Alexander O Govorov

List of Publications by Year in Descending Order

221 papers	18,959 citations	67 h-index	134 g-index
245 ext. papers	21,634 ext. citations	10.5 avg, IF	7.2 L-index

#	Paper	IF	Citations
221	Chiral Generation of Hot Carriers for Polarization-Sensitive Plasmonic Photocatalysis.. *Journal of the American Chemical Society*, **2022**,	16.4	4
220	Upcycling of biomass waste into photothermal superhydrophobic coating for efficient anti-icing and deicing. *Materials Today Physics*, **2022**, 100683	8	3
219	Local Growth Mediated by Plasmonic Hot Carriers: Chirality from Achiral Nanocrystals Using Circularly Polarized Light. *Nano Letters*, **2021**,	11.5	4
218	Distance Dependence of Förster Resonance Energy Transfer Rates in 2D Perovskite Quantum Wells via Control of Organic Spacer Length. *Journal of the American Chemical Society*, **2021**, 143, 4244-4252	16.4	19
217	Hot Electron Generation through Near-Field Excitation of Plasmonic Nanoresonators. *ACS Photonics*, **2021**, 8, 1243-1250	6.3	4
216	Nanoantenna-Enhanced Light-Emitting Diodes: Fundamental and Recent Progress. *Laser and Photonics Reviews*, **2021**, 15, 2000367	8.3	4
215	Long- and short-ranged chiral interactions in DNA-assembled plasmonic chains. *Nature Communications*, **2021**, 12, 2025	17.4	21
214	Plasmonic hot-electron photodetection with quasi-bound states in the continuum and guided resonances. *Nanophotonics*, **2021**,	6.3	4
213	Visible Light-Induced Reactivity of Plasmonic Gold Nanoparticles Incorporated into TiO2 Matrix towards 2-Chloroethyl Ethyl Sulfide. *Crystals*, **2021**, 11, 659	2.3	4
212	Theory of Plasmonic Excitations **2021**, 1-35		
211	Engineering plasmonic hot carrier dynamics toward efficient photodetection. *Applied Physics Reviews*, **2021**, 8, 021305	17.3	18
210	Nanolayered Tamm Plasmon-Based Multicolor Hot Electron Photodetection for O- and C-Band Telecommunication. *ACS Applied Electronic Materials*, **2021**, 3, 639-650	4	5
209	Ultrastable Plasmonic Cu-Based Core–Shell Nanoparticles. *Chemistry of Materials*, **2021**, 33, 695-705	9.6	7
208	Intensifying Heat Using MOF-Isolated Graphene for Solar-Driven Seawater Desalination at 98% Solar-to-Thermal Efficiency. *Advanced Functional Materials*, **2021**, 31, 2008904	15.6	23
207	Rational synthesis of novel "giant" CuInTeSe/CdS core/shell quantum dots for optoelectronics. *Nanoscale*, **2021**, 13, 15301-15310	7.7	1
206	Photoelectrochemical Methanol Oxidation Under Visible and UV Excitation of TiO2-Supported TiN and ZrN Plasmonic Nanoparticles. *Journal of the Electrochemical Society*, **2021**, 168, 016503	3.9	3
205	Visible light driven oxidation of harmful 2-Chloroethyl ethyl sulfide using SiO2-TiO2 composite particles and air. *Colloids and Interface Science Communications*, **2021**, 41, 100362	5.4	3

204	Chiral Photomelting of DNA-Nanocrystal Assemblies Utilizing Plasmonic Photoheating. *Nano Letters*, **2021**, 21, 7298-7308	11.5	7
203	Chiral Optofluidics with a Plasmonic Metasurface Using the Photothermal Effect. *ACS Nano*, **2021**, 15, 16357-16367	16.7	5
202	Broadband thin-film and metamaterial absorbers using refractory vanadium nitride and their thermal stability. *Optics Express*, **2021**, 29, 33456-33466	3.3	3
201	Chiral Assembly of Gold-Silver Core-Shell Plasmonic Nanorods on DNA Origami with Strong Optical Activity. *ACS Nano*, **2020**, 14, 7454-7461	16.7	32
200	Experimental and Theoretical Observation of Photothermal Chirality in Gold Nanoparticle Helicoids. *ACS Nano*, **2020**, 14, 4188-4195	16.7	31
199	Planar hot-electron photodetector utilizing high refractive index MoS in Fabry-P□ot perfect absorber. *Nanotechnology*, **2020**, 31, 274001	3.4	16
198	Determining Plasmonic Hot Electrons and Photothermal Effects during H2 Evolution with TiN□t Nanohybrids. *ACS Catalysis*, **2020**, 10, 5261-5271	13.1	66
197	Rational design of colloidal core/shell quantum dots for optoelectronic applications. *Journal of Electronic Science and Technology*, **2020**, 18, 100018	2.6	11
196	Hot Electrons Generated in Chiral Plasmonic Nanocrystals as a Mechanism for Surface Photochemistry and Chiral Growth. *Journal of the American Chemical Society*, **2020**, 142, 4193-4205	16.4	27
195	Terahertz three-dimensional monitoring of nanoparticle-assisted laser tissue soldering. *Biomedical Optics Express*, **2020**, 11, 2254-2267	3.5	5
194	Multitask deep-learning-based design of chiral plasmonic metamaterials. *Photonics Research*, **2020**, 8, 1213	6	26
193	Multipole and multimode engineering in Mie resonance-based metastructures. *Nanophotonics*, **2020**, 9, 1115-1137	6.3	37
192	Temporal plasmonics: Fano and Rabi regimes in the time domain in metal nanostructures. *Nanophotonics*, **2020**, 9, 3587-3595	6.3	10
191	Chiral Restructuring of Peptide Enantiomers on Gold Nanomaterials. *ACS Biomaterials Science and Engineering*, **2020**, 6, 2612-2620	5.5	6
190	Broadband mid-infrared perfect absorber using fractal Gosper curve. *Journal Physics D: Applied Physics*, **2020**, 53, 105106	3	17
189	Hybrid Plasmonic-Aerogel Materials as Optical Superheaters with Engineered Resonances. *Angewandte Chemie - International Edition*, **2020**, 59, 1696-1702	16.4	6
188	Photophysical Effects behind the Efficiency of Hot Electron Injection in Plasmon-Assisted Catalysis: The Joint Role of Morphology and Composition. *ACS Energy Letters*, **2020**, 5, 395-402	20.1	20
187	Broadband Tamm plasmon-enhanced planar hot-electron photodetector. *Nanoscale*, **2020**, 12, 23945-23952	7.7	14

186	Manipulating the Optoelectronic Properties of Quasi-type II CuInS/CdS Core/Shell Quantum Dots for Photoelectrochemical Cell Applications. *ACS Applied Materials & Interfaces*, **2020**, 12, 36277-36286	8.5	13
185	Efficiency of Hot-Electron Generation in Plasmonic Nanocrystals with Complex Shapes: Surface-Induced Scattering, Hot Spots, and Interband Transitions. *ACS Photonics*, **2020**, 7, 2807-2824	6.3	26
184	Identifying Performance-Limiting Deep Traps in Ta3N5 for Solar Water Splitting. *ACS Catalysis*, **2020**, 10, 10316-10324	13.1	28
183	Plasmonic Chirality and Circular Dichroism in Bioassembled and Nonbiological Systems: Theoretical Background and Recent Progress. *Advanced Materials*, **2020**, 32, e1801790	24	50
182	Hybrid Plasmonic Aerogel Materials as Optical Superheaters with Engineered Resonances. *Angewandte Chemie*, **2020**, 132, 1713-1719	3.6	5
181	Electronic Structure of the Plasmons in Metal Nanocrystals: Fundamental Limitations for the Energy Efficiency of Hot Electron Generation. *ACS Energy Letters*, **2019**, 4, 2552-2568	20.1	57
180	Time-Resolved Temperature-Jump Measurements and Theoretical Simulations of Nanoscale Heat Transfer Using NaYF4:Yb3+:Er3+ Upconverting Nanoparticles. *Journal of Physical Chemistry C*, **2019**, 123, 3770-3780	3.8	11
179	Gap-plasmon enhanced water splitting with ultrathin hematite films: the role of plasmonic-based light trapping and hot electrons. *Faraday Discussions*, **2019**, 214, 283-295	3.6	14
178	Chiral Plasmonic Nanocrystals for Generation of Hot Electrons: Toward Polarization-Sensitive Photochemistry. *Nano Letters*, **2019**, 19, 1395-1407	11.5	50
177	Chiral Plasmonic Nanostructures Enabled by Bottom-Up Approaches. *Annual Review of Physical Chemistry*, **2019**, 70, 275-299	15.7	61
176	Gold-implanted plasmonic quartz plate as a launch pad for laser-driven photoacoustic microfluidic pumps. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 6580-6585	11.5	15
175	The fast and the furious: Ultrafast hot electrons in plasmonic metastructures. Size and structure matter. *Nano Today*, **2019**, 27, 120-145	17.9	63
174	Fabrication of Anisotropic Silver Nanoplatelets on the Surface of TiO2 Fibers for Enhanced Photocatalysis of a Chemical Warfare Agent Simulant, Methyl Paraoxon. *Journal of Physical Chemistry C*, **2019**, 123, 19579-19587	3.8	12
173	Comparing Photoelectrochemical Methanol Oxidation Mechanisms for Gold versus Titanium Nitride Nanoparticles Dispersed in TiO2 Matrix. *Journal of the Electrochemical Society*, **2019**, 166, H485-H493	3.9	14
172	Generation of hot electrons in nanostructures incorporating conventional and unconventional plasmonic materials. *Faraday Discussions*, **2019**, 214, 199-213	3.6	17
171	Generation of Hot Electrons with Chiral Metamaterial Perfect Absorbers: Giant Optical Chirality for Polarization-Sensitive Photochemistry. *ACS Photonics*, **2019**, 6, 3241-3252	6.3	35
170	DNA-Enabled Chiral Gold Nanoparticle-Chromophore Hybrid Structure with Resonant Plasmon-Exciton Coupling Gives Unusual and Strong Circular Dichroism. *Journal of the American Chemical Society*, **2019**, 141, 19336-19341	16.4	20
169	Long-Range Plasmon-Assisted Chiral Interactions in Nanocrystal Assemblies. *ACS Photonics*, **2019**, 6, 749-756	6.3	12

168	Quantifying the photothermal conversion efficiency of plasmonic nanoparticles by means of terahertz radiation. *APL Photonics*, **2019**, 4, 126106	5.2	14
167	Theory of Photo-Thermal Effects for Plasmonic Nanocrystals and Assemblies. *SpringerBriefs in Applied Sciences and Technology*, **2019**, 5-22	0.4	1
166	Spectrally Resolved Ultrafast Exciton Transfer in Mixed Perovskite Quantum Wells. *Journal of Physical Chemistry Letters*, **2019**, 10, 419-426	6.4	53
165	Broadband Metamaterial Absorbers. *Advanced Optical Materials*, **2019**, 7, 1800995	8.1	236
164	Strong Quantum Confinement Effects and Chiral Excitons in Bio-Inspired ZnO–Amino Acid Cocrystals. *Journal of Physical Chemistry C*, **2018**, 122, 6348-6356	3.8	11
163	Plasmonic Glasses and Films Based on Alternative Inexpensive Materials for Blocking Infrared Radiation. *Nano Letters*, **2018**, 18, 3147-3156	11.5	24
162	Quantum Dots: Near-Infrared, Heavy Metal-Free Colloidal "Giant" Core/Shell Quantum Dots (Adv. Energy Mater. 2/2018). *Advanced Energy Materials*, **2018**, 8, 1870010	21.8	5
161	Photothermal Circular Dichroism Induced by Plasmon Resonances in Chiral Metamaterial Absorbers and Bolometers. *Nano Letters*, **2018**, 18, 2001-2008	11.5	61
160	Traveling Hot Spots in Plasmonic Photocatalysis: Manipulating Interparticle Spacing for Real-Time Control of Electron Injection. *ChemCatChem*, **2018**, 10, 1561-1565	5.2	18
159	Towards enhancing photocatalytic hydrogen generation: Which is more important, alloy synergistic effect or plasmonic effect?. *Applied Catalysis B: Environmental*, **2018**, 221, 77-85	21.8	49
158	Near-Infrared, Heavy Metal-Free Colloidal "Giant" Core/Shell Quantum Dots. *Advanced Energy Materials*, **2018**, 8, 1701432	21.8	68
157	Metamaterial perfect absorber with unabated size-independent absorption. *Optics Express*, **2018**, 26, 20471-20480	3.3	42
156	Determination of hot carrier energy distributions from inversion of ultrafast pump-probe reflectivity measurements. *Nature Communications*, **2018**, 9, 1853	17.4	42
155	DNA-Guided Plasmonic Helix with Switchable Chirality. *Journal of the American Chemical Society*, **2018**, 140, 11763-11770	16.4	103
154	Size-dependent longitudinal plasmon resonance wavelength and extraordinary scattering properties of Au nanobipyramids. *Nanotechnology*, **2018**, 29, 355402	3.4	19
153	Controlling Metamaterial Transparency with Superchiral Fields. *ACS Photonics*, **2018**, 5, 535-543	6.3	33
152	Heat Conversion: Highly Efficient Copper Sulfide-Based Near-Infrared Photothermal Agents: Exploring the Limits of Macroscopic Heat Conversion (Small 49/2018). *Small*, **2018**, 14, 1870238	11	3
151	Highly Efficient Copper Sulfide-Based Near-Infrared Photothermal Agents: Exploring the Limits of Macroscopic Heat Conversion. *Small*, **2018**, 14, e1803282	11	30

150	Circular Dichroism of Chiral Molecules in DNA-Assembled Plasmonic Hotspots. *ACS Nano*, **2018**, 12, 9110-9117	16.7	66
149	Tunable Nonthermal Distribution of Hot Electrons in a Semiconductor Injected from a Plasmonic Gold Nanostructure. *ACS Nano*, **2018**, 12, 7117-7126	16.7	47
148	Optoelectronic Properties in Near-Infrared Colloidal Heterostructured Pyramidal "Giant" Core/Shell Quantum Dots. *Advanced Science*, **2018**, 5, 1800656	13.6	49
147	Cooperative expression of atomic chirality in inorganic nanostructures. *Nature Communications*, **2017**, 8, 14312	17.4	54
146	Broadband Hot-Electron Collection for Solar Water Splitting with Plasmonic Titanium Nitride. *Advanced Optical Materials*, **2017**, 5, 1601031	8.1	147
145	Simple and Complex Metafluids and Metastructures with Sharp Spectral Features in a Broad Extinction Spectrum: Particle–Particle Interactions and Testing the Limits of the Beer–Lambert Law. *Journal of Physical Chemistry C*, **2017**, 121, 2987-2997	3.8	8
144	Aluminum Nanoparticles with Hot Spots for Plasmon-Induced Circular Dichroism of Chiral Molecules in the UV Spectral Interval. *Advanced Optical Materials*, **2017**, 5, 1700069	8.1	26
143	Hot spot-mediated non-dissipative and ultrafast plasmon passage. *Nature Physics*, **2017**, 13, 761-765	16.2	74
142	What's so Hot about Electrons in Metal Nanoparticles?. *ACS Energy Letters*, **2017**, 2, 1641-1653	20.1	256
141	InGaAs and GaAs quantum dot solar cells grown by droplet epitaxy. *Solar Energy Materials and Solar Cells*, **2017**, 161, 377-381	6.4	29
140	Laser streaming: Turning a laser beam into a flow of liquid. *Science Advances*, **2017**, 3, e1700555	14.3	31
139	Understanding Hot-Electron Generation and Plasmon Relaxation in Metal Nanocrystals: Quantum and Classical Mechanisms. *ACS Photonics*, **2017**, 4, 2759-2781	6.3	157
138	Effects of Plasmonic Metal Core -Dielectric Shell Nanoparticles on the Broadband Light Absorption Enhancement in Thin Film Solar Cells. *Scientific Reports*, **2017**, 7, 7696	4.9	66
137	Chiroplasmonic DNA-based nanostructures. *Nature Reviews Materials*, **2017**, 2,	73.3	88
136	Mid-infrared Plasmonic Circular Dichroism Generated by Graphene Nanodisk Assemblies. *Nano Letters*, **2017**, 17, 5099-5105	11.5	14
135	Solar-Energy Harvesting: Broadband Hot-Electron Collection for Solar Water Splitting with Plasmonic Titanium Nitride (Advanced Optical Materials 15/2017). *Advanced Optical Materials*, **2017**, 5,	8.1	2
134	Terahertz Thermometry: Combining Hyperspectral Imaging and Temperature Mapping at Terahertz Frequencies. *Laser and Photonics Reviews*, **2017**, 11, 1600342	8.3	15
133	Superchiral Plasmonic Phase Sensitivity for Fingerprinting of Protein Interface Structure. *ACS Nano*, **2017**, 11, 12049-12056	16.7	42

132	Near-Infrared Plasmonic Copper Nanocups Fabricated by Template-Assisted Magnetron Sputtering. *ACS Photonics*, **2017**, 4, 2881-2890	6.3	9
131	Enhanced generation and anisotropic Coulomb scattering of hot electrons in an ultra-broadband plasmonic nanopatch metasurface. *Nature Communications*, **2017**, 8, 986	17.4	41
130	Plasmonic Nanostars with Hot Spots for Efficient Generation of Hot Electrons under Solar Illumination. *Advanced Optical Materials*, **2017**, 5,	8.1	58
129	DNA Scaffolds for the Dictated Assembly of Left-/Right-Handed Plasmonic Au NP Helices with Programmed Chiro-Optical Properties. *Journal of the American Chemical Society*, **2016**, 138, 9895-901	16.4	40
128	Broadband Absorbing Exciton-Plasmon Metafluids with Narrow Transparency Windows. *Nano Letters*, **2016**, 16, 1472-7	11.5	19
127	A light-driven three-dimensional plasmonic nanosystem that translates molecular motion into reversible chiroptical function. *Nature Communications*, **2016**, 7, 10591	17.4	207
126	Chiroptical activity in colloidal quantum dots coated with achiral ligands. *Optics Express*, **2016**, 24, A65-73	3.3	6
125	Near Infrared, Highly Efficient Luminescent Solar Concentrators. *Advanced Energy Materials*, **2016**, 6, 1501913	21.8	115
124	Spatial control of chemical processes on nanostructures through nano-localized water heating. *Nature Communications*, **2016**, 7, 10946	17.4	32
123	Orientation-Sensitive Peptide-Induced Plasmonic Circular Dichroism in Silver Nanocubes. *Journal of Physical Chemistry C*, **2016**, 120, 12751-12756	3.8	24
122	Boosting Hot Electron-Driven Photocatalysis through Anisotropic Plasmonic Nanoparticles with Hot Spots in Au□TiO2 Nanoarchitectures. *Journal of Physical Chemistry C*, **2016**, 120, 11690-11699	3.8	151
121	Localization of Excess Temperature Using Plasmonic Hot Spots in Metal Nanostructures: Combining Nano-Optical Antennas with the Fano Effect. *Journal of Physical Chemistry C*, **2016**, 120, 13215-13226	3.8	50
120	Amplified Generation of Hot Electrons and Quantum Surface Effects in Nanoparticle Dimers with Plasmonic Hot Spots. *Journal of Physical Chemistry C*, **2016**, 120, 19329-19339	3.8	81
119	Fractal nanoparticle plasmonics: the Cayley tree. *ACS Nano*, **2015**, 9, 3284-92	16.7	75
118	Anomalous ultrafast dynamics of hot plasmonic electrons in nanostructures with hot spots. *Nature Nanotechnology*, **2015**, 10, 770-4	28.7	206
117	Hot plasmonic electrons for generation of enhanced photocurrent in gold-TiO2 nanocomposites. *Nanoscale Research Letters*, **2015**, 10, 38	5	35
116	Picosecond energy transfer and multiexciton transfer outpaces Auger recombination in binary´CdSe nanoplatelet solids. *Nature Materials*, **2015**, 14, 484-9	27	181
115	Harvesting Lost Photons: Plasmon and Upconversion Enhanced Broadband Photocatalytic Activity in Core@Shell Microspheres Based on Lanthanide-Doped NaYF4, TiO2, and Au. *Advanced Functional Materials*, **2015**, 25, 2950-2960	15.6	231

114	Circularly polarized light detection with hot electrons in chiral plasmonic metamaterials. *Nature Communications*, **2015**, 6, 8379	17.4	378
113	Enhanced Luminescence, Collective Heating, and Nanothermometry in an Ensemble System Composed of Lanthanide-Doped Upconverting Nanoparticles and Gold Nanorods. *Advanced Optical Materials*, **2015**, 3, 1606-1613	8.1	44
112	Kinetic Density Functional Theory for Plasmonic Nanostructures: Breaking of the Plasmon Peak in the Quantum Regime and Generation of Hot Electrons. *Journal of Physical Chemistry C*, **2015**, 119, 6181-6194	3.8	55
111	DNA-assembled nanoparticle rings exhibit electric and magnetic resonances at visible frequencies. *Nano Letters*, **2015**, 15, 1368-73	11.5	91
110	Broadband efficiency enhancement in quantum dot solar cells coupled with multispiked plasmonic nanostars. *Nano Energy*, **2015**, 13, 827-835	17.1	60
109	3D plasmonic chiral colloids. *Nanoscale*, **2014**, 6, 2077-81	7.7	89
108	Optophononics with coupled quantum dots. *Nature Communications*, **2014**, 5, 3299	17.4	23
107	Photogeneration of hot plasmonic electrons with metal nanocrystals: Quantum description and potential applications. *Nano Today*, **2014**, 9, 85-101	17.9	227
106	Optical Generation of Hot Plasmonic Carriers in Metal Nanocrystals: The Effects of Shape and Field Enhancement. *Journal of Physical Chemistry C*, **2014**, 118, 7606-7614	3.8	149
105	Förster-Type Nonradiative Energy Transfer for Assemblies of Arrayed Nanostructures: Confinement Dimension vs Stacking Dimension. *Journal of Physical Chemistry C*, **2014**, 118, 4951-4958	3.8	25
104	Cation exchange synthesis and optoelectronic properties of type II CdTe□Cu2□Te nano-heterostructures. *Journal of Materials Chemistry C*, **2014**, 2, 3189	7.1	23
103	Theory of Quantum Plasmon Resonances in Doped Semiconductor Nanocrystals. *Journal of Physical Chemistry C*, **2014**, 118, 16035-16042	3.8	54
102	Hierarchical synthesis of non-centrosymmetric hybrid nanostructures and enabled plasmon-driven photocatalysis. *Nature Communications*, **2014**, 5, 4792	17.4	93
101	Plasmonic Metamaterials and Nanocomposites with the Narrow Transparency Window Effect in Broad Extinction Spectra. *ACS Photonics*, **2014**, 1, 822-832	6.3	14
100	Reconfigurable 3D plasmonic metamolecules. *Nature Materials*, **2014**, 13, 862-6	27	477
99	Comparison of vapor formation of water at the solid/water interface to colloidal solutions using optically excited gold nanostructures. *ACS Nano*, **2014**, 8, 1439-48	16.7	46
98	Enantioselective control of lattice and shape chirality in inorganic nanostructures using chiral biomolecules. *Nature Communications*, **2014**, 5, 4302	17.4	138
97	Excitonics of semiconductor quantum dots and wires for lighting and displays. *Laser and Photonics Reviews*, **2014**, 8, 73-93	8.3	58

96	Amplification of chiroptical activity of chiral biomolecules by surface plasmons. *Nano Letters*, **2013**, 13, 1203-9	11.5	166
95	Optical Properties of Chiral Plasmonic Tetramers: Circular Dichroism and Multipole Effects. *Journal of Physical Chemistry C*, **2013**, 117, 14770-14777	3.8	65
94	Theory of Photoinjection of Hot Plasmonic Carriers from Metal Nanostructures into Semiconductors and Surface Molecules. *Journal of Physical Chemistry C*, **2013**, 117, 16616-16631	3.8	412
93	Chiral plasmonic nanostructures on achiral nanopillars. *Nano Letters*, **2013**, 13, 5277-83	11.5	107
92	Enantioselective Synthesis of Intrinsically Chiral Mercury Sulfide Nanocrystals. *Angewandte Chemie*, **2013**, 125, 1313-1317	3.6	17
91	Enantioselective synthesis of intrinsically chiral mercury sulfide nanocrystals. *Angewandte Chemie - International Edition*, **2013**, 52, 1275-9	16.4	94
90	Confinement and interaction of single indirect excitons in a voltage-controlled trap formed inside double InGaAs quantum Wells. *Physical Review Letters*, **2013**, 110, 127403	7.4	59
89	Chiroptical Activity in Silver Cholate Nanostructures Induced by the Formation of Nanoparticle Assemblies. *Journal of Physical Chemistry C*, **2013**, 117, 22240-22244	3.8	39
88	Chirality and chiroptical effects in inorganic nanocrystal systems with plasmon and exciton resonances. *Chemical Society Reviews*, **2013**, 42, 7028-41	58.5	265
87	Discrete nanocubes as plasmonic reporters of molecular chirality. *Nano Letters*, **2013**, 13, 3145-51	11.5	139
86	Generalized Theory of Förster-Type Nonradiative Energy Transfer in Nanostructures with Mixed Dimensionality. *Journal of Physical Chemistry C*, **2013**, 117, 10203-10212	3.8	46
85	Modelling of photo-thermal control of biological cellular oscillators. *European Physical Journal: Special Topics*, **2013**, 222, 2697-2704	2.3	3
84	Giant circular dichroism of a molecule in a region of strong plasmon resonances between two neighboring gold nanocrystals. *Physical Review B*, **2013**, 87,	3.3	117
83	Powering the programmed nanostructure and function of gold nanoparticles with catenated DNA machines. *Nature Communications*, **2013**, 4, 2000	17.4	113
82	Chiral plasmonic DNA nanostructures with switchable circular dichroism. *Nature Communications*, **2013**, 4, 2948	17.4	236
81	Photostimulated Au Nanoheaters in Polymer and Biological Media: Characterization of Mechanical Destruction and Boiling. *Advanced Functional Materials*, **2012**, 22, 294-303	15.6	53
80	Plasmonic chiroptical response of silver nanoparticles interacting with chiral supramolecular assemblies. *Journal of the American Chemical Society*, **2012**, 134, 17807-13	16.4	112
79	Induced chirality through electromagnetic coupling between chiral molecular layers and plasmonic nanostructures. *Nano Letters*, **2012**, 12, 977-83	11.5	156

78	Photothermal Effect of Plasmonic Nanoparticles and Related Bioapplications **2012**, 455-475		3
77	DNA-based self-assembly of chiral plasmonic nanostructures with tailored optical response. *Nature*, **2012**, 483, 311-4	50.4	1549
76	Chiral nanocrystals: plasmonic spectra and circular dichroism. *Nano Letters*, **2012**, 12, 3283-9	11.5	136
75	Theory of chiral plasmonic nanostructures comprising metal nanocrystals and chiral molecular media. *ChemPhysChem*, **2012**, 13, 2551-60	3.2	124
74	Plasmon-induced CD response of oligonucleotide-conjugated metal nanoparticles. *Chemical Communications*, **2011**, 47, 7383-5	5.8	74
73	Plasmonic circular dichroism of Peptide-functionalized gold nanoparticles. *Nano Letters*, **2011**, 11, 701-5	11.5	291
72	Plexciton dynamics: exciton-plasmon coupling in a J-aggregate-Au nanoshell complex provides a mechanism for nonlinearity. *Nano Letters*, **2011**, 11, 1556-60	11.5	219
71	Plasmon-Induced Circular Dichroism of a Chiral Molecule in the Vicinity of Metal Nanocrystals. Application to Various Geometries. *Journal of Physical Chemistry C*, **2011**, 115, 7914-7923	3.8	170
70	Quantum theory of the nonlinear Fano effect in hybrid metal-semiconductor nanostructures: The case of strong nonlinearity. *Physical Review B*, **2011**, 84,	3.3	79
69	Chiral nanoparticle assemblies: circular dichroism, plasmonic interactions, and exciton effects. *Journal of Materials Chemistry*, **2011**, 21, 16806		201
68	Helical Metal Nanoparticle Assemblies with Defects: Plasmonic Chirality and Circular Dichroism. *Journal of Physical Chemistry C*, **2011**, 115, 13254-13261	3.8	112
67	Plasmon induced modifications of the Fster energy transfer in reconstituted peridinin-chlorophyll-protein photosynthetic complex. *Materials Research Society Symposia Proceedings*, **2011**, 1286, 24		1
66	Many-body exciton states in self-assembled quantum dots coupled to a Fermi sea. *Nature Physics*, **2010**, 6, 534-538	16.2	47
65	Plasmon-induced Purcell effect in InN/In metal-semiconductor nanocomposites. *Physical Review B*, **2010**, 82,	3.3	19
64	Theory of circular dichroism of nanomaterials comprising chiral molecules and nanocrystals: plasmon enhancement, dipole interactions, and dielectric effects. *Nano Letters*, **2010**, 10, 1374-82	11.5	449
63	Solvent Effect in Dynamic Superstructures from Au Nanoparticles and CdTe Nanowires: Experimental Observation and Theoretical Description. *Journal of Physical Chemistry C*, **2010**, 114, 1404-1410	3.8	10
62	Broad band enhancement of light absorption in photosystem I by metal nanoparticle antennas. *Nano Letters*, **2010**, 10, 2069-74	11.5	106
61	Semiconductor-metal nanoparticle molecules in a magnetic field: Spin-plasmon and exciton-plasmon interactions. *Physical Review B*, **2010**, 82,	3.3	32

60	Measurement of coherent tunneling between InGaAs quantum wells and InAs quantum dots using photoluminescence spectroscopy. *Physical Review B*, **2010**, 82,	3.3	25
59	Thermomechanical control of electronic coupling in quantum dot solids. *Journal of Applied Physics*, **2010**, 107, 123516	2.5	13
58	Plasmonic circular dichroism of chiral metal nanoparticle assemblies. *Nano Letters*, **2010**, 10, 2580-7	11.5	384
57	Fluorescent Quantum Dots as Artificial Antennas for Enhanced Light Harvesting and Energy Transfer to Photosynthetic Reaction Centers. *Angewandte Chemie*, **2010**, 122, 7375-7379	3.6	6
56	Thermal Transport Properties of Nanostructures Immobilized Substrates. *Materials Research Society Symposia Proceedings*, **2009**, 1172, 7		
55	Thermal Effects of Colloidal Suspensions of Au Nanoparticles. *Materials Research Society Symposia Proceedings*, **2009**, 1172, 60		6
54	Metal-Enhanced Fluorescence of Chlorophylls in Single Light-Harvesting Complexes. *Materials Research Society Symposia Proceedings*, **2009**, 1208, 1		
53	Experimental and theoretical studies of light-to-heat conversion and collective heating effects in metal nanoparticle solutions. *Nano Letters*, **2009**, 9, 1139-46	11.5	483
52	The nonlinear Fano effect. *Nature*, **2008**, 451, 311-4	50.4	167
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