ NH ₃ PbI ₃ tandem solar cells. Energy and Environmental Science, 2018, 11, 3292-3297.	15.6	98
35	Refractive Index Properties of Calcined Silica Submicrometer Spheres. Langmuir, 2002, 18, 1942-1944.	1.6	96
36	Bragg diffraction from indium phosphide infilled fcc silica colloidal crystals. Physical Review B, 1999, 59, 1563-1566.	1.1	93

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37	Silicon Inverse Opal—A Platform for Photonic Bandgap Research. <i>Advanced Materials</i> , 2004, 16, 1471-1476.	11.1	93
38	Germanium FCC Structure from a Colloidal Crystal Template. <i>Langmuir</i> , 2000, 16, 4405-4408.	1.6	87
39	Full spectrum enhancement of the light harvesting efficiency of dye sensitized solar cells by including colloidal photonic crystal multilayers. <i>Applied Physics Letters</i> , 2006, 88, 193110.	1.5	86
40	Oriented Free-Standing Three-Dimensional Silicon Inverted Colloidal Photonic Crystal Microfibers. <i>Advanced Materials</i> , 2002, 14, 1805-1808.	11.1	82
41	Perfecting Imperfection—Designer Defects in Colloidal Photonic Crystals. <i>Advanced Materials</i> , 2006, 18, 2779-2785.	11.1	82
42	Photoconducting Bragg Mirrors based on TiO_2 Nanoparticle Multilayers. <i>Advanced Functional Materials</i> , 2008, 18, 2708-2715.	7.8	81
43	Selective UV Reflecting Mirrors Based on Nanoparticle Multilayers. <i>Advanced Functional Materials</i> , 2013, 23, 2805-2811.	7.8	76
44	Efficient Transparent Thin Dye Solar Cells Based on Highly Porous 1D Photonic Crystals. <i>Advanced Functional Materials</i> , 2012, 22, 1303-1310.	7.8	74
45	Photonic crystal made by close packing SiO_2 submicron spheres. <i>Superlattices and Microstructures</i> , 1997, 22, 399-404.	1.4	73
46	Theoretical Analysis of the Performance of One-Dimensional Photonic Crystal-Based Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2010, 114, 3681-3687.	1.5	73
47	Building Nanocrystalline Planar Defects within Self-Assembled Photonic Crystals by Spin-Coating. <i>Advanced Materials</i> , 2006, 18, 1183-1187.	11.1	72
48	Optical properties of a three-dimensional silicon square spiral photonic crystal. <i>Photonics and Nanostructures - Fundamentals and Applications</i> , 2003, 1, 37-42.	1.0	70
49	Building Tunable Planar Defects into Photonic Crystals Using Polyelectrolyte Multilayers. <i>Advanced Materials</i> , 2005, 17, 1912-1916.	11.1	70
50	Band spectroscopy of colloidal photonic crystal films. <i>Applied Physics Letters</i> , 2004, 84, 1239-1241.	1.5	68
51	Enhanced Photoconductivity in Thin-Film Semiconductors Optically Coupled to Photonic Crystals. <i>Advanced Materials</i> , 2007, 19, 4177-4182.	11.1	65
52	Experimental Demonstration of the Mechanism of Light Harvesting Enhancement in Photonic-Crystal-Based Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2009, 113, 1150-1154.	1.5	65
53	Strong Quantum Confinement and Fast Photoemission Activation in $\text{CH}_3\text{NH}_3\text{PbI}_3$ Perovskite Nanocrystals Grown within Periodically Mesostuctured Films. <i>Advanced Optical Materials</i> , 2017, 5, 1601087.	3.6	65
54	A New Synthetic Approach to Silicon Colloidal Photonic Crystals with a Novel Topology and an Omni-Directional Photonic Bandgap: Micromolding in Inverse Silica Opal (MISO). <i>Advanced Materials</i> , 2003, 15, 597-600.	11.1	64

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55	TiO ₂ â€“SiO ₂ one-dimensional photonic crystals of controlled porosity by glancing angle physical vapour deposition. <i>Journal of Materials Chemistry</i> , 2010, 20, 6408.	6.7	64
56	Edward-Wilkinson Behavior of Crystal Surfaces Grown By Sedimentation of SiO ₂ Nanospheres. <i>Physical Review Letters</i> , 1996, 77, 4572-4575.	2.9	62
57	Effect of nanostructured electrode architecture and semiconductor deposition strategy on the photovoltaic performance of quantum dot sensitized solar cells. <i>Electrochimica Acta</i> , 2012, 75, 139-147.	2.6	62
58	Barium Titanate Inverted Opalsâ€“Synthesis, Characterization, and Optical Properties. <i>Advanced Functional Materials</i> , 2002, 12, 71.	7.8	61
59	Refractive Index Patterns in Silicon Inverted Colloidal Photonic Crystals. <i>Advanced Materials</i> , 2003, 15, 1167-1172.	11.1	61
60	Molding with nanoparticle-based one-dimensional photonic crystals: a route to flexible and transferable Bragg mirrors of high dielectric contrast. <i>Journal of Materials Chemistry</i> , 2009, 19, 3144.	6.7	61
61	Optical Description of Mesostuctured Organicâ€“Inorganic Halide Perovskite Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 48-53.	2.1	59
62	Electron injection and scaffold effects in perovskite solar cells. <i>Journal of Materials Chemistry C</i> , 2017, 5, 634-644.	2.7	58
63	Collective osmotic shock in ordered materials. <i>Nature Materials</i> , 2012, 11, 53-57.	13.3	56
64	Experimental and theoretical analysis of the self-focusing of light by a photonic crystal lens. <i>Physical Review B</i> , 2004, 69, .	1.1	54
65	Replicating the Structure of a Crosslinked Polyferrocenylsilane Inverse Opal in the Form of a Magnetic Ceramic. <i>Advanced Functional Materials</i> , 2002, 12, 382.	7.8	50
66	Introducing structural colour in DSCs by using photonic crystals: interplay between conversion efficiency and optical properties. <i>Energy and Environmental Science</i> , 2012, 5, 8238.	15.6	50
67	Effect of Diffuse Light Scattering Designs on the Efficiency of Dye Solar Cells: An Integral Optical and Electrical Description. <i>Journal of Physical Chemistry C</i> , 2012, 116, 11426-11433.	1.5	48
68	Flexible, Adhesive, and Biocompatible Bragg Mirrors Based on Polydimethylsiloxane Infiltrated Nanoparticle Multilayers. <i>Chemistry of Materials</i> , 2010, 22, 3909-3915.	3.2	47
69	Growth of Mesoporous Materials within Colloidal Crystal Films by Spin-Coating. <i>Journal of Physical Chemistry B</i> , 2005, 109, 19643-19649.	1.2	44
70	Surface resonant modes in colloidal photonic crystals. <i>Physical Review B</i> , 2005, 71, .	1.1	42
71	Vapor swellable colloidal photonic crystals with pressure tunability. <i>Journal of Materials Chemistry</i> , 2005, 15, 133-138.	6.7	42
72	Photonic band gap properties of CdS-in-opal systems. <i>Applied Physics Letters</i> , 2001, 78, 3181-3183.	1.5	40

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73	Angular response of photonic crystal based dye sensitized solar cells. <i>Energy and Environmental Science</i> , 2013, 6, 1260.	15.6	40
74	Three-Dimensional Optical Tomography and Correlated Elemental Analysis of Hybrid Perovskite Microstructures: An Insight into Defect-Related Lattice Distortion and Photoinduced Ion Migration. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 5227-5234.	2.1	37
75	Optical Properties of Colloidal Photonic Crystals Confined in Rectangular Microchannels. <i>Langmuir</i> , 2003, 19, 3479-3485.	1.6	36
76	Mesostructured Thin Films as Responsive Optical Coatings of Photonic Crystals. <i>Small</i> , 2009, 5, 2309-2315.	5.2	36
77	Versatility and multifunctionality of highly reflecting Bragg mirrors based on nanoparticle multilayers. <i>Journal of Materials Chemistry</i> , 2010, 20, 8240.	6.7	36
78	Tailoring Photonic Crystals with Nanometer-Scale Precision Using Polyelectrolyte Multilayers. <i>Langmuir</i> , 2005, 21, 499-503.	1.6	35
79	Control over the Structural and Optical Features of Nanoparticle-Based One-Dimensional Photonic Crystals. <i>Langmuir</i> , 2009, 25, 2443-2448.	1.6	35
80	Dye sensitized solar cells as optically random photovoltaic media. <i>Energy and Environmental Science</i> , 2014, 7, 689.	15.6	35
81	Materials chemistry approaches to the control of the optical features of perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2017, 5, 20561-20578.	5.2	35
82	Interplay of Resonant Cavity Modes with Localized Surface Plasmons: Optical Absorption Properties of Bragg Stacks Integrating Gold Nanoparticles. <i>Advanced Materials</i> , 2011, 23, 2108-2112.	11.1	34
83	Solution processed high refractive index contrast distributed Bragg reflectors. <i>Journal of Materials Chemistry C</i> , 2016, 4, 4532-4537.	2.7	33
84	Efficient bifacial dye-sensitized solar cells through disorder by design. <i>Journal of Materials Chemistry A</i> , 2016, 4, 1953-1961.	5.2	33
85	Porous Supramolecularly Templated Optical Resonators Built in 1D Photonic Crystals. <i>Advanced Functional Materials</i> , 2011, 21, 2534-2540.	7.8	32
86	Optical interference for the matching of the external and internal quantum efficiencies in organic photovoltaic cells. <i>Solar Energy Materials and Solar Cells</i> , 2012, 104, 87-91.	3.0	32
87	Mesoporous Matrices as Hosts for Metal Halide Perovskite Nanocrystals. <i>Advanced Optical Materials</i> , 2020, 8, 1901868.	3.6	30
88	Low-temperature synthesis of Ge nanocrystals in zeolite Y. <i>Applied Physics Letters</i> , 1996, 69, 2347-2349.	1.5	29
89	Photonic crystals for laser action. <i>Optical Materials</i> , 1999, 13, 187-192.	1.7	29
90	Effect of extinction on the high-energy optical response of photonic crystals. <i>Physical Review B</i> , 2007, 75, .	1.1	29

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91	Integration of Photonic Crystals into Flexible Dye Solar Cells: A Route toward Bendable and Adaptable Optoelectronic Devices Displaying Structural Color and Enhanced Efficiency. <i>Advanced Optical Materials</i> , 2016, 4, 464-471.	3.6	29
92	Disentangling Electron-Phonon Coupling and Thermal Expansion Effects in the Band Gap Renormalization of Perovskite Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 569-575.	2.1	29
93	Growth Dynamics of Self-Assembled Colloidal Crystal Thin Films. <i>Langmuir</i> , 2007, 23, 9933-9938.	1.6	28
94	Fluorescent Humidity Sensors Based on Photonic Resonators. <i>Advanced Optical Materials</i> , 2017, 5, 1700663.	3.6	28
95	Localized surface plasmon effects on the photophysics of perovskite thin films embedding metal nanoparticles. <i>Journal of Materials Chemistry C</i> , 2020, 8, 916-921.	2.7	28
96	Colloidal photonic crystal microchannel array with periodically modulated thickness. <i>Applied Physics Letters</i> , 2002, 81, 2493-2495.	1.5	27
97	Towards a full understanding of the growth dynamics and optical response of self-assembled photonic colloidal crystal films. <i>Journal of Materials Chemistry</i> , 2009, 19, 185-190.	6.7	26
98	Single-step fabrication process of 1-D photonic crystals coupled to nanocolumnar TiO ₂ layers to improve DSC efficiency. <i>Optics Express</i> , 2015, 23, A1642.	1.7	25
99	Internal quantum efficiency and time signals from intensity-modulated photocurrent spectra of perovskite solar cells. <i>Journal of Applied Physics</i> , 2020, 128, .	1.1	25
100	Face centered cubic photonic bandgap materials based on opal-semiconductor composites. <i>Journal of Lightwave Technology</i> , 1999, 17, 1975-1981.	2.7	24
101	Environmentally responsive nanoparticle-based luminescent optical resonators. <i>Nanoscale</i> , 2010, 2, 936.	2.8	24
102	Interplay between crystal-size and disorder effects in the high-energy optical response of photonic crystal slabs. <i>Physical Review B</i> , 2007, 76, .	1.1	23
103	Photophysical Analysis of the Formation of Organic-Inorganic Trihalide Perovskite Films: Identification and Characterization of Crystal Nucleation and Growth. <i>Journal of Physical Chemistry C</i> , 2016, 120, 3071-3076.	1.5	23
104	Analysis of wave propagation in a two-dimensional photonic crystal with negative index of refraction: plane wave decomposition of the Bloch modes. <i>Optics Express</i> , 2005, 13, 4160.	1.7	22
105	Synthesis of Spherical Down- and Up-Conversion NaYF ₄ -Based Nanophosphors with Tunable Size in Ethylene Glycol without Surfactants or Capping Additives. <i>European Journal of Inorganic Chemistry</i> , 2008, 2008, 4517-4524.	1.0	22
106	Enhanced diffusion through porous nanoparticle optical multilayers. <i>Journal of Materials Chemistry</i> , 2012, 22, 1751-1757.	6.7	22
107	Porous One-Dimensional Photonic Crystal Coatings for Gas Detection. <i>IEEE Sensors Journal</i> , 2010, 10, 1206-1212.	2.4	21
108	Nanolevitation Phenomena in Real Plane-Parallel Systems Due to the Balance between Casimir and Gravity Forces. <i>Journal of Physical Chemistry C</i> , 2015, 119, 5663-5670.	1.5	21

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109	Photonic Tuning of the Emission Color of Nanophosphor Films Processed at High Temperature. <i>Advanced Optical Materials</i> , 2017, 5, 1700099.	3.6	21
110	Experimental and theoretical analysis of the intensity of beams diffracted by three-dimensional photonic crystals. <i>Physical Review B</i> , 2008, 78, .	1.1	20
111	Fully stable numerical calculations for finite one-dimensional structures: Mapping the transfer matrix method. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2014, 134, 9-20.	1.1	20
112	Highly Efficient and Environmentally Stable Flexible Color Converters Based on Confined $\text{CH}_3\text{NH}_3\text{PbBr}_3$ Nanocrystals. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 38334-38340.	4.0	20
113	Efficient third harmonic generation from FAPbBr_3 perovskite nanocrystals. <i>Journal of Materials Chemistry C</i> , 2020, 8, 15990-15995.	2.7	20
114	Local Rearrangement of the Iodide Defect Structure Determines the Phase Segregation Effect in Mixed-Halide Perovskites. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 4911-4916.	2.1	20
115	Persistent luminescent nanoparticles: Challenges and opportunities for a shimmering future. <i>Journal of Applied Physics</i> , 2021, 130, .	1.1	20
116	Atmospheric pressure MOCVD growth of crystalline InP in opals. <i>Journal of Crystal Growth</i> , 1998, 193, 9-15.	0.7	19
117	Maximized performance of dye solar cells on plastic: a combined theoretical and experimental optimization approach. <i>Energy and Environmental Science</i> , 2016, 9, 2061-2071.	15.6	19
118	Flexible and Adaptable Light-Emitting Coatings for Arbitrary Metal Surfaces based on Optical Tamm Mode Coupling. <i>Advanced Optical Materials</i> , 2018, 6, 1700560.	3.6	19
119	Absorption enhancement in methylammonium lead iodide perovskite solar cells with embedded arrays of dielectric particles. <i>Optics Express</i> , 2018, 26, A865.	1.7	19
120	Premelting of ice adsorbed on a rock surface. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 11362-11373.	1.3	19
121	Resonant Photocurrent Generation in Dye-Sensitized Periodically Nanostructured Photoconductors by Optical Field Confinement Effects. <i>Journal of the American Chemical Society</i> , 2013, 135, 7803-7806.	6.6	18
122	Panchromatic porous specular back reflectors for efficient transparent dye solar cells. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 663-668.	1.3	17
123	Fine Tuning the Emission Properties of Nanoemitters in Multilayered Structures by Deterministic Control of their Local Photonic Environment. <i>Small</i> , 2015, 11, 2727-2732.	5.2	17
124	Absorption and Emission of Light in Optoelectronic Nanomaterials: The Role of the Local Optical Environment. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 2077-2084.	2.1	17
125	Tamm Plasmons Directionally Enhance Rare-Earth Nanophosphor Emission. <i>ACS Photonics</i> , 2019, 6, 634-641.	3.2	17
126	Mechanism of Photoluminescence Intermittency in Organic-Inorganic Perovskite Nanocrystals. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 6344-6349.	4.0	17

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127	Enhanced Directional Light Extraction from Patterned Rare-Earth Phosphor Films. <i>Advanced Optical Materials</i> , 2021, 9, 2001611.	3.6	17
128	Physical origin of the high energy optical response of three dimensional photonic crystals. <i>Optics Express</i> , 2007, 15, 17754.	1.7	16
129	Relation between growth dynamics and the spatial distribution of intrinsic defects in self-assembled colloidal crystal films. <i>Applied Physics Letters</i> , 2008, 92, .	1.5	16
130	Adaptable Ultraviolet Reflecting Polymeric Multilayer Coatings of High Refractive Index Contrast. <i>Advanced Optical Materials</i> , 2015, 3, 1633-1639.	3.6	16
131	Flexible Distributed Bragg Reflectors from Nanocolumnar Templates. <i>Advanced Optical Materials</i> , 2015, 3, 171-175.	3.6	16
132	Highly Efficient Transparent Nanophosphor Films for Tunable White-Light-Emitting Layered Coatings. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 4219-4225.	4.0	16
133	Ligand-Free MAPbI ₃ Quantum Dot Solar Cells Based on Nanostructured Insulating Matrices. <i>Solar Rrl</i> , 2021, 5, 2100204.	3.1	16
134	Phase delay and group velocity determination at a planar defect state in three dimensional photonic crystals. <i>Applied Physics Letters</i> , 2007, 90, 101113.	1.5	15
135	Design and realization of transparent solar modules based on luminescent solar concentrators integrating nanostructured photonic crystals. <i>Progress in Photovoltaics: Research and Applications</i> , 2015, 23, 1785-1792.	4.4	15
136	Photonic structuring improves the colour purity of rare-earth nanophosphors. <i>Materials Horizons</i> , 2018, 5, 661-667.	6.4	15
137	Spatially Resolved Analysis of Defect Annihilation and Recovery Dynamics in Metal Halide Perovskite Single Crystals. <i>ACS Applied Energy Materials</i> , 2019, 2, 6967-6972.	2.5	15
138	Characterization of Mesoporous Thin Films by Specular Reflectance Porosimetry. <i>Langmuir</i> , 2012, 28, 13777-13782.	1.6	14
139	Integration of Gold Nanoparticles in Optical Resonators. <i>Langmuir</i> , 2012, 28, 9161-9167.	1.6	14
140	Multidirectional Light Harvesting Enhancement in Dye Solar Cells by Surface Patterning. <i>Advanced Optical Materials</i> , 2014, 2, 879-884.	3.6	14
141	Casimir-Lifshitz Force Based Optical Resonators. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 5856-5860.	2.1	14
142	Flexible nanophosphor films doped with Mie resonators for enhanced out-coupling of the emission. <i>Journal of Materials Chemistry C</i> , 2019, 7, 267-274.	2.7	14
143	Spin-on Nanostructured Silicon-Silica Film Displaying Room-Temperature Nanosecond Lifetime Photoluminescence. <i>Advanced Materials</i> , 2003, 15, 572-576.	11.1	13
144	Optical Analysis of the Fine Crystalline Structure of Artificial Opal Films. <i>Langmuir</i> , 2009, 25, 12860-12864.	1.6	13

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145	Biocompatible Films with Tailored Spectral Response for Prevention of DNA Damage in Skin Cells. <i>Advanced Healthcare Materials</i> , 2015, 4, 1944-1948.	3.9	13
146	Effect of temperature variations on equilibrium distances in levitating parallel dielectric plates interacting through Casimir forces. <i>Journal of Applied Physics</i> , 2016, 119, .	1.1	12
147	Ultrastrong Exciton-Photon Coupling in Broadband Solar Absorbers. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 10706-10712.	2.1	11
148	Aperiodic Metal-Dielectric Multilayers as Highly Efficient Sunlight Reflectors. <i>Advanced Optical Materials</i> , 2017, 5, 1600833.	3.6	10
149	Highly Versatile Upconverting Oxyfluoride-Based Nanophosphor Films. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 30051-30060.	4.0	10
150	Growth of Tin Oxide in Opal. <i>Chemical Vapor Deposition</i> , 2000, 6, 283-285.	1.4	9
151	Towards photonic ink (P-ink): a polychrome, fast response metallopolymer gel photonic crystal device. <i>Macromolecular Symposia</i> , 2003, 196, 63-69.	0.4	9
152	Light generation at the anomalous dispersion high energy range of a nonlinear opal film. <i>Optics Express</i> , 2009, 17, 12210.	1.7	9
153	Conformal Growth of Organic Luminescent Planar Defects within Artificial Opals. <i>Chemistry of Materials</i> , 2010, 22, 379-385.	3.2	9
154	Full solution processed mesostructured optical resonators integrating colloidal semiconductor quantum dots. <i>Nanoscale</i> , 2015, 7, 16583-16589.	2.8	9
155	Light-Harvesting Properties of a Subphthalocyanine Solar Absorber Coupled to an Optical Cavity. <i>Solar Rrl</i> , 2021, 5, 2100308.	3.1	9
156	Design and Realization of a Novel Optically Disordered Material: A Demonstration of a Mie Glass. <i>Advanced Optical Materials</i> , 2017, 5, 1700025.	3.6	8
157	Enhanced up-conversion photoluminescence in fluoride-oxyfluoride nanophosphor films by embedding gold nanoparticles. <i>Materials Advances</i> , 2022, 3, 4235-4242.	2.6	8
158	Synergistic strategies for the preparation of highly efficient dye-sensitized solar cells on plastic substrates: combination of chemical and physical sintering. <i>RSC Advances</i> , 2015, 5, 76795-76803.	1.7	7
159	The Complex Interplay of Lead Halide Perovskites with Their Surroundings. <i>Advanced Optical Materials</i> , 2021, 9, 2100133.	3.6	7
160	Gallium Arsenide Infiltration of Nanoporous Multilayers: A Route to High-Dielectric-Contrast One-Dimensional Photonic Crystals. <i>Small</i> , 2010, 6, 1283-1287.	5.2	6
161	Symmetry analysis of the numerical instabilities in the transfer matrix method. <i>Journal of Optics (United Kingdom)</i> , 2013, 15, 125719.	1.0	6
162	Nanoparticle Bragg reflectors: A smart analytical tool for biosensing. <i>Biosensors and Bioelectronics: X</i> , 2019, 1, 100012.	0.9	6

#	ARTICLE	IF	CITATIONS
163	Optoelectronic Devices Based on Scaffold Stabilized Blackâ€Phase CsPbI ₃ Nanocrystals. <i>Advanced Optical Materials</i> , 2022, 10, .	3.6	6
164	Comment on â€œObservation of higher-order diffraction features in self-assembled photonic crystalsâ€. <i>Physical Review A</i> , 2008, 78, .	1.0	5
165	Trapping of Gas Bubbles in Water at a Finite Distance below a Waterâ€Solid Interface. <i>Langmuir</i> , 2019, 35, 4218-4223.	1.6	5
166	Dipole reorientation and local density of optical states influence the emission of light-emitting electrochemical cells. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 92-96.	1.3	5
167	Optical interference effects on the Casimir-Lifshitz force in multilayer structures. <i>Physical Review A</i> , 2020, 101, .	1.0	5
168	The Role of the Atmosphere on the Photophysics of Ligandâ€Free Leadâ€Halide Perovskite Nanocrystals. <i>Advanced Optical Materials</i> , 2021, 9, 2100605.	3.6	5
169	Effect of Spatial Inhomogeneity on Quantum Trapping. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 4513-4519.	2.1	5
170	Angular dependence of the intensity of light beams diffracted by colloidal crystals. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2010, 27, 1394.	0.9	4
171	Facile Synthesis of Hybrid Organicâ€Inorganic Perovskite Microcubes of Optical Quality Using Polar Antisolvents. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 35505-35510.	4.0	4
172	Improving the Bulk Emission Properties of CH ₃ NH ₃ PbBr ₃ by Modifying the Halide-Related Defect Structure. <i>Journal of Physical Chemistry C</i> , 2018, 122, 27250-27255.	1.5	4
173	Finite Size Effects on Light Propagation throughout Random Media: Relation between Optical Properties and Scattering Event Statistics. <i>Advanced Optical Materials</i> , 2020, 8, 1901196.	3.6	4
174	Angular emission properties of a layer of rare-earth based nanophosphors embedded in one-dimensional photonic crystal coatings. <i>Applied Physics Letters</i> , 2011, 99, 051111.	1.5	3
175	Nanometerâ€Scale Precision Tuning of 3D Photonic Crystals Made Possible Using Polyelectrolytes with Controlled Short Chain Length and Narrow Polydispersity. <i>Advanced Materials Interfaces</i> , 2014, 1, 1300051.	1.9	3
176	Optical Responses of Localized and Extended Modes in a Mesoporous Layer on Plasmonic Array to Isopropanol Vapor. <i>Journal of Physical Chemistry C</i> , 2020, 124, 5772-5779.	1.5	3
177	Transparent Phosphor Thin Films Based on Rareâ€Earthâ€Doped Garnets: Building Blocks for Versatile Persistent Luminescence Materials. <i>Advanced Photonics Research</i> , 2022, 3, .	1.7	3
178	Anomalous group velocity at the high energy range of a 3D photonic nanostructure. <i>Optics Express</i> , 2010, 18, 15682.	1.7	2
179	Analysis of artificial opals by scanning near field optical microscopy. <i>Journal of Applied Physics</i> , 2011, 109, 083514.	1.1	2
180	Monitoring, Modeling, and Optimization of Lead Halide Perovskite Nanocrystal Growth within Porous Matrices. <i>Journal of Physical Chemistry C</i> , 2020, 124, 8041-8046.	1.5	2

#	ARTICLE	IF	CITATIONS
181	Full processing of colloidal photonic crystals by spin coating. , 2006, , .		1
182	Tunable defects in colloidal photonic crystals. , 2006, , .		1
183	Mesoporous Hybrid Thin Films: Building Blocks for Complex Materials with Spatial Organization. Materials Research Society Symposia Proceedings, 2007, 1007, 1.	0.1	1
184	High band anomalous group velocity dispersion for the enhancement of the nonlinear interaction. , 2007, , .		1
185	Enhanced power conversion efficiency in solar cells coupled to photonic crystals. Proceedings of SPIE, 2007, , .	0.8	1
186	Anomalous group velocity at the high energy range of real 3D photonic nanostructures. , 2010, , .		1
187	Anomalous light propagation, finite size-effects and losses in real 3D photonic nanostructures. , 2011, , .		1
188	Sunlight Absorption Engineering for Thermophotovoltaics: Contributions from the Optical Design. ChemSusChem, 2015, 8, 786-788.	3.6	1
189	Photophysical Processes in Metal Halide Perovskites. Advanced Optical Materials, 2021, 9, 2101738.	3.6	1
190	CHAPTER 1. Responsive Bragg Reflectors. RSC Smart Materials, 2013, , 1-20.	0.1	1
191	Transparent Phosphor Thin Films Based on Rare-Earth-Doped Garnets: Building Blocks for Versatile Persistent Luminescence Materials. Advanced Photonics Research, 2022, 3, .	1.7	1
192	Optical properties of surface modified self-assembled photonic crystals. , 0, , .		0
193	Origin of enhanced light harvesting in colloidal-crystal-based dye-sensitized solar cells. , 2006, 6197, 187.		0
194	Full processing of Colloidal Photonic Crystals by Spin-Coating. , 2007, , .		0
195	Integration of photonic crystals in dye sensitized solar cells. , 2008, , .		0
196	Anomalous group velocity in a 3D photonic nanostructure. , 2009, , .		0
197	Nonlinear light generation at the high energy range of a 3D opal film. , 2009, , .		0
198	Nanoparticle Based Multilayers as Multifunctional Optical Coatings. Materials Research Society Symposia Proceedings, 2009, 1188, 15.	0.1	0

#	ARTICLE	IF	CITATIONS
199	Flexible and transferable one-dimensional photonic crystals based on polymer infiltrated nanoparticle multilayers. Proceedings of SPIE, 2010, , .	0.8	0
200	Mesostructured thin films as photonic crystal building blocks for sensing applications. Proceedings of SPIE, 2010, , .	0.8	0
201	Increased efficiency of DSC coupled to one-dimensional photonic crystals. Proceedings of SPIE, 2010, , .	0.8	0
202	All-nanoparticle-based optical resonators for detection of gases and liquids. , 2010, , .		0
203	Toward a full understanding of the growth dynamics, optical response, and crystalline structure of self-assembled photonic colloidal crystal films. Proceedings of SPIE, 2010, , .	0.8	0
204	Full solution process approach for deterministic control of light emission at the nanoscale (Conference Presentation). , 2016, , .		0
205	Photonic Tuning of Nanophosphor Transparent thin films. , 2017, , .		0
206	Inverse Opals Fabrication. , 2001, , 219-227.		0
207	Advances in the use of MOCVD methods for the production of novel photonic bandgap materials. European Physical Journal Special Topics, 2002, 12, 63-68.	0.2	0
208	Modeling the Optical Response of Three-Dimensional Disordered Structures Using the "Korringa" "Kohn" "Rostoker Method. Series in Optics and Optoelectronics, 2012, , 39-54.	0.0	0
209	Interplay of Order and Disorder in the High-Energy Optical Response of Three-Dimensional Photonic Crystals. Series in Optics and Optoelectronics, 2012, , 301-322.	0.0	0
210	Optimizing light harvesting and charge collection properties of plastic dye-sensitized solar cells with theoretical modeling and synergistic approach. , 2015, , .		0
211	Nanophotonics Tunes Rare-Earth Nanophosphor Emission. , 2019, , .		0
212	Transparent nanophosphor films for efficient white-light generation. , 2019, , .		0
213	Optical Resonators based on Casimir Forces -INVITED. EPJ Web of Conferences, 2020, 238, 10003.	0.1	0