HernÃ¡n MÃ-guez

List of Publications by Year
in descending order

213 papers	11,885 citations	22132 59 h-index	29127 104 g-index
213 all docs	213 docs citations	213 times ranked	10158 citing authors

#	Article	IF	Citations
1	Optoelectronic Devices Based on Scaffold Stabilized Blackâ€Phase CsPbI₃Nanocrystals. Advanced Optical Materials, 2022, 10, .	3.6	6
2	Enhanced up-conversion photoluminescence in fluorideâ€“oxyfluoride nanophosphor films by embedding gold nanoparticles. Materials Advances, 2022, 3, 4235-4242.	2.6	8
3	Transparent Phosphor Thin Films Based on Rareâ€Earthâ€Doped Garnets: Building Blocks for Versatile Persistent Luminescence Materials. Advanced Photonics Research, 2022, 3, .	1.7	3
4	Effect of Spatial Inhomogeneity on Quantum Trapping. Journal of Physical Chemistry Letters, 2022, 13, 4513-4519.	2.1	5
5	Transparent Phosphor Thin Films Based on Rareâ€Earthâ€Doped Garnets: Building Blocks for Versatile Persistent Luminescence Materials. Advanced Photonics Research, 2022, 3, .	1.7	1
6	Enhanced Directional Light Extraction from Patterned Rareâ€Earth Phosphor Films. Advanced Optical Materials, 2021, 9, 2001611.	3.6	17
7	The Complex Interplay of Lead Halide Perovskites with Their Surroundings. Advanced Optical Materials, 2021, 9, 2100133.	3.6	7
8	The Role of the Atmosphere on the Photophysics of Ligandâ€Free Leadâ€Halide Perovskite Nanocrystals. Advanced Optical Materials, 2021, 9, 2100605.	3.6	5
9	Highly Versatile Upconverting Oxyfluoride-Based Nanophosphor Films. ACS Applied Materials & Interfaces, 2021, 13, 30051-30060.	4.0	10
10	Lightâ€Harvesting Properties of a Subphthalocyanine Solar Absorber Coupled to an Optical Cavity. Solar Rrl, 2021, 5, 2100308.	3.1	9
11	Ligandâ€Free MAPbI₃Quantum Dot Solar Cells Based on Nanostructured Insulating Matrices. Solar Rrl, 2021, 5, 2100204.	3.1	16
12	Persistent luminescent nanoparticles: Challenges and opportunities for a shimmering future. Journal of Applied Physics, 2021, 130, .	1.1	20
13	Photophysical Processes in Metal Halide Perovskites. Advanced Optical Materials, 2021, 9, 2101738.	3.6	1
14	Disentangling Electronâ€“Phonon Coupling and Thermal Expansion Effects in the Band Gap Renormalization of Perovskite Nanocrystals. Journal of Physical Chemistry Letters, 2021, 12, 569-575.	2.1	29
15	Ultrastrong Excitonâ€“Photon Coupling in Broadband Solar Absorbers. Journal of Physical Chemistry Letters, 2021, 12, 10706-10712.	2.1	11
16	Dipole reorientation and local density of optical states influence the emission of light-emitting electrochemical cells. Physical Chemistry Chemical Physics, 2020, 22, 92-96.	1.3	5
17	Localized surface plasmon effects on the photophysics of perovskite thin films embedding metal nanoparticles. Journal of Materials Chemistry C, 2020, 8, 916-921.	2.7	28
18	Finite Size Effects on Light Propagation throughout Random Media: Relation between Optical Properties and Scattering Event Statistics. Advanced Optical Materials, 2020, 8, 1901196.	3.6	4

#	Article	IF	Citations
19	Internal quantum efficiency and time signals from intensity-modulated photocurrent spectra of perovskite solar cells. Journal of Applied Physics, 2020, 128, .	1.1	25
20	Efficient third harmonic generation from FAPbBr₃ perovskite nanocrystals. Journal of Materials Chemistry C, 2020, 8, 15990-15995.	2.7	20
21	Local Rearrangement of the Iodide Defect Structure Determines the Phase Segregation Effect in Mixed-Halide Perovskites. Journal of Physical Chemistry Letters, 2020, 11, 4911-4916.	2.1	20
22	Optical interference effects on the Casimir-Lifshitz force in multilayer structures. Physical Review A, 2020, 101, .	1.0	5
23	Monitoring, Modeling, and Optimization of Lead Halide Perovskite Nanocrystal Growth within Porous Matrices. Journal of Physical Chemistry C, 2020, 124, 8041-8046.	1.5	2
24	Mesoporous Matrices as Hosts for Metal Halide Perovskite Nanocrystals. Advanced Optical Materials, 2020, 8, 1901868.	3.6	30
25	Optical Responses of Localized and Extended Modes in a Mesoporous Layer on Plasmonic Array to Isopropanol Vapor. Journal of Physical Chemistry C, 2020, 124, 5772-5779.	1.5	3
26	Premelting of ice adsorbed on a rock surface. Physical Chemistry Chemical Physics, 2020, 22, 11362-11373.	1.3	19
27	Optical Resonators based on Casimir Forces -INVITED. EPJ Web of Conferences, 2020, 238, 10003.	0.1	0
28	Casimirâ€“Lifshitz Force Based Optical Resonators. Journal of Physical Chemistry Letters, 2019, 10, 5856-5860.	2.1	14
29	Spatially Resolved Analysis of Defect Annihilation and Recovery Dynamics in Metal Halide Perovskite Single Crystals. ACS Applied Energy Materials, 2019, 2, 6967-6972.	2.5	15
30	Flexible nanophosphor films doped with Mie resonators for enhanced out-coupling of the emission. Journal of Materials Chemistry C, 2019, 7, 267-274.	2.7	14
31	Nanoparticle Bragg reflectors: A smart analytical tool for biosensing. Biosensors and Bioelectronics: X, 2019, 1, 100012.	0.9	6
32	Trapping of Gas Bubbles in Water at a Finite Distance below a Waterâ€“Solid Interface. Langmuir, 2019, 35, 4218-4223.	1.6	5
33	Tamm Plasmons Directionally Enhance Rare-Earth Nanophosphor Emission. ACS Photonics, 2019, 6, 634-641.	3.2	17
34	Highly Efficient Transparent Nanophosphor Films for Tunable White-Light-Emitting Layered Coatings. ACS Applied Materials & Interfaces, 2019, 11, 4219-4225.	4.0	16
35	Mechanism of Photoluminescence Intermittency in Organicâ€“Inorganic Perovskite Nanocrystals. ACS Applied Materials & Interfaces, 2019, 11, 6344-6349.	4.0	17
36	Nanophotonics Tunes Rare-Earth Nanophosphor Emission. , 2019, , .		0

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37	Transparent nanophosphor films for efficient white-light generation. , 2019, , .		0
38	Photonic structuring improves the colour purity of rare-earth nanophosphors. Materials Horizons, 2018, 5, 661-667.	6.4	15
39	Absorption and Emission of Light in Optoelectronic Nanomaterials: The Role of the Local Optical Environment. Journal of Physical Chemistry Letters, 2018, 9, 2077-2084.	2.1	17
40	Flexible and Adaptable Lightâ€Emitting Coatings for Arbitrary Metal Surfaces based on Optical Tamm Mode Coupling. Advanced Optical Materials, 2018, 6, 1700560.	3.6	19
41	Improving the Bulk Emission Properties of CH₃NH₃PbBr₃ by Modifying the Halide-Related Defect Structure. Journal of Physical Chemistry C, 2018, 122, 27250-27255.	1.5	4
42	High voltage vacuum-deposited CH₃NH₃PbI₃â€“CH₃NH₃PbI₃ tandem solar cells. Energy and Environmental Science, 2018, 11, 3292-3297.	15.6	98
43	Highly Efficient and Environmentally Stable Flexible Color Converters Based on Confined CH₃NH₃PbBr₃ Nanocrystals. ACS Applied Materials & Interfaces, 2018, 10, 38334-38340.	4.0	20
44	Absorption enhancement in methylammonium lead iodide perovskite solar cells with embedded arrays of dielectric particles. Optics Express, 2018, 26, A865.	1.7	19
45	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
46	Strong Quantum Confinement and Fast Photoemission Activation in CH₃NH₃PbI₃ Perovskite Nanocrystals Grown within Periodically Mesostructured Films. Advanced Optical Materials, 2017, 5, 1601087.	3.6	65
47	Photonic Tuning of the Emission Color of Nanophosphor Films Processed at High Temperature. Advanced Optical Materials, 2017, 5, 1700099.	3.6	21
48	Design and Realization of a Novel Optically Disordered Material: A Demonstration of a Mie Glass. Advanced Optical Materials, 2017, 5, 1700025.	3.6	8
49	Aperiodic Metalâ€Dielectric Multilayers as Highly Efficient Sunlight Reflectors. Advanced Optical Materials, 2017, 5, 1600833.	3.6	10
50	Electron injection and scaffold effects in perovskite solar cells. Journal of Materials Chemistry C, 2017, 5, 634-644.	2.7	58
51	Facile Synthesis of Hybrid Organicâ€“Inorganic Perovskite Microcubes of Optical Quality Using Polar Antisolvents. ACS Applied Materials & Interfaces, 2017, 9, 35505-35510.	4.0	4
52	Fluorescent Humidity Sensors Based on Photonic Resonators. Advanced Optical Materials, 2017, 5, 1700663.	3.6	28
53	ABX3 Perovskites for Tandem Solar Cells. Joule, 2017, 1, 769-793.	11.7	176
54	Materials chemistry approaches to the control of the optical features of perovskite solar cells. Journal of Materials Chemistry A, 2017, 5, 20561-20578.	5.2	35

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55	Photonic Tuning of Nanophosphor Transparent thin films. , 2017, , .		0
56	Unbroken Perovskite: Interplay of Morphology, Electroâ€optical Properties, and Ionic Movement. Advanced Materials, 2016, 28, 5031-5037.	11.1	242
57	Optical analysis of CH₃NH₃Sn_xPb_{1â^'x}I₃ absorbers: a roadmap for perovskite-on-perovskite tandem solar cells. Journal of Materials Chemistry A, 2016, 4, 11214-11221.	5.2	101
58	Three-Dimensional Optical Tomography and Correlated Elemental Analysis of Hybrid Perovskite Microstructures: An Insight into Defect-Related Lattice Distortion and Photoinduced Ion Migration. Journal of Physical Chemistry Letters, 2016, 7, 5227-5234.	2.1	37
59	Effect of temperature variations on equilibrium distances in levitating parallel dielectric plates interacting through Casimir forces. Journal of Applied Physics, 2016, 119, .	1.1	12
60	Maximized performance of dye solar cells on plastic: a combined theoretical and experimental optimization approach. Energy and Environmental Science, 2016, 9, 2061-2071.	15.6	19
61	Solution processed high refractive index contrast distributed Bragg reflectors. Journal of Materials Chemistry C, 2016, 4, 4532-4537.	2.7	33
62	Integration of Photonic Crystals into Flexible Dye Solar Cells: A Route toward Bendable and Adaptable Optoelectronic Devices Displaying Structural Color and Enhanced Efficiency. Advanced Optical Materials, 2016, 4, 464-471.	3.6	29
63	Full solution process approach for deterministic control of light emission at the nanoscale (Conference Presentation). , 2016, , .		0
64	Plasmonic Nanoparticles as Light-Harvesting Enhancers in Perovskite Solar Cells: A Userâ€™s Guide. ACS Energy Letters, 2016, 1, 323-331.	8.8	143
65	Photophysical Analysis of the Formation of Organicâ€“Inorganic Trihalide Perovskite Films: Identification and Characterization of Crystal Nucleation and Growth. Journal of Physical Chemistry C, 2016, 120, 3071-3076.	1.5	23
66	Efficient bifacial dye-sensitized solar cells through disorder by design. Journal of Materials Chemistry A, 2016, 4, 1953-1961.	5.2	33
67	Adaptable Ultraviolet Reflecting Polymeric Multilayer Coatings of High Refractive Index Contrast. Advanced Optical Materials, 2015, 3, 1633-1639.	3.6	16
68	Sunlight Absorption Engineering for Thermophotovoltaics: Contributions from the Optical Design. ChemSusChem, 2015, 8, 786-788.	3.6	1
69	Environmental Effects on the Photophysics of Organicâ€“Inorganic Halide Perovskites. Journal of Physical Chemistry Letters, 2015, 6, 2200-2205.	2.1	205
70	Fine Tuning the Emission Properties of Nanoemitters in Multilayered Structures by Deterministic Control of their Local Photonic Environment. Small, 2015, 11, 2727-2732.	5.2	17
71	Biocompatible Films with Tailored Spectral Response for Prevention of DNA Damage in Skin Cells. Advanced Healthcare Materials, 2015, 4, 1944-1948.	3.9	13
72	Single-step fabrication process of 1-D photonic crystals coupled to nanocolumnar TiO_2 layers to improve DSC efficiency. Optics Express, 2015, 23, A1642.	1.7	25

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73	Highly Efficient Perovskite Solar Cells with Tunable Structural Color. Nano Letters, 2015, 15, 1698-1702.	4.5	289
74	Flexible Distributed Bragg Reflectors from Nanocolumnar Templates. Advanced Optical Materials, 2015, 3, 171-175.	3.6	16
75	Absorption Enhancement in Organicâ€“Inorganic Halide Perovskite Films with Embedded Plasmonic Gold Nanoparticles. Journal of Physical Chemistry C, 2015, 119, 18635-18640.	1.5	105
76	Nanolevitation Phenomena in Real Plane-Parallel Systems Due to the Balance between Casimir and Gravity Forces. Journal of Physical Chemistry C, 2015, 119, 5663-5670.	1.5	21
77	Design and realization of transparent solar modules based on luminescent solar concentrators integrating nanostructured photonic crystals. Progress in Photovoltaics: Research and Applications, 2015, 23, 1785-1792.	4.4	15
78	Synergistic strategies for the preparation of highly efficient dye-sensitized solar cells on plastic substrates: combination of chemical and physical sintering. RSC Advances, 2015, 5, 76795-76803.	1.7	7
79	Full solution processed mesostructured optical resonators integrating colloidal semiconductor quantum dots. Nanoscale, 2015, 7, 16583-16589.	2.8	9
80	Optical Description of Mesostructured Organicâ€“Inorganic Halide Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2015, 6, 48-53.	2.1	59
81	Optimizing light harvesting and charge collection properties of plastic dye-sensitized solar cells with theoretical modeling and synergistic approach. , 2015, , .		0
82	Panchromatic porous specular back reflectors for efficient transparent dye solar cells. Physical Chemistry Chemical Physics, 2014, 16, 663-668.	1.3	17
83	Nanometerâ€Scale Precision Tuning of 3D Photonic Crystals Made Possible Using Polyelectrolytes with Controlled Short Chain Length and Narrow Polydispersity. Advanced Materials Interfaces, 2014, 1, 1300051.	1.9	3
84	Dye sensitized solar cells as optically random photovoltaic media. Energy and Environmental Science, 2014, 7, 689.	15.6	35
85	Fully stable numerical calculations for finite one-dimensional structures: Mapping the transfer matrix method. Journal of Quantitative Spectroscopy and Radiative Transfer, 2014, 134, 9-20.	1.1	20
86	Multidirectional Lightâ€Harvesting Enhancement in Dye Solar Cells by Surface Patterning. Advanced Optical Materials, 2014, 2, 879-884.	3.6	14
87	Angular response of photonic crystal based dye sensitized solar cells. Energy and Environmental Science, 2013, 6, 1260.	15.6	40
88	Resonant Photocurrent Generation in Dye-Sensitized Periodically Nanostructured Photoconductors by Optical Field Confinement Effects. Journal of the American Chemical Society, 2013, 135, 7803-7806.	6.6	18
89	Selective UV Reflecting Mirrors Based on Nanoparticle Multilayers. Advanced Functional Materials, 2013, 23, 2805-2811.	7.8	76
90	Symmetry analysis of the numerical instabilities in the transfer matrix method. Journal of Optics (United Kingdom), 2013, 15, 125719.	1.0	6

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91	CHAPTER 1. Responsive Bragg Reflectors. RSC Smart Materials, 2013, , 1-20.	0.1	1
92	Enhanced diffusion through porous nanoparticle optical multilayers. Journal of Materials Chemistry, 2012, 22, 1751-1757.	6.7	22
93	Optical interference for the matching of the external and internal quantum efficiencies in organic photovoltaic cells. Solar Energy Materials and Solar Cells, 2012, 104, 87-91.	3.0	32
94	Collective osmotic shock in ordered materials. Nature Materials, 2012, 11, 53-57.	13.3	56
95	Characterization of Mesoporous Thin Films by Specular Reflectance Porosimetry. Langmuir, 2012, 28, 13777-13782.	1.6	14
96	Introducing structural colour in DSCs by using photonic crystals: interplay between conversion efficiency and optical properties. Energy and Environmental Science, 2012, 5, 8238.	15.6	50
97	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
98	Integration of Gold Nanoparticles in Optical Resonators. Langmuir, 2012, 28, 9161-9167.	1.6	14
99	Effect of Diffuse Light Scattering Designs on the Efficiency of Dye Solar Cells: An Integral Optical and Electrical Description. Journal of Physical Chemistry C, 2012, 116, 11426-11433.	1.5	48
100	Efficient Transparent Thin Dye Solar Cells Based on Highly Porous 1D Photonic Crystals. Advanced Functional Materials, 2012, 22, 1303-1310.	7.8	74
101	Effect of nanostructured electrode architecture and semiconductor deposition strategy on the photovoltaic performance of quantum dot sensitized solar cells. Electrochimica Acta, 2012, 75, 139-147.	2.6	62
102	Modeling the Optical Response of Three-Dimensional Disordered Structures Using theÂKorringaâ€“Kohnâ€“Rostoker Method. Series in Optics and Optoelectronics, 2012, , 39-54.	0.0	0
103	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
104	Porous one dimensional photonic crystals: novel multifunctional materials for environmental and energy applications. Energy and Environmental Science, 2011, 4, 4800.	15.6	114
105	Porous Supramolecularly Templated Optical Resonators Built in 1D Photonic Crystals. Advanced Functional Materials, 2011, 21, 2534-2540.	7.8	32
106	Interplay of Resonant Cavity Modes with Localized Surface Plasmons: Optical Absorption Properties of Bragg Stacks Integrating Gold Nanoparticles. Advanced Materials, 2011, 23, 2108-2112.	11.1	34
107	Angular emission properties of a layer of rare-earth based nanophosphors embedded in one-dimensional photonic crystal coatings. Applied Physics Letters, 2011, 99, 051111.	1.5	3
108	Analysis of artificial opals by scanning near field optical microscopy. Journal of Applied Physics, 2011, 109, 083514.	1.1	2

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109	Anomalous light propagation, finite size-effects and losses in real 3D photonic nanostructures. , 2011, , .		1
110	Flexible and transferable one-dimensional photonic crystals based on polymer infiltrated nanoparticle multilayers. Proceedings of SPIE, 2010, , .	0.8	0
111	Mesostructured thin films as photonic crystal building blocks for sensing applications. Proceedings of SPIE, 2010, , .	0.8	0
112	Anomalous group velocity at the high energy range of real 3D photonic nanostructures. , 2010, , .		1
113	Gallium Arsenide Infiltration of Nanoporous Multilayers: A Route to Highâ€Dielectricâ€Contrast Oneâ€Dimensional Photonic Crystals. Small, 2010, 6, 1283-1287.	5.2	6
114	Increased efficiency of DSC coupled to one-dimensional photonic crystals. Proceedings of SPIE, 2010, , .	0.8	0
115	All-nanoparticle-based optical resonators for detection of gases and liquids. , 2010, , .		0
116	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
117	Theoretical Analysis of the Performance of One-Dimensional Photonic Crystal-Based Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2010, 114, 3681-3687.	1.5	73
118	Flexible, Adhesive, and Biocompatible Bragg Mirrors Based on Polydimethylsiloxane Infiltrated Nanoparticle Multilayers. Chemistry of Materials, 2010, 22, 3909-3915.	3.2	47
119	Conformal Growth of Organic Luminescent Planar Defects within Artificial Opals. Chemistry of Materials, 2010, 22, 379-385.	3.2	9
120	Anomalous group velocity at the high energy range of a 3D photonic nanostructure. Optics Express, 2010, 18, 15682.	1.7	2
121	Angular dependence of the intensity of light beams diffracted by colloidal crystals. Journal of the Optical Society of America B: Optical Physics, 2010, 27, 1394.	0.9	4
122	TiO2â€“SiO2 one-dimensional photonic crystals of controlled porosity by glancing angle physical vapour deposition. Journal of Materials Chemistry, 2010, 20, 6408.	6.7	64
123	Porous One-Dimensional Photonic Crystal Coatings for Gas Detection. IEEE Sensors Journal, 2010, 10, 1206-1212.	2.4	21
124	Versatility and multifunctionality of highly reflecting Bragg mirrors based on nanoparticle multilayers. Journal of Materials Chemistry, 2010, 20, 8240.	6.7	36
125	Environmentally responsive nanoparticle-based luminescent optical resonators. Nanoscale, 2010, 2, 936.	2.8	24
126	Anomalous group velocity in a 3D photonic nanostructure. , 2009, , .		0

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127	Porous Oneâ€Dimensional Photonic Crystals Improve the Powerâ€Conversion Efficiency of Dyeâ€Sensitized Solar Cells. Advanced Materials, 2009, 21, 764-770.	11.1	249
128	Mesostructured Thin Films as Responsive Optical Coatings of Photonic Crystals. Small, 2009, 5, 2309-2315.	5.2	36
129	Nonlinear light generation at the high energy range of a 3D opal film. , 2009, , .		0
130	Optical Analysis of the Fine Crystalline Structure of Artificial Opal Films. Langmuir, 2009, 25, 12860-12864.	1.6	13
131	Light generation at the anomalous dispersion high energy range of a nonlinear opal film. Optics Express, 2009, 17, 12210.	1.7	9
132	Towards a full understanding of the growth dynamics and optical response of self-assembled photonic colloidal crystal films. Journal of Materials Chemistry, 2009, 19, 185-190.	6.7	26
133	Experimental Demonstration of the Mechanism of Light Harvesting Enhancement in Photonic-Crystal-Based Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2009, 113, 1150-1154.	1.5	65
134	Control over the Structural and Optical Features of Nanoparticle-Based One-Dimensional Photonic Crystals. Langmuir, 2009, 25, 2443-2448.	1.6	35
135	Molding with nanoparticle-based one-dimensional photonic crystals: a route to flexible and transferable Bragg mirrors of high dielectric contrast. Journal of Materials Chemistry, 2009, 19, 3144.	6.7	61
136	Nanoparticle Based Multilayers as Multifunctional Optical Coatings. Materials Research Society Symposia Proceedings, 2009, 1188, 15.	0.1	0
137	Synthesis of Spherical Downâ€•and Upâ€Conversion NaYF₄â€Based Nanophosphors with Tunable Size in Ethylene Glycol without Surfactants or Capping Additives. European Journal of Inorganic Chemistry, 2008, 2008, 4517-4524.	1.0	22
138	Photoconducting Bragg Mirrors based on TiO₂ Nanoparticle Multilayers. Advanced Functional Materials, 2008, 18, 2708-2715.	7.8	81
139	Nanoparticle-Based One-Dimensional Photonic Crystals. Langmuir, 2008, 24, 4430-4434.	1.6	190
140	Sorption Properties of Mesoporous Multilayer Thin Films. Journal of Physical Chemistry C, 2008, 112, 3157-3163.	1.5	110
141	Response of Nanoparticle-Based One-Dimensional Photonic Crystals to Ambient Vapor Pressure. Langmuir, 2008, 24, 9135-9139.	1.6	114
142	Spectral Response of Opal-Based Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2008, 112, 13-17.	1.5	137
143	Relation between growth dynamics and the spatial distribution of intrinsic defects in self-assembled colloidal crystal films. Applied Physics Letters, 2008, 92, .	1.5	16
144	Comment on â€œObservation of higher-order diffraction features in self-assembled photonic crystalsâ€• Physical Review A, 2008, 78, .	1.0	5

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145	Experimental and theoretical analysis of the intensity of beams diffracted by three-dimensional photonic crystals. Physical Review B, 2008, 78, .	1.1	20
146	Integration of photonic crystals in dye sensitized solar cells. , 2008, , .		0
147	Mesoporous Hybrid Thin Films: Building Blocks for Complex Materials with Spatial Organization. Materials Research Society Symposia Proceedings, 2007, 1007, 1.	0.1	1
148	Full processing of Colloidal Photonic Crystals by Spin-Coating. , 2007, , .		0
149	Effect of extinction on the high-energy optical response of photonic crystals. Physical Review B, 2007, 75, .	1.1	29
150	High band anomalous group velocity dispersion for the enhancement of the nonlinear interaction. , 2007, , .		1
151	Phase delay and group velocity determination at a planar defect state in three dimensional photonic crystals. Applied Physics Letters, 2007, 90, 101113.	1.5	15
152	Interplay between crystal-size and disorder effects in the high-energy optical response of photonic crystal slabs. Physical Review B, 2007, 76, .	1.1	23
153	Enhanced power conversion efficiency in solar cells coupled to photonic crystals. Proceedings of SPIE, 2007, , .	0.8	1
154	Physical origin of the high energy optical response of three dimensional photonic crystals. Optics Express, 2007, 15, 17754.	1.7	16
155	Growth Dynamics of Self-Assembled Colloidal Crystal Thin Films. Langmuir, 2007, 23, 9933-9938.	1.6	28
156	Photonic Crystals from Ordered Mesoporous Thin-Film Functional Building Blocks. Advanced Functional Materials, 2007, 17, 1247-1254.	7.8	175
157	Enhanced Photoconductivity in Thinâ€Film Semiconductors Optically Coupled to Photonic Crystals. Advanced Materials, 2007, 19, 4177-4182.	11.1	65
158	Full spectrum enhancement of the light harvesting efficiency of dye sensitized solar cells by including colloidal photonic crystal multilayers. Applied Physics Letters, 2006, 88, 193110.	1.5	86
159	Building Nanocrystalline Planar Defects within Self-Assembled Photonic Crystals by Spin-Coating. Advanced Materials, 2006, 18, 1183-1187.	11.1	72
160	Oriented Colloidal-Crystal Thin Films by Spin-Coating Microspheres Dispersed in Volatile Media. Advanced Materials, 2006, 18, 2244-2249.	11.1	273
161	Perfecting Imperfectionâ€"Designer Defects in Colloidal Photonic Crystals. Advanced Materials, 2006, 18, 2779-2785.	11.1	82
162	Origin of enhanced light harvesting in colloidal-crystal-based dye-sensitised solar cells. , 2006, 6197, 187.		0

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163	Full processing of colloidal photonic crystals by spin coating. , 2006, , .		1
164	Tunable defects in colloidal photonic crystals. , 2006, , .		1
165	Building Tunable Planar Defects into Photonic Crystals Using Polyelectrolyte Multilayers. Advanced Materials, 2005, 17, 1912-1916.	11.1	70
166	Surface resonant modes in colloidal photonic crystals. Physical Review B, 2005, 71, .	1.1	42
167	Tailoring Photonic Crystals with Nanometer-Scale Precision Using Polyelectrolyte Multilayers. Langmuir, 2005, 21, 499-503.	1.6	35
168	Growth of Mesoporous Materials within Colloidal Crystal Films by Spin-Coating. Journal of Physical Chemistry B, 2005, 109, 19643-19649.	1.2	44
169	Analysis of wave propagation in a two-dimensional photonic crystal with negative index of refraction: plane wave decomposition of the Bloch modes. Optics Express, 2005, 13, 4160.	1.7	22
170	Vapor swellable colloidal photonic crystals with pressure tunability. Journal of Materials Chemistry, 2005, 15, 133-138.	6.7	42
171	Origin of Light-Harvesting Enhancement in Colloidal-Photonic-Crystal-Based Dye-Sensitized Solar Cells. Journal of Physical Chemistry B, 2005, 109, 15968-15976.	1.2	201
172	Band spectroscopy of colloidal photonic crystal films. Applied Physics Letters, 2004, 84, 1239-1241.	1.5	68
173	Dielectric Planar Defects in Colloidal Photonic Crystal Films. Advanced Materials, 2004, 16, 346-349.	11.1	123
174	Silicon Inverse Opalâ€"A Platform for Photonic Bandgap Research. Advanced Materials, 2004, 16, 1471-1476.	11.1	93
175	Towards the synthetic all-optical computer: science fiction or reality?. Journal of Materials Chemistry, 2004, 14, 781-794.	6.7	120
176	Experimental and theoretical analysis of the self-focusing of light by a photonic crystal lens. Physical Review B, 2004, 69, .	1.1	54
177	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). Advanced Materials, 2003, 15, 597-600.	11.1	64
178	Refractive Index Patterns in Silicon Inverted Colloidal Photonic Crystals. Advanced Materials, 2003, 15, 1167-1172.	11.1	61
179	Spin-on Nanostructured Siliconâ€"Silica Film Displaying Room-Temperature Nanosecond Lifetime Photoluminescence. Advanced Materials, 2003, 15, 572-576.	11.1	13
180	A Polychromic, Fast Response Metallopolymer Gel Photonic Crystal with Solvent and Redox Tunability: A Step Towards Photonic Ink (P-Ink). Advanced Materials, 2003, 15, 503-507.	11.1	207

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