

CITATION REPORT

List of articles citing

Molecular photovoltaics

DOI: 10.1021/ar980112j

Accounts of Chemical Research, 2000, 33, 269-77.

Source: <https://exaly.com/paper-pdf/31577620/citation-report.pdf>

Version: 2024-04-26

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

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

#	Paper	IF	Citations
2356	Electron Transfer Dynamics in Nanocrystalline Titanium Dioxide Solar Cells Sensitized with Ruthenium or Osmium Polypyridyl Complexes. 2001 , 105, 392-403		266
2355	Surface Photovoltage Spectroscopy of Dye-Sensitized Solar Cells with TiO ₂ , Nb ₂ O ₅ , and SrTiO ₃ Nanocrystalline Photoanodes: Indication for Electron Injection from Higher Excited Dye States. 2001 , 105, 6347-6352		314
2354	Phthalocyanine-Sensitized Nanostructured TiO ₂ Electrodes Prepared by a Novel Anchoring Method. 2001 , 17, 2743-2747		117
2353	Understanding the Facile Photooxidation of Ru(bpy) ₃ ²⁺ in Strongly Acidic Aqueous Solution Containing Dissolved Oxygen. <i>Journal of Physical Chemistry A</i> , 2001 , 105, 6945-6954	2.8	30
2352	Light-harvesting and photocurrent generation by gold electrodes modified with mixed self-assembled monolayers of boron-dipyrin and ferrocene-porphyrin-fullerene triad. 2001 , 123, 100-10		385
2351	Crystallographically oriented mesoporous WO ₃ films: synthesis, characterization, and applications. 2001 , 123, 10639-49		894
2350	Hydrogen produced from hydrohalic acid solutions by a two-electron mixed-valence photocatalyst. 2001 , 293, 1639-41		280
2349	Concentration Effects of Porphyrin Monolayers on the Structure and Photoelectrochemical Properties of Mixed Self-Assembled Monolayers of Porphyrin and Alkanethiol on Gold Electrodes. 2001 , 17, 4925-4931		52
2348	CoII(dbbip) ₂ ²⁺ Complex Rivals Tri-iodide/Iodide Redox Mediator in Dye-Sensitized Photovoltaic Cells. 2001 , 105, 10461-10464		376
2347	Mesoporous and Mesostructured Materials for Optical Applications. 2001 , 13, 3140-3150		573
2346	Electron Injection and Recombination in Ru(dcbpy) ₂ (NCS) ₂ Sensitized Nanostructured ZnO. 2001 , 105, 5585-5588		267
2345	Interfacial Recombination Processes in Dye-Sensitized Solar Cells and Methods To Passivate the Interfaces. 2001 , 105, 1422-1429		458
2344	Modulation of the Rate of Electron Injection in Dye-Sensitized Nanocrystalline TiO ₂ Films by Externally Applied Bias. 2001 , 105, 7424-7431		162
2343	Resonance Raman Scattering of a Dye-Sensitized Solar Cell: Mechanism of Thiocyanato Ligand Exchange. 2001 , 105, 6314-6320		157
2342	Large Increases in Photocurrents and Solar Conversion Efficiencies by UV Illumination of Dye Sensitized Solar Cells. 2001 , 105, 7602-7605		111
2341	Photophysics and Relaxation Dynamics of Ru(4,4'-Dicarboxy-2,2'-bipyridine) ₂ cis(NCS) ₂ in Solution. <i>Journal of Physical Chemistry A</i> , 2001 , 105, 4019-4028	2.8	31
2340	Design and synthesis of nonconjugated monodendrons with triarylamine repeating units. 2001 , 3, 2057-60		11

2339	New ligands bearing chiral bioactive fragments. 2001 , 3, 1857-60		13
2338	Photophysical properties of TiO ₂ surfaces modified with dinuclear RuRu and RuOs polypyridyl complexes. 2001 , 40, 5343-9		42
2337	Triarylamine on Nanocrystalline TiO ₂ Studied in Its Reduced and Oxidized State by Photoelectron Spectroscopy. 2001 , 105, 7182-7187		12
2336	Interaction of I(-) and I(3)(-) with a redox-stable Cr(III)-based structural surrogate for photo-oxidized "N3 Dye". 2001 , 40, 5924-7		26
2335	. 2001 ,		40
2334	Rod-like Dinuclear Ruthenium Complexes for Dye-sensitized Photovoltaics. 2001 , 708, 10381		
2333	39.2: Nanostructured Electrochromic Displays: Electric-Paint Displays 2001 , 32, 1058		5
2332	Spectroscopy and Photocurrent Generation in Nanostructured Thin Films of PorphyrinBullerene Dyad Clusters. <i>Chemistry Letters</i> , 2001 , 30, 784-785	1.7	37
2331	Charge Transport in Nanostructured Thin-film Electrodes. 169-200		2
2330	Molecules for converting sunlight into electricity. 2001 , 6, 76-86		4
2329	Sensitization of nanoporous TiO ₂ electrodes using the naturally occurring chromophores: stentorin and hypericin. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2001 , 140, 179-183	4.7	6
2328	A new method to make dye-sensitized nanocrystalline solar cells at room temperature. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2001 , 145, 107-112	4.7	171
2327	Electric-paint displays with carbon counter electrodes. <i>Electrochimica Acta</i> , 2001 , 46, 2187-2193	6.7	24
2326	Potential modulated absorbance spectroscopy: an investigation of the potential distribution at a CdS nanoparticle modified electrode. 2001 , 504, 45-51		11
2325	Solar energy. Solar cells by self-assembly?. 2001 , 293, 1059-60		110
2324	Spectroscopy and hot electron relaxation dynamics in semiconductor quantum wells and quantum dots. 2001 , 52, 193-231		635
2323	Transient luminescence studies of electron injection in dye sensitised nanocrystalline TiO ₂ films. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2001 , 142, 215-220	4.7	77
2322	Photoelectrochemical cells. 2001 , 414, 338-44		11071

2321	Scanning impedance microscopy of electroactive interfaces. 2001 , 78, 1306-1308	67
2320	Charge-transfer dynamics studied using resonant core spectroscopies. 2002 , 74, 703-740	310
2319	Excited-state dynamics of alizarin-sensitized TiO ₂ nanoparticles from resonance Raman spectroscopy. <i>Journal of Chemical Physics</i> , 2002 , 117, 842-850	3.9 57
2318	Quantum-chemical studies of metal oxides for photoelectrochemical applications. 2002 , 41, 203-263	43
2317	Semisynthetic Hemoproteins Using Cofactor Engineering: Toward Supramolecular Protein-based Photosynthetic System. 2002 , 14, 133-142	3
2316	Near-infrared sensitization solar cell with the electrode of aluminium phthalocyanine adsorbed on nanocrystalline titanium dioxide film. 2002 , 06, 211-216	12
2315	A perspective on four new porphyrin-based functional materials and devices. 2002 , 06, 243-258	90
2314	Interfacial processes in organic-based solar cells. 2002 ,	4
2313	Role of the conducting layer substrate on TiO ₂ nucleation when using microwave activated chemical bath deposition. 2002 , 17, 1218-1222	15
2312	Fe(phen) ₃ ²⁺ -Modified Zeolite Particles and Their Energetic Studies. 2002 , 49, 51-56	2
2311	Grafting Molecular Properties onto Semiconductor Surfaces. 2002 ,	
2310	Mechanism of Charge Recombination in Dye-Sensitized Nanocrystalline Semiconductors: Random Flight Model. 2002 , 106, 4356-4363	174
2309	Photoelectrochemical Behavior in Low-Conductivity Media of Nanostructured TiO ₂ Films Deposited on Interdigitated Microelectrode Arrays. 2002 , 106, 7218-7224	29
2308	Electron Injection Dynamics of Ru(II)(dcbpy) ₂ (SCN) ₂ on Zirconia. 2002 , 106, 6211-6219	25
2307	PES Studies of Ru(dcbpy) ₂ (NCS) ₂ Adsorption on Nanostructured ZnO for Solar Cell Applications. 2002 , 106, 10102-10107	101
2306	Photocatalytic Activity of a Multicomponent System Assembled within Zeolites: Case of 2,4,6-Triphenylpyrylium or Ruthenium Tris(bipyridyl) Photosensitizers and Titanium Dioxide Relays within Zeolite Y. 2002 , 106, 2460-2467	38
2305	Layer-by-Layer Construction of Nanostructured Porphyrin/Bullerene Electrodes. 2002 , 2, 965-968	55
2304	Electron Spectroscopic Studies of Bis-(2,2'Ebipyridine)-(4,4'Edicarboxy-2,2'Ebipyridine)-ruthenium(II) and Bis-(2,2'Ebipyridine)-(4,4'Edicarboxy-2,2'Ebipyridine)-osmium(II) Adsorbed on Nanostructured TiO ₂ and ZnO Surfaces. 2002 , 106, 10108-10113	47

2303	Photocurrent generation in multilayer organic-inorganic thin films with cascade energy architectures. 2002 , 124, 4796-803		75
2302	A high-throughput optical screening method for the optimization of colloidal water oxidation catalysts. 2002 , 124, 11114-21		120
2301	Preparation of Nanoporous Titania Films by Surface Sol-Gel Process Accompanied by Low-Temperature Oxygen Plasma Treatment. 2002 , 18, 9048-9053		71
2300	Emission Spectra and Lifetimes of R6G Dye on Silica-Coated Titania Powder. 2002 , 18, 2444-2447		35
2299	Structure of Titania Sol-Gel Films: A Study by X-Ray Absorption Spectroscopy. 2002 , 106, 1153-1160		59
2298	XPS and UPS Characterization of the TiO ₂ /ZnPCl ₂ Heterointerface: Alignment of Energy Levels. 2002 , 106, 5814-5819		169
2297	Interfacial Electron-Transfer Dynamics in Ru(tcterpy)(NCS) ₃ -Sensitized TiO ₂ Nanocrystalline Solar Cells. 2002 , 106, 12693-12704		170
2296	Crystal Engineering Where Do We Go from Here?. 2002 , 2, 465-474		123
2295	Benzyl Alcohol and Titanium Tetrachloride A Versatile Reaction System for the Nonaqueous and Low-Temperature Preparation of Crystalline and Luminescent Titania Nanoparticles. 2002 , 14, 4364-4370		371
2294	Substituted polypyridine complexes of cobalt(II/III) as efficient electron-transfer mediators in dye-sensitized solar cells. 2002 , 124, 11215-22		498
2293	Electron Transfer from the Singlet and Triplet Excited States of Ru(dcbpy) ₂ (NCS) ₂ into Nanocrystalline TiO ₂ Thin Films. 2002 , 106, 4396-4404		203
2292	Electron Dynamics in Nanocrystalline ZnO and TiO ₂ Films Probed by Potential Step Chronoamperometry and Transient Absorption Spectroscopy. 2002 , 106, 7605-7613		123
2291	Solvent Effects on the Oxidative Electrochemical Behavior of cis-Bis(isothiocyanato)ruthenium(II)-bis-2,2'-bipyridine-4,4'-dicarboxylic Acid. 2002 , 106, 3926-3932		58
2290	Ground- and Excited-State Electronic Structures of the Solar Cell Sensitizer Bis(4,4'-dicarboxylato-2,2'-bipyridine)bis(isothiocyanato)ruthenium(II). <i>Journal of Physical Chemistry A</i> , 2002 , 106, 7399-7406	2.8	200
2289	Transient Absorption Spectroscopy of Ruthenium and Osmium Polypyridyl Complexes Adsorbed onto Nanocrystalline TiO ₂ Photoelectrodes. 2002 , 106, 9347-9358		178
2288	A strategy for improving the room-temperature luminescence properties of Ru(II) complexes with tridentate ligands. 2002 , 124, 7912-3		118
2287	A Theoretical Investigation of the Ground and Excited States of Selected Ru and Os Polypyridyl Molecular Dyes. <i>Journal of Physical Chemistry A</i> , 2002 , 106, 11354-11360	2.8	166
2286	Photoinduced ultrafast dye-to-semiconductor electron injection from nonthermalized and thermalized donor states. 2002 , 124, 489-93		510

2285	A new class of functionalized terpyridyl ligands as building blocks for photosensitized supramolecular architectures. Synthesis, structural, and electronic characterizations. 2002 , 124, 1364-77		76
2284	Tuning the photocatalytic activity of titanium dioxide by encapsulation inside zeolites exemplified by the cases of thianthrene photooxygenation and horseradish peroxidase photodeactivation. 2002 , 26, 1448-1455		39
2283	Organic photovoltaic films. 2002 , 6, 87-95		333
2282	Molecular engineering of semiconductor surfaces and devices. <i>Accounts of Chemical Research</i> , 2002 , 35, 121-8	24.3	276
2281	Nanostructured Materials in Photoelectrochemical Applications. 2002 , 209-234		2
2280	Modified phthalocyanines for efficient near-IR sensitization of nanostructured TiO ₂ electrode. 2002 , 124, 4922-32		382
2279	Visible Light-induced Hydrogen Evolution from Aqueous Suspensions of Titanium(IV) Oxide Modified with Binaphthol. 2002 , 70, 442-445		18
2278	How organic molecules can control electronic devices. 2002 , 20, 22-9		98
2277	Organic photovoltaic films. 2002 , 5, 20-27		51
2276	Photoelectric behavior of nanocrystalline TiO ₂ electrode with a novel terpyridyl ruthenium complex. 2002 , 71, 261-271		42
2275	A 5% efficient photoelectrochemical solar cell based on nanostructured ZnO electrodes. 2002 , 73, 51-58		535
2274	Quantum dot solar cells. 2002 , 14, 115-120		1878
2273	Modulating interfacial electron transfer dynamics in dye sensitised nanocrystalline metal oxide films. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2002 , 148, 5-10	4-7	33
2272	Photosensitization of nanocrystalline TiO ₂ films by anthocyanin dyes. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2002 , 148, 17-24	4-7	97
2271	Electron injection kinetics for the nanocrystalline TiO ₂ films sensitised with the dye (Bu ₄ N) ₂ Ru(dcbpyH) ₂ (NCS) ₂ . 2002 , 285, 127-132		85
2270	Determination of the electronic density of states at a nanostructured TiO ₂ /Ru-dye/electrolyte interface by means of photoelectron spectroscopy. 2002 , 285, 157-165		54
2269	Electron dynamics within Ru-2,2'-bipyridine complexes: N1s core level excitation study. 2002 , 285, 167-176		17
2268	Quantum chemical prediction of the adsorption conformations and dynamics at HCOOH-covered ZnO(1010) surfaces. 2002 , 89, 172-180		41

2267	Experimental evidence for sub-3-fs charge transfer from an aromatic adsorbate to a semiconductor. 2002 , 418, 620-3		321
2266	Ligand-to-ligand charge transfer states and photochemical bond homolysis in metal-carbon bonded platinum complexes. <i>Coordination Chemistry Reviews</i> , 2002 , 230, 193-211	23.2	56
2265	Energy transfer and harvesting in [Ru ¹ Osx(bpy) ₃](PF ₆) ₂ and {[Ru(bpy) ₃][Os(bpy) ₃]}(PF ₆) ₄ . <i>Coordination Chemistry Reviews</i> , 2002 , 229, 75-93	23.2	29
2264	Transport and interfacial transfer of electrons in dye-sensitized nanocrystalline solar cells. 2002 , 524-525, 127-136		121
2263	Electrochemistry and spectroelectrochemistry of ruthenium(II)-bipyridine building blocks. Different behaviour of the 2,3- and 2,5-bis(2-pyridyl)pyrazine bridging ligands. 2002 , 532, 99-112		47
2262	Interfacial charge recombination via the triplet state? Mimicry of photoprotection in the photosynthetic process with a dye-sensitized TiO ₂ solar cell reaction. 2002 , 355, 294-300		17
2261	Energy harvesting in {[Ru(bpy) ₃][Os(bpy) ₃]}(PF ₆) ₄ and tunability of emission properties under magnetic field application. 2002 , 362, 365-372		7
2260	Electronic interactions between aromatic adsorbates and metal oxide substrates calculated from first principles. 2002 , 364, 469-474		58
2259	Carrier Localization and Cooling in Dye-Sensitized Nanocrystalline Titanium Dioxide. 2002 , 106, 11716-11719		188
2258	Conversion and Storage of Solar Energy using Dye-sensitized Nanocrystalline TiO ₂ Cells. 2003 , 719-758		13
2257	Design of new coumarin dyes having thiophene moieties for highly efficient organic-dye-sensitized solar cells. 2003 , 27, 783-785		596
2256	Excitonic Solar Cells: The Physics and Chemistry of Organic-Based Photovoltaics. 2003 , 243-257		11
2255	Flash photolysis studies of charge-transfer photochemistry of nickel(II) and cobalt(III) complexes. 2003 , 29, 349-364		9
2254	Molecular Design of Coumarin Dyes for Efficient Dye-Sensitized Solar Cells. 2003 , 107, 597-606		936
2253	A theoretical investigation of the dye-redox mediator interaction in dye-sensitized photovoltaic cells. 2003 , 371, 378-385		12
2252	One-step electrochemical synthesis of ZnO/Ru(dcbpy) ₂ (NCS) ₂ hybrid thin films and their photoelectrochemical properties. <i>Electrochimica Acta</i> , 2003 , 48, 3071-3078	6.7	33
2251	Exploiting the excited state. 2003 , 340-342, 48-57		5
2250	Visible and near-IR luminescence via energy transfer in rare earth doped mesoporous titania thin films with nanocrystalline walls. 2003 , 172, 81-88		203

2249	Molecular and electronic structures of black dye; an efficient sensitizing dye for nanocrystalline TiO ₂ solar cells. 2003 , 658, 25-32		55
2248	Structural study of adsorption of isonicotinic acid and related molecules on rutile TiO ₂ (110) I: XAS and STM. 2003 , 540, 39-54		50
2247	The surface science of titanium dioxide. 2003 , 48, 53-229		6317
2246	Photochemical hydrogen evolution from aqueous triethanolamine solutions sensitized by binaphthol-modified titanium(IV) oxide under visible-light irradiation. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2003 , 160, 61-67	4-7	72
2245	Dye-sensitized solar cells. 2003 , 4, 145-153		3630
2244	Solar cells with porphyrin sensitization. 2003 , 21, 221-224		33
2243	Manufacturing method for transparent electric windows using dye-sensitized TiO ₂ solar cells. 2003 , 75, 475-479		59
2242	Dye-sensitized nanocrystalline TiO ₂ solar cells based on novel coumarin dyes. 2003 , 77, 89-103		227
2241	Design of a block copolymer solar cell. 2003 , 79, 257-264		90
2240	A stable quasi-solid-state dye-sensitized solar cell with an amphiphilic ruthenium sensitizer and polymer gel electrolyte. 2003 , 2, 402-7		1387
2239	Characterization of a commercial dye-sensitised titania solar cell electrode. 2003 , 76, 25-35		15
2238	A study of reverse bias in a dye sensitised photoelectrochemical device. 2003 , 76, 175-181		17
2237	Eilatin as a bridging ligand in ruthenium(II) complexes: synthesis, crystal structures, absorption spectra, and electrochemical properties. 2003 , 42, 3483-91		33
2236	Absorption spectrum and solvatochromism of the [Ru(4,4'-COOH-2,2'-bpy) ₂ (NCS) ₂] molecular dye by time dependent density functional theory. 2003 , 125, 4381-7		289
2235	Conductivity in CdSe quantum dots and TiO ₂ /sub 2/ nanoparticles: what can THz spectroscopy tell us?.		
2234	A swift dye uptake procedure for dye sensitized solar cells. 2003 , 1456-7		176
2233	Investigation of Sensitizer Adsorption and the Influence of Protons on Current and Voltage of a Dye-Sensitized Nanocrystalline TiO ₂ Solar Cell. 2003 , 107, 8981-8987		671
2232	Charge Transfer on the Nanoscale: Current Status. 2003 , 107, 6668-6697		895

2231	Excitonic Solar Cells. 2003 , 107, 4688-4698	671
2230	Turning off phototriggered linkage isomerizations in ruthenium dimethyl sulfoxide complexes. 2003 , 42, 7357-9	45
2229	Photoelectrochemical and Optical Properties of Nitrogen Doped Titanium Dioxide Films Prepared by Reactive DC Magnetron Sputtering. 2003 , 107, 5709-5716	565
2228	Explaining the Enhanced Photocatalytic Activity of Degussa P25 Mixed-Phase TiO ₂ Using EPR. 2003 , 107, 4545-4549	1660
2227	Efficient Light Harvesting Polymers for Nanocrystalline TiO ₂ Photovoltaic Cells. 2003 , 3, 523-525	138
2226	Photoelectrochemical Reactions at Phthalocyanine Electrodes. 2003 , 247-283	18
2225	Optical properties and ultrafast dynamics of metallic nanocrystals. 2003 , 54, 331-66	1121
2224	Photochemical charge transfer and trapping at the interface between an organic adlayer and an oxide semiconductor. 2003 , 125, 14974-5	157
2223	Ruthenium complexes of 2-(2-pyridyl)benzimidazole as photosensitizers for dye-sensitized solar cells. 2003 , 685-691	23
2222	Self-Assembled Monolayers of Ruthenium and Osmium Bis-Terpyridine Complexes: Insights of the Structure and Interaction Energies by Combining Scanning Tunneling Microscopy and Electrochemistry. 2003 , 107, 1157-1162	41
2221	Excited-state metal-to-ligand charge transfer dynamics of a ruthenium(II) dye in solution and adsorbed on TiO ₂ nanoparticles from resonance Raman spectroscopy. 2003 , 125, 15636-46	86
2220	Particle Size and Crystallinity Dependent Electron Injection in Fluorescein 27-Sensitized TiO ₂ Films. 2003 , 107, 1370-1375	95
2219	Synthesis and comprehensive characterizations of new cis-RuL(2)X(2) (X = Cl, CN, and NCS) sensitizers for nanocrystalline TiO(2) solar cell using Bis-phosphonated bipyridine ligands (L). 2003 , 42, 6655-66	104
2218	Internal Reference Electrode in Dye Sensitized Solar Cells for Three-Electrode Electrochemical Characterizations. 2003 , 107, 6022-6025	34
2217	Photoluminescence and Electroluminescence of d6 Metal-Organic Conjugated Oligomers: Correlation of Photophysics and Device Performance. 2003 , 107, 12569-12572	32
2216	Electron Transfer Dynamics in Quantum Dot/Titanium Dioxide Composites Formed by in Situ Chemical Bath Deposition. 2003 , 107, 14154-14157	109
2215	Light Energy Conversion Using Mixed Molecular Nanoclusters. Porphyrin and C60 Cluster Films for Efficient Photocurrent Generation. 2003 , 107, 12105-12112	136
2214	Products of the electrochemical oxidation of cis-L(2)Ru(III)(NCS)(2) in dimethylformamide and acetonitrile determined by LC-UV/Vis-MS. 2003 , 42, 5545-50	13

2213	Generation and Migration of Electrons and Holes during Naphthalene Sorption in Acidic Al-ZSM-5 Zeolites. 2003 , 107, 8935-8945	26
2212	Energetic Probing for the Electron Transfer Reactions Sensitized by 9,10-Dicyanoanthracene and 9-Cyanoanthracene and Their Modified Zeolite Particles. 2003 , 107, 1628-1633	12
2211	Synthesis of nonconjugated dendrons with a redox gradient. 2003 , 68, 5559-67	20
2210	Organic and Plastic Solar Cells. 2003 , 483-511	
2209	Mono- and Dinuclear Ruthenium Complexes for Nanocrystalline TiO ₂ Based Dye-Sensitized Photovoltaics. 2003 , 40, 1317-1325	7
2208	A New Ionic Liquid Electrolyte Enhances the Conversion Efficiency of Dye-Sensitized Solar Cells. 2003 , 107, 13280-13285	569
2207	Photocurrent-Determining Processes in Quasi-Solid-State Dye-Sensitized Solar Cells Using Ionic Gel Electrolytes. 2003 , 107, 4374-4381	415
2206	Quantum dynamics simulations of interfacial electron transfer in sensitized TiO ₂ semiconductors. 2003 , 125, 7989-97	345
2205	Electron Injection Efficiency from Excited N ₃ into Nanocrystalline ZnO Films: Effect of (N ₃) _n ²⁺ Aggregate Formation. 2003 , 107, 2570-2574	201
2204	Quaternary self-organization of porphyrin and fullerene units by clusterization with gold nanoparticles on SnO ₂ electrodes for organic solar cells. 2003 , 125, 14962-3	158
2203	Control of charge recombination dynamics in dye sensitized solar cells by the use of conformally deposited metal oxide blocking layers. 2003 , 125, 475-82	967
2202	Diffusion Limitations to I _{sub 3} ⁻ /I _{sub 2} ⁻ Electrolyte Transport Through Nanoporous TiO ₂ Networks. 2003 , 6, E11	40
2201	Direct Observation of Interfacial Charge Recombination to the Excited-Triplet State in All-trans-Retinoic Acid Sensitized TiO ₂ Nanoparticles by Femtosecond Time-Resolved Difference Absorption Spectroscopy. 2003 , 107, 13688-13697	29
2200	Novel polyene dyes for highly efficient dye-sensitized solar cells. 2003 , 252-3	261
2199	Enhanced Dye-Sensitized Photoconversion Efficiency via Reversible Production of UV-Induced Surface States in Nanoporous TiO ₂ . 2003 , 107, 3019-3029	86
2198	Comparing organic to inorganic photovoltaic cells: Theory, experiment, and simulation. 2003 , 93, 3605-3614	402
2197	Electronic Transport in Dye-Sensitized Nanoporous TiO ₂ Solar Cells Comparison of Electrolyte and Solid-State Devices. 2003 , 107, 3556-3564	121
2196	From metal complexes to fullerene arrays: exploring the exciting world of supramolecular photochemistry fifteen years after its birth. 2003 , 2, 73-87	102

2195	Enhance the Performance of Dye-Sensitized Solar Cells by Co-grafting Amphiphilic Sensitizer and Hexadecylmalonic Acid on TiO ₂ Nanocrystals. 2003 , 107, 14336-14341		638
2194	Thermal and photo control of the linkage isomerism of bis(thiocyanato)(2,2'-bipyridine)platinum(II). 2003 , 42, 8728-34		39
2193	Photosensitization of Nanocrystalline SnO ₂ Films with a tris(2,2'-Bipyridine) Ruthenium(II)-Fullerene Dyad. 2003 , 11, 121-133		3
2192	Energy transfer in multichromophoric self-assembled molecular squares. 2003 , 1, 240-3		73
2191	Kinetics of Absorbed Chromophore Exchange on Metal Oxide Electrodes. 2003 , 19, 6081-6087		6
2190	Molecular Assembly by Sequential Ionic Adsorption of Nanocrystalline TiO ₂ and a Conjugated Polymer. 2003 , 40, 1307-1316		8
2189	Characterization of Au/TiO ₂ Nanocomposites by XPS. 2003 , 10, 1-7		17
2188	Electron Transfer from the Molecular to the Nanoscale. 2003 , 731-777		5
2187	Alignment of valence photoemission, x-ray absorption, and substrate density of states for an adsorbate on a semiconductor surface. 2003 , 67,		41
2186	Excited-state charge transfer dynamics in systems of aromatic adsorbates on TiO ₂ studied with resonant core techniques. <i>Journal of Chemical Physics</i> , 2003 , 119, 12462-12472	3-9	47
2185	Dye-sensitized solar cell with the near-infrared sensitization of aluminum phthalocyanine. 2003 , 07, 131-136		17
2184	Analysis of Energy Conversion Efficiency with an Empirical Model in Dye-Sensitized Nanocrystalline Solar Cells. 2003 , 6, A236		7
2183	Transient photoconductivity in CdSe nanoparticles and nanocrystalline TiO ₂ as measured by time-resolved terahertz spectroscopy. 2003 ,		2
2182	Mesoporous Titania Thin Film with Cubic Mesostructure using Photocalcination. 2003 , 146, 77-80		3
2181	UV Light-assisted Chemical Vapor Deposition of TiO ₂ for Efficiency Development at Dye-sensitized Mesoporous Layers on Plastic Film Electrodes. <i>Chemistry Letters</i> , 2003 , 32, 1076-1077	1-7	54
2180	Novel and Efficient Organic Liquid Electrolytes for Dye-sensitized Solar Cells Based on a Ru(II) Terpyridyl Complex Photosensitizer. <i>Chemistry Letters</i> , 2003 , 32, 1014-1015	1-7	11
2179	. 2003 ,		64
2178	Molecular Electron Transfer. 2003 , 657-730		7

2177	Fabrication and Efficiency Enhancement of Water-based Dye-Sensitized Solar Cells by Interfacial Activation of TiO ₂ Mesopores. 2004 , 72, 310-316		22
2176	Molecular ordering in isonicotinic acid on rutile TiO ₂ (110) investigated with valence band photoemission. <i>Journal of Chemical Physics</i> , 2004 , 121, 10203-8	3.9	11
2175	Nonlinear transport imaging by scanning impedance microscopy. 2004 , 85, 4240-4242		15
2174	Dye Sensitized Solar Cells Using Nanostructured Thin Films of Titanium Dioxide. 2004 , 836, L5.13.1		
2173	Interface modifications in solid state dye-sensitized TiO ₂ solar cells. 2004 ,		
2172	Organometallic triplet emitters for OLED applications: controlling emission properties by chemical variation. 2004 , 5214, 124		11
2171	Photoelectrochemical Cell Based on Mixed Dye-Sensitized Nanocrystalline ZnO Thin Film Electrodes in Acetonitrile Medium. <i>Journal of the Electrochemical Society</i> , 2004 , 151, G740	3.9	4
2170	Hybrid thin films of ZnO with porphyrins and phthalocyanines prepared by one-step electrodeposition. 2004 , 08, 1366-1375		14
2169	Hierarchically mesostructured doped CeO ₂ with potential for solar-cell use. 2004 , 3, 394-7		683
2168	Future Challenges in Automotive Emission Control. 2004 , 28, 191-199		35
2167	Au/TiO ₂ Nanosystems: A Combined RF-Sputtering/Sol-Gel Approach. 2004 , 16, 3331-3338		66
2166	Microwave calcination of thin TiO ₂ films on transparent conducting oxide glass substrates. <i>Journal of Materials Science</i> , 2004 , 39, 6361-6363	4.3	5
2165	Facile synthesis of chlorophyll analog possessing a disulfide bond and formation of self-assembled monolayer on gold surface. 2004 , 73, 29-34		17
2164	Microstructure characterization of titanium dioxide nanodispersions and thin films for dye-sensitized solar cell devices. 2004 , 79, 1819-1828		16
2163	Dual-functional materials for interface modifications in solid-state dye-sensitized TiO ₂ solar cells. 2004 , 79, 65-71		41
2162	A New Alternating Ferro-Antiferromagnetic One-Dimensional Azido-Bridged (Arylazoimidazole)manganese(II), [Mn(TaiEt)(N ₃) ₂] _n [TaiEt = 1-Ethyl-2-(p-tolylazo)imidazole], Exhibiting Bulk Weak Ferromagnetic Long-Range Ordering. 2004 , 2004, 250-259		61
2161	Synthesis of monophosphonic acid ligands with a phenanthroline core. 2004 , 45, 7805-7807		3
2160	Light-harvesting composites of directly connected porphyrin-phthalocyanine dyads and their coordination dimers. 2004 , 45, 7617-7620		62

2159	Slow interfacial charge recombination in solid-state dye-sensitized solar cell using Al ₂ O ₃ -coated nanoporous TiO ₂ films. 2004 , 81, 197-203		98
2158	Enhancement of photovoltaic characteristics using a PEDOT interlayer in TiO ₂ /MEHPPV heterojunction devices. 2004 , 85, 31-31		4
2157	Influence of electrolyte on the photovoltaic performance of a dye-sensitized TiO ₂ solar cell based on a Ru(II) terpyridyl complex photosensitizer. 2004 , 85, 21-21		4
2156	X-ray photoelectron spectroscopy of fluorescein adsorbed on model solar-cell surfaces. 2004 , 548, 317-323		17
2155	Preparation and properties of dye-sensitized solar cell using chlorophyll derivative immobilized TiO ₂ film electrode. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2004 , 164, 47-51	4-7	49
2154	Low temperature preparation of mesoporous TiO ₂ films for efficient dye-sensitized photoelectrode by chemical vapor deposition combined with UV light irradiation. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2004 , 164, 187-191	4-7	141
2153	Preparation and photoelectrochemical characterization of a red sensitive osmium complex containing 4,4',4''-tricarboxy-2,2':6',2''-terpyridine and cyanide ligands. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2004 , 164, 15-21	4-7	75
2152	Electrochemical properties of dye-sensitized solar cells fabricated with PVDF-type polymeric solid electrolytes. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2004 , 164, 111-115	4-7	96
2151	Comparative studies of substituted ruthenium(II)pyrazolopyridine complexes with classical N3 photosensitizer: the influence of NCS dye ligands on the efficiency of solid-state nanocrystalline solar cells. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2004 , 163, 331-340	4-7	26
2150	Light and energy dye solar cells for the 21st century. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2004 , 164, 209-219	4-7	94
2149	Conversion of sunlight to electric power by nanocrystalline dye-sensitized solar cells. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2004 , 164, 3-14	4-7	1898
2148	Sensitization of TiO ₂ with ruthenium complexes containing boronic acid functions. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2004 , 166, 91-98	4-7	38
2147	Efficient osmium sensitizers containing 2,2'-bipyridine-4,4'-bisphosphonic acid ligand. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2004 , 166, 99-106	4-7	19
2146	Organic photosensitizers with catechol groups for dye-sensitized photovoltaics. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2004 , 168, 191-196	4-7	56
2145	Solidifying liquid electrolytes with fluorine polymer and silica nanoparticles for quasi-solid dye-sensitized solar cells. 2004 , 125, 1241-1245		99
2144	Electropolymerisable bipyridine ruthenium(II) complexes: synthesis, spectroscopic and electrochemical characterisation of 4-((2-thienyl) ethenyl)- and 4,4'-di((2-thienyl) ethenyl)-2,2'-bipyridine ruthenium complexes. 2004 , 23, 589-598		17
2143	2D Extended supramolecular structures via π -interactions of 1D coordination polymers of cadmium(II) complexes of arylazoimidazole using azido and thiocyanato bridging ligands. 2004 , 23, 1669-1676		55
2142	The preparation of high-surface-area nanocrystalline TiO ₂ films using easy-reaggregation particles in solution. 2004 , 110, 227-232		18

2141	Modification of electron transfer properties in photoelectrochemical solar cells by substituting {Ru(terpy)} ₂ ²⁺ dyes with thiophene. 2004 , 7, 117-121		41
2140	Porphyrins as light harvesters in the dye-sensitised TiO ₂ solar cell. <i>Coordination Chemistry Reviews</i> , 2004 , 248, 1363-1379	23.2	699
2139	Electrochemical, spectral, and quartz crystal microgravimetric assessment of conduction band edge energies for nanocrystalline zirconium dioxide/solution interfaces. <i>Coordination Chemistry Reviews</i> , 2004 , 248, 1225-1230	23.2	13
2138	Towards optimisation of electron transfer processes in dye sensitised solar cells. <i>Coordination Chemistry Reviews</i> , 2004 , 248, 1247-1257	23.2	239
2137	Design of molecular dyes for application in photoelectrochemical and electrochromic devices based on nanocrystalline metal oxide semiconductors. <i>Coordination Chemistry Reviews</i> , 2004 , 248, 1299-1316	23.2	201
2136	Random walk models of charge transfer and transport in dye sensitized systems. <i>Coordination Chemistry Reviews</i> , 2004 , 248, 1181-1194	23.2	272
2135	Synthetic routes to homoleptic and heteroleptic ruthenium(II) complexes incorporating bidentate imine ligands. <i>Coordination Chemistry Reviews</i> , 2004 , 248, 1329-1341	23.2	87
2134	A system approach to molecular solar cells. <i>Coordination Chemistry Reviews</i> , 2004 , 248, 1501-1509	23.2	64
2133	Metal complex sensitizers in dye-sensitized solar cells. <i>Coordination Chemistry Reviews</i> , 2004 , 248, 1343-1361	23.2	444
2132	Theoretical study of ultrafast heterogeneous electron transfer reactions at dye/semiconductor interfaces. 2004 , 304, 169-181		76
2131	Ultrafast singlet energy transfer competes with intersystem crossing in a multi-center transition metal polypyridine complex. 2004 , 386, 336-341		49
2130	Ultrafast relaxation dynamics of charge carriers relaxation in ZnO nanocrystalline thin films. 2004 , 387, 176-181		103
2129	Significantly enhanced photocurrent efficiency of a poly(3-hexylthiophene) photoelectrochemical device by doping with the endohedral metallofullerene Dy@C ₈₂ . 2004 , 388, 253-258		28
2128	Time-dependent density functional theory study of the absorption spectrum of [Ru(4,4'-COOH-2,2'-bpy) ₂ (NCS) ₂] in water solution: influence of the pH. 2004 , 389, 204-208		118
2127	New paradigm of transition metal polypyridine complex photochemistry. 2004 , 127, 295-305		32
2126	Langmuir-Blodgett Films of Poly(3-hexylthiophene) Doped with the Endohedral Metallofullerene : Preparation, Characterization, and Application in Photoelectrochemical Cells. 2004 , 108, 4394-4404		62
2125	Ruthenium(II) Acetylide and Carbene Complexes Supported by the Terpyridine-Bipyridine Ligand Set: Structural, Spectroscopic, and Photochemical Studies 2004 , 23, 2263-2272		27
2124	Photocatalytic hydrogen production from hantzsch 1,4-dihydropyridines by platinum(II) terpyridyl complexes in homogeneous solution. 2004 , 126, 3440-1		213

2123	Topography of the rutile TiO ₂ (110) surface exposed to water and organic solvents. 2004 , 20, 4782-3	27
2122	Mononuclear and binuclear wirelike ruthenium(II) complexes with oligo-diethynyl-thiophene bridged back-to-back terpyridine ligands: synthesis and electrochemical and photophysical properties. 2004 , 43, 7359-68	68
2121	Photoinduced Redox Reaction Coupled with Limited Electron Mobility at Metal Oxide Surface. 2004 , 108, 10621-10624	52
2120	Adsorption and Charge-Transfer Study of Bi-isonicotinic Acid on In Situ-Grown Anatase TiO ₂ Nanoparticles. 2004 , 108, 3114-3122	34
2119	Effect of Fe ₂ O ₃ and Cr ₂ O ₃ on anatase - rutile transformation in TiO ₂ . 2004 , 103, 23-28	18
2118	Amphiphilic Polypyridyl Ruthenium Complexes with Substituted 2,2'-Dipyridylamine Ligands for Nanocrystalline Dye-Sensitized Solar Cells. 2004 , 16, 3246-3251	49
2117	Solvation Dynamics at the Water/Zirconia Interface: Molecular Dynamics Simulations 2004 , 108, 19687-19697	25
2116	Sensitization of nanostructured TiO ₂ by electrostatic coupling of ionic dyes to ionic absorbates. 2004 , 20, 5100-3	13
2115	Free-Energy-Driven Transfer of Charge in Dense Electrochemically Active Monomolecular Films. 2004 , 108, 15815-15819	6
2114	[60]Fullerene-Based Molecular Triads with Expanded Absorptions in the Visible Region: Synthesis and Photovoltaic Properties. 2004 , 108, 16677-16685	57
2113	Light and energy dye solar cells for the 21st century. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2004 , 164, 209-209	4-7 1
2112	Anchoring Group and Auxiliary Ligand Effects on the Binding of Ruthenium Complexes to Nanocrystalline TiO ₂ Photoelectrodes. 2004 , 108, 15640-15651	111
2111	Self-assembled monolayers of Ru/Os dinuclear complexes: probing monolayer structure and interaction energies by electrochemical means. 2004 , 20, 9242-8	31
2110	Pore-Wall Chemistry and Photocatalytic Activity of Mesoporous Titania Molecular Sieve Films. 2004 , 16, 1523-1530	245
2109	Characterization of a Porphyrin-Containing Dye-Sensitized Solar Cell. 2004 , 108, 12962-12971	64
2108	Enhanced Mesostructural Order and Changes to Optical and Electrochemical Properties Induced by the Addition of Cerium(III) to Mesoporous Titania Thin Films. 2004 , 16, 3524-3532	51
2107	Photoinduced intramolecular electron transfer in ruthenium and osmium polyads: insights from theory. 2004 , 126, 10763-77	195
2106	Conjugated Polymer Photovoltaic Cells. 2004 , 16, 4533-4542	1940

2105	Structure, Composition, and Morphology of Photoelectrochemically Active TiO ₂ -xN _x Thin Films Deposited by Reactive DC Magnetron Sputtering. 2004 , 108, 20193-20198	107
2104	Titania Nanoparticles Prepared with Pulsed Laser Ablation of Rutile Single Crystals in Water. 2004 , 108, 10863-10871	82
2103	Visible Light Induced Electron Transfer and Long-Lived Charge Separated State in Cyanine Dye/Layered Titanate Intercalation Compounds. 2004 , 108, 4268-4274	59
2102	Excitation Energies of Metal Complexes with Time-dependent Density Functional Theory. 2004 , 49-116	69
2101	Current Density versus Potential Characteristics of Dye-Sensitized Nanostructured Semiconductor Photoelectrodes. 1. Analytical Expressions. 2004 , 108, 5269-5281	61
2100	Supramolecular Photovoltaic Cells Based on Composite Molecular Nanoclusters: Dendritic Porphyrin and C60, Porphyrin Dimer and C60, and Porphyrin-C60 Dyad. 2004 , 108, 12865-12872	148
2099	Giant multiporphyrin arrays as artificial light-harvesting antennas. 2004 , 108, 6130-43	330
2098	A Porous Multilayer Dye-Based Photoelectrochemical Cell That Unexpectedly Runs in Reverse. 2004 , 108, 4111-4115	65
2097	Tailoring the Surface and Solubility Properties of Nanocrystalline Titania by a Nonaqueous In Situ Functionalization Process. 2004 , 16, 1202-1208	206
2096	Energy-storable dye-sensitized solar cell with a polypyrrole electrode. 2004 , 974-5	69
2095	Effect of additives on the photovoltaic performance of coumarin-dye-sensitized nanocrystalline TiO ₂ solar cells. 2004 , 20, 4205-10	386
2094	Dye-sensitized solar cells employing a highly conductive and mechanically robust nanocomposite gel electrolyte. 2004 , 144, 291-296	68
2093	Studies on photophysical and electrochemical properties of synthesized hydroxy perylene diimides in nanostructured titania thin films. 2004 , 145, 51-60	35
2092	Improving the efficiency of titania aerogel-based photovoltaic electrodes by electrochemically grafting isopropyl moieties on the titania surface. 2004 , 350, 107-112	17
2091	A Binary Ionic Liquid Electrolyte to Achieve 7% Power Conversion Efficiencies in Dye-Sensitized Solar Cells. 2004 , 16, 2694-2696	335
2090	Triplet Emitters for OLED Applications. Mechanisms of Exciton Trapping and Control of Emission Properties. 1-26	390
2089	Physical Chemical Principles of Photovoltaic Conversion with Nanoparticulate, Mesoporous Dye-Sensitized Solar Cells. 2004 , 108, 8106-8118	539
2088	Sustainable Development and Chemistry. 2004 ,	2

2087	Preparation and Photocurrent Generation of Nanostructured SnO ₂ Films Chemically Modified with Mono-substituted C ₆₀ -Malonic Acid. <i>Chemistry Letters</i> , 2004 , 33, 1598-1599	1.7	2
2086	Multiplex Sum-frequency Spectroscopy with Electronic Resonance Enhancement. <i>Chemistry Letters</i> , 2004 , 33, 1404-1407	1.7	9
2085	Nanoparticles for Electronic Device Applications: A Brief Review. 2005 , 38, 535-546		122
2084	Electrochemically self-assembled mesoporous dye-modified zinc oxide thin films. 2005 , 315-320		6
2083	Flexible Metallic Substrates for TiO ₂ Film of Dye-sensitized Solar Cells. <i>Chemistry Letters</i> , 2005 , 34, 804-805		48
2082	Mesoscopic Solar Cells for Electricity and Hydrogen Production from Sunlight. <i>Chemistry Letters</i> , 2005 , 34, 8-13	1.7	327
2081	Photovoltaic performance of dye-sensitized solar cell assembled with gel polymer electrolyte. 2005 , 149, 112-116		72
2080	Dye sensitization of nanocrystalline TiO ₂ : enhanced efficiency of unsymmetrical versus symmetrical squaraine dyes. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2005 , 172, 63-71	4.7	154
2079	The influence of ortho-substitution within the ligand on the geometry of the tris(2,2'-bipyridine)ruthenium(II) and tris(1,10-phenanthroline)ruthenium(II) ions. 2005 , 738, 129-136		28
2078	Progress towards development of a photolytic artificial lung. 2005 , 119, 246-251		6
2077	Ultraviolet photoelectron spectroscopy of nanocrystalline TiO ₂ films sensitized with (2,2'-bipyridyl)ruthenium(II) dyes for photovoltaic applications. <i>Organic Electronics</i> , 2005 , 6, 55-64	3.5	21
2076	Synthesis, spectroscopic and electrochemical properties of some heteroleptic tris-chelates of ruthenium (II) involving 2,2'-bipyridine (bpy) and N-(aryl) pyridine-2-aldehyde(L): X-ray crystal structures of [Ru(bpy)(L) ₂](ClO ₄) ₂ ·2H ₂ O and 3-N(4-tolyl)imidazo [1,5a] pyridinium perchlorate. 2005 , 34, 221-228		13
2075	Organization of supramolecular assemblies of fullerene, porphyrin and fluorescein dye derivatives on TiO ₂ nanoparticles for light energy conversion. 2005 , 319, 243-252		40
2074	Triplet exciton diffusion and delayed interfacial charge separation in a TiO ₂ /PdTPPC bilayer: Monte Carlo simulations. 2005 , 85, 189-203		23
2073	Design of novel efficient sensitizing dye for nanocrystalline TiO ₂ solar cell; tripyridine-thiolato (4,4',4'-tricarboxy-2,2':6',2'-terpyridine)ruthenium(II). 2005 , 85, 437-446		25
2072	Dye sensitized solar cells incorporating obliquely deposited titanium oxide layers. 2005 , 85, 321-331		85
2071	Performance of dye-sensitized solar cell based on nanocrystals TiO ₂ film prepared with mixed template method. 2005 , 87, 77-86		33
2070	A new approach to study organic solar cell using Lambert W-function. 2005 , 86, 197-205		107

2069	Brownian dynamics simulations of electrons and ions in mesoporous films. 2005 , 86, 283-297	25
2068	On the structural variations of Ru(II) complexes for dye-sensitized solar cells. 2005 , 87, 357-367	22
2067	Photoelectrochemical studies of nanocrystalline TiO ₂ co-sensitized by novel cyanine dyes. 2005 , 88, 23-35	102
2066	Phosphonic acid adsorption at the TiO ₂ anatase (101) surface investigated by periodic hybrid HF-DFT computations. 2005 , 582, 49-60	156
2065	Comparison of the size of excitonic effects in molecular systems as measured by core and valence spectroscopies. 2005 , 312, 39-45	31
2064	Time dependent density functional theory study of the absorption spectrum of the [Ru(4,4'-COOEt ₂ -bpy) ₂ (X) ₂] ₄ [X = NCS, Cl] dyes in water solution. 2005 , 415, 115-120	86
2063	Anchor group influence on molecule-metal oxide interfaces: Periodic hybrid DFT study of pyridine bound to TiO ₂ via carboxylic and phosphonic acid. 2005 , 415, 375-380	130
2062	Bioinorganic photochemistry: frontiers and mechanisms. 2005 , 105, 2647-94	620
2061	Significant efficiency improvement of the black dye-sensitized solar cell through protonation of TiO ₂ films. 2005 , 21, 4272-6	312
2060	Charge separation in a nonfluorescent donor-acceptor dyad derived from boron dipyrromethene dye, leading to photocurrent generation. 2005 , 109, 15368-75	211
2059	Solar energy conversion by dye-sensitized photovoltaic cells. 2005 , 44, 6841-51	2874
2058	Control of photochemical, photophysical, electrochemical, and photocatalytic properties of rhenium(I) complexes using intramolecular weak interactions between ligands. 2005 , 127, 15544-55	126
2057	Chemistry and properties of nanocrystals of different shapes. 2005 , 105, 1025-102	6278
2056	Temperature-Controlled Solvothermal Syntheses, Structures and Characterizations of a Novel Class of Zn Complexes Constructed from 1,4-Bis[2-(5-phenyloxazolyl)]benzene. 2005 , 2005, 423-427	48
2055	CoII Complexes of Triazine-Based Tridentate Ligands with Positive and Attractive CoII/III Redox Couples. 2005 , 2005, 1223-1226	19
2054	Sensitization of Nanocrystalline TiO ₂ Films with Carboxy-Functionalized Bis(indolyl)maleimide. 2005 , 2005, 3443-3449	11
2053	Synthesis of a Novel Series of 6,6'-Disubstituted 4,4'-Bipyrimidines by Radical Anion Coupling: New Accepting Ligands for Coordination Chemistry. 2005 , 2005, 3775-3780	24
2052	Charge trapping and photoadsorption of O ₂ on dehydroxylated TiO ₂ nanocrystals--an electron paramagnetic resonance study. 2005 , 6, 2104-12	122

2051	1:1 and 2:1 charge-transfer complexes between aromatic hydrocarbons and dry titanium dioxide. 2005 , 44, 910-3	49
2050	1:1 and 2:1 Charge-Transfer Complexes between Aromatic Hydrocarbons and Dry Titanium Dioxide. 2005 , 117, 932-935	8
2049	Novel Conjugated Organic Dyes for Efficient Dye-Sensitized Solar Cells. 2005 , 15, 246-252	389
2048	Infiltration of Regioregular Poly[2,2'-(3-hexylthiophene)] into Random Nanocrystalline TiO ₂ Networks. 2005 , 15, 677-682	65
2047	Molecular Photoelectrochemical Devices: Supramolecular Incorporation of C ₆₀ Molecules into Tailored Holes on Porphyrin-Modified Gold Nanoclusters. 2005 , 17, 1727-1730	56
2046	Facile Synthesis and Characterization of Luminescent TiO ₂ Nanocrystals. 2005 , 17, 1991-1995	175
2045	Ligand functionality as a versatile tool to control the assembly behavior of preformed titania nanocrystals. 2005 , 11, 3541-51	124
2044	A mesoporous Pt/TiO ₂ nanoarchitecture with catalytic and photocatalytic functions. 2005 , 11, 2997-3004	144
2043	Synthesis and characterization of dinuclear ruthenium complexes covalently linked to Ru(II) tris-bipyridine: an approach to mimics of the donor side of photosystem II. 2005 , 11, 7305-14	35
2042	Host-guest interactions in the supramolecular incorporation of fullerenes into tailored holes on porphyrin-modified gold nanoparticles in molecular photovoltaics. 2005 , 11, 7265-75	63
2041	Charge recombination in dye-sensitized nanoporous TiO ₂ solar cell. 2005 , 50, 2408-2412	7
2040	Synthesis, crystal structure determination, spectroscopic and electrochemical studies of trans-[Ru(PPh ₃) ₂ (bbpH ₂)Cl]Cl[CHCl ₃ ·H ₂ O] (bbpH ₂ =2,6-bis(benzimidazolyl) pyridine) An infinite double columnar supramolecule in the solid state. 2005 , 30, 352-356	13
2039	A novel fluorescein-porphyrinatozinc(II) hybrid: synthesis and its supramolecular self-assembly with imidazolyl-linked porphyrinatomanganese(III) by coordinative bonding. 2005 , 30, 643-649	5
2038	Time-resolved Infrared Absorption Study of Photochemical Reactions Over Metal Oxides. 2005 , 35, 211-216	14
2037	Organic solar cell optimizations. <i>Journal of Materials Science</i> , 2005 , 40, 1429-1443	4-3 62
2036	A novel hybrid nanocrystalline TiO ₂ electrode for the dye-sensitized nanocrystalline solar cells. <i>Journal of Materials Science</i> , 2005 , 40, 4921-4923	4-3 13
2035	The structure of short-lived excited states of molecular complexes by time-resolved X-ray diffraction. 2005 , 61, 162-72	79
2034	Characterization of Photovoltaic Performance of Dye-Sensitized Solar Cells. 2005 , 73, 887-896	10

2033	Quantum Mechanical/Molecular Mechanical (QM/MM) Car-Parrinello Simulations in Excited States. 2005 , 59, 493-498		31
2032	Bioinspired energy conversion. 2005 , 77, 1001-1008		13
2031	Charge recombination in dye-sensitized nanoporous TiO ₂ solar cell. 2005 , 50, 2408		2
2030	Unassisted Water Splitting from Bipolar PtDye-Sensitized TiO ₂ Photoelectrode Arrays. 2005 , 8, G371		35
2029	Materials for photoelectrochemical devices. 2005 , 35-62		3
2028	Sensitization of Nanocrystalline SnO ₂ Films with Indoline Dyes. 2005 , 44, L731-L733		41
2027	Fabrication and primary photoevents in self-assembled nanocomposites based on semiconductor quantum dots and tetrapyrrole chromophores. 2005 ,		
2026	The interplay between space charge and recombination in conjugated polymer/molecule photocells. 2005 , 98, 033714		29
2025	Ultrafast photo-induced dynamics at H ₂ O/TiO ₂ [110] and CH ₃ OH/TiO ₂ [110] interfaces. 2005 ,		
2024	Electrochemical evidences of morphological transformation in ordered mesoporous titanium oxide thin films. 2005 , 4566-8		31
2023	NANOSTRUCTURED TiO ₂ FILMS IN DYE-SENSITIZED SOLAR CELLS. 2005 , 04, 785-793		
2022	Photoelectrochemistry of Pure and Core/Sheath Nanowire Arrays of Cu ₂ S Directly Grown on Copper Electrodes. <i>Journal of the Electrochemical Society</i> , 2005 , 152, G220	3.9	16
2021	Dye-Sensitized Solid-State Heterojunction Solar Cells. 2005 , 30, 23-27		169
2020	Organic and plastic solar cells. 2005 , 419-447		2
2019	Enhancement in Performance of Dye-Sensitized Solar Cells Modified with In Situ Photopolymerized PDEA in TiO ₂ Films. <i>Journal of the Electrochemical Society</i> , 2005 , 152, A1378	3.9	10
2018	Applications of hybrid organic/inorganic nanocomposites. 2005 , 15, 3559		2121
2017	3-D molecular assembly of function in titania-based composite material systems. <i>Accounts of Chemical Research</i> , 2005 , 38, 263-71	24.3	129
2016	Organic dyes containing thienylfluorene conjugation for solar cells. 2005 , 4098-100		182

2015	Dye-sensitized solar cells based on nanocrystalline TiO ₂ films surface treated with Al ³⁺ ions: photovoltage and electron transport studies. 2005 , 109, 18483-90		88
2014	Transient absorption studies and numerical modeling of iodine photoreduction by nanocrystalline TiO ₂ films. 2005 , 109, 142-50		83
2013	Model study of coherent quantum dynamics of hole states in functionalized semiconductor nanostructures. <i>Journal of Chemical Physics</i> , 2005 , 122, 154709	3.9	40
2012	Interfacial electron dynamics and hot-electron-driven surface photochemistry of carbon tetrachloride on Ag(111). <i>Journal of Chemical Physics</i> , 2005 , 123, 114710	3.9	11
2011	Optimization of TiO ₂ /sub 2/ substrate for dye-sensitized solar cells.		
2010	Synthesis and properties of the elusive ruthenium(II) complexes of 4'-cyano-2,2':6',2''-terpyridine. 2005 , 44, 5-7		73
2009	Electron transport in silver-semiconductor nanocomposite films exhibiting multicolor photochromism. 2005 , 7, 3851-5		170
2008	Sol-gel synthesis of TiO ₂ /sub 2/ nanocrystals for application in dye-sensitized solar cells.		
2007	Time-resolved EPR study of the photophysics and photochemistry of 1-(3-(methoxycarbonyl)propyl)-1-phenyl[6.6]C ₆₁ . <i>Journal of Physical Chemistry A</i> , 2005 , 109, 11665-72	2.8	1
2006	Reversible and persistent electrical bistability in single crystals of a self-assembled pi-conjugated tetraaryl system: a submicrometer scale electrical characterization. 2005 , 127, 9848-54		6
2005	A theoretical study on the electronic structures of TiO ₂ : Effect of Hartree-Fock exchange. 2005 , 109, 19270-7		120
2004	Enhancement in Photoelectric Conversion Properties of the Dye-Sensitized Nanocrystalline Solar Cells Based on the Hybrid TiO ₂ /sub 2/ Electrode. <i>Journal of the Electrochemical Society</i> , 2005 , 152, A164	3.9	34
2003	Toward the Development of Molecular Wires: Ruthenium(II) Terpyridine Complexes Containing Polyferrocenyl as a Spacer. 2005 , 24, 4198-4206		36
2002	Trimethyl acetate on TiO ₂ (110): preparation and anaerobic photolysis. 2005 , 109, 12417-30		47
2001	Thermal and photochemistry of tert-butyl iodide on rutile TiO ₂ (110). 2005 , 109, 14990-5000		13
2000	Triplet state photosensitization of nanocrystalline metal oxide electrodes by zinc-substituted cytochrome c: application to hydrogen evolution. 2005 , 127, 15120-6		35
1999	Dyads and triads containing perylenetetracarboxylic diimide and porphyrin: efficient photoinduced electron transfer elicited via both excited singlet states. 2005 , 109, 3658-67		55
1998	Spectroscopy of photovoltaic and photoconductive nanocrystalline Co ²⁺ -doped ZnO electrodes. 2005 , 109, 14486-95		73

1997	Energy and electron transfer in bifunctional non-conjugated dendrimers. 2005 , 127, 373-83		134
1996	2,6-Bis(3,5-dimethylpyrazol-1-yl)pyridine: A Useful Pseudo-N ₃ Ligand in Efficient Ruthenium(II)-Catalyzed Transfer Hydrogenation of Ketones. 2005 , 24, 4110-4112		68
1995	Determination of the light-induced degradation rate of the solar cell sensitizer N719 on TiO ₂ nanocrystalline particles. 2005 , 109, 22413-9		55
1994	Nanoassemblies designed from semiconductor quantum dots and molecular arrays. 2005 , 109, 8679-92		86
1993	Fabrication of densely packed titania nanosheet films on solid surface by use of Langmuir-Blodgett deposition method without amphiphilic additives. 2005 , 21, 6590-5		132
1992	Photochemical reaction of trimethyl acetate on Pt/TiO ₂ (110). 2005 , 21, 11802-5		24
1991	Ultrafast dynamics of 2E state formation in Cr(acac) ₃ . 2005 , 127, 6857-65		98
1990	Solid-state photochromic device based on nanocrystalline TiO ₂ functionalized with electron donor-acceptor species. 2005 , 44, 9619-21		53
1989	Enhancement of light-energy conversion efficiency by multi-porphyrin arrays of porphyrin-peptide oligomers with fullerene clusters. 2005 , 109, 19-23		168
1988	Solvent effects on interfacial electron transfer from Ru(4,4'-dicarboxylic acid-2,2'-bipyridine) ₂ (NCS) ₂ to nanoparticulate TiO ₂ : spectroscopy and solar photoconversion. <i>Journal of Physical Chemistry A</i> , 2005 , 109, 11443-52	2.8	51
1987	Synthesis, characterization, and photophysical properties of Os(II) diimine complexes [Os(N(wedge)N)(CO) ₂ I(2)] (N(wedge)N = bipyridine, phenanthroline, and pyridyl benzoxazole). 2005 , 44, 4287-94		58
1986	Charge separation and efficient light energy conversion in sensitized mesoscopic solar cells based on binary ionic liquids. 2005 , 127, 6850-6		358
1985	Charge separation versus recombination in dye-sensitized nanocrystalline solar cells: the minimization of kinetic redundancy. 2005 , 127, 3456-62		456
1984	Dye-Sensitized Solar Cells. 2005 , 663-700		19
1983	Application of near-infrared absorbing heptamethine cyanine dyes as sensitizers for zinc oxide solar cell. 2005 , 148, 147-153		56
1982	Organic dyes incorporating low-band-gap chromophores for dye-sensitized solar cells. 2005 , 7, 1899-902		411
1981	Transition metal-doped TiO ₂ and ZnO: present status of the field. 2005 , 17, R657-R689		452
1980	Calculated structural and electronic interactions of the ruthenium dye N3 with a titanium dioxide nanocrystal. 2005 , 109, 11918-24		175

1979	The design and synthesis of porphyrin/oligothiophene hybrid monomers. 2005 , 3, 2075-84	25
1978	Semiconductive Coordination Networks from 2,3,6,7,10,11-Hexakis(alkylthio)triphenylenes and Bismuth(III) Halides: Synthesis, Structure-Property Relations, and Solution Processing. 2005 , 17, 4426-4437	38
1977	A new strategy for the improvement of photophysical properties in ruthenium(II) polypyridyl complexes. Synthesis and photophysical and electrochemical characterization of six mononuclear ruthenium(II) bisterpyridine-type complexes. 2005 , 44, 3215-25	83
1976	Photocatalytic TiO ₂ /glass nanoflake array films. 2005 , 21, 3486-92	38
1975	Dye-sensitized SnO ₂ electrodes with iodide and pseudohalide redox mediators. 2005 , 109, 937-43	113
1974	A strategy to increase the efficiency of the dye-sensitized TiO ₂ solar cells operated by photoexcitation of dye-to-TiO ₂ charge-transfer bands. 2005 , 109, 22513-22	171
1973	Blue copper model complexes with distorted tetragonal geometry acting as effective electron-transfer mediators in dye-sensitized solar cells. 2005 , 127, 9648-54	260
1972	Chromophore-Labeled Quinoxaline Derivatives as Efficient Electroluminescent Materials. 2005 , 17, 1860-1866	237
1971	Fabrication of highly ordered TiO ₂ nanotube arrays using an organic electrolyte. 2005 , 109, 15754-9	285
1970	Oligothiophene-containing coumarin dyes for efficient dye-sensitized solar cells. 2005 , 109, 15476-82	531
1969	Exciton multiplication and relaxation dynamics in quantum dots: applications to ultrahigh-efficiency solar photon conversion. 2005 , 44, 6893-9	279
1968	Organic and nano-structured composite photovoltaics: An overview. 2005 , 20, 3167-3179	180
1967	Electron transport in coumarin-dye-sensitized nanocrystalline TiO ₂ electrodes. 2005 , 109, 23776-8	152
1966	Photovoltaic cells using composite nanoclusters of porphyrins and fullerenes with gold nanoparticles. 2005 , 127, 1216-28	429
1965	Structure and dynamics of a confined ionic liquid. Topics of relevance to dye-sensitized solar cells. 2005 , 109, 17922-7	189
1964	Activation energy of electron transport in dye-sensitized TiO ₂ solar cells. 2005 , 109, 12093-8	169
1963	Influence of thermal fluctuations on interfacial electron transfer in functionalized TiO ₂ semiconductors. 2005 , 127, 18234-42	181
1962	Spatial electron distribution and its origin in the nanoporous TiO ₂ network of a dye solar cell. 2005 , 109, 20444-8	23

1961	Base Effect and Inhibition of Catalytic Activity in Palladium-Catalyzed N-Heteroarylation of Pyrazoles with 2,6-Dibromopyridine. 2005 , 24, 2959-2963	46
1960	Wet electrons at the H ₂ O/TiO ₂ (110) surface. 2005 , 308, 1154-8	214
1959	Langmuir-Schaefer films of Nafion with incorporated TiO ₂ nanoparticles. 2005 , 21, 172-7	27
1958	Hybrid polymer solar cells based on zinc oxide. 2005 , 15, 2985	128
1957	Preparations and characterizations of bichromophoric systems composed of a ruthenium polypyridine complex connected to a difluoroborazaindacene or a zinc phthalocyanine chromophore. 2005 , 44, 5600-11	52
1956	Dye-sensitized TiO ₂ nanotube solar cells: fabrication and electronic characterization. 2005 , 7, 4157-63	265
1955	Hydrogen bonding effects on the surface structure and photoelectrochemical properties of nanostructured SnO ₂ electrodes modified with porphyrin and fullerene composites. 2005 , 109, 18465-74	32
1954	Multifunctional Hybrid Materials Based on Conducting Organic Polymers. Nanocomposite Systems with Photo-Electro-Ionic Properties and Applications. 2005 , 210-269	1
1953	Efficient eosin y dye-sensitized solar cell containing Br ⁻ /Br ₃ ⁻ electrolyte. 2005 , 109, 22449-55	184
1952	Photophysical and electrochemical properties of 1,7-diaryl-substituted perylene diimides. 2005 , 70, 4323-31	165
1951	A photoelectrochemical device with a nanostructured SnO ₂ electrode modified with composite clusters of porphyrin-modified silica nanoparticle and fullerene. 2006 , 110, 11399-405	50
1950	Ruthenium: Inorganic & Coordination Chemistry Based in part on the article Ruthenium: Inorganic & Coordination Chemistry by Bruno Chaudret & Sylviane Sabo-Etienne which appeared in the Encyclopedia of Inorganic Chemistry, First Edition.. 2006 ,	2
1949	Synthesis and Modeling of Acridine Dyes as Potential Photosensitizers for Dye-Sensitized Photovoltaic Applications View all notes . 2006 , 43, 1907-1922	19
1948	Quantum Structured Solar Cells. 2006 , 485-516	7
1947	Femtosecond fluorescence dynamics of porphyrin in solution and solid films: the effects of aggregation and interfacial electron transfer between porphyrin and TiO ₂ . 2006 , 110, 410-9	89
1946	Solvated electrons on metal oxide surfaces. 2006 , 106, 4402-27	116
1945	Cyclometalated iridium(III)-sensitized titanium dioxide solar cells. 2006 , 5, 871-3	107
1944	Photocatalytic generation of hydrogen from water using a platinum(II) terpyridyl acetylde chromophore. 2006 , 128, 7726-7	264

1943	Chemical capacitance of nanoporous-nanocrystalline TiO ₂ in a room temperature ionic liquid. 2006 , 8, 1827-33	91
1942	Interplay between hydrogen bonding and electron solvation on hydrated TiO ₂ (110). 2006 , 73,	46
1941	Quantum Chemical Calculations of the Influence of Anchor-Cum-Spacer Groups on Femtosecond Electron Transfer Times in Dye-Sensitized Semiconductor Nanocrystals. 2006 , 2, 441-51	238
1940	Toward the Development of Molecular Wires: A Terpyridine Spacer Containing Polyferrocenylalkyne Linkages. 2006 , 25, 2018-2024	41
1939	Fabrication and characterization of silica/titania nanotubes composite membrane with photocatalytic capability. 2006 , 40, 6104-9	116
1938	Time-resolved photoluminescence characteristics of subnanometer ZnO clusters confined in the micropores of zeolites. 2006 , 110, 25612-8	32
1937	Nanocrystalline Injection Solar Cells. 2006 , 363-385	5
1936	Spectral Broadening in Nanocrystalline TiO ₂ Solar Cells Based on Poly(p-phenylene ethynylene) and Polythiophene Sensitizers. 2006 , 18, 6109-6111	80
1935	Synthesis and characterization of ultrathin WO ₃ nanodisks utilizing long-chain poly(ethylene glycol). 2006 , 110, 25288-96	122
1934	Highly efficient dye-sensitized solar cells composed of mesoporous titanium dioxide. 2006 , 16, 1287	153
1933	Modulation of the lowest metal-to-ligand charge-transfer state in [Ru(bpy) ₂ (N-N)] ²⁺ systems by changing the N-N from hydrazone to azine: photophysical consequences. 2006 , 45, 9580-6	20
1932	Nanocrystalline dye-sensitized solar cell/copper indium gallium selenide thin-film tandem showing greater than 15% conversion efficiency. 2006 , 88, 203103	145
1931	Alkyl chain barriers for kinetic optimization in dye-sensitized solar cells. 2006 , 128, 16376-83	243
1930	ZrO ₂ -modified mesoporous nanocrystalline TiO ₂ -xN _x as efficient visible light photocatalysts. 2006 , 40, 2369-74	205
1929	Effects of Nanocrystalline Porous TiO ₂ Films on Interface Adsorption of Phthalocyanines and Polymer Electrolytes in Dye-Sensitized Solar Cells. 2006 , 235, 230-236	16
1928	Electron transport analysis for improvement of solid-state dye-sensitized solar cells using poly(3,4-ethylenedioxythiophene) as hole conductors. 2006 , 110, 25251-8	55
1927	Structure and photoelectrochemical properties of phthalocyanine and perylene diimide composite clusters deposited electrophoretically on nanostructured SnO ₂ electrodes. 2006 , 22, 5497-503	19
1926	Corrole-sensitized TiO ₂ solar cells. 2006 , 10, 1259-1262	81

1925	Efficient single-layer electroluminescent device based on a bipolar emitting boron-containing material. 2006 , 281-3		90
1924	Interface engineering for solid-state dye-sensitized nanocrystalline solar cells: the use of an organic redox cascade. 2006 , 535-7		32
1923	Theoretical study of ultrafast heterogeneous electron transfer reactions at dye-semiconductor interfaces: coumarin 343 at titanium oxide. <i>Journal of Physical Chemistry A</i> , 2006 , 110, 1364-74	2.8	78
1922	STM observation of a ruthenium dye adsorbed on a TiO ₂ (110) surface. 2006 , 110, 4751-5		55
1921	Effect of functional group (fluorine) of aromatic thiols on electron transfer at the molecule-metal interface. 2006 , 128, 935-9		45
1920	Optoelectronic switches based on wide band gap semiconductors. 2006 , 110, 15275-83		59
1919	Photochemistry of ruthenium trisbipyridine functionalized on gold nanoparticles. 2006 , 110, 20737-41		44
1918	Recombination and transport processes in dye-sensitized solar cells investigated under working conditions. 2006 , 110, 17715-8		128
1917	Electron Spectroscopy of Dye-Sensitized Anatase(001) Surfaces Under Illumination. 2006 , 455, 317-325		3
1916	Effect of the anchoring group in Ru-bipyridyl sensitizers on the photoelectrochemical behavior of dye-sensitized TiO ₂ electrodes: carboxylate versus phosphonate linkages. 2006 , 110, 8740-9		169
1915	Role of the critical micelle concentration in the electrochemical deposition of nanostructured ZnO films under utilization of amphiphilic molecules. 2006 , 22, 9427-30		28
1914	Photosensitizers containing the 1,8-naphthyridyl moiety and their use in dye-sensitized solar cells. 2006 , 45, 10131-7		39
1913	Photoinduced electron transfer at molecule-metal interfaces. 2006 , 106, 4281-300		216
1912	Seeded growth of asymmetric binary nanocrystals made of a semiconductor TiO ₂ rodlike section and a magnetic gamma-Fe ₂ O ₃ spherical domain. 2006 , 128, 16953-70		153
1911	Visible-light-sensitized production of hydrogen using perfluorosulfonate polymer-coated TiO ₂ nanoparticles: an alternative approach to sensitizer anchoring. 2006 , 22, 2906-11		79
1910	Femtosecond stimulated Raman spectroscopy. 2006 , 78, 5953-9		38
1909	Synthesis and Characterization of New Efficient Tricarboxyterpyridyl (triketonato) Ruthenium(II) Sensitizers and Their Applications in Dye-Sensitized Solar Cells. 2006 , 18, 5178-5185		91
1908	Efficient photoinduced charge transfer in TiO ₂ nanorod/conjugated polymer hybrid materials. 2006 , 17, 5781-5785		56

1907	CNT-CdTe versatile donor-acceptor nanohybrids. 2006 , 128, 2315-23		212
1906	Density functional study of the interfacial electron transfer pathway for monolayer-adsorbed InN on the TiO ₂ (2) anatase (101) surface. 2006 , 110, 23460-6		12
1905	Rhenium-Linked Multiporphyrin Assemblies: Synthesis and Properties. 145-165		41
1904	Quantification of the effect of 4-tert-butylpyridine addition to I ⁻ /I ₃ ⁻ redox electrolytes in dye-sensitized nanostructured TiO ₂ solar cells. 2006 , 110, 13144-50		524
1903	Structure Property Relationships: Asymmetric Oligofluorene- π -thiophene Molecules for Organic TFTs. 2006 , 18, 6250-6257		36
1902	Comparison of electrode structures and photovoltaic properties of porphyrin-sensitized solar cells with TiO ₂ and Nb, Ge, Zr-added TiO ₂ composite electrodes. 2006 , 22, 11405-11		99
1901	Photoinduced direct electron transfer from InSe to GaSe semiconductor nanoparticles. 2006 , 6, 116-22		20
1900	. 2006 ,		90
1899	. 2006 ,		158
1898	Electrochemical Properties of Dye-Sensitized Solar Cells Fabricated with PVDF-type Polymeric Solid Electrolytes. 2006 , 63, 54-61		1
1897	Development and Photovoltaic Performance of Oligothiophene-sensitized TiO ₂ Solar Cells. <i>Chemistry Letters</i> , 2006 , 35, 592-593	1.7	41
1896	Electron Transfer in Coordination Compounds. 2006 ,		
1895	Photolytically driven generation of dissolved oxygen and increased oxyhemoglobin in whole blood. 2006 , 52, 456-66		6
1894	Computational study of titanium (IV) complexes with organic chromophores. 2006 , 106, 1291-1303		47
1893	Theoretical modelling of photoactive molecular systems: insights using the Density Functional Theory. 2006 , 9, 226-239		15
1892	Preparation of functionalized and non-functionalized fullerene thin films on ITO glasses and the application to a counter electrode in a dye-sensitized solar cell. 2006 , 44, 880-887		102
1891	Recent trends on nanocomposites based on Cu, Ag and Au clusters: A closer look. <i>Coordination Chemistry Reviews</i> , 2006 , 250, 1294-1314	23.2	167
1890	A selective review on the making of coordination networks with potential semiconductive properties. <i>Coordination Chemistry Reviews</i> , 2006 , 250, 2745-2757	23.2	87

1889	Structural and photoelectrochemical characteristics of nanocrystalline ZnO electrode with Eosin-Y. 2006 , 32, 495-498		24
1888	Spectral properties of bipyridyl ligands by time-dependent density functional theory. 2006 , 417, 445-451		21
1887	Determination of electron diffusion lengths in nanostructured oxide electrodes from photopotential maps obtained with the scanning microscope for semiconductor characterization. 2006 , 8, 1784-1790		19
1886	Viewing nanocrystalline TiO ₂ photoelectrodes as three-dimensional electrodes: Effect of the electrolyte upon the photocurrent efficiency. <i>Electrochimica Acta</i> , 2006 , 52, 694-703	6.7	19
1885	Mesostructured self-assembled titania films for photovoltaic applications. 2006 , 88, 304-311		45
1884	Challenges and advances in nanocomposite processing techniques. 2006 , 54, 121-285		344
1883	The removal of sodium dodecylbenzene sulfonate surfactant from water using silica/titania nanorods/nanotubes composite membrane with photocatalytic capability. 2006 , 252, 8598-8604		43
1882	Electrospray deposition in vacuum. 2006 , 252, 5622-5626		39
1881	Efficient degradation of organic pollutant with WO _x modified nano TiO ₂ under visible irradiation. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2006 , 181, 421-428	4.7	63
1880	Dynamic preparation of TiO ₂ films for fabrication of dye-sensitized solar cells. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2006 , 182, 187-191	4.7	47
1879	Mechanism of squarylium cyanine and Ru(dcbpy) ₂ (NCS) ₂ co-sensitization of colloidal TiO ₂ . <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2006 , 183, 138-145	4.7	24
1878	In situ polymerization of amphiphilic diacetylene for hole transport in solid state dye-sensitized solar cells. <i>Organic Electronics</i> , 2006 , 7, 546-550	3.5	13
1877	Photoinduced electron transfer-catalyzed processes of sulfoamino perylene diimide under concentrated sun light. <i>Solar Energy</i> , 2006 , 80, 332-346	6.8	18
1876	A 4.2% efficient flexible dye-sensitized TiO ₂ solar cells using stainless steel substrate. 2006 , 90, 574-581		216
1875	A novel UV-mediated low-temperature sintering of TiO ₂ for dye-sensitized solar cells. 2006 , 90, 1041-1051		49
1874	The effect of pre-thermal treatment of TiO ₂ nano-particles on the performances of dye-sensitized solar cells. 2006 , 90, 967-981		81
1873	Heteropolyacid-impregnated PVDF as a solid polymer electrolyte for dye-sensitized solar cells. 2006 , 90, 1715-1720		54
1872	The optical absorption edge of brookite TiO ₂ . 2006 , 137, 154-157		165

1871	Structure and photoelectrochemical properties of nanostructured SnO ₂ electrodes deposited electrophoretically with the composite clusters of porphyrin-modified gold nanoparticle with a long spacer and fullerene. 2006 , 62, 1955-1966	22
1870	Supramolecular nanostructured assemblies of different types of porphyrins with fullerene using TiO ₂ nanoparticles for light energy conversion. 2006 , 62, 1937-1946	63
1869	Electrodeposition of porous zinc oxide electrodes in the presence of sodium laurylsulfate. 2006 , 497, 163-169	58
1868	Controlling semiconductor/metal junction barriers by incomplete, nonideal molecular monolayers. 2006 , 128, 6854-69	95
1867	Investigations of Group 12 (IIB) Metal Halide/Pseudohalide-Bipy Systems: Syntheses, Structures, Properties, and TDDFT Calculations (Bipy = 2,2'Biipyridine or 4,4'Biipyridine). 2006 , 6, 2289-2300	83
1866	Ruthenium polypyridyl chemistry; from basic research to applications and back again. 2006 , 4869-83	239
1865	Synthesis of anatase TiO ₂ nanoparticles with beta-cyclodextrin as a supramolecular shell. 2006 , 1, 664-8	20
1864	Light harvesting unsymmetrical conjugated dendrimers as photosynthetic mimics. 2006 , 87, 115-31	31
1863	Mesophase configurations and optical properties of mesoporous TiO ₂ thin films. 2006 , 16, 499-502	4
1862	Synthesis of TiO ₂ nanospheres through microemulsion reactive precipitation. 2006 , 17, 37-40	12
1861	Exploring the photophysical behaviour of supramolecular systems: problems and perspectives. 2006 , 116, 219-231	13
1860	Modeling of photocurrent in dye-sensitized solar cells fabricated with PVDF-HFP-based gel-type polymeric solid electrolyte. 2006 , 9, 631-638	13
1859	One-step microwave calcination of ZrO ₂ -coated TiO ₂ electrodes for use in dye-sensitized solar cells. 2006 , 9, 713-716	16
1858	Reactive polymers: a versatile toolbox for the immobilization of functional molecules on TiO ₂ nanoparticles. 2006 , 45, 908-12	93
1857	Multielectron Storage and Photo-Induced Electron Transfer in Oligonuclear Complexes Containing Ruthenium(II) Terpyridine and Ferrocene Building Blocks. 2006 , 2006, 2040-2050	69
1856	Enhanced photocatalytic activity of zeolite-encapsulated TiO ₂ clusters by complexation with organic additives and N-doping. 2006 , 7, 200-5	44
1855	A novel concept for photovoltaic cells: clusters of titanium dioxide encapsulated within zeolites as photoactive semiconductors. 2006 , 7, 1996-2002	32
1854	Redox-controlled photosensitization of nanocrystalline titanium dioxide. 2006 , 7, 2384-91	41

1853	Electronic and Electrochemical Applications of Hybrid Materials. 401-432		
1852	Reactive Polymers: A Versatile Toolbox for the Immobilization of Functional Molecules on TiO ₂ Nanoparticles. 2006 , 118, 922-926		24
1851	Room-Temperature Synthesis of Porous Nanoparticulate TiO ₂ Films for Flexible Dye-Sensitized Solar Cells. 2006 , 16, 1228-1234		228
1850	Direct observation of the ultrafast intersystem crossing in tris(2,2'-bipyridine)ruthenium(II) using femtosecond stimulated Raman spectroscopy. 2006 , 104, 1275-1282		94
1849	Exciton Multiplication and Relaxation Dynamics in Quantum Dots: Applications to Ultra-High Efficiency Solar Photon Conversion. 2006 ,		
1848	Synthesis of Titania Nanocrystals: Application for Dye-Sensitized Solar Cells. 2006 , 71-100		1
1847	Application of Three TiO ₂ Polymorphs in Photoelectrochemical Solar Cells. 2006 , 3, 233-237		2
1846	Dye-Sensitized Nanostructured ZnO Electrodes for Solar Cell Applications. 2006 , 227-254		16
1845	Optical and Electrical Modeling of Nanocrystalline Solar Cells. 2006 , 81-104		3
1844	Efficient Organic-Dye-Sensitized Nanocrystalline TiO ₂ Solar Cells. 2006 ,		1
1843	Efficient Sensitization of Mesoporous Electrodeposited Zinc Oxide by cis-Bis(isothiocyanato)bis(2,2'-bipyridyl-4,4'-dicarboxylato)-Ruthenium(II). <i>Journal of the Electrochemical Society</i> , 2006 , 153, A699	3.9	17
1842	Optically directed molecular transport and 3D isoelectric positioning of amphoteric biomolecules. 2006 , 103, 6436-41		11
1841	High-Performance Hole-Transport Polyurethanes for Light-Emitting Diodes Applications. 2006 , 18, 4121-4129		20
1840	Tip-enhanced near-field Raman spectroscopy probing single dye-sensitized TiO ₂ nanoparticles. 2006 , 88, 093121		26
1839	Hot electrons at metal-organic interface: Time-resolved two-photon photoemission study of phenol on Ag(111). 2006 , 24, 1454-1459		6
1838	Probing the ultrafast electron transfer at the CuPc/Au(111) interface. 2006 , 88, 184102		49
1837	Dye-Sensitized Solar Cells with P3HT/Fullerene Derivatives. 2006 ,		1
1836	Steady-State Operation of Porous Photoelectrochemical Cells Under the Conditions of Mixed Diffusional and Migrational Mass Transport. <i>Journal of the Electrochemical Society</i> , 2006 , 153, A2326	3.9	10

1835	Utilization of Titanate Nanotubes as an Electrode Material in Dye-Sensitized Solar Cells. <i>Journal of the Electrochemical Society</i> , 2006 , 153, A1232	3.9	91
1834	Adsorption and charge transfer dynamics of bi-isonicotinic acid on Au(111). <i>Journal of Chemical Physics</i> , 2007 , 127, 134707	3.9	19
1833	New development of photoinduced electron-transfer catalytic systems. 2007 , 79, 981-991		60
1832	Calculated optoelectronic properties of ruthenium tris-bipyridine dyes containing oligophenyleneethynylene rigid rod linkers in different chemical environments. <i>Journal of Physical Chemistry A</i> , 2007 , 111, 1487-97	2.8	29
1831	Photocatalytic generation of dissolved oxygen and oxyhemoglobin in whole blood based on the indirect interaction of ultraviolet light with a semiconducting titanium dioxide thin film. 2007 , 102, 073512		4
1830	Preparation of WO _x -TiO ₂ and the Photocatalytic Activity under Visible Irradiation. 2007 , 336-338, 1979-1982		5
1829	Porous Films from TiO ₂ (Anatase) with Bimodal Morphology. 2007 , 10, A85		11
1828	Creation of Fullerene-Based Artificial Photosynthetic Systems. 2007 , 80, 621-636		144
1827	Chemically Modified Oxide Electrodes. 2007 ,		4
1826	Influence of addition of larger particles into 3-nm particles of TiO ₂ film on the performance of dye-sensitized solar cells. 2007 ,		1
1825	Photo-induced electron transfer in CdSe nanocrystals passivated by quinone derivatives. 2007 ,		2
1824	A comparative study on liquid-state photoelectrochemical cells based on poly(3-hexylthiophene) and a composite film of poly(3-hexylthiophene) and nanocrystalline titanium dioxide. 2007 , 157, 75-79		3
1823	Using internal coordinates to describe photoinduced geometry changes in MLCT excited states. <i>Journal of Physical Chemistry A</i> , 2007 , 111, 4604-11	2.8	23
1822	A highly efficient organic sensitizer for dye-sensitized solar cells. 2007 , 4887-9		399
1821	Influence of TiCl ₄ treatment on surface defect photoluminescence in pure and mixed-phase nanocrystalline TiO ₂ . 2007 , 23, 8686-90		115
1820	Influence of π -Conjugation Units in Organic Dyes for Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 1853-1860	3.8	149
1819	Phthalocyanines: old dyes, new materials. Putting color in nanotechnology. 2007 , 2000-15		665
1818	Theoretical studies of photoinduced electron transfer in dye-sensitized TiO ₂ . 2007 , 58, 143-84		487

1817	Comparison of Dye-Sensitized ZnO and TiO ₂ Solar Cells: Studies of Charge Transport and Carrier Lifetime. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 1035-1041	3.8	466
1816	Effects of 5-Membered Heteroaromatic Spacers on Structures of Porphyrin Films and Photovoltaic Properties of Porphyrin-Sensitized TiO ₂ Cells. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 3528-3537	3.8	125
1815	Chemical bath deposition of CdS quantum dots onto mesoscopic TiO ₂ films for application in quantum-dot-sensitized solar cells. 2007 , 91, 053503		362
1814	Photogeneration of hydrogen from water using an integrated system based on TiO ₂ and platinum(II) diimine dithiolate sensitizers. 2007 , 129, 7726-7		168
1813	Transition Metal Complexes for Photovoltaic and Light Emitting Applications. 2007 , 113-175		128
1812	Intramolecular Charge-Transfer Tuning of Perylenes: Spectroscopic Features and Performance in Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 15137-15140	3.8	217
1811	Solar Cells Based on Quantum Dots: Multiple Exciton Generation and Intermediate Bands. 2007 , 32, 236-241		189
1810	Quantum-dot-sensitized solar cells: Assembly of CdS-quantum-dots coupling techniques of self-assembled monolayer and chemical bath deposition. 2007 , 90, 143517		210
1809	Di(alkoxy)- and di(alkylthio)-substituted perylene-3,4;9,10-tetracarboxy diimides with tunable electrochemical and photophysical properties. 2007 , 72, 2402-10		97
1808	Modification of Nanostructured TiO ₂ Electrodes by Electrochemical Al ³⁺ Insertion: Effects on Dye-Sensitized Solar Cell Performance. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 13267-13274	3.8	55
1807	Electrophoretic deposition of donor-acceptor nanostructures on electrodes for molecular photovoltaics. 2007 , 17, 31-41		70
1806	Photoreaction of Ethanol on TiO ₂ (110) Single-Crystal Surface. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 1764-1769	3.8	97
1805	Synthesis of pendant-type anthraquinone-bridged cofacial dinuclear platinum(II) complexes and their emission properties. 2007 , 46, 11291-6		19
1804	Photoinduced Charge Recombination at Dye-Sensitized Individual TiO ₂ Nanoparticles and Its Application in Probe for the Local Polarity Change around the Nanoparticle in Solution. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 4567-4577	3.8	8
1803	Dye Dependent Regeneration Dynamics in Dye Sensitized Nanocrystalline Solar Cells: Evidence for the Formation of a Ruthenium Bipyridyl Cation/Iodide Intermediate. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 6561-6567	3.8	241
1802	Effects of molecular interface modification in hybrid organic-inorganic photovoltaic cells. 2007 , 101, 114503		394
1801	Synthesis and Characterization of a Ruthenium(II) Complex for Photovoltaic Cells. 2007 , 44, 1255-1260		3
1800	Ultrasonic irradiation to modify the PEO/P(VDF/PIFP)/TiO ₂ nanoparticle composite polymer electrolyte for dye sensitized solar cells. 2007 , 18, 295606		28

1799	Theoretical analysis of the electronic properties of N3 derivatives. <i>Journal of Physical Chemistry A</i> , 2007 , 111, 13106-11	2.8	31
1798	Dependence of the photoelectrochemical performance of sensitised ZnO on the crystalline orientation in electrodeposited ZnO thin films. 2007 , 9, 1843-9		18
1797	A dye-sensitized solar cell driven electrochromic device. 2007 , 6, 63-6		17
1796	cis-trans photoisomerization in [Ru(DIP)2(MeOH)2][OTf]2: synthesis, NMR, X-ray structure of the trans-isomer and photophysical properties. 2007 , 2179-86		12
1795	Charge-Transfer Dynamics at Model Metal/Organic Solar Cell Surfaces. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 16646-16655	3.8	28
1794	Harnessing the sol-gel process for the assembly of non-silicate mesostructured oxide materials. <i>Accounts of Chemical Research</i> , 2007 , 40, 784-92	24.3	145
1793	Dendritic Effects on Structure and Photophysical and Photoelectrochemical Properties of Fullerene Dendrimers and Their Nanoclusters. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 2777-2786	3.8	48
1792	Anodic construction of lamellar structured ZnO films using basic media via interfacial surfactant templating. 2007 , 23, 12710-5		27
1791	Strongly Interacting Organic Conjugated Dendrimers with Enhanced Two-Photon Absorption. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 149-162	3.8	130
1790	Effects of Dye Loading Conditions on the Energy Conversion Efficiency of ZnO and TiO2 Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 18804-18811	3.8	211
1789	PbSe Nanocrystal/TiOx Heterostructured Films: A Simple Route to Nanoscale Heterointerfaces and Photocatalysis. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 11734-11741	3.8	45
1788	Synchrotron-Induced Photoelectron Spectroscopy of the Dye-Sensitized Nanocrystalline TiO2/Electrolyte Interface: Band Gap States and Their Interaction with Dye and Solvent Molecules. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 849-854	3.8	74
1787	Pores in Nanostructured TiO2 Films. Size Distribution and Pore Permeability. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 7605-7611	3.8	14
1786	In situ Investigation of Carboxylate Adsorption at the Fluorite/Water Interface by Sum Frequency Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 8050-8059	3.8	25
1785	The first photoexcitation step of ruthenium-based models for artificial photosynthesis highlighted by resonance Raman spectroscopy. 2007 , 111, 6078-87		50
1784	Isonicotinic Acid Molecular Films on Ag(111): I. XPS and STM Studies of Orientational Domains. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 2102-2106	3.8	13
1783	Ultrafast dynamics of room temperature ionic liquids after ultraviolet femtosecond excitation. 2007 , 111, 4830-6		20
1782	Dye-Sensitization of the TiO2 Rutile (110) Surface by Perylene Dyes: Quantum-Chemical Periodic B3LYP Computations. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 12116-12123	3.8	82

1781	Research on the Effect of Different Sizes of ZnO Nanorods on the Efficiency of TiO ₂ -Based Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 18417-18422	3.8	78
1780	New Triphenylamine-Based Organic Dyes for Efficient Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 4465-4472	3.8	339
1779	Quantum Dynamics of Photoinduced Electron-Transfer Reactions in Dye-Semiconductor Systems: First-Principles Description and Application to Coumarin 343/TiO ₂ . <i>Journal of Physical Chemistry C</i> , 2007 , 111, 11970-11981	3.8	139
1778	Molecular architectonic on metal surfaces. 2007 , 58, 375-407		895
1777	Effect of Tetrahydroquinoline Dyes Structure on the Performance of Organic Dye-Sensitized Solar Cells. 2007 , 19, 4007-4015		283
1776	Correlation between Photovoltaic Performance and Impedance Spectroscopy of Dye-Sensitized Solar Cells Based on Ionic Liquids. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 6550-6560	3.8	821
1775	Phenothiazine derivatives for efficient organic dye-sensitized solar cells. 2007 , 3741-3		408
1774	Photoelectrochemistry of Mesoporous NiO Electrodes in Iodide/Triiodide Electrolytes. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 17455-17458	3.8	128
1773	Titania Particle Size Effect on the Overall Performance of Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 6296-6302	3.8	164
1772	Synthesis of a Soluble n-Type Cyano Substituted Polythiophene Derivative: A Potential Electron Acceptor in Polymeric Solar Cells. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 10732-10740	3.8	46
1771	Review of Recent Progress in Dye-Sensitized Solar Cells. 2007 , 2007, 1-13		101
1770	Recent Advances in Dye-Sensitized Solar Cells. 2007 , 2007, 1-10		58
1769	Charge Transport in Dye-sensitized Systems. 2007 ,		
1768	Functional Supramolecular Ruthenium Cyclodextrin Dyes for Nanocrystalline Solar Cells. 2007 , 17, 54-58		28
1767	A Thermoplastic Gel Electrolyte for Stable Quasi-Solid-State Dye-Sensitized Solar Cells. 2007 , 17, 2645-2652		195
1766	New Family of Ruthenium-Dye-Sensitized Nanocrystalline TiO ₂ Solar Cells with a High Solar-Energy-Conversion Efficiency. 2007 , 17, 2964-2974		65
1765	A High-Light-Harvesting-Efficiency Coumarin Dye for Stable Dye-Sensitized Solar Cells. 2007 , 19, 1138-1141		532
1764	Highly Efficient Solid-State Dye-Sensitized TiO ₂ Solar Cells Using Donor-Antenna Dyes Capable of Multistep Charge-Transfer Cascades. 2007 , 19, 1091-1095		175

1763	Hierarchically Structured ZnO Film for Dye-Sensitized Solar Cells with Enhanced Energy Conversion Efficiency. 2007 , 19, 2588-2592		481
1762	Theoretical Studies of the Electronic Structure and Spectroscopic Properties of [Ru(Htcterpy)(NCS) ₃] ³⁺ . 2007 , 2007, 2171-2180		17
1761	Synthesis, Characterization, and Sensitizing Properties of Heteroleptic RuII Complexes Based on 2,6-Bis(1-pyrazolyl)pyridine and 2,2'-Bipyridine-4,4'-dicarboxylic Acid Ligands. 2007 , 2007, 5633-5644		44
1760	Titanium-containing zeolites and microporous molecular sieves as photovoltaic solar cells. 2007 , 8, 1115-9		54
1759	Influence of the preparation conditions of TiO ₂ electrodes on the performance of solid-state dye-sensitized solar cells with CuI as a hole collector. <i>Solar Energy</i> , 2007 , 81, 717-722	6.8	31
1758	Highly efficient solid-state dye-sensitized TiO ₂ solar cells via control of retardation of recombination using novel donor-antenna dyes. 2007 , 91, 432-439		57
1757	Transparent conductors as solar energy materials: A panoramic review. 2007 , 91, 1529-1598		1225
1756	Mordant dyes as sensitizers in dye-sensitized solar cells. 2007 , 91, 1618-1630		34
1755	AM1 molecular screening of novel porphyrin analogues as dye-sensitized solar cells. 2007 , 91, 1775-1781		54
1754	Anthraquinone dyes as photosensitizers for dye-sensitized solar cells. 2007 , 91, 1863-1871		51
1753	Thermal thiocyanate ligand substitution kinetics of the solar cell dye N719 by acetonitrile, 3-methoxypropionitrile, and 4-tert-butylpyridine. 2007 , 91, 1934-1942		76
1752	Photocatalytic disinfection of phytopathogenic bacteria by dye-sensitized TiO ₂ thin film activated by visible light. 2007 , 202, 1329-1332		50
1751	Synthesis and crystal structure of two novel polymeric PbII compounds: [Pb(phen)(N ₃) ₂] _n and [Pb(deta)(N ₃) ₂] _n . 2007 , 10, 174-177		31
1750	Synthesis, structure and properties of (4,4'-H ₂ bipy)[HgBr ₄] · H ₂ O with strong fluorescence. 2007 , 10, 223-225		2
1749	Modeling of charge-transfer transitions and excited states in d ₆ transition metal complexes by DFT techniques. <i>Coordination Chemistry Reviews</i> , 2007 , 251, 258-287	23.2	386
1748	Coordination chemistry and supramolecular chemistry in mesoporous nanospace. <i>Coordination Chemistry Reviews</i> , 2007 , 251, 2562-2591	23.2	167
1747	Fabrication and functions of surface nanomaterials based on multilayered or nanoarrayed assembly of metal complexes. <i>Coordination Chemistry Reviews</i> , 2007 , 251, 2688-2701	23.2	106
1746	The multichromophore approach: A case of temperature controlled switching between single and dual emission in Ru(II) polypyridyl complexes. 2007 , 360, 876-884		13

- 1745 The s-triazine ring, a remarkable unit to generate supramolecular interactions. **2007**, 360, 381-404 133
- 1744 Probing inter-ligand excited state interaction in homo and heteroleptic ruthenium(II) polypyridyl complexes using selective deuteration. **2007**, 360, 1183-1190 17
- 1743 Tuning of redox potential and visible absorption band of ruthenium(II) complexes of (benzimidazolyl) derivatives: Synthesis, characterization, spectroscopic and redox properties, X-ray structures and DFT calculations. **2007**, 360, 2231-2244 19
- 1742 New ruthenium sensitizers containing styryl and antenna fragments. **2007**, 360, 3518-3524 18
- 1741 Visible-light-induced hydrogen production over Pt-Eosin Y catalysts with high surface area silica gel as matrix. **2007**, 166, 74-79 46
- 1740 Two pseudo-N3 ligands and the catalytic activity of their ruthenium(II) complexes in transfer hydrogenation and hydrogenation of ketones. **2007**, 692, 2306-2313 28
- 1739 Synthesis, electrochemistry, and photophysical properties of binuclear ruthenium(II) terpyridine complexes comprising redox-active ferrocenyl spacer. **2007**, 692, 2324-2333 25
- 1738 Quaternary ammonium polyiodides as ionic liquid/soft solid electrolytes in dye-sensitized solar cells. *Journal of Photochemistry and Photobiology A: Chemistry*, **2007**, 186, 29-33 4-7 31
- 1737 An investigation of the photosubstitution reaction between N719-dyed nanocrystalline TiO₂ particles and 4-tert-butylpyridine. *Journal of Photochemistry and Photobiology A: Chemistry*, **2007**, 187, 348-355 4-7 26
- 1736 Quasi-solid-state dye-sensitized solar cells: Pt and PEDOT:PSS counter electrodes applied to gel electrolyte assemblies. *Journal of Photochemistry and Photobiology A: Chemistry*, **2007**, 187, 395-401 4-7 90
- 1735 Role of TiO₂ nanoparticles on the photoinduced intramolecular electron-transfer reaction within a novel synthesized donor-acceptor system. *Journal of Photochemistry and Photobiology A: Chemistry*, **2007**, 189, 86-93 4-7 12
- 1734 TiO₂-catalyzed photooxygenation of cinnamic acid derivatives via their radical cations. *Journal of Photochemistry and Photobiology A: Chemistry*, **2007**, 189, 94-99 4-7 7
- 1733 Synthesis and photoelectrochemical properties of ruthenium bisterpyridine sensitizers functionalized with a thienyl phosphonic acid moiety. *Journal of Photochemistry and Photobiology A: Chemistry*, **2007**, 192, 56-65 4-7 32
- 1732 All-plastic dye-sensitized solar cell using a polysaccharide film containing excess redox electrolyte solution. **2007**, 599, 23-30 53
- 1731 Photodebromination of dibromobutane: Possibility and evidence. **2007**, 601, 237-241
- 1730 Identification and assignment of porphyrin- CdSe hetero-nanoassemblies. **2007**, 122-123, 784-788 28
- 1729 Synthesis, isolation, and redispersion of resorcinarene-capped anatase TiO₂ nanoparticles in nonaqueous solvents. **2007**, 310, 178-83 20
- 1728 Poly[μ_2 -4,4'-bipyridine-di- μ_2 -bromido-cadmium(II)], with novel colour-tunable fluorescence. **2007**, 63, m398-400 3

1727	Synthesis and Crystal Structure of a Novel Polymeric Lead(II) Compound: [Pb ₂ (phen) ₂ (N ₃) ₃ (ClO ₄)] _n . 2007 , 633, 1329-1332		16
1726	Development of water-soluble single-crystalline TiO ₂ nanoparticles for photocatalytic cancer-cell treatment. 2007 , 3, 850-3		184
1725	Photoinduced relaxation processes in complexes based on semiconductor CdSe nanocrystals and organic molecules. 2007 , 103, 958-968		20
1724	Influence of Solid Fraction on the Optimum Molecular Weight of Polymer Dispersants in Aqueous TiO ₂ Nanoparticle Suspensions. 2007 , 90, 3401-3406		33
1723	Photocatalytic activity and photo-induced hydrophilicity of mesoporous TiO ₂ thin films coated on aluminum substrate. 2007 , 73, 135-143		36
1722	Fabrication of uniform size titanium oxide nanotubes: Impact of current density and solution conditions. 2007 , 56, 373-376		88
1721	The role of interface in photo processes in photoconductive heterophase composites based on monolayer dispersions of molybdenum disulfide. 2007 , 81, 1870-1876		1
1720	Bioinspired nanodevice based on the folic acid/titanium dioxide system. 2007 , 2, 580-90		27
1719	Density functional theory analysis of the structural and electronic properties of TiO ₂ rutile and anatase polytypes: performances of different exchange-correlation functionals. <i>Journal of Chemical Physics</i> , 2007 , 126, 154703	3.9	276
1718	Hierarchical ZnO Nanostructures Obtained by Electrodeposition. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 11560-11565	3.8	147
1717	Femtosecond stimulated Raman spectroscopy. 2007 , 58, 461-88		468
1716	Sol-gel synthesis, characterization and photocatalytic activity of mesoporous TiO ₂ /EAl ₂ O ₃ granules. 2007 , 44, 21-28		8
1715	Biophotofuel cell (BPFC) generating electrical power directly from aqueous solutions of biomass and its related compounds while photodecomposing and cleaning. 2007 , 37, 1039-1046		16
1714	Study on titania nanotube arrays prepared by titanium anodization in NH ₄ F/H ₂ SO ₄ solution. <i>Journal of Materials Science</i> , 2007 , 42, 5539-5543	4.3	30
1713	Photochemical behaviors during the photosensitization of colloidal TiO ₂ particles by a newly synthesized multidentate squaraine. <i>Journal of Materials Science</i> , 2007 , 42, 7678-7683	4.3	5
1712	Role of the Platinum Nanoclusters in the Iodide/Triiodide Redox System of Dye Solar Cells. 2007 , 18, 141-155		56
1711	High visible-light photocatalytic activity of nitrogen-doped titania prepared from layered titania/isostearate nanocomposite. 2007 , 120, 226-232		63
1710	The photoelectrochemical properties of dye-sensitized solar cells made with TiO ₂ nanoribbons and nanorods. 2007 , 515, 4085-4091		42

1709	The influence of cations on charge accumulation in dye-sensitized solar cells. 2007 , 609, 55-60	61
1708	Quasi-solid-state dye-sensitized solar cells with a novel efficient absorbent for liquid electrolyte based on PAABEG hybrid. 2007 , 164, 921-925	47
1707	Low-Pt-loading acetylene-black cathode for high-efficient dye-sensitized solar cells. 2008 , 177, 631-636	40
1706	Direct electrochemistry of horseradish peroxidase on TiO ₂ (2) nanotube arrays via seeded-growth synthesis. 2008 , 24, 198-203	58
1705	Effects of carboxylic acids on the microstructure and performance of titania nanocrystals. 2008 , 138, 596-601	19
1704	Hybrid bulk heterojunction solar cells based on blends of TiO ₂ nanorods and P3HT. 2008 , 9, 110-118	27
1703	The effect of temperature on the charge transport and transient absorption properties of K27 sensitized DSSC. 2008 , 92, 1047-1053	23
1702	Charge transfer across the molecule/metal interface using the core hole clock technique. 2008 , 63, 465-486	63
1701	Molecular damage in bi-isonicotinic acid adsorbed on rutile TiO ₂ (110). 2008 , 602, 1693-1698	10
1700	Fabrication of thin film dye sensitized solar cells with solar to electric power conversion efficiency over 10%. 2008 , 516, 4613-4619	1564
1699	The TiO ₂ /Ru(dcbpyH ₂) ₂ (NCS) ₂ /Au Schottky junction. 2008 , 516, 7234-7236	2
1698	Preparation of core-shell Ti-Nb oxide nanocrystals. 2008 , 10, 77-85	6
1697	Photoelectrocatalytic activity of mesoporous TiO ₂ films prepared using the sol-gel method with tri-block copolymer as structure directing agent. 2008 , 38, 703-712	20
1696	In situ crosslinked ionic gel polymer electrolytes for dye sensitized solar cells. 2008 , 16, 424-428	9
1695	Fabrication and Properties of Porphyrin Nano- and Micro-particles with Novel Morphology. 2008 , 3, 169-78	14
1694	Artificial photosynthesis. 2008 , 11, 26-34	255
1693	Enhanced efficiency in solid-state dye-sensitized solar cells based on fractal nanostructured TiO ₂ thin films. 2008 , 4, 770-6	22
1692	Toward low-band gap dithienophosphole copolymers for an application in organic solar cells. 2008 , 46, 8179-8190	35

1691	Processing energy and signals by molecular and supramolecular systems. 2008 , 14, 26-39	115
1690	Temperature dependence of electronic coupling through oligo-p-phenyleneethynylene bridges. 2008 , 14, 2819-26	27
1689	Self-assembling nanoparticles at surfaces and interfaces. 2008 , 9, 20-42	344
1688	Ordered mesoporous thin films of rutile TiO ₂ nanocrystals mixed with amorphous Ta ₂ O ₅ . 2008 , 9, 748-57	26
1687	Photochemical conversion of solar energy. 2008 , 1, 26-58	934
1686	Synthesis, Photophysical Characterization, and Surface Photovoltage Spectra of Windmill-Shaped PhthalocyaninePorphyrin Heterodimers and Heteropentamers. 2008 , 2008, 119-128	17
1685	Synthesis and Characterisation of Poly(bipyridine)ruthenium Complexes as Building Blocks for Heterosupramolecular Arrays. 2008 , 2008, 3310-3319	53
1684	Phase inversion process to prepare quasi-solid-state electrolyte for the dye-sensitized solar cells. 2008 , 109, 1369-1375	7
1683	Femtosecond isomerization in a photochromic molecular switch. 2008 , 47, 1458-61	51
1682	Heterogeneous catalysis through microcontact printing. 2008 , 47, 9927-32	47
1681	Hybrid Solar Cells from a Blend of Poly(3-hexylthiophene) and Ligand-Capped TiO ₂ Nanorods. 2008 , 18, 622-633	132
1680	Functionalized Asymmetric Linear Acenes for High-Performance Organic Semiconductors. 2008 , 18, 1579-1585	36
1679	Demonstration of Bulk Semiconductor Optical Properties in Processable Ag ₂ S and EuS Nanocrystalline Systems. 2008 , 20, 2439-2443	113
1678	Femtosecond Isomerization in a Photochromic Molecular Switch. 2008 , 120, 1480-1483	10
1677	Heterogeneous Catalysis through Microcontact Printing. 2008 , 120, 10075-10080	5
1676	Photocatalytic activity of pulsed laser deposited TiO ₂ thin films. 2008 , 151, 133-139	45
1675	Influence of acceptor moiety in triphenylamine-based dyes on the properties of dye-sensitized solar cells. 2008 , 183, 792-798	41
1674	Energy transfer in zinc porphyrin-phthalocyanine heterotrimer and heterononamer studied by fluorescence resonance energy transfer (FRET). 2008 , 70, 42-9	15

1673	Photoelectrochemical characteristics of cells with dyed and undyed nanoporous p-type semiconductor CuO electrodes. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2008 , 194, 143-147	4.7	87
1672	Betalain pigments for dye-sensitized solar cells. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2008 , 195, 72-80	4.7	165
1671	Synthesis of new perylene imide dyes and their photovoltaic performances in nanocrystalline TiO ₂ dye-sensitized solar cells. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2008 , 197, 156-169	4.7	80
1670	Photocatalytic hydrogen generation over Eosin Y-Sensitized TS-1 zeolite. 2008 , 254, 4452-4456		25
1669	Hydrolysis-Condensation reactions of titanium alkoxides in thin films: A study of the steric hindrance effect by X-ray photoelectron spectroscopy. 2008 , 254, 5408-5412		24
1668	3MLCT excited states in Ru(II) complexes: Reactivity and related two-photon absorption applications in the near-infrared spectral range. 2008 , 11, 709-715		25
1667	Improved photovoltage and performance by aminosilane-modified PEO/P(VDF-HFP) composite polymer electrolyte dye-sensitized solar cells. <i>Electrochimica Acta</i> , 2008 , 53, 5415-5422	6.7	40
1666	Improving the photoelectrochemical performance of polythiophene sensitized TiO ₂ electrode by modification with gold nanoparticles. 2008 , 460, 168-172		17
1665	Nonperturbative quantum simulation of time-resolved nonlinear spectra: Methodology and application to electron transfer reactions in the condensed phase. 2008 , 347, 139-151		42
1664	Assessment of quantum chemical methods and basis sets for excitation energy transfer. 2008 , 346, 275-285		68
1663	A mathematical model for the anodic half cell of a dye-sensitised solar cell. 2008 , 92, 24-37		24
1662	A mathematical model for interfacial charge transfer at the semiconductor-dye-electrolyte interface of a dye-sensitised solar cell. 2008 , 92, 11-23		22
1661	Photovoltaic performance of hybrid solar cell with TiO ₂ nanotubes arrays fabricated through liquid deposition using ZnO template. 2008 , 92, 1445-1449		50
1660	Synthesis of titanium dioxide nanotubes from electrospun fiber templates. 2008 , 148, 556-558		35
1659	Role of phosphorus in synthesis of phosphated mesoporous TiO ₂ photocatalytic materials by EISA method. 2008 , 254, 5191-5198		25
1658	TiO ₂ Nanotube arrays: Elimination of disordered top layers (nanograss) for improved photoconversion efficiency in dye-sensitized solar cells. 2008 , 10, 1835-1838		181
1657	Synthesis and characterisation of bis(2,2'-bipyridine)(4-carboxy-4'-(pyrid-2-ylmethylamido)-2,2'-bipyridine)ruthenium(II) di(hexafluorophosphate): Comparison of spectroelectrochemical properties with related complexes. 2008 , 361, 601-612		27
1656	Interfacial electron transfer on TiO ₂ sensitized with an axially anchored trans tetradentate Ru(II) compound. 2008 , 361, 613-619		19

1655	Key aspects of individual layers in solid-state dye-sensitized solar cells and novel concepts to improve their performance. 2008 , 361, 635-655		68
1654	Transient emission studies of electron injection in dye sensitised solar cells. 2008 , 361, 663-670		74
1653	Hybrid solar cells. 2008 , 361, 581-588		241
1652	Protogonists in Chemistry. 2008 , 361, 561-571		1
1651	Highly dispersed gold nanoparticles assembled in mesoporous titania films of cubic configuration. 2008 , 110, 242-249		41
1650	Polymer-induced generation of anatase TiO ₂ hollow nanostructures. 2008 , 112, 641-646		20
1649	The structural, physical and photocatalytic properties of the mesoporous Cr-doped TiO ₂ . 2008 , 284, 155-160		136
1648	Enhanced charge carrier generation in dye sensitized solar cells by nanoparticle plasmons. 2008 , 92, 013113		213
1647	Mott-Schottky Analysis and Impedance Spectroscopy of TiO ₂ /6T and ZnO/6T devices. 2008 , 112, 10086-91		22
1646	Photoelectrochemical Properties of Doubly Functionalized Porphyrin Sensitizers for Dye-Sensitized Nanocrystalline-TiO ₂ Solar Cells. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 16691-16699 ^{3.8}		119
1645	Design of an organic chromophore for p-type dye-sensitized solar cells. 2008 , 130, 8570-1		344
1644	CdSe Quantum Dot-Sensitized Solar Cells Exceeding Efficiency 1% at Full-Sun Intensity. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 11600-11608	3.8	328
1643	Quinoxaline-Fused Porphyrins for Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 4396-4405	3.8	157
1642	Crystallization of TiO ₂ Powders and Thin Films Prepared from Modified Titanium Alkoxide Precursors. 2008 , 91, 2015-2023		17
1641	A facile solvothermal route to photocatalytically active nanocrystalline anatase TiO ₂ from peroxide precursors. 2008 , 10, 864-872		10
1640	How close can you get? Studies of ultrafast light-induced processes in ruthenium-[60] fullerene dyads with short pyrazolino and pyrrolidino links. 2008 , 47, 7286-94		25
1639	Modification of a TiO ₂ photoanode by using Cr-doped TiO ₂ with an influence on the photovoltaic efficiency of a dye-sensitized solar cell. 2008 , 18, 5809		98
1638	Dye-sensitized solar cells: A safe bet for the future.. 2008 , 1, 655		350

1637	Tuning energy transfer in switchable donor-acceptor systems. 2008 , 6, 1268-77		35
1636	Solid-state dye-sensitized TiO ₂ solar cells based on a sensitizer covalently wired to a hole conducting polymer. 2008 , 7, 789-93		13
1635	End-functional silicone coupling agent modified PEO/P(VDF-HFP)/SiO ₂ nanocomposite polymer electrolyte DSSC. 2008 , 19, 245202		22
1634	Dynamical Simulation of Photoinduced Electron Transfer Reactions in Dye/Semiconductor Systems with Different Anchor Groups. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 12326-12333	3.8	77
1633	A Computational Study on Adsorption Configurations and Dissociative Reactions of the HN ₃ Molecule on the TiO ₂ Anatase (101) Surface. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 18017-18027	3.8	7
1632	A panchromatic boradiazaindacene (BODIPY) sensitizer for dye-sensitized solar cells. 2008 , 10, 3299-302		370
1631	New Triphenylamine-Based Dyes for Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 874-880	3.8	307
1630	Improved Photon-to-Current Conversion Efficiency with a Nanoporous p-Type NiO Electrode by the Use of a Sensitizer-Acceptor Dyad. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 1721-1728	3.8	164
1629	Shape control of inorganic materials via electrodeposition. 2008 , 5432-8		81
1628	Facile Method for Fabrication of Nanostructured CuPC Thin Films To Enhance Photocurrent Generation. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 19934-19938	3.8	38
1627	Efficient Structural Modification of Triphenylamine-Based Organic Dyes for Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 11591-11599	3.8	163
1626	Pyrrole-Based Organic Dyes for Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 12557-12567	3.8	110
1625	Ladder-Type Pentaphenylene Dyes for Dye-Sensitized Solar Cells. 2008 , 20, 1808-1815		118
1624	The function of a TiO ₂ compact layer in dye-sensitized solar cells incorporating "planar" organic dyes. 2008 , 8, 977-81		177
1623	Ruthenium Carbene and Allenylidene Complexes Supported by the Tertiary Amine/Aromatic Diimine Ligand Set: Structural, Spectroscopic, and Theoretical Studies. 2008 , 27, 5806-5814		26
1622	Template-Free Formation of Meso-Structured Anatase TiO ₂ with Spherical Morphology. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 20007-20011	3.8	24
1621	Effect of Different Dye Baths and Dye-Structures on the Performance of Dye-Sensitized Solar Cells Based on Triphenylamine Dyes. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 11023-11033	3.8	404
1620	FUNDAMENTALS AND APPLICATIONS OF QUANTUM-CONFINED STRUCTURES. 2008 , 147-207		1

1619	DYE-SENSITISED MESOSCOPIC SOLAR CELLS. 2008 , 503-536		20
1618	Growth mechanism of titanium dioxide nanowires for dye-sensitized solar cells. 2008 , 19, 095604		88
1617	Carbon nanotube-modified electrodes for solar energy conversion. 2008 , 1, 120		170
1616	Nitrogen-Doped and CdSe Quantum-Dot-Sensitized Nanocrystalline TiO ₂ Films for Solar Energy Conversion Applications. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 1282-1292	3.8	176
1615	Effect of side chain length on the electrochemical and photoresponse characteristics of poly[3-(2,5-dialkoxyphenyl)thiophenes]. 2008 , 158, 307-314		3
1614	Fabrication of an Efficient Dye-Sensitized Solar Cell with Stainless Steel Substrate. <i>Journal of the Electrochemical Society</i> , 2008 , 155, F145	3.9	107
1613	Photoinduced energy transfer between water-soluble CdTe quantum dots and aluminium tetrasulfonated phthalocyanine. 2008 , 32, 290-296		104
1612	Photofunctional nanomaterials composed of multiporphyrins and carbon-based electron acceptors. 2008 , 18, 1427		297
1611	Photovoltaic properties of liquid-state photoelectrochemical cells based on PPAT and a composite film of PPAT and nanocrystalline titanium dioxide. 2008 , 158, 509-515		14
1610	All-metal-electrode-type dye sensitized solar cells (transparent conductive oxide-less dye sensitized solar cell) consisting of thick and porous Ti electrode with straight pores. 2008 , 92, 033308		62
1609	Theoretical studies on the electronic structures and spectroscopic properties for a series of Osmium(II)-2,2',6,2''-terpyridine complexes. 2008 , 121, 123-134		5
1608	A solid-state dye-sensitized solar cell based on a novel ionic liquid gel and ZnO nanoparticles on a flexible polymer substrate. 2008 , 19, 424006		62
1607	A dinuclear ruthenium(II) complex that functions as a label-free colorimetric sensor for DNA. 2008 , 1868-70		35
1606	Fe(II), Ru(II) and Re(I) complexes of endotopic, sterically non-hindering, U-shaped 8,8'-disubstituted-3,3'-biisoquinoline ligands: syntheses and spectroscopic properties. 2008 , 491-8		7
1605	Nonthermalized excited states in Ru(II) polypyridyl complexes probed by ultrafast transient absorption spectroscopy with high photon energy excitation. 2008 , 86, 1118-1125		3
1604	Excitation energy flow control in {Ru(2,2'-bipyridine) ₂ }-{pyridylporphyrin} ₂ systems. 2008 , 1541-3		5
1603	Distinguishing between Dexter and rapid sequential electron transfer in covalently linked donor-acceptor assemblies. 2008 , 130, 4708-24		38
1602	Detailed Experimental and Theoretical Investigation of the Electron Transport in a Dye Solar Cell by Means of a Three-Electrode Configuration. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 1711-1720	3.8	24

1601	Photosensitization and Photocurrent Switching in Carminic Acid/Titanium Dioxide Hybrid Material. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 19131-19141	3.8	33
1600	Micromodulating the Electronic Coupling Across Redox-Active Ferrocenyl Spacer in Binuclear Ruthenium(II) Terpyridine Complexes: Synthesis, Electrochemistry, and Photophysical Properties. 2008 , 27, 555-562		19
1599	Effects of excited state-excited state configurational mixing on emission bandshape variations in ruthenium-bipyridine complexes. 2008 , 47, 7493-511		26
1598	Architecture of a charge-transfer state regulating light harvesting in a plant antenna protein. 2008 , 320, 794-7		449
1597	Theoretical insights on the electronic properties of eosin Y, an organic dye for photovoltaic applications. <i>Journal of Physical Chemistry A</i> , 2008 , 112, 7264-70	2.8	27
1596	Surface-confined supramolecular coordination chemistry. 2009 , 287, 1-44		95
1595	Preparation, separation, and characterization of ruthenium(II) thiocyanate linkage isomers. 2008 , 47, 9134-6		31
1594	Visible-light induced water detoxification catalyzed by PtII dye sensitized titania. 2008 , 130, 12566-7		115
1593	Computational study of the lowest triplet state of ruthenium polypyridyl complexes used in artificial photosynthesis. <i>Journal of Physical Chemistry A</i> , 2008 , 112, 4470-6	2.8	56
1592	Molecules Immobilization in Titania Nanotubes: A Solid-State NMR and Computational Chemistry Study. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 17331-17335	3.8	28
1591	The early picosecond photophysics of Ru(II) polypyridyl complexes: a tale of two timescales. <i>Journal of Physical Chemistry A</i> , 2008 , 112, 4537-44	2.8	81
1590	A CdS-modified TiO ₂ nanocrystalline photoanode for efficient hydrogen generation by visible light. 2008 , 19, 125704		80
1589	Slow cation transfer follows sensitizer regeneration at anatase TiO ₂ interfaces. 2008 , 130, 11586-7		52
1588	Synthesis of diamond-shape titanate molecular sheets with different sizes and realization of quantum confinement effect during dimensionality reduction from two to zero. 2008 , 130, 6534-43		70
1587	Femtosecond UV excitation in imidazolium-based ionic liquids. 2008 , 112, 15718-24		25
1586	Achievement of 4.7% conversion efficiency in ZnO dye-sensitized solar cells fabricated by spray deposition using hydrothermally synthesized nanoparticles. 2008 , 19, 445712		45
1585	Theoretical studies on structures and spectroscopic properties of photoelectrochemical cell ruthenium sensitizers, [Ru(Hmtcterpy)(NCS) ₃] ⁿ⁻ (m = 0, 1, 2, and 3; n = 4, 3, 2, and 1). 2008 , 47, 2312-24		46
1584	Size Effects of Oligothiophene on the Dynamics of Electron Transfer in π -Conjugated Oligothiophene-Perylene Bisimide Dyads. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 2689-2696	3.8	38

1583	Femtosecond fluorescence and intersystem crossing in rhenium(I) carbonyl-bipyridine complexes. 2008 , 130, 8967-74	245
1582	Trialkylsilylethynyl-Functionalized Tetraceno[2,3-b]thiophene and Anthra[2,3-b]thiophene Organic Transistors. 2008 , 20, 4669-4676	60
1581	Trap-State Distributions and Carrier Transport in Pure and Mixed-Phase TiO ₂ : Influence of Contacting Solvent and Interphasial Electron Transfer. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 12786-12794	3.8 185
1580	Probing TiO ₂ /Dye Interface in Dye Sensitized Solar Cells Using Surface Potential Measurement. 2008 , 1, 105001	21
1579	Photoemission, resonant photoemission, and x-ray absorption of a Ru(II) complex adsorbed on rutile TiO ₂ (110) prepared by in situ electrospray deposition. <i>Journal of Chemical Physics</i> , 2008 , 129, 114709	73
1578	Pyrans and their Benzo Derivatives: Applications. 2008 , 701-726	12
1577	Chemical Modification on Hierarchically Structured ZnO Films for Energy Conversion Efficiency Enhancement of Dye-Sensitized Solar Cells. 2008 , 1102, 1	
1576	An effect of TiO ₂ morphology on performance of ITO/TiO ₂ /MEH-PPV/Au solar cells. 2008 ,	1
1575	Dye-sensitized solar cells based on poly(ethylene glycol) electrolyte containing oxotitanium(IV) 5,10,15,20-tetrakis(p-toyl)porphyrin. 2008 ,	1
1574	An effect of TiO ₂ morphology on performance of ITO/TiO ₂ /MEH-PPV/Au solar cells. 2008 ,	
1573	Nanocomposites of TiO ₂ and Siloxane Copolymers as Environmentally Safe Flame-Retardant Materials View all notes . 2008 , 45, 942-946	23
1572	Self-assembled monolayer initiated electropolymerization: a route to thin-film materials with enhanced photovoltaic performance. 2008 , 24, 9700-6	29
1571	Self-assembled nanoscale architecture of TiO ₂ and application for dye-sensitized solar cells. 2008 , 1, 1-7	5
1570	Transition Metal Complexes as Sensitizers for Efficient Mesoscopic Solar Cells. 2008 , 51, 3-12	8
1569	Adsorption of a Ru(II) dye complex on the Au(111) surface: photoemission and scanning tunneling microscopy. <i>Journal of Chemical Physics</i> , 2009 , 130, 164704	3.9 23
1568	4,4-Bis(4-octylphenoxy)-2,2-bipyridine. 2009 , 2009, M643	
1567	Novel extended π -conjugated Zn(II)-porphyrin derivatives bearing pendant triphenylamine moiety for dye-sensitized solar cell: synthesis and characterization. 2009 , 13, 798-804	22
1566	The Effect of UV-Irradiation (under Short-Circuit Condition) on Dye-Sensitized Solar Cells Sensitized with a Ru-Complex Dye Functionalized with a (diphenylamino)Styryl-Thiophen Group. 2009 , 2009, 1-9	4

1565	Functional Dyes, and Some Hi-Tech Applications. 2009 , 2009, 1-21	50
1564	Fabrication and Characterization of Dye-Sensitized Solar Cell Using TiO ₂ -Nanotube Particles by Anodic Oxidation. 2009 , 48, 08HK07	2
1563	Synthesis and spectral investigations of covalently linked phthalocyanine-C ₆₀ dyad via flexible carbon linker. 2009 , 15,	3
1562	New phthalocyanines containing bulky electron rich substituents. 2009 , 13, 753-759	28
1561	K-12 Outreach and Science Literacy through Green Chemistry. 2009 , 167-185	2
1560	Transparent Conductive Oxide Layer-Less Three Dimensional Dye Sensitized Solar Cells: Fabrication of Ionic Path in Three Dimensional Ti Electrode. 2009 , 48, 061504	12
1559	Nanostructured Materials for Electrochemical Energy Production and Storage. 2009 ,	4
1558	Nonaqueous sol-gel synthesis and growth mechanism of single crystalline TiO ₂ nanorods with high photocatalytic activity. 2009 , 44, 1312-1316	33
1557	Low temperature synthesis of crystalline mesoporous titania with high photocatalytic activity by post-treatment in nitric acid ethanol solution. 2009 , 63, 106-108	27
1556	Porous One-Dimensional Photonic Crystals Improve the Power-Conversion Efficiency of Dye-Sensitized Solar Cells. 2009 , 21, 764-770	227
1555	Nanopatterning Soluble Multifunctional Materials by Unconventional Wet Lithography. 2009 , 21, 1043-1053	124
1554	High Incident Photon-to-Current Conversion Efficiency of p-Type Dye-Sensitized Solar Cells Based on NiO and Organic Chromophores. 2009 , 21, 2993-2996	164
1553	Mesoporous Anatase TiO ₂ Beads with High Surface Areas and Controllable Pore Sizes: A Superior Candidate for High-Performance Dye-Sensitized Solar Cells. 2009 , 21, 2206-2210	858
1552	Towards Optimization of Materials for Dye-Sensitized Solar Cells. 2009 , 21, 4647-4651	119
1551	Brückenschlag in der Katalyse: Immobilisierung von molekularen Katalysatoren in funktionellen Materialien. 2009 , 121, 1922-1924	15
1550	A p-Type NiO-Based Dye-Sensitized Solar Cell with an Open-Circuit Voltage of 0.35 V. 2009 , 121, 4466-4469	50
1549	Influence of sodium cations of N3 dye on the photovoltaic performance and stability of dye-sensitized solar cells. 2009 , 10, 1117-24	43
1548	Ternary Porphyrinato Hf(IV) and Zr(IV) - Polyoxometalate Complexes. 2009 , 2009, 2459-2466	39

1547	Bridging the materials gap in catalysis: entrapment of molecular catalysts in functional supports and beyond. 2009 , 48, 1890-2	35
1546	A p-type NiO-based dye-sensitized solar cell with an open-circuit voltage of 0.35 V. 2009 , 48, 4402-5	237
1545	Influence of TiO ₂ /electrode interface on electron transport properties in back contact dye-sensitized solar cells. 2009 , 93, 720-724	51
1544	TiO ₂ -B narrow nanobelt/TiO ₂ nanoparticle composite photoelectrode for dye-sensitized solar cells. <i>Electrochimica Acta</i> , 2009 , 54, 7350-7356	6.7 75
1543	Modeling the structure and spectral properties of sensitizing black dye for nanocrystalline TiO ₂ solar cells. 2009 , 76, 772-776	2
1542	A simple approach for preparing a visible-light TiO ₂ photocatalyst. 2009 , 35, 717-726	15
1541	A luminescent rhenium(II) complex of 2,7-dimethyl-1,8-naphthyridine: synthesis, spectroscopy and X-ray crystal structure. 2009 , 34, 493-497	11
1540	Fine Control of Nitrogen Content in N-doped Titania Photocatalysts Prepared from Layered Titania/Isostearate Nanocomposites for High Visible-Light Photocatalytic Activity. 2009 , 52, 1584-1591	7
1539	Molecular design of organic dyes based on vinylene hexylthiophene bridge for dye-sensitized solar cells. 2009 , 52, 1198-1209	11
1538	Fluorescence and sensitization performance of phenylene-vinylene-substituted polythiophene. 2009 , 54, 1669-1676	10
1537	Dye-sensitized solar cells based on bisindolylmaleimide derivatives. 2009 , 4, 269-277	7
1536	Enhancing Solar Cell Efficiencies through 1-D Nanostructures. 2009 , 4, 1-10	243
1535	Growth of Comb-like ZnO Nanostructures for Dye-sensitized Solar Cells Applications. 2009 , 4, 1004-1008	78
1534	Formation and photodecomposition of cationic titanium oxide clusters. 2009 , 97, 765-770	13
1533	Grafting of polystyrene from and through surface modified titania nanoparticles. 2009 , 62, 281-289	22
1532	A First-Principle Study on Size-Dependent Thermodynamic Properties of Small TiO ₂ Nanoclusters. 2009 , 30, 384-390	7
1531	Interface-tailored and nanoengineered polymeric materials for (opto)electronic devices. 2009 , 58, 594-619	25
1530	Increased light harvesting in dye-sensitized solar cells with energy relay dyes. 2009 , 3, 406-411	398

1529	A novel solution for cathodic deposition of porous TiO ₂ films. 2009 , 11, 434-437		30
1528	Effect of Triton X-100 in water-added electrolytes on the performance of dye-sensitized solar cells. <i>Electrochimica Acta</i> , 2009 , 54, 6286-6291	6.7	55
1527	pH Dependent photophysics and role of medium on photoinduced electron transfer between ruthenium polypyridyl complex and anthraquinone. 2009 , 362, 1715-1722		28
1526	Effect of ancillary ligands on the photophysical properties of Ru(II) complexes bearing a highly conjugated diimine ligand: A density functional theory study. 2009 , 362, 5064-5072		10
1525	Structures and excitation energies of Zn-tetraarylporphyrin analogues: A theoretical study. 2009 , 910, 20-26		68
1524	Fabrication of dye-sensitized solar cells using TiO ₂ -nanotube arrays on Ti-grid substrates. 2009 , 517, 4196-4198		28
1523	On the addition of conducting ceramic nanoparticles in solvent-free ionic liquid electrolyte for dye-sensitized solar cells. 2009 , 93, 1411-1416		37
1522	Fresh perspectives for surface coordination chemistry. 2009 , 603, 1533-1541		227
1521	Electrochemical polymerization effects of triphenylamine-based dye on TiO ₂ photoelectrodes in dye-sensitized solar cells. 2009 , 631, 43-51		38
1520	Electrochemical characterization of TiO ₂ blocking layers prepared by reactive DC magnetron sputtering. 2009 , 637, 79-83		47
1519	Synthesis and quantum chemical study of PDI derivatives with phenylalkynyl groups at the bay position. 2009 , 938, 245-253		8
1518	Photosensitization of colloidal TiO ₂ nanoparticles with phycocyanin pigment. 2009 , 335, 196-202		52
1517	Organic chromophore-sensitized ZnO solar cells: Electrolyte-dependent dye desorption and band-edge shifts. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2009 , 202, 159-163	4.7	22
1516	Meta-substituted Ru(II) rigid rods for sensitization of TiO ₂ . <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2009 , 206, 155-163	4.7	9
1515	A convenient sol-gel route for the synthesis of salicylate-titania nanocomposites having visible absorption and blue luminescence. 2009 , 182, 1200-1205		6
1514	Photoinduced electron dynamics at the chromophore-semiconductor interface: A time-domain ab initio perspective. 2009 , 84, 30-68		155
1513	Surface transfer doping of semiconductors. 2009 , 84, 279-321		240
1512	Long-range electron transfer in artificial systems with d6 and d8 metal photosensitizers. <i>Coordination Chemistry Reviews</i> , 2009 , 253, 1439-1457	23.2	100

1511	Photoinduced electron transfer from a terrylene dye to TiO ₂ : Quantification of band edge shift effects. 2009 , 357, 124-131		16
1510	The dependence of the electronic coupling on energy gap and bridge conformation [Towards prediction of the distance dependence of electron transfer reactions. 2009 , 357, 132-139		33
1509	Photoelectrocatalytic activity of mesoporous TiO ₂ thin film electrodes. 2009 , 354, 8-16		54
1508	Visible-induced photocatalytic reactivity of polymer-sensitized titania nanotube films. 2009 , 86, 8-17		172
1507	Optical investigations of interaction between zinc tetra phenyl porphyrin and CdSe nanoparticles. 2009 , 483, 227-232		7
1506	Enhancing the performance of dye-sensitized solar cells based on an organic dye by incorporating TiO ₂ nanotube in a TiO ₂ nanoparticle film. <i>Electrochimica Acta</i> , 2009 , 54, 4123-4130	6.7	42
1505	Photoelectrochemical kinetics of Eosin Y-sensitized zinc oxide films investigated by scanning electrochemical microscopy under illumination with different LED. <i>Electrochimica Acta</i> , 2009 , 55, 458-464	6.7	37
1504	Interfacial electron transfer dynamics in quinizarin sensitized ZnS nanoparticles: monitoring charge transfer emission. 2009 , 25, 3168-72		10
1503	Regenerative PbS and CdS quantum dot sensitized solar cells with a cobalt complex as hole mediator. 2009 , 25, 7602-8		262
1502	Efficient and stable plastic dye-sensitized solar cells based on a high light-harvesting ruthenium sensitizer. 2009 , 19, 5009		62
1501	Effects of anodization growth of TiO ₂ -nanotube array membrane on photo-conversion efficiency of dye-sensitized solar cell. 2009 , 5, 7-11		19
1500	Photodriven heterogeneous charge transfer with transition-metal compounds anchored to TiO ₂ semiconductor surfaces. 2009 , 38, 115-64		987
1499	Organic nanomaterials: morphological control for charge stabilization and charge transport. 2009 , 4, 806-23		21
1498	Solvent-directed self-assembly of pi gelators to hierarchical macroporous structures and aligned fiber bundles. 2009 , 4, 824-9		56
1497	Large pi-aromatic molecules as potential sensitizers for highly efficient dye-sensitized solar cells. <i>Accounts of Chemical Research</i> , 2009 , 42, 1809-18	24.3	876
1496	Characteristics of the iodide/triiodide redox mediator in dye-sensitized solar cells. <i>Accounts of Chemical Research</i> , 2009 , 42, 1819-26	24.3	1177
1495	Enhanced Efficiency of Organic Dye-Sensitized Solar Cells: Triphenylamine Derivatives. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 16821-16833	3.8	287
1494	Ruthenium azo complexes: Synthesis, spectra, and electrochemistry of dithiocyanato-bis{1-(alkyl)-2-(arylo)imidazole}ruthenium(II). 2009 , 35, 687-691		2

1493	Theoretical study of vibration spectra of sensitizing dyes for photoelectrical converters based on ruthenium(II) and iridium(III) complexes. 2009 , 82, 1211-1221		18
1492	Reduction of I ₂ /I ⁻ by Titanium Dioxide. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 18444-18447	3.8	33
1491	Photovoltage Improvement for Dye-Sensitized Solar Cells via Cone-Shaped Structural Design. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 10307-10313	3.8	152
1490	Variable-band-gap poly(arylene ethynylene) conjugated polyelectrolytes adsorbed on nanocrystalline TiO ₂ : photocurrent efficiency as a function of the band gap. 2009 , 1, 381-7		35
1489	Electron Transfer from Organic Aminophenyl Acid Sensitizers to Titanium Dioxide Nanoparticle Films. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 13985-13992	3.8	26
1488	Effect on Cell Efficiency following Thermal Degradation of Dye-Sensitized Mesoporous Electrodes Using N719 and D5 Sensitizers. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 18902-18906	3.8	20
1487	Aggregation-Free ZnO Nanocrystals Coupled HMP-2 Dye of Higher Extinction Coefficient for Enhancing Energy Conversion Efficiency. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 9206-9209	3.8	31
1486	Ruthenium Acetylide Complexes Supported by Trithiacyclononane and Aromatic Diimine: Structural, Spectroscopic, and Theoretical Studies. 2009 , 28, 5656-5660		16
1485	Expanding the coordination cage: a ruthenium(II)-polypyridine complex exhibiting high quantum yields under ambient conditions. 2009 , 48, 5677-84		67
1484	Femtosecond Transient Absorption of Zinc Porphyrins with Oligo(phenylethynyl) Linkers in Solution and on TiO ₂ Films. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 11524-11531	3.8	61
1483	Photodriven spin change of Fe(II) benzimidazole compounds anchored to nanocrystalline TiO ₂ thin films. 2009 , 25, 13641-52		24
1482	Ruthenium(II) Isocyanide Complexes Supported by Triazacyclononane/Trithiacyclononane and Aromatic Diimine: Structural, Spectroscopic, and Theoretical Studies. 2009 , 28, 3537-3545		24
1481	Surface tension mediated conversion of light to work. 2009 , 131, 5396-8		128
1480	Ion-induced formation of charge-transfer states in conjugated polyelectrolytes. 2009 , 131, 8913-21		74
1479	Contrasts between the vibronic contributions in the tris-(2,2'-bipyridyl)osmium(II) emission spectrum and the implications of resonance-Raman parameters. 2009 , 48, 2818-29		7
1478	Adsorption Configuration and Dissociative Reaction of NH ₃ on Anatase (101) Surface with and without Hydroxyl Groups. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 6663-6672	3.8	20
1477	Platinum(II) terpyridyl acetylide complexes on platinized TiO ₂ : toward the photogeneration of H ₂ in aqueous media. 2009 , 48, 9653-63		74
1476	A Broadly Absorbing Perylene Dye for Solid-State Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 14595-14597	3.8	76

1475	Ab initio nonadiabatic molecular dynamics of wet-electrons on the TiO(2) surface. 2009 , 131, 15483-91		88
1474	A simple and efficient method using polymer dispersion to prepare controllable nanoporous TiO ₂ anodes for dye-sensitized solar cells. 2009 , 25, 11162-7		16
1473	Anomalous Photocathodic Behavior of CdS within the Urbach Tail Region. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 6774-6784	3.8	41
1472	Surface-mediated visible-light photo-oxidation on pure TiO(2)(001). 2009 , 131, 14670-2		86
1471	An Extremely High Molar Extinction Coefficient Ruthenium Sensitizer in Dye-Sensitized Solar Cells: The Effects of π -Conjugation Extension. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 14559-14566	3.8	111
1470	Novel dye-sensitized solar cell architecture using TiO ₂ -coated vertically aligned carbon nanofiber arrays. 2009 , 1, 1645-9		67
1469	Donor-Acceptor Nanoarchitecture on Semiconducting Electrodes for Solar Energy Conversion. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 9029-9039	3.8	96
1468	Structure, stability, and electronic properties of thin TiO ₂ nanowires. 2009 , 80,		23
1467	Charge trapping in imidazolium ionic liquids. 2009 , 113, 5582-92		79
1466	Optical description of solid-state dye-sensitized solar cells. I. Measurement of layer optical properties. 2009 , 106, 073111		35
1465	Optical description of solid-state dye-sensitized solar cells. II. Device optical modeling with implications for improving efficiency. 2009 , 106, 073112		13
1464	Molecular Design of Sensitizers for Dye-Sensitized Solar Cells. 2009 , 217-250		1
1463	Doubly π -Functionalized Meso-Meso Directly Linked Porphyrin Dimer Sensitizers for Photovoltaics. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 21956-21963	3.8	73
1462	Molecular design of triarylamine-based organic dyes for efficient dye-sensitized solar cells. 2009 , 33, 868		42
1461	Doping for speed: colloidal nanoparticles for thin-film optoelectronics. 2009 , 3, 261-5		27
1460	Substituted carbazole dyes for efficient molecular photovoltaics: long electron lifetime and high open circuit voltage performance. 2009 , 19, 4829		121
1459	Iodine/iodide-free dye-sensitized solar cells. <i>Accounts of Chemical Research</i> , 2009 , 42, 1827-38	24.3	299
1458	Two novel carbazole dyes for dye-sensitized solar cells with open-circuit voltages up to 1 V based on Br(-)/Br(3)(-) electrolytes. 2009 , 11, 5542-5		156

1457	Nanowire structured hybrid cell for concurrently scavenging solar and mechanical energies. 2009 , 131, 5866-72		151
1456	Interfacial nanostructuring on the performance of polymer/TiO ₂ nanorod bulk heterojunction solar cells. 2009 , 131, 3644-9		277
1455	Design and synthesis of a novel anchoring ligand for highly efficient thin film dye-sensitized solar cells. 2009 , 7146-8		40
1454	Photocatalytic inactivation of E. coli with a mesoporous TiO ₂ coated film using the film adhesion method. 2009 , 43, 148-51		65
1453	Thiophene dendrimers as entangled photon sensor materials. 2009 , 131, 973-9		118
1452	TiO ₂ /Nafion Photoelectrode Hybridized with Carbon Nanotubes for Sensitized Photochemical Activity. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 20974-20979	3.8	18
1451	Structural effects of core-modified porphyrins in dye-sensitized solar cells. 2009 , 13, 903-909		24
1450	Inhomogeneous thin deposits: a strategy to exploit their functionality. 2009 , 19, 6085		56
1449	Effects of Electrode Structure on Photoelectrochemical Properties of ZnO Electrodes Modified with Porphyrin/Fullerene Composite Layers with an Intervening Fullerene Monolayer. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 10819-10828	3.8	17
1448	High Molar Extinction Coefficient Ruthenium Sensitizers for Thin Film Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 1998-2003	3.8	57
1447	Nanocrystalline Solar Cells. 2009 , 232-269		4
1446	Structurally simple dipolar organic dyes featuring 1,3-cyclohexadiene conjugated unit for dye-sensitized solar cells. 2009 , 11, 377-80		64
1445	Synthesis of rutile/nanotase core/shell structured TiO ₂ for photocatalysis. 2009 , 19, 6590		108
1444	Vertically Oriented TiO ₂ Nanotube Arrays Grown on Ti Meshes for Flexible Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 14028-14033	3.8	108
1443	Highly entangled hollow TiO ₂ nanoribbons templating diphenylalanine assembly. 2009 , 19, 3512		49
1442	Visible light generation of iodine atoms and I-I bonds: sensitized I(-) oxidation and I(3)(-) photodissociation. 2009 , 131, 16206-14		112
1441	Synthesis and Photovoltaic Properties of Mesoporous TiO ₂ for the Dye-Sensitized Solar Cell. 2009 , 514, 92/[422]-98/[428]		2
1440	Exciton diffusion controlled quantum efficiency in hybrid dye sensitized solar cells. 2009 , 11, 1604-9		7

1439	Long-term stability of organic dye-sensitized solar cells based on an alkyl-functionalized carbazole dye. 2009 , 2, 1109		100
1438	Spectroelectrochemical properties of homo- and heteroleptic ruthenium and osmium binuclear complexes: intercomponent communication as a function of energy differences between HOMO levels of bridge and metal centres. 2009 , 4146-53		15
1437	Photovoltaic activity of layered zirconium phosphates containing covalently grafted ruthenium tris(bipyridyl) and diquat phosphonates as electron donor/acceptor sites. 2009 , 11, 2922-7		10
1436	Calculations of interfacial interactions in pyrene-Ipa rod sensitized nanostructured TiO ₂ . 2009 , 10021-31		21
1435	PHOTOELECTROCHEMICAL CELLS Dye-Sensitized Cells. 2009 , 10-21		3
1434	Combined QM/MM and classical molecular dynamics study of [Ru(bpy) ₃] ²⁺ in water. 2009 , 113, 7737-44		57
1433	Making hydrogen from water using a homogeneous system without noble metals. 2009 , 131, 9192-4		520
1432	Dye Regeneration by Spiro-MeOTAD in Solid State Dye-Sensitized Solar Cells Studied by Photoinduced Absorption Spectroscopy and Spectroelectrochemistry. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 6275-6281	3.8	96
1431	Efficient CdSe quantum dot-sensitized solar cells prepared by an improved successive ionic layer adsorption and reaction process. 2009 , 9, 4221-7		587
1430	Effects of Porphyrin Substituents and Adsorption Conditions on Photovoltaic Properties of Porphyrin-Sensitized TiO ₂ Cells. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 18406-18413	3.8	133
1429	Adsorption of Phosphonic Acid at the TiO ₂ Anatase (101) and Rutile (110) Surfaces. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 5730-5740	3.8	133
1428	Interface study of insertion layers in organic semiconductor devices. 2009 ,		3
1427	Photosynthesis Organ Grana from Spinach Adsorbed Nanocrystalline TiO ₂ Electrode for Photovoltaic Conversion Device. 2009 , 77, 862-864		6
1426	Photochemistry and Photophysics of Supramolecular Systems and Nanoassemblies. 77-105		
1425	Electronic-Structure Studies on Metal Complexes and Theoretical/Computational Chemistry for Molecular-Systems Design - Progress in Research on Dye-Sensitized Solar Cell -. 2009 , 54, 52-67		
1424	References. 471-548		
1423	The influence of light intensity, active area, and excitation wavelength on the temporal response of a dye sensitized solar cell. 2009 ,		1
1422	Low cost method to obtain counter electrode for dye sensitised solar cells. 2010 , 14, 410-413		4

1421	Photoelectrochemical cells. 2010 , 26-32		12
1420	Dye-sensitized solar cells: Present state and prospects for future development. 2010 , 57, 969-975		5
1419	Design of organic dyes and cobalt polypyridine redox mediators for high-efficiency dye-sensitized solar cells. 2010 , 132, 16714-24		912
1418	Dye sensitized solar cells. 2010 , 11, 1103-13		164
1417	Semiconductor quantum dots and quantum dot arrays and applications of multiple exciton generation to third-generation photovoltaic solar cells. 2010 , 110, 6873-90		996
1416	Hierarchical ZnO Nanowire/Nanosheet Architectures for High Power Conversion Efficiency in Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 2776-2782	3.8	200
1415	Effects of Lithium Ions on Dye-Sensitized ZnO Aggregate Solar Cells. 2010 , 22, 2427-2433		79
1414	D- π -A Sensitizers for Dye-Sensitized Solar Cells: Linear vs Branched Oligothiophenes. 2010 , 22, 1836-1845		139
1413	Interfacial behavior of benzoic acid and phenylphosphonic acid on nanocrystalline TiO(2) surfaces. 2010 , 5, 852-8		16
1412	Benzothiadiazole containing D- π -A conjugated compounds for dye-sensitized solar cells: synthesis, properties, and photovoltaic performances. 2010 , 5, 1911-7		81
1411	Electrophosphorescent heterobimetallic oligometallaynes and their applications in solution-processed organic light-emitting devices. 2010 , 5, 2405-14		34
1410	Self-energy and excitonic effects in the electronic and optical properties of TiO ₂ crystalline phases. 2010 , 82,		212
1409	Dye-sensitized solar cells. 2010 , 110, 6595-663		7291
1408	Photoinduced electron transfer in Zn(II)porphyrin-bridge-Pt(II)acetylide complexes: variation in rate with anchoring group and position of the bridge. 2010 , 49, 9823-32		20
1407	Photoinduced Energy-Transfer and Electron-Transfer Processes in Dye-Sensitized Solar Cells: TDDFT Insights for Triphenylamine Dyes. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 16716-16725	3.8	98
1406	Molecular semiconductors in organic photovoltaic cells. 2010 , 110, 6689-735		773
1405	Phthalocyanines and Their Analogs Applied in Dye-Sensitized Solar Cell. 2010 , 229-273		31
1404	Study of the transport mechanism in molecular self-assembling devices. 2010 , 98, 717-734		4

1403	Photofragmentation of mass-selected titanium oxide cluster cations. 2010 , 100, 587-590	9
1402	Synthesis, characterization and enhanced photoconductivity from a mesoporous titania on dye doping. 2010 , 674, 96-101	15
1401	Effects of metal hydroxide-treated photoanode on the performance of hybrid solar cells. 2010 , 10, e176-e180	8
1400	Improvement of the efficiency of thiophene-bridged compounds for dye-sensitized solar cells. 2010 , 376, 56-68	100
1399	Novel polymeric metal complexes as dye sensitizers for Dye-sensitized solar cells based on poly thiophene containing complexes of 8-hydroxyquinoline with Zn(II),Cu(II) and Eu(III) in the side chain. 2010 , 66, 2835-2842	37
1398	Photo-induced electron transfer study of rhenium(I) bipyridyl complexes with covalently linked phenothiazine donor through different bridge. 2010 , 5, 171-177	
1397	Metal complex dyes for dye-sensitized solar cells: Recent developments. 2010 , 15, 819-831	42
1396	Investigation into Photoconductivity in Single CNF/TiO(2)-Dye Core-Shell Nanowire Devices. 2010 , 5, 1480-1486	16
1395	Efficiently tuning the absorption and fluorescence spectroscopy of the novel branched p-nitro-stilbene derivatives with chemical strategy. 2010 , 20, 353-64	6
1394	Synthesis and photocatalytic behaviors of Cr ₂ O ₃ /CNT/TiO ₂ composite materials under visible light. <i>Journal of Materials Science</i> , 2010 , 45, 6611-6616	4-3 16
1393	Dye-sensitized solar cell with a solid state organic/inorganic composite electrolyte containing catalytic functional polypyrrole nanoparticles. 2010 , 53, 599-604	9
1392	Regeneration of oxidized organic photo-sensitizers in grätzel solar cells: quantum-chemical portrait of a general mechanism. 2010 , 11, 1858-62	32
1391	Metal-free porphyrin-sensitized mesoporous titania films for visible-light indoor air oxidation. 2010 , 3, 1057-62	59
1390	Heterointegration of Pt/Si/Ag Nanowire Photodiodes and Their Photocatalytic Properties. 2010 , 20, 3005-3011	27
1389	Double-layered NiO photocathodes for p-type DSSCs with record IPCE. 2010 , 22, 1759-62	281
1388	Bioinspired smart gating of nanochannels toward photoelectric-conversion systems. 2010 , 22, 1021-4	97
1387	Effect of an ultrathin TiO(2) layer coated on submicrometer-sized ZnO nanocrystallite aggregates by atomic layer deposition on the performance of dye-sensitized solar cells. 2010 , 22, 2329-32	185
1386	Design considerations for plasmonic photovoltaics. 2010 , 22, 4794-808	542

1385	Water-based electrolytes for dye-sensitized solar cells. 2010 , 22, 4505-9	149
1384	Recent Developments in the Design of Dye-Sensitized Solar Cell Components. 2010 , 523-579	2
1383	Dipolar compounds containing fluorene and a heteroaromatic ring as the conjugating bridge for high-performance dye-sensitized solar cells. 2010 , 16, 3184-93	123
1382	Two-photon chemistry in ruthenium 2,2'-bipyridyl-functionalized single-wall carbon nanotubes. 2010 , 16, 7282-92	14
1381	Tuning the HOMO energy levels of organic dyes for dye-sensitized solar cells based on Br-/Br ³⁻ electrolytes. 2010 , 16, 13127-38	101
1380	Photophysical studies of dipolar organic dyes that feature a 1,3-cyclohexadiene conjugated linkage: the implication of a twisted intramolecular charge-transfer state on the efficiency of dye-sensitized solar cells. 2010 , 16, 12873-82	34
1379	2,5-Bis(p-R-arylethynyl)rhodacyclopentadienes Show Intense Fluorescence: Denying the Presence of a Heavy Atom. 2010 , 122, 2399-2403	17
1378	Electronic Tuning of Nickel-Based Bis(dicarbollide) Redox Shuttles in Dye-Sensitized Solar Cells. 2010 , 122, 5467-5471	17
1377	2,5-Bis(p-R-arylethynyl)rhodacyclopentadienes show intense fluorescence: denying the presence of a heavy atom. 2010 , 49, 2349-53	63
1376	Electronic tuning of nickel-based bis(dicarbollide) redox shuttles in dye-sensitized solar cells. 2010 , 49, 5339-43	105
1375	Shape-Persistent, Truxene-Based, Nano-Sized Bisterpyridine Ruthenium(II) Complexes: Synthesis and Photophysical Properties. 2010 , 31, 850-5	24
1374	Electrochemical photovoltaic cells—Review of recent developments. 2010 , 85, 1547-1552	14
1373	Controlled synthesis of TiO ₂ -B nanowires and nanoparticles for dye-sensitized solar cells. 2010 , 257, 1660-1665	33
1372	Cis-bis(isothiocyanato)-bis(2,2'-bipyridyl-4,4'-dicarboxylato)-Ru(II) (N719) dark-reactivity when bound to fluorine-doped tin oxide (FTO) or titanium dioxide (TiO ₂) surfaces. 2010 , 640, 61-67	16
1371	Interpretation of small-modulation photocurrent transients in dye-sensitized solar cells [A film thickness study. 2010 , 646, 91-99	23
1370	Influence of nature of surface dipoles on observed photovoltage in dye-sensitized solar cells as probed by surface potential measurement. <i>Organic Electronics</i> , 2010 , 11, 419-426	3-5 20
1369	Plastic dye-sensitized photo-supercapacitor using electrophoretic deposition and compression methods. 2010 , 195, 6225-6231	117
1368	Theoretical study on the electronic absorption spectra and molecular orbitals of ten novel ruthenium sensitizers derived from N3 and K8. 2010 , 29, 498-505	11

1367	NIR-absorbing poly(thieno[3,4-b]thiophene-2-carboxylic acid) as a polymer dye for dye-sensitized solar cells. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2010 , 212, 81-87	4.7	29
1366	Controlled microwave synthesis of Rull synthons and chromophores relevant to solar energy conversion. 2010 , 363, 283-287		17
1365	Surface analytical studies of interfaces in organic semiconductor devices. 2010 , 68, 39-87		180
1364	Effect of coadsorbents on DSSC sensitized by NIR absorbing poly(ethyl thieno[3,4-b]thiophene-2-carboxylate). 2010 , 10, S410-S413		9
1363	A high temperature stable electrolyte system for dye-sensitized solar cells. <i>Electrochimica Acta</i> , 2010 , 55, 7159-7165	6.7	27
1362	Dye sensitized solar cell of TiO ₂ nanoparticle/nanorod composites prepared via low-temperature synthesis in oleic acid. 2010 , 518, 6542-6546		33
1361	Charge recombination reduction in dye-sensitized solar cells by means of an electron beam-deposited TiO ₂ buffer layer between conductive glass and photoelectrode. 2010 , 518, 7147-7151		29
1360	The application of ultrasound radiation to the synthesis of nanocrystalline metal oxide in a non-aqueous solvent. 2010 , 17, 173-8		46
1359	Photoelectrochemical and optical properties of N-doped TiO ₂ thin films prepared by oxidation of sputtered TiN _x films. 2010 , 84, 797-802		51
1358	Titanium(IV) complexes as direct TiO ₂ photosensitizers. <i>Coordination Chemistry Reviews</i> , 2010 , 254, 2687-2701	3.201	153
1357	Photoinduced rearrangements in transition metal compounds. <i>Coordination Chemistry Reviews</i> , 2010 , 254, 2519-2532	23.2	50
1356	Nanostructures Enabled by On-Wire Lithography (OWL). 2010 , 486, 89-98		33
1355	The effect of anchoring group number on the performance of dye-sensitized solar cells. <i>Dyes and Pigments</i> , 2010 , 87, 249-256	4.6	61
1354	The Combination of 4-Hydroxythiazoles with Azaheterocycles: Efficient Bidentate Ligands for Novel Ruthenium Complexes. 2010 , 636, 1380-1385		23
1353	Interaction induced transition in the nanoporous TiO ₂ /Pd-porphyrin system. 2010 , 7, 280-283		1
1352	Effect of anodization voltage on the formation of phase pure anatase nanotubes with doped carbon. 2010 , 46, 377-382		6
1351	Quantum-chemical study of the structure and optical properties of sensitized dyes of an indoline-thiazolidine series. 2010 , 108, 16-22		19
1350	New Components for Dye-Sensitized Solar Cells. 2010 , 2010, 1-16		36

1349	Light scattering with oxide nanocrystallite aggregates for dye-sensitized solar cell application. 2010 , 4, 041540		44
1348	Chemical binding of pyridine on TiO ₂ nanocrystalline film and its photoelectrochemical properties. 2010 , 25, 32-38		4
1347	Mixed-Metal Oxide Nanomaterials for Environmental Remediation. 2010 ,		
1346	Doubly Functionalized Zinc(II) Porphyrin-sensitized TiO ₂ Solar Cells. 2010 , 57, 1111-1118		11
1345	Dye-sensitized solar cells: Effect of Ar/O ₂ gas-flow ratio on the structural and morphological properties of facing-target sputter-deposited TiO ₂ electrode. 2010 , 28, 1269-1274		1
1344	Synthesis of TiO ₂ nanotube arrays and its application in mini-3D dye-sensitized solar cells. 2010 , 43, 205103		34
1343	Effects of Insulation Coating with Metal Salt on the Performance of Organic-Inorganic Hybrid Solar Cells. 2010 , 532, 1/[417]-7/[423]		2
1342	X-ray absorption and photoemission spectroscopy of zinc protoporphyrin adsorbed on rutile TiO ₂ (110) prepared by in situ electrospray deposition. <i>Journal of Chemical Physics</i> , 2010 , 132, 084703	3-9	51
1341	Improved performance of dye-sensitized solar cells by tuning the properties of ruthenium complexes containing conjugated bipyridine ligands. 2010 , 1, 025001		17
1340	Peptide-templating dye-sensitized solar cells. 2010 , 21, 185601		32
1339	TiO ₂ /polymer nanocomposite based inks. 2010 ,		
1338	Sensitivity of the photophysical properties of organometallic complexes to small chemical changes. <i>Journal of Chemical Physics</i> , 2010 , 133, 124314	3-9	12
1337	Semiconductor Nanocrystals Hybridized with Functional Ligands: New Composite Materials with Tunable Properties. 2010 , 3, 614-637		21
1336	Characterization and Formation Process of Highly Crystallized Single Crystalline TiO ₂ Nanorods for Dye-Sensitized Solar Cells. 2010 , 6, 269-276		11
1335	Photovoltage enhancement of dye sensitised solar cells by using ZnO modified TiO ₂ electrode. 2010 , 14, 370-374		10
1334	Gigantic absorption enhancement using nanostructured metal films: application to organic solar cells. 2010 ,		
1333	The Role of Leakage Currents and the Gate Oxide Width in Molecular Transistors. 2010 , 49, 01AB04		4
1332	Photoelectrochemical characterization of electrodeposited ZnO thin films sensitized by octacarboxymetallophthalocyanine derivatives. 2010 , 14, 142-149		24

1331	Photovoltaic and Spectral Properties of Conjugated Polymer Poly(3-octylthiophene) Doped with Various Acceptor Materials. 2010 , 49, 081601		1
1330	High excitation transfer efficiency from energy relay dyes in dye-sensitized solar cells. 2010 , 10, 3077-83		91
1329	Visible photoenhanced current-voltage characteristics of Au : TiO ₂ nanocomposite thin films as photoanodes. 2010 , 43, 105405		42
1328	High performance organic photosensitizers for dye-sensitized solar cells. 2010 , 46, 1335-7		120
1327	Spirobifluorene-bridged donor/acceptor dye for organic dye-sensitized solar cells. 2010 , 12, 12-5		126
1326	Lighting porphyrins and phthalocyanines for molecular photovoltaics. 2010 , 46, 7090-108		566
1325	Models of organometallic complexes for optoelectronic applications. 2010 , 20, 10301		29
1324	Coordination Chemistry of Some Terpyridyl-Polyamine Bridging Ligands. 2010 , 63, 669		5
1323	Anisotropic Crystal Growth Kinetics of Anatase TiO ₂ Nanoparticles Synthesized in a Nonaqueous Medium. 2010 , 22, 6044-6055		69
1322	Novel Broadly Absorbing Sensitizers with Cyanovinylene 4-Nitrophenyl Segments and Various Anchoring Groups: Synthesis and Application for High-Efficiency Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 12355-12363	3.8	30
1321	. 2010 ,		1
1320	Characterization of Surface Passivation by Poly(methylsiloxane) for Dye-Sensitized Solar Cells Employing the Ferrocene Redox Couple. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 10551-10558	3.8	78
1319	On the Significance of Phthalocyanines in Solar Cells. 2010 , 141-181		6
1318	A triphenylamine-grafted imidazo[4,5-f][1,10]phenanthroline ruthenium(II) complex: acid-base and photoelectric properties. 2010 , 49, 3752-63		81
1317	Synthesis and Mechanistic Studies of Organic Chromophores with Different Energy Levels for p-Type Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 4738-4748	3.8	159
1316	Accumulative charge separation inspired by photosynthesis. 2010 , 132, 17977-9		86
1315	Synthesis and preliminary photovoltaic behavior study of a soluble polyimide containing ruthenium complexes. 2010 , 1, 1048		19
1314	Viable alternative to N719 for dye-sensitized solar cells. 2010 , 2, 2039-45		55

1313	Nanoscience and nanostructures for photovoltaics and solar fuels. 2010 , 10, 2735-41		367
1312	Hierarchically Ordered Structures by Converging Holographic Lithography and Surfactant Templating. 2010 , 22, 4117-4119		6
1311	Cyclic tetrapyrrole based molecules for dye-sensitized solar cells. 2010 , 3, 94-106		144
1310	Influence of surface chemistry on the binding and electronic coupling of CdSe quantum dots to single crystal TiO ₂ surfaces. 2010 , 26, 4839-47		97
1309	[Ru(bpy) ₃] ²⁺ Analogues Containing an N-Heterocyclic Carbene Ligand. 2010 , 29, 6782-6789		45
1308	A New Heterogeneous Photocathode Based on Ruthenium(II)quaterpyridinium Complexes at TiO ₂ Particles. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 22763-22772	3.8	6
1307	Porphyrins as Potential Sensitizers for Dye-Sensitized Solar Cells. 2010 , 451, 29-40		5
1306	Improved Photoelectrochemical Response of Titanium Dioxide Irradiated with 120 MeV Ag ⁹⁺ Ions. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 622-626	3.8	22
1305	Dynamics of Photoinduced Proton-Coupled Electron Transfer at MoleculeSemiconductor Interfaces: A Reduced Density Matrix Approach. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 487-496	3.8	23
1304	Synthesis and solution phase characterization of strongly photooxidizing heteroleptic Cr(III) tris-dipyridyl complexes. 2010 , 49, 7981-91		61
1303	Excited state localization and internuclear interactions in asymmetric ruthenium(II) and osmium(II) bpy/tpy based dinuclear compounds. 2010 , 49, 2799-807		23
1302	Photoinduced electron transfer of oxazine 1/TiO ₂ nanoparticles at single molecule level by using confocal fluorescence microscopy. 2010 , 26, 9050-60		7
1301	SpinOrbit Coupling and MetalLigand Interactions in Fe(II), Ru(II), and Os(II) Complexes. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 10314-10322	3.8	39
1300	Multi-approach electron paramagnetic resonance investigations of UV-photoinduced Ti(3+) in titanium oxide-based gels. 2010 , 114, 4424-31		22
1299	Mg(OOCC ₃ H ₇) ₂ interface modification after sensitization to improve performance in quasi-solid dye-sensitized solar cells. 2010 , 26, 2460-5		39
1298	. 2010 ,		
1297	Conductive properties of switchable photoluminescence thermosetting systems based on liquid crystals. 2010 , 26, 4296-302		8
1296	Electrochemical characteristics of a self-propagating molecular-based assembly. 2010 , 114, 14283-6		23

1295	Ring-Opening Metathesis Polymers for Biodetection and Signal Amplification: Synthesis and Self-Assembly. 2010 , 43, 5530-5537		67
1294	Copper phthalocyanine on hydrogenated and bare diamond (001)-2 x 1: influence of interfacial interactions on molecular orientations. 2010 , 26, 165-72		21
1293	Studies of an Extremely High Molar Extinction Coefficient Ruthenium Sensitizer in Dye-Sensitized Solar Cells. 2010 , 2, 1980-1986		30
1292	Study of Redox Species and Oxygen Vacancy Defects at TiO ₂ /Electrolyte Interfaces. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 19433-19442	3.8	35
1291	Photosensitization of CdSe/ZnS QDs and reliability of assays for reactive oxygen species production. 2010 , 2, 114-21		65
1290	Porphyrin sensitized solar cells: TiO ₂ sensitization with a pi-extended porphyrin possessing two anchoring groups. 2010 , 46, 6090-2		94
1289	Effect of electrostatic interactions and dynamic disorder on the distance dependence of charge transfer in donor-bridge-acceptor systems. 2010 , 114, 14564-71		19
1288	Stability of dye-sensitized solar cells under light soaking test. 2010 , 356, 2049-2052		19
1287	Hybrid conjugated polymer/semiconductor photovoltaic cells. 2010 , 160, 1-15		139
1286	Single-molecule, single-particle fluorescence imaging of TiO ₂ -based photocatalytic reactions. 2010 , 39, 4802-19		142
1285	Dual emission caused by ring inversion isomerization of a 4-methyl-2-pyridyl-pyrimidine copper(I) complex. 2010 , 132, 9579-81		75
1284	Kinetic Competition in a Coumarin Dye-Sensitized Solar Cell: Injection and Recombination Limitations upon Device Performance. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 8054-8061	3.8	119
1283	Theoretical screening of -NH ₂ -, -OH-, -CH ₃ -, -F-, and -SH-substituted porphyrins as sensitizer candidates for dye-sensitized solar cells. <i>Journal of Physical Chemistry A</i> , 2010 , 114, 1973-9	2.8	57
1282	The influence of local electric fields on photoinduced absorption in dye-sensitized solar cells. 2010 , 132, 9096-101		187
1281	All-solid-state dye-sensitized solar cells incorporating SWCNTs and crystal growth inhibitor. 2010 , 20, 3619		62
1280	Photocatalytic Properties of Porous Silicon Nanowires. 2010 , 20, 3590-3594		112
1279	Observation of Transient Iron(II) Formation in Dye-Sensitized Iron Oxide Nanoparticles by Time-Resolved X-ray Spectroscopy. 2010 , 1, 1372-1376		28
1278	Electrospun TiO ₂ nanorods assembly sensitized by CdS quantum dots: a low-cost photovoltaic material. 2010 , 3, 2010		68

1277	Photochemical processes in ionic liquids on ultrafast timescales. 2010 , 12, 1698-708		34
1276	Theoretical Study of Photoinduced Electron-Transfer Processes in the Dye/Semiconductor System Alizarin/TiO ₂ . <i>Journal of Physical Chemistry C</i> , 2010 , 114, 18481-18493	3.8	67
1275	Symmetrically and unsymmetrically substituted carboxy phthalocyanines as sensitizers for nanoporous ZnO films. 2010 , 14, 985-992		18
1274	Excited-State Dynamics of (Organophosphine)gold(I) Pyrenyl Isomers. 2010 , 1, 1205-1211		30
1273	Excitation-dependent fluorescence of triphenylamine-substituted tridentate pyridyl ruthenium complexes. <i>Journal of Physical Chemistry A</i> , 2010 , 114, 9090-7	2.8	17
1272	Structural Modification of Organic Dyes for Efficient Coadsorbent-Free Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 2799-2805	3.8	109
1271	DFT/TD-DFT investigation of electronic structures and spectra properties of Cu-based dye sensitizers. <i>Journal of Physical Chemistry A</i> , 2010 , 114, 1178-84	2.8	34
1270	Synthesis and photophysical properties of N-fused tetraphenylporphyrin derivatives: near-infrared organic dye of [18]annulenic compounds. 2010 , 75, 8637-49		41
1269	Nanostructured materials for efficient solar energy conversion. 2010 ,		3
1268	Photoinduced ligand isomerisation in a pyrazine-containing ruthenium polypyridyl complex. 2010 , 9, 985-90		4
1267	Rational design and synthesis of freestanding photoelectric nanodevices as highly efficient photocatalysts. 2010 , 10, 1941-9		59
1266	Ultrafast spin crossover in 4-thiothymidine in an ionic liquid. 2010 , 46, 5963-5		52
1265	States and migration of an excess electron in a pyridinium-based, room-temperature ionic liquid: an ab initio molecular dynamics simulation exploration. 2010 , 12, 1854-61		25
1264	Interface modification effects of 4-tertbutylpyridine interacting with N3 molecules in quasi-solid dye-sensitized solar cells. 2011 , 13, 10635-40		22
1263	Anion-cation charge-transfer properties and spectral studies of [M(phen) ₃][Cd ₄ (SPh) ₁₀] (M = Ru, Fe, and Ni). 2011 , 40, 9551-6		18
1262	Stereospecific microwave-assisted conversion of a Ru(II)-p-cymene complex to a solar cell dye in water. 2011 , 35, 2752		1
1261	Multilayered ordered mesoporous platinum/titania composite films: does the photocatalytic activity benefit from the film thickness?. 2011 , 21, 7802		32
1260	Characteristics of dye-sensitized solar cells based on the TiO ₂ nanotube/nanoparticle composite electrodes. 2011 , 21, 5457		40

1259	Heteroleptic ruthenium complexes containing uncommon 5,5'-disubstituted-2,2'-bipyridine chromophores for dye-sensitized solar cells. 2011 , 40, 2314-23		26
1258	All-inorganic core-shell silica/titania mesoporous colloidal nanoparticles showing orthogonal functionality. 2011 , 21, 13817		4
1257	Fabrication and photovoltaic performance of hierarchically titanate tubular structures self-assembled by nanotubes and nanosheets. 2011 , 47, 9161-3		52
1256	Physicochemical, self-assembly and field-effect transistor properties of anti- and syn- thienoacene isomers. 2011 , 21, 11335		18
1255	Dye-sensitized solar cells based on TiO ₂ -B nanobelt/TiO ₂ nanoparticle sandwich-type photoelectrodes with controllable nanobelt length. 2011 , 40, 3808-14		20
1254	Electrospun TiO ₂ nanorods assembly sensitized by mercaptosuccinic acid-capped CdS quantum dots for solar cells: Subtitle as needed (paper subtitle). 2011 ,		
1253	Zinc stannate nanostructures: hydrothermal synthesis. 2011 , 12, 013004		112
1252	Role of One-Dimensional Ribbonlike Nanostructures in Dye-Sensitized TiO ₂ -Based Solar Cells. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 7104-7113	3.8	36
1251	Charge Transport and Photocurrent Generation Characteristics in Dye Solar Cells Containing Thermally Degraded N719 Dye Molecules. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 15598-15606	3.8	37
1250	Present status of solid state photoelectrochemical solar cells and dye sensitized solar cells using PEO-based polymer electrolytes. 2011 , 2, 023002		52
1249	High performance dye-sensitized solar cells with alkylpyridinium iodide salts in electrolytes. 2011 , 3, 512-6		20
1248	Di- and Tri-iodide Reactivity at Illuminated Titanium Dioxide Interfaces. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 6156-6161	3.8	22
1247	Indium-sulfur supertetrahedral polymers integrated with [M(phen) ₃] ²⁺ cations (M = Ni and Fe). 2011 , 50, 6972-8		33
1246	Effect of Hydrocarbon Chain Length of Disubstituted Triphenyl-amine-Based Organic Dyes on Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 22002-22008	3.8	57
1245	Dye-sensitized photovoltaic properties of hydrothermally prepared TiO ₂ nanotubes. 2011 , 4, 998		47
1244	Efficient organic dye sensitized solar cells based on modified sulfide/polysulfide electrolyte. 2011 , 21, 5573		32
1243	Preparation and photocatalytic activity of eccentric Au-titania core-shell nanoparticles by block copolymer templates. 2011 , 13, 2809-14		26
1242	Experimental and theoretical studies of the colloidal stability of nanoparticles-a general interpretation based on stability maps. 2011 , 5, 4658-69		82

1241	Molecular photovoltaics in nanoscale dimension. 2011 , 12, 173-225		12
1240	Metal oxide photoanodes for water splitting. 2011 , 303, 1-38		38
1239	Effects of Driving Forces for Recombination and Regeneration on the Photovoltaic Performance of Dye-Sensitized Solar Cells using Cobalt Polypyridine Redox Couples. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 21500-21507	3.8	242
1238	Electronic optimization of heteroleptic Ru(II) bipyridine complexes by remote substituents: synthesis, characterization, and application to dye-sensitized solar cells. 2011 , 50, 3271-80		47
1237	Synthesis of Rutile-Phase Sn _x Ti _{1-x} O ₂ Solid-Solution and (SnO ₂) _x /(TiO ₂) _{1-x} Core/Shell Nanoparticles with Tunable Lattice Constants and Controlled Morphologies. 2011 , 23, 4920-4930		43
1236	Colloidal approach to Au-loaded TiO ₂ thin films with optimized optical sensing properties. 2011 , 21, 4293		42
1235	Conjugated polymer/organic semiconductor hybrid solar cells. 2011 , 4, 2700		250
1234	UV-switchable polyoxometalate sandwiched between TiO ₂ and metal nanoparticles for enhanced visible and solar light photocatalysis. 2011 , 27, 9245-52		87
1233	Characterization of the Interface Properties and Processes in Solid State Dye-Sensitized Solar Cells Employing a Perylene Sensitizer. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 4345-4358	3.8	54
1232	Synthesis of recrystallized anatase TiO ₂ mesocrystals with Wulff shape assisted by oriented attachment. 2011 , 3, 1910-6		71
1231	Visualizing Interfacial Charge Transfer in Ru-Dye-Sensitized TiO ₂ Nanoparticles Using X-ray Transient Absorption Spectroscopy. 2011 , 2, 628-632		70
1230	Origin of efficiency enhancement in Nb ₂ O ₅ coated titanium dioxide nanorod based dye sensitized solar cells. 2011 , 4, 3414		71
1229	Theoretical Study on Effect of SiC Crystal Structure on Carrier Transfer in Quantum Dot Solar Cells. 2011 , 50, 04DP05		
1228	Dye-Sensitized Solar Cells: An Overview. 2011 ,		3
1227	Shell-in-shell TiO ₂ hollow spheres synthesized by one-pot hydrothermal method for dye-sensitized solar cell application. 2011 , 4, 3565		200
1226	Bithiazole-bridged dyes for dye-sensitized solar cells with high open circuit voltage performance. 2011 , 21, 6054		145
1225	Synthesis and spectroscopic characterization of CN-substituted bipyridyl complexes of Ru(II). 2011 , 50, 1656-69		41
1224	Theory of Transition Dipole Coupling in Dye-Sensitized Semiconductor Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 13693-13703	3.8	5

1223	Photoinduced charge carrier dynamics of Zn-porphyrin-TiO ₂ electrodes: the key role of charge recombination for solar cell performance. <i>Journal of Physical Chemistry A</i> , 2011 , 115, 3679-90	2.8	193
1222	Molecular host-guest complexes: Shielding of guests on semiconductor surfaces. 2011 , 4, 2482-2494		46
1221	Indium sulfide clusters integrated with 2,2'-bipyridine complexes. 2011 , 40, 9746-51		31
1220	Panchromatic engineering for dye-sensitized solar cells. 2011 , 4, 842-857		294
1219	Energy and hole transfer between dyes attached to titania in cosensitized dye-sensitized solar cells. 2011 , 133, 10662-7		92
1218	Assembly of individual TiO ₂ -C60/porphyrin hybrid nanoparticles for enhancement of photoconversion efficiency. 2011 , 22, 275720		6
1217	Solar Energy Conversion [Natural to Artificial]. 2011 , 325-359		5
1216	Interfacial morphology and photoelectrochemistry of conjugated polyelectrolytes adsorbed on single crystal TiO ₂ . 2011 , 27, 11906-16		11
1215	Adsorption-site-dependent electronic structure of catechol on the anatase TiO ₂ (101) surface. 2011 , 27, 8600-4		36
1214	Size-dependent light-scattering effects of nanoporous TiO ₂ spheres in dye-sensitized solar cells. 2011 , 21, 532-538		188
1213	Biophotonics: Spectroscopy, Imaging, Sensing, and Manipulation. 2011 ,		2
1212	Pore filling of nanostructured electrodes in dye sensitized solar cells by initiated chemical vapor deposition. 2011 , 11, 419-23		73
1211	NANOCRYSTALLINE OXIDE SEMICONDUCTORS FOR DYE-SENSITIZED SOLAR CELLS. 2011 , 127-173		
1210	Effect of molecular packing on corannulene-based materials electroluminescence. 2011 , 133, 14002-9		74
1209	Detailed investigations of ZnO photoelectrodes preparation for dye sensitized solar cells. 2011 , 27, 3920-9		41
1208	Controlling the directionality of charge transfer in phthalocyaninato zinc sensitizer for a dye-sensitized solar cell: density functional theory studies. 2011 , 13, 1639-48		23
1207	Ultrafast forward and backward electron transfer dynamics of coumarin 337 in hydrogen-bonded anilines as studied with femtosecond UV-pump/IR-probe spectroscopy. <i>Journal of Physical Chemistry A</i> , 2011 , 115, 664-70	2.8	18
1206	Plasmonic enhancements of photocatalytic activity of Pt/n-Si/Ag photodiodes using Au/Ag core/shell nanorods. 2011 , 133, 16730-3		114

1205	Molecular Design and Photovoltaic Performances of Organic Dyes Containing Triphenylamine for Dye-Sensitized Solar Cell. 2011 , 538, 278-284		2
1204	Click-chemistry approach in the design of 1,2,3-triazolyl-pyridine ligands and their Ru(II)-complexes for dye-sensitized solar cells. 2011 , 21, 3726		67
1203	A novel metal-free panchromatic TiO ₂ sensitizer based on a phenylenevinylene-conjugated unit and an indoline derivative for highly efficient dye-sensitized solar cells. 2011 , 47, 12400-2		63
1202	Modeling the interactions of phthalocyanines in water: from the Cu(II)-tetrasulphonate to the metal-free phthalocyanine. <i>Journal of Chemical Physics</i> , 2011 , 134, 024503	3.9	3
1201	Photo- and electrochemical redox behavior of cyclometalated Ru(II) complexes having a 3-phenylbenzo[b][1,6]naphthyridine ligand. 2011 , 50, 10718-23		18
1200	1-D Selenidoindates {[In ₂ Se ₅]} directed by chiral metal complex cations of 1,10-phenanthroline. 2011 , 50, 10872-7		22
1199	Investigation on the dynamics of electron transport and recombination in TiO ₂ nanotube/nanoparticle composite electrodes for dye-sensitized solar cells. 2011 , 13, 21487-91		28
1198	Application of the stabilization method to temporary anion states of CH ₃ CN, CH ₃ NC, CH ₃ SCN, and CH ₃ NCS in density functional theory with asymptotically corrected potentials. <i>Journal of Physical Chemistry A</i> , 2011 , 115, 84-93	2.8	15
1197	Dye-Sensitized Solar Cells. 2011 , 642-674		5
1196	Photocatalysis. 2011 ,		12
1195	DFT and TD-DFT investigations of metal-free dye sensitizers for solar cells: Effects of electron donors and π -conjugated linker. 2011 , 971, 42-50		47
1194	Ab initio nonadiabatic molecular dynamics of the ultrafast electron injection from a PbSe quantum dot into the TiO ₂ surface. 2011 , 133, 19240-9		114
1193	Interactions of the N3 dye with the iodide redox shuttle: quantum chemical mechanistic studies of the dye regeneration in the dye-sensitized solar cell. 2011 , 13, 15148-57		28
1192	Gold nanoparticle-decorated keggin ions/TiO ₂ photococatalyst for improved solar light photocatalysis. 2011 , 27, 6661-7		78
1191	Theoretical studies of dye-sensitised solar cells: from electronic structure to elementary processes. 2011 , 4, 4473		173
1190	Bringing some photonic structures for solar cells to the fore. 2011 , 50, C329-39		8
1189	Nanocrystalline electrodes based on nanoporous-walled WO ₃ nanotubes for organic-dye-sensitized solar cells. 2011 , 27, 12730-6		74
1188	Can Polypyridyl Cu(I)-based Complexes Provide Promising Sensitizers for Dye-Sensitized Solar Cells? A Theoretical Insight into Cu(I) versus Ru(II) Sensitizers. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 3753-3761	3.8	62

1187	Simulation of solution phase electron transfer in a compact donor-acceptor dyad. 2011 , 115, 12135-44		24
1186	Assessment of the BCF density functional theory approach for electronic excitations in organic dyes. <i>Journal of Chemical Physics</i> , 2011 , 134, 054128	3.9	127
1185	Optical stress and reliability study of ruthenium-based dye-sensitized solar cells (DSSC). 2011 ,		
1184	A convenient route to high area, nanoparticulate TiO ₂ photoelectrodes suitable for high-efficiency energy conversion in dye-sensitized solar cells. 2011 , 27, 1996-9		30
1183	Unsymmetrical squarylium dyes with extended heterocyclic components and their application to organic dye-sensitized solar cells. 2011 , 161, 2481-2487		32
1182	An interfacial and bulk charge transport model for dye-sensitized solar cells based on photoanodes consisting of core-shell nanowire arrays. 2011 , 133, 18663-72		28
1181	Effect of Annealing Temperature on TiO ₂ /ZnO Core-Shell Aggregate Photoelectrodes of Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 4927-4934	3.8	81
1180	Evidence for crystal-face-dependent TiO ₂ photocatalysis from single-molecule imaging and kinetic analysis. 2011 , 133, 7197-204		511
1179	Near-infrared absorbing squarylium dyes with linearly extended conjugated structure for dye-sensitized solar cell applications. 2011 , 13, 5994-7		63
1178	Low-temperature roll-to-roll coating procedure of dye-sensitized solar cell photoelectrodes on flexible polymer-based substrates. 2011 , 26, 045007		18
1177	Periodic Mesoporous Materials: Holes Filled with Opportunities. 2011 , 69-125		3
1176	Solid-state dye-sensitized solar cell with a charge transfer layer comprising two ionic liquids and a carbon material. 2011 , 21, 15471		27
1175	Comparative Study between Dye-Sensitized and CdS Quantum-Dots-Sensitized TiO ₂ Solar Cells Using Photoinduced Absorption Spectroscopy. 2011 , 2011, 1-5		
1174	Dye-Sensitized Solar Cells Based on Polymer Electrolytes. 2011 ,		3
1173	Dye Sensitized Solar Cells - Working Principles, Challenges and Opportunities. 2011 ,		13
1172	Dye Sensitized Solar Cells as an Alternative Approach to the Conventional Photovoltaic Technology Based on Silicon - Recent Developments in the Field and Large Scale Applications. 2011 ,		3
1171	Photovoltaic Performance of ZnO Nanosheets Solar Cell Sensitized with Beta-Substituted Porphyrin. 2011 , 2011, 1-9		7
1170	Quasi Solid-State Dye-Sensitized Solar Cell Incorporating Highly Conducting Polythiophene-Coated Carbon Nanotube Composites in Ionic Liquid. 2011 , 2011, 1-7		3

1169	Piperidine-Substituted Perylene Sensitizer for Dye-Sensitized Solar Cells. 2011 , 2011, 1-7		8
1168	Change of Dye Bath for Sensitisation of Nanocrystalline Films: Enhances Performance of Dye-Sensitized Solar Cells. 2011 , 2011, 1-9		3
1167	Photoactivation studies of zinc porphyrin-myoglobin system and its application for light-chemical energy conversion. 2011 , 7, 1203-13		5
1166	Nanostructured ZnO for photoelectrochemical splitting of water to produce hydrogen: swift heavy ion irradiation vis-a-vis dye-sensitisation. 2011 , 4, 248		5
1165	PhotoInitiated ElectronTransfer at the Interface between Anatase TiO ₂ Nanocrystallites and TransitionMetal Polypyridyl Compounds: Recent Advances. 2011 ,		
1164	DyeSensitized Solar Cells: An Overview. 2011 ,		3
1163	Current trends in materials for dye sensitized solar cells. 2011 , 5, 46-61		24
1162	PhotoInitiated ElectronTransfer at the Interface between Anatase TiO ₂ Nanocrystallites and TransitionMetal Polypyridyl Compounds: Recent Advances. 2011 ,		
1161	Electron Transfer in Coordination Compounds. 2011 ,		
1160	Development of Dye-sensitized Solar Cells Fabricated with PVDF-HFP-type Polymeric Solid Electrolytes and Titanium Dioxide Nanotubes. 2011 , 54, 168-179		1
1159	A phenylcarbazole functionalized ruthenium dye for efficient dye-sensitized solar cells. <i>Solar Energy</i> , 2011 , 85, 2497-2506	6.8	14
1158	Fluorenylvinylenes bridged triphenylamine-based dyes with enhanced performance in dye-sensitized solar cells. 2011 , 67, 8477-8483		43
1157	Thermal stress effects on Dye-Sensitized Solar Cells (DSSCs). 2011 , 51, 1762-1766		31
1156	Progress in light harvesting and charge injection of dye-sensitized solar cells. 2011 , 176, 1142-1160		110
1155	Indoline-dye immobilized ZnO nanoparticles for whopping 5.44% light conversion efficiency. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2011 , 222, 366-369	4-7	24
1154	Meta versus para substituent effect of organic dyes for sensitized solar cells. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2011 , 222, 192-202	4-7	27
1153	Carbazole donor and carbazole or bithiophene bridged sensitizers for dye-sensitized solar cells. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2011 , 223, 57-64	4-7	16
1152	New pyran dyes for dye-sensitized solar cells. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2011 , 224, 116-122	4-7	37

1151	Comparison of solar cell performance of conducting polymer dyes with different functional groups. 2011 , 196, 8874-8880		20
1150	Influences of textures in fluorine-doped tin oxide on characteristics of dye-sensitized solar cells. <i>Organic Electronics</i> , 2011 , 12, 2003-2011	3.5	29
1149	Facile synthesis of highly branched jacks-like ZnO nanorods and their applications in dye-sensitized solar cells. 2011 , 46, 1473-1479		51
1148	Increase in efficiency of dye-sensitized solar cells by porous TiO ₂ layer modification with gadolinium-containing thin layer. 2011 , 29, 783-786		18
1147	Concerted effect of large molecular dyes and bulky cobalt complex redox couple to retard recombination in dye-sensitized solar cells. 2011 , 13, 778-780		26
1146	Significant enhancement of the photoelectrochemical activity of TiO ₂ nanotubes. 2011 , 13, 1186-1189		15
1145	Conducting polymer-based counter electrode for a quantum-dot-sensitized solar cell (QDSSC) with a polysulfide electrolyte. <i>Electrochimica Acta</i> , 2011 , 57, 277-284	6.7	111
1144	Ionic liquid/polymer composite electrolytes by in situ photopolymerization and their application in dye-sensitized solar cells. <i>Electrochimica Acta</i> , 2011 , 56, 8680-8687	6.7	31
1143	Importance of adsorption isotherms in defining performance of dye-sensitized solar cells fabricated from photoelectrodes composed of ZnO nanopowders and nanorods. <i>Electrochimica Acta</i> , 2011 , 56, 8873-8879	6.7	9
1142	Cubic clusters of indium chalcogenides with 2,2-bipyridine ligand, a comprehensive view of [InQ(phen/bpy)Cl] ₄ (Q=S, Se) compounds. 2011 , 376, 645-650		3
1141	Contributions to the development of ruthenium-based sensitizers for dye-sensitized solar cells. <i>Coordination Chemistry Reviews</i> , 2011 , 255, 2602-2621	23.2	203
1140	Solid-state synthesis of mixed trihalides via reversible absorption of dihalogens by non porous onium salts. 2011 , 13, 4427		35
1139	Tuning the excited state of photoactive building blocks for metal-templated self-assembly. 2011 , 6, 2339-51		21
1138	Investigation of the photoinduced electron injection processes for p-type triphenylamine-sensitized solar cells. 2011 , 4, 4537		53
1137	Theoretical study of new ruthenium-based dyes for dye-sensitized solar cells. <i>Journal of Physical Chemistry A</i> , 2011 , 115, 3596-603	2.8	45
1136	Ruthenium(II)- bipyridyl with extended E _g system: Improved thermo-stable sensitizer for efficient and long-term durable dye sensitized solar cells. 2011 , 123, 555-565		14
1135	Structure of porphyrin-fullerene dyad monolayer on the water surface and solid substrate. 2011 , 56, 157-163		2
1134	Quantifying Regeneration in Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 2439-2447	3.47	179

1133	Phthalocyanines: colorful macroheterocyclic sensitizers for dye-sensitized solar cells. 2011 , 142, 699-707	56
1132	3D purely inorganic lead-azide coordination polymer constructed by exclusive end-to-end azido binding. 2011 , 990, 102-109	5
1131	Electronic correlations in organometallic complexes. 2011 , 508, 22-28	11
1130	Enhancement of photovoltaic performance using hybrid CdS nanorods and MEH-PPV active layer in ITO/TiO ₂ /MEH-PPV:CdS/Au devices. 2011 , 11, S171-S174	9
1129	Electrodeposited polyaniline films decorated with nano-islands: Characterization and application as anode buffer layers in solar cells. 2011 , 95, 440-445	17
1128	4,4'-Difluoro-4-bora-3a,4a-diaza-s-indacenes (BODIPYs) as components of novel light active materials. 2011 , 67, 3573-3601	229
1127	Formation of efficient dye-sensitized solar cells by introducing an interfacial layer of hierarchically ordered macro-mesoporous TiO ₂ film. 2011 , 54, 930-935	17
1126	Direct visualization of the charge transfer in conjugated polymers. 2011 , 54, 1119-1123	1
1125	Key technological elements in dye-sensitized solar cells (DSC). 2011 , 28, 1481-1494	37
1124	Organic/Organic Heterojunction Interfaces: Effect of Molecular Orientation. 2011 , 21, 410-424	193
1123	A Thiophene-Based Anchoring Ligand and Its Heteroleptic Ru(II)-Complex for Efficient Thin-Film Dye-Sensitized Solar Cells. 2011 , 21, 963-970	51
1122	Nanostructured Tungsten Oxide [Properties, Synthesis, and Applications. 2011 , 21, 2175-2196	994
1121	Photoelectric Cooperative Induced Wetting on Aligned-Nanopore Arrays for Liquid Reprography. 2011 , 21, 4519-4526	31
1120	Assessing Possibilities and Limits for Solar Cells. 2011 , 23, 2870-2876	112
1119	The marriage of terpyridines and inorganic nanoparticles: synthetic aspects, characterization techniques, and potential applications. 2011 , 23, 5728-48	73
1118	Recent Progress in Dye-Sensitized Solar Cells Using Nanocrystallite Aggregates. <i>Advanced Energy Materials</i> , 2011 , 1, 988-1001	21.8 80
1117	Solar Energy Materials. 2011 , 95-243	2
1116	Electrodeposited Porous ZnO Sensitized by Organic Dyes [Promising Materials for Dye-Sensitized Solar Cells with Potential Application in Large-Scale Photovoltaics. 2011 , 221-275	

1115	Dye-Sensitised Solar Cells Based on Large-Pore Mesoporous TiO ₂ with Controllable Pore Diameters. 2011 , 2011, 4730-4737		11
1114	A double-band tandem organic dye-sensitized solar cell with an efficiency of 11.5%. 2011 , 4, 609-12		33
1113	Polyethylenimine/N-doped titanium dioxide nanoparticle based inks for ink-jet printing applications. 2011 , 122, 3630-3636		8
1112	Towards Unimolecular Luminescent Solar Concentrators: Bodipy-Based Dendritic Energy-Transfer Cascade with Panchromatic Absorption and Monochromatized Emission. 2011 , 123, 11099-11104		23
1111	Towards unimolecular luminescent solar concentrators: bodipy-based dendritic energy-transfer cascade with panchromatic absorption and monochromatized emission. 2011 , 50, 10907-12		179
1110	Phenoxazine dyes for dye-sensitized solar cells: relationship between molecular structure and electron lifetime. 2011 , 17, 6415-24		92
1109	TiO ₂ Wedgy Nanotubes Array Films for Photovoltaic Enhancement. 2011 , 257, 5059-5063		19
1108	Solid-state dye-sensitized solar cells fabricated with nanoporous TiO ₂ and TPD dyes: Analysis of penetration behavior and I _v characteristics. 2011 , 510, 93-98		16
1107	The structural modification of thiophene-linked porphyrin sensitizers for dye-sensitized solar cells. <i>Dyes and Pigments</i> , 2011 , 88, 75-83	4.6	40
1106	Far-red absorbing squarylium dyes with terminally connected electron-accepting units for organic dye-sensitized solar cells. <i>Dyes and Pigments</i> , 2011 , 90, 275-283	4.6	28
1105	A composite poly(3,3-diethyl-3,4-dihydro-2H-thieno-[3,4-b][1,4]-dioxepine) and Pt film as a counter electrode catalyst in dye-sensitized solar cells. <i>Electrochimica Acta</i> , 2011 , 56, 6157-6164	6.7	26
1104	Dye-sensitized solar cells based on double-layered TiO ₂ composite films and enhanced photovoltaic performance. <i>Electrochimica Acta</i> , 2011 , 56, 6293-6298	6.7	110
1103	Laminating solution-processed silver nanowire mesh electrodes onto solid-state dye-sensitized solar cells. <i>Organic Electronics</i> , 2011 , 12, 875-879	3.5	63
1102	Theoretical characterization of ruthenium complexes containing functionalized bithiophene ligands for dye-sensitized solar cells. 2011 , 696, 1632-1639		9
1101	Applications of vertically oriented TiO ₂ micro-pillars array on the electrode of dye-sensitized solar cell. 2011 , 72, 653-656		4
1100	Dye-coated europium monosulfide. 2011 , 184, 1324-1327		8
1099	Photocatalytic destruction of gaseous toluene by porphyrin-sensitized TiO ₂ thin films. 2011 , 42, 470-479		12
1098	Nanostructured photoelectrodes for dye-sensitized solar cells. 2011 , 6, 91-109		561

1097	Dye-sensitized TiO ₂ film with bifunctionalized zones for photocatalytic degradation of 4-cholophenol. 2011 , 192, 599-604		55
1096	A simple recipe for an efficient TiO ₂ nanofiber-based dye-sensitized solar cell. 2011 , 353, 39-45		120
1095	Photovoltaic performance of solid-state solar cells based on ZnO nanosheets sensitized with low-cost metal-free organic dye. <i>Solar Energy</i> , 2011 , 85, 1787-1793	6.8	36
1094	Influences of water in bis-benzimidazole-derivative electrolyte additives to the degradation of the dye-sensitized solar cells. 2011 , 95, 158-162		38
1093	Surface-induced thermal decomposition of [Ru(dcbpyH) ₂ -(CN) ₂] on nanocrystalline TiO ₂ surfaces: Temperature-dependent infrared spectroscopy and two-dimensional correlation analysis. 2011 , 95, 326-331		19
1092	The degradation of dye sensitized solar cell in the presence of water isotopes. 2011 , 95, 1624-1629		55
1091	Fabrication and characterization of vacuum deposited fluorescein thin films. 2011 , 519, 3835-3839		7
1090	Integration of polymer electrolytes in dye sensitized solar cells by initiated chemical vapor deposition. 2011 , 519, 4551-4554		10
1089	Synthesis of Electron Donor-[60]Fullerene Multi-Ring Interlocked Systems. 2011 , 207-244		3
1088	Charge transfer dynamics of model charge transfer centers of a multicenter water splitting dye complex on rutile TiO ₂ (110). <i>Journal of Chemical Physics</i> , 2011 , 134, 054705	3.9	28
1087	A single centre water splitting dye complex adsorbed on rutile TiO ₂ (110): photoemission, x-ray absorption, and optical spectroscopy. <i>Journal of Chemical Physics</i> , 2011 , 135, 114703	3.9	10
1086	Perspective: The dawning of the age of graphene. <i>Journal of Chemical Physics</i> , 2011 , 135, 050901	3.9	30
1085	Ruthenium: Inorganic & Coordination Chemistry Based in part on the article Ruthenium: Inorganic & Coordination Chemistry by Bruno Chaudret & Sylviane Sabo-Etienne which appeared in the Encyclopedia of Inorganic Chemistry, First Edition.. 2011 ,		
1084	Theoretical investigation of resonance Raman scattering of dye molecules absorbed on semiconductor surfaces. <i>Journal of Chemical Physics</i> , 2011 , 135, 044108	3.9	17
1083	Adsorption Isotherms in Defining Performance of Dye-Sensitized Solar Cells with Photoelectrodes of TiO ₂ and ZnO. <i>Journal of the Electrochemical Society</i> , 2011 , 158, B1417	3.9	
1082	Open-boundary cluster model implemented in first-principles calculations for electronic excited states of an adsorbate-surface system. 2011 , 84,		3
1081	The Electrochemical Biosensor Based on the Immobilization of Horseradish Peroxidase on TiO ₂ Nanoneedles Modified Electrodes. 2011 , 239-242, 2499-2502		
1080	New dye-sensitized solar cells obtained from extracted bracts of <i>Bougainvillea glabra</i> and <i>spectabilis</i> betalain pigments by different purification processes. 2011 , 12, 5565-76		75

- 1079 Study of Dye-Sensitized Solar Cells with Nanostructure Inn Compact Layer and Au Nano Particles. **2011**, 378-379, 636-641
- 1078 Parametric Studies on the Photovoltaic Performance Improvement of a Nanotube Photo-Electrochemical Solar Cell. *Journal of the Electrochemical Society*, **2011**, 158, P57 3.9 4
- 1077 On the Sol-gel Synthesis and Characterization of Titanium Oxide Nanoparticles. **2011**, 1352, 21 11
- 1076 Nano Science and Technology in Solar Cells. **2011**,
- 1075 THIOCYANATE-FREE, PANCHROMATIC RUTHENIUM (II) TERPYRIDINE SENSITIZER HAVING A TRIDENTATE DIETHYLENETRIAMINE LIGAND FOR NEAR-IR SENSITIZATION OF NANOCRYSTALLINE TiO₂. **2011**, 04, 21-24 20
- 1074 Preparation of electrospun titania nanofibers. **2011**, 102, 194-199 3
- 1073 IR, Raman and UV-Vis spectra of the Ru(II) cyano complexes studied by DFT. **2011**, 37, 670-677 4
- 1072 The Power of Click Chemistry for Molecular Machines and Surface Patterning. **2011**,
- 1071 One-Dimensional Nanostructure Arrays for Dye-Sensitized Solar Cells. **2011**, 133, 4
- 1070 Development of a New Class of Thiocyanate-Free Cyclometalated Ruthenium(II) Complex for Sensitizing Nanocrystalline TiO₂Solar Cells. **2011**, 2011, 1-5 16
- 1069 Amphiphilic Ruthenium(II) Terpyridine Sensitizers with Long Alkyl Chain Substituted β -Diketonato Ligands: An Efficient Coadsorbent-Free Dye-Sensitized Solar Cells. **2011**, 2011, 1-7 5
- 1068 Efficiency Improvement of Dye-Sensitized Solar Cell with Ultraviolet and Hydrogen Chloride Treatments. *Journal of the Electrochemical Society*, **2011**, 158, K136 3.9 5
- 1067 Synthesis and Application of New Ruthenium Complexes Containing β -Diketonato Ligands as Sensitizers for Nanocrystalline TiO₂Solar Cells. **2011**, 2011, 1-8 4
- 1066 Characterization of Synthetic Ni(II)-Xylenol Complex as a Photosensitizer for Wide-Band Gap ZnO Semiconductor Electrodes. **2011**, 2011, 1-9 6
- 1065 Effect of Deoxycholic Acid on the Performance of Liquid Electrolyte Dye-Sensitized Solar Cells Using a Perylene Monoimide Derivative. **2012**, 2012, 1-7 13
- 1064 Hollow hemispherical titanium dioxide aggregates fabricated by coaxial electrospray for dye-sensitized solar cell application. **2012**, 6, 063519-1 8
- 1063 Role of ethylene on surface oxidation of TiO₂(110). **2012**, 101, 211601 2
- 1062 Preparation and characterization of low temperature sintering nanocrystalline TiO₂ prepared via the sol-gel method using titanium(IV) butoxide applicable to flexible dye sensitized solar cells. **2012**, 103, 347-351 15

1061	Luminescent ruthenium(II) tris-bipyridyl complex caged in nanoscale silica for particle velocimetry studies in microchannels. 2012 , 23, 084004		4
1060	Surface Modification of the TiO ₂ Light Scattering Layer for Dye-Sensitized Solar Cells (DSSCs). 2012 , 565, 43-51		1
1059	The Influence of Titania Electrode Modification with Lanthanide Ions Containing Thin Layer on the Performance of Dye-Sensitized Solar Cells. 2012 , 2012, 1-8		24
1058	Performance Degradation of Dye-Sensitized Solar Cells Induced by Electrolytes. 2012 , 2012, 1-4		9
1057	Crystallization and Growth of Colloidal Nanocrystals. 2012 ,		25
1056	Temperature and Irradiance Dependence of a Dye Sensitized Solar Cell With Acetonitrile Based Electrolyte. 2012 , 134,		4
1055	Electroactive functional hybrid layered nanocomposites. 2012 ,		2
1054	Structural Change of Pheophorbide a Methyl Ester by Contact with Titanium Oxide Particles. <i>Chemistry Letters</i> , 2012 , 41, 360-362	1.7	4
1053	Biodetection Based on Fluorescence Quenching and Surface-Enhanced Fluorescence Using Noble Metal Nanoparticles. 2012 , 223-260		
1052	Mesoporous titania: From synthesis to application. 2012 , 7, 344-366		230
1051	Compact Hydrogen-Bonded Self-Assembly of Ni(II)Balen Derivative Investigated Using Scanning Tunneling Microscopy. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 23404-23407	3.8	11
1050	Role of the triiodide/iodide redox couple in dye regeneration in p-type dye-sensitized solar cells. 2012 , 28, 6485-93		87
1049	Raman generation of coherent phonons of anatase and rutile TiO ₂ photoexcited at fundamental absorption edges. 2012 , 86,		18
1048	Carboxyl-modified conjugated polymer sensitizer for dye sensitized solar cells: significant efficiency enhancement. 2012 , 22, 23267		8
1047	Review on dye-sensitized solar cells (DSSCs): Fundamental concepts and novel materials. 2012 , 16, 5848-5860		609
1046	Structural and optical properties of visible active photocatalytic WO ₃ thin films prepared by reactive dc magnetron sputtering. 2012 , 27, 3130-3140		29
1045	Trends and Perspectives in Nanoparticles Synthesis. 2012 , 83-92		2
1044	Electrocatalytic pathways towards sustainable fuel production from water and CO ₂ . <i>Coordination Chemistry Reviews</i> , 2012 , 256, 2571-2600	23.2	123

1043	Hierarchically micro/nanostructured photoanode materials for dye-sensitized solar cells. 2012 , 22, 15475		127
1042	Experimental observation of sub-femtosecond charge transfer in a model water splitting dye-sensitized solar cell. <i>Journal of Chemical Physics</i> , 2012 , 137, 224706	3.9	7
1041	Cathodic Deposition of TiO ₂ : Effects of H ₂ O ₂ and Deposition Modes. <i>Journal of the Electrochemical Society</i> , 2012 , 159, D418-D424	3.9	12
1040	Fast transporting ZnO-TiO ₂ coaxial photoanodes for dye-sensitized solar cells based on ALD-modified SiO ₂ aerogel frameworks. 2012 , 6, 6185-96		72
1039	Synthesis, characterization, and DNA binding properties of ruthenium(II) complexes containing the redox active ligand benzo[<i>i</i>]dipyrido[3,2- <i>a</i> :2',3'- <i>c</i>]phenazine-11,16-quinone. 2012 , 51, 463-71		46
1038	Deprotonation-induced aromaticity enhancement and new conjugated networks in meso-Hexakis(pentafluorophenyl)[26]hexaphyrin. 2012 , 18, 15838-44		30
1037	Highly efficient nanocrystalline ZnO thin films prepared by a novel method and their application in dye-sensitized solar cells. 2012 , 109, 655-663		14
1036	Donor-enhanced bridge effect on the electronic properties of triphenylamine based dyes: density functional theory investigations. 2012 , 18, 3609-15		15
1035	Quantum chemical study in the direction to design efficient donor-bridge-acceptor triphenylamine sensitizers with improved electron injection. 2012 , 18, 4893-900		56
1034	Comparison between synthesis techniques to obtain ZnO nanorods and its effect on dye sensitized solar cells. 2012 , 23, 655-660		30
1033	Porphyryns in bio-inspired transformations: Light-harvesting to solar cell. <i>Coordination Chemistry Reviews</i> , 2012 , 256, 2601-2627	23.2	219
1032	Ultrafast X-ray spectroscopy as a probe of nonequilibrium dynamics in ruthenium complexes. 2012 , 407, 65-70		11
1031	Excited state potential energy surfaces of bistridentate Ru(II) complexes [A TD-DFT study]. 2012 , 407, 76-82		28
1030	Ruthenium dyes with heteroleptic tridentate 2,6-bis(benzimidazol-2-yl)-pyridine for dye-sensitized solar cells: Enhancement in performance through structural modifications. 2012 , 392, 388-395		13
1029	Enhanced Performance of Dye-Sensitized Solar Cells with Surface-treated Titanium Dioxides. 2012 , 565, 138-146		4
1028	Synthesis of Nest-Like NiO and its Application on P-Type Dye-Sensitized Solar Cell. 2012 , 519, 61-64		1
1027	Molecular organic conductors with triiodide/hole dual channels as efficient electrolytes for solid-state dye sensitized solar cells. 2012 , 2, 5550		5
1026	Solid-state dye-sensitized solar cells from polymer-templated TiO ₂ bilayer thin films. 2012 , 90, 1048-1055		

1025	The charge transport and photoconduction mechanisms of TiO ₂ -based dye sensitized solar cell. 2012,		
1024	Accumulative electron transfer: multiple charge separation in artificial photosynthesis. 2012 , 155, 233-52; discussion 297-308		47
1023	Highly porous TiO ₂ films for dye sensitized solar cells. 2012 , 22, 14254		55
1022	Synergistic enhancement of photovoltaic performance of TiO ₂ photoanodes by incorporation of Dawson-type polyoxometalate and gold nanoparticles. 2012 , 22, 23627		31
1021	Recyclable and stable ruthenium catalyst for free radical polymerization at ambient temperature initiated by visible light photocatalysis. 2012 , 14, 618		16
1020	Anatase TiO ₂ pillar-nanoparticle composite fabricated by layer-by-layer assembly for high-efficiency dye-sensitized solar cells. 2012 , 41, 12683-9		14
1019	MetalOrganic Chemical Vapor Deposition of Metal Oxide Films and Nanostructures. 2012 , 291-336		3
1018	Effective panchromatic sensitization of electrochemical solar cells: strategy and organizational rules for spatial separation of complementary light harvesters on high-area photoelectrodes. 2012 , 134, 19820-7		41
1017	Ionic crystals of {[Ni(phen) ₃]2Ge ₄ S ₁₀ } _x ·Sol, showing solid-state solvatochromism and rapid solvent-induced recrystallization. 2012 , 51, 1330-5		24
1016	Narrowing band gap of platinum acetylide dye-sensitized solar cell sensitizers with thiophene Ebridges. 2012 , 22, 5382		78
1015	Synthesis and characterization of peryleneBithiopheneBriphenylamine triads: studies on the effect of alkyl-substitution in p-type NiO based photocathodes. 2012 , 22, 7366		57
1014	Anchoring molecular chromophores to colloidal gold nanocrystals: surface-enhanced Raman evidence for strong electronic coupling and irreversible structural locking. 2012 , 134, 2000-3		44
1013	Titania Nanostructures for Dye-sensitized Solar Cells. 2012 , 4, 253-266		21
1012	Oligo(poly)thiophene Sensitization of CdSe Nanocrystal and TiO ₂ Polycrystalline Electrodes: A Photoelectrochemical Investigation. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 2033-2039	3.8	9
1011	Theoretical study of the absorption spectrum of a photoisomerizable iron complex. <i>Journal of Physical Chemistry A</i> , 2012 , 116, 11905-12	2.8	5
1010	Efficient Light Harvesting and Charge Collection of Dye-Sensitized Solar Cells with (001) Faceted Single Crystalline Anatase Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 19164-19172	3.8	34
1009	Effect of axially projected oligothiophene pendants and nitro-functionalized diimine ligands on the lowest excited state in cationic Ir(III) bis-cyclometalates. 2012 , 51, 5082-94		27
1008	Dispersion Overwhelms Charge Transfer in Determining the Magnitude of the First Hyperpolarizability in Triindole Octupoles. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 12312-12321	3.8	25

1007	A novel amine-free anchoring organic dye for efficient dye-sensitized solar cells. 2012 , 14, 6338-41		56
1006	Comparative interface metrics for metal-free monolayer-based dye-sensitized solar cells. 2012 , 4, 6735-46		12
1005	Transformation of organic-inorganic hybrid films obtained by molecular layer deposition to photocatalytic layers with enhanced activity. 2012 , 6, 7263-9		42
1004	Molecular photovoltaic system based on fullerenes and carotenoids co-assembled in lipid/alkanethiol hybrid bilayers. 2012 , 28, 4877-82		12
1003	Synthesis, Photophysics, and Photovoltaic Studies of Ruthenium Cyclometalated Complexes as Sensitizers for p-Type NiO Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 16854-16863	3.8	76
1002	Nanostructured platinum counter electrodes by self-assembled nanospheres for dye-sensitized solar cells. <i>Organic Electronics</i> , 2012 , 13, 1865-1872	3.5	14
1001	Metallophthalocyanine and Metallophthalocyanine fullerene complexes as potential dye sensitizers for solar cells DFT and TD-DFT calculations. <i>Organic Electronics</i> , 2012 , 13, 2063-2074	3.5	10
1000	p-n junction organic photovoltaics fabricated by all solution processing. 2012 , 161, 2798-2802		4
999	Characterization of TiO ₂ thin films prepared by electrolytic deposition for lithium ion battery anodes. 2012 , 520, 6744-6751		10
998	Mesoporous metal oxides by vapor infiltration and atomic layer deposition on ordered surfactant polymer films. 2012 , 28, 11906-13		16
997	A microscopic model of singlet fission. 2012 , 116, 11473-81		77
996	Increase in the coordination number of a cobalt porphyrin after photo-induced interfacial electron transfer into nanocrystalline TiO ₂ . 2012 , 51, 9865-72		8
995	Quantum confinement effect of CdSe induced by nanoscale solvothermal reaction. 2012 , 4, 6642-8		13
994	Structure-property relationship of naphthalene based donor-acceptor organic dyes for dye-sensitized solar cells: remarkable improvement of open-circuit photovoltage. 2012 , 22, 22550		32
993	Nanomaterials for renewable energy production and storage. 2012 , 41, 7909-37		729
992	Theoretical studies of COOH group effect on the performance of rhenium (I) tricarbonyl complexes with bispyridine sulfur-rich core ligand as dyes in DSSC. 2012 , 131, 1		8
991	Photocatalytic CO ₂ reduction by TiO ₂ and related titanium containing solids. 2012 , 5, 9217		442
990	Influence of a GC base pair on excitation energy transfer in DNA-assembled phenanthrene stacks. 2012 , 23, 2105-13		8

989	Long-range electron transfer in zinc-phthalocyanine-oligo(phenylene-ethynylene)-based donor-bridge-acceptor dyads. 2012 , 51, 11500-12		35
988	The role of poly(methacrylic acid) conformation on dispersion behavior of nano TiO ₂ powder. 2012 , 258, 3524-3531		20
987	High-temperature hydrothermal synthesis of crystalline mesoporous TiO ₂ with superior photo catalytic activities. 2012 , 258, 7448-7454		11
986	Titanium oxide based mesoporous powders and gels: Doping effects and photogenerated charge transfer. 2012 , 177, 1446-1451		6
985	Hybrid cells for simultaneously harvesting multi-type energies for self-powered micro/nanosystems. 2012 , 1, 259-272		87
984	Magnetic-field effect on dye-sensitized ZnO nanorods-based solar cells. 2012 , 216, 269-272		22
983	Analysis and characterization of coordination compounds by resonance Raman spectroscopy. <i>Coordination Chemistry Reviews</i> , 2012 , 256, 1479-1508	23.2	88
982	Catecholate and 2,3-acenediolate complexes of d0 ions as prospective materials for molecular electronics and spintronics. <i>Coordination Chemistry Reviews</i> , 2012 , 256, 1706-1731	23.2	20
981	Managing wetting behavior and collection efficiency in photoelectrochemical devices based on water electrolytes; improvement in efficiency of water/iodide dye sensitised cells to 4%. 2012 , 22, 23387		56
980	Photoinduced electron transfer in an amine-corrrole-peryene bisimide assembly: charge separation over terminal components favoured by solvent polarity. 2012 , 18, 14845-59		14
979	Photoinduced relaxation processes in self-assembling complexes from CdSe/ZnS water-soluble nanocrystals and cationic porphyrins. 2012 , 113, 165-178		7
978	Solar Cell as an Energy Harvesting Device. 2012 , 463-539		1
977	Mesoporous Dye-Sensitized Solar Cells. 2012 , 481-496		2
976	Photoinduced electron transfer processes in dye-semiconductor systems with different spacer groups. <i>Journal of Chemical Physics</i> , 2012 , 137, 22A529	3.9	39
975	Dye-sensitized solar cells based on ZnO nanoneedle/TiO ₂ nanoparticle composite photoelectrodes with controllable weight ratio. 2012 , 27, 2982-2987		4
974	Dye-Sensitized Photoelectrochemical Cells. 2012 , 479-542		13
973	Photoinduced charge separation in donor-acceptor spiro compounds at metal and metal oxide surfaces: application in dye-sensitized solar cell. 2012 , 2, 4869		21
972	NaYF ₄ :Er ³⁺ /Yb ³⁺ +graphene composites: preparation, upconversion luminescence, and application in dye-sensitized solar cells. 2012 , 22, 20381		57

971	Supramolecular chemistry of donor-acceptor interactions. 2012 , 108, 186		10
970	Donor-acceptor dyes incorporating a stable dibenzosilole π -conjugated spacer for dye-sensitized solar cells. 2012 , 22, 10771		43
969	Improvement in the power conversion efficiency of thiocyanate-free Ru(II) based dye sensitized solar cells by cosensitization with a metal-free dye. 2012 , 22, 18788		21
968	Quantitative analysis of valence photoemission spectra and quasiparticle excitations at chromophore-semiconductor interfaces. 2012 , 109, 116801		24
967	Selective TDDFT with automatic removal of ghost transitions: application to a perylene-dye-sensitized solar cell model. 2012 , 14, 8608-19		11
966	Ru-based donor-acceptor photosensitizer that retards charge recombination in a p-type dye-sensitized solar cell. 2012 , 41, 13105-11		48
965	Theory of a Single Dye Molecule Blinking with a Diffusion-Based Power Law Distribution. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 15782-15789	3.8	10
964	Synthesis and photo-electrochemical properties of novel thienopyrazine and quinoxaline derivatives, and their dye-sensitized solar cell performance. <i>Organic Electronics</i> , 2012 , 13, 3097-3101	3.5	22
963	Dye-sensitized solar cells and complexes between pyridines and iodines. A NMR, IR and DFT study. 2012 , 98, 247-51		11
962	Fabrication and reliability of dye solar cells: A resonance Raman scattering study. 2012 , 52, 2487-2489		12
961	Phthalocyanines as Sensitizers in Dye-Sensitized Solar Cells. 2012 , 389-420		1
960	High-efficiency dye-sensitized solar cells using ferrocene-based electrolytes and natural photosensitizers. 2012 , 45, 425101		50
959	Decoration of TiO ₂ nanotubes with metal nanoparticles using polyoxometalate as a UV-switchable reducing agent for enhanced visible and solar light photocatalysis. 2012 , 28, 14470-5		86
958	Encyclopedia of Sustainability Science and Technology. 2012 , 3886-3926		3
957	Removal of bisphenol A by mesoporous BiOBr under simulated solar light irradiation. 2012 , 2, 2351		56
956	Encyclopedia of Sustainability Science and Technology. 2012 , 3768-3786		2
955	Theoretical studies of the structures and spectroscopic properties of the photoelectrochemical cell ruthenium sensitizers, C101 and J13. 2012 , 55, 398-408		2
954	Commercialization of dye sensitized solar cells: Present status and future research needs to improve efficiency, stability, and manufacturing. 2012 , 30, 020801		108

953	Photoelectrochemical Photocurrent Switching and Related Phenomena. 2012 , 165-197		1
952	Multi-carbazole derivatives: new dyes for highly efficient dye-sensitized solar cells. 2012 , 2, 2427		51
951	Influence of triplet state multidimensionality on excited state lifetimes of bis-tridentate Ru(II) complexes: a computational study. <i>Journal of Physical Chemistry A</i> , 2012 , 116, 1041-50	2.8	75
950	Pd(II)-mediated triad multilayers with zinc tetrapyrrolylporphyrin and pyridine-functionalized nano-TiO ₂ as linkers: assembly, characterization, and photocatalytic properties. 2012 , 28, 7711-9		19
949	Towards highly efficient photocatalysts using semiconductor nanoarchitectures. 2012 , 5, 6732		335
948	Encyclopedia of Sustainability Science and Technology. 2012 , 3872-3886		
947	Encyclopedia of Sustainability Science and Technology. 2012 , 3705-3768		4
946	RASPT2/RASSCF vs Range-Separated/Hybrid DFT Methods: Assessing the Excited States of a Ru(II)bipyridyl Complex. 2012 , 8, 203-13		49
945	Structural and optical properties of pentacene films grown on differently oriented ZnO surfaces. 2012 , 24, 445012		2
944	Luminescent bis-tridentate ruthenium(II) and osmium(II) complexes based on terpyridyl-imidazole ligand: synthesis, structural characterization, photophysical, electrochemical, and solvent dependence studies. 2012 , 41, 2427-38		35
943	Thermoelectric Bi ₂ Te ₃ -improved charge collection for high-performance dye-sensitized solar cells. 2012 , 5, 6294-6298		67
942	Vibrational spectroscopy as a probe of molecule-based devices. 2012 , 41, 1929-46		31
941	Fluorous Molecules for Dye-Sensitized Solar Cells: Synthesis and Characterization of Fluorene-Bridged Donor/Acceptor Dyes with Bulky Perfluoroalkoxy Substituents. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 21190-21200	3.8	28
940	Low-Dimensional Metals and Semiconductors. 2012 , 63-117		
939	Potential Applications for Solar Photocatalysis: From Environmental Remediation to Energy Conversion. 2012 ,		5
938	Solid-state dye-sensitized and bulk heterojunction solar cells using TiO ₂ and ZnO nanostructures: recent progress and new concepts at the borderline. 2012 , 61, 355-373		86
937	Molecular engineering of sensitizers for dye-sensitized solar cell applications. 2012 , 12, 306-28		84
936	The renaissance of dye-sensitized solar cells. 2012 , 6, 162-169		1091

935	Direct application of commercial fountain pen ink to efficient dye-sensitized solar cells. 2012 , 22, 9639		35
934	Next Generation Photovoltaics Based on Multiple Exciton Generation in Quantum Dot Solar Cells. 2012 , 191-207		6
933	. 2012 , 100, 1486-1517		649
932	Role of Carbon Nanotubes in Dye-Sensitized TiO ₂ -Based Solar Cells. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 14848-14856	3.8	76
931	The electrochemistry of nanostructured titanium dioxide electrodes. 2012 , 13, 2824-75		210
930	One-dimensional homogeneous and heterogeneous nanowires for solar energy conversion. 2012 , 22, 16171		47
929	Spectroscopy and Photophysics in Cyclometalated Ru(II)Bis(bipyridyl) Complexes. 2012 , 2012, 4004-4011		28
928	Efficient Metal-Free Organic Sensitizers Containing Tetraphenylethylene Moieties in the Donor Part for Dye-Sensitized Solar Cells. 2012 , 2012, 5248-5255		24
927	Adsorption of Dipyrrin-Based Dye Complexes on a Rutile TiO ₂ (110) Surface. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 18184-18192	3.8	12
926	Organic Dye Design Tools for Efficient Photocurrent Generation in Dye-Sensitized Solar Cells: Exciton Binding Energy and Electron Acceptors. 2012 , 22, 1606-1612		119
925	Heterojunction Engineering of CdTe and CdSe Quantum Dots on TiO ₂ Nanotube Arrays: Intricate Effects of Size-Dependency and Interfacial Contact on Photoconversion Efficiencies. 2012 , 22, 2821-2829		104
924	Molecular Understanding of the Open-Circuit Voltage of Polymer:Fullerene Solar Cells. <i>Advanced Energy Materials</i> , 2012 , 2, 229-237	21.8	89
923	A DNA-Based Light-Harvesting Antenna. 2012 , 124, 940-943		32
922	The radiative decay rates tune the emissive properties of ruthenium(II) polypyridyl complexes: a computational study. 2012 , 7, 667-71		17
921	Photocurrent enhancement of dye-sensitized solar cells owing to increased dye-adsorption onto silicon-nanoparticle-coated titanium-dioxide films. 2012 , 7, 1624-9		5
920	Unsymmetric platinum(II) bis(aryleneethynylene) complexes as photosensitizers for dye-sensitized solar cells. 2012 , 7, 1426-34		31
919	Modified triphenylamine-dicyanovinyl-based donor-acceptor dyes with enhanced power conversion efficiency of p-type dye-sensitized solar cells. 2012 , 7, 2791-5		29
918	The influence of defects on Mo-doped TiO ₂ by first-principles studies. 2012 , 13, 1514-21		26

917	Acene-modified triphenylamine dyes for dye-sensitized solar cells: a computational study. 2012 , 13, 2051-60	95
916	Electrochemistry in reverse biased dye solar cells and dye/electrolyte degradation mechanisms. 2012 , 13, 2964-75	30
915	Flexible and platinum-free dye-sensitized solar cells with conducting-polymer-coated graphene counter electrodes. 2012 , 5, 379-82	126
914	Charge transfer from an aromatic adsorbate to a semiconductor TiO ₂ surface probed on the femtosecond time scale with resonant inelastic x-ray scattering. 2012 , 109, 017401	6
913	Molecular modification on dye-sensitized solar cells by phosphonate self-assembled monolayers. 2012 , 22, 2915-2921	24
912	Brief overview of dye-sensitized solar cells. 2012 , 41 Suppl 2, 151-5	55
911	The controllable synthesis of chain-like TiO ₂ networks with multiwalled carbon nanotubes as templates and its application for dye-sensitized solar cells. 2012 , 14, 1	7
910	Titanium phosphates as positive electrode in lithium-ion batteries: composition, phase purity and electrochemical performance. 2012 , 16, 1461-1471	7
909	Effect of acetic acid in TiO ₂ paste on the performance of dye-sensitized solar cells. 2012 , 38, S511-S515	23
908	Dye-sensitized solar cell based on nanocrystalline ZnO thin film electrodes combined with a novel light absorbing dye Coomassie Brilliant Blue in acetonitrile solution. 2012 , 37, 4863-4870	16
907	Synthesis and photophysical properties phthalocyanine-pyrene dyads. <i>Dyes and Pigments</i> , 2012 , 92, 954-960	36
906	Novel di-anchoring dye for DSSC by bridging of two mono anchoring dye molecules: A conformational approach to reduce aggregation. <i>Dyes and Pigments</i> , 2012 , 92, 1132-1137	4.6 72
905	Alkyloxy substituted organic dyes for high voltage dye-sensitized solar cell: Effect of alkyloxy chain length on open-circuit voltage. <i>Dyes and Pigments</i> , 2012 , 94, 88-98	4.6 27
904	Effects of different acceptors in phenothiazine-triphenylamine dyes on the optical, electrochemical, and photovoltaic properties. <i>Dyes and Pigments</i> , 2012 , 94, 150-155	4.6 40
903	New 2,6-modified BODIPY sensitizers for dye-sensitized solar cells. <i>Dyes and Pigments</i> , 2012 , 94, 224-232	4.6 71
902	Theoretical studies on spectroscopic properties of ruthenium sensitizers absorbed to TiO ₂ film surface with connection mode for DSSC. <i>Dyes and Pigments</i> , 2012 , 94, 459-468	4.6 56
901	New efficient dyes containing tert-butyl in donor for dye-sensitized solar cells. <i>Dyes and Pigments</i> , 2012 , 95, 244-251	4.6 28
900	Photovoltaic performance enhancement of dye-sensitized solar cells by formation of blocking layers via molecular electrostatic effect. <i>Electrochimica Acta</i> , 2012 , 59, 207-212	6.7 18

899	Electrochemical characterization of newly synthesized polyterthiophene benzoate and its applications to an electrochromic device and a photovoltaic cell. <i>Electrochimica Acta</i> , 2012 , 67, 201-207	6.7	33
898	Template free synthesis of locally-ordered mesoporous titania and its application in dye-sensitized solar cells. 2012 , 134, 170-176		8
897	Dye-sensitized solar cells composed of TiO ₂ /SnO ₂ nanocrystals. 2012 , 135, 46-50		4
896	Enhancing the performance of dye-sensitized solar cells by benzoic acid modified TiO ₂ nanorod electrode. 2012 , 38, 214-218		32
895	Synthesis, characterization and DFT study of methoxybenzylidene containing chromophores for DSSC materials. 2012 , 91, 239-43		37
894	Study of non-covalent interaction between a designed monoporphyrin and fullerenes (C ₆₀ and C ₇₀) in absence and presence of silver nanoparticles. 2012 , 96, 485-92		6
893	Triphenylamine-based starburst dyes with carbazole and phenothiazine antennas for dye-sensitized solar cells. 2012 , 199, 426-431		78
892	Electron-irradiation induced changes in the phases and photocatalytic activity of TiO ₂ nanoparticles. 2012 , 276, 7-13		3
891	Effect of surface roughness of top cover layer on the efficiency of dye-sensitized solar cell. <i>Solar Energy</i> , 2012 , 86, 2049-2055	6.8	26
890	Laser assisted glass frit sealing of dye-sensitized solar cells. 2012 , 96, 43-49		48
889	Transmittance optimized nb-doped TiO ₂ /Sn-doped In ₂ O ₃ multilayered photoelectrodes for dye-sensitized solar cells. 2012 , 96, 276-280		28
888	Dye-sensitized solar cells using branched titania nanotube films. 2012 , 520, 2764-2768		4
887	Influences of textures in Pt counter electrode on characteristics of dye-sensitized solar cells. <i>Organic Electronics</i> , 2012 , 13, 199-205	3.5	29
886	Nanoporous platinum counter electrodes by glancing angle deposition for dye-sensitized solar cells. <i>Organic Electronics</i> , 2012 , 13, 856-863	3.5	16
885	Enhanced photoelectrocatalytic degradation of phenols with bifunctionalized dye-sensitized TiO ₂ film. 2012 , 199-200, 226-32		28
884	Reliability Study of Ruthenium-Based Dye-Sensitized Solar Cells (DSCs). 2012 , 2, 27-34		14
883	Synthesis of new dendritic antenna-like polypyridine ligands. 2012 , 66,		25
882	Metal-containing polymers via electropolymerization. 2012 , 24, 332-45		95

881	A DNA-based light-harvesting antenna. 2012 , 51, 916-9		104
880	Preparation and photovoltaic property of a new hybrid nanocrystalline SnO ₂ /Polypyrrole p-n heterojunction. 2012 , 43, 129-136		8
879	Thiophene nitroxide radical as a novel combination of sensitizer-redox mediator for dye-sensitized solar cells. 2012 , 16, 657-663		15
878	Enhanced efficiency of phenothiazine derivative organic dye-sensitized ionic liquid solar cells on aging. 2013 , 21, 525-533		1
877	Theoretical studies on structural and spectroscopic properties of photoelectrochemical cell ruthenium sensitizers, derivatives of AR20. 2013 , 113, 891-901		5
876	Novel cyclotetrasiloxane tetraimidazolium salts as high performance quasi-solid state electrolyte for dye-sensitized solar cells. 2013 , 21, 732-737		1
875	Improved efficiency of dye-sensitized solar cells by design of a proper double layer photoanode electrodes composed of Cr-doped TiO ₂ transparent and light scattering layers. 2013 , 67, 77-87		21
874	Correlation between Current-Voltage Curves and Recombination Kinetics of Dye-Sensitized Solar Cells Investigated by the Galvanostatic Constant Intensity Light Perturbation Technique. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 15924-15932	3.8	2
873	Stimuli-responsive pyrimidine ring rotation in copper complexes for switching their physical properties. 2013 , 15, 10549-65		40
872	Review on nanostructured photoelectrodes for next generation dye-sensitized solar cells. 2013 , 27, 334-349		106
871	Effects of aromatic trifluoromethylation, fluorination, and methylation on intermolecular π - π interactions. <i>Journal of Physical Chemistry A</i> , 2013 , 117, 7970-9	2.8	21
870	Synthesis of ZnO-decorated TiO ₂ nanotubes for dye-sensitized solar cells. <i>Electrochimica Acta</i> , 2013 , 109, 181-186	6.7	20
869	A high efficiency dye-sensitized solar cell with a UV-cured polymer gel electrolyte and a nano-gel electrolyte double layer. 2013 , 1, 8529		10
868	Enhanced Performance of Dye-Sensitized Solar Cells with Nanostructure InN Compact Layer. 2013 , 52, 05DC06		
867	Photocurrent enhancement by multilayered porphyrin sensitizers in a photoelectrochemical cell. 2013 , 5, 7604-12		30
866	Quantum dot light-emitting diode with quantum dots inside the hole transporting layers. 2013 , 5, 6535-40		39
865	Excited state properties of anodic TiO ₂ nanotubes. 2013 , 102, 233109		18
864	Combining the UV-switchability of Keggin ions with a galvanic replacement process to fabricate TiO ₂ -polyoxometalate-bimetal nanocomposites for improved surface enhanced raman scattering and solar light photocatalysis. 2013 , 5, 7007-13		23

863	Preparing core-shell structure of ZnO@TiO ₂ nanowires through a simple dipping-in-situ hydrolyzation process as the photoanode for dye-sensitized solar cells. 2013 , 2, 609-621		26
862	Cobalt complexes as artificial hydrogenases for the reductive side of water splitting. 2013 , 1827, 958-73		155
861	Structural modification on copper(I)-pyridylpyrimidine complexes for modulation of rotational dynamics, redox properties, and phototriggered isomerization. 2013 , 52, 8962-70		5
860	Tetraaryl Zn(II) porphyrinates substituted at β -pyrrolic positions as sensitizers in dye-sensitized solar cells: a comparison with meso-disubstituted push-pull Zn(II) porphyrinates. 2013 , 19, 10723-40		55
859	First application of the HETPHEN concept to new heteroleptic bis(diimine) copper(I) complexes as sensitizers in dye sensitized solar cells. 2013 , 42, 10818-27		74
858	Nanocrystal Assembly of Hierarchical Porous Architecture for Photocatalysis. 2013 , 417-441		0
857	An easy approach for the fabrication of TiO ₂ nanotube-based transparent photoanodes for Dye-sensitized Solar Cells. <i>Solar Energy</i> , 2013 , 95, 90-98	6.8	44
856	Wearable solar cells by stacking textile electrodes. 2014 , 53, 6110-4		115
855	Raman spectroscopic study of dye adsorption on TiO ₂ electrodes of dye-sensitized solar cells. 2014 , 72, 66-71		5
854	Tuning the electronic nature of mono-bay alkynyl-phenyl-substituted perylene bisimides: synthesis, structure, and photophysical properties. 2014 , 20, 5776-86		27
853	Novel D- π -A organic dyes with thieno[3,2-b]thiophene-3,4-ethylenedioxythiophene unit as a π -bridge for highly efficient dye-sensitized solar cells with long-term stability. 2014 , 6, 4102-8		44
852	First principle investigations to enhance the charge transfer properties by bridge elongation. 2014 , 13, 1450013		11
851	Enhanced photovoltaic performance of cross-linked ruthenium dye with functional cross-linkers for dye-sensitized solar cell. 2014 , 22, 1109-1117		5
850	Cation-induced switching on/off luminescence in an imidazole 4,5-dicarboxylate-bridged Ru(II)Os(II) bipyridine complex: A combined experimental and DFT/TD-DFT investigation. 2014 , 76, 55-70		2
849	Effects of surface-modified photoelectrode on the power conversion efficiency of dye-sensitized solar cells. 2014 , 20, 571-575		6
848	Carbazole based A- π -A dyes with double electron acceptor for dye-sensitized solar cell. <i>Organic Electronics</i> , 2014 , 15, 266-275	3.5	58
847	Sol-gel synthesis and characterization of pure and manganese doped TiO ₂ nanoparticles--a new NLO active material. 2014 , 120, 548-57		24
846	Principles of phosphorescent organic light emitting devices. 2014 , 16, 1719-58		327

845	Synthesis of a novel dinuclear ruthenium polypyridine dye for dye-sensitized solar cells application. 2014 , 67, 381-387		16
844	Novel organic dyes incorporating a carbazole or dendritic 3,6-diiodocarbazole unit for efficient dye-sensitized solar cells. <i>Dyes and Pigments</i> , 2014 , 100, 269-277	4.6	30
843	All-organic chromophores for dye-sensitized solar cells: A theoretical study on aggregation. <i>Dyes and Pigments</i> , 2014 , 101, 203-211	4.6	21
842	On global energy scenario, dye-sensitized solar cells and the promise of nanotechnology. 2014 , 16, 6838-58		76
841	Synthesis and characterization of free base and metal porphyrins and their interaction with CdTe QDs. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2014 , 276, 104-112	4.7	12
840	Photoinduced intramolecular energy transfer and anion sensing studies of isomeric Ru(II) complexes derived from an asymmetric phenanthroline-terpyridine bridge. 2014 , 43, 1829-45		35
839	Evaluation of photovoltaic efficiency of dye-sensitized solar cells fabricated with electrospun PVDF-PAN-Fe ₂ O ₃ composite membrane. 2014 , 131, n/a-n/a		8
838	An efficient photoanode consisting of TiO ₂ nanoparticle-filled TiO ₂ nanotube arrays for dye sensitized solar cells. 2014 , 268, 941-949		39
837	Elucidating the role of non-radiative processes in charge transfer of core-shell SiO ₂ nanoparticles. 2014 , 112, 422-429		3
836	Heterogeneity in Dye/TiO ₂ Interactions Dictate Charge Transfer Efficiencies for Diketopyrrolopyrrole-Based Polymer Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 29650-29662	3.8	4
835	Silver Conducting Lines of Dye-sensitized Solar Cells Printed onto Commercial Building Tiles. 2014 , 79, 267-272		1
834	Preparation and characterization of ZnO/graphene nanocomposite for improved photovoltaic performance. 2014 , 16, 1		22
833	Supramolecular formation of Li(+) @PCBM fullerene with sulfonated porphyrins and long-lived charge separation. 2014 , 15, 3782-90		12
832	Understanding and Promoting Molecular Interactions and Charge Transfer in Dye-Mediated Hybrid Photovoltaic Materials. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 25374-25391	3.8	3
831	Effect of Donor-Acceptor Substitution on Optoelectronic Properties of Conducting Organic Polymers. 2014 , 10, 4921-37		24
830	Theoretical investigation on structural and electronic properties of organic dye C258 on TiO ₂ (101) surface in dye-sensitized solar cells. 2014 , 16, 21827-37		21
829	Synthesis, structure, characterization and photophysical properties of copper(I) complexes containing polypyridyl ligands. 2014 , 4, 42624-42631		10
828	Highly stable dye-sensitized solar cells with quasi-solid-state electrolyte based on Flemion. <i>Solar Energy</i> , 2014 , 110, 648-655	6.8	4

827	Rational assembly and dual functionalization of Au@MnO heteroparticles on TiO ₂ nanowires. 2014 , 38, 2031-2036		1
826	In-depth exploration of the photophysics of a trinuclear palladium complex. 2014 , 16, 8332-8		9
825	Patterned liquid permeation through the TiO ₂ nanotube array coated Ti mesh by photoelectric cooperation for liquid printing. 2014 , 2, 2498		8
824	High surface area TiO ₂ nanoparticles by a freeze-drying approach for dye-sensitized solar cells. 2014 , 4, 36821-36827		18
823	Fluorene-bridged organic dyes with di-anchoring groups for efficient co-adsorbent-free dye-sensitized solar cells. <i>Journal of Materials Chemistry C</i> , 2014 , 2, 7086	7.1	31
822	TiO ₂ nanotube array micro-solid phase equilibrium extraction for the determination of bisphenol A, 4-n-nonylphenol, and 4-tert-octylphenol at trace levels with high-performance liquid chromatography. 2014 , 6, 8396-8402		2
821	Morphological and structural behavior of TiO ₂ nanoparticles in the presence of WO ₃ : crystallization of the oxide composite system. 2014 , 16, 19540-9		8
820	Analysis of benzoylurea insecticides in water samples with TiO ₂ nanotube array micro-solid phase extraction coupled to high performance liquid chromatography. 2014 , 4, 45946-45952		9
819	Facile method to attach transition metal ions to the surface of anatase TiO(2) nanorods. 2014 , 50, 5721-4		17
818	Highly ordered mesoporous CdxZn1-xSe ternary compound semiconductors with controlled band gap energies. 2014 , 38, 3729-3736		10
817	Novel polymer gel electrolyte with organic solvents for quasi-solid-state dye-sensitized solar cells. 2014 , 6, 18489-96		47
816	Fabrication and characterization of coil type transparent conductive oxide-less cylindrical dye-sensitized solar cells. 2014 , 4, 22959-22963		3
815	A modular LHC built on the DNA three-way junction. 2014 , 50, 159-61		38
814	Structural design of ruthenium sensitizer compatible with cobalt electrolyte for a dye-sensitized solar cell. 2014 , 2, 17551-17560		20
813	Elimination of ibuprofen and its relative photo-induced toxicity by mesoporous BiOBr under simulated solar light irradiation. 2014 , 4, 13061		37
812	Influence of Al ₂ O ₃ nanoparticles embedded-TiO ₂ nanofibers based photoanodes on photovoltaic performance of a dye sensitized solar cell. 2014 , 4, 52871-52877		15
811	Synthesis of nanoparticles of P3HT and PCBM for optimizing morphology in polymeric solar cells. 2014 , 323, 13-18		25
810	Enhancement of Optical and Electrochemical Properties via Bottom-Up Assembly of Binary Oligomer System. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 9578-9587	3.8	16

809	Tuning of Conductivity and Density of States of NiO Mesoporous Films Used in p-Type DSSCs. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 19556-19564	3.8	65
808	Influence of porphyrinic structure on electron transfer processes at the electrolyte/dye/TiO ₂ interface in PSSCs: a comparison between meso push-pull and porphyrinic architectures. 2014 , 6, 15841-52		28
807	Role of molybdenum oxide for organic electronics: Surface analytical studies. 2014 , 32, 040801		36
806	Photo-stable substituted dihydroindolo[2,3-b]carbazole-based organic dyes: tuning the photovoltaic properties by optimizing the structure for panchromatic DSSCs. 2014 , 70, 8122-8128		11
805	Photophysical properties of cis-Mo ₂ quadruply bonded complexes and observation of photoinduced electron transfer to titanium dioxide. 2014 , 136, 11428-35		10
804	Organotitanias: a versatile approach for band gap reduction in titania based materials. <i>Journal of Materials Chemistry C</i> , 2014 , 2, 9497-9504	7.1	19
803	Structural and Photoelectrochemical Properties of DC Magnetron-Sputtered TiO ₂ Layers on FTO. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 25234-25244	3.8	9
802	Titanium-oxo cluster with 9-anthracenecarboxylate antennae: a fluorescent and photocurrent transfer material. 2014 , 53, 7233-40		50
801	Synthesis and characterization of organic dyes with various electron-accepting substituents for p-type dye-sensitized solar cells. 2014 , 9, 3251-63		23
800	Reduced Recombination by Fullerene Compositated Metal Oxide as Electron Extraction Layers for Hybrid Optoelectronic Devices. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 18962-18968	3.8	7
799	Advances and challenges for flexible energy storage and conversion devices and systems. 2014 , 7, 2101		650
798	Investigation of dye regeneration kinetics in sensitized solar cells by scanning electrochemical microscopy. 2014 , 15, 1182-9		20
797	Preparation and Characterization of Squaraine Dyes containing Mono- and Bis-Anchoring Groups as the Light Absorber in Dye Sensitized Solar Cells. <i>Electrochimica Acta</i> , 2014 , 138, 148-154	6.7	13
796	Theoretical screening of novel alkyne bridged zinc porphyrins as sensitizer candidates for dye-sensitized solar cells. 2014 , 133, 514-20		3
795	Synthesis of Cuboid-Shaped Single-Crystalline TiO ₂ Nanocrystals with High-Energy Facets {001} and Its Dye-Sensitized Solar Cell Application. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 16703-16709	3.8	24
794	Fluorescence in rhoda- and iridacyclopentadienes neglecting the spin-orbit coupling of the heavy atom: the ligand dominates. 2014 , 53, 7055-69		29
793	Theoretical studies on the interaction of ruthenium sensitizers and redox couple in different deprotonation situations. <i>Journal of Physical Chemistry A</i> , 2014 , 118, 2244-52	2.8	11
792	Modification of TiO ₂ electrode with organic silane interposed layer for high-performance of dye-sensitized solar cells. 2014 , 6, 5818-26		44

791	Probing Raman enhancement in a dopamine-TiO ₂ hybrid using stretched molecular geometries. <i>Journal of Physical Chemistry A</i> , 2014 , 118, 1196-202	2.8	8
790	Analysis of hole transport in thin films and nanoparticle assemblies of poly(3-hexylthiophene). 2014 , 610-611, 273-277		9
789	Enhanced photovoltaic effect of ruthenium complex-modified graphene oxide with P-type conductivity. 2014 , 147, 1140-1145		7
788	Toward a Quantitative Assessment of Electronic Transitions' Charge-Transfer Character. 2014 , 10, 3896-905		114
787	New Insight into the Topology of Excited States through Detachment/Attachment Density Matrices-Based Centroids of Charge. 2014 , 10, 3906-14		102
786	Lead methylammonium triiodide perovskite-based solar cells: an interfacial charge-transfer investigation. 2014 , 7, 3088-94		47
785	Design of D π A organic dyes with different acceptor and auxiliary acceptor for highly efficient dye-sensitized solar cells: a computational study. 2014 , 4, 50338-50350		32
784	Conditions for Directional Charge Transfer in CdSe Quantum Dots Functionalized by Ru(II) Polypyridine Complexes. 2014 , 5, 3565-76		24
783	Optics-Electrics highways: Plasmonic silver nanowires@TiO ₂ core-shell nanocomposites for enhanced dye-sensitized solar cells performance. 2014 , 10, 181-191		58
782	Mesoporous titania beads for flexible dye-sensitized solar cells. <i>Journal of Materials Chemistry C</i> , 2014 , 2, 1284-1289	7.1	16
781	Assemblies from metallic and semiconducting nanocrystals. 2014 , 115, 617-625		2
780	Improving photoelectrical performance of dye sensitized solar cells by doping Y ₂ O ₃ :Tb ³⁺ nanorods. 2014 , 25, 2060-2065		6
779	TiO ₂ and TiO ₂ /SiO ₂ nanoparticles obtained by sol-gel method and applied on dye sensitized solar cells. 2014 , 72, 273-281		17
778	Atomic-scale observation of multiconformational binding and energy level alignment of ruthenium-based photosensitizers on TiO ₂ anatase. 2014 , 14, 563-9		60
777	Enhanced performance of dye co-sensitized solar cells by panchromatic light harvesting. 2014 , 64, 904-909		9
776	Indolo[2,3-b]carbazole synthesized from a double-intramolecular Buchwald-Hartwig reaction: its application for a dianchor DSSC organic dye. 2014 , 16, 3176-9		40
775	Lessons learned: from dye-sensitized solar cells to all-solid-state hybrid devices. 2014 , 26, 4013-30		133
774	Organic Sensitizers with Pyridine Ring Anchoring Group for p-Type Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 16433-16440	3.8	61

773	Tuning Interfacial Charge Separation by Molecular Twist: A New Insight into Coumarin-Sensitized TiO ₂ Films. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 10661-10669	3.8	21
772	Time-dependent density-functional theory for open electronic systems. 2014 , 57, 26-35		5
771	Recent Trends in Nanotechnology and Materials Science. 2014 ,		4
770	Frequency-Modulated Gigahertz Complex Conductivity of TiO ₂ Nanoparticles: Interplay of Free and Shallowly Trapped Electrons. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 22561-22572	3.8	34
769	Dinuclear ruthenium complexes containing a new ditopic phthalazin-bis(triazole) ligand that promotes metal-metal interactions. 2014 , 38, 1980-1987		16
768	Review on modified N-TiO ₂ for green energy applications under UV/visible light: selected results and reaction mechanisms. 2014 , 4, 28265-28299		125
767	Recent Advances in the Field of Iridium-Catalyzed Molecular Water Oxidation. 2014 , 113-133		11
766	Understanding interfacial charge transfer between metallic PEDOT counter electrodes and a cobalt redox shuttle in dye-sensitized solar cells. 2014 , 6, 2074-9		40
765	The synthesis, molecular structure and photophysical properties of 2, 9, 16, 23-tetrakis (7-coumarinoxy-4-methyl)-phthalocyanine sensitizer. 2014 , 1060, 17-23		12
764	Monoanchoring (D-D-EA) and Dianchoring (D-D-(EA) ₂) Organic Dyes Featuring Triarylamine Donors Composed of Fluorene and Carbazole. 2014 , 3, 886-898		8
763	Optimizing the photovoltaic performance of thiocyanate-free ruthenium photosensitizers by structural modification of C ^N cyclometalating ligand in dye-sensitized solar cells. 2014 , 82, 71-79		6
762	Magnetic-field enhanced photovoltaic performance of dye-sensitized TiO ₂ nanoparticle-based solar cells. 2014 , 591, 166-169		6
761	Facile synthesis of Y ₂ O ₃ :Dy ³⁺ nanorods and its application in dye-sensitized solar cells. 2014 , 293, 202-206		20
760	Highly accurate excited-state structure of [Os(bpy) ₂ dc bpy](²⁺) determined by X-ray transient absorption spectroscopy. 2014 , 136, 8804-9		38
759	Characterization of ferrocene-modified electrode using electrochemical surface forces apparatus. 2014 , 30, 7093-7		18
758	Physikalische Chemie 2013. 2014 , 62, 313-321		6
757	Computational study on zinc porphyrin analogs for use in dye-sensitized solar cells. 2014 , 18, 406-415		3
756	Solid-State Dye-Sensitized Solar Cells. 2014 , 465-494		

755	Molecular design of donor-acceptor dyes for efficient dye-sensitized solar cells I: a DFT study. 2014 , 20, 2241		28
754	Functional gels based on chemically modified graphenes. 2014 , 26, 3992-4012		248
753	Cluster Approach To Model Titanium Dioxide as Isolated or Organic Dye Sensitized Nanoobjects. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 6009-6018	3.8	16
752	Chemical Doping of TiO ₂ with Nitrogen and Fluorine and Its Support Effect on Catalytic Activity of CO Oxidation. 2014 , 144, 1411-1417		21
751 ¹	2,6-Conjugated Bodipy sensitizers for high-performance dye-sensitized solar cells. <i>Organic Electronics</i> , 2014 , 15, 2079-2090	3.5	38
750 ^o	Thieno[2,3-a]carbazole-based donor-acceptor organic dyes for efficient dye-sensitized solar cells. 2014 , 70, 6211-6216		17
749	A nanostructure-based counter electrode for dye-sensitized solar cells by assembly of silver nanoparticles. <i>Organic Electronics</i> , 2014 , 15, 1641-1649	3.5	15
748	Structure and Photo-Induced Charge Transfer of Pyridine Molecules Adsorbed on TiO ₂ (110): A NEXAFS and Core-Hole-Clock Study. 2014 , 82, 341-345		2
747	Fabrication of Microfibre-Nanowire Junction Arrays of ZnO/SnO ₂ Composite by the Carbothermal Evaporation Method. 2014 , 4, 21		7
746	First principles study of hydrogen doping in anatase TiO ₂ . 2014 , 67, 30401		10
745	Antiferromagnetic structures and electronic energy levels at reconstructed NiO(111) surfaces: A DFT+U study. 2015 , 91,		17
744	Atomic layer deposition of epitaxial layers of anatase on strontium titanate single crystals: Morphological and photoelectrochemical characterization. 2015 , 33, 01A135		4
743	Block Copolymer Packing Limits and Interfacial Reconfigurability in the Assembly of Periodic Mesoporous Organosilicas. 2015 , 25, 4120-4128		16
742	Performance Enhancement of Electronic and Energy Devices via Block Copolymer Self-Assembly. 2015 , 27, 3982-98		79
741 ¹	Synthesis of Anatase Mesoporous TiO ₂ by Using Cyclodextrin as a Pore Forming Template via Hydrothermal Treatment. 2015 , 36, 1694-1698		
740 ^o	Mesoporous Materials-Based Electrochemical Enzymatic Biosensors. 2015 , 27, 2028-2054		40
739	The Evidence for Fullerene Aggregation in High-Performance Small-Molecule Solar Cells by Molecular Dynamics Simulation. 2015 , 1, 1500217		16
738	Investigation of Coral-Like Cu ₂ O Nano/Microstructures as Counter Electrodes for Dye-Sensitized Solar Cells. 2015 , 8, 5715-5729		15

737	Efficiency Enhancement of Cocktail Dye of <i>Ixora coccinea</i> and <i>Tradescantia spathacea</i> in DSSC. 2015 , 2015, 582091	14
736	Electrodeposition of Thin Films for Low-cost Solar Cells. 2015 ,	5
735	Photophysical and electrochemical studies of multinuclear complexes of iron(II) with acetate and extended conjugated N-donor ligands. 2015 , 2015, 860537	3
734	Enhanced dye-sensitized solar cell photocurrent and efficiency using a Y-shaped, pyrazine-containing heteroaromatic sensitizer linkage. 2015 , 17, 15788-96	13
733	Magnetic, thermal, mesomorphic and thermoelectric properties of mononuclear, dimeric and polymeric iron(II) complexes with conjugated ligands. 2015 , 5, 50999-51007	6
732	Stable organic dyes based on the benzo[1,2-b:4,5-b']dithiophene donor for efficient dye-sensitized solar cells. 2015 , 3, 8083-8090	27
731	Quantum dynamical simulation of photoinduced electron transfer processes in dye-semiconductor systems: theory and application to coumarin 343 at TiO ₂ 2015 , 27, 134202	18
730	Co-sensitization of 3D bulky phenothiazine-cored photosensitizers with planar squaraine dyes for efficient dye-sensitized solar cells. 2015 , 3, 13848-13855	46
729	Selective formation of hydrogen peroxide by oxygen reduction on TiO ₂ nanotubes in alkaline media. <i>Electrochimica Acta</i> , 2015 , 174, 557-562	6.7 19
728	Supramolecular bimetallic assemblies for photocatalytic hydrogen generation from water. 2015 , 185, 143-70	31
727	Surface plasma resonance enhanced photocurrent generation in NiO photoanode based solar cells. 2015 , 199, 1-8	6
726	Enhance the performance of co-sensitized solar cell by a series efficient pyridine-anchor co-adsorbents of N,N'-bis((pyridin-2-yl)methylene)-p-phenylenediimine and a ruthenium dye of N719. 2015 , 293, 203-212	13
725	Reactively sputtered nickel nitride as electrocatalytic counter electrode for dye- and quantum dot-sensitized solar cells. 2015 , 5, 10450	66
724	Shifting the Sun: Solar Spectral Conversion and Extrinsic Sensitization in Natural and Artificial Photosynthesis. 2015 , 2, 1500218	55
723	Comparison between thin-film solar cells and copper ^{II} indium ^{III} gallium ^{III} selenide in Southeast Asia. 2015 , 9, 1079-1086	3
722	Rational modifications on ruthenium terpyridine sensitizers with large J _{sc} for dye-sensitized solar cells: combined DFT and relativistic TDDFT studies. 2015 , 5, 100169-100175	2
721	Insights into the Spin-State Transitions in [Fe(tpy) ₂] ²⁺ : Importance of the Terpyridine Rocking Motion. 2015 , 54, 11259-68	42
720	Ligand-centred fluorescence and electronic relaxation cascade at vibrational time scales in transition-metal complexes. 2015 , 6, 4475-80	23

719	The Synthesis, Characterisation, Photophysical and Thermal Properties, and Photovoltaic Performance of 7-Coumarinoxy-4-Methyltetrasubstituted Metallophthalocyanines. 2015 , 68, 1025		12
718	Review on the degradation and device physics of quantum dot solar cells. 2015 , 29, 1530008		7
717	Synthesis and Performance of New Organic Dyes and Functional Fullerenes for Organic Solar Cells. 2015 , 193-236		1
716	Optical properties of dye based on hydroxamate improved with designed tridentate ligands for dye sensitized solar cell: a theoretical study. 2015 , 31, 830-834		3
715	Synthesis, characterisation, electrochemical study and photovoltaic measurements of a new terpyridine and pyridine-quinoline based mixed chelate ruthenium dye. 2015 , 102, 615-626		10
714	Fe ₃ W ₃ C/WC/graphitic carbon ternary nanojunction hybrids for dye-sensitized solar cells. 2015 , 8, 726-33		13
713	Photoelectrochemical enhancement of ternary nanocomposite electrode polyoxometalate/copper quantum dots/TiO ₂ with electrocatalytic performance of formic acid oxidation. <i>Electrochimica Acta</i> , 2015 , 155, 1-7	6.7	7
712	Efficiency enhancement of dye-sensitized TiO ₂ solar cell based on ruthenium(II) terpyridyl complex photosensitizer. 2015 , 39, 977-992		6
711	Recent progress in organic sensitizers for dye-sensitized solar cells. 2015 , 5, 23810-23825		181
710	Design of Bodipy based organic dyes for high-efficient dye-sensitized solar cells employing double electron acceptors. <i>Dyes and Pigments</i> , 2015 , 117, 28-36	4.6	37
709	Ambient Layer-by-Layer ZnO Assembly for Highly Efficient Polymer Bulk Heterojunction Solar Cells. 2015 , 25, 1558-1564		22
708	Uniform nanostructured photoelectrodes made of a zinc-stabilized TiO ₂ gel for dye-sensitized solar cell applications. 2015 , 32, 90-99		8
707	On the redox mechanism operating along C ₂ H ₂ self-assembly at the surface of TiO ₂ . 2015 , 31, 569-77		14
706	Electrolytes in dye-sensitized solar cells. 2015 , 115, 2136-73		744
705	Time-domain ab initio modeling of photoinduced dynamics at nanoscale interfaces. 2015 , 66, 549-79		103
704	Two-step Hydrothermal Syntheses and Structures of Three Tantalum Oxyfluoride Compounds with [M(phen) ₃] ²⁺ (M = Ru, Fe) Counter Ions. 2015 , 641, 704-709		1
703	A meso-meso directly linked porphyrin dimer-based double D-πA sensitizer for efficient dye-sensitized solar cells. 2015 , 51, 3782-5		28
702	Thieno[2,3,a]carbazole donor-based organic dyes for high efficiency dye-sensitized solar cells. 2015 , 2, 253-258		12

701	Nanoenergy Materials. 2015 , 255-291		3
700	Efficient improvements in the performance of Ru(II) Expanded terpyridyl dyes in dye-sensitized solar cells: A theoretical study. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2015 , 301, 40-46	4.7	9
699	Interfacial carrier dynamics in PbS-ZnO light harvesting assemblies and their potential implication in photovoltaic/ photocatalysis application. 2015 , 134, 400-406		35
698	Tailoring of energy levels in D- π -A organic dyes via fluorination of acceptor units for efficient dye-sensitized solar cells. 2015 , 5, 7711		43
697	Facet-Dependent Electron Trapping in TiO ₂ Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 1913-1920	3.8	44
696	Carbonaceous Dye-Sensitized Solar Cell Photoelectrodes. 2015 , 2, 1400025		37
695	Design of organic dyes for dye-sensitized solar cells: Extending π conjugation backbone via Click reaction to improve photovoltaic performances. <i>Dyes and Pigments</i> , 2015 , 117, 108-115	4.6	7
694	Enhanced charge collection in dye-sensitized solar cells utilizing collector/hell electrodes. 2015 , 277, 343-349		2
693	Theories of phosphorescence in organo-transition metal complexes [From relativistic effects to simple models and design principles for organic light-emitting diodes. <i>Coordination Chemistry Reviews</i> , 2015 , 295, 46-79	23.2	83
692	Polymer electrolytes and perovskites: lights and shadows in photovoltaic devices. <i>Electrochimica Acta</i> , 2015 , 175, 151-161	6.7	73
691	Probing the Locality of Excited States with Linear Algebra. 2015 , 11, 1692-9		32
690	DFT analysis of substituent effects on electron-donating efficacy of pyridine. 2015 , 41, 6859-6875		5
689	Effect of pH in the photoluminescence of a ruthenium complex featuring a derivative of the ligand pyrazine[2,3-f][1,10]-phenanthroline. 2015 , 146, 61-5		4
688	Synthesis and photovoltaic performance of asymmetric di-anchoring organic dyes. <i>Dyes and Pigments</i> , 2015 , 122, 13-21	4.6	19
687	Electron-Transfer Dynamics for a Donor-Bridge-Acceptor Complex in Ionic Liquids. 2015 , 119, 11336-45		12
686	Crucial role of sustainable liquid junction potential for solar-to-carbon monoxide conversion by a photovoltaic photoelectrochemical system. 2015 , 5, 54246-54252		26
685	Electronic Structure of the Perylene/zinc Oxide Interface: Computational Study of Photoinduced Electron Transfer and Impact of Surface Defects. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 18843-18858	3.8	9
684	Enhancing the efficiency of dye-sensitized solar cells by adding diatom frustules into TiO ₂ working electrodes. 2015 , 347, 64-72		13

683	Investigation of benzo(1,2-b:4,5-b?)dithiophene as a spacer in organic dyes for high efficient dye-sensitized solar cell. <i>Organic Electronics</i> , 2015 , 25, 245-253	3.5	5
682	Charge transfer and storage in nanostructures. 2015 , 96, 1-69		62
681	Microwave-enhanced photocatalysis on CdS quantum dots--Evidence of acceleration of photoinduced electron transfer. 2015 , 5, 11308		21
680	Highly crystalline, small sized, monodisperse NiS nanocrystal ink as an efficient counter electrode for dye-sensitized solar cells. 2015 , 3, 15905-15912		59
679	Preparation of silver nanowires coated with TiO_2 using chemical binder and their applications as photoanodes in dye sensitized solar cell. 2015 , 86, 122-130		9
678	Effect of ion-chelating chain lengths in thiophene-based monomers on in situ photoelectrochemical polymerization and photovoltaic performances. 2015 , 7, 11482-9		6
677	A tetrathiafulvalene-grafted titanium-oxo-cluster material: self-catalyzed crystal exfoliation and photocurrent response properties. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 409-415	7.1	28
676	Antimony sulfide as a light absorber in highly ordered, coaxial nanocylindrical arrays: preparation and integration into a photovoltaic device. 2015 , 3, 5971-5981		34
675	Efficient co-sensitization of dye-sensitized solar cells by novel porphyrin/triazine dye and tertiary aryl-amine organic dye. <i>Organic Electronics</i> , 2015 , 25, 295-307	3.5	33
674	Photovoltaic properties of dye sensitised solar cells using TiO_2 nanotube arrays for photoanodes: Role of hydrochloric acid treatment. 2015 , 355, 256-261		13
673	Scanning Probe Characterization of Heterostructured Colloidal Nanomaterials. 2015 , 115, 8157-81		27
672	Theoretical studies of fluorine substituent effect on organic photo-sensitizers in dye sensitized solar cells. 2015 , 1067, 119-128		4
671	Correlating Changes in Electron Lifetime and Mobility on Photocatalytic Activity at Network-Modified TiO_2 Aerogels. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 17529-17538	3.8	32
670	An overview on visible light responsive metal oxide based photocatalysts for hydrogen energy production. 2015 , 5, 61535-61553		117
669	Carboxy derivatised Ir(III) complexes: synthesis, electrochemistry, photophysical properties and photocatalytic hydrogen generation. 2015 , 44, 10423-30		17
668	Investigation of photoinduced electron transfer on TiO_2 nanowire arrays/porphyrin composite via scanning electrochemical microscopy. 2015 , 5, 56697-56703		4
667	Dye-sensitized solar cells based on dyes extracted from dried plant leaves. 2015 , 39, 24-30		23
666	A strategy of engineering impurity distribution in metal oxide nanostructures for photoelectrochemical water splitting. 2015 , 1, 134-145		14

665	Effect of swift heavy ion (SHI) irradiation on transparent conducting oxide electrodes for dye-sensitized solar cell applications. 2015 , 353, 35-41		8
664	Synthesis of arylsulfanyl-subphthalocyanines and their ring expansion reaction. 2015 , 19, 688-694		2
663	The Power of Materials Science Tools for Gaining Insights into Organic Semiconductors. 2015 , 45, 459-490		31
662	Novel Semiconductor-Liquid Heterojunction Solar Cells Based on Cuprous Oxide and Iodine Electrolyte. <i>Electrochimica Acta</i> , 2015 , 167, 112-118	6.7	2
661	Efficient thieno[3,2-a]carbazole-based organic dyes for dye-sensitized solar cells. 2015 , 71, 6534-6540		7
660	Enhanced photovoltaic properties in graphitic carbon nanospheres networked TiO ₂ nanocomposite based dye sensitized solar cell. <i>Journal of Alloys and Compounds</i> , 2015 , 641, 99-105	5.7	5
659	Discovering the intermediate of dye regeneration in dye-sensitized solar cells: Theoretical investigations on the interaction between organic dye with different donors and . <i>Dyes and Pigments</i> , 2015 , 120, 74-84	4.6	21
658	Coherent and Incoherent Contributions to Charge Separation in Multichromophore Systems. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 7590-7603	3.8	17
657	Artificial photosynthesis based on ruthenium(II) tetrazole-dye-sensitized nanocrystalline TiO ₂ solar cells. 2015 , 152, 4-13		7
656	Simple Metal-Free Dyes Derived from Triphenylamine for DSSC: A Comparative Study of Two Different Anchoring Group. <i>Electrochimica Acta</i> , 2015 , 169, 256-263	6.7	23
655	Effect of TiO ₂ particles on normal and resonance Raman spectra of coumarin 343: a theoretical investigation. 2015 , 17, 10910-8		9
654	Metal-free tetrathienoacene sensitizers for high-performance dye-sensitized solar cells. 2015 , 137, 4414-23		210
653	Exploring Photoinduced Excited State Evolution in Heterobimetallic Ru(II)-Co(III) Complexes. 2015 , 119, 7378-92		9
652	Enhancing the Efficiency and Charge Transport Characteristics of Dye-Sensitized Solar Cells by Adding Graphene Nanosheets to TiO ₂ Working Electrodes. <i>Electrochimica Acta</i> , 2015 , 165, 356-364	6.7	15
651	Effect of morphology of ZnO nanowire arrays on photovoltaic and electron transport properties of DSSC. 2015 , 81, 012046		4
650	Synthesis and dye sensitized solar cell applications of Bodipy derivatives with bis-dimethylfluorenyl amine donor groups. 2015 , 39, 4086-4092		34
649	Electrosynthesis of highly transparent cobalt oxide water oxidation catalyst films from cobalt aminopolycarboxylate complexes. 2015 , 8, 1394-403		19
648	Poly(aniline-co-o-toluidine):poly(styrene sulfonic acid) nanocolloidal self assembled multilayer thin films as a hole transport layer in organic solar cells. 2015 , 34, 382-389		6

647	Theoretical studies on the absorption spectra and intramolecular charge transfer of push-pull zinc porphyrin dyes for dye-sensitized solar cells. 2015 , 31, 276-280		5
646	Vegetable-based dye-sensitized solar cells. 2015 , 44, 3244-94		241
645	Self-cleaning applications of TiO ₂ by photo-induced hydrophilicity and photocatalysis. 2015 , 176-177, 396-428		541
644	Dye-sensitized solar cells using TiO ₂ nanoparticles: a review. 2015 , 6, 35		1
643	Single-molecule interfacial electron transfer dynamics of porphyrin on TiO ₂ nanoparticles: dissecting the interfacial electric field and electron accepting state density dependent dynamics. 2015 , 51, 16821-4		21
642	The effect of anchoring groups on the electro-optical and charge injection in triphenylamine derivatives@TiO ₂ . 2015 , 14, 1550027		20
641	Plasmon Enhanced Photovoltaic Performance in TiO ₂ -Graphene Oxide Composite Based Dye-Sensitized Solar Cells. 2015 , 4, M64-M68		5
640	Substituents role in zinc phthalocyanine derivatives used as dye-sensitized solar cells. A theoretical study using Density Functional Theory. 2015 , 639, 172-177		14
639	Protocol for High-Sensitivity Surface Area Measurements of Nanostructured Films Enabled by Atomic Layer Deposition of TiO ₂ . <i>Journal of Physical Chemistry C</i> , 2015 , 119, 26119-26127	3.8	7
638	Steady-state and time-resolved luminescence of Ru(II) polypyridine complexes attached to Ag nanoparticles: Effect of chemisorption in comparison with electrostatic bonding. 2015 , 150, 657-63		1
637	Graphene-Based Dye-Sensitized Solar Cells: A Review. 2015 , 7, 1863-1912		85
636	High-Performance Gel-Type Dye-Sensitized Solar Cells Using Poly (methyl methacrylate-co-ethylacrylate)-Based Polymer Gel Electrolyte with Superior Enduring Stability. <i>Journal of the Electrochemical Society</i> , 2015 , 162, H922-H928	3.9	2
635	An annealing-free anatase TiO ₂ nanocrystal film as an electron collection layer in organic solar cells. 2015 , 5, 88973-88978		8
634	The luminescence properties of the heteroleptic [Re(CO) ₃ (N ₂ N)Cl] and [Re(CO) ₃ (N ₂ N)(CH ₃ CN)](+) complexes in view of the combined Marcus-Jortner and Mulliken-Hush formalism. 2015 , 17, 30468-80		22
633	Synthesis, characterization and theoretical studies of the heteroleptic Ruthenium(II) complexes of 2,6-bis(benzimidazolyl)pyridine. 2015 , 100, 170-179		4
632	Strategies for optimizing the performance of carbazole thiophene appended unsymmetrical squaraine dyes for dye-sensitized solar cells. 2015 , 17, 23095-103		25
631	Thermal equilibrium properties of surface hopping with an implicit Langevin bath. <i>Journal of Chemical Physics</i> , 2015 , 142, 024110	3.9	13
630	Nonplanar Organic Sensitizers Featuring a Tetraphenylethene Structure and Double Electron-Withdrawing Anchoring Groups. 2015 , 80, 9034-40		25

629	Unraveling the charge transfer/electron transport in mesoporous semiconductive TiO ₂ films by voltabsorptometry. 2015 , 17, 10592-607		21
628	Sono-chemical successive ionic layer adsorption and reaction for the synthesis of CdS quantum dots onto mesoporous TiO ₂ photoanodes. 2015 , 54, 070304		5
627	Charge transfer in photorechargeable composite films of TiO ₂ and polyaniline. 2015 , 54, 071101		3
626	Theoretical study on the hydrophobic and hydrophilic hydration on large solutes: The case of phthalocyanines in water. <i>Journal of Chemical Physics</i> , 2015 , 143, 044502	3.9	3
625	Effects of rubrene co-sensitized TiO ₂ photoanode on the performance of ruthenium dye N719 sensitized solar cells. 2015 , 592, 14-23		8
624	Theoretical studies of heteroatom-doping in TiO ₂ to enhance the electron injection in dye-sensitized solar cells. 2015 , 5, 79868-79873		11
623	Rapid solid-state metathesis route to transition-metal doped titanias. 2015 , 232, 241-248		7
622	Encapsulated β -carotene in ZnO nanotubes: Theoretical insight into the stabilization dynamics. 2015 , 636, 62-66		6
621	The combination of a new organic D π A dye with different organic hole-transport materials for efficient solid-state dye-sensitized solar cells. 2015 , 3, 4420-4427		35
620	Recent advances in dye-sensitized photoelectrochemical cells for solar hydrogen production based on molecular components. 2015 , 8, 760-775		326
619	Investigation of graphene nanosheets as counter electrodes for efficient dye-sensitized solar cells. <i>Organic Electronics</i> , 2015 , 17, 57-65	3.5	26
618	Enhanced photochromic efficiency of transparent and flexible nanocomposite films based on PEOBPOBEO and tungstate hybridization. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 177-186	7.1	17
617	Synthesis of phenothiazine-based di-anchoring dyes containing fluorene linker and their photovoltaic performance. <i>Dyes and Pigments</i> , 2015 , 114, 47-54	4.6	41
616	Nanostructured thin films based on TiO ₂ and/or SiC for use in photoelectrochemical cells: A review of the material characteristics, synthesis and recent applications. 2015 , 29, 56-68		59
615	Highly porous titania films coated on sub-micron particles with tunable thickness by molecular layer deposition in a fluidized bed reactor. 2015 , 41, 2240-2246		16
614	Novel carbazole based sensitizers for efficient dye-sensitized solar cells: Role of the hexyl chain. <i>Dyes and Pigments</i> , 2015 , 114, 18-23	4.6	19
613	Dye-sensitized solar cells with improved performance using cone-calix[4]arene based dyes. 2015 , 8, 280-7		21
612	Transparent conductive oxide-less back contact dye-sensitized solar cells using cobalt electrolyte. 2015 , 23, 1100-1109		13

611	SubPc-ZnPorphyrin conjugates [Synthesis, characterization and properties. <i>Dyes and Pigments</i> , 2015 , 112, 283-289	4.6	7
610	Theoretical studies of electronic and optical properties of the triphenylamine-based organic dyes with diketopyrrolopyrrole chromophore. <i>Dyes and Pigments</i> , 2015 , 113, 87-95	4.6	41
609	A layer-by-layer ZnO nanoparticle-PbS quantum dot self-assembly platform for ultrafast interfacial electron injection. 2015 , 11, 112-8		28
608	Carbazole-bridged double D π A dye for efficient dye-sensitized solar cell. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2015 , 296, 1-10	4.7	12
607	Near-IR organic sensitizers containing squaraine and phenothiazine units for dye-sensitized solar cells. <i>Dyes and Pigments</i> , 2015 , 113, 18-26	4.6	26
606	Solar Energy Conversion [Natural to Artificial. 2016 ,		
605	Dye Sensitized Solar Cells with Low Cost Carbon Nanotubes Electrodes. 2016 , 2016, 1-13		6
604	Enhancing Performance of SnO ₂ -Based Dye-Sensitized Solar Cells Using ZnO Passivation Layer. 2016 , 2016, 1-8		3
603	Inorganic p-Type Semiconductors: Their Applications and Progress in Dye-Sensitized Solar Cells and Perovskite Solar Cells. 2016 , 9, 331		57
602	Characterizing the Solvated Structure of Photoexcited [Os(terpy)] ^{II} (2+) with X-ray Transient Absorption Spectroscopy and DFT Calculations. 2016 , 21, 235		6
601	Investigation of Ultrafast Electronic Transfer Process on Organic/Inorganic Heterojunction by Femtosecond Transient Absorption. 2016 , 29, 389-394		1
600	The Effect of Donor Group Rigidification on the Electronic and Optical Properties of Arylamine-Based Metal-Free Dyes for Dye-Sensitized Solar Cells: A Computational Study. <i>Journal of Physical Chemistry A</i> , 2016 , 120, 5917-27	2.8	40
599	The Structure-property Relationships of D- π A BODIPY Dyes for Dye-sensitized Solar Cells. 2016 , 16, 719-33		37
598	Band Edge Modulated Polymer Layer to Decrease Back Electron Transfer and Increase Efficiency in Sensitized Solar Cells. <i>Advanced Energy Materials</i> , 2016 , 6, 1502334	21.8	7
597	Effect of Molecular Coupling on Ultrafast Electron-Transfer and Charge-Recombination Dynamics in a Wide-Gap ZnS Nanoaggregate Sensitized by Triphenyl Methane Dyes. 2016 , 17, 724-30		3
596	The potential of imogolite nanotubes as (co-)photocatalysts: a linear-scaling density functional theory study. 2016 , 28, 074003		20
595	(D) π D π A-Type Organic Dyes for Efficient Dye-Sensitized Solar Cells. 2016 , 2016, 2528-2538		8
594	Light-Driven Delivery and Release of Materials Using Liquid Marbles. 2016 , 26, 3199-3206		138

593	Metal-Organic Framework (MOF) Compounds: Photocatalysts for Redox Reactions and Solar Fuel Production. 2016 , 55, 5414-45		675
592	Our Expedition in Linear Neutral Platinum-Acetylide Complexes: The Preparation of Micro/nanostructure Materials, Complicated Topologies, and Dye-Sensitized Solar Cells. 2016 , 16, 1274-97		23
591	Photovoltaic properties of oriented ZnO nanowires arrays decorated with TiO ₂ shell layer for dye-sensitized solar cell application. 2016 , 52, 533-538		3
590	Hexagonal FeS nanosheets with high-energy (001) facets: Counter electrode materials superior to platinum for dye-sensitized solar cells. 2016 , 9, 2862-2874		34
589	Two New Armtype Polyoxometalates Grafted on Titanium Dioxide Films: Towards Enhanced Photoelectrochemical Performance. 2016 , 9, 1125-33		19
588	Optical and Electrochemical Properties of Anthraquinone Imine Based Dyes for Dye-Sensitized Solar Cells. 2016 , 2016, 756-767		5
587	Characterization and current-voltage characteristics of solar cells based on the composite of synthesized Sb ₂ S ₃ powder with small band gap and natural dye. 2016 , 35, 512-516		7
586	Ultrafast photoelectron migration in dye-sensitized solar cells: Influence of the binding mode and many-body interactions. <i>Journal of Chemical Physics</i> , 2016 , 145, 174704	3.9	11
585	Interactions between graphene oxide and wide band gap semiconductors. 2016 , 745, 032102		4
584	Natural Dye Extracted From <i>Saraca asoca</i> Flowers as Sensitizer for TiO ₂ -Based Dye-Sensitized Solar Cell. 2016 , 138, 051006		24
583	Interplay between mass-impurity and vacancy phonon scattering effects on the thermal conductivity of doped cadmium oxide. 2016 , 108, 021901		18
582	Influence of ball milling on textural and morphological properties of TiO ₂ and TiO ₂ /SiO ₂ xerogel powders applied in photoanodes for solar cells. 2016 , 20, 1731-1741		8
581	Synthesis and Characterization of Phenothiazine-Based Platinum(II)-Acetylide Photosensitizers for Efficient Dye-Sensitized Solar Cells. 2016 , 22, 3750-7		25
580	TRIZ to Support Blue-design of Products. 2016 , 39, 125-131		2
579	A Study of the Efficiency Enhancement of the Gel Electrolyte-based SnO ₂ Dye-sensitized Solar Cells Through the Use of Thin Insulating Layers. <i>Electrochimica Acta</i> , 2016 , 210, 138-146	6.7	9
578	Chemical synthesis of CdS onto TiO ₂ nanorods for quantum dot sensitized solar cells. 2016 , 58, 46-50		32
577	Synthesis of multi-donor dyes and influence of molecular design on dye-sensitized solar cells. 2016 , 6, 51807-51815		3
576	CBI Activation of Fluoroarenes: Synthesis, Structure, and Luminescence Properties of Copper(I) and Gold(I) Complexes Bearing 2-Phenylpyridine Ligands. 2016 , 35, 629-640		26

575	Phenothiazine-based dyes for efficient dye-sensitized solar cells. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 2404-2426	7.1	164
574	Influence of anchoring group numbers in an efficient pyridine-anchor co-adsorbent of pyridinecarboxaldimine substituted aminonaphthalene on the performance of N719 sensitized solar cells. 2016 , 6, 39972-39981		10
573	Dye regeneration mechanisms of dye sensitized solar cells: Quantum chemical studies on the interaction between iodide and O/S-containing organic dyes. <i>Dyes and Pigments</i> , 2016 , 132, 136-141	4.6	9
572	Electrochemical and Spectroscopic Properties of Boron Dipyrromethene- <i>thiophene</i> -triphenylamine-Based Dyes for Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 9068-9080	3.8	31
571	Copper Phenanthroline as a Fast and High-Performance Redox Mediator for Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 9595-9603	3.8	114
570	Over 75% incident-photon-to-current efficiency without solid electrodes. 2016 , 18, 12428-33		6
569	Electrochemistry of N4 Macrocyclic Metal Complexes. 2016 ,		25
568	Reactivity of Proton Sources with a Nickel Hydride Complex in Acetonitrile: Implications for the Study of Fuel-Forming Catalysts. 2016 , 55, 5079-87		35
567	A high efficiency ruthenium(II) tris-heteroleptic dye containing 4,7-dicarbazole-1,10-phenanthroline for nanocrystalline solar cells. 2016 , 6, 46487-46494		16
566	Improving performance of copper(I)-based dye sensitized solar cells through $[\text{3}][\text{7}]$ electrolyte manipulation. <i>Dyes and Pigments</i> , 2016 , 132, 72-78	4.6	21
565	Triphenylamine-based tri-anchoring organic dye with enhanced electron lifetime and long-term stability for dye sensitized solar cells. 2016 , 217, 248-255		15
564	Facile synthesis of fluorene-based hole transport materials for highly efficient perovskite solar cells and solid-state dye-sensitized solar cells. 2016 , 26, 108-113		89
563	Amorphous TiO ₂ Compact Layers via ALD for Planar Halide Perovskite Photovoltaics. 2016 , 8, 24310-4		52
562	Inhomogeneous and Complex Interfacial Electron-Transfer Dynamics: A Single-Molecule Perspective. 2016 , 1, 773-791		8
561	Low Temperature Atomic Layer Deposited TiO ₂ Compact Layers for Planar Perovskite Solar Cells. 2016 , 75, 111-116		1
560	Lithium salt- <i>anionic</i> surfactant lyotropic liquid crystalline gel-electrolytes with redox couple for dye sensitized solar cells. 2016 , 6, 97430-97437		9
559	Supramolecular Hemicage Cobalt Mediators for Dye-Sensitized Solar Cells. 2016 , 17, 3845-3852		13
558	Perspectives for solid biopolymer electrolytes in dye sensitized solar cell and battery application. 2016 , 65, 1098-1117		74

557	Influence of Ancillary Ligands in Dye-Sensitized Solar Cells. 2016 , 116, 9485-564		189
556	ORGANIC SEMICONDUCTORS: MANIPULATION AND CONTROL OF THE MICROSTRUCTURE OF ACTIVE LAYERS. 2016 , 159-193		1
555	Understanding why replacing I3 ⁻ by cobalt(II)/(III) electrolytes in bis(diimine)copper(I)-based dye-sensitized solar cells improves performance. 2016 , 4, 12995-13004		23
554	Activated kinetics in a nonequilibrium thermal bath. 2016 , 113, 9401-3		9
553	Poly(o-methoxyaniline) doped with an organic acid as cost-efficient counter electrodes for dye-sensitized solar cells. <i>Electrochimica Acta</i> , 2016 , 213, 791-801	6.7	18
552	Nanomedicine approaches in acute lymphoblastic leukemia. 2016 , 238, 123-138		32
551	Enhanced conversion efficiency of quasi solid state dye sensitized solar cells based on functionalized multi-walled carbon nanotubes incorporated TiO ₂ photoanode. 2016 , 27, 10010-10019		
550	Investigation on the photoconductivity of polyoxometalates. 2016 , 6, 81466-81470		6
549	In situ synthesis, enhanced luminescence and application in dye sensitized solar cells of YO/YOS:Eu nanocomposites by reduction of YO:Eu. 2016 , 6, 37133		24
548	Theoretical design and characterization of high-efficiency organic dyes with different electron-withdrawing groups based on C275 toward dye-sensitized solar cells. 2016 , 40, 9320-9328		15
547	Demonstration of intramolecular energy transfer in asymmetric bimetallic ruthenium(ii) complexes. 2016 , 45, 17241-17253		7
546	Towards scanning probe lithography-based 4D nanoprinting by advancing surface chemistry, nanopatterning strategies, and characterization protocols. 2016 , 45, 6289-6310		35
545	Are Very Small Emission Quantum Yields Characteristic of Pure Metal-to-Ligand Charge-Transfer Excited States of Ruthenium(II)-(Acceptor Ligand) Chromophores?. 2016 , 55, 7341-55		6
544	Ab initio calculation of ionization potential and electron affinity in solid-state organic semiconductors. 2016 , 93,		20
543	Reductive Coupling of Diynes at Rhodium Gives Fluorescent Rhodacyclopentadienes or Phosphorescent Rhodium 2,2'-Biphenyl Complexes. 2016 , 22, 10523-32		20
542	Dye-sensitized solar cells: Development, structure, operation principles, electron kinetics, characterisation, synthesis materials and natural photosensitisers. 2016 , 65, 183-213		103
541	Wrinkled silica/titania nanoparticles with tunable interwinkle distances for efficient utilization of photons in dye-sensitized solar cells. 2016 , 6, 30829		25
540	Heteroleptic ruthenium(ii) chromophores based on tunable polytopic 4'-(benzamido)-2,2':6',2''-terpyridines. 2016 , 45, 17850-17858		6

539	DFT and TD-DFT study of benzene and borazines containing chromophores for DSSC materials. 2016 , 61, 1267-1273		3
538	Charge Transfer Dynamics at Dye-Sensitized ZnO and TiO ₂ Interfaces Studied by Ultrafast XUV Photoelectron Spectroscopy. 2016 , 6, 24422		18
537	Understanding structure-property correlation of metal free organic dyes using interfacial electron transfer measurements. <i>Solar Energy</i> , 2016 , 139, 547-556	6.8	10
536	Molecular Architecture Studied by the Surface Forces Measurement. 2016 , 32, 12290-12303		6
535	Metall-organische Gerätverbindungen: Photokatalysatoren für Redoxreaktion und die Produktion von Solarbrennstoffen. 2016 , 128, 5504-5535		69
534	Coumarinyl azoimidazolyl complexes of osmium(II) hydridocarbonyls: spectroscopic and structural characterization, oxidation catalysis, photovoltaic effect and density functional theory computation. 2016 , 30, 323-334		4
533	Synthesis of conductive PSt-g-PANi/TiO ₂ nanocomposites by metal catalyzed and chemical oxidative polymerization. 2016 , 19, 585-595		3
532	A feasible scalable porphyrin dye for dye-sensitized solar cells under one sun and dim light environments. 2016 , 4, 11878-11887		68
531	Review: hydrothermal technology for smart materials. 2016 , 115, 354-376		99
530	Simultaneous Spectroscopic and Topographic Imaging of Single-Molecule Interfacial Electron-Transfer Reactivity and Local Nanoscale Environment. 2016 , 7, 2221-7		8
529	Facile one-pot synthesis of uniform niobium-doped titanium dioxide microparticles for nanostructured dye-sensitized solar cells. 2016 , 36, 112-121		4
528	Growth of 3D branched ZnO nanowire for DC-type piezoelectric nanogenerators. 2016 , 27, 6708-6712		10
527	Solution Deposition of Self-Assembled Benzoate Monolayers on Rutile (110): Effect of π Interactions on Monolayer Structure. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 11581-11589	3.8	11
526	Status and outlook of sensitizers/dyes used in dye sensitized solar cells (DSSC): a review. 2016 , 40, 1303-1320		128
525	Pt/Y ₂ O ₃ :Eu ³⁺ composite nanotubes: Enhanced photoluminescence and application in dye-sensitized solar cells. 2016 , 9, 2338-2346		17
524	Use of lithium iodide and tetrapropylammonium iodide in gel electrolytes for improved performance of quasi-solid-state dye-sensitized solar cells: Recording an efficiency of 6.40%. <i>Electrochimica Acta</i> , 2016 , 191, 1037-1043	6.7	19
523	Hierarchical zinc oxide pomegranate and hollow sphere structures as efficient photoanodes for dye-sensitized solar cells. 2016 , 226, 201-208		18
522	Thiophene-bithiazole based metal-free dye as DSSC sensitizer: Effect of co-adsorbents on photovoltaic efficiency. 2016 , 128, 101-110		8

521	Electrospraying-assisted rapid dye molecule uptake on the surfaces of TiO ₂ nanoparticles for speeding up dye-sensitized solar cell fabrication. 2016 , 144, 411-417		8
520	Exploring Interfacial Events in Gold-Nanocluster-Sensitized Solar Cells: Insights into the Effects of the Cluster Size and Electrolyte on Solar Cell Performance. 2016 , 138, 390-401		99
519	Triphenylamine based dyes for dye sensitized solar cells: A review. <i>Solar Energy</i> , 2016 , 123, 127-144	6.8	154
518	Exact exchange and the density functional theory of metal-to-ligand charge-transfer in fac-Ir(ppy) ₃ . <i>Organic Electronics</i> , 2016 , 33, 110-115	3.5	11
517	Nonadiabatic Molecular Dynamics for Thousand Atom Systems: A Tight-Binding Approach toward PYXAID. 2016 , 12, 1436-48		82
516	Ultrafast excited state dynamics of [Cr(CO) ₄ (bpy)]: revealing the relaxation between triplet charge-transfer states. 2016 , 6, 20507-20515		9
515	Dye molecule bonded titanium alkoxide: a possible new type of dye for sensitized solar cells. 2016 , 52, 4072-5		30
514	High-efficiency counter electrodes using graphene hybrid with a macrocyclic nickel complex for dye-sensitized solar cells. <i>Organic Electronics</i> , 2016 , 31, 207-216	3.5	22
513	Titania@gold plasmonic nanoarchitectures: An ideal photoanode for dye-sensitized solar cells. 2016 , 60, 408-420		48
512	Improved light absorbance does not lead to better DSC performance: studies on a ruthenium porphyrin/terpyridine conjugate. 2016 , 6, 15370-15381		4
511	Influence of Phenylethynylene of Push-Pull Zinc Porphyrins on the Photovoltaic Performance. 2016 , 8, 3418-27		45
510	Influence of alkoxy chain envelopes on the interfacial photoinduced processes in tetraarylporphyrin-sensitized solar cells. 2016 , 18, 9577-85		27
509	The Nature of the Donor Motif in Acceptor-Bridge-Donor Dyes as an Influence in the Electron Photo-Injection Mechanism in DSSCs. <i>Journal of Physical Chemistry A</i> , 2016 , 120, 1613-24	2.8	37
508	Photocatalytic degradation of p-nitrophenol and methylene blue using Zn-TCPP/Ag doped mesoporous TiO ₂ under UV and visible light irradiation. 2016 , 57, 25848-25856		29
507	Design, fabrication and modification of metal oxide semiconductor for improving conversion efficiency of excitonic solar cells. <i>Coordination Chemistry Reviews</i> , 2016 , 320-321, 193-215	23.2	49
506	On the stability of manganese tris(β-diketonate) complexes as redox mediators in DSSCs. 2016 , 18, 5949-56		19
505	Excited state structural evolution during charge-transfer reactions in betaine-30. 2016 , 18, 20290-7		23
504	The Influence of Different Annealing Temperatures on Graphene-Modified TiO ₂ for Dye-Sensitized Solar Cell. 2016 , 15, 164-170		5

503	Enhancement of photocatalytic reduction of CO ₂ to CH ₄ over TiO ₂ nanosheets by modifying with sulfuric acid. 2016 , 364, 416-427		92
502	Effect of recombination and binding properties on the performance of dye sensitized solar cells based on propeller shaped triphenylamine dyes with multiple binding groups. <i>Solar Energy</i> , 2016 , 124, 227-241	6.8	28
501	New anthracene-based-phthalocyanine semi-conducting materials: Synthesis and optoelectronic properties. 2016 , 75, 144-154		15
500	Theoretical description of dye regeneration on the TiO ₂ dye-electrolyte model. 2016 , 111, 239-246		18
499	High boiling point solvent-based dye solar cells pass a harsh thermal ageing test. 2016 , 144, 457-466		11
498	Design of (Z)-2-cyano-2-[2-[(E)-2-[5-[(E)-2-(4-dimethylaminophenyl)vinyl]-2-thienyl]vinyl]pyran-4-ylidene]acetic acid derivatives as D-πA dye sensitizers in molecular photovoltaics: a density functional theory		7
497	Probing Driving Force and Electron Accepting State Density Dependent Interfacial Electron Transfer Dynamics: Suppressed Fluorescence Blinking of Single Molecules on Indium Tin Oxide Semiconductor. 2016 , 120, 1685-97		9
496	Artificial zinc chlorin dyes for dye sensitized solar cell. 2016 , 439, 30-34		6
495	Recent Advances in the Regio- and Stereospecific Cyclopolymerization of μ -Diynes by Tailored Ruthenium Alkylidenes and Molybdenum Imido Alkylidene N-Heterocyclic Carbene Complexes. 2017 , 57, 15-30		28
494	Use of organic materials in dye-sensitized solar cells. 2017 , 20, 267-283		160
493	Rational design and first-principles studies of phenothiazine-based dyes for dye-sensitised solar cells. 2017 , 115, 731-742		4
492	40% enhanced photocurrent of dye sensitized solar cells using lotus-shaped H ₂ -treated anatase TiO ₂ with {0 0 1} dominated facets. 2017 , 316, 534-543		11
491	Reduced graphene oxide/macrocyclic iron complex hybrid materials as counter electrodes for dye-sensitized solar cells. 2017 , 495, 111-121		24
490	Photoinduced bimolecular electron transfer from aromatic amines to pentafluorophenyl porphyrin combined with ultrafast charge recombination persistence with Marcus inverted region. 2017 , 19, 5658-5673		3
489	Computational investigation on structural and electronic properties of various metal complexes of (2,2',6',2',2',2'-terpyridine)-4-mercaptobenzoic acid ligand. 2017 , 418, 275-279		4
488	Dye-sensitized solar cells using cobalt electrolytes: the influence of porosity and pore size to achieve high-efficiency. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 2833-2843	7.1	42
487	A solvent degradation approach to expose nanoparticles by decreasing nanofibers' diameter. 2017 , 138, 126-132		
486	Charge transfer tuning in TiO ₂ hybrid nanostructures with acceptor-acceptor systems. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 2415-2424	7.1	3

485	Convenient synthetic access to fluorescent rhodacyclopentadienes via ligand exchange reactions. 2017 , 847, 184-192	5
484	Mesoporous NiCoO networks with enhanced performance as counter electrodes for dye-sensitized solar cells. 2017 , 46, 4403-4411	21
483	Impact of Temperature and Non-Gaussian Statistics on Electron Transfer in Donor-Bridge-Acceptor Molecules. 2017 , 121, 2665-2676	8
482	Enhancing Photocatalytic Hydrogen Generation: the Impact of the Peripheral Ligands in Ru/Pd and Ru/Pt Complexes. 2017 , 23, 5330-5337	10
481	Stepwise co-sensitization of two metal-based sensitizers: probing their competitive adsorption for improving the photovoltaic performance of dye-sensitized solar cells. 2017 , 7, 10494-10502	13
480	Electrical, optical and electrophotochemical studies on agarose based biopolymer electrolyte towards dye sensitized solar cell application. 2017 , 102, 214-219	22
479	Exploring simple ancillary ligands in copper-based dye-sensitized solar cells: effects of a heteroatom switch and of co-sensitization. 2017 , 5, 4671-4685	22
478	Recent developments in tetrathiafulvalene and dithiafulvalene based metal-free organic sensitizers for dye-sensitized solar cells: a mini-review. 2017 , 1, 678-688	26
477	Palmitic acid and hexadecylamine molecules adsorbed on titania surface in hybrid composites. Effect of surfactants using density functional theory. 2017 , 1110, 50-59	
476	Effect of dye extracting solvents and sensitization time on photovoltaic performance of natural dye sensitized solar cells. 2017 , 7, 1516-1523	44
475	Surface chemistry of carboxylato-substituted metal oxo clusters [Model systems for nanoparticles. <i>Coordination Chemistry Reviews</i> , 2017 , 350, 61-67	23.2 29
474	Work Function Tunable Titanium Carbonitride Nanostructures for High-Efficiency, Rechargeable Li-Ion Batteries. 2017 , 4, 1700151	7
473	Ag ₃ TiO ₂ composite photoelectrode for dye-sensitized solar cell. 2017 , 123, 1	17
472	Artificial photosynthesis: closing remarks. 2017 , 198, 549-560	14
471	Correlation Between Charge Recombination and Lateral Hole-Hopping Kinetics in a Series of cis-Ru(phen')(dcb)(NCS) Dye-Sensitized Solar Cells. 2017 , 9, 33446-33454	30
470	Metal-free branched alkyl tetrathienoacene (TTAR)-based sensitizers for high-performance dye-sensitized solar cells. 2017 , 5, 12310-12321	45
469	Semiconductor/electrolyte interfaces for solar energy conversion: Interface studies by synchrotron induced photoelectron spectroscopy. 2017 , 221, 116-133	9
468	Surface-Sensitive and Surface-Specific Ultrafast Two-Dimensional Vibrational Spectroscopy. 2017 , 117, 10623-10664	95

467	Bis(phenothiazyl-ethynylene)-Based Organic Dyes Containing Di-Anchoring Groups with Efficiency Comparable to N719 for Dye-Sensitized Solar Cells. 2017 , 12, 332-340	8
466	Evaluation of electronic polarization energy in oligoacene molecular crystals using the solvated supermolecular approach. 2017 , 19, 14453-14461	6
465	Enhancement of cell performance using nano polystyrene beads in photoelectrodes for dye-sensitized solar cells. 2017 , 78, 195-199	2
464	A DFT and TDDFT Study of PCM Effect on N3 Dye Absorption in Ethanol Solution. 2017 , 812, 012068	4
463	Carbon Nanomaterials Application as a Counter Electrode for Dye-Sensitized Solar Cells. 2017 , 62, 27-32	8
462	Ultrafast Vibrational Energy Transfer in Catalytic Monolayers at Solid-Liquid Interfaces. 2017 , 8, 2489-2495	29
461	A polymer and graphene layer to increase dye regeneration and suppress back electron transfer in dye sensitized solar cells. 2017 , 53, 6629-6632	7
460	Electrochemical impedance spectroscopy: Fundamentals and application in dye-sensitized solar cells. 2017 , 79, 814-829	151
459	Interfacial effects of MnOx-loaded TiO2 with exposed {001} facets and its catalytic activity for the photoreduction of CO2. 2017 , 7, 3065-3072	18
458	The influence of noncovalent interactions in metal-free organic dye molecules to augment the efficiency of dye sensitized solar cells: A computational study. 2017 , 117, e25415	5
457	Nonadiabatic charge dynamics in novel solar cell materials. 2017 , 7, e1305	53
456	The revival of dye-sensitized solar cells. 2017 , 2, 111-119	28
455	Rose bengal-sensitized ZrO2 photoanode for dye-sensitized solar cell. 2017 , 21, 2719-2723	4
454	Application of the boron center for the design of a covalently bonded closely spaced triad of porphyrin-fullerene mediated by dipyrromethane. 2017 , 46, 6278-6290	16
453	Enhanced photoelectric conversion efficiency of dye-sensitized solar cells by the synergetic effect of NaYF4:Er3+/Yb3+ and g-C3N4. 2017 , 60, 228-238	21
452	The role of low light intensity: A cheap, stable, and solidly efficient amorphous Sb2S3 powder/hypericin composite/PVA matrix loaded with electrolyte solar cell. 2017 , 36, 1507-1516	6
451	Hydrothermal growth of highly monodispersed TiO2 nanoparticles: Functional properties and dye-sensitized solar cell performance. 2017 , 418, 186-193	5
450	First-Principle Determination of Electronic Coupling and Prediction of Charge Recombination Rates in Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 983-992	3.8 14

449	Covalent bond-grafted soluble poly(o-methoxyaniline)-graphene oxide composite materials fabricated as counter electrodes of dye-sensitized solar cells. <i>Organic Electronics</i> , 2017 , 42, 209-220	3.5	16
448	Performance improvement of modified dye-sensitized solar cells. 2017 , 71, 602-617		53
447	Electron-Transfer Reactions Triggered by Uncharged or Cationic Photosensitizer: Methodology for Generation of o-Quinodimethane and Analysis of Back Electron-Transfer Process. 2017 , 6, 458-468		3
446	Stability issues pertaining large area perovskite and dye-sensitized solar cells and modules. 2017 , 50, 033001		30
445	Short-Range π -Stacking Assembly on P25 TiO ₂ Nanoparticles for Enhanced Visible-Light Photocatalysis. 2017 , 7, 652-663		80
444	Improvement in light harvesting and device performance of dye sensitized solar cells using electrophoretic deposited hollow TiO ₂ NPs scattering layer. 2017 , 161, 255-262		23
443	Excitation energy transfer in ruthenium (II)-porphyrin conjugates led to enhanced emission quantum yield and $1 O_2$ generation. 2017 , 184, 89-95		12
442	Control and Switching of Aromaticity in Various All-Aza-Expanded Porphyrins: Spectroscopic and Theoretical Analyses. 2017 , 117, 2257-2312		107
441	Structurally Simple and Easily Accessible Perylenes for Dye-Sensitized Solar Cells Applicable to Both 1 Sun and Dim-Light Environments. 2017 , 9, 37786-37796		25
440	Current and Future Ionic Liquid Markets. 2017 , 35-65		14
439	Time-periodic oscillation reaction in an organic-solvent dominated electrolyte. 2017 , 19, 27643-27650		2
438	Geometric Design of Scalable Forward Scatterers for Optimally Efficient Solar Transformers. 2017 , 29, 1702922		16
437	Counter electrodes in dye-sensitized solar cells. 2017 , 46, 5975-6023		439
436	Unveiling the nature of post-linear response Z-vector method for time-dependent density functional theory. <i>Journal of Chemical Physics</i> , 2017 , 147, 024108	3.9	21
435	Electrolyte containing lithium cation in squaraine-sensitized solar cells: interactions and consequences for performance and charge transfer dynamics. 2017 , 19, 27670-27681		5
434	Synthesis and characterization of Nb ₂ O ₅ mesostructures with tunable morphology and their application in dye-sensitized solar cells. 2017 , 202, 289-301		10
433	-Symmetric Triphenylamine-Linked Bisthiazole-Based Metal-Free Donor-Acceptor Organic Dye for Efficient ZnO Nanoparticles-Based Dye-Sensitized Solar Cells: Synthesis, Theoretical Studies, and Photovoltaic Properties. 2017 , 2, 5981-5991		5
432	Double D π A branched dyes π a new class of metal-free organic dyes for efficient dye-sensitized solar cells. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 9828-9837	7.1	70

- 431 Ultra-high aspect ratio titania nanoflakes for dye-sensitized solar cells. **2017**, 426, 1263-1270 8
- 430 Photovoltaic performance of SnO₂/CaCO₃-based dye-sensitized solar cells co-sensitized using metal-free organic dyes. *Journal of Photochemistry and Photobiology A: Chemistry*, **2017**, 346, 541-547 4-7
- 429 Dye/TiO₂ interfacial structure of dye-sensitized solar cell working electrodes buried under a solution of I/I redox electrolyte. **2017**, 9, 11793-11805 14
- 428 Interfacial Electron Injection Probed by a Substrate-Specific Excitonic Signature. **2017**, 139, 11584-11589 18
- 427 Carbazole Substituted BODIPYs: Synthesis, Computational, Electrochemical and DSSC Studies. **2017**, 27, 2131-2144 10
- 426 Effect of dimethylaminophenyl and thienyl donor groups on Zn-Porphyrin for dye sensitized solar cell (DSSC) applications. **2017**, 467, 256-263 7
- 425 Incorporating a molecular co-catalyst with a heterogeneous semiconductor heterojunction photocatalyst: Novel mechanism with two electron-transfer pathways for enhanced solar hydrogen production. **2017**, 353, 274-285 27
- 424 Effects of co-coordinated auxiliary ligands on the photoelectrochemical behaviour of titanium-alkoxide-dyes. **2017**, 5, 18270-18275 33
- 423 Nanofillers in the electrolytes of dye-sensitized solar cells – A short review. *Coordination Chemistry Reviews*, **2017**, 353, 58-112 23.2 37
- 422 Influence of Diffusion Coefficient of Cobalt Redox Mediator Using Triphenylamine Dyes with Various Number of Anchoring Groups: Photovoltaic Performance of DSSCs. **2017**, 8, 414-421 3
- 421 Engineered core-shell nanofibers for electron transport study in dye-sensitized solar cells. **2017**, 7, 065008 4
- 420 Modulation of the absorption properties of a novel iron trisbipyridyl complex by introducing peripheral ruthenium amines. **2017**, 135, 79-85 1
- 419 In silico designing of power conversion efficient organic lead dyes for solar cells using today's innovative approaches to assure renewable energy for future. **2017**, 3, 31
- 418 A Strong Donor-Acceptor System Based on a Metal Chalcogenide Cluster and Porphyrin. **2017**, 56, 8036-8044 7
- 417 Computational studies on optoelectronic and charge transfer properties of some perylene-based donor-acceptor systems for dye sensitized solar cell applications. **2017**, 117, e25332 16
- 416 Study on dye-loading mode on TiO₂ films and impact of co-sensitizers on highly efficient co-sensitized solar cells. **2017**, 28, 3962-3969 4
- 415 Exploring the effect of vibronic contributions on light harvesting efficiency of NKX-2587 derivatives through vibrationally resolved electronic spectra. **2017**, 171, 406-414 5
- 414 Ruthenium(II) complexes with 8-(diphenylphosphino)quinoline: Synthesis, spectroscopic properties, and single-crystal X-ray structures. **2017**, 47, 655-660 4

413	Main group metal chalcogenidometalates with transition metal complexes of 1,10-phenanthroline and 2,2'-bipyridine. <i>Coordination Chemistry Reviews</i> , 2017 , 330, 95-109	23.2	34
412	Tailoring of energy levels in (2Z)-2-cyano-2-[2-[(E)-2-[2-[(E)-2-(p-tolyl)vinyl]thieno[3,2-b]thiophen-5-yl]vinyl]pyran-4-ylidene]acetic acid derivatives via conjugate bridge and fluorination of acceptor units for effective DSSC dye-sensitized solar cells: DFT and TDFT approach. 2017 , 43, 1863-1879		7
411	Energy transfer in rhodium- Ruthenium dimer-of-dimer assemblies. 2017 , 454, 208-215		3
410	A systematic study of phenoxazine-based organic sensitizers for solar cells. <i>Dyes and Pigments</i> , 2017 , 137, 12-23	4.6	45
409	Binding modes of phosphonic acid derivatives adsorbed on TiO ₂ surfaces: Assignments of experimental IR and NMR spectra based on DFT/PBC calculations. 2017 , 655, 31-38		15
408	Light-driven electron transfer in a modular assembly of a ruthenium(II) polypyridine sensitiser and a manganese(II) terpyridine unit separated by a redox active linkage. DFT analysis. 2017 , 20, 323-332		2
407	Optical and Photovoltaic Properties of Thieno[3,2-]thiophene-Based Push-Pull Organic Dyes with Different Anchoring Groups for Dye-Sensitized Solar Cells. 2017 , 2, 9268-9279		21
406	Luminescence in Organic Semiconductors. 2017 , 39-64		1
405	Influence of natural dye adsorption on the structural, morphological and optical properties of TiO ₂ based photoanode of dye-sensitized solar cell. 2017 , 36, 93-101		18
404	Hot Carrier Transportation Dynamics in InAs/GaAs Quantum Dot Solar Cell. 2017 ,		
403	Dye-Sensitized Photocatalytic Water Splitting and Sacrificial Hydrogen Generation: Current Status and Future Prospects. 2017 , 5, 34		26
402	Recent Development on Narrow Bandgap Conjugated Polymers for Polymer Solar Cells. 2017 , 9,		32
401	A Review of Organic Photovoltaic Energy Source and Its Technological Designs. 2017 , 2017, 1-12		14
400	DFT-based Theoretical Simulations for Photocatalytic Applications Using TiO ₂ . 2017 ,		3
399	Free-Base and Metal Complexes of 5,10,15,20-Tetrakis(NMethyl Pyridinium L)Porphyrin: Catalytic and Therapeutic Properties. 2017 ,		4
398	Third-Generation-Sensitized Solar Cells. 2017 ,		6
397	Biomimetic Assembly of Porphyrinoids. 2017 , 593-613		
396	Fingerprints of electronic, spin and structural dynamics from resonant inelastic soft X-ray scattering in transient photo-chemical species. 2018 , 20, 7243-7253		21

395	Plasmonic enhancement of dye-sensitized solar cells by using Au-decorated Ag dendrites as a morphology-engineered. 2018 , 125, 590-598		47
394	Dynamical simulation of electron transfer processes in self-assembled monolayers at metal surfaces using a density matrix approach. <i>Journal of Chemical Physics</i> , 2018 , 148, 124705	3.9	4
393	Recent Technological Applications of ICT Molecules and Prospect of Designing New Molecules. 2018 , 197-231		1
392	A comparative study on electrical properties of dye-sensitized solar cell and silicon photodiode under colored light for optical sensor applications. 2018 , 275, 148-153		2
391	Elucidating ultrafast electron dynamics at surfaces using extreme ultraviolet (XUV) reflection-absorption spectroscopy. 2018 , 54, 4216-4230		18
390	Microwave assisted synthesis and characterization of pure and Cr doped TiO ₂ with improved photo-efficiency. 2018 , 29, 6501-6510		3
389	Spectroscopic investigation on structure (monomer and dimer), molecular characteristics and comparative study on vibrational analysis of picolinic and isonicotinic acids using experimental and theoretical (DFT & IVP) methods. 2018 , 1160, 271-292		14
388	Solvent-Controlled Morphology of Catalytic Monolayers at Solid-Liquid Interfaces. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 2259-2267	3.8	6
387	Seed mediated synthesis of nanosized zinc oxide and its electron transporting activity in dye-sensitized solar cells. 2018 , 5, 015029		19
386	Single-layer solar cell based on nanostructure of polyaniline on fluorine-doped tin oxide: a simple, low-cost and efficient FTO n-PANI Al cell. 2018 , 15, 967-980		10
385	Single-Nanoparticle Photoelectrochemistry at a Nanoparticulate TiO ₂ -Filmed Ultramicroelectrode. 2018 , 57, 3758-3762		40
384	Single-Nanoparticle Photoelectrochemistry at a Nanoparticulate TiO ₂ -Filmed Ultramicroelectrode. 2018 , 130, 3820-3824		14
383	Dye-Sensitized Photoelectrochemical Cells. 2018 , 503-565		2
382	The influence of anchoring group position in ruthenium dye molecule on performance of dye-sensitized solar cells. <i>Dyes and Pigments</i> , 2018 , 150, 335-346	4.6	7
381	Effect of gold nanoparticles on the performances of TiO ₂ dye-sensitised solar cell. 2018 , 44, 5926-5931		9
380	New Ligand Design Provides Delocalization and Promotes Strong Absorption throughout the Visible Region in a Ru(II) Complex. 2018 , 140, 229-234		29
379	Tailoring optical properties of TiO ₂ -Cr co-sputtered films using swift heavy ions. 2018 , 440, 403-408		11
378	Application of paper industry waste materials containing TiO ₂ for dye-sensitized solar cells fabrication. 2018 , 158, 469-476		12

377	Adding graphene nanosheets in liquid electrolytes to improve the efficiency of dye-sensitized solar cells. 2018 , 207, 154-160		9
376	Improved efficiency of ZnO hierarchical particle based dye sensitized solar cell by incorporating thin passivation layer in photo-anode. 2018 , 124, 1		9
375	A visible-light driven electrochemical biofuel cell with the function of CO ₂ conversion to formic acid: coupled thylakoid from microalgae and biocatalyst immobilized electrodes. 2018 , 42, 9269-9280		7
374	Synthesis, Characterization and Heterogeneous Photocatalytic activity of H ₃ PW ₁₂ O ₄₀ /TiO ₂ /Ag Composites. 2018 , 5, 8808-8811		5
373	Direct Contact of Selective Charge Extraction Layers Enables High-Efficiency Molecular Photovoltaics. 2018 , 2, 1108-1117		189
372	Revealing Bound Exciton Physics in Strongly Interacting Band Insulators. 2018 , 109-168		
371	Synthesis and characterization of carbon based counter electrode for dye sensitized solar cells (DSSCs) using organic precursor 2,2'-Bipyridine (Bpy) as a carbon material. <i>Journal of Alloys and Compounds</i> , 2018 , 748, 905-910	5-7	24
370	Density functional theory study of atomic and electronic properties of defects in reduced anatase TiO ₂ nanocrystals. 2018 , 8, 035119		17
369	Influence of TiO ₂ Particle Size on Dye-Sensitized Solar Cells Employing an Organic Sensitizer and a Cobalt(III/II) Redox Electrolyte. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 7051-7060	3.8	24
368	Composite liquid crystal-polymer electrolytes in dye-sensitized solar cells: effects of mesophase alkyl chain length. 2018 , 45, 112-121		7
367	Fabrication of reduced graphene oxide/macrocyclic cobalt complex nanocomposites as counter electrodes for Pt-free dye-sensitized solar cells. 2018 , 434, 412-422		24
366	Preparation of reduced graphene oxide/macrocyclic manganese complex composite materials as counter electrodes in dye-sensitized solar cells. <i>Organic Electronics</i> , 2018 , 52, 51-60	3-5	18
365	Recent advances in plasmonic dye-sensitized solar cells. 2018 , 258, 271-282		36
364	Influence of vibronic contribution on light harvesting efficiency of NKX-2587 derivatives with oligothiophene as π -conjugated linker. 2018 , 189, 454-462		3
363	Liquid Dye-Sensitized Solar Cells. 2018 , 109-149		5
362	Optical properties and structural morphology of one-dimensional perylene diimide derivatives. 2018 , 196, 455-461		4
361	Mechanistic and Time Resolved Single-Photon Counting Analysis for Light Harvesting Characteristics Depending on the Adsorption Mode of Organic Sensitizers in DSSCs. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 995-1002	3.8	4
360	Substituent Effect on Pyridine Efficacy as a Chelating Stabilizer. 2018 ,		1

359	Dye-Sensitized Solar Cells: Fundamentals and Current Status. 2018 , 13, 381		355
358	Roles of Chenodeoxycholic Acid Coadsorbent in Anthracene-Based Dye-Sensitized Solar Cells: A Density Functional Theory Study. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 23280-23287	3.8	10
357	Theoretical study of triphenylamine-based organic dyes with mono-, di-, and tri-anchoring groups for dye-sensitized solar cells. <i>Organic Electronics</i> , 2018 , 63, 328-342	3.5	35
356	Exploration on Charge Transfer and Absorption Spectra of Spiro[fluorene-9,90-xanthene]-based Polyoxometalate Hybrids Toward High Performance Dye-sensitized Solar Cell. 2018 , 34, 767-771		4
355	Construction of Highly Hierarchical Layered Structure Consisting of Titanate Nanosheets, Tungstate Nanosheets, Ru(bpy), and Pt(terpy) for Vectorial Photoinduced Z-Scheme Electron Transfer. 2018 , 10, 37150-37162		7
354	A comprehensive review on counter electrodes for dye sensitized solar cells: A special focus on Pt-TCO free counter electrodes. <i>Solar Energy</i> , 2018 , 174, 1097-1125	6.8	77
353	Ultrafast Dynamics of Charge Transfer and Photochemical Reactions in Solar Energy Conversion. 2018 , 5, 1800221		22
352	Effect on photovoltaic performance of D π A motif polymer dye sensitizers by adopting the complex of metal with diamine as auxiliary electron acceptor. 2018 , 29, 21170-21179		1
351	Chemical Scavenging Yields for Short-Lived Products from the Visible Light Photoionization of the Tris(bipyridine)ruthenium(II) Triplet Metal-to-Ligand Charge-Transfer Excited State. <i>Journal of Physical Chemistry A</i> , 2018 , 122, 9251-9266	2.8	2
350	Impact of Ligand Substitutions on Multielectron Redox Properties of Fe Complexes Supported by Nitrogenous Chelates. 2018 , 3, 14766-14778		6
349	Cu Complex Redox Couples Open Up New Possibilities for Dye-Sensitized Solar Cells. 2018 , 349-365		1
348	Counter Electrodes in DSSCs Based on Carbon Derived from Edible Sources. 2018 , 71-92		
347	Hot Electrons Role in Biomolecule-based Quantum Dot Hybrid Solar Cells. 2018 , 339-368		
346	Photovoltaics and Nanotechnology as Alternative Energy. 2018 , 211-241		1
345	New organic materials based on D π A structure for application in dye-sensitized solar cells. 2018 , 44, 6071-6085		19
344	Low Carbon Energy Supply. 2018 ,		3
343	Dye-sensitized Solar Cell Technology: Recent Development and Advancement. 2018 , 221-250		1
342	The Combination of Hydrogen and Methanol Production through Artificial Photosynthesis-Are We Ready Yet?. 2018 , 11, 2654-2672		6

- 341 A Varied Alkyl Chains of Ruthenium(II) Complexes for Dye Sensitized Solar Cells (DSSCs). **2018**, 382, 359-363
- 340 Nanosensors for Biomedical Applications: A Tutorial. **2018**, 145-167
- 339 Electro-optical interfacial effects on a graphene/E-conjugated organic semiconductor hybrid system. **2018**, 9, 963-974 5
- 338 A review on applications of Cu₂ZnSnS₄ as alternative counter electrodes in dye-sensitized solar cells. **2018**, 8, 070701 12
- 337 Organic Nanostructures by Molecular Layer Epitaxy: A Tutorial. **2018**, 93-116
- 336 Semiconductor Nanotechnology. **2018**, 3
- 335 Solar Cells Based on Sol-Gel Films. **2018**, 2555-2572
- 334 Nanostructured Semiconductor Composites for Solar Cells. **2018**, 353-412 1
- 333 CuO and CuO/Graphene Nanostructured Thin Films as Counter Electrodes for Pt-Free Dye-Sensitized Solar Cells. **2018**, 8, 21 27
- 332 Investigation of Electrochemically Deposited and Chemically Reduced Platinum Nanostructured Thin Films as Counter Electrodes in Dye-Sensitized Solar Cells. **2018**, 8, 56 3
- 331 Recent theoretical progress in the organic/metal-organic sensitizers as the free dyes, dye/TiO₂ and dye/electrolyte systems; Structural modifications and solvent effects on their performance. **2018**, 94, 609-655 20
- 330 Au Nanoparticle Sub-Monolayers Sandwiched between Sol-Gel Oxide Thin Films. **2018**, 11, 1
- 329 CuGaS₂ and CuGaSe₂/ZnS Porous Layers from Solution-Processed Nanocrystals. **2018**, 8, 7
- 328 Photosensitized Multiheme Cytochromes as Light-Driven Molecular Wires and Resistors. **2018**, 19, 2206-2215 8
- 327 Titanium dioxide nanostructures for photoelectrochemical applications. **2018**, 98, 299-385 148
- 326 Copper Complexes with Tetradentate Ligands for Enhanced Charge Transport in Dye-Sensitized Solar Cells. **2018**, 6, 53 26
- 325 Enhancing the efficiency of quasi-solid-state dye-sensitized solar cells by adding bis(trifluoromethane)sulfonimide lithium salt and camphorsulfonic acid to gel-based electrolytes. **2018**, 107, 87-93 3
- 324 Ultrafast probes of electron-hole transitions between two atomic layers. **2018**, 9, 1859 23

323	First-principles study of efficient phenothiazine-based D π A organic sensitizers with various spacers for DSSCs. <i>Journal of Computational Electronics</i> , 2018 , 17, 1410-1420	1.8	18
322	Donor Effect on the Photoinduced Interfacial Charge Transfer Dynamics of D π A Diketopyrrolopyrrole Dye Sensitizers Adsorbed on Titanium Dioxide. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 19359-19369	3.8	6
321	Fluorene Dyes. 2018 , 153-164		1
320	Characterization of ZnO as substrate for DSSC. 2018 , 20, 21910-21916		6
319	Superatom Molecular Orbital as an Interfacial Charge Separation State. 2018 , 9, 3485-3490		24
318	Biosynthesis of zinc oxide nanoparticles using culture filtrates of <i>Aspergillus niger</i> : Antimicrobial textiles and dye degradation studies. 2018 , 3, 48-55		98
317	Selected growth of second phase on BiOBr facets via spatial charge separation towards enhanced photocatalysis activity. 2018 , 66, 262-268		22
316	Dye-Sensitized Solar Cells. 2018 , 183-239		4
315	Electrolyte-Free Dye-Sensitized Solar Cell with High Open Circuit Voltage Using a Bifunctional Ferrocene-Based Cyanovinyl Molecule as Dye and Redox Couple. 2018 , 37, 1999-2002		16
314	Cation Effects on the Reduction of Colloidal ZnO Nanocrystals. 2018 , 140, 8924-8933		19
313	The computational study of bridge effect in D- π A photosensitive dyes, based on triphenylamine. 2018 , 161, 012021		3
312	Molecular design towards suppressing electron recombination and enhancing the light-absorbing ability of dyes for use in sensitized solar cells: a theoretical investigation. 2018 , 42, 12891-12899		8
311	Nahinfrarotaktive Bleichalkogenid-Quantenpunkte: Herstellung, postsynthetischer Ligandenaustausch und Anwendungen in Solarzellen. 2019 , 131, 5256-5279		1
310	Near-Infrared Active Lead Chalcogenide Quantum Dots: Preparation, Post-Synthesis Ligand Exchange, and Applications in Solar Cells. 2019 , 58, 5202-5224		47
309	Three Silver Coordination Polymers with Diverse Architectures Constructed from Pyridine Carboxylic Hydrazide Ligands. 2019 , 58, 11793-11800		9
308	The Important Role of Coordination Geometry on Photophysical Properties of Blue-Green Emitting Ruthenium(II) Diisocyanide Complexes Bearing 2-Benzoxazol-2-ylphenolate. 2019 , 58, 11372-11381		3
307	A facile method to produce TiO ₂ nanorods for high-efficiency dye solar cells. 2019 , 438, 227012		9
306	Synthesis, characterization and structural computational investigation of novel Zn(II) phthalocyanines containing peripheral anthracene moieties. 2019 , 23, 943-959		1

305	Dye sensitized solar cells based on double-layered titanium dioxide and their evaluation in tropical hot desert climate of Saudi Arabia. 2019 , 133, 106206		2
304	Review on simulation of current-voltage characteristics of dye-sensitized solar cells. 2019 , 80, 516-526		9
303	Zippering Up NiFe(OH) _x -Encapsulated Hematite To Achieve an Ultralow Turn-On Potential for Water Oxidation. 2019 , 4, 1983-1990		48
302	Exploration of optoelectronic and photosensitization properties of triphenylamine-based organic dye on TiO ₂ surfaces. <i>Journal of Computational Electronics</i> , 2019 , 18, 1119-1127	1.8	9
301	Fabrication of a counter electrode for dye-sensitized solar cells (DSSCs) using a carbon material produced with the organic ligand 2-methyl-8-hydroxyquinolinol (Mq). 2019 , 1, 3192-3199		27
300	Theoretical design and characterization of NIR porphyrin-based sensitizers for applications in dye-sensitized solar cells. <i>Solar Energy</i> , 2019 , 188, 1031-1040	6.8	10
299	Asymmetry induces long-lasting energy current transients inside molecular loop circuits. 2019 , 100,		3
298	Assessment of BODIPY-xasmaragdyrin Dyads for Dye-Sensitized Solar Cells: Aromaticity, Photosensitization Capability, and Charge Transport. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 19362-19375	3.8	12
297	Molecular Model of Dye Sensitized Titanium Oxides Based on Aryl-Amine Dye Anchored Titanium Oxo Clusters. 2019 , 58, 9246-9252		22
296	Molecules and heterostructures at TiO ₂ surface: the cases of H ₂ O, CO ₂ , and organic and inorganic sensitizers. 2019 , 45, 5801-5829		8
295	Experimental Observation of Island-Type Films of C ₆₀ F ₁₈ Polar Molecules on the Surface of Highly Oriented Pyrolytic Graphite. 2019 , 13, 934-940		1
294	Recent advances in dye-sensitized photoelectrochemical cells for water splitting. 2019 , 1, 100015		49
293	Environmentally Benign Protocols for the Synthesis of Transition Metal Oxide: A Brief Outlook. 2019 , 383-419		
292	Long-Lived, Strongly Emissive, and Highly Reducing Excited States in Mo(0) Complexes with Chelating Isocyanides. 2019 , 141, 14394-14402		43
291	Investigation of cell-level potential-induced degradation mechanisms on perovskite, dye-sensitized and organic photovoltaics. <i>Solar Energy</i> , 2019 , 190, 301-318	6.8	2
290	Comparative Study of the Different Anchoring of Organometallic Dyes on Ultrathin Alumina. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 22250-22260	3.8	3
289	The capricious nature of iodine catenation in I excess, perovskite-derived hybrid Pt(IV) compounds. 2019 , 55, 588-591		11
288	Native Surface Oxides Featured Liquid Metals for Printable Self-Powered Photoelectrochemical Device. 2019 , 7, 356		4

287	Progress on Electrolytes Development in Dye-Sensitized Solar Cells. 2019 , 12,		95
286	Intriguing Effects of Halogen Substitution on the Photophysical Properties of 2,9-(Bis)halo-Substituted Phenanthrolinecopper(I) Complexes. 2019 , 58, 7730-7745		14
285	Binary redox electrolytes used in dye-sensitized solar cells. 2019 , 78, 53-65		19
284	Influence and Substituent Effects on the HOMO-LUMO Energy Gap and Stokes Shift in Ru Mono-Diimine Derivatives. 2019 , 1195, 620-631		3
283	Intramolecular Path Determination of Active Electrons on Push-Pull Oligocarbazole Dyes-Sensitized Solar Cells. 2019 , 8, 580-588		4
282	Design of a novel series of small molecule donors for application in organic solar cells. <i>Solar Energy</i> , 2019 , 186, 72-83	6.8	10
281	Tuning the electronic structure properties of MoS monolayers with carbon doping. 2019 , 21, 11168-11174		7
280	Hierarchical Co-N microballs with heterostructure exhibiting superior electrochemical properties for water splitting and reduction of I ³⁻ <i>Journal of Alloys and Compounds</i> , 2019 , 797, 341-347	5-7	4
279	Electrospun Nanocomposite Ag ₂ ZnO Nanofibrous Photoanode for Better Performance of Dye-Sensitized Solar Cells. 2019 , 48, 4389-4399		5
278	Koopmans Meets Bethe-Salpeter: Excitonic Optical Spectra without GW. 2019 , 15, 3710-3720		9
277	Promising sensitizers for dye sensitized solar cells: A comparison of Ru(II) with other earth's scarce and abundant metal polypyridine complexes. 2019 , 119, e25963		10
276	Enhancement in Dye-Sensitized Solar Cells Using Surface Plasmon Resonance Effects from Colloidal Core-Shell Au@SiO ₂ Nanoparticles. 2019 , 4, 4995-5001		3
275	Ultrafast photoinduced energy and charge transfer. 2019 , 216, 9-37		3
274	Exploring the effect of oligocene elongation on photovoltaic, optoelectronic and charge transfer properties in TPA dyes tethered to the semiconductor surface. 2019 , 13, 102304		15
273	Studies on photosensitization of TiO ₂ nanoparticles by novel 1,3,4-oxadiazoles derivatives. 2019 , 183, 732-741		4
272	Materials for Photovoltaics: State of Art and Recent Developments. 2019 , 20,		112
271	Metal Coordination Complexes as Redox Mediators in Regenerative Dye-Sensitized Solar Cells. 2019 , 7, 30		53
270	QM/MM nonadiabatic dynamics simulation on ultrafast excited-state relaxation in osmium(II) compounds in solution. 2019 , 1155, 90-100		8

269	Overview of Dye-Sensitized Solar Cells. 2019 , 1-49		7
268	Dyes based on the D/A-acetylene linker-phenothiazine system for developing efficient dye-sensitized solar cells. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 5830-5840	7.1	32
267	Recent Progress of Graphene-Based Photoelectrode Materials for Dye-Sensitized Solar Cells. 2019 , 2019, 1-16		18
266	Synthesis of novel semi-squaraine derivatives and application in efficient dye-sensitized solar cells. <i>Dyes and Pigments</i> , 2019 , 165, 308-318	4.6	8
265	Luminescent material with functionalized graphitic carbon nitride as a photovoltaic booster in DSSCs: Enhanced charge separation and transfer. 2019 , 34, 616-625		4
264	Nanostructured photovoltaics. 2019 , 3, 012002		3
263	New semi-rigid triphenylamine donor moiety for D- π -A sensitizer: Theoretical and experimental investigations for DSSCs. <i>Dyes and Pigments</i> , 2019 , 165, 1-10	4.6	13
262	Enhancing the device efficiency by filling the traps in photoanodes. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 14632-14638	7.1	1
261	There Is a Future for π -Heterocyclic Carbene Iron(II) Dyes in Dye-Sensitized Solar Cells: Improving Performance through Changes in the Electrolyte. 2019 , 12,		6
260	Kinetics of Photoinduced Electron Transfer in Alternately Stacked Eu ³⁺ :LaNb ₂ O ₇ and W ₂ O ₇ Nanosheets As Demonstrated by $f\pi$ Radiative Transition of Doped Eu ³⁺ . <i>Journal of Physical Chemistry C</i> , 2019 , 123, 30029-30038	3.8	
259	New Synthetic Route for Cobalt(III) Dissymmetric Bisalkynyl Complexes Based on Cobalt(III)(cyclam)(C ₂ NAPMes). 2019 , 2019, 4766-4772		3
258	Vibronic coherence evolution in multidimensional ultrafast photochemical processes. 2019 , 10, 5621		20
257	Cobalt-doped titanium oxide nanotubes grown via one-step anodization for water splitting applications. 2019 , 464, 351-359		22
256	Aerosol synthesis and luminescent properties of CaAl ₂ O ₄ :Eu ²⁺ , Nd ³⁺ down-conversion phosphor particles for enhanced light harvesting of dye-sensitized solar cells. <i>Solar Energy</i> , 2019 , 178, 173-180	6.8	12
255	Metal-Organic Frameworks in Dye-Sensitized Solar Cells. 2019 , 175-219		5
254	Scalable, eco-friendly and ultrafast solar steam generators based on one-step melamine-derived carbon sponges toward water purification. 2019 , 58, 322-330		172
253	Theoretical study of the effects of modifying the structures of organic dyes based on N,N-alkylamine on their efficiencies as DSSC sensitizers. 2019 , 25, 9		13
252	Electronic Structure and Optical Properties of Designed Photo-Efficient Indoline-Based Dye-Sensitizers with D π A Framework. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 3309-3320	3.8	34

251	Ultrafast dynamics of solvated electrons at anatase TiO ₂ /HO interface. 2019 , 31, 114004		2
250	Theoretical study of 5,10-diphenylindeno[2,1-a]indene (DPI) dyes for dye sensitized solar cells (DSSC). 2019 , 45, 77-90		4
249	Synthesis of reduced graphene oxide/macrocyclic ytterbium complex nanocomposites and their application in the counter electrodes of dye-sensitized solar cells. <i>Organic Electronics</i> , 2019 , 64, 166-175 ^{3.5}		9
248	In silico investigation of the coumarin-based organic semiconductors for the possible use in organic electronic devices. 2019 , 32, e3905		5
247	Rhodanine-3-acetic acid containing D- π -A push-pull chromophores: Effect of methoxy group on the performance of dye-sensitized solar cells. <i>Organic Electronics</i> , 2019 , 65, 386-393	3.5	14
246	Transition Metal Complexes and Photodynamic Therapy from a Tumor-Centered Approach: Challenges, Opportunities, and Highlights from the Development of TLD1433. 2019 , 119, 797-828		517
245	Efficiency improvement of TiO ₂ nanowire arrays based dye-sensitized solar cells through further enhancing the specific surface area. 2019 , 505, 62-68		8
244	Preparation and characterization of two dye-sensitized solar cells using <i>Acalypha Godseffia</i> and <i>Epipremnum Aureum</i> dyes as sensitizers. 2020 , 42, 1662-1673		12
243	Atomically Precise Noble Metal Nanoclusters as Efficient Catalysts: A Bridge between Structure and Properties. 2020 , 120, 526-622		441
242	Supercritical Water Processing Technologies for Environment, Energy and Nanomaterial Applications. 2020 ,		2
241	Solar Energy. 2020 ,		3
240	Triplet BODIPY and AzaBODIPY Derived Donor-acceptor Dyads: Competitive Electron Transfer versus Intersystem Crossing upon Photoexcitation. 2020 , 4, 68-81		13
239	Fabrication of optimized eco-friendly dye-sensitized solar cells by extracting pigments from low-cost native wild plants. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2020 , 388, 112191 ^{4.7}		11
238	Porphyrin sensitizers involving a fluorine-substituted benzothiadiazole as auxiliary acceptor and thiophene as bridge for use in dye-sensitized solar cells (DSSCs). <i>Dyes and Pigments</i> , 2020 , 174, 107984 ^{4.6}		16
237	Tuning optoelectronic properties of triphenylamine based dyes through variation of pi-conjugated units and anchoring groups: A DFT/TD-DFT investigation. 2020 , 94, 107480		19
236	The effect of encapsulation of lithium atom on supramolecular triad complexes performance in solar cell by using theoretical approach. 2020 , 26, 471-489		1
235	Photoinduced Betaine Generation for Efficient Photothermal Energy Conversion. 2020 , 26, 2060-2066		1
234	A platinum-free nanostructured gold counter electrode for DSSCs prepared by pulsed laser ablation. 2020 , 506, 144690		7

233	4,4'-Diaminodiphenylsulfone; an efficient co-additive in dye-sensitized nanocrystalline TiO ₂ solar cells. 2020 , 34, e5284		
232	DNA-Targeting Ru -Polypyridyl Complex with a Long-Lived Intraligand Excited State as a Potential Photodynamic Therapy Agent. 2020 , 26, 17495-17503		3
231	Femtosecond stimulated Raman spectro-microscopy for probing chemical reaction dynamics in solid-state materials. <i>Journal of Chemical Physics</i> , 2020 , 153, 030901	3.9	2
230	Study of oxygenation and hydrogenation of tris(8-hydroxyquinoline) aluminum generated by electrode deposition using liquid extraction surface analysis nano-electrospray ionization mass spectrometry. 2020 , 756, 137791		
229	Recent advances in eco-friendly and cost-effective materials towards sustainable dye-sensitized solar cells. 2020 , 22, 7168-7218		147
228	Current Challenges in the Development of Quantum Dot Sensitized Solar Cells. <i>Advanced Energy Materials</i> , 2020 , 10, 2001774	21.8	22
227	Graphene-Si ₃ N ₄ nanocomposite blended polymer counter electrode for low-cost dye-sensitized solar cells. 2020 , 758, 137920		5
226	Other Hybridized Nanogenerators. 2020 , 97-132		
225	All-inorganic and lead-free BiI ₃ thin film solar cells by iodization of BiI thin films. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 14066-14074	7.1	9
224	Recent developments on the photoanodes employed in dye-sensitized solar cell. 2020 , 805, 012019		0
223	Preparation of Photoactive Transition-Metal Layered Double Hydroxides (LDH) to Replace Dye-Sensitized Materials in Solar Cells. 2020 , 13,		5
222	Synthesis and DSSC application of BODIPY decorated triazole bridged and benzene nucleus cored conjugated dendrimers.. 2020 , 10, 18390-18399		2
221	Understanding Surface Recombination Processes Using Intensity-Modulated Photovoltage Spectroscopy on Hematite Photoanodes for Solar Water Splitting. 2020 , 103, e2000064		4
220	Shedding Light on the Molecular Surface Assembly at the Nanoscale Level: Dynamics of a Re(I) Carbonyl Photosensitizer with a Coadsorbed Cobalt Tetrapyrrolyl Water Reduction Catalyst on ZrO ₂ . <i>Journal of Physical Chemistry C</i> , 2020 , 124, 12502-12511	3.8	3
219	Orbital-free photophysical descriptors to predict directional excitations in metal-based photosensitizers. 2020 , 11, 7685-7693		6
218	Visualization of Charge Migration in Conductive Polymers via Time-Resolved Electrostatic Force Microscopy. <i>Journal of Physical Chemistry A</i> , 2020 , 124, 5063-5070	2.8	5
217	A Liquid Arylazopyrazole Derivative as Molecular Solar Thermal Fuel with Long-term Thermal Stability. <i>Chemistry Letters</i> , 2020 , 49, 736-740	1.7	8
216	Synergetic Effects of Hybrid Carbon Nanostructured Counter Electrodes for Dye-Sensitized Solar Cells: A Review. 2020 , 13,		20

215	Graphene/polyaniline nanocomposite as platinum-free counter electrode material for dye-sensitized solar cell: its fabrication and photovoltaic performance. 2020 , 31, 10288-10297		10
214	Photophysics and Photochemistry of Iron Carbene Complexes for Solar Energy Conversion and Photocatalysis. 2020 , 10, 315		28
213	Investigation of electrical values of low-efficiency dye-sensitized solar cells (DSSCs). 2020 , 199, 117222		10
212	Molecular engineering strategies for fabricating efficient porphyrin-based dye-sensitized solar cells. 2020 , 13, 1617-1657		89
211	Effects of oxygen defects on electronic band structures and dopant migration in Sn-doped TiO ₂ by density functional studies. 2020 , 754, 137732		7
210	Core/Shell Quantum Dots. 2020 ,		
209	13. Metal complexes for photohydrogenation and hydrogen evolution. 2020 , 301-326		
208	Incorporation of Carbon Dots on the ZnO Nanosheets as Metal-Organic Framework Photoanodes for High Efficient Dye Sensitized Solar Cell Applications. 2020 , 32, 795		4
207	Increasing the Efficiency of Dye-Sensitized Solar Cells by Adding Nickel Oxide Nanoparticles to Titanium Dioxide Working Electrodes. 2020 , 10, 195		6
206	References. 2020 , 203-223		
205	Green synthesis of TiO ₂ and its photocatalytic activity. 2020 , 11-61		6
204	Aromaticity-Photovoltaic Property Relationship of Triphenylamine-Based D- π -A Dyes: Leads from DFT Calculations. <i>Journal of Physical Chemistry A</i> , 2020 , 124, 3374-3385	2.8	16
203	First-Principles Approach for Assessing Cold Electron Injection Efficiency of Dye-Sensitized Solar Cell: Elucidation of Mechanism of Charge Injection and Recombination. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 2817-2836	3.8	10
202	Dye-Sensitized Solar Cell. 2020 , 287-333		
201	Design and fabrication of hybrid carbon dots/titanium dioxide (CDs/TiO ₂) photoelectrodes for highly efficient dye-sensitized solar cells. 2020 , 31, 3492-3499		6
200	Chemometric modeling of power conversion efficiency of organic dyes in dye sensitized solar cells for the future renewable energy. 2020 , 70, 104537		19
199	Optimization of the doping of polyaniline via response surface method to prepare polymer electrolytes for dye sensitized solar cells. 2020 , 8, 103709		8
198	Optimization of platinum precursor concentration for new, fast and simple fabrication method of counter electrode for DSSC application. 2020 , 206, 164314		6

197	A review on quantum dot sensitized solar cells: Past, present and future towards carrier multiplication with a possibility for higher efficiency. <i>Solar Energy</i> , 2020 , 203, 210-239	6.8	52
196	Synthesis of Yb ³⁺ /Ho ³⁺ co-doped Y ₂ O ₃ nanoparticles and its application to dye sensitized solar cells. 2021 , 1228, 129479		4
195	Morphology dependent photovoltaic performance of zinc oxide-cobalt oxide nanoparticle/nanorod composites synthesized by simple chemical co-precipitation method. <i>Journal of Alloys and Compounds</i> , 2021 , 852, 156997	5.7	14
194	Solvent free synthesis of vinylcyanoacetohydrazone bridged diferrocenyl organometallic compounds as bifunctional molecule for donor-acceptor and photovoltaic properties. 2021 , 933, 121648		2
193	Effects of the coupling between electrode and GQD-anthoxanthin nanocomposites for dye-sensitized solar cell: DFT and TD-DFT investigations. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2021 , 407, 113080	4.7	8
192	New approaches in component design for dye-sensitized solar cells. 2021 , 5, 367-383		16
191	Experimental and theoretical study of the synthesis of N-doped TiO ₂ by N ion implantation of TiO ₂ thin films. 2021 , 541, 148493		8
190	Coumarin-based D π A dyes for efficient DSSCs: DFT and TD-DFT study of the π spacers influence on photovoltaic properties. 2021 , 47, 875-893		2
189	Application of graphene in energy storage device [A review]. 2021 , 135, 110026		171
188	Betanidin isomerisation and decarboxylation, thermodynamic and charge transfer dye properties towards dye sensitised solar cells application. 2021 , 34, e4185		1
187	Quantum Mechanical Simulation of Electron Dynamics on Surfaces of Materials. 2021 , 115-136		
186	Structural and Electronic Properties of Various Useful Metal Oxides. 2021 , 49-84		
185	Photovoltaic studies on cadmium metal ions doped coordination polymer/TiO ₂ hybrid solar cell. 2021 , 60, 807-815		1
184	A review on the use of carbon matrix incorporated with macrocyclic metal complexes as counter electrodes for platinum free dye sensitized solar cells. 2021 , 74, 543-562		4
183	Power Voltage Characteristics of Fabricated DSSC Incorporating Multiple Organic Dyes as Photosensitizer. 2021 , 13, 221-235		1
182	Advanced research trends in dye-sensitized solar cells. 2021 , 9, 10527-10545		64
181	Chemistry of cyanine dyes-A review. 2021 , 46, 3102-3108		6
180	Excited-State Dynamics of [Ru(bpy)(bpy)] to Form Long-Lived Localized Triplet States. 2021 , 60, 1672-1682		8

179	Computational Screening of Organic Dye-Sensitizers for Dye-Sensitized Solar Cells: DFT/TDDFT Approach. 2021 , 187-205	
178	The Rise of Dye-Sensitized Solar Cells: From Molecular Photovoltaics to Emerging Solid-State Photovoltaic Technologies. 2021 , 104, e2000230	8
177	Transparent and Colorless Dye-Sensitized Solar Cells Exceeding 75% Average Visible Transmittance. 2021 , 1, 409-426	19
176	Magnesium-doped green solar cells using natural chromophores. 2021 , 11, 205-214	1
175	Improving the performance of dye-sensitized solar cells using nanoparticles and a dye produced by an Antarctic bacterium. 1	3
174	A Tetradentate Phosphonate Ligand-based Ni-MOF as a Support for Designing High-performance Proton-conducting Materials. 2021 , 16, 1562-1569	6
173	Design and characterization of effective solar cells. 1	1
172	Co-sensitization of 4-(thiophene-2-ylmethylene)thiazolidin-5-one dyes with Ru(II) complex N-719. 2021 , 35, e6313	0
171	Quasi-solid-state composite electrolytes with Al ₂ O ₃ and ZnO nanofillers for dye-sensitized solar cells. <i>Electrochimica Acta</i> , 2021 , 380, 137588	6.7 4
170	Catalytic Effect of 1,4-Dioxane on the Kinetics of the Oxidation of Iodide by Dicyanobis(bipyridine)iron(III) in Water. 2021 , 11, 840	2
169	Strongly Red-Emissive Molecular Ruby [Cr(bpmp)] Surpasses [Ru(bpy)]. 2021 , 143, 11843-11855	17
168	Carboxymethyl cellulose stabilized lead sulfide nanocrystals: Synthesis, characterization and catalytic applications. 2021 , 620, 126572	2
167	Computational Discovery of Transition-metal Complexes: From High-throughput Screening to Machine Learning. 2021 , 121, 9927-10000	26
166	Anisotropic Electrical Conductivity of a Single-Crystalline Oxo-Bridged CrMo Heterometallic Complex. 2021 , 60, 13262-13268	
165	Aggregation induced emission (AIE) materials based on diketopyrrolopyrrole chromophore for CdS nanowire solar cell applications. 2021 , 895, 115451	3
164	Designing LiBOB-based electrolyte for dye-sensitized solar cell. 1-9	
163	Applications of Titanium Dioxide Materials.	0
162	Organic Dyes in Dye-Sensitized Solar Cells Featuring Back Reflector. 2021 , 14, 5529	3

161	Recent progress in organic hole transport materials for energy applications. <i>Dyes and Pigments</i> , 2021 , 193, 109465	4.6	6
160	Uniformly citrate-assisted deposition of small-sized FeOOH on BiVO ₄ photoanode for efficient solar water oxidation. <i>Electrochimica Acta</i> , 2021 , 389, 138795	6.7	7
159	Surface Functionalization of Metal Oxide Semiconductors with Catechol Ligands for Enhancing Their Photoactivity. 2021 , 5, 2100512		4
158	Switching the electrical characteristics of TiO ₂ from n-type to p-type by ion implantation. 2021 , 563, 150274		1
157	Advances in phenothiazine and phenoxazine-based electron donors for organic dye-sensitized solar cells. <i>Dyes and Pigments</i> , 2021 , 194, 109638	4.6	7
156	Dye-sensitized solar cell performance and photocatalytic activity enhancement using binary zinc oxide-copper oxide nanocomposites prepared via co-precipitation route. 2021 , 47, 30234-30246		3
155	QSPR modeling of absorption maxima of dyes used in dye sensitized solar cells (DSSCs). 2022 , 265, 120387		2
154	Dye sensitized solar cell action of Sn(IV)tetrakis(4-pyridyl) porphyrins as a function of axial ligation and pyridine protonation. 2021 , 18, 1523-1536		0
153	Alternative low-cost photon sensitizer for dye-sensitized solar cells using less explored natural fabric dyes. 2021 , 45, 7764-7782		0
152	New luminescent tetracoordinate boron complexes: an in-depth experimental and theoretical characterisation and their application in OLEDs. 2021 , 8, 3960-3983		3
151	The influence of triphenylamine as a donor group on Zn porphyrin for dye sensitized solar cell applications. 2021 , 45, 2453-2462		3
150	Quantum Wells, Wires and Dots for Luminescent Device Applications. 2021 , 11-26		
149	Recent Applications of Nanoscale Materials: Solar Cells. 2009 , 1-31		1
148	Mesostructured Thin Film Oxides. 2010 , 255-279		1
147	Effect of Titanium Coating on the Structural and Optical Properties of TiO ₂ Thin Films for Improved Performance in Dye-Sensitized Solar Cells. 2017 , 437-449		1
146	Quantum Dynamics of Ultrafast Molecular Processes in a Condensed Phase Environment. 2007 , 195-221		1
145	Solar Energy Conversion [Natural to Artificial]. 2011 , 219-236		1
144	Conducting Polymers as Cost Effective Counter Electrode Material in Dye-Sensitized Solar Cells. 2020 , 345-371		6

- 143 Ru-Os dyads based on a mixed bipyridine-terpyridine bridging ligand: modulation of the rate of energy transfer and pH-induced luminescence switching in the infrared domain. **2017**, 46, 12950-12963 12
- 142 Role of TiO₂ Nanotube on Improvement of Performance of Hybrid Photovoltaic Devices. **2009**, 26, 017202 1
- 141 Insight Into Electric Potential Distribution Within Mesoporous Titanium Dioxide Films. **2003**, 68, 1596-1604 4
- 140 The Essential Interface. **2003**, 1
- 139 Current Status of Dye-Sensitized Solar Cells. **2003**, 3
- 138 Nanostructured Organic Solar Cells. **2010**, 147-185 1
- 137 One-pot synthesis of nano titanium dioxide in supercritical water. **2020**, 9, 410-417 2
- 136 Microstructure and Optical Properties of CuSCN Thin Film Deposited by Successive Ionic Layer Adsorption and Reaction (SILAR) Method. **2009**, 24, 8-12 1
- 135 Optical and Electrochemical Properties of Non-Peripheral Thioaryl-Substituted Subphthalocyanine as Precursors for Dye-Sensitizer to Develop Photovoltaic Cells. **2014**, 05, 1037-1045 3
- 134 Studies on the Effects of Crystallite Sizes and Scattering Layers on the Conversion Efficiency of Dye-Sensitized Solar Cell. **2014**, 02, 18-24 5
- 133 Synthesis and Characterization of Free and Copper (II) Complex of N,N'-bis(Salicylidene)Ethylenediamine for Application in Dye Sensitized Solar Cells. **2017**, 05, 46-66 4
- 132 Microstructure Characterization of TiO₂ Photoelectrodes for Dye-Sensitized Solar Cell using Statistical Design of Experiments. **2009**, 10, 177-181 7
- 131 Anchoring Cadmium Chalcogenide Quantum Dots (QDs) onto Stable Oxide Semiconductors for QD Sensitized Solar Cells. **2007**, 28, 953-958 49
- 130 Synthesis and Application of New Ru(II) Complexes for Dye-Sensitized Nanocrystalline TiO₂ Solar Cells. **2007**, 28, 1311-1316 21
- 129 Electric Field-induced Charge Transfer of (Bu₄N)₂[Ru(dcbpyH)₂(NCS)₂] on Gold, Silver, and Copper Electrode Surfaces Investigated by Means of Surface-enhanced Raman Scattering. **2007**, 28, 1405-1409 14
- 128 Photoelectric Characteristics of Nanocrystalline TiO₂ Film Prepared from TiO₂ Colloid Sol for Dye-Sensitized Solar Cell. **2009**, 30, 2365-2370 3
- 127 An Organic Nitrile Dye with Strong Donor and Acceptor Groups for Dye-Sensitized Solar Cells. **2011**, 32, 2083-2086 14
- 126 Influence of para-orientating Methoxyl Units on the Electronic Structures and Light Absorption Properties of the Triphenylamine-based dyes by DFT Study. **2011**, 32, 2279-2285 4

125	Oxidation of Benzyl Alcohols with Extraordinarily High Kinetic Isotope Effects. 2011 , 32, 3003-3008	2
124	Influence of Lithium Ions on the Ion-coordinating Ruthenium Sensitizers for Nanocrystalline Dye-sensitized Solar Cells. 2011 , 32, 3031-3038	2
123	Quantum Chemical Designing of Efficient Sensitizers for Dye Sensitized Solar Cells. 2013 , 34, 2093-2098	32
122	Novel Pyridinium Iodide Containing Siloxane High Performance Electrolyte for Dye-Sensitized Solar Cell. 2013 , 34, 2583-2588	9
121	Preparation of Silica Hollow Composite Particles. 2014 , 35, 3303-3306	1
120	Co-sensitization of N719 with an Organic Dye for Dye-sensitized Solar Cells Application. 2014 , 35, 1449-1454	23
119	Development of Carbazole Dyes for Efficient Molecular Photovoltaics. 2010 , 68, 399-408	2
118	Dye-sensitized Solar Cell with the Electrode of Chlorophyll Derivative Adsorbed on Titanium Dioxide Film. 2003 , 71, 174-176	7
117	Theoretical Study on Effect of SiC Crystal Structure on Carrier Transfer in Quantum Dot Solar Cells. 2011 , 50, 04DP05	3
116	Development of Solar Cell. 2021 , 33-46	
115	Quartz Crystal Microbalance Study on Photoelectrochemical Deposition of Lead(IV) Oxide on Titanium(IV) Oxide Nanoparticulate Films. 2002 , 70, 438-441	
114	Heterosupramolecular Devices Based on Nanocrystalline Semiconductors. 2003 ,	
113	Photo-Induced Electron Transfer Reactivity at Nanoscale Semiconductor-Solution Interfaces. 2003 ,	2
112	Dye-Sensitized Solar Cells Based on Mesoscopic Oxide Semiconductor Films. 2003 ,	
111	Quantum dot solar cells. 2003 ,	0
110	Eu-doped LGF Luminescent Down Converter Possible for TiO ₂ Dye Sensitized Solar Cells. 2004 , 5, 89-92	1
109	Luminescence Properties of Ag Doped ZnO as Quantum Dot Materials for Improving Efficiency of Dye-sensitized Solar Cell. 2004 , 17, 988-993	
108	????????????????? ?????????????? 2005 , 17, 795-799	

- 107 Development of Dye-sensitized Solar Cell Using Solid Polymer Electrolyte Consisting of Hyper-branched Graft Polymer. **2007**, 32, 685-688
- 106 Stability of Ultrasonicated TiO₂ Nanoparticles Slurry. **2008**, 55, 263-269
- 105 Design, Synthesis and Characterization of Amphiphilic Bipyridyl Ruthenium (II) Sensitizers. **2008**, 1275-1279
- 104 Property of the Nano-Thick TiO₂ Films Using an ALD at Low Temperature. **2008**, 18, 515-520 3
- 103 Electrochemical Approaches to Dye-Sensitized Solar Cells. **2009**, 12, 301-310 3
- 102 Platinum/Nickel Catalyzed Selective Hydrosilylation of Alkynes and Alkenes with 1,1'-Bis(dimethylhydrosilyl) Ferrocene. **2010**, 54, 27-37
- 101 Electrical Properties of Semiconductor Nanocrystals. **2010**, 235-280
- 100 Quantum Dots and Quantum Dot Arrays. **2010**, 311-367
- 99 Anodized Titania Nanotube Array and its Application in Dye-Sensitized Solar Cells. **2010**, 57-108
- 98 Heterogeneous Catalysis Through Microcontact Printing. **2011**, 53-71
- 97 Lithographically Controlled Etching. **2011**, 73-90
- 96 Highly Efficient Organic Photosensitizer with Dinaphthylphenylamine Unit as a Donor for DSSCs. **2011**, 32, 4109-4112
- 95 Encyclopedia of Sustainability Science and Technology. **2012**, 3847-3860 1
- 94 NEW DYE ADSORPTION METHOD FOR DYE-SENSITIZED SOLAR CELL UTILIZING ELECTROSTATIC INKJET. **2013**, 25, 25-30
- 93 General Introduction. **2014**, 1-23
- 92 The Performance of Solid-State Dye Sensitized Solar Cells with Mist-Atomized CuI as the Hole Conductors. **2014**, 49-62 1
- 91 CHAPTER 12: Metallosupramolecular Assemblies for Application as Photocatalysts for the Production of Solar Fuels. **2015**, 345-396 1
- 90 Time-Domain Ab Initio Modeling of Charge and Exciton Dynamics in Nanomaterials. **2015**, 353-392

- 89 High Efficiency Dye-Sensitized Solar Cell. **2015**, 23, 65-69
- 88 Photoelectrochemical Reactions at Phthalocyanine Electrodes. **2016**, 263-314
- 87 Electronic and carrier transport properties of small molecule donors. **2016**, 1, 305-326
- 86 Introduction. **2017**, 1-40
- 85 Sustainable Design of Photovoltaics. **2017**, 416-493
- 84 CHAPTER 18:Ionic Liquid-based Polymers and Crystals for Dye-sensitized Solar Cells. **2017**, 515-530
- 83 Molecular Design of Organometallic Materials: Effect of the Metallophilic Interactions, Ligand, Metal, and Oxidation State. **2017**, 139-158
- 82 Sustainable Design of Photovoltaics. **2017**, 412-489 2
- 81 Design and Control of Nanostructures and Interfaces for Excitonic Solar Cells. **2017**, 635-679
- 80 Encyclopedia of Sustainability Science and Technology. **2017**, 1-16
- 79 Solar Cells Based on SolGel Films. **2017**, 1-19
- 78 Fuel Cell Comparison to Alternate Technologies. **2019**, 11-25
- 77 Supercritical Hydrothermal Synthesis of Inorganic Nanomaterials. **2020**, 117-147 1
- 76 Frequency-modulation Kelvin probe force microscopy under tapping mode operation for surfaces with large protrusions. **2020**, 59, 090906 2
- 75 Organic dyes based on selenophene for efficient dye-sensitized solar cell. **2021**, 27, 333 0
- 74 Novel anthracene-based organic dyes as co-sensitizers of porphyrins for developing efficient dye-sensitized solar cells. 0
- 73 Fabrication techniques and working principle of neoteric dye-sensitized solar cells. **2022**, 159-179
- 72 pH-Responsive luminescence sensing, photoredox catalysis and photodynamic applications of ruthenium(II) photosensitizers bearing imidazo[4,5-f][1,10]phenanthroline scaffolds. *Coordination Chemistry Reviews*, **2022**, 452, 214272 23.2 3

71	Preparation of TiO ₂ Nanotube Array Photoanode and Its Application in Three-Dimensional DSSC. 2020 , 1558-1566		
70	Core/Shell Quantum-Dot-Sensitized Solar Cells. 2020 , 219-255		
69	Estimation of mechanical milling characteristic parameters to explain the structural transformation of titanium dioxide. 2021 , 2046, 012055		
68	Covalent Grafting of Ruthenium Complexes on Iron Oxide Nanoparticles: Hybrid Materials for Photocatalytic Water Oxidation. 2021 , 13, 53829-53840		0
67	Zinc stannate nanostructures: hydrothermal synthesis. 2011 , 12, 013004		6
66	Efficiency and stability improvements for room light dye-sensitized solar cells in the presence of electrochemically fabricated composite counter electrodes. 2022 , 518, 230781		3
65	Construction of Ni doped MoO ₃ nanostructures and their application as counter electrode in dye-sensitized solar cells. 2021 , 135, 109079		4
64	Tuning the dye aerosol impaction and TiO ₂ nanoparticle stacking structures for High-Efficiency Dye-Sensitized solar cells. 2021 , 33, 103367-103367		
63	Review on the Revolution of Polymer Electrolytes for Dye-Sensitized Solar Cells. 2021 , 35, 19320-19350		1
62	Dynamics of photoconversion processes: the energetic cost of lifetime gain in photosynthetic and photovoltaic systems. 2021 , 50, 13372-13409		1
61	Solid-state dye-sensitized solar cells using polymeric hole conductors.. 2021 , 11, 39570-39581		0
60	TiO ₂ nanoparticles via simple surface modification as cathode interlayer for efficient organic solar cells. <i>Organic Electronics</i> , 2022 , 101, 106422	3.5	0
59	Substitution effect on solid parking motif and luminescence of diphenylfuro[2,3-b]quinoxaline isomers. <i>Organic Electronics</i> , 2022 , 101, 106416	3.5	1
58	Dye-sensitized solar cells based on Fe N-heterocyclic carbene photosensitizers with improved rod-like push-pull functionality.. 2021 , 12, 16035-16053		3
57	Dye-sensitized solar cells. 2022 , 195-244		0
56	Design of dyes for energy transformation: From the interaction with biological systems to application in solar cells. 2022 , 79-114		
55	Molecular modeling and simulation for the design of dye sensitizers with mono- and di-substituted donor moieties. <i>Journal of Computational Electronics</i> , 2022 , 21, 52	1.8	0
54	Oxygen Deficiencies in Titanium Oxide Clusters as Models for Bulk Defects.. <i>Journal of Physical Chemistry A</i> , 2022 ,	2.8	0

53	Advancements, frontiers and analysis of metal oxide semiconductor, dye, electrolyte and counter electrode of dye sensitized solar cell. <i>Solar Energy</i> , 2022 , 233, 378-407	6.8	2
52	Liquid bisazobenzenes as molecular solar thermal fuel with enhanced energy density. <i>Chemistry Letters</i> ,	1.7	0
51	Enhanced adsorption on TiO ₂ photoelectrodes of dye-sensitized solar cells by electrochemical methods dye. <i>Journal of Alloys and Compounds</i> , 2022 , 903, 163959	5.7	0
50	Indoor Dye-Sensitized Solar Cells with Efficiencies Surpassing 26% Using Polymeric Counter Electrodes. <i>ACS Sustainable Chemistry and Engineering</i> ,	8.3	5
49	Distinction of charge transfer and Frenkel excitons in pentacene traced via infrared spectroscopy. <i>Journal of Materials Chemistry C</i> , 2022 , 10, 5582-5589	7.1	0
48	Anthracene-Bridged Sensitizers for Dye-Sensitized Solar Cells with 37% Efficiency under Dim Light. <i>Advanced Energy Materials</i> , 2104051	21.8	3
47	ReflectSim: an open-source software for teaching optical light reflection of nanostructured materials. <i>European Journal of Physics</i> , 2022 , 43, 035303	0.8	
46	Combining localized orbital scaling correction and Bethe-Salpeter equation for accurate excitation energies.. <i>Journal of Chemical Physics</i> , 2022 , 156, 154101	3.9	1
45	Computational analysis of carbazole-based newly efficient D-EA organic spacer dye derivatives for dye-sensitized solar cells. <i>Structural Chemistry</i> , 1	1.8	1
44	Recent Developments on Green Synthesis of Nanomaterials and their Application in Dye-Sensitized Solar Cells. <i>International Journal of Ambient Energy</i> , 1-39	2	0
43	Highly efficient quantum-dot-sensitized solar cells with composite semiconductor of ZnO nanorod and oxide inverse opal in photoanode. <i>Electrochimica Acta</i> , 2022 , 412, 140145	6.7	0
42	Chalcone- and flavone-based novel terpyridine metal complexes: Synthesis, electrochemical, photophysical, photovoltaic and computational studies. <i>Dyes and Pigments</i> , 2022 , 201, 110248	4.6	1
41	A NOVEL MERCURY COORDINATION COMPOUND WITH YELLOW PHOTOLUMINESCENCE. <i>Journal of Structural Chemistry</i> , 2021 , 62, 1810-1817	0.9	
40	Functional Ligand-Decorated ZnO Nanoparticles as Cathode Interlayers for Efficient Organic Solar Cells. <i>ACS Applied Energy Materials</i> , 2022 , 5, 1291-1297	6.1	4
39	Synthesis and manifold but controllable emission switching of stilbene-appended polyaromatic terpyridine derivatives via aggregation and trans-cis isomerization. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2022 , 113966	4.7	0
38	Image_1.pdf. 2019 ,		
37	Mesoporous Dye-Sensitized Solar Cells. 2012 , 447-462		
36	Effect of carboxylic acid and cyanoacrylic acid as anchoring groups on Coumarin 6 dye for dye-sensitized solar cells: DFT and TD-DFT study. <i>Structural Chemistry</i> ,	1.8	0

35	Ultrafast photo-induced processes in complex environments: The role of accuracy in excited-state energy potentials and initial conditions. <i>Chemical Physics Reviews</i> , 2022 , 3, 021307	4.4	1
34	Recent Advancements in Dye-Sensitized Solar Cells; From Photoelectrode to Counter Electrode. <i>Journal of the Electrochemical Society</i> ,	3.9	2
33	Photofunctional molecular assembly for artificial photosynthesis: Beyond a simple dye sensitization strategy. <i>Coordination Chemistry Reviews</i> , 2022 , 467, 214624	23.2	2
32	Flexible and Wearable Photovoltaics. 2022 , 1-26		
31	Electron Transfer at Quantum Dot/Metal Oxide Interfaces for Solar Energy Conversion. <i>ACS Nanoscience Au</i> ,		
30	Why is graphene an extraordinary material? A review based on a decade of research. <i>Frontiers of Materials Science</i> , 2022 , 16,	2.5	0
29	Photophysical Properties of Donor-Acceptor-Bridge-Acceptor Sensitizers with a Naphthobisthiadiazole Auxiliary Acceptor: Toward Longer-Wavelength Access in Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> ,	3.8	0
28	Enhanced photovoltaic performance of D- π -A organic sensitizers by simple fluorination of acceptor unit. <i>Organic Electronics</i> , 2022 , 108, 106606	3.5	
27	Bio-inspired MXene coated wood-like ordered chitosan aerogels for efficient solar steam generating devices. <i>Journal of Materials Science</i> ,	4.3	0
26	An insight into interchain charge transfer through a photophysical study of purified conjugated nanoparticles system. 2023 , 564, 111705		0
25	BODIPY Dyes in Solar Energy. 2022 , 119-142		0
24	Modified HSE06 functional applied to anatase TiO ₂ : influence of exchange fraction on the quasiparticle electronic structure and optical response.		0
23	Computational Investigations on Acceptor Substituent Influence of Metal-free Efficient Chromophores for Optoelectronic Properties.		0
22	Structural characterization of excited state transition metal complexes by x-ray transient absorption spectroscopies. 2022 ,		0
21	?????(III)?????????????. 2022 ,		0
20	Computational investigations on acceptor substituent influence of metal-free efficient chromophores for optoelectronic properties. 2022 , 28,		1
19	Synthesis of lignite-based Ni/C composite with low-medium temperature pyrolysis method as an efficient Pt-free counter electrode for dye-sensitized solar cells.		0
18	Surface tailored Ti-oxo clusters enabling highly efficient organic solar cells. 2023 , 454, 140002		0

- 17 Advances in Photovoltaic Technologies from Atomic to Device Scale. **2022**, 9, 837 ○
- 16 Assessment of Performance of Photocatalytic Nanostructured Materials with Varied Morphology Based on Reaction Conditions. **2022**, 27, 7778 ○
- 15 Electrochemical impedance simulation of porous electrodes with variously shaped pores using 3-dimensional finite element method. **2023**, 440, 141723 ○
- 14 Carboxymethyl Cellulose Stabilized Cobalt Sulfide Nanoparticles: Preparation, Characterization and Application. ○
- 13 Computational Study on D-πA-based Metal-Free Donor-Tuned Molecules for Efficient Organic Dye-Sensitized Solar Cells. ○
- 12 Quantum chemical and photovoltaic modeling of D-πA organic dyes based on substituted arylamine electron donors in dye sensitized solar cells. **2022**, 75, 966-973 ○
- 11 Nature of the Ultrafast Interligands Electron Transfers in Dye-Sensitized Solar Cells. 2
- 10 Synthesis of lignite-based Ni/C composite with low-medium temperature pyrolysis method as an efficient Pt-free counter electrode for dye-sensitized solar cells. ○
- 9 Quantum dot-sensitized solar cells: A review on interfacial engineering strategies for boosting efficiency. **2022**, ○
- 8 Upscaling of Carbon-Based Perovskite Solar Module. **2023**, 13, 313 ○
- 7 Exciton dispersion and exciton-phonon interaction in solids by time-dependent density functional theory. ○
- 6 Progress in transition metal chalcogenides-based counter electrode materials for dye-sensitized solar cells. **2023**, 156, 107273 ○
- 5 Compact size ZrFe₂O₃ inspired metal-dielectric angle and polarization insensitive nanostructure for efficient solar energy absorption. **2023**, 190, 108330 ○
- 4 Quantum-chemical calculations of electronic spectra absorption: ab initio or semiempirical methods?. **2021**, 33-43 ○
- 3 Computational analysis of the structural, optoelectronic and photovoltaic properties of triphenylamine-based dyes and their interaction with TiO₂ / Iodine. **2023**, 49, 1855-1878 ○
- 2 ANALYSIS OF QD-SI SOLAR CELL WITH EFFICIENCY ENHANCING METHODS USING NANOMATERIALS. **2023**, 48-52 ○
- 1 Sulfonated polyaniline synthesis via moistureproof sulfonation of emeraldine salt polyaniline for graphite-based composite counter electrode in dye-sensitized solar cells. **2022**, 61, 1564-1577 ○