Citation Report
List of articles citing

Semiconductor nanocrystals as fluorescent biological labels

DOI: 10.1126/science.281.5385.2013
Science, 1998, 281, 2013-6.

#	Paper	IF	Citations
2285	Current activities at the Centers for Disease Control and Prevention's National Diabetes Laboratory. **1999**, 1, 403-9		
2284	Three-dimensional orientation measurements of symmetric single chromophores using polarization microscopy. **1999**, 399, 126-130		223
2283	Illuminating single molecules in condensed matter. *Science*, **1999**, 283, 1670-6	33.3	976
2282	Luminescence Spectral Properties of CdS Nanoparticles. **1999**, 103, 7613-7620		203
2281	Colloidal Synthesis and Properties of InAs/InP and InAs/CdSe Core/Shell Nanocrystals. **1999**, 571, 75		4
2280	Synthese und Charakterisierung von InAs/InP- und InAs/CdSe-Kern/Schalen-Nanokristallen. **1999**, 111, 3913-3916		11
2279	Self-Assembly of Monolayers of Cadmium Selenide Nanocrystals with Dual Color Emission. **1999**, 15, 6845-6850		68
2278	Luminescence Photophysics in Semiconductor Nanocrystals. **1999**, 32, 407-414		802
2277	Nanosphere Lithography: Size-Tunable Silver Nanoparticle and Surface Cluster Arrays. **1999**, 103, 3854-3863		646
2276	Synthesis and Ultrafast Study of Cysteine- and Glutathione-Capped Ag2S Semiconductor Colloidal Nanoparticles. **1999**, 103, 10194-10201		126
2275	Efficient Raman Enhancement and Intermittent Light Emission Observed in Single Gold Nanocrystals. **1999**, 121, 9208-9214		335
2274	Preparation of Platinum Colloids on Polystyrene Nanospheres and Their Catalytic Properties in Hydrogenation **1999**, 11, 1381-1389		174
2273	Triphenylmethane Dyes Revealing Heterogeneity of Their Nanoenvironment: Femtosecond, Picosecond, and Single-Molecule Studies. **1999**, 103, 4319-4331		45
2272	Evidence for a thermal contribution to emission intermittency in single CdSe/CdS core/shell nanocrystals. **1999**, 110, 1195-1201		208
2271	Redox-Modulated Recognition of Flavin by Functionalized Gold Nanoparticles. **1999**, 121, 4914-4915		105
2270	Programmed Assembly of DNA Functionalized Quantum Dots. **1999**, 121, 8122-8123		632
2269	Fluorescence spectroscopy of single biomolecules. *Science*, **1999**, 283, 1676-83	33.3	1744

2268	Synthesis and Characterization of Strongly Fluorescent CdTe Nanocrystal Colloids. **1999**, 581, 139	2
2267	Organische Chemie 1998, Teil I. **1999**, 47, 153-175	0
2266	Nonlinear Optical Response of Colloidal Gold Nanoparticles Studied by Hyper-Rayleigh Scattering Technique. **2000**, 29, 1140-1141	11
2265	The Assembly of Nano-Materials Using Bio-Scaffolding. **2000**, 642, 231	
2264	Vapor Phase Synthesis of II-IV Semiconductor Nanoparticles in a Counterflow Jet Reactor. **2000**, 616, 41	7
2263	Dynamic Light Scattering at CdSe Nanocrystals and CdSe Cluster-Molecules. **2000**, 636, 9531	3
2262	Quantum-Confined Electron Transitions in CdSe Nanocrystals. **2000**, 642, 251	
2261	Bioconjugates of Luminescent CdSe-ZnS Quantum Dots with Engineered Recombinant Proteins: Novel Self-Assembled Tools for Biosensing. **2000**, 642, 281	1
2260	Time-resolved spectral observations of cadmium-enriched cadmium sulfide nanoparticles and the effects of DNA oligomer binding. **2000**, 280, 128-36	92
2259	A Simple Colloidal Synthesis for Gram-Quantity Production of Water-Soluble ZnS Nanocrystal Powders. **2000**, 227, 561-566	109
2258	Self-assembly and photoluminescence of CdS-mercaptoacetic clusters with internal structures. **2000**, 27, 1-5	49
2257	Fast Imaging of Single Molecules and Nanoparticles by Wide-Field Microscopy and Spectrally Resolved Confocal Microscopy. **2000**, 1, 291-298	9
2256	Excitons, microcavity physics and devices in wide bandgap semiconductors. **2000**, 214-215, 993-1001	
2255	The kinetics of growth of semiconductor nanocrystals in a hot amphiphile matrix. **2000**, 88, 37-78	71
2254	Synthesis and photoluminescence enhancement of Mn2+-doped ZnS nanocrystals. **2000**, 92, 73-78	93
2253	Synthesis and electronic properties of semiconductor nanoparticles/quantum dots. **2000**, 5, 168-172	128
2252	Recent developments in the encoding and deconvolution of combinatorial libraries. **2000**, 4, 346-50	48
2251	High-throughput screening: new technology for the 21st century. **2000**, 4, 445-51	438

2250	Applications of nanotechnology to biotechnology commentary. **2000**, 11, 215-7	283
2249	Shape control of CdSe nanocrystals. **2000**, 404, 59-61	3891
2248	Optical emission from a charge-tunable quantum ring. **2000**, 405, 926-9	767
2247	n-type colloidal semiconductor nanocrystals. **2000**, 407, 981-3	411
2246	Synthesis and Characterization of CdS Nanoparticles with Strong Electrolyte Behavior. **2000**, 2, 299-303	1
2245	Photon antibunching in single CdSe/ZnS quantum dot fluorescence. **2000**, 329, 399-404	255
2244	Synthesis and Characterization of CdS Nanoclusters in a Quaternary Microemulsion: the Role of the Cosurfactant. **2000**, 104, 8391-8397	160
2243	Multilocus genetic analysis of single interphase cells by spectral imaging. **2000**, 107, 615-22	34
2242	Ion irradiation effects in nonmetals: formation of nanocrystals and novel microstructures. **2000**, 3, 190-204	36
2241	Ultrahigh-resolution multicolor colocalization of single fluorescent probes. **2000**, 97, 9461-6	281
2240	Long-lived quantum-confined infrared transitions in CdSe nanocrystals. **2000**, 77, 2816-2818	39
2239	Optical microcavities using highly luminescent films of semiconductor nanocrystals. **2000**, 77, 2500-2502	34
2238	Vapor phase synthesis of polycrystalline II-VI semiconductor nanoparticles in a counterflow jet reactor.	
2237	Phase transformation and conductivity in nanocrystal PbS under pressure. **2000**, 87, 2658-2660	56
2236	A ruthenium probe for cell viability measurement using flow cytometry, confocal microscopy and time-resolved luminescence. **2000**, 72, 28-34	39
2235	Probing specific sequences on single DNA molecules with bioconjugated fluorescent nanoparticles. **2000**, 72, 1979-86	225
2234	Zinc-histidine as nucleation centers for growth of ZnS nanocrystals. **2000**, 272, 29-35	36
2233	Fluorescence intensity calibration for immunophenotyping by flow cytometry. **2000**, 21, 289-96	14

2232	Tuning Solid-State Photoluminescence Frequencies and Efficiencies of Oligomers Containing One Central Thiophene-S,S-dioxide Unit. **2000**, 122, 11971-11978		134
2231	Fluorescence techniques: shedding light on ligand-receptor interactions. **2000**, 21, 266-73		91
2230	Lead salt quantum dots: the limit of strong quantum confinement. **2000**, 33, 773-80		995
2229	Preparation of Aminodextran□CdS Nanoparticle Complexes and Biologically Active Antibody□Aminodextran□CdS Nanoparticle Conjugates. **2000**, 16, 3107-3118		110
2228	Self-Assembly of CdSe□ZnS Quantum Dot Bioconjugates Using an Engineered Recombinant Protein. **2000**, 122, 12142-12150		1526
2227	Interfacial Charge Carrier Dynamics of Colloidal Semiconductor Nanoparticles. **2000**, 104, 7239-7253		282
2226	One-Pot Synthesis of Ag@TiO2Core□Shell Nanoparticles and Their Layer-by-Layer Assembly. **2000**, 16, 2731-2735		299
2225	Biomineralization. Naturally aligned nanocrystals. *Science*, **2000**, 289, 736-7	33.3	393
2224	Raisin Bun□Type Composite Spheres of Silica and Semiconductor Nanocrystals. **2000**, 12, 2676-2685		386
2223	Multiphonon resonant Raman scattering in nanocrystals. **2000**, 62, 11006-11016		42
2222	Single-target molecule detection with nonbleaching multicolor optical immunolabels. **2000**, 97, 996-1001		751
2221	Nanoscale Chemistry and Processing of Multifunctional Composites for Nanophotonics and Biophotonics. **2000**, 353, 257-270		
2220	Synthesis and Steady-State Photophysical Properties of Dye-Labeled Dendrimers Having Novel Oligothiophene Cores:´A Comparative Study. **2000**, 12, 1463-1472		55
2219	Nucleation and Growth of Lead Sulfide Nano- and Microcrystallites in Supramolecular Polymer Assemblies. **2000**, 12, 1042-1048		96
2218	Electroinjection of colloid particles and biopolymers into single unilamellar liposomes and cells for bioanalytical applications. **2000**, 72, 5857-62		107
2217	Intra- and Intermonolayer Hydrogen Bonding in Amide-Functionalized Alkanethiol Self-Assembled Monolayers on Gold Nanoparticles. **2000**, 16, 9527-9532		84
2216	High-Yield Luminescence from Cadmium Sulfide Nanoclusters Supported in a Poly(ethylene glycol) Oligomer. **2000**, 16, 3561-3563		17
2215	Synthesis of Nanocrystalline Bismuth in Reverse Micelles. **2000**, 122, 7114-7115		74

2214	Quantum confinement energies in zinc-blende III–V and group IV semiconductors. **2000**, 77, 639-641	52
2213	Silica Nanobubbles Containing an Organic Dye in a Multilayered Organic/Inorganic Heterostructure with Enhanced Luminescence. **2000**, 12, 2632-2639	86
2212	Preparation and Characterization of Dendrimer-Encapsulated CdS Semiconductor Quantum Dots. **2000**, 122, 12886-12887	172
2211	Alkanethiolate-Protected PbS Nanoclusters: Synthesis, Spectroscopic and Electrochemical Studies. **2000**, 12, 3864-3870	129
2210	The Discovery and Study of Nanocrystalline TiO2-(MoO3) Core–Shell Materials. **2000**, 122, 5138-5146	147
2209	Ten Years of Single-Molecule Spectroscopy. **2000**, 104, 1-16	297
2208	Polymer-Mediated Assembly of Gold Nanoclusters. **2000**, 16, 9151-9154	21
2207	Growth and Properties of Semiconductor Core/Shell Nanocrystals with InAs Cores. **2000**, 122, 9692-9702	396
2206	Temperature- and Salt-Dependent Binding of Long DNA to Protein-Sized Quantum Dots:´ Thermodynamics of Inorganic Protein–DNA Interactions. **2000**, 122, 14-17	151
2205	Nanostructured materials. **2001**, 64, 297-381	634
2204	Supramolecular Complexes from CdSe Nanocrystals and Organic Fluorophors. **2001**, 17, 2861-2865	221
2203	Photochemical instability of CdSe nanocrystals coated by hydrophilic thiols. **2001**, 123, 8844-50	956
2202	Electrophoretic Isolation of Discrete Au Nanocrystal/DNA Conjugates. **2001**, 1, 32-35	419
2201	Tailoring the Polyelectrolyte Coating of Metal Nanoparticles. **2001**, 105, 6846-6852	277
2200	Hydroxylated quantum dots as luminescent probes for in situ hybridization. **2001**, 123, 4103-4	580
2199	Calculating the Influence of External Charges on the Photoluminescence of a CdSe Quantum Dot. **2001**, 105, 2360-2364	69
2198	Crystallographically oriented mesoporous WO3 films: synthesis, characterization, and applications. **2001**, 123, 10639-49	894
2197	Synthesis and Properties of Biocompatible Water-Soluble Silica-Coated CdSe/ZnS Semiconductor Quantum Dots. **2001**, 105, 8861-8871	1128

2196	Conjugation of biomolecules with luminophore-doped silica nanoparticles for photostable biomarkers. **2001**, 73, 4988-93		675
2195	Current status of flow cytometry in cell and molecular biology. **2001**, 204, 239-98		26
2194	Intraband hole burning of colloidal quantum dots. **2001**, 64,		46
2193	Charge-Tunable Optical Properties in Colloidal Semiconductor Nanocrystals. **2001**, 105, 2369-2373		148
2192	Structure and stability of germanium nanoparticles. **2001**, 63,		54
2191	Photooxidation and Photobleaching of Single CdSe/ZnS Quantum Dots Probed by Room-Temperature Time-Resolved Spectroscopy. **2001**, 105, 8281-8284		340
2190	Formation and Distinctive Decay Times of Surface- and Lattice-Bound Mn2+ Impurity Luminescence in ZnS Nanoparticles. **2001**, 105, 4128-4132		127
2189	Submicrometer metallic barcodes. *Science*, **2001**, 294, 137-41	33.3	1078
2188	Large-scale production of nanocrystals by laser ablation of microparticles in a flowing aerosol. **2001**, 78, 1128-1130		53
2187	Development of novel dye-doped silica nanoparticles for biomarker application. **2001**, 6, 160-6		233
2186	Time-gated biological imaging by use of colloidal quantum dots. **2001**, 26, 825-7		286
2185	CdSe□ZnS Quantum Dots as Resonance Energy Transfer Donors in a Model Protein□Protein Binding Assay. **2001**, 1, 469-474		447
2184	Mechanisms of the Shape Evolution of CdSe Nanocrystals. **2001**, 123, 1389-1395		1162
2183	Nanosphere Lithography:´A Versatile Nanofabrication Tool for Studies of Size-Dependent Nanoparticle Optics. **2001**, 105, 5599-5611		2088
2182	High Sensitivity Spectrograph for Use in Fluorescence Microscopy. **2001**, 55, 1005-1012		17
2181	Large-image-format computed tomography imaging spectrometer for fluorescence microscopy. **2001**, 9, 444-53		62
2180	Dendrimer-Encapsulated Metals and Semiconductors: Synthesis, Characterization, and Applications. **2001**, 81-135		156
2179	Ultrahigh-resolution colocalization of spectrally separable point-like fluorescent probes. **2001**, 25, 87-102		55

2178	Luminescence spectra of a quantum-dot cascade laser. **2001**, 78, 1820-1822		17
2177	Autofluorescent proteins in single-molecule research: applications to live cell imaging microscopy. **2001**, 80, 2396-408		191
2176	Linearly polarized emission from colloidal semiconductor quantum rods. *Science*, **2001**, 292, 2060-3	33.3	1026
2175	Albumin□CdTe Nanoparticle Bioconjugates: Preparation, Structure, and Interunit Energy Transfer with Antenna Effect. **2001**, 1, 281-286		393
2174	Freeze-substitution: origins and applications. **2001**, 206, 45-96		32
2173	Evolution of an Ensemble of Nanoparticles in a Colloidal Solution: Theoretical Study. **2001**, 105, 12278-12285		423
2172	Highly Luminescent Monodisperse CdSe and CdSe/ZnS Nanocrystals Synthesized in a Hexadecylamine□Trioctylphosphine Oxide□Trioctylphospine Mixture. **2001**, 1, 207-211		1313
2171	Alternative Routes toward High Quality CdSe Nanocrystals. **2001**, 1, 333-337		880
2170	Enhanced fluorescence from Eu3+-doped silica gels by adsorbed CdS nanoparticles. **2001**, 291, 137-141		48
2169	Progress on methods of gene detection in preimplantation embryos. **2001**, 55, 23-34		24
2168	DC Transport in Self-Assembled 2D Layers of Ag Nanoparticles□ **2001**, 105, 8797-8800		84
2167	Kinetic-Dependent Crystal Growth of Size-Tunable CdS Nanoparticles. **2001**, 13, 594-598		55
2166	Phase separation in AlxGa1-xAs nanowhiskers grown by the solution-liquid-solid mechanism. **2001**, 123, 4502-11		55
2165	Exciton-mediated hydrosilylation on photoluminescent nanocrystalline silicon. **2001**, 123, 7821-30		225
2164	Sublattice Resolution Structural and Chemical Analysis of Individual CdSe Nanocrystals Using Atomic Number Contrast Scanning Transmission Electron Microscopy and Electron Energy Loss Spectroscopy. **2001**, 105, 361-369		27
2163	Surface Modification of Erbium-Doped Silicon Nanocrystals. **2001**, 13, 4783-4786		15
2162	Micropipet-Assisted Formation of Microscopic Networks of Unilamellar Lipid Bilayer Nanotubes and Containers. **2001**, 17, 6754-6758		90
2161	Triangular CdS Nanocrystals: Synthesis, Characterization, and Stability. **2001**, 17, 7982-7987		100

2160	Photoluminescence and Local Structure of Organic/Inorganic Hybrid ZnS: Mn Nanocrystal Phosphors.. **2001**, 22, 315-322	4
2159	Novel Fluorescent Labels Prepared by Layer-by-Layer Assembly on Colloids for Biodetection Systems. **2001**, 667, 1	
2158	The Facile Synthesis of Nanocrystalline Semiconductor Quantum Dots. **2001**, 676, 231	3
2157	Development of Quantum dot Reporters for Immunoassay Applications. **2001**, 676, 361	
2156	Fluorescence from Coated Oxide Nanoparticles. **2001**, 703, 1	3
2155	NANOPARTICLE THIN FILMS: AN APPROACH BASED ON SELF-ASSEMBLY. **2001**, 87-123	3
2154	Homogeneous Assays for High-Throughput and Ultrahigh-Throughput Screening. **2001**,	
2153	Ultrahigh-resolution multicolor colocalization of single fluorescent nanocrystals. **2001**, 4258,	3
2152	A novel fluorescent label based on biological fluorescent nanoparticles and its application in cell recognition. **2001**, 46, 1962-1965	11
2151	Optical emission from single, charge-tunable quantum rings. **2001**, 9, 124-130	26
2150	Layer-by-Layer Construction of Novel Biofunctional Fluorescent Microparticles for Immunoassay Applications. **2001**, 234, 356-362	96
2149	Properties of Fluorescent Semiconductor Nanocrystals and their Application to Biological Labeling. **2001**, 2, 261-276	335
2148	Nanofabrication: conventional and nonconventional methods. **2001**, 22, 187-207	233
2147	Synthese von Kolloiden und redispergierbaren Pulvern stark lumineszierender LaPO4:Ce,Tb-Nanokristalle. **2001**, 113, 574-578	32
2146	Spontaner Phasentransfer metallischer Nanopartikel von der organischen in die wäßrige Phase. **2001**, 113, 3089-3092	29
2145	Nanopartikel, Proteine und Nucleinsäuren: Die Biotechnologie begegnet den Materialwissenschaften. **2001**, 113, 4254-4287	234
2144	Liquid-Phase Synthesis of Colloids and Redispersible Powders of Strongly Luminescing LaPO :Ce,Tb Nanocrystals. **2001**, 40, 573-576	332
2143	Spontaneous phase transfer of nanoparticulate metals from organic to aqueous media. **2001**, 40, 3001-4	414

2142	Nanoparticles, Proteins, and Nucleic Acids: Biotechnology Meets Materials Science. **2001**, 40, 4128-4158	1983
2141	Bioconjugation of Highly Luminescent Colloidal CdSe□ZnS Quantum Dots with an Engineered Two-Domain Recombinant Protein. **2001**, 224, 277-283	92
2140	IR-REMPI of vanadium-carbide nanocrystals: Ideal versus truncated lattices. **2001**, 333, 350-357	27
2139	Formation of high-quality CdTe, CdSe, and CdS nanocrystals using CdO as precursor. **2001**, 123, 183-4	2418
2138	Si□N linkage in ultrabright, ultrasmall Si nanoparticles. **2001**, 78, 3711-3713	57
2137	Bar-coding biomolecules with fluorescent nanocrystals. **2001**, 19, 621-2	103
2136	Quantum-dot-tagged microbeads for multiplexed optical coding of biomolecules. **2001**, 19, 631-5	2266
2135	Combinatorial fluorescence energy transfer tags for multiplex biological assays. **2001**, 19, 756-9	80
2134	Biologists join the dots. **2001**, 413, 450-2	105
2133	Solution and chip arrays in protein profiling. **2001**, 19, 34-39	45
2132	Solution and chip arrays in protein profiling. **2001**, 19, S34-9	58
2131	Microminiaturized immunoassays using quantum dots as fluorescent label by laser confocal scanning fluorescence detection. **2001**, 249, 85-9	121
2130	CORE-SHELL NANOPARTICLES AND ASSEMBLIES THEREOF. **2001**, 189-237	25
2129	Synthesis and luminescence properties of colloidal lanthanide doped YVO4. **2001**, 667, 1	7
2128	Advance in contrast agents, reporters, and detection. **2001**, 6, 106-10	55
2127	Doping and Charging in Colloidal Semiconductor Nanocrystals. **2001**, 26, 1005-1008	64
2126	Enhanced thermal stability of silica-encapsulated metal nanoshells. **2001**, 79, 674-676	60
2125	Femtosecond time-resolved electron-hole dynamics and radiative transitions in the double-layer quantum well of the CdS/(HgS)2/CdS quantum-dot□quantum-well nanoparticle. **2001**, 64,	24

2124	Field-induced Coulomb coupling in semiconductor macroatoms: Application to single-electron quantum devices. **2001**, 79, 1676-1678	28
2123	Spin spectroscopy of dark excitons in CdSe quantum dots to 60 T. **2001**, 63,	68
2122	Single-electron charging in quantum dots with large dielectric mismatch. **2001**, 63,	20
2121	Compton scattering, positron annihilation, and the electronic properties of quantum dots. **2002**, 65,	18
2120	Evidence for surface reconstruction on InAs nanocrystals. **2002**, 65,	29
2119	Simple model for the power-law blinking of single semiconductor nanocrystals. **2002**, 66,	295
2118	Electrochromic semiconductor nanocrystal films. **2002**, 80, 4-6	88
2117	Adsorption behavior and current□oltage characteristics of CdSe nanocrystals on hydrogen-passivated silicon. **2002**, 92, 1434-1440	16
2116	Determination of the localization times of electrons and holes in the HgS well in a CdS/HgS/CdS quantum dot□uantum well nanoparticle. **2002**, 66,	15
2115	Colloidal Semiconductor Quantum Dot Conjugates in Biosensing. **2002**, 537-569	23
2114	Colloidal synthesis of monodisperse luminescent InP nanocrystals.	
2113	THE INFLUENCE OF ENVIRONMENTAL EFFECTS ON THE ACOUSTIC PHONON SPECTRA IN QUANTUM-DOT HETEROSTRUCTURES. **2002**, 12, 1147-1158	3
2112	USING EMISSION QUENCHING TO STUDY THE INTERACTION BETWEEN ZnO NANOCRYSTALS AND ORGANIC LIGANDS. **2002**, 01, 743-747	1
2111	Encagement of Gold Nanoclusters in Crosslinked Resorcinarene Shells. **2002**, 14, 291-294	22
2110	ADVANCES IN QUANTUM-DOT RESEARCH AND TECHNOLOGY: THE PATH TO APPLICATION IN BIOLOGY. **2002**, 12, 1039-1056	5
2109	The energy gap of clusters, nanoparticles, and quantum dots. **2002**, 61-97	23
2108	Size and shape dependent level structure in CdSe quantum rods. **2002**, 737, 174	
2107	Novel Polyethylene Glycol Derivatives of Melatonin and Serotonin. Ligands for Conjugation to Fluorescent Cadmium Selenide/Zinc Sulfide core shell Nanocrystals. **2002**, 2002, 203-204	2

2106	Nanometer Scale Patterning of Langmuir Blodgett Films of Gold Nanoparticles by Electron Beam Lithography. **2002**, 2, 43-47	94
2105	Exciton Exciton interaction engineering in coupled GaN quantum dots. **2002**, 81, 4236-4238	21
2104	Preparation and Characterization of Gold Nanoparticles Dispersed in Poly(2-hydroxyethyl methacrylate). **2002**, 18, 8255-8259	43
2103	Synthesis and properties of water-soluble gold colloids covalently derivatized with neutral polymer monolayers. **2002**, 124, 5811-21	122
2102	Sorting fluorescent nanocrystals with DNA. **2002**, 124, 7070-4	263
2101	Hybridization and enzymatic extension of au nanoparticle-bound oligonucleotides. **2002**, 124, 7314-23	134
2100	Multiparticle Effects on the Interactions of Complex Colloidal Dispersions. **2002**, 18, 1098-1103	10
2099	Effects of Branched Ligands on the Structure and Stability of Monolayers on Gold Nanoparticles. **2002**, 18, 2368-2373	61
2098	Efficient Phase Transfer of Luminescent Thiol-Capped Nanocrystals: From Water to Nonpolar Organic Solvents. **2002**, 2, 803-806	228
2097	Electro-optical properties of semiconductor quantum dots: Application to quantum information processing. **2002**, 65,	98
2096	Targeting cell surface receptors with ligand-conjugated nanocrystals. **2002**, 124, 4586-94	324
2095	Intrinsic exciton-exciton coupling in GaN-based quantum dots: Application to solid-state quantum computing. **2002**, 65,	84
2094	Epitaxial growth and photochemical annealing of graded CdS/ZnS shells on colloidal CdSe nanorods. **2002**, 124, 7136-45	513
2093	Quantum Dots: A Primer. **2002**, 56, 16A-27A	161
2092	Emulating biology: building nanostructures from the bottom up. **2002**, 99 Suppl 2, 6451-5	343
2091	Synthesis and Characterization of High-Efficiency Nanocrystal Up-Conversion Phosphors: Ytterbium and Erbium Codoped Lanthanum Molybdate. **2002**, 14, 2910-2914	176
2090	Molecular Weight, Osmotic Second Virial Coefficient, and Extinction Coefficient of Colloidal CdSe Nanocrystals. **2002**, 106, 5500-5505	117
2089	Conjugation of luminescent quantum dots with antibodies using an engineered adaptor protein to provide new reagents for fluoroimmunoassays. **2002**, 74, 841-7	387

2088	Size and Band-Gap Dependences of the First Hyperpolarizability of CdxZn1-xS Nanocrystals. **2002**, 106, 5325-5334	103
2087	Selective binding of mannose-encapsulated gold nanoparticles to type 1 pili in Escherichia coli. **2002**, 124, 3508-9	264
2086	Size-dependent tunneling and optical spectroscopy of CdSe quantum rods. **2002**, 89, 086801	190
2085	Single-molecule chemistry. **2002**, 117, 11033-11061	552
2084	Conjugation of DNA to Silanized Colloidal Semiconductor Nanocrystalline Quantum Dots. **2002**, 14, 2113-2119	274
2083	Antigen/Antibody Immunocomplex from CdTe Nanoparticle Bioconjugates. **2002**, 2, 817-822	459
2082	Preparation of cadmium selenide-polyolefin composites from functional phosphine oxides and ruthenium-based metathesis. **2002**, 124, 5729-33	140
2081	Characterization of Pt Nanoparticles Encapsulated in Al2O3 and Their Catalytic Efficiency in Propene Hydrogenation **2002**, 106, 2049-2054	67
2080	Semiconductor Quantum Dot-Labeled Microsphere Bioconjugates Prepared by Stepwise Self-Assembly. **2002**, 2, 857-861	289
2079	Electronic structure and optical properties of quantum rods with wurtzite structure. **2002**, 66,	56
2078	Individual water-soluble dendrimer-encapsulated silver nanodot fluorescence. **2002**, 124, 13982-3	545
2077	A microfabrication-based dynamic array cytometer. **2002**, 74, 3984-90	277
2076	Interaction of Anionic Superparamagnetic Nanoparticles with Cells: Kinetic Analyses of Membrane Adsorption and Subsequent Internalization. **2002**, 18, 8148-8155	230
2075	Electrostatically Assembled Fluorescent Thin Films of Rare-Earth-Doped Lanthanum Phosphate Nanoparticles. **2002**, 14, 4509-4516	192
2074	Investigations on the stability of thiol stabilized semiconductor nanoparticles. **2002**, 4, 4747-4753	66
2073	The Synthesis of SiO2@CdS Nanocomposites Using Single-Molecule Precursors. **2002**, 14, 2900-2904	48
2072	Biofunctionalization of Silica-Coated CdTe and Gold Nanocrystals. **2002**, 2, 1363-1367	155
2071	Synthesis and Characterization of Gold Sulfide Nanoparticles. **2002**, 18, 535-539	62

2070	Effects of surface termination on the band gap of ultrabright Si29 nanoparticles: Experiments and computational models. **2002**, 65,		39
2069	Direct patterning of modified oligonucleotides on metals and insulators by dip-pen nanolithography. *Science*, **2002**, 296, 1836-8	33.3	661
2068	Emission Spectral Properties of Cadmium Sulfide Nanoparticles with Multiphoton Excitation. **2002**, 106, 5365-5370		52
2067	High-sensitivity detection of DNA hybridization on microarrays using resonance light scattering. **2002**, 74, 1792-7		176
2066	A microfluidic device with a linear temperature gradient for parallel and combinatorial measurements. **2002**, 124, 4432-5		153
2065	Luminescence enhancement of core-shell ZnS:Mn/ZnS nanoparticles. **2002**, 80, 4300-4302		118
2064	Protein-Protected Nanoparticles from Rapid Expansion of Supercritical Solution into Aqueous Solution. **2002**, 106, 11178-11182		66
2063	Self-assembled semiconductor quantum dots. **2002**, 43, 351-364		22
2062	Quantum-dot nanocrystals for ultrasensitive biological labeling and multicolor optical encoding. **2002**, 7, 532-7		374
2061	Fluorescent probes and bioconjugation chemistries for single-molecule fluorescence analysis of biomolecules. **2002**, 117, 10953-10964		128
2060	Self-assembled nanoparticle probes for recognition and detection of biomolecules. **2002**, 124, 9606-12		797
2059	Fluorescence quantum yield of CdSe/ZnS nanocrystals investigated by correlated atomic-force and single-particle fluorescence microscopy. **2002**, 80, 4033-4035		187
2058	Monolayer Exchange Chemistry of □Fe2O3 Nanoparticles. **2002**, 14, 2628-2636		96
2057	Stabilization of inorganic nanocrystals by organic dendrons. **2002**, 124, 2293-8		293
2056	Synthesis and photophysics of purine-capped Q-CdS nanocrystallites. **2002**, 1, 737-41		11
2055	Dynamic distribution of growth rates within the ensembles of colloidal II-VI and III-V semiconductor nanocrystals as a factor governing their photoluminescence efficiency. **2002**, 124, 5782-90		448
2054	Etching of Colloidal InP Nanocrystals with Fluorides: Photochemical Nature of the Process Resulting in High Photoluminescence Efficiency. **2002**, 106, 12659-12663		182
2053	Combinatorial fluorescence energy transfer tags: new molecular tools for genomics applications. **2002**, 38, 110-121		5

2052	Solution routes to III/V semiconductor quantum dots. **2002**, 6, 355-363		81
2051	Synthetic studies on II/VI semiconductor quantum dots. **2002**, 6, 347-353		51
2050	Quantum dots as luminescent probes in biological systems. **2002**, 6, 365-370		122
2049	Chemical passivation of sputter-deposited nanocrystalline CdS thin films. **2002**, 54, 343-347		16
2048	In vivo imaging of quantum dots encapsulated in phospholipid micelles. *Science*, **2002**, 298, 1759-62	33.3	2710
2047	Electrophoretic and Structural Studies of DNA-Directed Au Nanoparticle Groupings. **2002**, 106, 11758-11763		190
2046	Avidin: a natural bridge for quantum dot-antibody conjugates. **2002**, 124, 6378-82		468
2045	Photothermal imaging of nanometer-sized metal particles among scatterers. *Science*, **2002**, 297, 1160-3	33.3	778
2044	A Synthesis of 6-(2,5-Dimethoxy-4-(2-aminopropyl)phenyl)-hexylthiol. A Ligand for Conjugation with Fluorescent Cadmium Selenide/Zinc Sulfide Core/Shell Nanocrystals and Biological Imaging. **2002**, 7, 777-790		14
2043	Ion beam induced luminescence of thin films. **2002**, 190, 709-713		13
2042	Biomedical applications of protein chips. **2002**, 6, 329-40		21
2041	Molecular motors: single-molecule recordings made easy. **2002**, 12, R203-5		4
2040	Single molecule fluorescence and force microscopy. **2002**, 37, 1495-511		4
2039	High-throughput cell analysis using multiplexed array technologies. **2002**, 7, S131-5		55
2038	Von selbstorganisierenden Polymeren zu Nanohybrid- und Biomaterialien. **2002**, 114, 712-739		59
2037	Ligandendesign und Biokonjugation kolloidaler Gold-Nanopartikel. **2002**, 114, 3346-3350		11
2036	Ligand design and bioconjugation of colloidal gold nanoparticles. **2002**, 41, 3218-21		87
2035	Luminescent Quantum Dot-Adaptor Protein-Antibody Conjugates for Use in Fluoroimmunoassays. **2002**, 229, 407-414		57

2034	Use of Luminescent CdSe⁄ZnS Nanocrystal Bioconjugates in Quantum Dot-Based Nanosensors. **2002**, 229, 427-432	96
2033	Quantum Information/Computation Processing with Self-Assembled Macroatoms. **2002**, 233, 377-384	2
2032	Controlling the Aspect Ratio of Inorganic Nanorods and Nanowires. **2002**, 14, 80-82	1086
2031	Lasing from Semiconductor Quantum Rods in a Cylindrical Microcavity. **2002**, 14, 317-321	404
2030	Biological and physical applications of water-based metal nanoparticles synthesised in organic solution. **2002**, 3, 110-3	66
2029	Photomechanical delivery of 100-nm microspheres through the stratum corneum: implications for transdermal drug delivery. **2002**, 31, 207-10	31
2028	GaN quantum dot based quantum information/computation processing. **2002**, 31, 117-125	9
2027	Formation of nanoparticles and one-dimensional nanostructures in floating and deposited Langmuir monolayers under applied electric and magnetic fields. **2002**, 198-200, 593-604	10
2026	Synthesis and surface modification of amino-stabilized CdSe, CdTe and InP nanocrystals. **2002**, 202, 145-154	203
2025	Intrinsic dipole⁄dipole excitonic coupling in GaN quantum dots: application to quantum information processing. **2002**, 13, 624-629	6
2024	Synthesis of surface-modified colloidal semiconductor nanocrystals and study of photoinduced charge separation and transport in nanocrystal-polymer composites. **2002**, 14, 237-241	70
2023	Fluorescence microscopy of single autofluorescent proteins for cellular biology. **2002**, 3, 645-656	12
2022	Highly stable fluorescent nanocrystals as a novel class of labels for immunohistochemical analysis of paraffin-embedded tissue sections. **2002**, 82, 1259-61	116
2021	Epitaxial core-shell and core-multishell nanowire heterostructures. **2002**, 420, 57-61	1802
2020	Magnetic relaxation switches capable of sensing molecular interactions. **2002**, 20, 816-20	991
2019	Biomolecular screening with encoded porous-silicon photonic crystals. **2002**, 1, 39-41	365
2018	Ordered nanoparticle arrays formed on engineered chaperonin protein templates. **2002**, 1, 247-52	310
2017	Encoding microcarriers: present and future technologies. **2002**, 1, 447-56	249

2016	Photoluminescence from single CdSe quantum rods. **2002**, 97, 205-211		33
2015	Luminescent quantum dots for multiplexed biological detection and imaging. **2002**, 13, 40-6		1750
2014	Immobilization of oligonucleotides onto silica nanoparticles for DNA hybridization studies. **2002**, 470, 51-56		143
2013	Synchronous fluorescence determination of protein with functionalized CdS nanoparticles as a fluorescence probe. **2002**, 466, 87-92		59
2012	Preparation and application of functionalized nanoparticles of CdS as a fluorescence probe. **2002**, 468, 35-41		44
2011	Electrochemical synthesis and optical readout of striped metal rods with submicron features. **2002**, 522, 95-103		74
2010	Base pair mismatch recognition using plasmon resonant particle labels. **2002**, 309, 109-116		67
2009	Functionalization of Carbon Nanotubes for Biocompatibility and Biomolecular Recognition. **2002**, 2, 285-288		795
2008	Thiol-Capping of CdTe Nanocrystals: An Alternative to Organometallic Synthetic Routes. **2002**, 106, 7177-7185		1387
2007	Enhanced Luminescence of CdSe Quantum Dots on Gold Colloids. **2002**, 2, 1449-1452		578
2006	Nanocrystal targeting in vivo. **2002**, 99, 12617-21		1246
2005	Spin dynamics in semiconductor nanocrystals. **2002**, 66,		130
2004	Optical Properties of Colloidal PbSe Nanocrystals. **2002**, 2, 1321-1324		416
2003	The effect of dielectric polarization-induced surface states on many-body configurations in a quantum dot. **2002**, 17, 1302-1311		14
2002	Highly Luminescent CdSe/ZnSe Core/Shell Nanocrystals of Low Size Dispersion. **2002**, 2, 781-784		743
2001	Control of photoluminescence properties of CdSe nanocrystals in growth. **2002**, 124, 2049-55		1465
2000	On the Absorption Cross Section of CdSe Nanocrystal Quantum Dots. **2002**, 106, 7619-7622		684
1999	Nanoparticles with Raman spectroscopic fingerprints for DNA and RNA detection. *Science*, **2002**, 297, 1536-40	33.3	2702

1998	Experimental Determination of the Extinction Coefficient of CdTe, CdSe, and CdS Nanocrystals. **2003**, 15, 2854-2860	4277
1997	Process for Preparing Macroscopic Quantities of Brightly Photoluminescent Silicon Nanoparticles with Emission Spanning the Visible Spectrum. **2003**, 19, 8490-8496	295
1996	Effect of Surface Passivation on the Electrogenerated Chemiluminescence of CdSe/ZnSe Nanocrystals. **2003**, 3, 1053-1055	263
1995	Solution-Phase Synthesis of Cu2O Nanocubes. **2003**, 3, 231-234	583
1994	Large-scale synthesis of nearly monodisperse CdSe/CdS core/shell nanocrystals using air-stable reagents via successive ion layer adsorption and reaction. **2003**, 125, 12567-75	1338
1993	Generalized and facile synthesis of semiconducting metal sulfide nanocrystals. **2003**, 125, 11100-5	572
1992	Composition-tunable Zn(x)Cd(1-x)Se nanocrystals with high luminescence and stability. **2003**, 125, 8589-94	496
1991	Tunneling and optical spectroscopy of semiconductor nanocrystals. **2003**, 54, 465-92	131
1990	Gallium nitride nanoparticles for solar-blind detectors. **2003**, 115, 459-463	6
1989	Nanoparticles in bioanalytics. **2003**, 376, 284-6	37
1988	Novel fluorescent colloids as a DNA fluorescence probe. **2003**, 377, 346-9	40
1987	Quantum dot-based cell motility assay. **2003**, 71, 542-8	68
1986	PEGylated nanoparticles for biological and pharmaceutical applications. **2003**, 55, 403-19	1185
1985	Bridging the electrochemical and biological worlds with hybrid nanocomposites. **2003**, 21, 379-80	2
1984	Molecular profiling of single cells and tissue specimens with quantum dots. **2003**, 21, 371-3	192
1983	Colloidal Two-Dimensional Systems: CdSe Quantum Shells and Wells. **2003**, 115, 5189-5193	11
1982	Colloidal two-dimensional systems: CdSe quantum shells and wells. **2003**, 42, 5035-9	163
1981	Current status of modern analytical luminescence methods. **2003**, 500, 21-69	147

1980	Theoretical study of the ionization potential of thymine: effect of adding conjugated functional groups. **2003**, 380, 54-62	9
1979	Studies on quantum dots synthesized in aqueous solution for biological labeling via electrostatic interaction. **2003**, 319, 239-43	66
1978	A solvothermal route to CdS nanocrystals. **2003**, 375, 560-564	37
1977	Synthesis and assembly of SiO2-coated Bi2S3 nanofibers. **2003**, 264, 391-5	10
1976	Photophysics and photocatalytic behavior of composite CdS-purine nanoparticles in the presence of certain indoles. **2003**, 265, 432-8	4
1975	Multi-wavelength intermittent photoluminescence of single CdSe quantum dots. **2003**, 4, 519-522	5
1974	Sensitive miniature single-particle immunoassay of prostate-specific antigen using time-resolved fluorescence. **2003**, 482, 157-164	25
1973	Direct quantification of □globulin in human blood serum by resonance light scattering techniques without separation of human serum albumin. **2003**, 493, 179-184	9
1972	Gold and alloy nanoparticles in solution and thin film assembly: spectrophotometric determination of molar absorptivity. **2003**, 496, 17-27	95
1971	Exploiting the excited state. **2003**, 340-342, 48-57	5
1970	The design and synthesis of novel derivatives of the dopamine uptake inhibitors GBR 12909 and GBR 12935. High-affinity dopaminergic ligands for conjugation with highly fluorescent cadmium selenide/zinc sulfide core/shell nanocrystals. **2003**, 59, 8035-8047	21
1969	Luminescence of CdTe nanocrystals. **2003**, 102-103, 327-332	27
1968	Synthesis and luminescence of (3-mercaptopropyl)-trimethoxysilane capped CdS quantum dots. **2003**, 102-103, 338-343	38
1967	Europium-doped bioapatite: a new photostable biological probe, internalizable by human cells. **2003**, 24, 3365-71	132
1966	Magnetic anisotropy in carbon encapsulated Co/CoO □nes□with large exchange bias. **2003**, 307, 69-75	18
1965	Layer-by-layer accumulation of cadmium sulfide core□silica shell nanoparticles and size-selective photoetching to make adjustable void space between core and shell. **2003**, 160, 69-76	20
1964	Energy transfer in Cr3+/Nd3+-codoped lead silicate glasses. **2003**, 327, 79-87	14
1963	Preparation and characterization of CdS quantum dots chitosan biocomposite. **2003**, 55, 35-43	99

1962	The effect of nanometer size of porous anodic aluminum oxide on adsorption and fluorescence of tetrahydroxyflavanol. **2003**, 59, 1139-44	7
1961	Imaging single metal nanoparticles in scattering media by photothermal interference contrast. **2003**, 17, 537-540	9
1960	Functional polymers as nanoscopic building blocks. **2003**, 23, 267-274	42
1959	Nanodroplets of polyisoprene fluid contained within poly(acrylic acid-co-acrylamide) shells. **2003**, 41, 1659-1668	35
1958	Water-driven structure transformation in nanoparticles at room temperature. **2003**, 424, 1025-9	392
1957	Controlling anisotropic nanoparticle growth through plasmon excitation. **2003**, 425, 487-90	1467
1956	Immunofluorescent labeling of cancer marker Her2 and other cellular targets with semiconductor quantum dots. **2003**, 21, 41-6	2161
1955	Long-term multiple color imaging of live cells using quantum dot bioconjugates. **2003**, 21, 47-51	1745
1954	The potential environmental impact of engineered nanomaterials. **2003**, 21, 1166-70	1756
1953	Synthesis and size-dependent properties of zinc-blende semiconductor quantum rods. **2003**, 2, 155-8	360
1952	Biology of TiO2-oligonucleotide nanocomposites. **2003**, 2, 343-6	254
1951	Controlled growth of tetrapod-branched inorganic nanocrystals. **2003**, 2, 382-5	1290
1950	Self-assembled nanoscale biosensors based on quantum dot FRET donors. **2003**, 2, 630-8	1371
1949	Quantum dots: Resonant energy-transfer sensor. **2003**, 2, 575-6	73
1948	Single-ion fluorescence spectroscopy of a Y2SiO5:Pr3+ nanocluster. **2003**, 316, 147-152	34
1947	Synthesis and luminescence of CdS quantum dots capped with a silica precursor. **2003**, 105, 35-43	70
1946	Effects of electric field on the electronic structure and optical properties of quantum rods with wurtzite structure. **2003**, 68,	19
1945	Alloyed Zn(x)Cd(1-x)S nanocrystals with highly narrow luminescence spectral width. **2003**, 125, 13559-63	610

1944	Alloyed semiconductor quantum dots: tuning the optical properties without changing the particle size. **2003**, 125, 7100-6	783
1943	Synthesis of Germanium Nanoclusters with Irreversibly Attached Functional Groups: Acetals, Alcohols, Esters, and Polymers. **2003**, 15, 1682-1689	54
1942	High Energy Excitations in CdSe Quantum Rods. **2003**, 3, 101-105	58
1941	Raman dye-labeled nanoparticle probes for proteins. **2003**, 125, 14676-7	394
1940	DNA hybridization detection with water-soluble conjugated polymers and chromophore-labeled single-stranded DNA. **2003**, 125, 896-900	399
1939	Light amplification in semiconductor nanocrystals: Quantum rods versus quantum dots. **2003**, 82, 4776-4778	152
1938	Formation and Stability of Size-, Shape-, and Structure-Controlled CdTe Nanocrystals: Ligand Effects on Monomers and Nanocrystals. **2003**, 15, 4300-4308	701
1937	Biological applications of colloidal nanocrystals. **2003**, 14, R15-R27	626
1936	Single-precursor, one-pot versatile synthesis under near ambient conditions of tunable, single and dual band fluorescing metal sulfide nanoparticles. **2003**, 125, 2050-1	149
1935	Transitions in ZnS and CdSe quantum dots and wave-function symmetry. **2003**, 118, 5937-5946	9
1934	Preparation of quantum dot-biotin conjugates and their use in immunochromatography assays. **2003**, 75, 4043-9	113
1933	Size-tunable emission from 1,3-diphenyl-5-(2-anthryl)-2-pyrazoline nanoparticles. **2003**, 125, 6740-5	252
1932	Luminescent CdSe/CdS core/shell nanocrystals in dendron boxes: superior chemical, photochemical and thermal stability. **2003**, 125, 3901-9	287
1931	Functionalized Europium Oxide Nanoparticles Used as a Fluorescent Label in an Immunoassay for Atrazine. **2003**, 75, 5282-5286	139
1930	Labeling of Biocompatible Polymer Microcapsules with Near-Infrared Emitting Nanocrystals. **2003**, 3, 369-372	137
1929	Shape Effects on Electronic States of Nanocrystals. **2003**, 3, 1357-1363	145
1928	Preferential end-to-end assembly of gold nanorods by biotin-streptavidin connectors. **2003**, 125, 13914-5	605
1927	Nanodiagnostics: application of nanotechnology in molecular diagnostics. **2003**, 3, 153-61	256

1926	Multifunctional gold nanoparticle-peptide complexes for nuclear targeting. **2003**, 125, 4700-1	666
1925	Spontaneous Insertion of DNA Oligonucleotides into Carbon Nanotubes. **2003**, 3, 471-473	397
1924	Nanocable-aligned ZnS tetrapod nanocrystals. **2003**, 125, 16196-7	106
1923	Quantum dots as strain- and metabolism-specific microbiological labels. **2003**, 69, 4205-13	172
1922	Synthesis of High-Quality Metal Sulfide Nanoparticles from Alkyl Xanthate Single Precursors in Alkylamine Solvents. **2003**, 107, 13843-13854	201
1921	Synthesis of Metal Alloy Nanoparticles in Solution by Laser Irradiation of a Metal Powder Suspension. **2003**, 107, 6920-6923	75
1920	A europium chelate for quantitative point-of-care immunoassays using direct surface measurement. **2003**, 75, 3193-201	98
1919	Growth of large periodic arrays of carbon nanotubes. **2003**, 82, 460-462	133
1918	Conjugation Chemistry and Bioapplications of Semiconductor Box Nanocrystals Prepared via Dendrimer Bridging. **2003**, 15, 3125-3133	181
1917	Parallel Multispot Detection of Target Hybridization to Surface-Bound Probe Oligonucleotides of Different Base Mismatch by Surface-Plasmon Field-Enhanced Fluorescence Microscopy **2003**, 19, 1567-1572	40
1916	Noncovalent functionalization of carbon nanotubes for highly specific electronic biosensors. **2003**, 100, 4984-9	1238
1915	Alumina Pepsin Hybrid Nanoparticles with Orientation-Specific Enzyme Coupling. **2003**, 3, 55-58	81
1914	Optically activated functionalization reactions in Si quantum dots. **2003**, 125, 15243-9	44
1913	Electron Relaxation in Colloidal InP Quantum Dots with Photogenerated Excitons or Chemically Injected Electrons. **2003**, 107, 102-109	80
1912	Fluorescence Anisotropy and Crystal Structure of Individual Semiconductor Nanocrystals **2003**, 107, 7463-7471	60
1911	Immobilization of Quantum Dots in the Photo-Cross-Linked Poly(ethylene glycol)-Based Hydrogel. **2003**, 107, 10464-10469	46
1910	Type-II quantum dots: CdTe/CdSe(core/shell) and CdSe/ZnTe(core/shell) heterostructures. **2003**, 125, 11466-7	1075
1909	Single-Step Synthesis to Control the Photoluminescence Quantum Yield and Size Dispersion of CdSe Nanocrystals. **2003**, 107, 489-496	323

1908	Oligomeric ligands for luminescent and stable nanocrystal quantum dots. **2003**, 125, 14652-3	382
1907	From self-organizing polymers to nano- and biomaterials. **2003**, 13, 2671-2688	146
1906	Shape control and applications of nanocrystals. **2003**, 361, 241-55; discussion 56-7	172
1905	Acetylcholine esterase-labeled CdS nanoparticles on electrodes: photoelectrochemical sensing of the enzyme inhibitors. **2003**, 125, 622-3	316
1904	Multiplexed SNP genotyping using the Qbead system: a quantum dot-encoded microsphere-based assay. **2003**, 31, e43	215
1903	Novel Interparticle Spatial Properties of Hydrogen-Bonding Mediated Nanoparticle Assembly. **2003**, 15, 29-37	103
1902	Engineered nanomaterials for biophotonics applications: improving sensing, imaging, and therapeutics. **2003**, 5, 285-92	729
1901	Methods of single-molecule fluorescence spectroscopy and microscopy. **2003**, 74, 3597-3619	666
1900	Determination of quantum confinement in CdSe nanocrystals by cyclic voltammetry. **2003**, 119, 2333-2337	241
1899	The Assembly of Coated Nanocrystals **2003**, 107, 7312-7326	255
1898	. **2003**, 91, 830-838	56
1897	Quantum cascade transitions in nanostructures. **2003**, 52, 455-521	44
1896	A General Method To Coat Colloidal Particles with Silica. **2003**, 19, 6693-6700	1015
1895	Spectroscopic tags using dye-embedded nanoparticles and surface-enhanced Raman scattering. **2003**, 75, 6171-6	458
1894	Highly Luminescent Water-Soluble CdTe Quantum Dots. **2003**, 3, 503-507	396
1893	Expansion of the genetic code enables design of a novel "gold" class of green fluorescent proteins. **2003**, 328, 1071-81	184
1892	Semiconductor quantum dot/albumin complex is a long-life and highly photostable endosome marker. **2003**, 302, 496-501	285
1891	Synthesis of cadmium selenide by use of selenadiazol in ethylene glycol greener source of selenium. **2003**, 57, 1464-1466	20

1890	Enhancement of the Photoluminescence of CdSe Nanocrystals Dispersed in CHCl3by Oxygen Passivation of Surface States. **2003**, 3, 747-749		146
1889	One-Pot Synthesis of Highly Luminescent CdSe/CdS Core□Shell Nanocrystals via Organometallic and □Greener□Chemical Approaches□ **2003**, 107, 7454-7462		338
1888	Semiconductor quantum dots for photodynamic therapy. **2003**, 125, 15736-7		681
1887	Multigram scale synthesis and characterization of monodisperse tetragonal zirconia nanocrystals. **2003**, 125, 6553-7		337
1886	Preparation, physical properties, on-bead binding assay and spectroscopic reliability of 25 barcoded polystyrene-poly(ethylene glycol) graft copolymers. **2003**, 125, 10546-60		62
1885	An encoded particle array tool for multiplex bioassays. **2003**, 1, 199-207		29
1884	Magneto-optical transitions in nanoscopic rings. **2003**, 68,		63
1883	Statistical aging and nonergodicity in the fluorescence of single nanocrystals. **2003**, 90, 120601		318
1882	Novel Lanthanide Luminescent Materials Based on Complexes of 3-Hydroxypicolinic Acid and Silica Nanoparticles. **2003**, 15, 100-108		216
1881	Lighting-up the dynamics of telomerization and DNA replication by CdSe-ZnS quantum dots. **2003**, 125, 13918-9		330
1880	Temperature dependence of the luminescence lifetime of single CdSe/ZnS quantum dots. **2003**, 90, 257404		277
1879	Glass-Coated, Analyte-Tagged Nanoparticles: A New Tagging System Based on Detection with Surface-Enhanced Raman Scattering. **2003**, 19, 4784-4790		405
1878	Acoustic modes in free and embedded quantum dots. **2003**, 93, 2900-2905		27
1877	Water-soluble quantum dots for multiphoton fluorescence imaging in vivo. *Science*, **2003**, 300, 1434-6	33.3	2048
1876	Synthesis and Properties of CdSe/ZnS Core/Shell Nanorods. **2003**, 15, 3955-3960		223
1875	Probing photoelectrochemical processes in Au-CdS nanoparticle arrays by surface plasmon resonance: application for the detection of acetylcholine esterase inhibitors. **2003**, 125, 16006-14		158
1874	Collagen Coating Promotes Biocompatibility of Semiconductor Nanoparticles in Stratified LBL Films. **2003**, 3, 1177-1182		146
1873	Semiconductor nanocrystals with multifunctional polymer ligands. **2003**, 125, 320-1		133

1872	Highly Emissive Colloidal CdSe/CdS Heterostructures of Mixed Dimensionality. **2003**, 3, 1677-1681	528
1871	Quantum Dot Molecules Assembled with Genetically Engineered Proteins. **2003**, 3, 1581-1585	59
1870	Amphiphilic Block Copolymers for Templating Applications. **2003**, 1-28	52
1869	Microcavity Lasing from Block Peptide Hierarchically Assembled Quantum Dot Spherical Resonators. **2003**, 3, 907-911	61
1868	Effect of chromophore-charge distance on the energy transfer properties of water-soluble conjugated oligomers. **2003**, 125, 6705-14	192
1867	Thermal shaping of shell-crosslinked (SCK) nanoparticles, facilitated by nanoconfinement of fluid-like cores. **2003**, 13, 2785-2795	47
1866	Synthesis and organization of nanoscale II□VI semiconductor materials using evolved peptide specificity and viral capsid assembly. **2003**, 13, 2414-2421	155
1865	Intracellular integration of synthetic nanostructures with viable cells for controlled biochemical manipulation. **2003**, 14, 551-556	172
1864	Structure formation, melting, and optical properties of gold/DNA nanocomposites: Effects of relaxation time. **2003**, 68,	28
1863	Surface States in Passivated, Unpassivated and Core/Shell Nanocrystals: Electronic Structure and Optical Properties. **2003**, 789, 138	4
1862	Photoluminescence Properties and Zeta Potential of Water-Dispersible CdTe Nanocrystals. **2003**, 789, 322	
1861	Design of Water-Soluble Quantum Dots with Novel Surface Ligands for Biological Applications. **2003**, 789, 312	0
1860	Towards the Design and Implementation of Surface Tethered Quantum Dot-Based Nanosensors. **2003**, 789, 306	
1859	Optical systems for in vivo molecular imaging of cancer. **2003**, 2, 491-504	167
1858	Combined tyramide signal amplification and quantum dots for sensitive and photostable immunofluorescence detection. **2003**, 51, 981-7	90
1857	ZnS nanoparticles synthesis and characterization. **2003**, 789, 1	1
1856	Optimization of Quantum Dot□Nerve Cell Interfaces. **2003**, 789, 318	1
1855	Modeling distributed kinetics in isolated semiconductor quantum dots. **2003**, 67,	250

1854	Enhancement of photoluminescence in manganese-doped ZnS nanoparticles due to a silica shell. **2003**, 118, 8945-8953	73
1853	Materials in nanotechnology: New structures, new properties, new complexity. **2003**, 21, S194-S206	14
1852	Genome function and nuclear architecture: from gene expression to nanoscience. **2003**, 13, 1029-41	56
1851	Biochips beyond DNA: technologies and applications. **2003**, 9, 1-149	42
1850	Rare earth-doped glass microbarcodes. **2003**, 100, 389-93	163
1849	Bioconjugated Luminescent Nanoparticles for Biological Applications. **2003**, 24, 453-464	50
1848	Preparation and Application of a Novel Fluorescent Nanoparticle as Aluminum Fluorescence Probe. **2003**, 36, 1621-1629	2
1847	Direct detection of antibody-antigen binding using an on-chip artificial pore. **2003**, 100, 820-4	148
1846	Study on the Preparation and Stabilization of Pyrene Labeled Polymer Particles in Nonpolar Media. **2003**, 11, 305-318	4
1845	An accurate description of quantum size effects in InP nanocrystallites over a wide range of sizes. **2003**, 36, 1595-1598	17
1844	Selection of Quantum Dot Wavelengths for Biomedical Assays and Imaging. **2003**, 2, 153535002003021	14
1843	[A new fluorescent marker for in vivo imaging]. **2003**, 19, 532-4	0
1842	Evolution of High-Sensitivity Microarray Technology. **2003**, 8, 96-100	2
1841	Fabrication of Inorganic Nanocomposites Using Self-Assembly and Sol-Gel Processing. **2004**, 247-272	
1840	Chemical Aspects of Semiconductor Nanocrystals. **2004**, 157-179	
1839	Multiplexed electrochemical protein coding based on quantum dot (QD)-bioconjugates for a clinical barcode system. **2004**, 2006, 137-40	1
1838	Quantum dots targeted to the assigned organelle in living cells. **2004**, 48, 985-94	154
1837	Luminescent Semiconductor Quantum Dots Nanoassemblies for Bioanalysis. **2004**, 245-256	

1836	On the cyto-toxicity caused by quantum dots. **2004**, 48, 669-75	296
1835	Emission intermittency in silicon nanocrystals. **2004**, 70,	101
1834	Core-level photoemission study of the InAs/CdSe nanocrystalline system. **2004**, 69,	15
1833	Biomedical Applications of Semiconductor Quantum Dots. **2004**, 37-50	1
1832	Labeling cellular targets with semiconductor quantum dot conjugates. **2004**, 75, 171-83	18
1831	FLUORESCENCE RESONANCE ENERGY TRANSFER BETWEEN DYES AND WATER-SOLUBLE QUANTUM DOTS WITH AVIDIN AS A BRIDGE. **2004**, 03, 273-280	1
1830	Integrating and Tagging Biological Structures with Nanoscale Semiconductor Quantum dot Structures. **2004**, 1-36	3
1829	Characterization of Shell Material on Colloidal CdSe/ZnS Quantum Dots. **2004**, 818, 17	
1828	New biological labels based on functionalized YVO4:Eu nanoparticles. **2004**, 845, 264	2
1827	Quantum dots as a novel immunofluorescent detection system for Cryptosporidium parvum and Giardia lamblia. **2004**, 70, 597-8	119
1826	Quantum dot nanocrystals for in vivo molecular and cellular imaging. **2004**, 80, 377-85	123
1825	Simultaneous determination of alpha-fetoprotein and free beta-human chorionic gonadotropin by element-tagged immunoassay with detection by inductively coupled plasma mass spectrometry. **2004**, 50, 1214-21	106
1824	Cyclodextrins Stabilize TOPO-(CdSe)ZnS Quantum Dots in Water. **2004**, 823, W4.5.1	
1823	Nanocrystal Self-Assembly. **2004**, 77-117	
1822	Bioinspired Approaches to Building Nanoscale Devices. **2004**, 149-160	1
1821	Nanoshell-enabled photonics-based imaging and therapy of cancer. **2004**, 3, 33-40	883
1820	HgTe, CdTe, (Cd,Hg)Te, Cd(Te,Se), Cd(Te,S), ZnTe, HgSe, CdSe, Cd(Se,S), (Cd,Mn)Se, (Cd,Zn)Se quantum dots-nanocrystals. 220-283	1
1819	Synthesis and Investigation of ZnS Nanoparticles Adsorbed On Functionalised Silica Particles. **2004**, 20, 367-372	5

1818	Imaging takes a quantum leap. **2004**, 19, 322-5	35
1817	The use of nanocrystals in biological detection. **2004**, 22, 47-52	2626
1816	In vivo cancer targeting and imaging with semiconductor quantum dots. **2004**, 22, 969-76	4032
1815	Seventeen-colour flow cytometry: unravelling the immune system. **2004**, 4, 648-55	792
1814	Energy-transfer pumping of semiconductor nanocrystals using an epitaxial quantum well. **2004**, 429, 642-6	485
1813	Colloidal nanocrystal heterostructures with linear and branched topology. **2004**, 430, 190-5	1064
1812	Enlightened receptor dynamics. **2004**, 22, 169-70	12
1811	Modeling improvement of spectral response of solar cells by deployment of spectral converters containing semiconductor nanocrystals. **2004**, 38, 962-969	47
1810	Potentials and pitfalls of fluorescent quantum dots for biological imaging. **2004**, 14, 497-504	451
1809	Semiconductor quantum dots as contrast agents for whole animal imaging. **2004**, 22, 607-9	87
1808	Synthesis and characterization of CaCO3@SiO2 core□shell nanoparticles. **2004**, 141, 75-79	39
1807	Quantum dots and other nanoparticles: what can they offer to drug discovery?. **2004**, 9, 1065-71	116
1806	Concepts for nanoscale resolution in fluorescence microscopy. **2004**, 14, 599-609	226
1805	Fluorescence resonance energy transfer between quantum dot donors and dye-labeled protein acceptors. **2004**, 126, 301-10	1149
1804	Label-free colorimetric detection of specific sequences in genomic DNA amplified by the polymerase chain reaction. **2004**, 126, 10958-61	580
1803	Multiplexed toxin analysis using four colors of quantum dot fluororeagents. **2004**, 76, 684-8	590
1802	Luminescence temperature antiquenching of water-soluble CdTe quantum dots: role of the solvent. **2004**, 126, 10397-402	131
1801	CdSe/CdS/ZnS and CdSe/ZnSe/ZnS Core□Shell□Shell Nanocrystals. **2004**, 108, 18826-18831	624

1800	A fluorescence resonance energy transfer-derived structure of a quantum dot-protein bioconjugate nanoassembly. **2004**, 101, 9612-7	263
1799	Fluorescence Microscopy Visualization of Single-Walled Carbon Nanotubes Using Semiconductor Nanocrystals. **2004**, 4, 2415-2419	74
1798	Polymer microgels: reactors for semiconductor, metal, and magnetic nanoparticles. **2004**, 126, 7908-14	583
1797	Efficient energy transfer between nanocrystalline YAG:Ce and TRITC. **2004**, 6, 1633-1636	28
1796	Adsorption and Immobilization of Cytochrome c on Nanodiamonds. **2004**, 20, 5879-5884	346
1795	Physicochemical Properties and Cellular Toxicity of Nanocrystal Quantum Dots Depend on Their Surface Modification. **2004**, 4, 2163-2169	837
1794	Structural and optical investigations of SiO2-CdS core-shell particles. **2004**, 278, 107-14	30
1793	Biocompatible fluorescent nanocrystals for immunolabeling of membrane proteins and cells. **2004**, 324, 60-7	274
1792	Synthesis and photoluminescence study of molecularly imprinted polymers appended onto CdSe/ZnS core-shells. **2004**, 20, 127-31	84
1791	Optical properties of core/multishell CdSe/Zn(S,Se) nanocrystals. **2004**, 21, 331-335	30
1790	Enhancement of the photoluminescence of CdSe quantum dots during long-term UV-irradiation: privilege or fault in life science research?. **2004**, 75, 99-105	49
1789	Labeled avidin bound to water-soluble nanocrystals by electrostatic interactions. **2004**, 53, 2690-2694	5
1788	Synthesis and thermal stability of gold nanowires within monolithic mesoporous silica. **2004**, 78, 1187-1191	6
1787	Application of L-cysteine-capped nano-ZnS as a fluorescence probe for the determination of proteins. **2004**, 378, 811-5	36
1786	Application of luminescent nanocrystals as labels for biological molecules. **2004**, 379, 913-9	97
1785	Luminescence properties of mechanically milled ZnSe. **2004**, 201, 3183-3187	7
1784	Surface passivation in CdSe nanocrystal/polymer films revealed by ultrafast excitation relaxation dynamics. **2004**, 241, 1986-1993	17
1783	On the development of colloidal nanoparticles towards multifunctional structures and their possible use for biological applications. **2005**, 1, 48-63	322

1782	Applications of nanoparticles in biology and medicine. **2004**, 2, 3	1457
1781	Integrated nanoparticle-biomolecule hybrid systems: synthesis, properties, and applications. **2004**, 43, 6042-108	2155
1780	Biofunctionalization of fluorescent rare-earth-doped lanthanum phosphate colloidal nanoparticles. **2004**, 43, 5954-7	305
1779	Method for Preparation of Semiconductor Quantum-Rod Lasers in a Cylindrical Microcavity. **2004**, 14, 957-962	37
1778	Gold Nano-Antennas for Increasing Luminescence. **2004**, 16, 2163-2166	26
1777	Porous Silicon Photonic Crystals as Encoded Microcarriers. **2004**, 16, 1811-1814	80
1776	Integrierte Hybridsysteme aus Nanopartikeln und Biomolekülen: Synthese, Eigenschaften und Anwendungen. **2004**, 116, 6166-6235	254
1775	Biofunctionalization of Fluorescent Rare-Earth-Doped Lanthanum Phosphate Colloidal Nanoparticles. **2004**, 116, 6080-6083	28
1774	Towards 3-D Spherical Self-Assembly by Ternary Surfactant Combinations: The Case of Magnetite Nanoparticles. **2004**, 2004, 1169-1173	37
1773	Analysis of UV-excited fluorochromes by flow cytometry using near-ultraviolet laser diodes. **2004**, 61, 9-17	34
1772	Bionanotechnology based on silica nanoparticles. **2004**, 24, 621-38	386
1771	Gold glyconanoparticles as new tools in antiadhesive therapy. **2004**, 5, 291-7	151
1770	Effect of silver nanoparticles on the electron transfer reactivity and the catalytic activity of myoglobin. **2004**, 5, 1686-91	91
1769	Tools for glycomics: mapping interactions of carbohydrates in biological systems. **2004**, 5, 1375-83	172
1768	Site-specific multivalent carbohydrate labeling of quantum dots and magnetic beads. **2004**, 5, 1593-6	87
1767	Linear and non-linear optical properties of capped CdTe nanocrystals prepared by mechanical alloying. **2004**, 27, 579-584	33
1766	Fluorescence of CdSe/ZnS quantum dots in solid solutions in the presence of organic molecules DODCl. **2004**, 110, 23-29	4
1765	Preparation and application of cysteine-capped ZnS nanoparticles as fluorescence probe in the determination of nucleic acids. **2004**, 60, 1719-24	65

1764	Luminescent CdSe-ZnS quantum dots as selective Cu2+ probe. **2004**, 60, 2527-2530	157
1763	Adaptation of inorganic quantum dots for stable molecular beacons. **2004**, 102, 315-319	118
1762	Synthesis of CdSe nanoparticles in the presence of aminodextran as stabilizing and capping agent. **2004**, 275, 503-7	41
1761	One-pot synthesis and characterization of high-quality CdSe/ZnX (X=S, Se) nanocrystals via the CdO precursor. **2004**, 265, 250-259	38
1760	Recombination process of CdS quantum dot covered by novel polymer chains. **2004**, 21, 1102-1105	6
1759	Quantum dots in biology and medicine. **2004**, 25, 1-12	288
1758	Formation and spectroscopic characterization of nearly mono-dispersed Cds nanocrystals. **2004**, 26, 71-74	8
1757	Production of titania nanoparticles by using a new microreactor assembled with same axle dual pipe. **2004**, 101, 269-276	117
1756	Design and validation of a bifunctional ligand display system for receptor targeting. **2004**, 11, 1081-91	61
1755	Molecularly imprinted polymeric film on semiconductor nanoparticles analyte detection by quantum dot photoluminescence. **2004**, 1027, 259-62	90
1754	Optical coding of mammalian cells using semiconductor quantum dots. **2004**, 327, 200-8	191
1753	Ultrasensitive detection of biomolecules with fluorescent dye-doped nanoparticles. **2004**, 334, 135-44	235
1752	Novel fluorescent silica nanoparticle probe for ultrasensitive immunoassays. **2004**, 503, 163-169	89
1751	Surface-modified CdSe quantum dots as luminescent probes for cyanide determination. **2004**, 522, 1-8	155
1750	Luminescence and photophysical properties of colloidal ZnS nanoparticles. **2004**, 52, 1489-1494	96
1749	Green synthesis of starch capped CdS nanoparticles. **2004**, 247, 125-127	76
1748	Preparation and characterization of core-shell nanoparticles hardened by gamma-ray. **2004**, 38, 187-90	12
1747	Gold nanoparticle-based detection of genomic DNA targets on microarrays using a novel optical detection system. **2004**, 19, 875-83	242

1746	Preparation of CdS–SiO2 core-shell particles and hollow SiO2 spheres ranging from nanometers to microns in the nonionic reverse microemulsions. **2004**, 93-95, 651-657	43
1745	Grafting of colloidal stable gold nanoparticles with lissamine rhodamine B: an original procedure for counting the number of dye molecules attached to the particles. **2004**, 14, 402-407	17
1744	Surface modification and bioconjugation of colloidal nanocrystals to form building blocks with molecular recognition.	
1743	On shape controlled nanocrystals and hybrid materials: how nanotransistors and remote controlled fluorescent probes could be realized.	
1742	Two-Photon Fluorescence Microscopy of Single Semiconductor Quantum Rods: Direct Observation of Highly Polarized Nonlinear Absorption Dipole. **2004**, 108, 2797-2800	48
1741	Supramolecular control of complexation-induced fluorescence change of water-soluble, beta-cyclodextrin-modified CdS quantum dots. **2004**, 2704-5	56
1740	Application of Organic Nanoparticles as Fluorescence Probe in the Determination of Nucleic Acids. **2004**, 37, 1811-1822	16
1739	Biotinylated CdSe/ZnSe nanocrystals for specific fluorescent labeling. **2004**, 14, 2638-2642	28
1738	Biological applications and biocompatibility of nanocrystals.	
1737	An investigation of the structure of stearate monolayers on Au@ZrO2 and Ag@ZrO2 core–shell nanoparticles. **2004**, 14, 857-862	25
1736	Electron irradiation effects on nanocrystal quantum dots used in bio-sensing applications. **2004**, 51, 3186-3192	6
1735	Luminescence characteristics of K2Ca2(SO4)3:Eu,Tb micro- and nanocrystalline phosphor. **2004**, 159, 321-334	44
1734	Water-soluble silica-overcoated CdS:Mn/ZnS semiconductor quantum dots. **2004**, 121, 7421-6	62
1733	Study of structure and luminescence of CdSe Nanocrystals obtained by ball milling. **2004**, 96, 2210-2213	25
1732	Photoluminescence of tetrahedral quantum-dot quantum wells. **2004**, 92, 127402	41
1731	Luminescent Silicon Nanoparticles Capped by Conductive Polyaniline through the Self-Assembly Method. **2004**, 20, 1963-1971	85
1730	Electrogenerated chemiluminescence from a CdSe nanocrystal film and its sensing application in aqueous solution. **2004**, 76, 6871-6	286
1729	Embryonic Nuclei-Induced Alloying Process for the Reproducible Synthesis of Blue-Emitting ZnxCd1-xSe Nanocrystals with Long-Time Thermal Stability in Size Distribution and Emission Wavelength. **2004**, 108, 15552-15559	104

1728	Comparison between Quantum Confinement Effects of Quantum Wires and Dots. **2004**, 16, 4012-4015	45
1727	Exciton Recycling in Graded Gap Nanocrystal Structures. **2004**, 4, 1599-1603	242
1726	Synthesis, surface modification, and multilayer construction of mixed-monolayer-protected CdS nanoparticles. **2004**, 20, 11169-74	31
1725	Fabrication of Fluorescent Rare Earth Phosphates in Confined Media of Polyelectrolyte Microcapsules. **2004**, 108, 19109-19113	21
1724	Functionalized Fluorescent Oxide Nanoparticles: Artificial Toxins for Sodium Channel Targeting and Imaging at the Single-Molecule Level. **2004**, 4, 2079-2083	175
1723	Investigation of Energy Transfer between CdTe Nanocrystals on Polystyrene Beads and Dye Molecules for FRET-SNOM Applications **2004**, 108, 14527-14534	42
1722	Synthesis and Assembly of CdS Nanoparticles in Keggin Ion Colloidal Particles as Templates. **2004**, 108, 7126-7131	37
1721	Intrinsic electric field effects on few-particle interactions in coupled GaN quantum dots. **2004**, 69,	39
1720	Laser desorption and matrix-assisted laser desorption/ionization mass spectrometry of 29-kDa Au:SR cluster compounds. **2004**, 76, 6187-96	53
1719	Protein–ligand Mediated Aggregation of Nanoparticles: A Study of Synthesis and Assembly Mechanism. **2004**, 16, 1775-1785	41
1718	Toward nanoamphiphiles: efficient synthesis of desymmetrized polyphenylene dendrimers. **2004**, 69, 8029-37	22
1717	Surface-immobilized self-assembled protein-based quantum dot nanoassemblies. **2004**, 20, 7720-8	75
1716	Interplay between Optical Gain and Photoinduced Absorption in CdSe Nanocrystals. **2004**, 108, 5250-5255	89
1715	Photobleaching of Rhodamine 6G in Poly(vinyl alcohol) at the Ensemble and Single-Molecule Levels. **2004**, 108, 1657-1665	185
1714	Shape control of III-V semiconductor nanocrystals: synthesis and properties of InAs quantum rods. **2004**, 125, 23-38; discussion 99-116	62
1713	Single-cell microbiology: tools, technologies, and applications. **2004**, 68, 538-59, table of contents	361
1712	Near-infrared fluorescence microscopy of single-walled carbon nanotubes in phagocytic cells. **2004**, 126, 15638-9	732
1711	Light Emission and Amplification in Charged CdSe Quantum Dots. **2004**, 108, 9027-9031	107

1710	Homogeneous Fluorescence-Based DNA Detection with Water-Soluble Conjugated Polymers. **2004**, 16, 4467-4476	589
1709	Quantum Dot Chemiluminescence. **2004**, 4, 693-698	257
1708	In Situ Observation of the Nucleation and Growth of CdSe Nanocrystals. **2004**, 4, 465-469	182
1707	SiO2-Coated CdTe Nanowires: Bristled Nano Centipedes. **2004**, 4, 225-231	74
1706	Mechanism of Strong Luminescence Photoactivation of Citrate-Stabilized Water-Soluble Nanoparticles with CdSe Cores. **2004**, 108, 15461-15469	254
1705	Fabrication of Magnetic Luminescent Nanocomposites by a Layer-by-Layer Self-assembly Approach. **2004**, 16, 4022-4027	239
1704	Water-Soluble Poly(acrylic acid) Grafted Luminescent Silicon Nanoparticles and Their Use as Fluorescent Biological Staining Labels. **2004**, 4, 1463-1467	369
1703	Characterization of superparamagnetic "core-shell" nanoparticles and monitoring their anisotropic phase transition to ferromagnetic "solid solution" nanoalloys. **2004**, 126, 9072-8	182
1702	Water-Soluble CdS Quantum Dots Prepared from a Refluxing Single Precursor in Aqueous Solution. **2004**, 108, 18569-18574	75
1701	Preparation and Characterization of Monodisperse PbSe Semiconductor Nanocrystals in a Noncoordinating Solvent. **2004**, 16, 3318-3322	381
1700	Tuning spectral properties of fullerenes by substitutional doping. **2004**, 69,	34
1699	A quantum dot conjugated sugar ball and its cellular uptake. On the size effects of endocytosis in the subviral region. **2004**, 126, 6520-1	457
1698	Porosity of core□shell nanoparticles. **2004**, 14, 2661-2666	57
1697	Chelating ligands for nanocrystals' surface functionalization. **2004**, 126, 11574-82	146
1696	Charging and quantum size effects in tunnelling and optical spectroscopy of CdSe nanorods. **2004**, 15, R1-R6	27
1695	Fast energy transfer in layer-by-layer assembled CdTe nanocrystal bilayers. **2004**, 84, 2904-2906	115
1694	Single-crystal CdSe nanosaws. **2004**, 126, 708-9	206
1693	Single-molecule measurements of gold-quenched quantum dots. **2004**, 93, 166108	223

1692	Nile red-adsorbed gold nanoparticles for selective determination of thiols based on energy transfer and aggregation. **2004**, 76, 3727-34	169
1691	Controlled synthesis of monodisperse silver nanocubes in water. **2004**, 126, 13200-1	358
1690	Controlled vesicle self-assembly in microfluidic channels with hydrodynamic focusing. **2004**, 126, 2674-5	364
1689	Electronic Level Structure and Single Electron Tunneling Effects in CdSe Quantum Rods. **2004**, 44, 391-400	5
1688	Pt and Pd Nanoparticles Immobilized on Amine-Functionalized Zeolite: Excellent Catalysts for Hydrogenation and Heck Reactions. **2004**, 16, 3714-3724	332
1687	SIMULATION OF DNA-NANOTUBE INTERACTIONS. **2004**, 34, 123-150	185
1686	Synthesis of high-quality CdS, ZnS, and ZnxCd1 xS nanocrystals using metal salts and elemental sulfur. **2004**, 14, 2790-2794	97
1685	Enhancement Effect of Illumination on the Photoluminescence of Water-Soluble CdTe Nanocrystals: Toward Highly Fluorescent CdTe/CdS Core Shell Structure. **2004**, 16, 3853-3859	362
1684	Structural and spectroscopic characterization of Lu2O3:Eu nanocrystalline spherical particles. **2004**, 16, 6983-6994	31
1683	Environmental Effects on Photoluminescence of Highly Luminescent CdSe and CdSe/ZnS Core/Shell Nanocrystals in Polymer Thin Films. **2004**, 108, 5507-5515	145
1682	Electronic Structure of InP Quantum Rods: Differences between Wurtzite, Zinc Blende, and Different Orientations. **2004**, 4, 29-33	18
1681	Synthesis of monofunctionalized gold nanoparticles by fmoc solid-phase reactions. **2004**, 126, 5064-5	125
1680	Quantum dot biolabeling coupled with immunomagnetic separation for detection of Escherichia coli O157:H7. **2004**, 76, 4806-10	223
1679	Near-complete suppression of quantum dot blinking in ambient conditions. **2004**, 126, 1324-5	443
1678	Multiplexed hybridization detection of quantum dot-conjugated DNA sequences using surface plasmon enhanced fluorescence microscopy and spectrometry. **2004**, 76, 6160-5	80
1677	Colloidal ZnSe, ZnSe/ZnS, and ZnSe/ZnSeS Quantum Dots Synthesized from ZnO. **2004**, 108, 17119-17123	130
1676	Control of protein structure and function through surface recognition by tailored nanoparticle scaffolds. **2004**, 126, 739-43	261
1675	Template-Controlled Synthesis of Wire-Like Cadmium Sulfide Nanoparticle Assemblies within Core Shell Cylindrical Polymer Brushes. **2004**, 16, 537-543	219

1674	Applications of T-lymphoma labeled with fluorescent quantum dots to cell tracing markers in mouse body. **2004**, 314, 46-53		233
1673	Synthesis of CdSe from cyclohepteno-1,2,3-selenadiazole and cadmium salts in ethylene glycol. **2004**, 58, 966-969		21
1672	Ciprofloxacin-protected gold nanoparticles. **2004**, 20, 1909-14		181
1671	Quantum-Dot-Functionalized Scanning Probes for Fluorescence-Energy-Transfer-Based Microscopy. **2004**, 108, 93-99		80
1670	Probing the Cytotoxicity Of Semiconductor Quantum Dots. **2004**, 4, 11-18		2903
1669	Synthesis and properties of tadpole-shaped gold nanoparticles. **2004**, 126, 9470-1		119
1668	Preparation, characterization, and time-resolved fluorometric application of silica-coated terbium(III) fluorescent nanoparticles. **2004**, 76, 513-8		187
1667	CdS:Mn nanocrystals passivated by ZnS: synthesis and luminescent properties. **2004**, 121, 10233-40		64
1666	Tuning the architecture of mesostructures by electrodeposition. **2004**, 126, 2316-7		149
1665	Multicolor Coding of Cells with Cationic Peptide Coated Quantum Dots. **2004**, 4, 2019-2022		122
1664	Influence of Thiol Capping on the Exciton Luminescence and Decay Kinetics of CdTe and CdSe Quantum Dots. **2004**, 108, 17393-17397		432
1663	Highly fluorescent streptavidin-coated CdSe nanoparticles: preparation in water, characterization, and micropatterning. **2004**, 20, 3828-31		83
1662	Luminescent polymer microcapsules addressable by a magnetic field. **2004**, 20, 1449-52		161
1661	Fluorescent CdSe/ZnS Nanocrystal-Peptide Conjugates for Long-term, Nontoxic Imaging and Nuclear Targeting in Living Cells. **2004**, 4, 1827-1832		445
1660	Versatile organic (fullerene)-inorganic (CdTe nanoparticle) nanoensembles. **2004**, 126, 14340-1		63
1659	Novel molecular recognition via fluorescent resonance energy transfer using a biotin-PEG/polyamine stabilized CdS quantum dot. **2004**, 20, 6396-400		76
1658	Self-assembly of ordered, robust, three-dimensional gold nanocrystal/silica arrays. *Science*, **2004**, 304, 567-71	33.3	433
1657	From DNA to transistors. **2004**, 53, 441-496		84

1656	Facile one-pot synthesis of bifunctional heterodimers of nanoparticles: a conjugate of quantum dot and magnetic nanoparticles. **2004**, 126, 5664-5	669
1655	Bioactivation and cell targeting of semiconductor CdSe/ZnS nanocrystals with phytochelatin-related peptides. **2004**, 126, 6115-23	522
1654	Colloidal Synthesis of Luminescent Rhabdophane LaPO4:Ln3+·xH2O (Ln = Ce, Tb, Eu; x ≈ 0.7) Nanocrystals. **2004**, 16, 3767-3773	132
1653	Silica nanoparticle size influences the structure and enzymatic activity of adsorbed lysozyme. **2004**, 20, 6800-7	734
1652	Bioconjugates of CdTe Nanowires and Au Nanoparticles: Plasmon−Exciton Interactions, Luminescence Enhancement, and Collective Effects. **2004**, 4, 2323-2330	338
1651	Exploring the mechanism of competence development in Escherichia coli using quantum dots as fluorescent probes. **2004**, 58, 59-66	28
1650	Integration of nanocrystal quantum dots with crystalline semiconductor substrates: Structure, Stability, and Optical response. **2004**, 854, U4.7.1	
1649	Synthesis of Novel Nanocrystals as Fluorescent Sensors for Hg2+Ions. **2004**, 33, 1608-1609	82
1648	Formation of Luminescent CdTe−Silica Nanoparticles through an Inverse Microemulsion Technique. **2004**, 33, 434-435	45
1647	Preparation Method Allowing Self-isolation of CdS Nanocrystals Emitting Intense Band-gap Luminescence. **2004**, 33, 1344-1345	14
1646	Time-lapse microscopy of brain development. **2004**, 76, 207-35	19
1645	Nanocomposites, Layer-by-Layer Assembly. **2004**,	
1644	Preparation of Water-soluble PEGylated Semiconductor Nanocrystals. **2004**, 33, 840-841	22
1643	Dipolar emitters at nanoscale proximity of metal surfaces: Giant enhancement of relaxation in microscopic theory. **2004**, 69,	131
1642	Preparation and a time-resolved fluoroimmunoassay application of new europium fluorescent nanoparticles. **2004**, 20, 245-6	40
1641	Quantum dots for multiparameter measurements. **2005**,	
1640	Peptide-coated semiconductor nanocrystals for biomedical applications. **2005**, 5704,	4
1639	Toward the Emergence of Nanoneurosurgery: Part III—Progress in Nanoscience, Nanotechnology, and the Comprehension of Events in the Mesoscale Realm. **2005**, 57, 606-634	52

1638	Design of Stable Bionanoparticles by PEG based Surface Modifications. **2005**, 18, 513-514	2
1637	Two- or Three-Dimensional Imagings of Simultaneous Visualization of Rat Pituitary Hormone and Its mRNA: Comparison between Electron Microscopy and Confocal Laser Scanning Microscopy with Semiconductor Nanocrystals (Quantum dots). **2005**, 38, 253-256	2
1636	A scalable optical detection scheme for matter wave interferometry. **2005**, 7, 224-224	3
1635	Laser Assisted Catalytic Growth of ZnS/CdSe Core-Shell and Wire-Coil Nanowire Heterostructures. **2005**, 52, 725-732	7
1634	New Organometallic Approach to Synthesize High-quality CdSe Quantum Dots. **2005**, 34, 1284-1285	5
1633	Surfactant-dependent Photoluminescence of CdTe Nanocrystals in Aqueous Solution. **2005**, 34, 92-93	90
1632	Functional InP Nanocrystals as Novel Near-infrared Fluorescent Sensors for Mercury Ions. **2005**, 34, 898-899	48
1631	Fluorescent Quantum Dots: Properties and Applications. **2005**, 263-274	
1630	Microscopy and image analysis. **2005**, Chapter 4, Unit 4.4	7
1629	Labels and Detection Methods. **2005**, 147-179	8
1628	Direct fluorimetric determination of gamma-globulin in human serum with organic nanoparticle biosensor. **2005**, 61, 129-33	34
1627	Fluorescence determination of DNA with 1-pyrenebutyric acid nanoparticles coated with beta-cyclodextrin as a fluorescence probe. **2005**, 61, 1201-5	13
1626	Sensitive determination of nucleic acids using organic nanoparticle fluorescence probes. **2005**, 61, 1841-5	36
1625	A highly sensitive assay for spectrofluorimetric determination of reduced glutathione using organic nano-probes. **2005**, 61, 2533-8	26
1624	Luminescence effect of silver nanoparticle in water phase. **2005**, 61, 2488-94	50
1623	The interaction between some diamines and CdSe quantum dots. **2005**, 61, 2974-8	38
1622	Plate-based biochemical assay using quantum dots as a fluorescent labeling agent. **2005**, 108, 713-720	9
1621	Optically detected nuclear magnetic resonance at the sub-micron scale. **2005**, 176, 207-14	8

1620	Novel fluorescence-based approaches for the study of biogenic amine transporter localization, activity, and regulation. **2005**, 143, 3-25	90
1619	Adsorption and photoreactivity of CdSe nanoparticles at liquid|liquid interfaces. **2005**, 583, 241-247	41
1618	Electrogenerated chemiluminescence of CdSe hollow spherical assemblies in aqueous system by immobilization in carbon paste. **2005**, 579, 175-180	35
1617	Effect of irradiation on the luminescence in ZnS:Mn2+ nanoparticles. **2005**, 114, 293-298	11
1616	Optical properties of colloidal nanocrystal spheres and tetrapods. **2005**, 36, 552-554	11
1615	Photoluminescence behavior of CdSe on GaAsOx/GaAs substrates. **2005**, 36, 578-580	6
1614	Quantum dots for robust and simple assays using single particles in nanodevices. **2005**, 1, 122-4	10
1613	Studies of positron trapping at quantum-dot-like particles on metal surfaces. **2005**, 241, 267-270	
1612	Facile one-pot synthesis of gold nanoparticles stabilized with bifunctional amino/siloxy ligands. **2005**, 287, 360-5	25
1611	Stability and quantum yield effects of small molecule additives on solutions of semiconductor nanoparticles. **2005**, 290, 437-43	42
1610	Large scaled synthesis of chainlike nickel wires assisted by ligands. **2005**, 280, 217-221	21
1609	Nanotechnology, nanomedicine, and the development of new, effective therapies for cancer. **2005**, 1, 101-9	248
1608	Self-assembling nanoclusters in living systems: application for integrated photothermal nanodiagnostics and nanotherapy. **2005**, 1, 326-45	182
1607	Influence of the gamma irradiation on photoluminescence properties of DGMA doped with Eu3+β-diketonate complex. **2005**, 236, 235-240	4
1606	New materials for electrochemical sensing V: Nanoparticles for DNA labeling. **2005**, 24, 341-349	55
1605	Enhanced phosphorescence and electroluminescence in triplet emitters by doping gold into cadmium selenide/zinc sulfide nanoparticles. **2005**, 489, 296-302	8
1604	Enhancing solar cell efficiency by using spectral converters. **2005**, 87, 395-409	153
1603	Synthesis and spectral properties of DNA capped CdS nanoparticles in aqueous and non-aqueous media. **2005**, 21, 95-102	30

1602	Nanoparticle labels in immunosensing using optical detection methods. **2005**, 20, 2454-69	272
1601	Interfacing biology with nanoparticles. **2005**, 5, 118-127	178
1600	Biomolecules as selective dispersants for carbon nanotubes. **2005**, 43, 1879-1884	62
1599	Self-assembled luminescent CdSe□ZnS quantum dot bioconjugates prepared using engineered poly-histidine terminated proteins. **2005**, 534, 63-67	85
1598	An energy-transfer cataluminescence reaction on nanosized catalysts and its application to chemical sensors. **2005**, 535, 145-152	40
1597	Functionalized semiconductor nanocrystals for ultrasensitive detection of peptides. **2005**, 542, 144-150	33
1596	Functionalized cadmium sulfide quantum dots as fluorescence probe for silver ion determination. **2005**, 546, 147-153	163
1595	Synthesis, characterization, and photoluminescence of quaternary [Cd4In16S33□Sex]10□ supertetrahedral clusters: (0.33. **2005**, 8, 836-840	7
1594	Turning all the lights on: quantum dots in cellular assays. **2005**, 9, 533-7	63
1593	Wavefunction engineering: From quantum wells to near-infrared type-II colloidal quantum dots synthesized by layer-by-layer colloidal epitaxy. **2005**, 318, 82-90	35
1592	The size-dependent optical properties of 1-phenyl-3-naphthyl-5-((dimethylamino)phenyl)-2-pyrazoline nanoparticles. **2005**, 257-258, 415-418	11
1591	Variation of cadmium sulfide nanoparticle size and photoluminescence intensity with altered aqueous synthesis conditions. **2005**, 254, 147-157	105
1590	Prototype of immunochromatographic assay strips using colloidal CdTe nanocrystals as biological luminescent label. **2005**, 40, 179-82	21
1589	In vivo molecular and cellular imaging with quantum dots. **2005**, 16, 63-72	1004
1588	Optical detection of antibody using silica□ilver core□hell particles. **2005**, 404, 136-141	66
1587	A theoretical study of the structural and electronic properties of CdSe/CdS and CdS/CdSe core/shell nanoparticles. **2005**, 405, 103-107	32
1586	Laser-based synthesis of core Ag-shell AgI nanoparticles. **2005**, 406, 289-293	35
1585	Density functional study of the TiO2□opamine complex. **2005**, 406, 306-311	64

1584	Optical properties of CdS nanoparticles and the energy transfer from CdS nanoparticles to Rhodamine 6G. **2005**, 413, 311-314		45
1583	Preparation of silica encapsulated CdSe quantum dots in aqueous solution with the improved optical properties. **2005**, 242, 281-286		42
1582	Rare earth based clusters for nanoscale light source. **2005**, 34, 139-143		17
1581	Surface plasmon resonance scattering and absorption of anti-EGFR antibody conjugated gold nanoparticles in cancer diagnostics: applications in oral cancer. **2005**, 5, 829-34		1614
1580	Visualizing and manipulating individual protein molecules. **2005**, 26, R119-53		35
1579	Quantum dots for live cells, in vivo imaging, and diagnostics. *Science*, **2005**, 307, 538-44	33.3	6718
1578	Mild synthesis of ultra-small CdSe quantum dots in ethylenediamine solution. **2005**, 59, 1430-1433		20
1577	Photoassisted synthesis of CdSe and core-shell CdSe/CdS quantum dots. **2005**, 21, 728-34		75
1576	Quantum dots as bio-labels for the localization of a small plant adhesion protein. **2005**, 16, 1-4		104
1575	Ligand effects on optical properties of CdSe nanocrystals. **2005**, 109, 7012-21		388
1574	Integrated Biological-Semiconductor Devices. **2005**, 93, 1772-1783		39
1573	Electrochemistry and Electrogenerated Chemiluminescence of Semiconductor Nanocrystals in Solutions and in Films. 1-57		85
1572	Bioinorganic photochemistry: frontiers and mechanisms. **2005**, 105, 2647-94		620
1571	A new route to zinc-blende CdSe nanocrystals: mechanism and synthesis. **2005**, 109, 16671-5		262
1570	Silica-coated nanocomposites of magnetic nanoparticles and quantum dots. **2005**, 127, 4990-1		757
1569	Single Quantum Dots in Silica Spheres by Microemulsion Synthesis. **2005**, 17, 5720-5725		320
1568	Synthesis of luminescent and rodlike CdS nanocrystals dispersed in polymer templates. **2005**, 16, 58-64		26
1567	Synthesis and characterization of highly luminescent CdSe-core CdS/Zn0.5Cd0.5S/ZnS multishell nanocrystals. **2005**, 127, 7480-8		802

1566	Quantum dots as cellular probes. **2005**, 7, 55-76	1170
1565	Nanostructures in biodiagnostics. **2005**, 105, 1547-62	4122
1564	Highly efficient, wavelength-tunable, gold nanoparticle based optothermal nanoconvertors. **2005**, 109, 11135-8	157
1563	Core-shell CdS/Cd(OH)2 quantum dots: synthesis and bioconjugation to target red cells antigens. **2005**, 219, 103-8	24
1562	Quantum dot bioconjugates for imaging, labelling and sensing. **2005**, 4, 435-46	5269
1561	Single-quantum-dot-based DNA nanosensor. **2005**, 4, 826-31	826
1560	Colloidal nanocrystal synthesis and the organic-inorganic interface. **2005**, 437, 664-70	2739
1559	Chemically tailorable colloidal particles from infinite coordination polymers. **2005**, 438, 651-4	580
1558	Effect of nano cadmium sulfide on the electron transfer reactivity and peroxidase activity of hemoglobin. **2005**, 64, 38-45	31
1557	Semiconductor nanocrystals for biological imaging. **2005**, 15, 568-75	153
1556	CdS nanoparticles: structural and energetical correlations. **2005**, 89, 21-27	11
1555	Efficient phase transfer of hydrophobic CdSe quantum dots: From nonpolar organic solvent to biocompatible water buffer. **2005**, 93, 310-313	21
1554	One-step and rapid synthesis of high quality alloyed quantum dots (CdSe□CdS) in aqueous phase by microwave irradiation with controllable temperature. **2005**, 40, 1726-1736	98
1553	Structural characterization of CdS nanoparticles grown in polystyrene matrix by thermolytic synthesis. **2005**, 59, 3181-3187	56
1552	Synthesis of silica nanocubes by sol□gel method. **2005**, 59, 4013-4015	33
1551	Incorporation and release of cloxacillin sodium in micelles of poly(styrene-b-2-vinyl pyridine-b-ethylene oxide). **2005**, 108, 150-60	20
1550	Nanobiotechnology: the promise and reality of new approaches to molecular recognition. **2005**, 23, 168-73	182
1549	Modeling and simulation for a nano-photonic quantum dot waveguide fabricated by DNA-directed self-assembly. **2005**, 11, 500-509	14

1548	. **2005**, 11, 733-751	98
1547	Fluorescent nanocrystals for use in early cervical cancer detection. **2005**, 99, S89-94	48
1546	Surface modification of gold and quantum dot nanoparticles with chitosan for bioapplications. **2005**, 75, 56-62	78
1545	The Effects of Organisation, Embedding and Surfactants on the Properties of Cadmium Chalcogenide (CdS, CdSe and CdS/CdSe) Semiconductor Nanoparticles. **2005**, 2005, 3585-3596	29
1544	Gold nanoparticles for microfluidics-based biosensing of PCR products by hybridization-induced fluorescence quenching. **2005**, 26, 4743-50	27
1543	Design of molecular photonic wires based on multistep electronic excitation transfer. **2005**, 6, 217-22	69
1542	Single-molecule quantum-dot fluorescence resonance energy transfer. **2005**, 6, 956-60	144
1541	MOCVD of the Cubic Zinc Nitride Phase, Zn3N2, Using Zn[N(SiMe3)2]2 and Ammonia as Precursors. **2005**, 11, 409-414	27
1540	Selecting the right fluorophores and flow cytometer for fluorescence resonance energy transfer measurements. **2005**, 65, 148-57	38
1539	Quantum dots are powerful multipurpose vital labeling agents in zebrafish embryos. **2005**, 234, 670-81	88
1538	Studies on fluorescence resonance energy transfer between dyes and water-soluble quantum dots. **2005**, 20, 251-5	40
1537	Exploring the mechanisms of molecular recognition by flavins. **2005**, 2, 429-46	7
1536	Branching out of single-molecule fluorescence spectroscopy: challenges for chemistry and influence on biology. **2005**, 44, 2642-2671	218
1535	Colloidally stable amphibious nanocrystals derived from poly{[2-(dimethylamino)ethyl] methacrylate} capping. **2005**, 44, 1717-20	72
1534	Lipid-coated nanocrystals as multifunctionalized luminescent scaffolds for supramolecular biological assemblies. **2005**, 44, 1388-92	52
1533	CdSe/ZnS nanocrystals with dye-functionalized polymer ligands containing many anchor groups. **2005**, 44, 2437-40	73
1532	Visualization of membrane processes in living cells by surface-attached chromatic polymer patches. **2005**, 44, 1092-1096	56
1531	Aerogels from semiconductor nanomaterials. **2005**, 44, 4839-41	24

1530	Water-soluble photoluminescent silicon quantum dots. **2005**, 44, 4550-4	441
1529	Nanoparticle assemblies with molecular springs: a nanoscale thermometer. **2005**, 44, 7439-42	163
1528	Fluorescence resonant energy transfer biosensor based on upconversion-luminescent nanoparticles. **2005**, 44, 6054-7	801
1527	Neue Wege in der Einzelmolekül-Fluoreszenzspektroskopie: Herausforderungen für die Chemie und Einfluss auf die Biologie. **2005**, 117, 2698-2728	44
1526	Colloidally Stable Amphibious Nanocrystals Derived from Poly{[2-(dimethylamino)ethyl] Methacrylate} Capping. **2005**, 117, 1745-1748	9
1525	Lipid-Coated Nanocrystals as Multifunctionalized Luminescent Scaffolds for Supramolecular Biological Assemblies. **2005**, 117, 1412-1416	6
1524	CdSe/ZnS-Nanokristalle mit farbstoffmarkierten Polymerliganden mit mehrfachen Ankergruppen. **2005**, 117, 2490-2493	17
1523	Visualization of Membrane Processes in Living Cells by Surface-Attached Chromatic Polymer Patches. **2005**, 117, 1116-1120	3
1522	Aerogele aus Halbleiter-Nanomaterialien. **2005**, 117, 4917-4919	7
1521	Water-Soluble Photoluminescent Silicon Quantum Dots. **2005**, 117, 4626-4630	81
1520	Nanoparticle Assemblies with Molecular Springs: A Nanoscale Thermometer. **2005**, 117, 7605-7608	66
1519	Fluorescence Resonant Energy Transfer Biosensor Based on Upconversion-Luminescent Nanoparticles. **2005**, 117, 6208-6211	88
1518	Highly Luminescent CdSe/ZnS Nanocrystals Synthesized Using a Single-Molecular ZnS Source in a Microfluidic Reactor. **2005**, 15, 603-608	100
1517	Composition- and Shape-Controlled Synthesis and Optical Properties of ZnxCd1−xS Alloyed Nanocrystals. **2005**, 15, 433-441	110
1516	Bonding Polyether onto ZnO Nanoparticles: An Effective Method for Preparing Polymer Nanocomposites with Tunable Luminescence and Stable Conductivity. **2005**, 15, 1751-1756	121
1515	Size Fractionation of Metal Nanoparticles by Membrane Filtration. **2005**, 17, 532-535	133
1514	Fabrication of Multicolor-Encoded Microspheres by Tagging Semiconductor Nanocrystals to Hydrogel Spheres. **2005**, 17, 267-270	161
1513	Preparation of Fluorescent Silica Nanotubes and Their Application in Gene Delivery. **2005**, 17, 404-407	154

1512	Fluorescent Nanocrystal–Polymer Complexes with Flexible Processability. **2005**, 17, 853-857	75
1511	Synthesis of Extremely Small CdSe and Highly Luminescent CdSe/CdS Core–Shell Nanocrystals via a Novel Two-Phase Thermal Approach. **2005**, 17, 176-179	168
1510	Multifunctional Quantum-Dot-Based Magnetic Chitosan Nanobeads. **2005**, 17, 2375-2380	80
1509	Super-Efficient Exciton Funneling in Layer-by-Layer Semiconductor Nanocrystal Structures. **2005**, 17, 769-773	100
1508	Robust, Non-Cytotoxic, Silica-Coated CdSe Quantum Dots with Efficient Photoluminescence. **2005**, 17, 1620-1625	427
1507	Synthesis of ZnO Nanocrystals with Cone, Hexagonal Cone, and Rod Shapes via Non-Hydrolytic Ester Elimination Sol–Gel Reactions. **2005**, 17, 1873-1877	246
1506	Synthesis and Characterization of Fluorescent, Radio-Opaque, and Paramagnetic Silica Nanoparticles for Multimodal Bioimaging Applications. **2005**, 17, 2165-2169	193
1505	Preparation of Fluorescent SiO2 Particles with Single CdTe Nanocrystal Cores by the Reverse Microemulsion Method. **2005**, 17, 2354-2357	244
1504	Synthesis of Well-Dispersed Y2O3:Eu Nanocrystals and Self-Assembled Nanodisks Using a Simple Non-hydrolytic Route. **2005**, 17, 2506-2509	102
1503	Photogeneration of Fluorescent Silver Nanoclusters in Polymer Microgels. **2005**, 17, 2336-2340	334
1502	Microfluidics for Processing Surfaces and Miniaturizing Biological Assays. **2005**, 17, 2911-2933	208
1501	Research in bioengineering and nanotechnology. **2005**, 51, 2382-2385	1
1500	Directly Fabricating Monolayer Nanoparticles on a Polymer Surface by UV-Induced MMA/DVB Microemulsion Graft Polymerization. **2005**, 26, 87-92	19
1499	Quantum dots protected with tiopronin: a new fluorescence system for cell-biology studies. **2005**, 6, 989-91	29
1498	Probing lectin and sperm with carbohydrate-modified quantum dots. **2005**, 6, 1899-905	80
1497	Synthesis and structural metastability of CdTe nanowires. **2005**, 11, 2220-4	32
1496	A new two-phase route to high-quality CdS nanocrystals. **2005**, 11, 3843-8	66
1495	Single quantum dot (QD) imaging of fluid flow near surfaces. **2005**, 39, 784-786	38

1494	Differences in subcellular distribution and toxicity of green and red emitting CdTe quantum dots. **2005**, 83, 377-85	647
1493	A new determining method of copper(II) ions at ng ml(-1) levels based on quenching of the water-soluble nanocrystals fluorescence. **2005**, 381, 986-92	142
1492	Microstructured layers of spherical biofunctional core-shell nanoparticles provide enlarged reactive surfaces for protein microarrays. **2005**, 383, 738-46	14
1491	Inhibitors of the serotonin transporter protein (SERT): the design and synthesis of biotinylated derivatives of 3-(1,2,3,6-tetrahydro-pyridin-4-yl)-1H-indoles. High-affinity serotonergic ligands for conjugation with quantum dots. **2005**, 15, 5307-10	26
1490	The structure and character of CdSe nanocrystals capped ZnO layer for phase transfer from hexane to ethanol solution. **2005**, 582, 61-68	20
1489	Glyco-quantum dots: a new luminescent system with multivalent carbohydrate display. **2005**, 16, 387-391	75
1488	Molecular dynamics simulation of peeling a DNA molecule on substrate. **2005**, 21, 249-256	36
1487	Simultaneous control of nanocrystal size and nanocrystal-nanocrystal separation in CdS nanocrystal assembly. **2005**, 65, 565-570	52
1486	Dipyrrylmetheneboron difluorides as labels in two-photon excited fluorometry. Part II--Nucleic acid hybridization assays. **2005**, 15, 233-42	4
1485	Preparation, characterization and application of fluorescent terbium complex-doped zirconia nanoparticles. **2005**, 15, 499-505	35
1484	Double labeling and simultaneous detection of B- and T cells using fluorescent nano-crystal (q-dots) in paraffin-embedded tissues. **2005**, 15, 661-5	32
1483	The fluorescence bioassay platforms on quantum dots nanoparticles. **2005**, 15, 729-33	37
1482	Semiconductor Nanoparticles. **2005**, 160, 81-94	24
1481	CdS nanoparticles in R-phycoerythrin, a protein matrix. **2005**, 41, 331-337	15
1480	Promising avenues of research in nanoscience: chemistry of semiconductor nanoparticles. **2005**, 54, 827-852	40
1479	Bioapplication of nanosemiconductors. **2005**, 8, 20-31	50
1478	Magnetic nanoparticle probes. **2005**, 8, 32-38	139
1477	Highly improved green photoluminescence from CePO4:Tb/LaPO4 core/shell nanowires. **2005**, 1, 967-71	68

1476 Metal (Mn, Co, and Cu) oxide nanocrystals from simple formate precursors. **2005**, 1, 1081-6 82

1475 Thermal stability and lasing of CdS nanowires coated by amorphous silica. **2005**, 1, 1058-62 44

1474 FLUORESCENCE | Derivatization. **2005**, 138-148

1473 Quantum dots as fluorescent labels for quantitative detection of Salmonella typhimurium in chicken carcass wash water. **2005**, 68, 1241-5 73

1472 Optical Properties of Excitons in Structures of Reduced Dimensionality. **2005**, 365-404

1471 Novel Single Cell Fluorescence Approaches in the Investigation of Signaling at the Cellular Level. **2005**, 33-70 1

1470 Multiphoton imaging of renal tissues in vitro. **2005**, 288, F1079-83 51

1469 Blinking and nonradiant dark fraction of water-soluble quantum dots in aqueous solution. **2005**, 102, 14284-9 191

1468 Controlled Synthesis of High Quality Semiconductor Nanocrystals. 79-119 41

1467 Thermally Triggered CdS Nanoparticles Formation from Cadmium-Loaded Liposomes. **2005**, 26, 22-28

1466 Application of luminescent Eu:Gd2O3 nanoparticles to the visualization of protein micropatterns. **2005**, 10, 064006 61

1465 Assembly of Nanomaterials using Polymers and Biomaterials: Sensing and Electronic Applications. **2005**, 901, 1 1

1464 Synthesis of CdSe Quantum Dots Using Micro-Flow Reactor and Their Optical Properties. **2005**, 44, 452-456 10

1463 From Nanosize Silica Spheres to Three-Dimensional Colloidal Crystals. **2005**, 109-142 1

1462 Biomedical/analytical applications of deposited nanostructured Si films. **2005**, 16, 1383-1391 19

1461 Amplified Electrochemical and Photoelectrochemical Analysis of DNA. **2005**, 195-246 8

1460 Photosensitive quantum dot composites and their applications in optical structures. **2005**, 23, 2413 23

1459 Simultaneous multicolor detection system of the single-molecular microbial antigen with total internal reflection fluorescence microscopy. **2005**, 49, 461-70 38

1458	Reactions and luminescence in passivated Si nanocrystallites induced by vacuum ultraviolet and soft-x-ray photons. **2005**, 98, 044316	33
1457	Targeting quantum dots to surface proteins in living cells with biotin ligase. **2005**, 102, 7583-8	449
1456	Imaging and spectroscopy of individual CdSe nanocrystals on atomically resolved surfaces. **2005**, 87, 053114	23
1455	Comparison of the optical response of hydrogen-passivated germanium and silicon clusters. **2005**, 71,	36
1454	Monitoring surface charge migration in the spectral dynamics of single CdSe/CdS nanodot/nanorod heterostructures. **2005**, 72,	93
1453	Self-integration of aligned cobalt nanoparticles into silica nanotubes. **2005**, 87, 212503	5
1452	Spin dynamics in electrochemically charged CdSe quantum dots. **2005**, 72,	28
1451	Imaging the life story of nanotube devices. **2005**, 87, 083103	41
1450	In vivo optical molecular imaging: principles and signal processing issues.	1
1449	Miniaturized detection technology in molecular diagnostics. **2005**, 5, 549-59	19
1448	Three-dimensional imaging of the intracellular localization of growth hormone and prolactin and their mRNA using nanocrystal (Quantum dot) and confocal laser scanning microscopy techniques. **2005**, 53, 833-8	36
1447	Fluorescent nanoparticle probes for cancer imaging. **2005**, 4, 593-602	120
1446	Cardiac stem cells and mechanisms of myocardial regeneration. **2005**, 85, 1373-416	349
1445	Reversible and non-reversible photo-enhanced luminescence in CdSe/ZnS quantum dots. **2005**, 20, 876-881	50
1444	Incorporating lanthanide cations with cadmium selenide nanocrystals: a strategy to sensitize and protect Tb(III). **2005**, 127, 16752-3	80
1443	Photoluminescence of colloidal CdSe/ZnS quantum dots under oxygen atmosphere. **2005**, 4, 632-636	41
1442	Quantum dot surfaces for use in vivo and in vitro. **2005**, 70, 103-20	23
1441	Special-Purpose Modifications and Immobilized Functional Nucleic Acids for Biomolecular Interactions. **2005**, 131-168	8

1440	Controlled Growth of Silica Shell on Ba0.6Sr0.4TiO3 Nanoparticles Used As Precursors of Ferroelectric Composites. **2005**, 17, 4530-4536	52
1439	Pegylated, steptavidin-conjugated quantum dots are effective detection elements for reverse-phase protein microarrays. **2005**, 16, 559-66	113
1438	Synthesis and analysis of ZnO and CdSe nanoparticles. **2005**, 65, 615-620	28
1437	Infrared up-converting phosphors for bioassays. **2005**, 152, 64-72	106
1436	Ligand-installed PEGylated bionanosphere. **2005**, 152, 89-96	2
1435	Observation of a quadrupole plasmon mode for a colloidal solution of gold nanoprisms. **2005**, 127, 5312-3	653
1434	Shape-Controlled Synthesis of CdS Nanocrystals in Mixed Solvents. **2005**, 5, 1801-1806	89
1433	High-pressure behavior of SnO2 nanocrystals. **2005**, 72,	61
1432	Chemiluminescence of CdTe nanocrystals induced by direct chemical oxidation and its size-dependent and surfactant-sensitized effect. **2005**, 109, 23304-11	151
1431	Engineering InAs(x)P(1-x)/InP/ZnSe III-V alloyed core/shell quantum dots for the near-infrared. **2005**, 127, 10526-32	206
1430	Microarray immunoassay for phenoxybenzoic acid using polymer encapsulated Eu:Gd2O3 nanoparticles as fluorescent labels. **2005**, 77, 6864-73	188
1429	Real time in vivo non-invasive optical imaging using near-infrared fluorescent quantum dots. **2005**, 12, 313-23	139
1428	Size-dependent properties of Zn(m)S(n) clusters: a density-functional tight-binding study. **2005**, 123, 044311	38
1427	Biomacromolecule Surface Recognition using Nanoparticle Receptors. **2005**, 17, 155-161	14
1426	Structure and luminescence of pyramid-shaped CdSe nanostructures grown by metalorganic chemical vapor deposition. **2005**, 86, 213106	23
1425	Infrared emitting PbSe nanocrystals for telecommunications window applications. **2005**, 52, 955-964	31
1424	Research strategies for safety evaluation of nanomaterials, Part III: nanoscale technologies for assessing risk and improving public health. **2005**, 88, 298-306	44
1423	Interfused semiconductor nanocrystals: brilliant blue photoluminescence and electroluminescence. **2005**, 4616-8	52

1422	Surface morphology dependent photoluminescence from colloidal silicon nanocrystals. **2005**, 109, 19064-7	93
1421	Microfluidic device as a new platform for immunofluorescent detection of viruses. **2005**, 5, 1327-30	62
1420	Biomolecule detection via target mediated nanoparticle aggregation and dielectrophoretic impedance measurement. **2005**, 5, 606-10	20
1419	Anhydrous solution synthesis of germanium nanocrystals from the germanium(II) precursor Ge[N(SiMe3)2]2. **2005**, 1914-6	82
1418	A sensitive method for the detection of proteins by high-efficiency fluorescence quenching. **2005**, 130, 283-5	23
1417	Photoactive Nanomaterials for Sensing Trace Analytes in Biological Samples. **2005**, 35, 661-668	10
1416	Detection of encephalic and hemorrhagic viruses: integration of micro- and nano-fabrication with computational tools. **2005**,	
1415	Diethylene glycol ether-linked 3,4,5-trihydroxybenzamides as triply branched dendritic anchors to CdSe/ZnS core/shell type nanoparticles: potential hydrophilic fluorescent probes. **2005**, 2483-5	19
1414	Formation of isolated and clustered Au nanoparticles in the presence of polyelectrolyte molecules using a flow-through Si chip reactor. **2005**, 15, 1924	46
1413	Photoactivated luminescent CdSe quantum dots as sensitive cyanide probes in aqueous solutions. **2005**, 883-5	279
1412	Nucleotide passivated cadmium sulfide quantum dots. **2005**, 4830-2	23
1411	New approaches to the synthesis of anisotropic, core□shell and hollow metal nanostructures. **2005**, 15, 3161	64
1410	Size-dependent properties of CdSe quantum dots. **2005**, 71,	139
1409	Photoactivation of quantum dot fluorescence following endocytosis. **2005**, 5, 1445-9	90
1408	Shell distribution on colloidal CdSe/ZnS quantum dots. **2005**, 5, 565-70	74
1407	Structure-controlled solventless thermolytic synthesis of uniform silver nanodisks. **2005**, 44, 9817-22	70
1406	Microcontact printing of proteins inside microstructures. **2005**, 21, 11296-303	39
1405	Enhancing the photoluminescence of peptide-coated nanocrystals with shell composition and UV irradiation. **2005**, 109, 1669-74	53

1404	ZnO-CdSe nanoparticle clusters as directional photoemitters with tunable wavelength. **2005**, 127, 10152-3	74
1403	Tunable solvation effects on the size-selective fractionation of metal nanoparticles in CO2 gas-expanded solvents. **2005**, 109, 22852-9	48
1402	Precise and rapid size selection and targeted deposition of nanoparticle populations using CO2 gas expanded liquids. **2005**, 5, 461-5	80
1401	Subsecond luminescence intensity fluctuations of single CdSe quantum dots. **2005**, 109, 14350-5	51
1400	Western blot analysis with quantum dot fluorescence technology: a sensitive and quantitative method for multiplexed proteomics. **2005**, 2, 79-81	61
1399	Surface chemistry studies of (CdSe)ZnS quantum dots at the air-water interface. **2005**, 21, 5377-82	42
1398	Upconversion luminescence of CdTe nanoparticles. **2005**, 71,	66
1397	STRONG LUMINESCING CdSe NANOPARTICLES BY SURFACE MODIFICATION WITH CADMIUM (II) HYDROUS OXIDE. **2005**, 19, 2835-2840	7
1396	Optical characterization of ultrasmall Si nanoparticles prepared through electrochemical dispersion of bulk Si. **2005**, 109, 19786-97	27
1395	Expanding Frontiers in Biomaterials. **2005**, 30, 864-873	38
1394	Heterodimers of nanoparticles: formation at a liquid-liquid interface and particle-specific surface modification by functional molecules. **2005**, 127, 34-5	509
1393	Frequency-dependent spontaneous emission rate from CdSe and CdTe nanocrystals: influence of dark states. **2005**, 95, 236804	154
1392	Band gap engineering of CdTe nanocrystals through chemical surface modification. **2005**, 127, 1634-5	67
1391	Observation of interband two-photon absorption saturation in CdS nanocrystals. **2005**, 109, 19184-7	58
1390	Preparation and characterization of Cr(CO)(4)dpp (chromium tetracarbonyl 2,3-bis(2'-pyridyl)pyrazine) adsorbed on silver nanoparticles. **2005**, 109, 19657-63	7
1389	Recombination dynamics of luminescence in colloidal CdSe/ZnS quantum dots. **2005**, 16, 1517-1521	53
1388	A rapid synthesis of iron phosphate nanoparticles via surface-mediated spontaneous reaction for the growth of high-yield, single-walled carbon nanotubes. **2005**, 21, 9098-102	20
1387	Peptide-conjugated quantum dots activate neuronal receptors and initiate downstream signaling of neurite growth. **2005**, 5, 603-7	120

1386	Size-dependent dissociation pH of thiolate ligands from cadmium chalcogenide nanocrystals. **2005**, 127, 2496-504	328
1385	Time- and polarization-resolved optical spectroscopy of colloidal CdSe nanocrystal quantum dots in high magnetic fields. **2005**, 109, 15332-8	59
1384	Characterization of nanocrystalline CdSe by size exclusion chromatography. **2005**, 77, 3511-5	107
1383	Synthesis and Characterization of Triangular Bismuth Nanoplates. **2005**, 5, 1379-1385	58
1382	Amphiphilic p-sulfonatocalix[4]arene-coated CdSe/ZnS quantum dots for the optical detection of the neurotransmitter acetylcholine. **2005**, 4300-2	94
1381	Quenching of CdSe quantum dot emission, a new approach for biosensing. **2005**, 3201-3	179
1380	Polyether-Grafted ZnO Nanoparticles with Tunable and Stable Photoluminescence at Room Temperature. **2005**, 17, 3062-3064	118
1379	The effect of nanocrystal surface structure on the luminescence properties: photoemission study of HF-etched InP nanocrystals. **2005**, 123, 084706	92
1378	Aggregation-driven growth of size-tunable organic nanoparticles using electronically altered conjugated polymers. **2005**, 127, 10350-5	159
1377	Surface-plasmon-coupled emission of quantum dots. **2005**, 109, 1088-93	93
1376	Alternating-laser excitation of single molecules. **2005**, 38, 523-33	276
1375	Single-crystalline and monodisperse LaF3 triangular nanoplates from a single-source precursor. **2005**, 127, 3260-1	392
1374	Phosphine oxide polymer for water-soluble nanoparticles. **2005**, 127, 4556-7	196
1373	Size-selected (2-10 nm) gold nanoparticles for matrix assisted laser desorption ionization of peptides. **2005**, 127, 5304-5	346
1372	Labelling of cells with quantum dots. **2005**, 16, R9-R25	389
1371	Regulation of neuronal P53 activity by CXCR 4. **2005**, 30, 58-66	40
1370	Quantum dots in bio-imaging: Revolution by the small. **2005**, 329, 1173-7	120
1369	Protease-activated quantum dot probes. **2005**, 334, 1317-21	194

1368	In vitro toxicity of nanoparticles in BRL 3A rat liver cells. **2005**, 19, 975-83	1588
1367	Monitoring the presence and expression of transgenes in living plants. **2005**, 10, 390-6	51
1366	Detection of single bacterial pathogens with semiconductor quantum dots. **2005**, 77, 4861-9	197
1365	Use of block copolymer-stabilized cadmium sulfide quantum dots as novel tracers for laser scanning confocal fluorescence imaging of blend morphology in polystyrene/poly(methyl methacrylate) films. **2005**, 21, 2465-73	18
1364	Synthesis, characterization, and applications of dendrimer-encapsulated nanoparticles. **2005**, 109, 692-704	782
1363	Surface effects on capped and uncapped nanocrystals. **2005**, 109, 19650-6	69
1362	Synthesis and characterization of submicron single-crystalline Bi2Fe4O9 cubes. **2005**, 15, 2099	91
1361	Inhibition assay of biomolecules based on fluorescence resonance energy transfer (FRET) between quantum dots and gold nanoparticles. **2005**, 127, 3270-1	475
1360	Systematic study of the photoluminescence dependence of thiol-capped CdTe nanocrystals on the reaction conditions. **2005**, 109, 17467-73	207
1359	Integrated semiconductor nanocrystal and epitaxical nanostructure systems: structural and optical behavior. **2005**, 5, 479-82	22
1358	Excitation dependence of steady-state photoluminescence in CdSe nanocrystal films. **2005**, 109, 15349-54	13
1357	Structural and electronic properties of epitaxial core-shell nanowire heterostructures. **2005**, 71,	80
1356	Nonlinear structured-illumination microscopy: wide-field fluorescence imaging with theoretically unlimited resolution. **2005**, 102, 13081-6	1564
1355	In vivo magnetic resonance detection of cancer by using multifunctional magnetic nanocrystals. **2005**, 127, 12387-91	768
1354	Synthesis of luminescent silicon nanopowders redispersible to various solvents. **2005**, 21, 6324-9	35
1353	An alternative of CdSe nanocrystal emitters: pure and tunable impurity emissions in ZnSe nanocrystals. **2005**, 127, 17586-7	623
1352	Folate-receptor-mediated delivery of InP quantum dots for bioimaging using confocal and two-photon microscopy. **2005**, 127, 11364-71	404
1351	Can luminescent quantum dots be efficient energy acceptors with organic dye donors?. **2005**, 127, 1242-50	250

1350	Semiconductor nanostructures in biological applications. **2005**, 17, R637-R656	29
1349	Effects of sonication on the size and crystallinity of stable zwitterionic organic nanoparticles formed by reprecipitation in water. **2005**, 21, 7990-4	65
1348	Extremely Stable Water-Soluble Ag Nanoparticles. **2005**, 17, 4630-4635	224
1347	Biofunctionalization of fluorescent-magnetic-bifunctional nanospheres and their applications. **2005** , 4276-8	82
1346	Shape-selective synthesis and oxygen storage behavior of ceria nanopolyhedra, nanorods, and nanocubes. **2005**, 109, 24380-5	1106
1345	Coupled and decoupled dual quantum systems in one semiconductor nanocrystal. **2005**, 127, 10889-97	156
1344	Effect of Thermal Sintering and Ultraviolet Irradiating on Photoluminescence of Self-Assembled CdSe Nanoparticulate Films. **2005**, 26, 449-454	
1343	Structure of nanoparticles from powder diffraction data using the pair distribution function. **2005**, 17, S125-S134	58
1342	Semiconductor Nanoparticles. **2005**, 81-94	1
1341	Nanosized Hybrid Particles with Double Luminescence for Biological Labeling. **2005**, 17, 1673-1682	172
1340	Synthesis of compact multidentate ligands to prepare stable hydrophilic quantum dot fluorophores. **2005**, 127, 3870-8	487
1339	Influence of surface modification on the luminescence of colloidal ZnO nanocrystals. **2005**, 109, 20810-6	292
1338	Band-structure-corrected local density approximation study of semiconductor quantum dots and wires. **2005**, 72,	199
1337	Inhibition of the acetycholine esterase-stimulated growth of Au nanoparticles: nanotechnology-based sensing of nerve gases. **2005**, 5, 649-53	212
1336	(CdSe)ZnS quantum dots and organophosphorus hydrolase bioconjugate as biosensors for detection of paraoxon. **2005**, 109, 3793-9	241
1335	Calixarene-coated water-soluble CdSe-ZnS semiconductor quantum dots that are highly fluorescent and stable in aqueous solution. **2005**, 2829-31	49
1334	Third-harmonic generation from single gold nanoparticles. **2005**, 5, 799-802	299
1333	Colloidal LaF3:Yb,Er, LaF3:Yb,Ho and LaF3:Yb,Tm nanocrystals with multicolor upconversion fluorescence. **2005**, 15, 4460	249

1332	Quantum dot-based multiplexed fluorescence resonance energy transfer. **2005**, 127, 18212-21	209
1331	What is the effective charge of TGA-stabilized CdTe nanocolloids?. **2005**, 127, 7322-3	39
1330	Structure determination of CdS and ZnS nanoparticles: direct modeling of synchrotron-radiation diffraction data. **2005**, 123, 224707	45
1329	Ligand Displacement Immunoassay. **2005**, 38, 1057-1069	10
1328	Cellular internalization and targeting of semiconductor quantum dots. **2005**, 2217-9	65
1327	Observation of individual microtubule motor steps in living cells with endocytosed quantum dots. **2005**, 109, 24220-4	142
1326	Highly luminescent water-soluble CdTe nanowires as fluorescent probe to detect copper(II). **2005**, 4184-6	83
1325	CdSe/ZnS-labeled carboxymethyl chitosan as a bioprobe for live cell imaging. **2005**, 5518-20	77
1324	Fluorescence lifetime enhancement of organic chromophores attached to gold nanoparticles. **2005**, 109, 9499-504	32
1323	Direct conjugation of semiconductor nanoparticles with proteins. **2005**, 21, 2008-11	50
1322	Analytical ultracentrifugation for characterizing nanocrystals and their bioconjugates. **2005**, 5, 963-7	39
1321	Direct electrochemistry and electrocatalysis with hemoglobin in water-soluble quantum dots film on glassy carbon electrode. **2005**, 2584-5	67
1320	Single molecule nanoparticles of the conjugated polymer MEH-PPV, preparation and characterization by near-field scanning optical microscopy. **2005**, 109, 8543-6	217
1319	Preparation, characterization, and surface modification of silver nanoparticles in formamide. **2005**, 109, 7698-704	66
1318	Surface-enhanced Raman scattering studies on immunoassay. **2005**, 10, 031112	52
1317	Electronic structure of and quantum size effect in III-V and II-VI semiconducting nanocrystals using a realistic tight binding approach. **2005**, 72,	74
1316	Controlled synthesis of ternary II-II'-VI nanoclusters and the effects of metal ion distribution on their spectral properties. **2005**, 44, 5447-58	51
1315	Synthesis and optical properties of thiol-stabilized PbS nanocrystals. **2005**, 21, 1086-90	87

1314	Comparison of photophysical and colloidal properties of biocompatible semiconductor nanocrystals using fluorescence correlation spectroscopy. **2005**, 77, 2235-42	110
1313	Multiplexed hybridization detection with multicolor colocalization of quantum dot nanoprobes. **2005**, 5, 1693-7	153
1312	Investigation of red blood cell antigens with highly fluorescent and stable semiconductor quantum dots. **2005**, 10, 44023	12
1311	Incorporating Fluorescent CdTe Nanocrystals into a Hydrogel via Hydrogen Bonding:´Toward Fluorescent Microspheres with Temperature-Responsive Properties. **2005**, 17, 2648-2653	164
1310	Surfactant-assisted synthesis of water-soluble and biocompatible semiconductor quantum dot micelles. **2005**, 5, 645-8	210
1309	Mixed monolayer coverage on gold nanoparticles for interfacial stabilization of immiscible fluids. **2005**, 4050-2	62
1308	Phase-transfer of CdSe@ZnS quantum dots using amphiphilic hyperbranched polyethylenimine. **2005**, 1735-6	126
1307	Synthesis of organo-silane functionalized nanocrystal micelles and their self-assembly. **2005**, 127, 13746-7	52
1306	Synthesis of water-dispersible fluorescent, radio-opaque, and paramagnetic CdS:Mn/ZnS quantum dots: a multifunctional probe for bioimaging. **2005**, 127, 1656-7	278
1305	Adsorption and hybridization of oligonucleotides on mercaptoacetic acid-capped CdSe/ZnS quantum dots and quantum dot-oligonucleotide conjugates. **2006**, 22, 11346-52	102
1304	Water-Soluble, Cyclodextrin-Modified CdSe□CdS Core□Shell Structured Quantum Dots. **2006**, 18, 1275-1280	105
1303	DNA-gold nanorod conjugates for remote control of localized gene expression by near infrared irradiation. **2006**, 128, 3709-15	370
1302	Synthesis and characterization of monodisperse chitosan nanoparticles with embedded quantum dots. **2006**, 17, 140-144	61
1301	Synthesis of CdTe nanocrystals through program process of microwave irradiation. **2006**, 110, 13352-6	110
1300	Design and Characterization of Lysine Cross-Linked Mercapto-Acid Biocompatible Quantum Dots. **2006**, 18, 872-878	134
1299	Thiolated PAMAM dendrimer-coated CdSe/ZnSe nanoparticles as protein transfection agents. **2006** , 1637-9	55
1298	Thermal decomposition of single source precursors and the shape evolution of CdS and CdSe nanocrystals. **2006**, 16, 467-473	58
1297	Size, charge, and interactions with giant lipid vesicles of quantum dots coated with an amphiphilic macromolecule. **2006**, 22, 2304-10	105

1296	Thermal control of the size and crystalline phase of CdS nanoparticles. **2006**, 17, 3812-3816	60
1295	Nanoparticles for multiplex diagnostics and imaging. **2006**, 1, 413-26	80
1294	Versatile apoferritin nanoparticle labels for assay of protein. **2006**, 78, 7417-23	76
1293	Nanotechnology and nanotoxicology: a primer for clinicians. **2006**, 25, 245-60	77
1292	Quantum dot as a drug tracer in vivo. **2006**, 5, 263-7	51
1291	Quantum dot-based fluorescence resonance energy transfer with improved FRET efficiency in capillary flows. **2006**, 78, 5532-7	69
1290	Photopatterned semiconductor nanocrystals and their electroluminescence from hybrid light-emitting devices. **2006**, 22, 2407-10	47
1289	Analysis of the inter- and extracellular formation of platinum nanoparticles by Fusarium oxysporum f. sp. lycopersici using response surface methodology. **2006**, 17, 3482-9	200
1288	Carbodithioate-Containing Oligo- and Polythiophenes for Nanocrystals' Surface Functionalization. **2006**, 18, 4817-4826	65
1287	Optical in situ size determination of single lanthanide-ion doped oxide nanoparticles. **2006**, 89, 253103	15
1286	A Comparative Study of Spectral Characteristics of CdSe and CdSe/ZnS Quantum Dots. **2006**,	
1285	Preparation and encapsulation of highly fluorescent conjugated polymer nanoparticles. **2006**, 22, 2956-60	310
1284	Controlled nucleation and growth of CdS nanoparticles in a polymer matrix. **2006**, 110, 12603-9	65
1283	A new bioimaging carrier for fluorescent quantum dots: phospholipid nanoemulsion mimicking natural lipoprotein core. **2006**, 13, 159-64	17
1282	Tracking individual proteins in living cells using single quantum dot imaging. **2006**, 414, 211-28	28
1281	Preparation of Monodisperse GeO2 Nanocubes in a Reverse Micelle System. **2006**, 18, 1817-1820	55
1280	Binding of muscimol-conjugated quantum dots to GABAC receptors. **2006**, 128, 15701-13	67
1279	Synthesis and characterization of sulfide and selenide colloidal semiconductor nanocrystals. **2006**, 22, 7364-8	31

1278	Iridium-complex modified CdSe/ZnS quantum dots; a conceptual design for bi-functionality toward imaging and photosensitization. **2006**, 615-7	64
1277	Nanoscale Resolution with Focused Light: Stimulated Emission Depletion and Other Reversible Saturable Optical Fluorescence Transitions Microscopy Concepts. **2006**, 571-579	18
1276	A microfluidic chip for measurement of biomolecules using a microbead-based quantum dot fluorescence assay. **2006**, 17, 3178-3183	23
1275	Synthesis of CdSnO(3).3H(2)O nanocubes via ion exchange and their thermal decompositions to cadmium stannate. **2006**, 45, 10774-9	26
1274	Optimizing the Synthesis of Red- to Near-IR-Emitting CdS-Capped CdTexSe1-x Alloyed Quantum Dots for Biomedical Imaging. **2006**, 18, 4845-4854	127
1273	Temperature- and pH-dependent morphology and FT-IR analysis of magnesium carbonate hydrates. **2006**, 110, 12969-73	182
1272	Solution-phase single quantum dot fluorescence resonance energy transfer. **2006**, 128, 15324-31	240
1271	Synthesis of CdS nanocrystals based on low-temperature thermolysis of one single-source organometallic precursor. **2006**, 17, 845-851	60
1270	Homogenous rapid detection of nucleic acids using two-color quantum dots. **2006**, 131, 484-8	34
1269	Characterization of Target effect of Nano-hydrogel by Near-infrared Fluorescent Quantum Dots. **2006**,	1
1268	Direct observation of resonant energy transfer between quantum dots of two different sizes in a single water droplet. **2006**, 89, 033121	17
1267	Quantum dot probes for monitoring dynamic cellular response: reporters of T cell activation. **2006**, 5, 268-72	8
1266	Time-resolved x-ray-excited optical luminescence characterization of one-dimensional Si□CdSe heterostructures. **2006**, 89, 243102	11
1265	The interaction between functionalized ZnS nanofluorescence probe and DNA. **2006**,	
1264	Exciton transitions in tetrapod-shaped CdTe nanocrystals investigated by photomodulated transmittance spectroscopy. **2006**, 89, 094104	10
1263	A 1.53 □m colloidal nanocrystal quantum dot laser. **2006**,	2
1262	Eu3+-doped CdS nanocrystals in SiO2 matrices: one-pot sol□gel synthesis and optical characterization. **2006**, 16, 4612-4618	43
1261	Construction of CdS quantum dots via a regioselective dendritic functionalized cellulose template. **2006**, 3495-7	30

1260	Visible light excitation of CdSe nanocrystals triggers the release of coumarin from cinnamate surface ligands. **2006**, 128, 11720-6	37
1259	Uncoated, broad fluorescent, and size-homogeneous CdSe quantum dots for bioanalyses. **2006**, 78, 321-30	73
1258	InAs(x)Sb(1-x) alloy nanocrystals for use in the near infrared. **2006**, 4811-3	13
1257	Europium and Samarium doped Ga/sub 2/O/sub 3/ Nanoparticles as Potential New Fluorescent Labels. **2006**,	2
1256	Rapid diagnostic barcode system for codetection of multiple protein markers. **2006**, 6, 248-253	13
1255	Synthesizing biofunctionalized nanoparticles to image cell signaling pathways. **2006**, 5, 222-30	11
1254	Synthesis of AgcoreAushell bimetallic nanoparticles for immunoassay based on surface-enhanced Raman spectroscopy. **2006**, 110, 4002-6	273
1253	Microwave-assisted growth and characterization of water-dispersed CdTe/CdS core-shell nanocrystals with high photoluminescence. **2006**, 110, 13370-4	170
1252	Aqueous routes to lanthanide-doped oxide nanophosphors. **2006**, 16, 529-539	109
1251	Synthesis of high quality zinc-blende CdSe nanocrystals and their application in hybrid solar cells. **2006**, 17, 4736-42	135
1250	Water soluble quantum dot nanoclusters: energy migration in artifical materials. **2006**, 8, 5079-85	12
1249	Hydrothermal synthesis of rare-earth fluoride nanocrystals. **2006**, 45, 6661-5	298
1248	Quantum dot solar cells. harvesting light energy with CdSe nanocrystals molecularly linked to mesoscopic TiO2 films. **2006**, 128, 2385-93	1621
1247	High-quality sodium rare-earth fluoride nanocrystals: controlled synthesis and optical properties. **2006**, 128, 6426-36	1271
1246	Multiamino-functionalized carbon nanotubes and their applications in loading quantum dots and magnetic nanoparticles. **2006**, 16, 1852	70
1245	Rotational and translational diffusion of peptide-coated CdSe/CdS/ZnS nanorods studied by fluorescence correlation spectroscopy. **2006**, 128, 1639-47	106
1244	Fe3O4/CdSe/ZnS magnetic fluorescent bifunctional nanocomposites. **2006**, 17, 2850-2854	51
1243	Study of fluorescence quenching and dialysis process of CdTe quantum dots, using ensemble techniques and fluorescence correlation spectroscopy. **2006**, 110, 11069-75	158

1242	A toxicologic review of quantum dots: toxicity depends on physicochemical and environmental factors. **2006**, 114, 165-72	1733
1241	Growth and photoluminescence properties of PbS nanocubes. **2006**, 17, 3280-3287	106
1240	Highly luminescent, stable, and water-soluble CdSe/CdS core-shell dendron nanocrystals with carboxylate anchoring groups. **2006**, 22, 6341-5	81
1239	[Nano-biocaptures for research and diagnostics in inflammation diseases and cancer]. **2006**, 64, 125-34	3
1238	A two-photon excitation fluorescence cross-correlation assay for a model ligand-receptor binding system using quantum dots. **2006**, 90, 1396-410	73
1237	k-Space image correlation spectroscopy: a method for accurate transport measurements independent of fluorophore photophysics. **2006**, 91, 3061-75	86
1236	Kinetic analysis for formation of Cd1-xZnxSe solid-solution nanocrystals. **2006**, 128, 9002-3	70
1235	Tunable Photoluminescence Wavelength of Chalcopyrite CuInS2-Based Semiconductor Nanocrystals Synthesized in a Colloidal System. **2006**, 18, 3330-3335	256
1234	Synthesis of well-defined copper nanocubes by a one-pot solution process. **2006**, 17, 6000-6006	104
1233	Peptide-labeled near-infrared quantum dots for imaging tumor vasculature in living subjects. **2006**, 6, 669-76	836
1232	Nanotechnology for cancer diagnostics: promises and challenges. **2006**, 6, 307-18	128
1231	Nanoparticles: health effects--pros and cons. **2006**, 114, 1818-25	388
1230	Green upconversion nanocrystals for DNA detection. **2006**, 2557-9	281
1229	Propionic-Acid-Terminated Silicon Nanoparticles: Synthesis and Optical Characterization. **2006**, 18, 4083-4088	160
1228	Nanobiotechnology. **2006**,	2
1227	Templated self-assembly of quantum dots from aqueous solution using protein scaffolds. **2006**, 17, 5073-5079	29
1226	Self-organized monolayer of nanosized ceria colloids stabilized by poly(vinylpyrrolidone). **2006**, 110, 5994-6000	138
1225	Nanoparticle probes with surface enhanced Raman spectroscopic tags for cellular cancer targeting. **2006**, 78, 6967-73	243

1224	Novel Fluorophores. **2006**, 675-703	2
1223	Spectroscopic study of bio-functionalized nanodiamonds. **2006**, 15, 622-625	164
1222	Silica-coated CdTe quantum dots functionalized with thiols for bioconjugation to IgG proteins. **2006**, 110, 5779-89	225
1221	Semiconductor Nano-Onions with Multifold Alternating CdS/CdSe or CdSe/CdS Structure. **2006**, 18, 4253-4258	61
1220	Microwave-assisted aqueous synthesis: a rapid approach to prepare highly luminescent ZnSe(S) alloyed quantum dots. **2006**, 110, 9034-40	160
1219	Simultaneous detection of Escherichia coli O157:H7 and Salmonella Typhimurium using quantum dots as fluorescence labels. **2006**, 131, 394-401	263
1218	DIRECTIONAL SUPERPARAMAGNETISM AND PHOTOLUMINESCENCE IN CLUSTERS OF MAGNETITE AND CADMIUM SELENIDE NANOPARTICLES. **2006**, 27, 41-59	3
1217	Synthesis of InAs/CdSe/ZnSe core/shell1/shell2 structures with bright and stable near-infrared fluorescence. **2006**, 128, 257-64	165
1216	Colloidal HgTe nanocrystals with widely tunable narrow band gap energies: from telecommunications to molecular vibrations. **2006**, 128, 3516-7	152
1215	Solvent-stabilized oxovanadium phthalocyanine nanoparticles and their application in xerographic photoreceptors. **2006**, 22, 344-8	35
1214	Low-temperature solution-phase synthesis of quantum well structured CdSe nanoribbons. **2006**, 128, 5632-3	250
1213	Hydrodynamic dimensions, electrophoretic mobility, and stability of hydrophilic quantum dots. **2006**, 110, 20308-16	259
1212	Subdiffraction photon guidance by quantum-dot cascades. **2006**, 6, 2549-53	41
1211	Optimisation of the synthesis and modification of CdTe quantum dots for enhanced live cell imaging. **2006**, 16, 2896	141
1210	Simple conjugation and purification of quantum dot-antibody complexes using a thermally responsive elastin-protein L scaffold as immunofluoresecent agents. **2006**, 128, 14756-7	49
1209	Application of quantum dot-antibody conjugates for detection of sulfamethazine residue in chicken muscle tissue. **2006**, 54, 6139-42	57
1208	Quantum-dot-based nanosensor for RRE IIB RNA-Rev peptide interaction assay. **2006**, 128, 5324-5	85
1207	Luminescent properties of water-soluble denatured bovine serum albumin-coated CdTe quantum dots. **2006**, 110, 16860-6	154

1206	Growth and optical properties of wurtzite-type CdS nanocrystals. **2006**, 45, 5103-8	118
1205	Directing the self-assembly of nanocrystals beyond colloidal crystallization. **2006**, 8, 3288-99	95
1204	Polychromatic microarrays: simultaneous multicolor array hybridization of eight samples. **2006**, 78, 2478-86	31
1203	Fluorescence blinking statistics from CdSe core and core/shell nanorods. **2006**, 110, 23221-7	98
1202	Spectroscopically encoded resins for high throughput imaging time-of-flight secondary ion mass spectrometry. **2006**, 8, 18-25	16
1201	Optical properties of N-succinimidyl bithiophene and the effects of the binding to biomolecules: comparison between coupled-cluster and time-dependent density functional theory calculations and experiments. **2006**, 110, 18651-60	23
1200	Uniformly Colorized Beads for Multiplex Immunoassay. **2006**, 18, 2443-2449	40
1199	In-situ encapsulation of quantum dots into polymer microspheres. **2006**, 22, 3782-90	142
1198	Counting single native biomolecules and intact viruses with color-coded nanoparticles. **2006**, 78, 1061-70	127
1197	Controlling the direction of photocurrents by means of CdS nanoparticles and cytochrome c-mediated biocatalytic cascades. **2006**, 1395-7	65
1196	Cadmium selenide and zinc sulfide nanoparticles - challenges in synthesis revealed through optical properties. **2006**,	
1195	Synthesis of CdSe, ZnSe, and ZnxCd1-xSe nanocrystals and their silica sheathed core/shell structures. **2006**, 45, 4922-7	56
1194	Solvothermal synthesis and photoluminescent properties of ZnS/cyclohexylamine: inorganic-organic hybrid semiconductor nanowires. **2006**, 110, 12948-53	41
1193	Electric-field-induced changes in absorption and emission spectra of CdS nanoparticles doped in a polymer film. **2006**, 110, 20927-36	25
1192	Protease-modulated cellular uptake of quantum dots. **2006**, 6, 1988-92	94
1191	Optical Detection of Single Nanoparticles and Viruses. **2006**, 12, 1292-1300	23
1190	Nanodiagnostics: a new frontier for clinical laboratory medicine. **2006**, 52, 1238-46	145
1189	Classification of spectroscopically encoded resins by Raman mapping and infrared hyperspectral imaging. **2006**, 8, 192-8	30

1188	Energy transfer mediated fluorescence from blended conjugated polymer nanoparticles. **2006**, 110, 14148-54	177
1187	Control of the optical properties of quantum dots by surface coating with calix[n]arene carboxylic acids. **2006**, 128, 9288-9	99
1186	Nanoparticle□el Hybrid Material Designed with Bile Acid Analogues. **2006**, 18, 4224-4226	65
1185	Photocatalysis and Luminescence of Nanometer-sized CdS. **2006**,	
1184	Size effect on the fluorescence properties of dansyl-doped silica nanoparticles. **2006**, 22, 5877-81	64
1183	Photo-gated charge transfer of organized assemblies of CdSe quantum dots. **2006**, 22, 787-93	18
1182	Colloidal and monocrystalline Ln3+ doped apatite calcium phosphate as biocompatible fluorescent probes. **2006**, 606-8	64
1181	Synthesis of water-soluble photoluminescent germanium nanocrystals. **2006**, 17, 3745-3749	48
1180	As-Prepared Single-Crystalline Hematite Rhombohedra and Subsequent Conversion into Monodisperse Aggregates of Magnetic Nanocomposites of Iron and Magnetite. **2006**, 18, 5289-5295	43
1179	Luminescent metal-ligand complexes as probes of macromolecular interactions and biopolymer dynamics. **2006**, 453, 54-62	30
1178	Acoustic phonons in semiconductor nanocrystals. **2006**, 37, 58-63	3
1177	Glyconanoparticles: types, synthesis and applications in glycoscience, biomedicine and material science. **2006**, 1760, 636-51	232
1176	Bionanotechnology progress and advances. **2006**, 12, 87-91	59
1175	Imaging of multiple mRNA targets using quantum dot based in situ hybridization and spectral deconvolution in clinical biopsies. **2006**, 348, 628-36	68
1174	Water-soluble quantum dots for biomedical applications. **2006**, 348, 781-6	373
1173	Reduction in nonfluorescence state of quantum dots on an immunofluorescence staining. **2006**, 351, 7-13	29
1172	Surface-plasmon enhanced bright emission from CdSe quantum-dot nanocrystals. **2006**, 23, 1674	132
1171	Poly(N-isopropylacrylamide)-Coated Luminescent/Magnetic Silica Microspheres: Preparation, Characterization, and Biomedical Applications. **2006**, 18, 5554-5562	194

1170	Soft Synthesis of Inorganic Nanorods, Nanowires, and Nanotubes. **2006**, 101-158	1
1169	Fiber-optic fluorescence correlation spectrometer. **2006**, 45, 7538-42	20
1168	Silica-shelled single quantum dot micelles as imaging probes with dual or multimodality. **2006**, 78, 5925-32	104
1167	Gold nanoparticles as carriers for efficient transmucosal insulin delivery. **2006**, 22, 300-5	175
1166	Dendrimer FISH detection of single-copy intervals in acute promyelocytic leukemia. **2006**, 20, 114-20	7
1165	Thiophene-based fluorescent markers for the efficient labeling of monoclonal antibodies and oligonucleotides. **2006**, 352, 2465-2467	7
1164	Theoretical study on N-succinimidyl oligothiophenes: A novel class of materials for biological applications. **2006**, 352, 2452-2456	
1163	4Pi microscopy of quantum dot-labeled cellular structures. **2006**, 156, 517-23	25
1162	Quantum dots and multifunctional nanoparticles: new contrast agents for tumor imaging. **2006**, 1, 209-17	178
1161	Assembly of Bimetallic Gold□Silver Nanoparticles via Selective Interparticle Dicarboxylate□Silver Linkages. **2006**, 18, 123-132	30
1160	Preparation and application of functionalized nanoparticles of CdSe capped with 11-mercaptoundecanoic acid as a fluorescence probe. **2006**, 70, 902-6	25
1159	Fabrication of Magnetic Luminescent Nanocomposites via Adsorption□Precipitation of Metal Ions on Sulfonated Iron Oxide Nanoparticles. **2006**, 35, 1116-1117	4
1158	Synthesis of CdxZn1□S Nanoparticles in Porous Vycol Glass by Reaction of Single-source Precursors. **2006**, 35, 62-63	9
1157	Fluorescence in Forensic Science. **2006**,	1
1156	The detection application of CdS quantum dots in labeling DNA molecules. **2006**, 1, 81-4	9
1155	Nanotechnology. **2006**, 139-156	1
1154	Miniaturized Multiplexed Protein Binding Assays. **2006**, 61-87	
1153	??????????□?????????????????????????. **2006**, 74, 501-506	

1152	Controlling Length and Monitoring Growth of Gold Nanorods. **2006**, 53, 1343-1348	3
1151	Inorganic phosphate nanorods are a novel fluorescent label in cell biology. **2006**, 4, 11	49
1150	Glass-bead-based parallel detection of DNA using composite Raman labels. **2006**, 2, 375-80	64
1149	One-pot synthesis of CdTe nanocrystals and shape control of luminescent CdTe-cystine nanocomposites. **2006**, 2, 476-80	154
1148	Use of ester-terminated polyamidoamine dendrimers for stabilizing quantum dots in aqueous solutions. **2006**, 2, 999-1002	35
1147	Coupling fluorescence correlation spectroscopy with microchip electrophoresis to determine the effective surface charge of water-soluble quantum dots. **2006**, 2, 534-8	31
1146	Facile one-pot synthesis of luminescent, water-soluble, and biocompatible glutathione-coated CdTe nanocrystals. **2006**, 2, 747-51	193
1145	Apoferritin-templated synthesis of metal phosphate nanoparticle labels for electrochemical immunoassay. **2006**, 2, 1139-43	66
1144	Evaluation of quantum dot cytotoxicity based on intracellular uptake. **2006**, 2, 1412-7	331
1143	Quantum dots as fluorescent bio-labels in cancer diagnostic. **2006**, 3, 4001-4008	10
1142	Interface optical phonons in spherical multilayer nanostructures. **2006**, 203, 1370-1375	3
1141	Synthesis and perspectives of complex crystalline nano-structures. **2006**, 203, 1329-1336	9
1140	Nanowire electronic and optoelectronic devices. **2006**, 9, 18-27	1128
1139	Novel Terbium Chelate Doped Fluorescent Silica Nanoparticles. **2006**, 24, 193-196	1
1138	Nanoparticles in biomolecular detection. **2006**, 1, 28-37	198
1137	Preparation and Characterization of the Fluorescent Chitosan Nanoparticle Probe. **2006**, 34, 1555-1559	41
1136	Self-illuminating quantum dot conjugates for in vivo imaging. **2006**, 24, 339-43	676
1135	Quantum dot semiconductor nanocrystals for immunophenotyping by polychromatic flow cytometry. **2006**, 12, 972-7	316

1134	An X-ray computed tomography imaging agent based on long-circulating bismuth sulphide nanoparticles. **2006**, 5, 118-22	757
1133	Proteolytic activity monitored by fluorescence resonance energy transfer through quantum-dot-peptide conjugates. **2006**, 5, 581-9	490
1132	Quasi-nanowires from fluorescent semiconductor nanocrystals on the surface of oriented DNA molecules. **2006**, 100, 854-861	8
1131	Photo-switching behavior of CdS nanoparticles doped in a polymer film. **2006**, 9, 742-749	7
1130	Study on charge transfer reactions at multilayers of polyoxometalates clusters and poly(allylamine hydrochloride) (Grotthuss-018). **2006**, 51, 6038-6044	20
1129	A novel bi-layered samarium complex with an unprecedented coordination mode of orotic acid [Sm2(HL)2(ox)(H2O)2]n □2.5nH2O (H3L = orotic acid, ox2□ = oxalate2□□ Synthesis, crystal structure and physical properties. **2006**, 9, 347-350	30
1128	Development of biosensors for cancer clinical testing. **2006**, 21, 1851-8	144
1127	Universal polyethylene glycol linkers for attaching receptor ligands to quantum dots. **2006**, 16, 6262-6	11
1126	Nanomedical imaging: In vivo imaging with smart nanohybrid. **2006**, 6, e22-e25	3
1125	Immunofluorescent labeling of cancer cells with quantum dots synthesized in aqueous solution. **2006**, 354, 169-74	46
1124	Development of an open sandwich fluoroimmunoassay based on fluorescence resonance energy transfer. **2006**, 358, 31-7	57
1123	Microbial detection in microfluidic devices through dual staining of quantum dots-labeled immunoassay and RNA hybridization. **2006**, 556, 171-7	45
1122	Preparation, characterization and evaluation of water-soluble l-cysteine-capped-CdS nanoparticles as fluorescence probe for detection of Hg(II) in aqueous solution. **2006**, 559, 234-239	163
1121	A novel route for immobilization of oligonucleotides onto modified silica nanoparticles. **2006**, 576, 177-83	21
1120	A novel fluorescent array for mercury (II) ion in aqueous solution with functionalized cadmium selenide nanoclusters. **2006**, 577, 77-84	167
1119	Advances in fluorescence imaging with quantum dot bio-probes. **2006**, 27, 1679-87	368
1118	Quantum dot-mediated detection of gamma-aminobutyric acid binding sites on the surface of living pollen protoplasts in tobacco. **2006**, 13, 723-31	57
1117	Characterization of quantum dot bioconjugates by capillary electrophoresis with laser-induced fluorescent detection. **2006**, 1113, 251-4	71

1116	Nanoparticles for bioimaging. **2006**, 123-126, 471-85	566
1115	The effects of temperature and carboxylic acid ligand on the growth of nanocrystalline CdSe in a hot paraffin matrix. **2006**, 273, 10-15	15
1114	Langmuir and Langmuir□Blodgett films of quantum dots. **2006**, 284-285, 35-42	22
1113	Surface oxidation of CdTe nanocrystals□A high resolution core-level photoelectron spectroscopy study. **2006**, 286, 1-7	28
1112	An alternative approach to amyloid fibrils morphology: CdSe/ZnS quantum dots labelled beta-amyloid peptide fragments Abeta (31-35), Abeta (1-40) and Abeta (1-42). **2006**, 50, 104-11	23
1111	A novel approach of preparation and patterning of organic fluorescent nanomaterials. **2006**, 420, 480-483	19
1110	Local structural characterization of gold nanowires using extended X-ray absorption fine structure spectroscopy. **2006**, 428, 93-97	1
1109	Luminescence enhancement by energy transfer in core-shell structures. **2006**, 429, 157-160	32
1108	A simple route to water-soluble size-tunable monodispersed Pd nanoparticles from light decomposition of Pd(PPh3)4. **2006**, 428, 352-355	19
1107	Analytical detection and biological assay of antileukemic drug using gold nanoparticles. **2006**, 52, 1152-1160	17
1106	Poly(ether) dendrons possessing phosphine focal points for stabilization and reduced quenching of luminescent quantum dots. **2006**, 359, 1961-1966	20
1105	Positron trapping at quantum-dot-like particles on metal surfaces. **2006**, 252, 3327-3332	6
1104	Controllable fabrication and characterization of biocompatible core-shell particles and hollow capsules as drug carrier. **2006**, 252, 8724-8733	36
1103	-HgS nanocrystals: Synthesis, structure and optical properties. **2006**, 35, 9-15	29
1102	Colloidal CdSe□ZnS core-shell nanoparticles: Dependence of physical properties on initial Cd to Se concentration. **2006**, 33, 388-393	11
1101	Synthesis and characterization of SiO2-coated mercaptoacetic acid-stabilized CdSe nanocrystals in aqueous solution. **2006**, 35, 75-80	5
1100	Origin of luminescence from PMMA functionalized nanoparticles. **2006**, 350, 252-257	17
1099	One-dimensional assemblies of silica-coated cobalt nanoparticles: Magnetic pearl necklaces. **2006**, 303, 163-166	63

1098	Photodeposition of CdSe using Se-TiO2 suspensions as photocatalysts. **2006**, 179, 57-65	24
1097	Fabrication of a quantum dot-polymer matrix by layer-by-layer conjugation. **2006**, 183, 285-291	21
1096	Spectroscopic characterization of zinc oxide nanorods synthesized by solid-state reaction. **2006**, 65, 173-8	101
1095	Solvent induced different morphologies of bis(propyl)triethoxysilane substituted perylenediimide and their optical properties. **2006**, 297, 625-30	10
1094	Photophysics and charge dynamics of Q-PbS based mixed ZnS/PbS and PbS/ZnS semiconductor nanoparticles. **2006**, 297, 607-17	12
1093	Water-soluble CdSe and CdSe/CdS nanocrystals: a greener synthetic route. **2006**, 299, 225-32	90
1092	Langmuir-Blodgett monolayers of InP quantum dots with short chain ligands. **2006**, 300, 597-602	19
1091	A solvothermal route to size- and shape-controlled CdSe and CdTe nanocrystals. **2006**, 286, 83-90	61
1090	Synthesis of monodisperse CdSe nanocrystals directly open to air: Monomer reactivity tuned by the selenium ligand. **2006**, 292, 14-18	15
1089	Significant enhancement of the quantum yield of CdTe nanocrystals synthesized in aqueous phase by controlling the pH and concentrations of precursor solutions. **2006**, 116, 59-66	171
1088	Fluorescence lifetime measurements to determine the core□shell nanostructure of FITC-doped silica nanoparticles: An optical approach to evaluate nanoparticle photostability. **2006**, 117, 75-82	83
1087	Luminescent CdSe and CdSe/CdS core-shell nanocrystals synthesized via a combination of solvothermal and two-phase thermal routes. **2006**, 118, 91-98	26
1086	Luminescence properties of impurity-doped semiconductor nanoparticles. **2006**, 119-120, 161-166	20
1085	Identification of tyrosine in the presence of tryptophan using Cd2+-enriched colloidal CdS nanoparticles: A fluorescence spectroscopic study. **2006**, 121, 553-560	11
1084	Electrical and optical properties of colloidal semiconductor nanocrystals in aqueous environments. **2006**, 40, 38-44	17
1083	Electronic structure and optical absorption spectra of CdSe covered with ZnSe and ZnS epilayers. **2006**, 137, 332-337	9
1082	Interconnected □Ni(OH)2 sheets and their morphology-retained transformation into mesostructured Ni. **2006**, 137, 585-588	39
1081	The use of luminescent quantum dots for optical sensing. **2006**, 25, 207-218	427

1080	Determining the size and shape dependence of gold nanoparticle uptake into mammalian cells. **2006**, 6, 662-8	3698
1079	Biosensing with Luminescent Semiconductor Quantum Dots. **2006**, 6, 925-953	332
1078	Biofunctional magnetic nanoparticles for protein separation and pathogen detection. **2006**, 941-9	584
1077	Multi-Photon Molecular Excitation in Laser-Scanning Microscopy. **2006**, 535-549	23
1076	Practical Considerations in the Selection and Application of Fluorescent Probes. **2006**, 353-367	17
1075	Multicolor quantum dots for molecular diagnostics of cancer. **2006**, 6, 231-44	288
1074	A systematic examination of surface coatings on the optical and chemical properties of semiconductor quantum dots. **2006**, 8, 3895-903	383
1073	Lanthanides in magnetic resonance imaging. **2006**, 35, 557-71	458
1072	Using bioconjugated nanoparticles to monitor E. coli in a flow channel. **2006**, 1, 384-90	16
1071	Interaction of CdSe/ZnS core-shell semiconductor nanocrystals in solid thin films. **2006**, 16, 1625-1632	22
1070	Quantum dot-based energy transfer: perspectives and potential for applications in photodynamic therapy. **2006**, 82, 617-25	237
1069	Calculated absorption and scattering properties of gold nanoparticles of different size, shape, and composition: applications in biological imaging and biomedicine. **2006**, 110, 7238-48	3334
1068	Mechanism and origin of exciton spin relaxation in CdSe nanorods. **2006**, 110, 25371-82	31
1067	Luminescent nanomaterials for biological labelling. **2006**, 17, R1-R13	474
1066	Optical properties of single semiconductor nanocrystals. **2006**, 8, 4989-5011	112
1065	Factors governing the quality of aqueous CdTe nanocrystals: calculations and experiment. **2006**, 110, 19280-4	172
1064	Colloidal CdSe nanocrystals synthesized in noncoordinating solvents with the addition of a secondary ligand: exceptional growth kinetics. **2006**, 110, 16508-13	34
1063	Optical characterization of eu-doped and undoped gd(2)o(3) nanoparticles synthesized by the hydrogen flame pyrolysis method. **2006**, 128, 14498-505	163

1062	Photostability of luminescent water-soluble cadmium selenide nanocrystals with chemical surface modification. **2006**, 73, 572-575	7
1061	Highly luminescent CdSe nanoparticles embedded in silica thin films. **2006**, 17, 21-29	7
1060	Vapor-Phase Synthesis and Surface Passivation of ZnSe Nanocrystals. **2006**, 8, 533-542	11
1059	The seminal literature of nanotechnology research. **2006**, 8, 193-213	60
1058	Luminescence of porous silicon derived nanocrystals dispersed in water: dependence on initial porous silicon oxidation. **2006**, 8, 1071-1074	22
1057	Synchronous Fluorescence Determination of Protein with Functional Organic Nanoparticles. **2006**, 154, 309-314	9
1056	Fluorometric determination of DNA using nano-SiO2 particles as an effective dispersant and stabilizer for acridine orange. **2006**, 156, 225-230	4
1055	Engineering luminescent quantum dots for in vivo molecular and cellular imaging. **2006**, 34, 3-14	155
1054	A one-pot approach to the preparation of silver-PMMA shell-core nanocomposite. **2006**, 284, 449-454	26
1053	Imaging Escherichia coli using functionalized core/shell CdSe/CdS quantum dots. **2006**, 11, 663-9	41
1052	Analyses of the mechanism of intracellular transport and secretion of pituitary hormone, with an insight of the subcellular localization of pituitary hormone and its mRNA. **2006**, 23, 1-5	8
1051	From analog to digital: exploring cell dynamics with single quantum dots. **2006**, 125, 451-6	15
1050	Structure determination of very small (1 nm) nano-particles. **2006**, 85, 337-343	18
1049	In situ, real-time detection of soot particles coated with NaCl using 193 nm light. **2006**, 84, 385-388	1
1048	Optical sensors based on luminescent quantum dots. **2006**, 384, 37-40	45
1047	Luminescent quantum dots in immunoassays. **2006**, 384, 560-3	97
1046	Labeling strategies for bioassays. **2006**, 384, 572-83	62
1045	Characterization of the coupling of quantum dots and immunoglobulin antibodies. **2006**, 386, 1665-71	42

1044	Tagging of avidin immobilized beads with biotinylated YAG:Ce3+ nanocrystal phosphor. **2006**, 386, 1641-7	37
1043	Synthesis and characterization of PVP-encapsulated ZnS nanoparticles. **2006**, 28, 1047-1053	130
1042	Preparation and characterization of the ZnS nanospheres with narrow size distribution. **2006**, 28, 1080-1083	21
1041	Low-dimensional SiC nanostructures: Fabrication, luminescence, and electrical properties. **2006**, 51, 983-1031	275
1040	The pinpoint promise of nanoparticle-based drug delivery and molecular diagnosis. **2006**, 23, 171-84	237
1039	Biomolecular engineering at interfaces. **2006**, 61, 989-1003	47
1038	The influence of oxygen on the fluorescence enhancement of fatty-acid-capped CdS nanocrystals. **2006**, 294, 104-8	11
1037	Study on interaction between poly(amidoamine) dendrimer and CdSe nanocrystal in chloroform. **2006**, 297, 151-6	49
1036	Fine tuning photoluminescence properties of CdSe nanoparticles by surface states modulation. **2006**, 298, 685-8	12
1035	Preparation and properties of polymer and quantum dot composites. **2006**, 1, 474-478	2
1034	Specific detection of DNA using quantum dots and magnetic beads for large volume samples. **2006**, 11, 449-454	18
1033	What it means to measure a single molecule in a solution by fluorescence fluctuation spectroscopy. **2006**, 80, 209-18	22
1032	Facile synthesis of monodisperse Bi2O3 nanoparticles. **2006**, 99, 174-180	89
1031	Synthesis of highly luminescent and photostable ZnS:Ag nanocrystals under microwave irradiation. **2006**, 99, 494-497	52
1030	Comparative behavior of CdS and CdSe quantum dots in poly(3-hexylthiophene) based nanocomposites. **2006**, 41, 198-208	22
1029	Synthesis of size-tunable and stable CdS nanocrystals in DMF. **2006**, 60, 124-128	15
1028	Synthesis of liposomes-templated CdSe hollow and solid nanospheres. **2006**, 60, 11-14	22
1027	Selenium calixarene for luminescent and stable quantum dots. **2006**, 60, 703-705	22

1026	Highly facetted metallic zinc nanocrystals fabricated by thermal evaporation. **2006**, 60, 2423-2427	6
1025	Preparation and characterization of novel CdSe quantum dots modified with poly (d, l-lactide) nanoparticles. **2006**, 60, 2565-2568	30
1024	Effect of ligands and growth temperature on the growth kinetics and crystal size of colloidal CdSe nanocrystals. **2006**, 60, 2925-2928	5
1023	Fabrication of fluorescent hollow capsule with CdS□olyelectrolyte composite films. **2006**, 60, 3447-3450	5
1022	A novel method for the preparation of water-soluble and small-size CdSe quantum dots. **2006**, 60, 3782-3785	53
1021	Evaluating the intracellular stability and unpacking of DNA nanocomplexes by quantum dots-FRET. **2006**, 116, 83-9	153
1020	Self-assembled fluorescent chemosensors. **2006**, 12, 1844-54	118
1019	Direct and efficient monitoring of glycosyltransferase reactions on gold colloidal nanoparticles by using mass spectrometry. **2006**, 12, 6478-85	51
1018	One-pot synthesis and bioapplication of amine-functionalized magnetite nanoparticles and hollow nanospheres. **2006**, 12, 6341-7	401
1017	Silica-coated Ln3+-Doped LaF3 nanoparticles as robust down- and upconverting biolabels. **2006**, 12, 5878-84	286
1016	Bioassay labels based on apoferritin nanovehicles. **2006**, 7, 1315-9	41
1015	Ligand-functionalized core/shell Ag@Au nanoparticles label-free amperometric immun-biosensor. **2006**, 94, 996-1004	56
1014	Preparation of nanosize cadmium sulfide particles with a silk fibroin membrane and their photocatalytic activity. **2006**, 101, 2162-2166	2
1013	Characterization and photoluminescence properties of diglycidyl methacrylic resin doped with the Eu3+□diketonate complex. **2006**, 100, 406-412	14
1012	Synergic influence of a surfactant and ultrasonication on the preparation of soluble, conducting polydiphenylamine/silica-nanoparticle composites. **2006**, 102, 3912-3918	7
1011	Colloidal CdSe nanocrystals passivated by a dye-labeled multidentate polymer: quantitative analysis by size-exclusion chromatography. **2006**, 45, 2221-4	56
1010	Nanohybrids composed of quantum dots and cytochrome P450 as photocatalysts. **2006**, 45, 504-7	109
1009	Shape control of semiconductor and metal oxide nanocrystals through nonhydrolytic colloidal routes. **2006**, 45, 3414-39	1003

1008	Materials for fluorescence resonance energy transfer analysis: beyond traditional donor-acceptor combinations. **2006**, 45, 4562-89	1240
1007	Multisegmented one-dimensional nanorods prepared by hard-template synthetic methods. **2006**, 45, 2672-92	447
1006	Fluorescent quantum dots with boronic acid substituted viologens to sense glucose in aqueous solution. **2006**, 45, 3829-32	175
1005	HaloTag protein-mediated site-specific conjugation of bioluminescent proteins to quantum dots. **2006**, 45, 4936-40	133
1004	Designed fabrication of multifunctional magnetic gold nanoshells and their application to magnetic resonance imaging and photothermal therapy. **2006**, 45, 7754-8	453
1003	Single nonblinking CdTe quantum dots synthesized in aqueous thiopropionic acid. **2006**, 45, 7588-91	58
1002	Personal cytometers: slow flow or no flow?. **2006**, 69, 620-30	40
1001	Hyperchromatic cytometry principles for cytomics using slide based cytometry. **2006**, 69, 691-703	47
1000	Increasing the luminescence of lanthanide complexes. **2006**, 69, 767-78	50
999	Development of Quantum Dots Modified Acetylcholinesterase Biosensor for the Detection of Trichlorfon. **2006**, 18, 2163-2167	25
998	Highly efficient size separation of CdTe quantum dots by capillary gel electrophoresis using polymer solution as sieving medium. **2006**, 27, 1341-6	72
997	The internalized CdSe/ZnS quantum dots impair the chondrogenesis of bone marrow mesenchymal stem cells. **2006**, 79, 95-101	49
996	Emerging implications of nanotechnology on cancer diagnostics and therapeutics. **2006**, 107, 459-66	373
995	Fster resonance energy transfer investigations using quantum-dot fluorophores. **2006**, 7, 47-57	492
994	Heterogeneous charge transfer of colloidal nanocrystals in ionic liquids. **2006**, 7, 77-81	24
993	Alignment of colloidal CdS nanowires embedded in polymer nanofibers by electrospinning. **2006**, 7, 102-6	88
992	Quantum-dot-labeled DNA probes for fluorescence in situ hybridization (FISH) in the microorganism Escherichia coli. **2006**, 7, 1062-7	68
991	Pure white-light emission of nanocrystal-polymer composites. **2006**, 7, 2492-6	22

990	Synthesis of Conjugated Polymer Nanoparticles in Non-Aqueous Emulsions. **2006**, 27, 586-593	70
989	Colloidal CdSe Nanocrystals Passivated by a Dye-Labeled Multidentate Polymer: Quantitative Analysis by Size-Exclusion Chromatography. **2006**, 118, 2279-2282	5
988	Nanohybride aus Quantenpunkten und Cytochrom P450 als Photokatalysatoren. **2006**, 118, 519-522	23
987	Formkontrolle von Halbleiter- und Metalloxid-Nanokristallen durch nichthydrolytische Kolloidverfahren. **2006**, 118, 3492-3517	77
986	Materialien f□den resonanten Fluoreszenzenergietransfer (FRET): jenseits klassischer Donor-Acceptor-Kombinationen. **2006**, 118, 4676-4704	120
985	Vielsegmentige Nanost□be: Templatsynthese und Eigenschaften. **2006**, 118, 2738-2759	41
984	Fluorescent Quantum Dots with Boronic Acid Substituted Viologens To Sense Glucose in Aqueous Solution. **2006**, 118, 3913-3916	19
983	HaloTag Protein-Mediated Site-Specific Conjugation of Bioluminescent Proteins to Quantum Dots. **2006**, 118, 5058-5062	11
982	Designed Fabrication of Multifunctional Magnetic Gold Nanoshells and Their Application to Magnetic Resonance Imaging and Photothermal Therapy. **2006**, 118, 7918-7922	142
981	Single Nonblinking CdTe Quantum Dots Synthesized in Aqueous Thiopropionic Acid. **2006**, 118, 7750-7753	20
980	Composite Silica Spheres with Magnetic and Luminescent Functionalities. **2006**, 16, 509-514	346
979	High-Yield Fabrication and Electrochemical Characterization of Tetrapodal CdSe, CdTe, and CdSexTe1□x Nanocrystals. **2006**, 16, 1705-1716	203
978	Sub-kilogram-Scale One-Pot Synthesis of Highly Luminescent and Monodisperse Core/Shell Quantum Dots by the Successive Injection of Precursors. **2006**, 16, 2077-2082	50
977	Quantum Dots in Biological and Biomedical Research: Recent Progress and Present Challenges. **2006**, 18, 1953-1964	542
976	Alumina-Template Synthesis of Fluorescent RuO2 Nanotubes Derived from Ru3(CO)12 Clusters. **2006**, 18, 619-623	49
975	Photoluminescence Quenching Control in Quantum Dot□Carbon Nanotube Composite Colloids Using a Silica-Shell Spacer. **2006**, 18, 415-420	104
974	Nanoscale ZnO-Enhanced Fluorescence Detection of Protein Interactions. **2006**, 18, 2685-2690	152
973	The Microemulsion Synthesis of Hydrophobic and Hydrophilic Silicon Nanocrystals. **2006**, 18, 2053-2056	128

972	Growth of CdSe Quantum Rods and Multipods Seeded by Noble-Metal Nanoparticles. **2006**, 18, 1978-1982	72
971	Quantification of quantum dots in HUVECs by confocal laser scanning microscopy. **2006**, 2006, 1478-81	5
970	In vivo optical imaging using quantum dots for the management of brain tumors. **2006**, 6, 879-90	36
969	Preparation of bioconjugates of CdTe nanocrystals for cancer marker detection. **2006**, 17, 2972-2977	45
968	Modelling the formation of high aspect CdSe quantum wires: axial-growth versus oriented-attachment mechanisms. **2006**, 17, 5707-14	33
967	Micropatterning of a single layer of nanoparticles by lithographical methods with diblock copolymer micelles. **2006**, 17, 450-454	40
966	Improvement of the photostability of thiol-capped CdTe quantum dots in aqueous solutions and in living cells by surface treatment. **2006**, 17, 5875-5881	15
965	One- and Two-Photon Excited Fluorescence of CdSe and CdSe/ZnS Quantum Dots in n-Hexane. **2006**, 23, 2859-2862	6
964	Stable luminescent films and hollow spheres comprising CdTe nanoparticles. **2006**, 17, 1895-1900	8
963	The structure and optical properties of fluorescent nanospheres coated with mercaptoacetic acid-capped CdSe nanocrystals. **2006**, 15, 1646-1650	5
962	Photostability of thiol-capped CdTe quantum dots in living cells: the effect of photo-oxidation. **2006**, 17, 2083-2089	70
961	Incorporating quantum dots into polymer microspheres via a spray-drying and thermal-denaturizing approach. **2006**, 17, 1791-6	21
960	Quantum Dots as Fluorescent Labels for Molecular and Cellular Imaging. **2006**, 181-193	9
959	Single plasma membrane K+ channel detection by using dual-color quantum dot labeling. **2006**, 291, C266-9	20
958	Preparation and characterisation of fluorescent polystyrene spheres coated with different sized quantum dots. **2006**, 22, 1240-1244	1
957	Emerging Opportunities at the Interface of Photonics, Nanotechnology and Biotechnology. **2006**, 446, 1-10	12
956	DNA-assisted formation of quasi-nanowires from fluorescent CdSe/ZnS nanocrystals. **2006**, 17, 581-587	52
955	Nanochemistry: The Development and Implementation of a New Graduate Elective at the Middle Eastern Technical University in Turkey. **2006**, 931, 1	

954	Neuro-oncological applications of optical spectroscopy. **2006**, 5, 231-8	21
953	A Novel Approach for the Preparation of InP Nanocrystals. **2006**, 942, 1	2
952	BIOLOGICALLY-INSPIRED CHEMICALLY-DIRECTED SELF-ASSEMBLY OF SEMICONDUCTOR QUANTUM-DOT-BASED SYSTEMS: PHONON-HOLE SCATTERING IN DNA BOUND TO DNA-QUANTUM-DOT COMPLEXES. **2006**, 16, 659-668	4
951	Chapter 1 Nanotechnology and nanomaterials. **2006**, 1-69	15
950	Molecular optical imaging of therapeutic targets of cancer. **2007**, 96, 299-344	24
949	Quantum Dots CdSe/ZnS-Loaded Poly(D,L-Lactide-Co-Glycolide) Nanoparticles: Physicochemical Characterization and Application. **2006**, 505-507, 667-672	1
948	DNA Hybridization Detection using Fluorescent Zinc Selenide Quantum Dots. **2006**, 951, 1	
947	Blue emission of Ge nanocrystals prepared by thermal decomposition. **2006**, 17, 5339-5343	26
946	Biological Properties of Nanocrystalline Silicon Particles for Biomedical Applications. **2006**, 958, 1	
945	Structural and electronic properties of SiGe nanoparticles. **2006**, 74,	28
944	Preparation of CdSe Quantum Dots in Ionic Liquids. **2006**, 220, 1473-1481	5
943	Photomodification of CdSe nanocrystals incorporated in a poly(butylmethacrylate) polymer film. **2006**, 99, 014305	1
942	ZnO nanocrystals synthesized by evaporation of Zn in microwave plasma torch in terms of mixture ratio of N2 to O2. **2006**, 13, 063506	15
941	A consistent extension of the local spin density approximation to account for quantum dot mass and dielectric mismatches. **2006**, 100, 073712	5
940	Time-resolved photoluminescence spectroscopy of individual Te impurity centers in ZnSe. **2006**, 73,	46
939	Microscopy, Fluorescence. **2006**,	
938	Correlation between surface and buried InAs quantum dots. **2006**, 89, 043125	17
937	Theoretical study of structural, electronic, and optical properties of ZnmSen clusters. **2006**, 73,	35

936	High Q-factor colloidal nanocrystal-based vertical microcavity by hot embossing technology. **2006**, 88, 181108		14
935	Spectrally resolved energy transfer using quantum dot donors: Ensemble and single-molecule photoluminescence studies. **2006**, 73,		56
934	Homogeneous point mutation detection by quantum dot-mediated two-color fluorescence coincidence analysis. **2006**, 34, e35		63
933	Two-color upconversion in rare-earth-ion-doped ZrO2 nanocrystals. **2006**, 89, 163105		137
932	Real-time and background-free detection of nanoscale particles. **2006**, 96, 013901		105
931	Characterization of blinking dynamics in quantum dot ensembles using image correlation spectroscopy. **2006**, 99, 064503		21
930	Novel Quantum Dot based Approach for Biosensing. **2006**,		1
929	Synthesis and Characterization of Thiol-Stabilized CdTe, CdSe Nanocrystals by a Modified Hydrothermal Method. **2006**,		
928	Surface plasmon enhanced light emission from CdSe quantum dot nanocrystals. **2006**,		
927	SYNTHESIS AND CHARACTERIZATION OF CdSe/ZnO CORE/SHELL NANOCRYSTALS. **2006**, 05, 299-306		7
926	ZnO Nanorods Synthesized by Self-Catalytic Method of Metal in Atmospheric Microwave Plasma Torch Flame. **2006**, 45, 5940-5944		4
925	Living cells as test tubes. *Science*, **2006**, 312, 228-30	33.3	218
924	Development of Novel Quantum Dots as Fluorescent Sensors for Application in Highly Sensitive Spectrofluorimetric Determination of Cu2+. **2006**, 39, 1201-1209		29
923	Microscopy, Confocal. **2006**,		8
922	Chapter 4 Modification and passivation of colloidal particles. **2006**, 225-292		
921	Synthesis and electrochemical properties of InP nanocrystals. **2006**, 21, 543-546		9
920	A Novel Method To Prepare Cysteine Capped Cadmium Selenide Nanoparticles. **2006**, 951, 12		1
919	Eu-Doped Silica Nanotubes: Synthesis and Optical Properties. **2006**, 922, 1		1

918	STRUCTURAL TRANSFORMATION IN PbS AND HgS NANOCRYSTALS UNDER HIGH PRESSURE. **2006**, 20, 963-970	9
917	Microwave irradiation method for the synthesis of water-soluble CdSe nanoparticles with narrow photoluminescent emission in aqueous solution. **2006**, 17, 444-449	40
916	Nanoparticle-assisted DNA nanosensor. **2007**,	
915	Orderly Aligned and Highly Luminescent Monodisperse Rare-Earth Orthophosphate Nanocrystals Synthesized by a Limited Anion-Exchange Reaction. **2007**, 19, 4514-4522	102
914	Nanoparticles for Optical Imaging of Cancer. **2007**,	1
913	Optical Biosensing Based on Metal and Semiconductor Colloidal Nanocrystals. **2007**,	1
912	Size Control of Monodisperse Copper Sulfide Faceted Nanocrystals and Triangular Nanoplates. **2007**, 111, 9658-9663	62
911	Evidence for a diffusion-controlled mechanism for fluorescence blinking of colloidal quantum dots. **2007**, 104, 14249-54	143
910	Controllable size reduction of CdSe nanowires through the intermediate formation of Se-coated CdSe nanowires using acid and thermal treatment. **2007**, 18, 415607	9
909	Quantum Dots as Reporters in Multiplexed Immunoassays for Biomarkers of Exposure to Agrochemicals. **2007**, 40, 1423-1433	34
908	Zero- versus One-Dimensional Water-Soluble CdTe NanocrystalsSynthesis and Photophysical Characterization. **2007**, 111, 9694-9703	18
907	In vivoSPECT/CT imaging and biodistribution using radioactive Cd125mTe/ZnS nanoparticles. **2007**, 18, 175103	35
906	Everything is illuminated ... with quantum dots. **2007**, 2, 951-4	
905	Electron states in quantum rings with structural distortions under axial or in-plane magnetic fields. **2007**, 18, 375402	35
904	Rotary reactor for atomic layer deposition on large quantities of nanoparticles. **2007**, 25, 67-74	114
903	Molecular ligands guide individual nanocrystals to a soft-landing alignment on surfaces. **2007**, 75,	6
902	Structure stability, fracture, and tuning mechanism of CdSe nanobelts. **2007**, 90, 113115	29
901	Biocatalytic growth of semiconductor nanowires. **2007**, 101, 074306	4

900	Room-temperature exciton storage in elongated semiconductor nanocrystals. **2007**, 98, 017401	96
899	Photoluminescence spectral switching of single CdSe/ZnS colloidal nanocrystals in poly(methyl methacrylate). **2007**, 76,	6
898	Size dependence of tetrahedral bond lengths in CdSe nanocrystals. **2007**, 90, 161911	17
897	Thermochemical Synthesis of CdS Nanoparticles and Investigation on Luminescence Properties. **2007**, 37, 387-390	7
896	Three-dimensional structure of CdX (X=Se,Te) nanocrystals by total x-ray diffraction. **2007**, 102, 044304	14
895	Effect of the shell on the blinking statistics of core-shell quantum dots: A single-particle fluorescence study. **2007**, 75,	70
894	High pressure photoluminescence of CdZnSe quantum dots: Alloying effect. **2007**, 102, 053509	25
893	Synthesis and characterization of europium(III) nanoparticles for time-resolved fluoroimmunoassay of prostate-specific antigen. **2007**, 18, 075604	13
892	Nanotechnology in proteomics. **2007**, 4, 617-26	14
891	Endotoxemia increases the clearance of mPEGylated 5000-MW quantum dots as revealed by multiphoton microvascular imaging. **2007**, 12, 064005	9
890	Immunofluorescence detection with quantum dot bioconjugates for hepatoma in vivo. **2007**, 12, 014008	63
889	Virus-specific CD8+ T cells accumulate near sensory nerve endings in genital skin during subclinical HSV-2 reactivation. **2007**, 204, 595-603	272
888	Quantum Dot-based Nanobiohybrids for Fluorescent Detection of Molecular and Cellular Biological Targets. **2007**,	1
887	Non-invasive high-resolution acoustic microscopy technique using embedded nanostructures. **2007**, 1019, 1	
886	Active Polymer Nanoparticles: Delivery of Antibiotics. **2007**, 1019, 1	2
885	Electronic coupling one-dimensional Ag/ZnS nanocomposites in a nanoporous nickel phosphate host. **2007**, 18, 255607	4
884	Luminescence of Doped Nanoparticles of Wide Band Gap II-VI Compounds. **2007**, 128, 123-134	4
883	PRODUCTION AND BIOFUNCTIONALIZATION OF MAGNETIC NANOBEADS FOR MAGNETIC SEPARATION OF MESSENGER RNA. **2007**, 02, 109-122	3

882	Effect of Ligand Exchange on the Stability and Optical Properties of CdSe Quantum Dots. **2007**, 1056, 1	
881	Use of quantum dot luminescent probes to achieve single-cell resolution of human oral bacteria in biofilms. **2007**, 73, 630-6	75
880	Enhancing the Biological Stability and Functionalities of Quantum Dots via Compact Multifunctional Ligands. **2007**, 1019,	0
879	Nanoparticles and Nanowires for Cellular Engineering. **2007**,	2
878	Optical Fiber Sensing Using Quantum Dots. **2007**, 7, 3489-3534	95
877	Biomimetic Nanosensors. **2007**,	
876	Influence of the Choice of Indium Precursor and Ligand on the Synthesis of InP Nanocrystals. **2007**, 221, 393-402	3
875	Synthesis of mercaptoethylamine-coated CdSe/CdS nanocrystals and their use for DNA probe. **2007**, 23, 1085-9	5
874	Quantum dots for single bio-molecule imaging. **2007**, 23, 21-4	31
873	Measurable Emission Color Change: Size-dependent Reversible Fluorescence Quenching of CdTe Quantum Dots by Molecular Oxygen. **2007**, 36, 242-243	23
872	CdS Quantum Dots Sensitized TiO2Sandwich Type Photoelectrochemical Solar Cells. **2007**, 36, 88-89	140
871	Organic Nanoparticles of Cyanine Dye in Aqueous Solution. **2007**, 80, 295-302	19
870	Polymeric Nanomaterials Synthesis, Functionalization and Applications in Diagnosis and Therapy. **2007**,	1
869	Flow Cytometry and Immunospeak. **2007**, 15, 183-191	
868	Introduction to nanotechnology: potential applications in physical medicine and rehabilitation. **2007**, 86, 225-41	13
867	Quantum dots are phagocytized by macrophages and colocalize with experimental gliomas. **2007**, 60, 524-9; discussion 529-30	80
866	Monodisperse ZnO Nanodots: Synthesis, Charaterization, and Optoelectronic Properties. **2007**, 111, 9757-9760	27
865	Optical Properties of CdTe Nanocrystal Quantum Dots, Grown in the Presence of Cd0 Nanoparticles. **2007**, 111, 10841-10847	27

864	[Future technological evolutions in blood donation qualification]. **2007**, 14, 132-41	0
863	Luminescent quantum dots fluorescence resonance energy transfer-based probes for enzymatic activity and enzyme inhibitors. **2007**, 79, 208-14	132
862	Theoretical Studies on Optical and Electronic Properties of Propionic-Acid-Terminated Silicon Quantum Dots. **2007**, 3, 1518-26	33
861	Synthesis of CdSeS Nanocrystals in Coordinating and Noncoordinating Solvents: Solvent's Role in Evolution of the Optical and Structural Properties. **2007**, 19, 5185-5193	90
860	Substrate- and time-dependent photoluminescence of quantum dots inside the ultrathin polymer LbL film. **2007**, 23, 4509-15	59
859	Multicolor quantum dot encoding for polymeric particle-based optical ion sensors. **2007**, 79, 3716-23	52
858	Kinetics of monodisperse iron oxide nanocrystal formation by "heating-up" process. **2007**, 129, 12571-84	374
857	Fluorescent Quantum Dot–Polymer Nanocomposite Particles by Emulsification/Solvent Evaporation. **2007**, 19, 2930-2936	43
856	Multicolour hybrid nanoprobes of molecular beacon conjugated quantum dots: FRET and gel electrophoresis assisted target DNA detection. **2007**, 18, 195105	59
855	Monodisperse nanocrystals: general synthesis, assembly, and their applications. **2007**, 2901-10	163
854	Coating Aqueous Quantum Dots with Silica via Reverse Microemulsion Method: Toward Size-Controllable and Robust Fluorescent Nanoparticles. **2007**, 19, 4123-4128	155
853	Mechanistic study of precursor evolution in colloidal group II-VI semiconductor nanocrystal synthesis. **2007**, 129, 305-12	346
852	A versatile strategy for quantum dot ligand exchange. **2007**, 129, 482-3	271
851	Stable aqueous dispersion of ZnO quantum dots with strong blue emission via simple solution route. **2007**, 129, 16029-33	235
850	Nanoparticles as nonviral gene delivery vectors. **2007**, 6, 319-30	60
849	Synthesis, characterization, and biological applications of multifluorescent silica nanoparticles. **2007**, 79, 6507-14	115
848	Fate of micelles and quantum dots in cells. **2007**, 65, 270-81	130
847	Correlative microscopy: bridging the gap between fluorescence light microscopy and cryo-electron tomography. **2007**, 160, 135-45	305

846	Synthesis and characterization of efficient near-infrared upconversion Yb and Tm codoped NaYF4 nanocrystal reporter. **2007**, 427, 333-340	92
845	The use of quantum dots for analysis of chick CAM vasculature. **2007**, 73, 75-83	59
844	Imaging and tracking of tat peptide-conjugated quantum dots in living cells: new insights into nanoparticle uptake, intracellular transport, and vesicle shedding. **2007**, 129, 14759-66	417
843	Size-sorted anionic iron oxide nanomagnets as colloidal mediators for magnetic hyperthermia. **2007**, 129, 2628-35	825
842	Enhancing the stability and biological functionalities of quantum dots via compact multifunctional ligands. **2007**, 129, 13987-96	439
841	Excitation wavelength dependence of fluorescence intermittency in CdSe/ZnS core/shell quantum dots. **2007**, 7, 3869-74	79
840	Novel Hierarchical Nanostructures of Nickel: Self-Assembly of Hexagonal Nanoplatelets. **2007**, 111, 601-605	79
839	In vivo imaging of transport and biocompatibility of single silver nanoparticles in early development of zebrafish embryos. **2007**, 1, 133-43	660
838	Synthesis of Water-Soluble and Functionalized Nanoparticles by Silica Coating. **2007**, 19, 5074-5082	257
837	Interfacial Bioelectrochemistry: Fabrication, Properties and Applications of Functional Nanostructured Biointerfaces. **2007**, 111, 2351-2367	136
836	Brilliant Sm, Eu, Tb, and Dy chiral lanthanide complexes with strong circularly polarized luminescence. **2007**, 129, 77-83	244
835	In Situ Synthesis of CdTe/CdSe Core−Shell Quantum Dots. **2007**, 19, 2715-2717	41
834	Nanobiotechnology: quantum dots in bioimaging. **2007**, 4, 565-72	22
833	Reversible binding and fluorescence energy transfer between surface-derivatized CdS nanoparticles and multi-functionalized fluorescent mesoporous silica nanospheres. **2007**, 170, 1827-1835	8
832	Cell-penetrating quantum dots based on multivalent and endosome-disrupting surface coatings. **2007**, 129, 3333-8	408
831	CdSe nanocrystal based chem-/bio- sensors. **2007**, 36, 579-91	544
830	Singlet oxygen production by Peptide-coated quantum dot-photosensitizer conjugates. **2007**, 129, 6865-71	251
829	Synthesis and Characterization of Organosilica Nanoparticles Prepared from 3-Mercaptopropyltrimethoxysilane as the Single Silica Source. **2007**, 111, 18892-18898	74

828	Temperature and Size Dependence of Nonradiative Relaxation and Exciton−Phonon Coupling in Colloidal CdTe Quantum Dots. **2007**, 111, 5846-5849		122
827	Chiral highly luminescent CdS quantum dots. **2007**, 3900-2		210
826	Quantum dot photon statistics measured by three-dimensional particle tracking. **2007**, 7, 3535-9		81
825	Spontaneous superlattice formation in nanorods through partial cation exchange. *Science*, **2007**, 317, 355-8	33.3	632
824	Decorating carbon nanotubes with metal or semiconductor nanoparticles. **2007**, 17, 2679		574
823	Synthesis of Type II CdTe/CdSe Nanocrystal Heterostructured Multiple-Branched Rods and Their Photovoltaic Applications. **2007**, 111, 6538-6543		149
822	Interparticle coupling effect on the surface plasmon resonance of gold nanoparticles: from theory to applications. **2007**, 107, 4797-862		2094
821	RNA-mediated fluorescent Q-PbS nanoparticles. **2007**, 23, 2915-8		39
820	Synthesis of high-quality near-infrared-emitting CdTeS alloyed quantum dots via the hydrothermal method. **2007**, 18, 485611		83
819	Dynamics of the dissociation of a disulfide biradical on a CdSe nanoparticle surface. **2007**, 129, 14150-1		18
818	Tuning the energy bandgap of CdSe nanocrystals via Mg doping. **2007**, 18, 205702		35
817	Characterization of the functional binding properties of antibody conjugated quantum dots. **2007**, 7, 1839-45		149
816	Mechanism of giant enhancement of light emission from Au/CdSe nanocomposites. **2007**, 18, 415707		58
815	Facile synthesis of magic-sized CdSe and CdTe nanocrystals with tunable existence periods. **2007**, 18, 405603		29
814	High-Quality and Water-Soluble Near-Infrared Photoluminescent CdHgTe/CdS Quantum Dots Prepared by Adjusting Size and Composition. **2007**, 111, 16852-16857		125
813	DNA hybridization detection with blue luminescent quantum dots and dye-labeled single-stranded DNA. **2007**, 129, 3048-9		238
812	Quantum dot-insect neuropeptide conjugates for fluorescence imaging, transfection, and nucleus targeting of living cells. **2007**, 23, 10254-61		92
811	Synthesis and Characterization of Multi-Pod-Shaped Gold/Silver Nanostructures. **2007**, 111, 5909-5914		66

810	Weak coupling interactions of colloidal lead sulphide nanocrystals with silicon photonic crystal nanocavities near 1.55□m at room temperature. **2007**, 90, 111117	39
809	Quantum Dot Nanotechnology for Prostate Cancer Research. **2007**, 231-244	1
808	Controlled Synthesis and Luminescence of Lanthanide Doped NaYF4 Nanocrystals. **2007**, 19, 727-734	500
807	Photoassisted tuning of silicon nanocrystal photoluminescence. **2007**, 23, 3388-94	50
806	Colloidal InP nanocrystals as efficient emitters covering blue to near-infrared. **2007**, 129, 15432-3	408
805	Quantifying RNA-peptide interaction by single-quantum dot-based nanosensor: an approach for drug screening. **2007**, 79, 7775-81	45
804	Homocysteine-mediated reactivity and assembly of gold nanoparticles. **2007**, 23, 826-33	127
803	Efficient emission from core/(doped) shell nanoparticles: applications for chemical sensing. **2007**, 7, 3429-32	157
802	Fluorescent magnetic nanocrystals by sequential addition of reagents in a one-pot reaction: a simple preparation for multifunctional nanostructures. **2007**, 129, 11928-35	155
801	Shape-controlled assembly of luminescent dumbbell-like CdTe□ystine nanocomposites. **2007**, 18, 455701	20
800	References. **2007**, 97-102	
799	Identity profiling of cell surface markers by multiplex gold nanorod probes. **2007**, 7, 2300-6	134
798	Ion-selective nano-optodes incorporating quantum dots. **2007**, 129, 8418-9	79
797	Surface reconstruction and core distortion of silicon and germanium nanowires. **2007**, 18, 215703	6
796	Finely controlled size-selective precipitation and separation of CdSe/ZnS semiconductor nanocrystals using CO2-gas-expanded liquids. **2007**, 23, 7338-43	44
795	Photochemical synthesis of crown-shaped platinum nanoparticles using aggregates of G4-NH2 PAMAM dendrimer as templates. **2007**, 17, 567-571	39
794	Lanthanide-doped calcium phosphate nanoparticles with high internal crystallinity and with a shell of DNA as fluorescent probes in cell experiments. **2007**, 17, 4153	121
793	Characterization of immobilized pH gradient formed in capillary based on quantum dots. **2007**,	

792	In vivo real-time tracking of single quantum dots conjugated with monoclonal anti-HER2 antibody in tumors of mice. **2007**, 67, 1138-44	316
791	Probing synaptic signaling with quantum dots. **2007**, 1, 5-10	5
790	A facile route to violet- to orange-emitting CdxZn1−xSe alloy nanocrystals via cation exchange reaction. **2007**, 18, 385606	61
789	Photophysics of (CdSe)ZnS colloidal quantum dots in an aqueous environment stabilized with amino acids and genetically-modified proteins. **2007**, 6, 1027-33	18
788	Integrating Magnetic and Optical Nanotechnology for Selective Capture and Multiplexed Analysis of Rare Tumor Cells. **2007**,	1
787	Peptide-mediated surface-immobilized quantum dot hybrid nanoassemblies with controlled photoluminescence. **2007**, 17, 866-872	25
786	Colloidal synthesis and characterization of monocrystalline apatite nanophosphors. **2007**, 17, 2904	27
785	A quantum dot-based fluorescence sensing platform for the efficient and sensitive monitoring of collagen self-assembly. **2020**, 44, 11304-11309	2
784	Facile Synthesis of Cubic Magnetic Up-Conversion Nanoparticles. **2020**, 41, 682-685	
783	Fabrication of amine functionalized CdSe@SiO nanoparticles as fluorescence nanosensor for highly selective and sensitive detection of picric acid. **2020**, 233, 118221	7
782	Detection of Human p53 In-Vitro Expressed in a Transcription-Translation Cell-Free System by a Novel Conjugate Based on Cadmium Sulphide Nanoparticles. **2020**, 10,	4
781	Protein Design for the Synthesis and Stabilization of Highly Fluorescent Quantum Dots. **2020**, 32, 5729-5738	7
780	Surface-enhanced Raman scattering and antibacterial properties from copper nanoparticles obtained by green chemistry. **2020**, 126, 1	3
779	Ultrafast photochemistry produces superbright short-wave infrared dots for low-dose in vivo imaging. **2020**, 11, 2933	33
778	Advances in carbon dots: from the perspective of traditional quantum dots. **2020**, 4, 1586-1613	94
777	Real-Time 3D Imaging and Inhibition Analysis of Various Amyloid Aggregations Using Quantum Dots. **2020**, 21,	7
776	Selected nanotechnologies and nanostructures for drug delivery, nanomedicine and cure. **2020**, 43, 1339-1357	20
775	Shell-by-Shell Functionalization of Inorganic Nanoparticles. **2020**, 26, 8483-8498	6

774	Anti-microbial activity of curcumin nanoformulations: New trends and future perspectives. **2020**, 34, 1926-1946	50
773	Excitonic fine structure of zinc-blende and wurtzite colloidal CdSe nanocrystals and comparison to effective mass results. **2020**, 101,	3
772	Cellulose nanocrystal based multifunctional nanohybrids. **2020**, 112, 100668	58
771	Aqueous synthesis of L-cysteine-modified cobalt-doped zinc selenide/zinc sulfide quantum dots with enhanced fluorescence. **2020**, 53, 315-326	2
770	Human Neutrophil Elastase Activated Fluorescent Probe for Pulmonary Diseases Based on Fluorescence Resonance Energy Transfer Using CdSe/ZnS Quantum Dots. **2020**, 14, 4244-4254	14
769	Nanoparticulate formulations of radiopharmaceuticals: Strategy to improve targeting and biodistribution properties. **2020**, 63, 333	9
768	Nucleation and Growth of Colloidal Semiconductor Nanoparticles. **2020**, 1-11	
767	Photon induced quantum yield regeneration of cap-exchanged CdSe/CdS quantum rods for ratiometric biosensing and cellular imaging. **2020**, 12, 8647-8655	4
766	Theoretical Investigation of Electronic and Magnetic Optical Properties of CdS Doped and Co Doped With Transition Metals (Mn, Fe, and Cu): Spin Density Functional Theory. **2020**, 56, 1-6	2
765	Proteomic Analysis Identifies Markers of Exposure to Cadmium Sulphide Quantum Dots (CdS QDs). **2020**, 10,	2
764	Insights into the formation of an emissive CdTe-quantum-dots/cellulose hybrid film. **2020**, 579, 714-722	5
763	Principle of whole-cell patch-clamp and its applications in neural interface studies. **2020**, 25-63	
762	Surface and intrinsic contributions to extinction properties of ZnSe quantum dots. **2020**, 13, 824-831	18
761	Self-Assembly of Semiconductor Quantum Dots using Organic Templates. **2020**, 26, 7176-7184	6
760	Direct Atomic Simulations of Facet Formation and Equilibrium Shapes of SiC Nanoparticles. **2020**, 20, 2147-2152	1
759	The Electric and Dielectric Properties of SrF2:Tb3+ Nanocrystals Revealed by AC Impedance Spectroscopy. **2020**, 10, 31	
758	Neural network modeling and simulation of the synthesis of CuInS2/ZnS quantum dots. **2020**, 2, e12122	2
757	A review of carbon quantum dots and their applications in wastewater treatment. **2020**, 278, 102124	65

756	Preparation of molecularly imprinted fluorescence sensor based on carbon quantum dots via precipitation polymerization for fluorescence detection of tetracycline. **2020**, 137, 49126	7
755	Mn-Doped ZnS Quantum dots An Effective Nanoscale Sensor. **2020**, 155, 104755	20
754	Nonlinear optical properties of colloidal CdSe/ZnS quantum dots in PMMA. **2020**, 31, 195703	7
753	Zwitterion and Oligo(ethylene glycol) Synergy Minimizes Nonspecific Binding of Compact Quantum Dots. **2020**, 14, 3227-3241	9
752	Multifunctional Droplet Microfluidic Platform for Rapid Immobilization of Oligonucleotides on Semiconductor Quantum Dots. **2020**, 5, 746-753	5
751	Synthesis of folic acid conjugated photoluminescent carbon quantum dots with ultrahigh quantum yield for targeted cancer cell fluorescence imaging. **2020**, 30, 101687	11
750	Thermally induced fragmentation of nanoscale calcite.. **2020**, 10, 6088-6091	5
749	Rapid Intestinal Uptake and Targeted Delivery to the Liver Endothelium Using Orally Administered Silver Sulfide Quantum Dots. **2020**, 14, 1492-1507	15
748	Facile and efficient 3-chlorophenol sensor development based on photolumenescent core-shell CdSe/ZnS quantum dots. **2020**, 10, 557	29
747	Multinary copper-based chalcogenide semiconductor nanocrystals: synthesis and applications in light-emitting diodes and bioimaging. **2020**, 22, 1	13
746	Single-Virus Tracking: From Imaging Methodologies to Virological Applications. **2020**, 120, 1936-1979	75
745	Influence of Quantum Dot Surface on Electrochemical DNA Sensing Mechanism. **2020**, 7, 770-781	2
744	Pressure-Tuned Core/Shell Configuration Transition of Shell Thickness-Dependent CdSe/CdS Nanocrystals. **2020**, 11, 920-926	6
743	3D electronic and photonic structures as active biological interfaces. **2020**, 2, 527-552	12
742	Quantum dots for Fster Resonance Energy Transfer (FRET). **2020**, 125, 115819	59
741	Red-Emissive Carbon Quantum Dots for Nuclear Drug Delivery in Cancer Stem Cells. **2020**, 11, 1357-1363	58
740	Highly Stabilized Gradient Alloy Quantum Dots and Silica Hybrid Nanospheres by Core Double Shells for Photoluminescence Devices. **2020**, 11, 1428-1434	14
739	Engineering Quantum Dot (Cadmium Sulfide) on Antibodies for Fluoroimmunoassays. **2020**, 2020, 1-12	2

738	Multifunctional nanoparticles in stem cell therapy for cellular treating of kidney and liver diseases. **2020**, 65, 101371	0
737	Nanotechnology for cancer screening and diagnosis: from innovations to clinical applications. **2020**, 261-289	2
736	Materials and biological applications of 1,2,3-selenadiazoles: a review. **2020**, 16, 100255	5
735	Statistically controlled biogenesis of silver nano-size by Penicillium chrysogenum MF318506 for biomedical application. **2020**, 25, 101592	12
734	Tunable Metal Oxide Shell as a Spacer to Study Energy Transfer in Semiconductor Nanocrystals. **2020**, 11, 3430-3435	7
733	Development of a Thermoresponsive Polymeric Composite Film Using Cross-Linked ‖Cyclodextrin Embedded with Carbon Quantum Dots as a Transdermal Drug Carrier.. **2020**, 3, 3285-3293	7
732	Polypeptide-Templated Au Nanoclusters with Red and Blue Fluorescence Emissions for Multimodal Imaging of Cell Nuclei.. **2020**, 3, 1934-1943	10
731	Advanced functionalized nanographene oxide as a biomedical agent for drug delivery and anti-cancerous therapy: A review. **2021**, 142, 110124	7
730	Recent advances in semiconducting polymer dots as optical probes for biosensing. **2021**, 9, 328-346	13
729	PARAFAC study of L-cys@CdTe QDs interaction to BSA, cytochrome c and trypsin: An approach through electrostatic and covalent bonds. **2021**, 246, 119016	6
728	Dye-Loaded Nanoemulsions: Biomimetic Fluorescent Nanocarriers for Bioimaging and Nanomedicine. **2021**, 10, e2001289	24
727	A synergistic promotion strategy remarkably accelerated electrochemiluminescence of SnO QDs for MicroRNA detection using 3D DNA walker amplification. **2020**, 173, 112820	15
726	Improving the Performance of Near-infrared CuInSe2 Quantum Dots by Two Strategies: Doping and Ligand Exchange. **2021**, 16, 2150012	1
725	Novel rare earth yttrium doping effect on physical properties of PbS nanostructures: facile synthesis and characterization. **2021**, 56, 4763-4781	9
724	Recent Developments in Semiconducting Polymer Dots for Analytical Detection and NIR-II Fluorescence Imaging.. **2021**, 4, 2142-2159	7
723	Universal Electrochemical Synthesis of Mesoporous Chalcogenide Semiconductors: Mesoporous CdSe and CdTe Thin Films for Optoelectronic Applications. **2021**, 60, 9660-9665	6
722	Current nanotechnology advances in diagnostic biosensors. **2021**, 4, e10156	1
721	Universal Electrochemical Synthesis of Mesoporous Chalcogenide Semiconductors: Mesoporous CdSe and CdTe Thin Films for Optoelectronic Applications. **2021**, 133, 9746-9751	0

720	Uncovering the Role of Hole Traps in Promoting Hole Transfer from Multiexcitonic Quantum Dots to Molecular Acceptors. **2021**, 15, 2281-2291	11
719	Polarized emission of CdSe nanocrystals in magnetic field: the role of phonon-assisted recombination of the dark exciton. **2021**, 13, 790-800	3
718	Synthesis of biocompatible and highly fluorescent N-doped silicon quantum dots from wheat straw and ionic liquids for heavy metal detection and cell imaging. **2021**, 765, 142754	16
717	Semiconductor Nanocrystals for Biological Imaging and Fluorescence Spectroscopy. **2021**, 1310, 449-473	
716	Novel N,Cl-doped deep eutectic solvents-based carbon dots as a selective fluorescent probe for determination of morphine in food.. **2021**, 11, 16805-16813	2
715	Photoluminescence and Thermoluminescence Properties of Nanophosphors, YVO4:Eu3+ and YVO4:Eu3+:Dy3+. 1	0
714	Mass spectrometry for multi-dimensional characterization of natural and synthetic materials at the nanoscale. **2021**, 50, 5243-5280	7
713	Investigating the effect of 6-mercaptohexanol on the performance of a biosensor based on nanosurface energy transfer between gold nanoparticles and quantum dots. **2021**, 13, 2092-2098	3
712	CRISPR-dCas9-Guided and Telomerase-Responsive Nanosystem for Precise Anti-Cancer Drug Delivery. **2021**, 13, 7890-7896	7
711	CHAPTER 2:Water-compatible Colloidal Nanocrystals. **2021**, 47-76	
710	Intravital Microscopy. **2021**, 167-192	1
709	Carbohydrate Functionalized Quantum Dots in Sensing, Imaging and Therapy Applications. **2021**, 433-472	2
708	Synthesis of Advanced Inorganic Materials Through Molecular Precursors. **2021**, 467-501	0
707	The unconventional role of surface ligands in dictating the light harvesting properties of quantum dots. **2021**, 9, 7422-7457	5
706	Modern applications of quantum dots: Environmentally hazardous metal ion sensing and medical imaging. **2021**, 465-503	2
705	Comparison of quantum dot immunofluorescence histochemistry with conventional immunohistochemistry in detecting Helicobacter pylori infection in paraffin-embedded tissues of gastric biopsy. **2021**, 52, 461-466	3
704	Synthesis of Carbon Allotropes in Nanoscale Regime. **2021**, 9-46	
703	Electrochemical DNA biosensors based on quantum dots. **2021**, 155-184	0

702	Effect of alkali bases on the synthesis of ZnO quantum dots. **2021**, 19, 377-384	4
701	Diagnostic and Therapeutic Nanomedicine. **2021**, 1310, 401-447	4
700	Semiconductor Quantum Dots and Core Shell Systems for High Contrast Cellular/Bio Imaging. **2021**, 27-38	
699	Choosing Fluorescent Probes and Labeling Systems. **2021**, 2304, 37-64	1
698	Light-emitting MXene quantum dots. **2021**, 4, 20007701-20007715	14
697	Study of carbon quantum dots as smart materials for environmental applications. **2021**, 223-239	
696	Current and future challenges in polymeric nanomaterials for biomedical applications. **2021**, 327-359	
695	Solid-State Green Synthesis of Different Nanoparticles. **2021**, 289-301	
694	CHAPTER 6:Applications of Colloidal Nanocrystals. **2021**, 209-257	
693	Introduction to the Optical Applications of Nanomaterials. **2021**, 1-9	
692	Light-driven hydrogen production with CdSe quantum dots and a cobalt glutathione catalyst. **2021**, 57, 2053-2056	3
691	Advancements in Cancer Therapeutics. **2021**, 382-412	0
690	Advances in optical imaging of drug delivery across the blood-brain barrier. **2021**, 171-253	0
689	Synthesis and characterization of ZnSe: Ag/SiO2 nanoparticles. **2021**, 261, 02063	1
688	Quantum Dots in Drug Delivery. **2021**, 149-167	
687	Hyper-stable defect-induced SiO2 powder materials for fluorescence performance. **2021**, 47, 77-90	
686	Exciton-Photon Interactions in Semiconductor Nanocrystals: Radiative Transitions, Non-Radiative Processes and Environment Effects. **2021**, 11, 497	4
685	Inorganic Nanoparticles for Biomedical Applications. **2021**, 49-72	

684	Nanostructures for Biosensing, with a Brief Overview on Cancer Detection, IoT, and the Role of Machine Learning in Smart Biosensors. **2021**, 21,	12
683	pH-Response Quantum Dots with Orange-Red Emission for Monitoring the Residue, Distribution, and Variation of an Organophosphorus Pesticide in an Agricultural Crop. **2021**, 69, 2689-2696	31
682	Affinity biosensors developed with quantum dots in microfluidic systems. **2021**, 4, 1-23	4
681	Development of Iridium Based Fluorimetric Method for Determination of Cystein.	1
680	Fluorescent Nanohybrids from ZnS/CdSe Quantum Dots Functionalized with Triantennary, -Hydroxy--(4-arylbutanamido)benzamide/Gallamide Dendrons That Act as Inhibitors of Histone Deacetylase for Lung Cancer.. **2021**, 4, 2475-2489	
679	Ab-initio study about the electronic, optical and thermoelectric nature of □ and □phases of CdS semiconductor: using the accurate m-BJ approach. **2021**, 96, 055803	2
678	Ensemble-level energy transfer measurements can reveal the spatial distribution of defect sites in semiconductor nanocrystals. **2021**, 154, 054704	0
677	Development of a quantum dots-based strip immunoassay for the detection of pyrimethanil in fruit and vegetable samples. **2021**, 41, e12890	1
676	Colloidal quantum dot lasers. **2021**, 6, 382-401	52
675	Synthesis of Magnetic Ions-Doped QDs Synthesized Via a Facial Aqueous Solution Method for Optical/MR Dual-Modality Imaging Applications. **2021**, 31, 897-906	1
674	Structural characterization of cystathionine □lyase smCSE enables aqueous metal quantum dot biosynthesis. **2021**, 174, 42-51	1
673	Quantum Dots for Improved Single-Molecule Localization Microscopy. **2021**, 125, 2566-2576	4
672	Highly versatile near-infrared emitters based on an atomically defined HgS interlayer embedded into a CdSe/CdS quantum dot. **2021**, 16, 673-679	10
671	Comparing Transcriptome Profiles of Saccharomyces Cerevisiae Cells Exposed to Cadmium Selenide/Zinc Sulfide and Indium Phosphide/Zinc Sulfide. **2021**, 12,	3
670	Expediting the Conversion of LiS to LiS Enables High-Performance Li-S Batteries. **2021**, 15, 7318-7327	35
669	CdSe Quantum Dots in Human Models Derived from ALS Patients: Characterization, Nuclear Penetration Studies and Multiplexing. **2021**, 11,	1
668	Characterization, Antimicrobial and Antioxidant Evaluation of Biofabricated Silver Nanoparticles from Endophytic. **2021**, 31, 1-15	5
667	Compressibility of Multicomponent, Charged Model Biomembranes Tunes Permeation of Cationic Nanoparticles. **2021**, 37, 3550-3562	0

666	Interaction of Folic Acid with Mn Doped CdTe/ZnS Quantum Dots: In Situ Detection of Folic Acid. **2021**, 31, 951-960	5
665	Bonding behavior and passivation mechanism of organic ligands (-SH, -NH2, -COOH) on ZnS (101□0) surface from first-principles calculations. **2021**, 545, 148970	2
664	Sensitive Immunoassay Based on Biocompatible and Robust Silica-Coated Cd-Free InP-Based Quantum Dots. **2021**, 60, 6503-6513	8
663	Synthesis of polystyrene-based fluorescent quantum dots nanolabel and its performance in H5N1 virus and SARS-CoV-2 antibody sensing. **2021**, 225, 122064	10
662	Nanocrystal Quantum Dots: From Discovery to Modern Development. **2021**, 15, 6192-6210	57
661	Room-Temperature Diffusion-Induced Extraction for Perovskite Nanocrystals with High Luminescence and Stability.. **2021**, 5, e2001292	0
660	Inorganic-Ligand Quantum Dots Meet Inorganic-Ligand Semiconductor Nanoplatelets: A Promising Fusion to Construct All-Inorganic Assembly. **2021**, 60, 6994-6998	
659	DNA Nanoengineering and DNA-Driven Nanoparticle Assembly. **2021**, 1-41	
658	Nonlinear Optical Properties of CdSe and CdTe Core-Shell Quantum Dots and Their Applications. 9,	5
657	Nanomaterials: Applications, waste-handling, environmental toxicities, and future challenges □A review. **2021**, 9, 105028	58
656	Recent Progress in Fiber Optofluidic Lasing and Sensing. **2021**, 11, 262-278	1
655	Onsite/on-field analysis of pesticide and veterinary drug residues by a state-of-art technology: A review. **2021**, 44, 2310-2327	6
654	Softness Meets with Brightness: Dye-Doped Multifunctional Fluorescent Polymer Particles via Microfluidics for Labeling. **2021**, 9, 2002219	4
653	BSA-drug-ZnO-PEI conjugates interaction with glycans of gp60 endothelial cell receptor protein for targeted drug delivery: a comprehensive spectroscopic study. **2021**, 1-17	0
652	Importance of Surface Functionalization and Purification for Narrow FWHM and Bright Green-Emitting InP Core□Multishell Quantum Dots via a Two-Step Growth Process. **2021**, 33, 4399-4407	9
651	Applications of novel quantum dots derived from layered materials in cancer cell imaging. **2021**, 27, 100246	6
650	Recent Progress of Near-Infrared Fluorescence in vivo Bioimaging in the Second and Third Biological Window. **2021**, 37, 691-697	5
649	Quantum Dots as Biosensors in the Determination of Biochemical Parameters in Xenobiotic Exposure and Toxins. **2021**, 37, 661-671	2

648	Fine-Tuning Synthesis of Fluorescent Silver Thiolate Nanoclusters. **2021**, 21, 2816-2823	0
647	Toxicity of quantum dots on target organs and immune system. **2022**, 42, 17-40	7
646	In-situ synthesis of Cu2S nanoparticles to consolidate the tribological performance of PAI-PTFE bonded solid lubricating coatings. **2021**, 154, 106197	5
645	Aqueous CdTe colloidal quantum dots for bio-imaging of Artemia sp. **2021**, 128, 108510	3
644	A review on carbon nanotube: An overview of synthesis, properties, functionalization, characterization, and the application. **2021**, 268, 115095	64
643	DNA-Based Architectures for in situ Target Biomolecule Analysis in Confined Nano-space **2021**, 39, 2027-2034	0
642	NIR-II Fluorescence imaging for cerebrovascular diseases. 20200128	4
641	Fluorescent nanoparticles as tools in ecology and physiology. **2021**, 96, 2392-2424	4
640	Revealing the Surface Structure of CdSe Nanocrystals by Dynamic Nuclear Polarization-Enhanced Se and Cd Solid-State NMR Spectroscopy. **2021**, 143, 8747-8760	5
639	Shape-Dependent Linear Dichroism Spectra of Colloidal Semiconductor Nanocrystals. **2021**, 37, 7611-7616	0
638	Exploration of Methylene Blue Degradation over ZnO Nanorods Mechanism using Scavenging Reagents. **2021**, 37, 609-618	0
637	A stable biocompatible porous coordination cage promotes in vivo liver tumor inhibition. **2021**, 14, 3407-3415	3
636	Tong hop v khao s kha n g kh g khuan cua nano bac trong s n c noi that. **2021**, 57, 10-22	
635	Real-Time Detection and Monitoring of Bacterial Infection Based on NIR-II Imaging. **2021**, 9, 689017	2
634	Use of nanotechnology in combating coronavirus. **2021**, 11, 358	0
633	Photoluminescent Nanoparticles for Chemical and Biological Analysis and Imaging. **2021**, 121, 9243-9358	40
632	Quantitative comparison of luminescence probes for biomedical applications. **2021**, 9,	4
631	Nucleic Acid Tests for Clinical Translation. **2021**, 121, 10469-10558	23

630	Advances in Cancer Therapeutics: Conventional Thermal Therapy to Nanotechnology-Based Photothermal Therapy. **2021**, 13,	13
629	Nanomaterials and Stem Cell Differentiation Potential: An Overview of Biological Aspects and Biomedical Efficacy. **2021**,	0
628	Recent Developments in the Use of Glyconanoparticles and Related Quantum Dots for the Detection of Lectins, Viruses, Bacteria and Cancer Cells. **2021**, 9, 668509	5
627	Effect of Micelle Encapsulation on Toxicity of CdSe/ZnS and Mn-Doped ZnSe Quantum Dots. **2021**, 11, 895	1
626	Improvement of image resolution by combining enhanced confocal microscopy and quantum dot triexciton imaging. **2021**, 11, 3324-3330	0
625	Characterization of Fluorescent Proteins with Intramolecular Photostabilization*. **2021**, 22, 3283-3291	2
624	Polymer-templated supramolecular co-assemblies of proteins and metal oxide clusters as versatile platform for chemo-enzymatic catalysis. **2021**, 594, 874-881	1
623	The Application of Inorganic Optical Nanoprobes in Bacterial Infection. 2130004	1
622	Tailored growth of single-crystalline InP tetrapods. **2021**, 12, 4454	5
621	Nanomaterial-Based Dual-Emission Ratiometric Fluorescent Sensors for Biosensing and Cell Imaging. **2021**, 13,	7
620	Determine the position of nanoparticles in cells by using surface-enhanced Raman three-dimensional imaging. **2021**, 14, 3402-3406	1
619	Synergistic effect of photocatalytic, antibacterial and electrochemical activities on biosynthesized zirconium oxide nanoparticles. **2021**, 136, 1	4
618	Sensitive and rapid detection of fingerprints based on electrospun nanofibrous membranes and quantum dots. **2021**, 623, 126716	4
617	Bulk-like ZnSe Quantum Dots Enabling Efficient Ultranarrow Blue Light-Emitting Diodes. **2021**, 21, 7252-7260	12
616	Shape Evolution and Control of Wurtzite CdSe Nanocrystals through a Facile One-Pot Strategy. **2021**, 125, 18905-18915	1
615	Investigating the interaction of CdTe quantum dots with plasma protein transferrin and their interacting consequences at the molecular and cellular level. **2021**, 185, 434-440	1
614	Efficient and Versatile Application of Fluorescence DNA-Conjugated CdTe Quantum Dots Nanoprobe for Detection of a Specific Target DNA of SARS Cov-2 Virus. **2021**, 37, 10223-10232	3
613	Low-Temperature Synthesis of High-Brightness Green-Emitting Silica-Coated CsPbBr3 and Its Application in Light-Emitting Diodes. **2021**, 50, 6337-6343	

612	Influence on structural, electronic and optical properties of Fe doped ZnS quantum dot: A density functional theory based study. **2021**, 121, e26786	
611	Quantum dots as a theranostic approach in Alzheimer's disease: a systematic review. **2021**, 16, 1595-1611	7
610	Effects of Carboxyl or Amino Group Modified InP/ZnS Nanoparticles Toward Simulated Lung Surfactant Membrane. **2021**, 9, 714922	1
609	The Accessibility of the Cell Wall in Scots Pine (L.) Sapwood to Colloidal FeO Nanoparticles. **2021**, 6, 21719-21729	2
608	The Evolution of Single-Cell Analysis and Utility in Drug Development. **2021**, 23, 98	1
607	An ionic liquid-assisted quantum dot-grafted covalent organic framework-based multi-dimensional sensing array for discrimination of insecticides using principal component analysis and clustered heat map. **2021**, 188, 298	0
606	Enhanced Exciton Quantum Coherence in Single CsPbBr Perovskite Quantum Dots using Femtosecond Two-Photon Near-Field Scanning Optical Microscopy. **2021**,	3
605	A First Wide-Open LDH Structure Hosting InP/ZnS QDs: A New Route Toward Efficient and Photostable Red-Emitting Phosphor. **2021**, 33, e2103411	3
604	Water molecules bonded to the carboxylate groups at the inorganic-organic interface of an inorganic nanocrystal coated with alkanoate ligands.. **2022**, 9, nwab138	2
603	Unveiling the Ag-Bi miscibility at the atomic level: A theoretical insight. **2021**, 197, 110612	1
602	Quantum and carbon dots conjugated molecularly imprinted polymers as advanced nanomaterials for selective recognition of analytes in environmental, food and biomedical applications. **2021**, 142, 116306	18
601	An endophytic fungus, conjugated with C60 fullerene for its potential antimitotic, anti-inflammatory, anticancer and photodegradation activities. **2021**, 1-15	2
600	Spherical nucleic acids: Organized nucleotide aggregates as versatile nanomedicine.. **2022**, 3, e120	1
599	Subcellular Targeted Nanohoop for One- and Two-Photon Live Cell Imaging. **2021**, 15, 15285-15293	5
598	Structural, optical and dielectric studies of wurtzite-type CdS quantum dots green synthesised using Ocimum sanctum (Tulsi) leaf extract. **2021**, 12, 035010	
597	Decoupling Radiative and Auger Processes in Semiconductor Nanocrystals by Shape Engineering. **2021**, 12, 9155-9161	0
596	Quantitative detection of aflatoxin B using quantum dots-based immunoassay in a recyclable gravity-driven microfluidic chip. **2021**, 190, 113394	3
595	Insight into the electronic, optical and transport nature of Al2CdX4 (X = S, Se and Te) employing the accurate mBJ approach: Novel materials for opto-electronic devices. **2021**, 135, 106098	1

594	Synthesis of near-infrared-emitting type-II In(Zn)P/ZnTe (core/shell) quantum dots. **2021**, 886, 161233	2
593	Recent advances in the nanoparticles synthesis using plant extract: Applications and future recommendations. **2022**, 1248, 131538	5
592	Atomistic tight-binding calculations of CdSe/CdS core/shell dot-in-hexagonal platelet nanocrystals with interesting electronic structures and optical properties. **2022**, 624, 413435	0
591	Nanomaterials: Synthesis, physicochemical characterization, and biopharmaceutical applications. **2021**, 33-70	
590	Nanomedicine and drug delivery. **2021**, 221-246	
589	Conclusion, Outlook, Future Aspects, and Utilization of Functional Bio-engineered Materials. **2021**, 429-438	
588	Microbially synthesized nanomaterials for remediation of contaminated soil and water environment. **2021**, 157-176	2
587	Semiconductor nanocrystal photocatalysis for the production of solar fuels. **2021**, 154, 030901	12
586	Down-Shifting of the Incident Light for Photovoltaic Applications. **2021**, 534-534	0
585	Optical Imaging Agents. **2021**, 603-625	
584	May nanoparticles offer chances to avoid the development of insecticide resistance in mosquitoes?. **2021**, 549-563	
583	The kinetic models in electron transfer processes in colloidal semiconductor photocatalysis. **2021**, 375-441	
582	Shell thickness dependent photostability studies of green-emitting □Giant□quantum dots.	3
581	A Concise Review on Multidimensional Silver Nanoparticle Health Aids and Threats. **2021**, 15, 457-468	
580	Quantum dots: A brief introduction. **2021**, 181-196	1
579	Synthesis of carbon nanomaterials by chemical vapor deposition method using green chemistry principles□**2021**, 273-314	2
578	Magic-sized CdSe nanoclusters: a review on synthesis, properties and white light potential. **2021**, 2, 1204-1228	12
577	Oxi-Redox Selective Breast Cancer Treatment: An In Vitro Study of Theranostic In-Based Oxide Nanoparticles for Controlled Generation or Prevention of Oxidative Stress. **2021**, 13, 2204-2217	2

576	Correlative Light and Electron Microscopy: Methods and Applications. 1-10	1
575	Organically Modified Quantum Dots in Chemical and Biochemical Analysis. 377-403	1
574	Surface-Enhanced Raman Spectroscopy for Glucose Sensing. 421-443	1
573	Progress of Nanobiomaterials for Theranostic Systems. 435-476	2
572	Top-Down Versus Bottom-Up. 41	1
571	Properties. 371-454	1
570	Semiconductor Quantum Dots for Analytical and Bioanalytical Applications. 455-511	3
569	Monitoring chromosome rearrangements. **2005**, 570, 19-41	1
568	Recognizing DNA Splicing. **2006**, 12-26	3
567	Engineering Biocompatible Quantum Dots for Ultrasensitive, Real-Time Biological Imaging and Detection. **2006**, 137-156	4
566	Use of Nanoparticles as Building Blocks for Bioapplications. **2007**, 353-376	5
565	Quantum Dots and Targeted Nanoparticle Probes for In Vivo Tumor Imaging. **2008**, 413-425	1
564	Investigating the Dynamics of Cellular Processes at the Single Molecule Level with Semiconductor Quantum Dots. **2008**, 427-441	1
563	Targeting Vascular Epitopes Using Quantum Dots. **2008**, 443-461	2
562	(Super)paramagnetic Nanoparticles: Applications in Noninvasive MR Imaging of Stem Cell Transfer. **2008**, 91-140	3
561	Single-Molecule FRET: Methods and Biological Applications. **2009**, 129	2
560	Fluorescent nanoparticle for bacteria and DNA detection. **2007**, 620, 129-35	12
559	Integrated DNA Biochips: Past, Present and Future. **2007**, 1-9	0

558	Nanoparticles for Cancer Diagnosis and Therapy. **2009**, 209-235	5
557	QUANTUM DOT BIO-TEMPLATE FOR RAPID DETECTION OF PATHOGENIC SUBSTANCES. **2006**, 159-173	1
556	Encyclopedia of Sustainability Science and Technology. **2012**, 4642-4673	2
555	Hydrogels-Based Drug Delivery System with Molecular Imaging. **2010**, 179-200	1
554	Surface Plasmon Enhanced Solid-State Light-Emitting Devices. **2010**, 27-46	3
553	Ecotoxicological Impact of ZnO and CdE (E = S, Se, Te) Quantum Dots on Microorganisms. **2013**, 287-305	1
552	Lab on a Wire: Application of Silicon Nanowires for Nanoscience and Biotechnology. **2014**, 241-278	2
551	Auger Processes in Nanosize Semiconductor Crystals. **2003**, 52-72	13
550	Quantum dots as biophotonics tools. **2014**, 1199, 3-9	4
549	In vivo approaches to assessing the toxicity of quantum dots. **2014**, 1199, 179-90	2
548	Quantum dot-antibody conjugates via carbodiimide-mediated coupling for cellular imaging. **2014**, 1199, 67-83	9
547	Fluorochromes: properties and characteristics. **2010**, 588, 123-34	7
546	High-throughput T-cell epitope discovery through MHC peptide exchange. **2009**, 524, 383-405	38
545	Quantum dot hybrid gel blotting: a technique for identifying quantum dot-protein/protein-protein interactions. **2009**, 544, 381-91	2
544	MicroPET, MicroSPECT, and NIR fluorescence imaging of biomolecules in vivo. **2009**, 544, 461-81	2
543	Construction and hyperspectral imaging of quantum dot lysate arrays. **2012**, 823, 311-24	2
542	Imaging vasculature and lymphatic flow in mice using quantum dots. **2009**, 574, 63-74	6
541	Labeling of mesenchymal stem cells with bioconjugated quantum dots. **2011**, 680, 61-75	25

540	Real-time quantum dot tracking of single proteins. **2011**, 726, 51-62	10
539	Introduction. **2012**, 1-5	1
538	Quantum dot-based single-molecule microscopy for the study of protein dynamics. **2013**, 1026, 71-84	3
537	Nanomedicine: Diagnosis, Treatment, and Potential Prospects. **2020**, 297-331	2
536	Surface Engineering in Alloyed CdSe/CdSexCdS1−x/CdS Core-Shell Colloidal Quantum Dots for Enhanced Optoelectronic Applications. **2020**, 189-205	2
535	Polymer-Functionalized NIR-Emitting Nanoparticles: Applications in Cancer Theranostics and Treatment of Bacterial Infections. **2020**, 231-277	2
534	Exciton dynamics and energy transfer processes in semiconductor nanocrystals. **2008**, 277-310	4
533	Layer-by-layer (LBL) assembly with semiconductor nanoparticles and nanowires. **2008**, 197-216	3
532	Introduction. **2015**, 1-15	1
531	Optical Imaging. **2017**, 403-490	1
530	Prospects for Rational Control of Nanocrystal Shape Through Successive Ionic Layer Adsorption and Reaction (SILAR) and Related Approaches. **2017**, 169-232	4
529	Green Nanotechnology for Biomedical, Food, and Agricultural Applications. **2019**, 2681-2698	9
528	Photoluminescent Carbon Nanomaterials: Properties and Potential Applications. **2009**, 128-153	2
527	Quantum Optics: Colloidal Fluorescent Semiconductor Nanocrystals (Quantum Dots) in Single-Molecule Detection and Imaging. **2008**, 53-81	2
526	Combined Endoscopic Optical Coherence Tomography and Laser Induced Fluorescence. **2008**, 787-823	2
525	Functionalised Inorganic Nanoparticles for Biomedical Applications. **2009**, 129-170	1
524	Nanomaterial-Enhanced Fluorescence Polarization and Its Application. **2012**, 3-25	2
523	Quantum Dots for Biological Imaging. **2013**, 501-511	1

522	Spectral Imaging of Single CdSe/ZnS Quantum Dots Employing Spectrally- and Time-resolved Confocal Microscopy. **2002**, 317-335	2
521	The Cognitive, Instrumental and Institutional Origins of Nanoscale Research: The Place of Biology. **2011**, 221-242	1
520	Emerging Technologies: Biosecurity and Consequence Management Implications. **2012**, 25-33	3
519	Synthesis, Assembly, and Processing of Nanostructures. **2000**, 71-93	1
518	Applications: Biotechnology, Medicine, and Healthcare. **2000**, 153-172	2
517	Major Nano-based Products: Nanomedicine, Nanosensors, and Nanodiagnostics. **2020**, 211-228	2
516	Nanograins: II. Plasticity and Yield Stress. **2014**, 571-601	3
515	Laser Ablation-Based Synthesis of Nanomaterials. **2006**, 1-36	6
514	Photonic glasses. **2001**, 141-162	3
513	Coherent optical spectroscopy and manipulation of single quantum dots. **2003**, 281-365	2
512	Room temperature preparation of fluorescent starch nanoparticles from starch-dopamine conjugates and their biological applications. **2018**, 82, 204-209	20
511	Synthesis of Colloidal Quantum Dots with an Ultranarrow Photoluminescence Peak. **2021**, 33, 1799-1810	10
510	Colloidal Quantum Dots as Platforms for Quantum Information Science. **2021**, 121, 3186-3233	34
509	Probing intermediates of the induction period prior to nucleation and growth of semiconductor quantum dots. **2017**, 8, 15467	60
508	Extracellular biosynthesis of biocompatible CdSe quantum dots. **2019**, 13, 962-966	2
507	Facile one-pot low-temperature solid-state approach towards phase transformation of nanoCdS. **2014**, 9, 731-735	6
506	Strong fluorescence blinking of large-size all-inorganic perovskite nano-spheres. **2020**, 31, 215204	2
505	Enhanced circular dichroism of TDBC in a metallic hole array structure. **2020**, 29, 097306	3

504	Toward the Emergence of Nanoneurosurgery: Part IIProgress in Nanoscience, Nanotechnology, and the Comprehension of Events in the Mesoscale Realm. **2005**, 57, 606-634	12
503	Characterization of fluorescent proteins with intramolecular photostabilization.	3
502	A novel pollen-tracking method: using quantum dots as pollen labels.	2
501	Composition-dependent energy transfer from alloyed ternary CdSeS/ZnS quantum dots to Rhodamine 640 dye. **2018**, 12, 1	1
500	Nano-Crystalline Quartz Prepared by AP-CVD. **2005**, 8, C72	0
499	Assay Miniaturization. **2001**,	3
498	Organically capped silicon nanocrystals. **2017**, 367-398	1
497	Fluorescence Microscopy and Spectroscopy of Individual Semiconductor Nanocrystals. **2005**, 103-123	1
496	Nanoparticles for Solar Spectrum Conversion. **2010**, 351-390	1
495	- Elastic Scattering of Soft X-rays from Free Size-Selected Nanoparticles. **2010**, 420-437	4
494	- Enhancement Techniques for Fingerprints in Blood. **2012**, 236-257	9
493	Toxicology of Nanomaterials. **2006**, 217-233	1
492	Small- molecule labeling probes. **2014**, 98-123	2
491	Preparation of Ultrafine CdS in an Aqueous Solution: Surface Modification with a Carboxylgroup for Using a Fluorescent Probe.. **2001**, 34, 700-702	2
490	Multi-Color Emission in Quantum-Dot-Quantum-Well Semiconductor Heteronanocrystals. **2009**, 116, 598-602	19
489	DNA Assisted Synthesis, Characterization and Optical Properties of Zinc Oxide Nanoparticles.	3
488	The use of nanotechnology in the agriculture. **2015**, 3, 207-223	23
487	Ratiometric optical sensor for high-resolution imaging of pH with low cross-talk. **2018**, 57, 9922-9928	3

486	Reduction of fluorescence resonance energy transfer by space control between quantum dots via direct bonding of reactive ligands to the polymer matrix for color conversion films. **2019**, 36, 1479	3
485	Optical properties of neodymium ions in nanoscale regions of gallium nitride. **2020**, 10, 2614	3
484	Rapid nanoparticle-mediated monitoring of bacterial metabolic activity and assessment of antimicrobial susceptibility in blood with magnetic relaxation. **2008**, 3, e3253	39
483	Fluorescent nanocrystals reveal regulated portals of entry into and between the cells of Hydra. **2009**, 4, e7698	38
482	CdSe quantum dot (QD)-induced morphological and functional impairments to liver in mice. **2011**, 6, e24406	48
481	Determination of a threshold dose to reduce or eliminate CdTe-induced toxicity in L929 cells by controlling the exposure dose. **2013**, 8, e59359	21
480	Inhibition of STAT3 by niclosamide synergizes with erlotinib against head and neck cancer. **2013**, 8, e74670	59
479	CLAVATA3 dodecapeptide modified CdTe nanoparticles: a biocompatible quantum dot probe for in vivo labeling of plant stem cells. **2014**, 9, e89241	6
478	Simultaneous multi-species tracking in live cells with quantum dot conjugates. **2014**, 9, e97671	21
477	Quantum Dots Reveal Shifts in Organic Nitrogen Uptake by Fungi Exposed to Long-Term Nitrogen Enrichment. **2015**, 10, e0138158	6
476	New generation of oxide-based nanoparticles for the applications in early cancer detection and diagnostics. **2020**, 9, 274-302	8
475	Biological nanoscale fluorescent probes: From structure and performance to bioimaging. **2020**, 39, 209-221	8
474	Photoluminescent Semiconductor Nanocrystals for Fingerprint Detection. **2000**, 45, 14727J	3
473	Cellular imaging and surface marker labeling of hematopoietic cells using quantum dot bioconjugates. **2006**, 12, 94-8	16
472	The Use of Iron Oxide Nanoparticles for Pancreatic Cancer Therapy. **2014**, 1,	5
471	Plastic scintillator enriched Gd-containing nanoparticles. **2014**, 21, 414-420	2
470	Analysis of conditions for synthesis of CdS:Mn nanoparticles. **2015**, 18, 74-78	3
469	Environmentally responsive polymeric "intelligent" materials: the ideal components of non-mechanical valves that control flow in microfluidic systems. **2010**, 27, 1-14	4

468	Optical imaging probes in oncology. **2016**, 7, 48753-48787	37
467	Potential clinical applications of quantum dots. **2008**, 3, 151-67	137
466	Quantum dot-based nanoprobes for in vivo targeted imaging. **2013**, 13, 1549-67	54
465	Targeting Tumors with Small Molecule Peptides. **2016**, 16, 489-508	15
464	Nanomedicine and Early Cancer Diagnosis: Molecular Imaging using Fluorescence Nanoparticles. **2020**, 20, 2737-2761	5
463	Amalgamation of Stem Cells with Nanotechnology: A Unique Therapeutic Approach. **2019**, 14, 83-92	13
462	Antimicrobial Photothermal Treatment of Pseudomonas Aeruginosa by a Carbon Nanoparticles-Polypyrrole Nanocomposite. **2019**, 9, 661-672	9
461	Gold and nano-gold in medicine: overview, toxicology and perspectives. **2009**, 7, 75-91	129
460	Biomedical Applications of Reactive Oxygen Species Generation by Metal Nanoparticles. **2020**, 14,	42
459	Ultrasensitive Materials for Electrochemical Biosensor Labels. **2020**, 21,	6
458	Aqueous Phase Preparation of CdTe Nanorods and its Application in Recognition of Cu2+ Ions. **2009**, 24, 251-254	3
457	Preparation and Characterization of Polymer-CdSe/ZnS QDs Composite Thin Film. **2010**, 25, 700-704	4
456	Synthesis of Effective and Qualified Cu-doped ZnSe Quantum Dots and Their Optical Properties. **2013**, 28, 159-164	3
455	Hot Topic and Challenge of Semiconductor Quantum Dots as Fluorescence Labels*. **2010**, 37, 103-110	1
454	Pyrolysis Synthesis of CdSe/ZnS Nanocrystal Quantum Dots and Their Application to Light-Emitting Diodes. **2008**, 18, 379-383	2
453	Enzyme-Conjugated CdSe/ZnS Quantum Dot Biosensors for Glucose Detection. **2009**, 19, 44-49	2
452	Synthesis and Characterization of CdSe Quantum Dot with Injection Temperature and Reaction Time. **2012**, 22, 140-144	3
451	Rapid Detection of Campylobacter jejuni in Poultry Products Using Quantum Dots and Nanobeads Based Fluorescent Immunoassay. **2014**, 13, 253-259	7

450	Optical Characteristics of CdSe/ZnS Quantum Dot with Precursor Flow Rate Synthesized by using Microreactor. **2016**, 23, 91-94	3
449	Fabrication of Visible-Light Sensitized ZnTe/ZnSe (Core/Shell) Type-II Quantum Dots. **2018**, 55, 510-514	5
448	Biotoxicity of CdS/CdSe Core-Shell Nano-Structures. **2016**, 05, 1-8	8
447	An Study on the Cytotoxicity and Genotoxicity of Silver Sulfide Quantum Dots Coated with Meso-2,3-dimercaptosuccinic Acid. **2019**, 16, 282-291	6
446	Characteristics of Silver-Hydroxyapatite/PVP Nanocomposite. **2010**, 1, 1-3	8
445	Synthesis of the Water Dispersible L-Valine Capped ZnS:Mn Nanocrystal and the Crystal Structure of the Precursor Complex: [Zn(Val)2(H2O)]. **2006**, 27, 1809-1814	24
444	Development of NIR Emitted CdTe Quantum Dots by Concentration Control Method. **2007**, 28, 1637-1638	4
443	Detection of Avidin Based on Rugate-structured Porous Silicon Interferometer. **2007**, 28, 2083-2088	8
442	Surfactant Induced Photostability Enhancements of Thiol Coated Quantum Dot Nanocolloids. **2008**, 29, 249-251	6
441	Preparation, Characterization and Toxicological Impacts of Monodisperse Quantum Dot Nanocolloids in Aqueous Solution. **2008**, 29, 303-304	9
440	Bioanalytical Application of SERS Immunoassay for Detection of Prostate-Specific Antigen. **2010**, 31, 1215-1218	26
439	Evaluation of Toxicity and Gene Expression Changes Triggered by Quantum Dots. **2010**, 31, 1555-1560	12
438	SERS Immunoassay Using Microcontact Printing for Application of Sensitive Biosensors. **2011**, 32, 4281-4285	1
437	Syntheses and Properties of ZnS:Mn/ZnS Core-Shell Quantum Dots Prepared via Thermal Decomposition Reactions of Organometallic Precursors at Various Reaction Temperatures. **2009**, 53, 677-682	1
436	28-Day Oral Toxicity of Cadmium Selenide in Sprague-Dawley Rats. **2009**, 25, 140-146	2
435	Non-blinking dendritic crystals from C-dot solution. **2015**, 16, 211-214	5
434	Diagnosing emerging and reemerging infectious diseases: the pivotal role of the pathologist. **2011**, 135, 83-91	20
433	Biomedical Application of Carbon Nanotubes for Proteins Extraction and Seperation. **2016**, 6, 126-143	2

432	Synthesis and optical properties of lanthanides doped ultrasmall NaYF4 markers for bio-medical applications. **2011**, 27, 154-157	1
431	Quantum dots for cancer research: current status, remaining issues, and future perspectives. **2012**, 9, 151-63	89
430	Photoacoustic and surface photovoltaic characteristics of L-Cysteine-capped ZnSe quantum dots with a core-shell structure. **2016**, 65, 038101	2
429	CdAgAlloy@polymer dots of Biginelli polyamide for the highly sensitive and selective recognition of nerve agent mimics in an aqueous and vapor phase. **2021**, 9, 16721-16731	0
428	Low-Cost Water Soluble Silicon Quantum Dots and Biocompatible Fluorescent Composite Films. **2021**, 38, 2100173	2
427	Size-Controlled Indium Phosphide Quantum Dots for Bright and Tunable Light Emission by Simple Hindered Diamine Addition. **2021**, 4, 11105-11114	
426	Cd+2-sensing property of highly luminescent CdTe nanocrystals in the presence of Na2S2O3. **2021**, 23, 1	
425	Selective Thermal Transformation of Automotive Shredder Residues into High-Value Nano Silicon Carbide. **2021**, 11,	0
424	Time for NanoNeuro. **2021**, 18, 1287-1293	4
423	Versatile Types of Inorganic/Organic NIR-IIa/IIb Fluorophores: From Strategic Design toward Molecular Imaging and Theranostics. **2021**,	34
422	Development of a Single Quantum Dot-Mediated FRET Nanosensor for Sensitive Detection of Single-Nucleotide Polymorphism in Cancer Cells. **2021**, 93, 14568-14576	8
421	Iron oxide nanoparticles in biological systems: Antibacterial and toxicology perspective. **2021**, 4, 100027	11
420	Statements on Societal Implications. **2001**, 25-327	
419	Light and Life. **2001**, 1273-1357	
418	State and prospects of creating new generation microsatellites: new materials, nanotechnology and architecture. **2001**, 7, 53-65	1
417	Self-Assembled Ordered Nanostructures. **2003**, 1297-1333	
416	Carrier dynamics, optical nonlinearities, and optical gain in nanocrystal quantum dots. **2003**, 73-111	
415	Protein Array Detection with Nanoparticle Fluorescent Probes by Laser Confocal Scanning Fluorescence Detection. **2003**, 91-99	1

414 Synthesis, simulation & spectroscopy: physical chemistry of nanocrystals. **2003**, 665-696

413 Semiconductor Quantum Dots for Multicolor Fluorescence Imaging and Spectroscopy of Single Cancer Cells. **2003**, 773, 151

412 Quantum Dot Bioconjugates as Energy Donors in Fluorescence Resonance Energy Transfer Assays. **2003**, 773, 791

411 Diagnosis of Prion Diseases by Multispectral Techniques. **2003**,

410 Semiconductor Quantum Dots for Optoelectronic Applications. **2004**, 249-273

409 Nanobiology in Cardiology and Cardiac Surgery. **2004**,

408 Nanobiotechnology. **2004**,

407 SEMICONDUCTOR MATERIALS | Quantum Dots. **2005**, 408-417

406 Potential Risks and Remedies. **2005**,

405 Interparticle Structural and Spatial Properties of Molecularly Mediated Assembly of Nanoparticles. **2005**, 551-576

404 Biomolecular Functionalization and Organization of Nanoparticles. **2005**, 227-267

403 Uniform PbS Hopper (Skeletal) Crystals Grown by a Solution Approach [Retracted]. **2005**, 34, 1570-1571

402 Aseptic Processing: Basic Principlesand Advantages. **2005**, 2275-2286

401 Silicon Nanoparticles for Biophotonics. **2007**, 77-98

400 Analytical Imaging and Microscopy Techniques. **2007**, 40-68 4

399 Nanogold in Cancer Therapy and Diagnosis.

398 Nanoprobe-Based Affinity Mass Spectrometry for Cancer Marker Protein Profiling.

397 Nanoparticles for Magnetic Resonance Imaging of Tumors.

396 Quantum Dot Modification and Cytotoxicity. **2008**, 799-809

395 Design of the solid phase for protein arrays and use of semiconductor nanoparticles as reporters in immunoassays. **2008**, 395-II

394 Fabrication of Optically Encoded Images on Porous Silicon. **2008**, 17, 46-50

393 Chapter 3:Resistive-pulse Sensing and On-chip Artificial Pores for Biological Sensing. **2008**, 60-81

392 Colloids as Light Scattering and Emission Markers for Analysis of Blood. **2008**, 1-41

391 In-vitro and in-vivo Biological Behaviour of Micro and Nanoparticles. **2008**, 11-37

390 Nanotechnology Provides New Tools for Biomedical Optics. **2008**,

389 Nanotechnology in Stem Cell Biology and Technology. **2008**, 1

388 Semiconductor Quantum Dots for Molecular and Cellular Imaging. **2008**,

387 Study on the Resistance to Aging of CdS Quantum Dots Encapsulated by PAMAM Dendrimers. **2008**, 23, 379-382

386 Fabrication of Ultrathin Films of CdTe Quantum Dots by Electrostatic Self-assembly Method. **2008**, 23, 557-561

385 DNA Hybridization. **2008**, 1122-1133

384 Nanocrystals. **2008**, 2665-2675

383 Nanocrystals. **2008**, 2676-2696

382 The Emergence of Magnetic and Fluorescent Multimodal Nanoparticles as Contrast Agents in Bioimaging. **2008**, 353-392

381 FloDots for Bioimaging and Bioanalysis. **2008**, 255-282

380 Large-Scale Ab Initio Study of Size, Shape, and Doping Effects on Electronic Structure of Nanocrystals. **2009**, 193-211

379 Micro- and Nanoscale Technologies in High-Throughput Biomedical Experimentation. **2009**, 314-346

378 Applying Nanotechnology to Revolutionary Chemical and Biological Countermeasures. **2009**, 29-87

377 Microfluidic chips designed for measuring biomolecules through a microbead-based quantum dot fluorescence assay. **2009**, 544, 53-67

376 Blinking Kinetics of Single CdSe/ZnS Nanocrystals by Photon-Counting Statistics at High Temporal Resolution. **2009**, 7, 701-707

375 Optical Tools. **2009**, 253-373

374 Fluorescent Nanocrystals and Proteins. **2009**, 225-254

373 Fabrication and Assembly of Nanomaterials and Nanostructures for Biological Detections. **2009**, 76-95

372 High-Throughput Screening of Vapor Selectivity of Multisize CdSe Nanocrystal/Polymer Composite Films. **2009**, 117-132

371 Preparation and Cellular Uptake of Hydrophobic Quantum Dots Encapsulated in Poly-L-Lactic Acid Film. **2009**, 39, 1-6

370 Molecular Imaging: Basic Approaches. **2010**, 105-119

369 Development of Nanocrystal Molecules for Plasmon Rulers and Single Molecule Biological Imaging. **2010**, 175-186

368 Light Emission from CdS Quantum Dots Stabilized by Sugars. **2009**, 116, S-166-S-168

367 Optical properties and interactions of nanoscale materials. **2009**, 125-205

366 Synthesis and Surface Modification of Fluorescent Semiconductor Nanoparticles, and Their Use for Biomedical Applications. **2010**, 47, 646-655

365 Nanoporous Template Synthesized Nanotubes for Bio-related Applications. **2010**, 165-200

364 Nanocrystals Nanowires Nanolayers. **2010**, 169-207

363 Single-Molecule Detection. **2010**, 13-1-13-39

362 Preparation and Application of Fluorescein Isothiocynate Fluorophore Nano-composites. **2010**, 38, 202-206

361 Nanomaterials Incorporated Bioelectronics. 1

360 Application of Functional Nanomaterials in Food Safety. **2010**, 38, 442-448 1

359 CdTe Nanoparticles Labeled with Anti-Fluorethene Antibody and Fluorescent Immunoassay of Fluoranthene in Water Samples. **2010**, 38, 385-388

358 Biomolecule Nanoparticle Hybrid Systems. 139

357 Visualization of Cardioplegia Delivery. **2011**, 269-282

356 Site-Specific Labeling of Proteins in Living Cells Using Synthetic Fluorescent Dyes. **2011**, 111-130

355 Wavelength Engineered Luminescent Material Incorporating Colloidal Quantum Dot within a Nanoporous Gallium Nitride Matrix. **2011**,

354 Toxicological Models Part A: Toxicological Studies of Nanoparticles on Biological Targets and Attempts to Attenuate Toxicity by Encapsulation Techniques. **2011**, 359-377

353 Multiplexed Detection Using Quantum Dots.

352 Molecular Imaging. **2011**, 305-328

351 Simple and inexpensive immunoassay-based diagnostic tests. **2013**, 183-196

350 Quantum Dot Imaging of Neural Cells and Tissue. **2012**, 151-168 1

349 Use of Nanotechnology for Enhancing of Cancer Biomarker Discovery and Analysis: A Molecular Approach. 175-192

348 X-Ray Imaging Basics. **2011**, 226-239

347 The Study on Toxicokinetics and Distribution of CdSe Quantum Dots in Rats. **2012**, 1361-1365 1

346 Modeling Silicon Nanostructure Surface Functionalization for Biological Detections. **2012**, 33-51

345 Cell Internalizing Anti-Mortalin Antibody for Generation of Illuminating MSCs for Long-Term In vitro and In vivo Tracking. **2012**, 295-305

344 Development of bright phosphors using glasses incorporating semiconductor nanoparticles. **2012**, 558-561

343 SYNTHESIS OF AMPHIPHILIC CHITOSAN DERIVATIVES AND THEIR APPLICATION IN ENCAPSULATION OF QDs. **2012**, 012, 180-186 1

342 References. 177-198

341 Monitoring Antigen-Specific Responses in Clinical Trials of Cancer Immunotherapy. **2013**, 425-453

340 II-VI Semiconductor Nanostructures. **2012**, 167-235

339 Functionalized Nanomaterials. **2013**, 581-609

338 Functional Materials for Signal Amplification of Molecular Beacons. **2013**, 91-106

337 The Synthesis and Optical Properties of Silica Coated CdSe/ZnS QDs. **2013**, 26, 221-226

336 DNA as Nanostructuring Element for Design of Functional Devices. **2014**, 85-121

335 Introduction. **2014**, 1-18

334 Chapter 8:Novel Lab-on-a-Chip Sensing Systems: Applications of Optical, Electrochemical, and Piezoelectric Transduction in Bioanalysis. **2014**, 224-269

333 Physics and Chemistry of Colloidal Semiconductor Nanocrystals. **2014**, 15-38

332 Properties of DNA-Capped Nanoparticles. **2014**, 1227-1262

331 Detection Based on Plasmon Resonance Energy Transfer. **2014**, 83-88

330 Silicon Nanostructures by Self-Assembly and Metal-Assisted Etching. **2014**, 101-134

329 Study of Plasma Induced Gas Phase Growth Mechanism of TiO2/Al2O3 Multilayer Thin Films and Its Correlation with its Morphological and Electrical Properties. **2014**, 221-240 1

328 Nanoparticles: Generation, Functionalization, and Ion Sensing. 3179-3191

327 Luminescent Quantum Dots for Diagnostic and Bioimaging Applications. **2014**, 535-554

326 Photothermal detection of single nanoparticle by using single element interferometer. **2015**,

325 Suppression of the blinking of single QDs by using an N-type semiconductor nanomaterial. **2015**, 64, 247803 4

324 Quantitative Multiplexed Quantum Dot Based In Situ Hybridization in Formalin-Fixed Paraffin-Embedded Tissue. **2015**, 427-449

323 Nanosuspensions in Nanobiomedicine. **2015**, 240-276

322 Semiconductor Quantum Dots and Energy Transfer for Optical Sensing and Bioanalysis: Principles. **2015**, 179-196

321 Photothermal imaging for nanoparticle characterization using single element interferometer. **2015**,

320 Fluorescence Bioimaging with Applications to Chemistry. **2015**, 27-71

319 Fluorescence resonance energy transfer in a aqueous system of CdTe quantum dots and Rhodamine B with two-photon excitation. **2015**, 64, 108201 2

318 Structures and Electric Properties of Semiconductor clusters. **2015**, 1-41

317 Rapid Synthesis of AgInS2/ZnS Core/Shell Nanoparticles and Their Luminescence Property. **2015**, 4, 45-47

316 Aberrant Signaling Pathways: Hallmark of Cancer Cells and Target for Nanotherapeutics. 1-35

315 Hybrid and Coupled Photonic System between Nanoparticle and Integrated Microresonator. **2015**, 1-30 1

314 Electrochemical Synthesis of Metal Chalogenide Nanorods, Nanotubes, Segmented Nanorods, and Coaxial Nanorods. **2016**, 101-133

313 Research Background. **2016**, 1-30

312 Recent Advances of Biosensors in Food Detection Including Genetically Modified Organisms in Food. 355-387

311 Enzyme Sensors Based on Nanostructured Materials. 229-275

310 Encyclopedia of Nanotechnology. **2016**, 3389-3399

309 Organic/Inorganic Hybrid Solar Cells Based on Colloidal Quantum Dots. **2016**, 89, 268-273

308 Fluorescent Nanohybrids: Cancer Diagnosis and Therapy. 3420-3444

307 Functionalized Nanomaterials. **2016**, 123-150

306 Advances of Quantum Dots as Fluorescent Probes in Biological and Medical Fields. **2016**, 06, 9-13

305 Immunotherapy and Vaccines. **2016**, 441-464

304 Semiconducting Polymer Dot Bioconjugates. 1-10

303 Förster Resonant Energy Transfer in CdTe Nanocrystal Quantum Dot Structures. **2016**, 99-132

302 Synthesis and Characterization of Nanocrystals and Nanoparticles. **2016**, 1-38

301 Selected Applications of QDs and QD-Based Nanoassemblies. **2016**, 245-294

300 Fundamentals. **2017**, 15-44

299 Evaluation of quantum dot conjugated antibodies for immunofluorescent labelling of cellular targets.

298 Therapeutic efficacy of nanoparticles synthesized by different plants against different hepatotoxicants in the field of medical sciences. **2016**,

297 Nanotechnology-Based Stem Cell Applications and Imaging. **2017**, 17-35 1

296 Introduction. **2017**, 1-9

295 The Application of Immunochromatographic Analysis in Early Detection of Gastric Cancer. **2017**, 129-156

294 Nanosuspensions in Nanobiomedicine. **2017**, 1286-1313

293 Chapter 13:Future of Nanogels for Sensing Applications. **2017**, 261-282 3

292 Optical Properties of Semiconductor Nanocrystals into the Glass and Colloidal Environments for New Technological Applications. **2017**, 155-175

291 Charge-Trap-Non-volatile Memory and Focus on Flexible Flash Memory Devices. **2017**, 55-89 1

290 Assessment of Chromium Oxide Nanoparticles Intake in Rattus norvegicus by Primary Renal Function Markers and RBC Architecture. **2017**, 2, 008-012 1

289 Nanoparticle-Assisted Stimulated Emission Depletion (STED) Super-Resolution Nanoscopy. **2017**, 247-298 0

288 Fluorescent Nanohybrids: Cancer Diagnosis and Therapy. **2017**, 560-584

287 Chapter 32: The Present and Future of Nanotechnology in Human Health Care. **2017**, 775-806

286 Semiconducting Polymer Dot Bioconjugates. **2017**, 1382-1392

285 Silicon nanoparticles from pulsed laser ablation. **2017**, 211-226

284 Silicon Nanoparticles for Biophotonics. **2017**, 307-334

283 Silicon Nanoparticles for Biophotonics. **2017**, 307-334

282 Literature Review. **2018**, 1-50

281 Optical Dynamics in Single Semiconductor Quantum Dots. **2017**, 215-234

280 Introduction to Fundamental Concepts. **2018**, 1-26

279 Field Effect and Applications. **2018**, 51-81

278 Study on the Luminescence Properties of InP/ZnS Quantum Dot. **2018**, 08, 131-136

277 Application of Inorganic Nanomaterials in Imaging Diagnosis. **2018**, 07, 37-47

276 Characterization of the ligand structure and stoichiometry on quantum dots and gold nanocrystals using NMR spectroscopy. **2018**,

275 Photostability study of CdTe quantum dots using laser induced fluorescence. **2018**, 0

274 Nonlinear properties of CdSe/ZnS quantum dots colloidal solutions under one- and two-photon excitation by means of high-power ultrashort laser pulses. **2018**,

273 Properties of highly dispersed cadmium telluride systems obtained by electrospray method. **2018**, 53, 213-219

272 ZAIS-based colloidal QDs as fluorescent labels for theranostics: physical properties, biodistribution and biocompatibility. **2019**, 94-101 0

271 [redacted]AginS2/ZnS [redacted] [redacted] **2019**, 103-110

270	Preparation and Application of Semiconductor Fluorescent Probe. **2020**, 294-299	
269	Sensing of Ozone Gas by Using CdSe-Based Photoluminescent Quantum Dots and Effects of Combining Noble Metals and Quantum Dots. **2019**, 92, 362-368	
268	Fabrication of C-rich a-SiC Semiconductor Nanoparticles Having Variable Optical Gaps and Particle Sizes Using High-density Plasma in Localized Area. **2020**, 88, 397-406	1
267	Bright and Stable Quantum Dot Light-Emitting Diodes. **2021**, e2106276	17
266	Water Effects on Colloidal Semiconductor Nanocrystals: Correlation of Photophysics and Photochemistry. **2021**, 143, 18721-18732	0
265	Stimuli-Responsive Zinc (II) Coordination Polymers: A Novel Platform for Supramolecular Chromic Smart Tools. **2021**, 13,	3
264	Microbiota and nanoparticles: Description and interactions. **2021**, 169, 220-240	1
263	Precise modulation of spatially distributed inorganic nanoparticles in block copolymers-based self-assemblies with diverse morphologies. **2021**, 22, 100616	0
262	CdSe Quantum Dots to Quantum Rods: Transition Studies and Evaluation of Sensitivity as Transducers for Biosensing Glucose. **2020**, 10, 29-38	1
261	Measuring the Hydrodynamic Radius of Colloidal Quantum Dots by Fluorescence Correlation Spectroscopy. **2020**, 2135, 85-93	
260	Electroceuticals for neural regenerative nanomedicine. **2020**, 213-257	1
259	Dextran-Functionalized Quantum Dot Immunoconjugates for Cellular Imaging. **2020**, 2135, 143-168	1
258	Nanoformulations in Human Health Conditions: The Paradigm Shift. **2020**, 13-42	
257	Fluorescent Cadmium Chalcogenide Nanoclusters in Ubiquitin. **2021**, 2, 2000127	
256	INVESTIGATION OF CdTe QUANTUM DOTS SYNTHESIS TECHNOLOGY FEATURES IN COLLOID SOLUTIONS BY PHOTOLUMINESCENT SPECTROSCOPY AND SURFACE PLASMON RESONANCE REFRACTOMETRY. **2020**, 55, 126-135	
255	Semiconductor Quantum Dots for NIR Bioimaging. **2021**, 73-84	
254	Synthesis and fluorescent properties of quinoxaline derived ionic liquids. **2020**,	1
253	Influence of zinc doping on the molecular biocompatibility of cadmium-based quantum dots: Insights from the interaction with trypsin. **2021**, 351, 109716	1

252 Application of Nanotechnology in Early Detection of Gastrointestinal Cancer. **2020**, 169-187 1

251 Biocompatible Fluorescent Nanomaterials for Molecular Imaging Applications. **2020**, 27-53

250 Multiplexed Detection of Cancer Serum Antigens with a Quantum Dot-Based Lab-on-Bead System. **2020**, 2135, 225-236 1

249 CHAPTER 7:Synthesis and Applications of Graphene Quantum Dots. **2020**, 131-173

248 Conjugated Polymers and Polymer Dots for Cell Imaging. **2020**, 155-180 1

247 Semiconductor Quantum Dots for Cell Imaging. **2020**, 17-48

246 Dendronised Polymers as Templates for In Situ Quantum Dot Synthesis. **2020**, 73, 658

245 Novel inclusion of engineered nanoparticles in horticultural sectors. **2020**, 4, 125-127

244 Recent Trends for Nanomedicine Safety. **2020**, 469-509

243 Latest Tools in Fight Against Cancer: Nanomedicines. **2020**, 139-164

242 Potential Role of Biomarkers, Biosensors, Technologies, and Computational Methods in Early Detection of Gastrointestinal Cancer. **2020**, 3-13

241 Quantum Dots Application in Biomolecules Interaction and Bioimaging. **2020**, 247-274

240 Liquid-Phase Synthesis of Multifunctional Nanomaterials: A Recent Update. **2020**, 1-56 1

239 Some features of Mn2+ EPR spectra in cubic nano-ZnS. **2020**, 23, 60-65 1

238 Soft chemistry of pure silver as unique plasmonic metal of the Periodic Table of Elements. **2020**, 92, 1007-10280

237 Perspectives of Hydrothermal Synthesis of Fluorides for Luminescence Applications. 277-303

236 Nanoparticle Reactions on Chip. **2004**, 39-50

235 Quantum Dots, a New Tool for Real-Time in Vivo Imaging. **2005**, 217-225

234	An On-Chip Artificial Pore for Molecular Sensing. **2006**, 35-53	
233	Surface Trafficking of Membrane Proteins at Excitatory and Inhibitory Synapses. **2008**, 369-406	
232	FUNDAMENTALS OF NANOBIOPHOTONICS. **2006**, 55-65	0
231	Optical Imaging Analysis of Atypical Nevi and Melanoma. **2006**, 399-408	
230	Optical Properties of Excitons in Structures of Reduced Dimensionality. **2007**, 371-410	
229	Site-Specific Labeling of Proteins in Living Cells Using Synthetic Fluorescent Dyes. **2011**, 111-130	0
228	MANUFACTURING AND POSITIONING (GENERATIONS) OF OIL-IN-WATER NANOSIZED EMULSIONS. **2020**, 169-223	
227	Luminescent Conjugated Polymer Dots for Biomedical Applications. **2021**, 197-230	
226	Biodistribution studies of protein cage nanoparticles demonstrate broad tissue distribution and rapid clearance in vivo. **2007**, 2, 715-33	107
225	Nanoparticles and cancer therapy: a concise review with emphasis on dendrimers. **2009**, 4, 1-7	92
224	Nanoparticles for biomedical imaging: fundamentals of clinical translation. **2010**, 9, 291-310	168
223	Quantum dots for molecular diagnostics of tumors. **2011**, 3, 29-47	6
222	Quantum dots for molecular imaging and cancer medicine. **2005**, 5, 213-8	28
221	Cerenkov imaging - a new modality for molecular imaging. **2012**, 2, 163-73	85
220	Synthesis and characterization of intrinsically radiolabeled quantum dots for bimodal detection. **2012**, 2, 122-35	20
219	In a "nutshell": intrinsically radio-labeled quantum dots. **2012**, 2, 136-40	21
218	Stem cell tracking with optically active nanoparticles. **2013**, 3, 232-46	22
217	Progress in Nanomedicine: Approved and Investigational Nanodrugs. **2017**, 42, 742-755	301

216	Expression of Tiam1 and Rac1 proteins in renal cell carcinoma and its clinical-pathological features. **2017**, 10, 11114-11121	2
215	Rapid detection of using magnetic nanobead-based immunoseparation and quantum dot-based immunofluorescence.. **2021**, 11, 38638-38647	1
214	Advances and Challenges of Fluorescent Nanomaterials for Synthesis and Biomedical Applications. **2021**, 16, 167	5
213	The effect of graphene on structure and optical properties of CdSe nanoparticles for optoelectronic application. **2021**, 898, 162946	1
212	Power in Numbers: Harnessing Combinatorial and Integrated Screens to Advance Nanomedicine.. **2022**, 2, 12-21	2
211	Biosynthesis of quantum dots and their usage in solar cells: insight from the novel researches. **2021**, 1	1
210	Interface polarization in heterovalent core-shell nanocrystals. **2021**,	11
209	Schiff base metal complexes driven quantum dots of ZnSe and CdSe. **2021**, 135, 109070	2
208	Nanotechnology: An Emerging Field in Protein Aggregation and Cancer Therapeutics. **2022**, 177-207	
207	Introducing the Tellurophene-Appended BODIPY: PDT Agent with Mass Cytometry Tracking Capabilities.. **2021**, 12, 1925-1931	0
206	Mechanism for the Pumping-Dependent Red Shift in the Amplified Spontaneous Emission Spectra of Colloidal Quantum Dots.	1
205	Chapter 6:Ligand Chemistry. **2014**, 166-223	
204	Synthesis, optical and structural characterisation of ZnS nanoparticles derived from Zn(ii) dithiocarbamate complexes. **2021**, 19, 1134-1147	1
203	Surface Chemistry and Properties of Magnetic Nanoparticles. **2021**, 31-44	1
202	Insights into the impact of photophysical processes and defect state evolution on the emission properties of surface-modified ZnO nanoplates for application in photocatalysis and hybrid LEDs.. **2022**,	0
201	Analysis of super-resolution single molecule localization microscopy data: A tutorial. **2022**, 12, 010701	0
200	SARS-CoV-2 detection using quantum dot fluorescence immunochromatography combined with isothermal amplification and CRISPR/Cas13a.. **2022**, 202, 113978	7
199	Half-metallicity in smallest cage-like cluster of CdTe with doping of transition metal atoms. **2022**, 30, 103104	1

198	Development of a single quantum dot-mediated FRET biosensor for amplification-free detection of ten-eleven translocation 2.. **2021**, 239, 123135	0
197	Doped organic charge-transfer cocrystal with tunable fluorescence of wide band emission. **2022**, 426, 113727	0
196	Selective and simultaneous detection of cell cytoplasm and nucleus using plasmon waveguide resonance based on self-referenced directional enhanced Raman scattering. **2021**,	
195	Nanotheranostics: Nanoparticles Applications, Perspectives, and Challenges. **2022**, 345-376	
194	Biogenic Sulfur-Based Chalcogenide Nanocrystals: Methods of Fabrication, Mechanistic Aspects, and Bio-Applications.. **2022**, 27,	1
193	Universal precursors dispersed in Vaseline-octadecene gel for nanocrystal synthesis. 1	2
192	Nanomaterials for Biophotonics. **2022**,	
191	Quantum Dots: An Emerging Approach for Cancer Therapy. **2022**, 8,	7
190	Past, present and future of indium phosphide quantum dots. 1	12
189	High-quantum yield alloy-typed core/shell CdSeZnS/ZnS quantum dots for bio-applications.. **2022**, 20, 22	3
188	Multifaceted Approaches to Engineer Fluorescence in Nanomaterials via a Focused Laser Beam. **2022**, 2, 1	0
187	Boosting the Near-Infrared Emission of AgS Nanoparticles by a Controllable Surface Treatment for Bioimaging Applications.. **2022**,	1
186	Ceramic-based upconversion phosphors. **2022**, 181-202	
185	Material properties and potential applications of CdSe semiconductor nanocrystals. **2022**, 105-153	0
184	Structural Correlations of the Nonlinear Optical Response in Polydiacetylene Nanotubes Hybridized with Gold Nanoparticles. **2022**, 126, 2763-2771	0
183	Morphology-controlled synthesis of Cu2S for efficient oxygen evolution reaction. **2022**, 907, 116020	1
182	Preparation of Functional Nanoparticles by Laser Process in Liquid and Their Optical Applications. **2022**, 237-259	
181	Energy Dissipation for Nanometer Sized Acoustic Oscillators.	0

180	An approach to the simultaneous detection of multiple biomarkers for the early diagnosis of liver cancer using quantum dot nanoprobes. **2022**, Publish Ahead of Print,	2
179	A Two-Pathway Model for the Evolution of Colloidal Compound Semiconductor Quantum Dots and Magic-Size Clusters.. **2022**, e2107940	4
178	Colloidal Inorganic Ligand-Capped Nanocrystals: Fundamentals, Status, and Insights into Advanced Functional Nanodevices.. **2021**,	13
177	Revealing Glycobiology by Quantum Dots Conjugated to Lectins or Borono-Lectins **2022**, 351-380	
176	Recent advances in the development and applications of conjugated polymer dots.. **2022**,	0
175	Insight into morphology dependent charge carrier dynamics in ZnSe-CdS nanoheterostructures.. **2022**,	1
174	Nanoparticles in dentistry. **2022**, 335-358	
173	High-efficiency visible-light photocatalytic H2O2 production using CdSe-based core/shell quantum dots.	0
172	Quantum Dots: Characteristics and Prospects from Diagnosis to Treatment. **2022**, 175-204	
171	Overview of the application of inorganic nanomaterials in breast cancer diagnosis. 1-19	0
170	Luminescence Properties of Cr3+ Doped LiGa5O8 Prepared by Solid-State Synthesis. **2022**, 96, 450-455	
169	Luminescence-Tunable ZnS-AgInS Nanocrystals for Cancer Cell Imaging and Photodynamic Therapy.. **2022**,	1
168	Preparation of Cadmium Telluride Quantum Dots Modified by Thioglycolic Acid. 915, 95-100	
167	Study of DNA/RNA Aggregation Linked to Cadmium Oxide (CdO) Nanoparticles by Aryl Mercaptanes with Various Chain Length. 13-34	
166	Enhanced fluorescence from semiconductor quantum dot-labelled cells excited at 280 nm.. **2022**,	
165	Impact of Silver Nanoparticles on Neurodevelopment and Neurodegeneration.	
164	Cytotoxic effect of plant extract-based nanoparticles on cancerous cells: a review. 1	0
163	Synthesis and characterization of InP/ZnSe/ZnS quantum dots for photo-emissive color conversion. **2022**, 12, 1717	0

162	Dynamic Tuning of the Bandgap of CdSe Quantum Dots through Redox-Active Exciton-Delocalizing N-Heterocyclic Carbene Ligands.. **2022**,	2
161	Semiconductor Nanoplatelets as Ultra-Bright Fluorophores for Two-Photon Absorption Cell Imaging. **2022**, 126, 5658-5664	1
160	Anomalous Emission Shift of CdSe/CdS/ZnS Quantum Dots at Cryogenic Temperatures.. **2022**,	2
159	Characterization of Quantum Dots with Hyperspectral Fluorescence Microscopy for Multiplexed Optical Imaging of Biomolecules.	
158	Amine as a bottom-line functionality on DDS surface for efficient endosomal escape and further subcellular targets. **2022**, 103303	
157	Transformation of an Aqueous Micellar Phase to a Bilayer of Gemini Surfactants on Gold Nanoparticles: A Steady-State and Time-Resolved Fluorescence and Fluorescence Anisotropy Study by Tuning the Precise Locations of Probes.	0
156	Binding interaction of 5-amino-2-mercaptobenzimidazole with Au-TiO2: inhibition of switch-on fluorescence. 1-6	
155	Study of Shell Thickness-Dependent Charge Transfer Dynamics in Green-Emitting Core/Shell Giant Quantum Dots.. **2021**,	3
154	A Composite Catalytic Oxidation-fluorescence Sensing System for 2,4-dichlorophenol Analysis based on Fe(III)PcTs-BuOOH-CdTe QDs. **2021**, 36, 896-902	
153	Synthesis, Structural and Optical Investigation of Cdse Semiconductor Quantum Dots. **2020**, 24, A1-A5	
152	Facile and wide-range size tuning of conjugated polymer nanoparticles for biomedical applications as a fluorescent probe.. **2022**, 12, 11606-11611	
151	Nanocarriers in drug delivery: Classification, properties, and targeted drug delivery applications. **2022**, 1-23	
150	RNA delivery for cancer gene therapy. **2022**, 375-424	
149	Novel Organic and Inorganic Nanoparticles as a Targeted Drug Delivery Vehicle in Cancer Treatment. **2022**, 117-161	0
148	Bleaching-resistant single-molecule fluorescence and FRET monitoring based on fluorophore exchange via transient DNA binding.	0
147	Image_1.TIF. **2018**,	
146	[Application of novel quantum dot-based molecularly imprinted fluorescence sensor in rapid detection]. **2021**, 39, 775-780	0
145	Synthesis of bio-templated clickable quantum dots and dual-emitting organic/inorganic complex for ratiometric fluorescence visual assay of blood glucose.	1

144	CHAPTER 9. Quantum Dots in Biological Imaging. **2022**, 278-321	0
143	Quantum Dots for Cancer-Related miRNA Monitoring.. **2022**,	5
142	Biophotonics in Dentistry. **2022**, 12, 4254	1
141	Hydrophilization parameters influencing the properties of shelled alloyed QDs. **2022**,	
140	Structural changes in selected human proteins induced by exposure to quantum dots, their biological relevance and possible biomedical applications.. **2022**, 26, 100405	0
139	Role of Atomic Structure on Exciton Dynamics and Photoluminescence in NIR Emissive InAs/InP/ZnSe Quantum Dots. **2022**, 126, 7576-7587	1
138	Optoelectronic Neural Interfaces Based on Quantum Dots.. **2022**,	2
137	Quantum Chemical Characterization and Design of Quantum Dots for Sensing Applications.. **2022**, 126, 2899-2908	1
136	Synthesis, properties and catalysis of quantum dots in C□ and C-heteroatom bond formations. **2022**,	
135	Size focusing of colloidal quantum dots under high monomer concentration.	
134	Dysbiosis of gut microbiota and intestinal damage in mice induced by a single intravenous exposure to CdTe quantum dots at low - concentration.	
133	Improved Surface Passivation of Colloidal Ge1□Snx Nanoalloys through Amorphous SiO2 Shell Growth.	0
132	In situ-Synthesized cadmium sulfide quantum dots in pore-forming protein and polysaccharide matrices for optical biosensing applications. **2022**, 217, 112607	1
131	A Green Approach for the Biosynthesis of Gold Nanoparticles Using Cuminum cyminum L. Seed and Its Application for Pain Management in Rats. **2022**, 26, 219-229	
130	The preparation of novel AIE fluorescent microspheres by dispersion polymerization. **2022**, 25, 175-183	
129	Organosilicone Compounds in Supercritical Carbon Dioxide. **2022**, 14, 2367	2
128	Chitosan-CdS Quantum Dots Biohybrid for Highly Selective Interaction with Copper(II) Ions. **2022**, 7, 21014-21024	2
127	Advances in quantum dot-based biosensors for DNA-modifying enzymes assay. **2022**, 469, 214674	5

126	Fluorescent sensor based on thiourea capped Mn doped ZnS quantum dots for the sensing of Cu2+ ions in water. **2022**, 18, 100710	
125	Photoluminescent inorganic nanoprobe-based pathogen detection.	
124	CdS Quantum Dots as Potent Photoreductants for Organic Chemistry Enabled by Auger Processes. **2022**, 144, 12229-12246	5
123	Microenvironmental Behaviour of Nanotheranostic Systems for Controlled Oxidative Stress and Cancer Treatment. **2022**, 12, 2462	1
122	Recent advances in nanotechnology and microfluidic-based approaches for isolation and detection of circulating tumor cells (CTCs). **2022**, 31, 100886	0
121	Nanoparticles in the diagnosis and treatment of vascular aging and related diseases. **2022**, 7,	4
120	A review on nanoparticles categorization, characterization and applications in drug delivery systems. **2022**, 121, 103407	
119	Biogenesis of Quantum Dots: An Update. **2022**, 7,	0
118	Surface plasmon-enhanced aptamer-based fluorescence detection of cocaine using hybrid nanostructure of cadmium-free ZnSe/In2S3 core/shell quantum dots and gold nanoparticles. **2022**, 433, 114131	1
117	Stable Monodisperse Pb1-xCdxS Quantum Dots for NIR-II Bioimaging by Aqueous Coprecipitation of Bimetallic Clusters.	
116	Green Route Synthesis and Characterization Techniques of Silver Nanoparticles and Their Biological Adeptness.	1
115	Direct Detection of Long-Range Interdomain Auger Recombination in Dumbbell-Shaped Quasi-Type-II Nanoparticle. **2022**, 13, 6845-6851	0
114	Electronic structure and transport properties of quantum dots. **2004**, 516, 249-304	1
113	Synthesis of Metal□Organic Frameworks Quantum Dots Composites as Sensors for Endocrine-Disrupting Chemicals. **2022**, 23, 7980	1
112	Green Synthesis of Gd(OH)3 and Eu:Gd(OH)3 Nanorods: Effect of Reaction Parameters on Morphology, Crystallinity and Thermal Conversion to Photoluminescent Oxide Nanorods.	
111	Realization of a Model-Free Pathway for Quantum Dot□Protein Interaction Beyond Classical Protein Corona or Protein Complex.	0
110	Stable Monodisperse Pb 1□x Cd x S Quantum Dots for NIR-II Bioimaging by Aqueous Coprecipitation of Bimetallic Clusters.	
109	Enabling ultranarrow blue emission linewidths in colloidal alloy quantum dots by decreasing the exciton fine structure splitting and exciton-phonon coupling.	

108	A Critical Scrutiny on Liposomal Nanoparticles Drug Carriers as Modelled by Topotecan Encapsulation and Release in Treating Cancer. **2022**, 2022, 1-7	
107	Investigating the impact of growth time of CdSe quantum dots on the structure and optical properties of its nanocomposites with SiO2 for improvement of optical devices. **2022**, 925, 166729	1
106	Quantum-Dot-Based Iron Oxide Nanoparticles Activate the NLRP3 Inflammasome in Murine Bone Marrow-Derived Dendritic Cells. **2022**, 12, 3145	0
105	Multifunctional nanotheranostics for near infrared optical imaging-guided treatment of brain tumors. **2022**, 190, 114536	2
104	Fabrication of transparent ultrathin films with ordered solid luminescence by LBL assembly of CdTe quantum dots with exfoliated vermiculite. **2022**, 230, 106710	0
103	Current progress of nanomedicine for prostate cancer diagnosis and treatment. **2022**, 155, 113714	1
102	Carbon dots in separation science. **2023**, 67-75	0
101	All-Optical Detection of Biocompatible Quantum Dots. **2022**, 35-65	0
100	Upconversion and Downconversion Quantum Dots for Biomedical and Therapeutic Applications. **2022**, 229-263	0
99	Magnetic alignment of rhodamine/magnetite dual-labeled microtubules probed with inverted fluorescence microscopy. **2022**, 94,	0
98	Oxidation of quantum dots encapsulated in block copolymer micelles as a function of polymer terminal charge. **2022**, 14, 11779-11789	0
97	Quantum Dots: Potential Cell Imaging Agent. **2022**, 191-207	0
96	Fluorescent Quantum Dots, A Technological Marvel for Optical Bio-imaging: A Perspective on Associated In Vivo Toxicity. **2022**, 143-163	0
95	Quantum Dots: Synthesis, Properties, and Applications. **2022**, 11-45	0
94	Quantum Dot: A Boon for Biological and Biomedical Research. **2022**, 209-228	0
93	Transition Metal Quantum Dots for the Electrocatalytic Hydrogen Evolution Reaction: Recent Progress and Challenges.	0
92	Microbial strategies to address environmental nanopollutants. **2022**, 151-179	0
91	Organic–Inorganic Nanohybrids in Medicine. **2022**, 77-106	0

90	Synthesizing active and durable cubic ceria catalysts (<6 nm) for fast dehydrogenation of bio-polyols to carboxylic acids coproducing green H2. **2022**,	0
89	Histochemistry in Advanced Cytometry: From Fluorochromes to Mass Probes. **2023**, 1-25	0
88	Optically Patternable Intensely Luminescent All-Inorganic Nanocrystals.	0
87	Low-Dimensional Organic Crystals: From Precise Synthesis to Advanced Applications. 2203961	1
86	The use of Trojan-horse drug delivery system in managing periodontitis. **2022**,	0
85	Highly Bright Silica-Coated InP/ZnS Quantum Dot-Embedded Silica Nanoparticles as Biocompatible Nanoprobes. **2022**, 23, 10977	0
84	Graphene quantum dots as a potential diagnostic and therapeutic tool for the management of Alzheimer disease.	3
83	Color-Switchable Nanosilicon Fluorescent Probes. **2022**, 16, 15450-15459	0
82	Potential of fluorescent nanoprobe in diagnosis and treatment of Alzheimer's disease.	1
81	Tuning the Crystal Structure of the Epitaxial CdS Shells on Zinc-Blende CdSe Nanocrystals: Lattice Defects and Electronic Traps. **2022**, 34, 8297-8305	0
80	Characterization of enhanced optical and structural properties of CBD-CdS thin films by gold ions doping.	0
79	Nanobiosensors Potentialities for Environmental Monitoring. **2022**, 41-74	0
78	Atomistic Tight-Binding Study of Core/Shell Nanocrystals. **2022**, 641-667	0
77	Bioinspired quantum dots: Promising nanosystems for biomedical application. **2022**, 32, 100921	0
76	Establishment of a Ca(II) ion-quantum dots fluorescence signal amplification sensor for high-sensitivity biomarker detection. **2022**, 340534	0
75	Recent Advances in Rapid Detection Techniques for Pesticide Residue: A Review. **2022**, 70, 13093-13117	4
74	Manipulation of CuO morphology for efficient potentiometric detection of urea via slow nucleation/growth kinetics exerted by mixed solvents.	0
73	An aqueous ammonia detection by hybrid Ag-CdS quantum dots. **2022**, 24,	0

72	Fabrication of red-emitting Eu3+-induced CaS phosphors: a view of optical, in vitro, lifetime, structural and morphological studies for biomedical applications. **2022**, 137,	0
71	Nanoparticles: The future of effective diagnosis and treatment of colorectal cancer?. **2022**, 936, 175350	1
70	Cytochromes P450 in biosensing and biosynthesis applications: Recent progress and future perspectives. **2023**, 158, 116791	2
69	BioNanoimaging. **2007**, 47-66	0
68	Femtomolar detection of staphylococcal enterotoxin B using a fluorescent quantum dot based hybrid Apta-immunosensor. **2023**, 287, 122036	1
67	Nanobiotechnology. **2022**, 209-254	0
66	A High-Quality CdSe/CdS/ZnS Quantum-Dot-Based FRET Aptasensor for the Simultaneous Detection of Two Different Alzheimer's Disease Core Biomarkers. **2022**, 12, 4031	0
65	Characterization of Nanomaterials. **2023**, 61-86	0
64	Monitoring leaching of Cd2+ from cadmium-based quantum dots by an Cd aptamer fluorescence sensor. **2023**, 220, 114880	0
63	Nanoparticles for super-resolution microscopy: intracellular delivery and molecular targeting. **2022**, 51, 9882-9916	1
62	Indium arsenide quantum dots: an alternative to lead-based infrared emitting nanomaterials. **2022**, 51, 9861-9881	2
61	Preparation and properties of high stability quantum dot-silica hybrid nanospheres. **2023**,	0
60	Dopant mediated augmentation of nanotwinning and anomalous emission behaviour. **2023**, 255, 119544	0
59	Fluorochromes Suitable for Antibody Conjugation. **2022**, 259-323	0
58	New insight into the application of fluorescence platforms in tumor diagnosis: From chemical basis to clinical application.	0
57	Near-Unity Photoluminescence Quantum Yield of Green-Emitting Graded-Alloy Core/Shell Giant Quantum Dots by z-Type Ligand Passivation for Display Applications. **2022**, 5, 18014-18022	0
56	The Use of Metallic Nanoparticles in Wound Healing: New Perspectives. **2022**, 23, 15376	0
55	Fluorescence Imaging of Onion epidermal Cell utilizing Highly Luminescent Water-Soluble CdTe Colloidal Quantum Dots. **2022**, 110352	0

54	ZIF-8-Supported AgInS2 Quantum Dots for Photocatalytic H2 Production by Precise Location Sulfurization.	0
53	Nanostructured Graphdiyne: Synthesis and Biomedical Applications. Volume 17, 6467-6490	0
52	Cerasome Spherical Nucleic Acid Nanostructure-Based AND Logic Gate-Guided Dual-DNAzyme Walker for Accurate Cancer Cell Identification.	0
51	Synthesis and Applications of Optical Materials. **2023**, 13, 297	0
50	Direct Observation of Off-Stoichiometry-Induced Phase Transformation of 2D CdSe Quantum Nanosheets. 2205690	0
49	Multifunctional nanocarriers of Fe3O4@PLA-PEG/curcumin for MRI, magnetic hyperthermia and drug delivery.	0
48	Surface passivation of intensely luminescent all-inorganic nanocrystals and their direct optical patterning. **2023**, 14,	2
47	Silver nanoparticle induced enhancement and quenching of fluorescence of thiol-capped CdS quantum dot.	0
46	Recent Progress in Nanomaterial-Based Biosensors and Theranostic Nanomedicine for Bladder Cancer. **2023**, 13, 106	0
45	Isolation, Detection and Analysis of Circulating Tumour Cells: A Nanotechnological Bioscope. **2023**, 15, 280	0
44	High-performance carbon-rich amorphous silicon–carbon alloy semiconductors with low optical gaps. **2023**, 148, 115652	0
43	Seed-mediated growth of gradient Cu–In–Zn–S alloyed nanocrystals by balancing cation exchange and shelling reaction. **2023**, 257, 119656	0
42	One-Step Colloidal Synthesis of Non-Toxic Electroactive Carbon Dots with a Better Threshold Cytotoxicity and Cytocompatibility. **2023**, 15, 281-291	0
41	An Insight into Carbon Nanomaterial-Based Photocatalytic Water Splitting for Green Hydrogen Production. **2023**, 13, 66	2
40	Phage-based Pathogen Biosensors. **2011**, 101-155	0
39	Quantum dots: novel approach for biological imaging. **2023**, 477-500	0
38	Phosphors for bioimaging applications. **2023**, 237-260	0
37	Quantum Dot–Peptide Conjugates as Energy Transfer Probes for Sensing the Proteolytic Activity of Matrix Metalloproteinase-14. **2023**, 95, 2713-2722	0

36	Synthesis and application of CdSe functional material. **2023**, 393-423	0
35	Theranostic applications of nanoemulsions in pulmonary diseases. **2023**, 177-216	0
34	Quantum dot-based security ink and fluorescent flexible films: Preparation, characterization, and applications to multiple anti-counterfeiting and cell imaging. **2023**, 501-537	0
33	A review on Quantum Dots (QDs) and their biomedical applications. **2023**, 6, 1	0
32	Prospects and future perspectives of electronic materials for solar energy applications. **2023**, 281-296	0
31	Recent advances in quantum dot-based fluorescence-linked immunosorbent assays. **2023**, 15, 5560-5578	0
30	Emerging ultrasmall luminescent nanoprobes for in vivo bioimaging. **2023**, 52, 1672-1696	0
29	Multiplex Immunofluorescence: A Powerful Tool in Cancer Immunotherapy. **2023**, 24, 3086	1
28	Effect of surface defects on photoluminescence properties of CdSe quantum dots in glasses. **2023**, 622, 156931	0
27	Effects of Na2O on the optical properties of CdSe QDs embedded in glasses. **2023**, 610, 122326	0
26	Precipitation and optical properties of PbSexS1-x quantum dots in glasses. **2023**, 604, 122156	0
25	Construction of nano slow-release systems for antibacterial active substances and its applications: A comprehensive review. 10,	0
24	Preparation of Nitrogen-doped Carbon Dots from Coke Powder as a Fluorescent Chemosensor for Selective and Sensitive Detection of Cr (VI). **2022**, 37, 1096-1104	0
23	Nanoparticle-Based Techniques for Bladder Cancer Imaging: A Review. **2023**, 24, 3812	0
22	Review: Quantum Dot Light-Emitting Diodes.	1
21	Synthesis and Micro hardness Studies of Polymer Nanocomposites of ZnS with PVK. **2023**, 2426, 012043	0
20	Fluorescence. **2023**, 245-329	0
19	Determining the impact of gold nanoparticles on amyloid aggregation with 2D IR spectroscopy. **2023**, 158, 091101	0

18	Biogenic synthesis of metal oxide-based photocatalysts for dye removal. **2023**, 69-109	0
17	Quantum Dots Meet Enzymes: Hydrophobicity of Surface Ligands and Size Do Matter. **2023**, 39, 3967-3978	0
16	Excitation Intensity-Dependent Quantum Yield of Semiconductor Nanocrystals. **2023**, 14, 2702-2707	0
15	Linker-Assisted CdS-TiO2 Nanohybrids as Reusable Visible Light Photocatalysts for the Oxidative Hydroxylation of Arylboronic Acids.	0
14	In Vitro Tracking of Human Umbilical Vein Endothelial Cells Using Ultra-Sensitive Quantum Dot-Embedded Silica Nanoparticles. **2023**, 24, 5794	1
13	QDs-Based Chemiluminescence Biosensors. **2023**, 509-529	0
12	Fluorescent Biosensors Based on II$\overline{V}$I Quantum Dots. **2023**, 475-508	0
11	Management of infectious disease and biotoxin elimination using nanomaterials. **2023**, 149-174	0
10	Toward Imaging Defect-Mediated Energy Transfer between Single Nanocrystal Donors and Single Molecule Acceptors.	0
9	Thickness and fluorescence-based dual-encoded suspension array and corresponding decoding system for multiplexed detection. **2023**, 388, 133793	0
8	Bleaching-resistant, Near-continuous Single-molecule Fluorescence and FRET Based on Fluorogenic and Transient DNA Binding.	0
7	Environmentally benign synthesis of bioconjugate materials. **2023**,	0
6	Luminescent Quantum Dots: Synthesis, Optical Properties, Bioimaging and Toxicity. **2023**, 114830	0
5	Introduction in II-VI Semiconductors. **2023**, 3-19	0
4	Quantum Dot (QD)-Induced Toxicity and Biocompatibility. **2023**, 181-211	0
3	II-VI Quantum Dots and Their Surface Functionalization. **2023**, 385-422	0
2	Nanomaterials in bioimaging and cell labeling. **2023**, 499-523	0
1	Theranostics applications of quantum dots in regenerative medicine, cancer medicine, and infectious diseases. **2023**, 114863	0