

Hernn Miguez

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

187
papers

10,182
citations

56
h-index

97
g-index

213
ext. papers

10,990
ext. citations

9.4
avg, IF

6.15
L-index

#	Paper	IF	Citations
187	Effect of Spatial Inhomogeneity on Quantum Trapping.. <i>Journal of Physical Chemistry Letters</i> , 2022 , 451364519 1	6.4	1
186	Ultrastrong Exciton-Photon Coupling in Broadband Solar Absorbers. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 10706-10712	6.4	3
185	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	6.4	10
184	The Complex Interplay of Lead Halide Perovskites with Their Surroundings. <i>Advanced Optical Materials</i> , 2021 , 9, 2100133	8.1	4
183	The Role of the Atmosphere on the Photophysics of Ligand-Free Lead-Halide Perovskite Nanocrystals. <i>Advanced Optical Materials</i> , 2021 , 9, 2100605	8.1	2
182	Highly Versatile Upconverting Oxyfluoride-Based Nanophosphor Films. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 30051-30060	9.5	1
181	Light-Harvesting Properties of a Subphthalocyanine Solar Absorber Coupled to an Optical Cavity. <i>Solar Rrl</i> , 2021 , 5, 2100308	7.1	5
180	Enhanced Directional Light Extraction from Patterned Rare-Earth Phosphor Films. <i>Advanced Optical Materials</i> , 2021 , 9, 2001611	8.1	7
179	Ligand-Free MAPbI ₃ Quantum Dot Solar Cells Based on Nanostructured Insulating Matrices. <i>Solar Rrl</i> , 2021 , 5, 2100204	7.1	6
178	Persistent luminescent nanoparticles: Challenges and opportunities for a shimmering future. <i>Journal of Applied Physics</i> , 2021 , 130, 080902	2.5	4
177	Photophysical Processes in Metal Halide Perovskites. <i>Advanced Optical Materials</i> , 2021 , 9, 2101738	8.1	1
176	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	6.4	10
175	Optical interference effects on the Casimir-Lifshitz force in multilayer structures. <i>Physical Review A</i> , 2020 , 101,	2.6	2
174	Monitoring, Modeling, and Optimization of Lead Halide Perovskite Nanocrystal Growth within Porous Matrices. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 8041-8046	3.8	1
173	Mesoporous Matrices as Hosts for Metal Halide Perovskite Nanocrystals. <i>Advanced Optical Materials</i> , 2020 , 8, 1901868	8.1	14
172	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	3.8	2
171	Optical Resonators based on Casimir Forces -INVITED. <i>EPJ Web of Conferences</i> , 2020 , 238, 10003	0.3	

170	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	7.1	17
169	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	8.1	3
168	Internal quantum efficiency and time signals from intensity-modulated photocurrent spectra of perovskite solar cells. <i>Journal of Applied Physics</i> , 2020 , 128, 133103	2.5	8
167	Efficient third harmonic generation from FAPbBr ₃ perovskite nanocrystals. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 15990-15995	7.1	9
166	Premelting of ice adsorbed on a rock surface. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 11362-11373	3.6	7
165	Casimir-Lifshitz Force Based Optical Resonators. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 5856-5860	4	6
164	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	6.1	10
163	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	7.1	9
162	Nanoparticle Bragg reflectors: A smart analytical tool for biosensing. <i>Biosensors and Bioelectronics: X</i> , 2019 , 1, 100012	2.9	4
161	Trapping of Gas Bubbles in Water at a Finite Distance below a Water-Solid Interface. <i>Langmuir</i> , 2019 , 35, 4218-4223	4	3
160	Dipole reorientation and local density of optical states influence the emission of light-emitting electrochemical cells. <i>Physical Chemistry Chemical Physics</i> , 2019 , 22, 92-96	3.6	3
159	Tamm Plasmons Directionally Enhance Rare-Earth Nanophosphor Emission. <i>ACS Photonics</i> , 2019 , 6, 634-641	6.4	10
158	Highly Efficient Transparent Nanophosphor Films for Tunable White-Light-Emitting Layered Coatings. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 4219-4225	9.5	7
157	Mechanism of Photoluminescence Intermittency in Organic-Inorganic Perovskite Nanocrystals. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 6344-6349	9.5	13
156	Photonic structuring improves the colour purity of rare-earth nanophosphors. <i>Materials Horizons</i> , 2018 , 5, 661-667	14.4	7
155	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	6.4	11
154	Origin of Light-Induced Photophysical Effects in Organic Metal Halide Perovskites in the Presence of Oxygen. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 3891-3896	6.4	84
153	Flexible and Adaptable Light-Emitting Coatings for Arbitrary Metal Surfaces based on Optical Tamm Mode Coupling. <i>Advanced Optical Materials</i> , 2018 , 6, 1700560	8.1	13

152	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	3.8	3
151	High voltage vacuum-deposited CH ₃ NH ₃ PbI ₃ /CH ₃ NH ₃ PbI ₃ tandem solar cells. <i>Energy and Environmental Science</i> , 2018 , 11, 3292-3297	35.4	74
150	Highly Efficient and Environmentally Stable Flexible Color Converters Based on Confined CH ₃ NH ₃ PbBr Nanocrystals. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 38334-38340	9.5	10
149	Absorption enhancement in methylammonium lead iodide perovskite solar cells with embedded arrays of dielectric particles. <i>Optics Express</i> , 2018 , 26, A865-A878	3.3	15
148	Strong Quantum Confinement and Fast Photoemission Activation in CH ₃ NH ₃ PbI ₃ Perovskite Nanocrystals Grown within Periodically Mesoporous Films. <i>Advanced Optical Materials</i> , 2017 , 5, 1601087	8.1	52
147	Photonic Tuning of the Emission Color of Nanophosphor Films Processed at High Temperature. <i>Advanced Optical Materials</i> , 2017 , 5, 1700099	8.1	12
146	Design and Realization of a Novel Optically Disordered Material: A Demonstration of a Mie Glass. <i>Advanced Optical Materials</i> , 2017 , 5, 1700025	8.1	7
145	Aperiodic Metal-Dielectric Multilayers as Highly Efficient Sunlight Reflectors. <i>Advanced Optical Materials</i> , 2017 , 5, 1600833	8.1	8
144	Electron injection and scaffold effects in perovskite solar cells. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 634-644	7.1	52
143	Facile Synthesis of Hybrid Organic-Inorganic Perovskite Microcubes of Optical Quality Using Polar Antisolvents. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 35505-35510	9.5	3
142	Fluorescent Humidity Sensors Based on Photonic Resonators. <i>Advanced Optical Materials</i> , 2017 , 5, 1700063	6.3	23
141	ABX ₃ Perovskites for Tandem Solar Cells. <i>Joule</i> , 2017 , 1, 769-793	27.8	125
140	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	13	27
139	Plasmonic Nanoparticles as Light-Harvesting Enhancers in Perovskite Solar Cells: A User's Guide. <i>ACS Energy Letters</i> , 2016 , 1, 323-331	20.1	114
138	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	3.8	21
137	Efficient bifacial dye-sensitized solar cells through disorder by design. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 1953-1961	13	28
136	Unbroken Perovskite: Interplay of Morphology, Electro-optical Properties, and Ionic Movement. <i>Advanced Materials</i> , 2016 , 28, 5031-7	24	208
135	Optical analysis of CH ₃ NH ₃ Sn Pb I absorbers: a roadmap for perovskite-on-perovskite tandem solar cells. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 11214-11221	13	87

134	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	6.4	32
133	Effect of temperature variations on equilibrium distances in levitating parallel dielectric plates interacting through Casimir forces. <i>Journal of Applied Physics</i> , 2016 , 119, 144301	2.5	9
132	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	35.4	15
131	Solution processed high refractive index contrast distributed Bragg reflectors. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 4532-4537	7.1	25
130	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	8.1	25
129	Flexible Distributed Bragg Reflectors from Nanocolumnar Templates. <i>Advanced Optical Materials</i> , 2015 , 3, 171-175	8.1	13
128	Absorption Enhancement in Organic-Inorganic Halide Perovskite Films with Embedded Plasmonic Gold Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 18635-18640	3.8	89
127	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	3.8	12
126	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	6.8	9
125	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	3.7	6
124	Full solution processed mesostructured optical resonators integrating colloidal semiconductor quantum dots. <i>Nanoscale</i> , 2015 , 7, 16583-9	7.7	8
123	Optical Description of Mesostructured Organic-Inorganic Halide Perovskite Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 48-53	6.4	51
122	Adaptable Ultraviolet Reflecting Polymeric Multilayer Coatings of High Refractive Index Contrast. <i>Advanced Optical Materials</i> , 2015 , 3, 1633-1639	8.1	14
121	Sunlight absorption engineering for thermophotovoltaics: contributions from the optical design. <i>ChemSusChem</i> , 2015 , 8, 786-8	8.3	1
120	Environmental Effects on the Photophysics of Organic-Inorganic Halide Perovskites. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 2200-5	6.4	181
119	Fine Tuning the Emission Properties of Nanoemitters in Multilayered Structures by Deterministic Control of their Local Photonic Environment. <i>Small</i> , 2015 , 11, 2727-32	11	14
118	Biocompatible films with tailored spectral response for prevention of DNA damage in skin cells. <i>Advanced Healthcare Materials</i> , 2015 , 4, 1944-8	10.1	11
117	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, A1642-50	3.3	17

116	Highly efficient perovskite solar cells with tunable structural color. <i>Nano Letters</i> , 2015 , 15, 1698-702	11.5	240
115	Nanometer-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	4.6	3
114	Dye sensitized solar cells as optically random photovoltaic media. <i>Energy and Environmental Science</i> , 2014 , 7, 689	35.4	32
113	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	2.1	14
112	Multidirectional Light-Harvesting Enhancement in Dye Solar Cells by Surface Patterning. <i>Advanced Optical Materials</i> , 2014 , 2, 879-884	8.1	12
111	Panchromatic porous specular back reflectors for efficient transparent dye solar cells. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 663-8	3.6	16
110	Angular response of photonic crystal based dye sensitized solar cells. <i>Energy and Environmental Science</i> , 2013 , 6, 1260-1266	35.4	36
109	Resonant photocurrent generation in dye-sensitized periodically nanostructured photoconductors by optical field confinement effects. <i>Journal of the American Chemical Society</i> , 2013 , 135, 7803-6	16.4	17
108	Selective UV Reflecting Mirrors Based on Nanoparticle Multilayers. <i>Advanced Functional Materials</i> , 2013 , 23, 2805-2811	15.6	65
107	Symmetry analysis of the numerical instabilities in the transfer matrix method. <i>Journal of Optics (United Kingdom)</i> , 2013 , 15, 125719	1.7	5
106	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	6.7	61
105	Enhanced diffusion through porous nanoparticle optical multilayers. <i>Journal of Materials Chemistry</i> , 2012 , 22, 1751-1757		22
104	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	6.4	31
103	Characterization of mesoporous thin films by specular reflectance porosimetry. <i>Langmuir</i> , 2012 , 28, 13777-82		10
102	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	35.4	45
101	Novel approaches to flexible visible transparent hybrid films for ultraviolet protection. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2012 , 50, 945-956	2.6	93
100	Integration of gold nanoparticles in optical resonators. <i>Langmuir</i> , 2012 , 28, 9161-7	4	11
99	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	3.8	47

98	Efficient Transparent Thin Dye Solar Cells Based on Highly Porous 1D Photonic Crystals. <i>Advanced Functional Materials</i> , 2012 , 22, 1303-1310	15.6	72
97	Modeling the Optical Response of Three-Dimensional Disordered Structures Using the Korringa-Kohn-Rostoker Method. <i>Series in Optics and Optoelectronics</i> , 2012 , 39-54		
96	Interplay of Order and Disorder in the High-Energy Optical Response of Three-Dimensional Photonic Crystals. <i>Series in Optics and Optoelectronics</i> , 2012 , 301-322		
95	Collective osmotic shock in ordered materials. <i>Nature Materials</i> , 2011 , 11, 53-7	27	54
94	Porous one dimensional photonic crystals: novel multifunctional materials for environmental and energy applications. <i>Energy and Environmental Science</i> , 2011 , 4, 4800	35.4	96
93	Porous Supramolecularly Templated Optical Resonators Built in 1D Photonic Crystals. <i>Advanced Functional Materials</i> , 2011 , 21, 2534-2540	15.6	30
92	Interplay of resonant cavity modes with localized surface plasmons: optical absorption properties of Bragg stacks integrating gold nanoparticles. <i>Advanced Materials</i> , 2011 , 23, 2108-12	24	31
91	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	3.4	3
90	Analysis of artificial opals by scanning near field optical microscopy. <i>Journal of Applied Physics</i> , 2011 , 109, 083514	2.5	2
89	Anomalous light propagation, finite size-effects and losses in real 3D photonic nanostructures 2011 ,		1
88	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	3.8	62
87	Flexible, Adhesive, and Biocompatible Bragg Mirrors Based on Polydimethylsiloxane Infiltrated Nanoparticle Multilayers. <i>Chemistry of Materials</i> , 2010 , 22, 3909-3915	9.6	42
86	Conformal Growth of Organic Luminescent Planar Defects within Artificial Opals. <i>Chemistry of Materials</i> , 2010 , 22, 379-385	9.6	9
85	Anomalous group velocity at the high energy range of a 3D photonic nanostructure. <i>Optics Express</i> , 2010 , 18, 15682-90	3.3	2
84	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	1.7	4
83	TiO ₂ /BiO ₂ one-dimensional photonic crystals of controlled porosity by glancing angle physical vapour deposition. <i>Journal of Materials Chemistry</i> , 2010 , 20, 6408		63
82	Porous One-Dimensional Photonic Crystal Coatings for Gas Detection. <i>IEEE Sensors Journal</i> , 2010 , 10, 1206-1212	4	18
81	Versatility and multifunctionality of highly reflecting Bragg mirrors based on nanoparticle multilayers. <i>Journal of Materials Chemistry</i> , 2010 , 20, 8240		31

80	Environmentally responsive nanoparticle-based luminescent optical resonators. <i>Nanoscale</i> , 2010 , 2, 936-41	4.7	22
79	Gallium arsenide infiltration of nanoporous multilayers: a route to high-dielectric-contrast one-dimensional photonic crystals. <i>Small</i> , 2010 , 6, 1283-7	11	6
78	Porous One-Dimensional Photonic Crystals Improve the Power-Conversion Efficiency of Dye-Sensitized Solar Cells. <i>Advanced Materials</i> , 2009 , 21, 764-770	24	227
77	Mesostructured thin films as responsive optical coatings of photonic crystals. <i>Small</i> , 2009 , 5, 2309-15	11	32
76	Optical analysis of the fine crystalline structure of artificial opal films. <i>Langmuir</i> , 2009 , 25, 12860-4	4	10
75	Light generation at the anomalous dispersion high energy range of a nonlinear opal film. <i>Optics Express</i> , 2009 , 17, 12210-6	3.3	9
74	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		25
73	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	3.8	56
72	Control over the structural and optical features of nanoparticle-based one-dimensional photonic crystals. <i>Langmuir</i> , 2009 , 25, 2443-8	4	31
71	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		57
70	Nanoparticle Based Multilayers as Multifunctional Optical Coatings. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1188, 15		
69	Nanoparticle-based one-dimensional photonic crystals. <i>Langmuir</i> , 2008 , 24, 4430-4	4	171
68	Sorption Properties of Mesoporous Multilayer Thin Films. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 3157-3163	3.8	101
67	Response of nanoparticle-based one-dimensional photonic crystals to ambient vapor pressure. <i>Langmuir</i> , 2008 , 24, 9135-9	4	100
66	Spectral Response of Opal-Based Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 13-17	3.8	131
65	Relation between growth dynamics and the spatial distribution of intrinsic defects in self-assembled colloidal crystal films. <i>Applied Physics Letters</i> , 2008 , 92, 091904	3.4	16
64	Comment on Observation of higher-order diffraction features in self-assembled photonic crystals. <i>Physical Review A</i> , 2008 , 78,	2.6	5
63	Experimental and theoretical analysis of the intensity of beams diffracted by three-dimensional photonic crystals. <i>Physical Review B</i> , 2008 , 78,	3.3	18

62	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	2.3	22
61	Photoconducting Bragg Mirrors based on TiO ₂ Nanoparticle Multilayers. <i>Advanced Functional Materials</i> , 2008 , 18, 2708-2715	15.6	72
60	Growth dynamics of self-assembled colloidal crystal thin films. <i>Langmuir</i> , 2007 , 23, 9933-8	4	26
59	Photonic Crystals from Ordered Mesoporous Thin-Film Functional Building Blocks. <i>Advanced Functional Materials</i> , 2007 , 17, 1247-1254	15.6	157
58	Enhanced Photoconductivity in Thin-Film Semiconductors Optically Coupled to Photonic Crystals. <i>Advanced Materials</i> , 2007 , 19, 4177-4182	24	58
57	Mesoporous Hybrid Thin Films: Building Blocks for Complex Materials with Spatial Organization. <i>Materials Research Society Symposia Proceedings</i> , 2007 , 1007, 1		1
56	Effect of extinction on the high-energy optical response of photonic crystals. <i>Physical Review B</i> , 2007 , 75,	3.3	19
55	Phase delay and group velocity determination at a planar defect state in three dimensional photonic crystals. <i>Applied Physics Letters</i> , 2007 , 90, 101113	3.4	15
54	Interplay between crystal-size and disorder effects in the high-energy optical response of photonic crystal slabs. <i>Physical Review B</i> , 2007 , 76,	3.3	20
53	Physical origin of the high energy optical response of three dimensional photonic crystals. <i>Optics Express</i> , 2007 , 15, 17754-60	3.3	13
52	Building Nanocrystalline Planar Defects within Self-Assembled Photonic Crystals by Spin-Coating. <i>Advanced Materials</i> , 2006 , 18, 1183-1187	24	66
51	Oriented Colloidal-Crystal Thin Films by Spin-Coating Microspheres Dispersed in Volatile Media. <i>Advanced Materials</i> , 2006 , 18, 2244-2249	24	241
50	Tunable defects in colloidal photonic crystals 2006 ,		1
49	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	3.4	81
48	Tailoring photonic crystals with nanometer-scale precision using polyelectrolyte multilayers. <i>Langmuir</i> , 2005 , 21, 499-503	4	32
47	Growth of mesoporous materials within colloidal crystal films by spin-coating. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 19643-9	3.4	40
46	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, 4160-74	3.3	14
45	Vapor swellable colloidal photonic crystals with pressure tunability. <i>Journal of Materials Chemistry</i> , 2005 , 15, 133-138		38

44	Origin of light-harvesting enhancement in colloidal-photonic-crystal-based dye-sensitized solar cells. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 15968-76	3-4	173
43	Building Tunable Planar Defects into Photonic Crystals Using Polyelectrolyte Multilayers. <i>Advanced Materials</i> , 2005 , 17, 1912-1916	24	66
42	Surface resonant modes in colloidal photonic crystals. <i>Physical Review B</i> , 2005 , 71,	3-3	37
41	Band spectroscopy of colloidal photonic crystal films. <i>Applied Physics Letters</i> , 2004 , 84, 1239-1241	3-4	60
40	Dielectric Planar Defects in Colloidal Photonic Crystal Films. <i>Advanced Materials</i> , 2004 , 16, 346-349	24	110
39	Towards the synthetic all-optical computer: science fiction or reality?. <i>Journal of Materials Chemistry</i> , 2004 , 14, 781-794		106
38	Experimental and theoretical analysis of the self-focusing of light by a photonic crystal lens. <i>Physical Review B</i> , 2004 , 69,	3-3	41
37	Towards photonic ink (P-ink): a polychrome, fast response metallopolymer gel photonic crystal device. <i>Macromolecular Symposia</i> , 2003 , 196, 63-69	0.8	7
36	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	24	56
35	Refractive Index Patterns in Silicon Inverted Colloidal Photonic Crystals. <i>Advanced Materials</i> , 2003 , 15, 1167-1172	24	55
34	Spin-on Nanostructured Silicon/Silica Film Displaying Room-Temperature Nanosecond Lifetime Photoluminescence. <i>Advanced Materials</i> , 2003 , 15, 572-576	24	12
33	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	24	192
32	Optical properties of a three-dimensional silicon square spiral photonic crystal. <i>Photonics and Nanostructures - Fundamentals and Applications</i> , 2003 , 1, 37-42	2.6	57
31	Optical Properties of Colloidal Photonic Crystals Confined in Rectangular Microchannels. <i>Langmuir</i> , 2003 , 19, 3479-3485	4	32
30	Oriented Free-Standing Three-Dimensional Silicon Inverted Colloidal Photonic Crystal Microfibers. <i>Advanced Materials</i> , 2002 , 14, 1805-1808	24	65
29	Barium Titanate Inverted Opals Synthesis, Characterization, and Optical Properties. <i>Advanced Functional Materials</i> , 2002 , 12, 71	15.6	57
28	Replicating the Structure of a Crosslinked Polyferrocenylsilane Inverse Opal in the Form of a Magnetic Ceramic. <i>Advanced Functional Materials</i> , 2002 , 12, 382	15.6	42
27	Opal Circuits of Light Planarized Microphotonic Crystal Chips. <i>Advanced Functional Materials</i> , 2002 , 12, 425-431	15.6	190

26	Synthesis of inverse opals. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2002 , 202, 281-290	5.1	88
25	Colloidal photonic crystal microchannel array with periodically modulated thickness. <i>Applied Physics Letters</i> , 2002 , 81, 2493-2495	3.4	26
24	Refractive Index Properties of Calcined Silica Submicrometer Spheres. <i>Langmuir</i> , 2002 , 18, 1942-1944	4	80
23	Mechanical stability enhancement by pore size and connectivity control in colloidal crystals by layer-by-layer growth of oxide. <i>Chemical Communications</i> , 2002 , 2736-7	5.8	115
22	Synthesis and Photonic Bandgap Characterization of Polymer Inverse Opals. <i>Advanced Materials</i> , 2001 , 13, 393-396	24	91
21	Photonic Bandgap Engineering in Germanium Inverse Opals by Chemical Vapor Deposition. <i>Advanced Materials</i> , 2001 , 13, 1634-1637	24	113
20	Photonic band gap properties of CdS-in-opal systems. <i>Applied Physics Letters</i> , 2001 , 78, 3181-3183	3.4	34
19	Inverse Opals Fabrication 2001 , 219-227		
18	Growth of Tin Oxide in Opal. <i>Chemical Vapor Deposition</i> , 2000 , 6, 283-285		8
17	Large-scale synthesis of a silicon photonic crystal with a complete three-dimensional bandgap near 1.5 micrometres. <i>Nature</i> , 2000 , 405, 437-40	50.4	1323
16	Germanium FCC Structure from a Colloidal Crystal Template. <i>Langmuir</i> , 2000 , 16, 4405-4408	4	76
15	Photonic crystals for laser action. <i>Optical Materials</i> , 1999 , 13, 187-192	3.3	27
14	Electrophoretic Deposition To Control Artificial Opal Growth. <i>Langmuir</i> , 1999 , 15, 4701-4704	4	240
13	Bragg diffraction from indium phosphide infilled fcc silica colloidal crystals. <i>Physical Review B</i> , 1999 , 59, 1563-1566	3.3	83
12	Face centered cubic photonic bandgap materials based on opal-semiconductor composites. <i>Journal of Lightwave Technology</i> , 1999 , 17, 1975-1981	4	22
11	Atmospheric pressure MOCVD growth of crystalline InP in opals. <i>Journal of Crystal Growth</i> , 1998 , 193, 9-15	1.6	19
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9	CdS photoluminescence inhibition by a photonic structure. <i>Applied Physics Letters</i> , 1998 , 73, 1781-1783	3.4	138

8	Photonic crystal properties of packed submicrometric SiO ₂ spheres. <i>Applied Physics Letters</i> , 1997 , 71, 1148-1150	3.4	294
7	Evidence of FCC Crystallization of SiO ₂ Nanospheres. <i>Langmuir</i> , 1997 , 13, 6009-6011	4	259
6	3D Long-range ordering in ein SiO ₂ submicrometer-sphere sintered superstructure. <i>Advanced Materials</i> , 1997 , 9, 257-260	24	306
5	Photonic crystal made by close packing SiO ₂ submicron spheres. <i>Superlattices and Microstructures</i> , 1997 , 22, 399-404	2.8	67
4	Low-temperature synthesis of Ge nanocrystals in zeolite Y. <i>Applied Physics Letters</i> , 1996 , 69, 2347-2349	3.4	25
3	Edward-Wilkinson Behavior of Crystal Surfaces Grown By Sedimentation of SiO ₂ Nanospheres. <i>Physical Review Letters</i> , 1996 , 77, 4572-4575	7.4	54
2	Optoelectronic Devices Based on Scaffold Stabilized Black-Phase CsPbI ₃ Nanocrystals. <i>Advanced Optical Materials</i> , 2102112	8.1	0
1	Transparent Phosphor Thin Films Based on Rare-Earth-Doped Garnets: Building Blocks for Versatile Persistent Luminescence Materials. <i>Advanced Photonics Research</i> , 2100367	1.9	1