

John A Capobianco

List of Publications by Year in descending order

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102
papers

12,401
citations

46918

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100
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all docs

105
docs citations

105
times ranked

9373
citing authors

#	ARTICLE	IF	CITATIONS
1	On the photostability and luminescence of dye-sensitized upconverting nanoparticles using modified IR820 dyes. <i>Nanoscale Advances</i> , 2022, 4, 608-618.	2.2	12
2	Modulating Photo- and Radioluminescence in Tb(III) Cluster-Based Metal-Organic Frameworks. , 2022, 4, 1025-1031.		19
3	Growing Gold Nanostars on SiO ₂ Nanoparticles: Easily Accessible, NIR Active Core-Shell Nanostructures from PVP/DMF Reduction. <i>Chemistry</i> , 2022, 4, 647-654.	0.9	1
4	Investigating the reactive oxygen species production of Rose Bengal and Merocyanine 540-loaded radioluminescent nanoparticles. <i>Nanoscale Advances</i> , 2021, 3, 1375-1381.	2.2	14
5	Synthesis and fundamental studies of a photoresponsive oligonucleotide-upconverting nanoparticle covalent conjugate. <i>Materials Chemistry Frontiers</i> , 2021, 5, 4690-4699.	3.2	1
6	Reconstructing the Surface Structure of NaREF ₄ Upconversion Nanocrystals with a Novel K ⁺ Treatment. <i>Chemistry of Materials</i> , 2021, 33, 2548-2556.	3.2	5
7	Low-Temperature-Induced Controllable Transversal Shell Growth of NaLnF ₄ Nanocrystals. <i>Nanomaterials</i> , 2021, 11, 654.	1.9	1
8	BaYF ₅ :Yb ₃ ,Tm ₃ Upconverting Nanoparticles with Improved Population of the Visible and Near-Infrared Emitting States: Implications for Bioimaging. <i>ACS Applied Nano Materials</i> , 2021, 4, 5301-5308.	2.4	16
9	Energy Migration Control of Multimodal Emissions in an Er ³⁺ -Doped Nanostructure for Information Encryption and Deep-Learning Decoding. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 23790-23796.	7.2	67
10	Energy Migration Control of Multimodal Emissions in an Er ³⁺ -Doped Nanostructure for Information Encryption and Deep-Learning Decoding. <i>Angewandte Chemie</i> , 2021, 133, 23983-23989.	1.6	11
11	Lanthanide-Doped Nanoparticles in Biological Imaging and Bioassays. <i>Springer Series on Fluorescence</i> , 2021, , 93-128.	0.8	2
12	Lifetime of the ³ H ₄ Electronic State in Tm ³⁺ -Doped Upconverting Nanoparticles for NIR Nanothermometry. <i>Journal of Physical Chemistry B</i> , 2021, 125, 13132-13136.	1.2	9
13	On a local (de-)trapping model for highly doped Pr ³⁺ radioluminescent and persistent luminescent nanoparticles. <i>Nanoscale</i> , 2020, 12, 20759-20766.	2.8	13
14	Thermal properties of lipid bilayers derived from the transient heating regime of upconverting nanoparticles. <i>Nanoscale</i> , 2020, 12, 24169-24176.	2.8	18
15	The Key Role of Intrinsic Lifetime Dynamics from Upconverting Nanosystems in Multiemission Particle Velocimetry. <i>Advanced Materials</i> , 2020, 32, e2002266.	11.1	10
16	Multiemission Particle Velocimetry: The Key Role of Intrinsic Lifetime Dynamics from Upconverting Nanosystems in Multiemission Particle Velocimetry (Adv. Mater. 42/2020). <i>Advanced Materials</i> , 2020, 32, 2070316.	11.1	0
17	Evaluation of Lanthanide-Doped Upconverting Nanoparticles for in Vitro and in Vivo Applications. <i>ACS Applied Bio Materials</i> , 2020, 3, 4358-4369.	2.3	18
18	Wavelength-Selective Nonlinear Imaging and Photo-Induced Cell Damage by Dielectric Harmonic Nanoparticles. <i>ACS Nano</i> , 2020, 14, 4087-4095.	7.3	13

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19	Optically Stimulated Nanodosimeters with High Storage Capacity. <i>Nanomaterials</i> , 2019, 9, 1127.	1.9	26
20	Frontispiece: Intrinsic Time-Tunable Emissions in Core-Shell Upconverting Nanoparticle Systems. <i>Angewandte Chemie - International Edition</i> , 2019, 58, .	7.2	0
21	Thermal Properties of Lipid Bilayers Determined Using Upconversion Nanothermometry. <i>Advanced Functional Materials</i> , 2019, 29, 1905474.	7.8	96
22	Frontispiz: Intrinsic Time-Tunable Emissions in Core-Shell Upconverting Nanoparticle Systems. <i>Angewandte Chemie</i> , 2019, 131, .	1.6	0
23	Cellular Uptake, Cytotoxicity and Trafficking of Supported Lipid-Bilayer-Coated Lanthanide Upconverting Nanoparticles in Alveolar Lung Cancer Cells. <i>ACS Applied Bio Materials</i> , 2019, 2, 4527-4536.	2.3	12
24	Intrinsic Time-Tunable Emissions in Core-Shell Upconverting Nanoparticle Systems. <i>Angewandte Chemie</i> , 2019, 131, 9844-9853.	1.6	2
25	Intrinsic Time-Tunable Emissions in Core-Shell Upconverting Nanoparticle Systems. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 9742-9751.	7.2	24
26	Recent insights into upconverting nanoparticles: spectroscopy, modeling, and routes to improved luminescence. <i>Nanoscale</i> , 2019, 11, 12015-12029.	2.8	83
27	Luminescence dynamics and enhancement of the UV and visible emissions of Tm^{3+} in $LiYF_4:Yb^{3+},Tm^{3+}$ upconverting nanoparticles. <i>Nanoscale Advances</i> , 2019, 1, 4492-4500.	2.2	18
28	Perspective: lanthanide-doped upconverting nanoparticles. <i>Methods and Applications in Fluorescence</i> , 2019, 7, 012004.	1.1	26
29	Radioluminescence studies of colloidal oleate-capped β - $Na(Gd,Lu)F_4:Ln^{3+}$ nanoparticles ($Ln = Ce, Eu, Tb$). <i>Nanoscale</i> , 2018, 10, 7821-7832.	2.8	30
30	Smart Self-Assembled Nanosystem Based on Water-Soluble Pillararene and Rare-Earth-Doped Upconversion Nanoparticles for pH-Responsive Drug Delivery. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 4910-4920.	4.0	104
31	A NIR-responsive azobenzene-based supramolecular hydrogel using upconverting nanoparticles. <i>Chemical Communications</i> , 2018, 54, 5847-5850.	2.2	31
32	Double-Sensitive Drug Release System Based on MnO_2 Assembled Upconversion Nanoconstruct for Double-Model Guided Chemotherapy. <i>ACS Applied Nano Materials</i> , 2018, 1, 1648-1656.	2.4	23
33	The effects of lanthanide-doped upconverting nanoparticles on cancer cell biomarkers. <i>Nanoscale</i> , 2018, 10, 14464-14471.	2.8	16
34	Dual Activity of Rose Bengal Functionalized to Albumin-Coated Lanthanide-Doped Upconverting Nanoparticles: Targeting and Photodynamic Therapy. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 26947-26953.	4.0	62
35	A Route to Triggered Delivery via Photocontrol of Lipid Bilayer Properties Using Lanthanide Upconversion Nanoparticles. <i>ACS Applied Nano Materials</i> , 2018, 1, 5345-5354.	2.4	27
36	Absolute upconversion quantum yields of blue-emitting $LiYF_4:Yb^{3+},Tm^{3+}$ upconverting nanoparticles. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 22556-22562.	1.3	66

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37	Counting the Photons: Determining the Absolute Storage Capacity of Persistent Phosphors. <i>Materials</i> , 2017, 10, 867.	1.3	47
38	Photoluminescent nanoplatfoms in biomedical applications. <i>Advances in Physics: X</i> , 2016, 1, 194-225.	1.5	18
39	Formation of a Supported Lipid Bilayer on Faceted LiYF ₄ :Tm ³⁺ /Yb ³⁺ Upconversion Nanoparticles. <i>Particle and Particle Systems Characterization</i> , 2016, 33, 865-870.	1.2	26
40	Near-IR Triggered Photon Upconversion. <i>Fundamental Theories of Physics</i> , 2015, 47, 273-347.	0.1	9
41	Persistent and Photostimulated Red Emission in CaS:Eu ²⁺ , Dy ³⁺ Nanophosphors. <i>Advanced Optical Materials</i> , 2015, 3, 551-557.	3.6	146
42	Photon upconversion nanomaterials. <i>Chemical Society Reviews</i> , 2015, 44, 1299-1301.	18.7	312
43	The Fluoride Host: Nucleation, Growth, and Upconversion of Lanthanide-Doped Nanoparticles. <i>Advanced Optical Materials</i> , 2015, 3, 482-509.	3.6	128
44	Intense NIR emissions at 0.8 μ m, 1.47 μ m, and 1.53 μ m from colloidal LiYbF ₄ :Ln ³⁺ (Ln = Tm, Er, Yb) nanoparticles. <i>Journal of Materials Chemistry C</i> , 2015, 3, 17577-17583.	1.3	11
45	Near infrared light mediated release of doxorubicin using upconversion nanoparticles. <i>Chemical Communications</i> , 2015, 51, 8477-8479.	2.2	47
46	Upconverting nanoparticles: assessing the toxicity. <i>Chemical Society Reviews</i> , 2015, 44, 1561-1584.	18.7	520
47	The near-IR photo-stimulated luminescence of CaS:Eu ²⁺ /Dy ³⁺ nanophosphors. <i>Journal of Materials Chemistry C</i> , 2014, 2, 228-231.	2.7	70
48	Lanthanide-Doped Upconverting Nanoparticles: Harvesting Light for Solar Cells. <i>ChemSusChem</i> , 2013, 6, 1308-1311.	3.6	35
49	A highly sensitive luminescent lectin sensor based on an α -D-mannose substituted Tb ³⁺ antenna complex. <i>Dalton Transactions</i> , 2013, 42, 9453.	1.6	13
50	Enhancing the color purity of the green upconversion emission from Er ³⁺ /Yb ³⁺ -doped GdVO ₄ nanocrystals via tuning of the sensitizer concentration. <i>Journal of Materials Chemistry C</i> , 2013, 1, 6536.	2.7	55
51	Imaging: High Relaxivities and Strong Vascular Signal Enhancement for NaGdF ₄ Nanoparticles Designed for Dual MR/Optical Imaging (<i>Adv. Healthcare Mater.</i> 11/2013). <i>Advanced Healthcare Materials</i> , 2013, 2, 1477-1477.	3.9	4
52	Structure of NaYF ₄ Upconverting Nanoparticles: A Multinuclear Solid-State NMR and DFT Computational Study. <i>Journal of Physical Chemistry C</i> , 2013, 117, 25733-25741.	1.5	32
53	High Relaxivities and Strong Vascular Signal Enhancement for NaGdF ₄ Nanoparticles Designed for Dual MR/Optical Imaging. <i>Advanced Healthcare Materials</i> , 2013, 2, 1478-1488.	3.9	63
54	Response to α -Critical Growth Temperature of Aqueous CdTe Quantum Dots is Non-negligible for their Application as Nanothermometers. <i>Small</i> , 2013, 9, 3198-3200.	5.2	8

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55	Enhancing upconverted white light in Tm ³⁺ /Yb ³⁺ /Ho ³⁺ -doped GdVO ₄ nanocrystals via incorporation of Li ⁺ ions. Optics Express, 2012, 20, 111.	1.7	87
56	High Resolution Fluorescence Imaging of Cancers Using Lanthanide Ion-Doped Upconverting Nanocrystals. Cancers, 2012, 4, 1067-1105.	1.7	53
57	Bio-functionalization of ligand-free upconverting lanthanide doped nanoparticles for bio-imaging and cell targeting. Nanoscale, 2012, 4, 3647.	2.8	94
58	Lanthanide-Doped Na ₂ ScF ₃ Nanocrystals: Crystal Structure Evolution and Multicolor Tuning. Journal of the American Chemical Society, 2012, 134, 8340-8343.	6.6	315
59	Photoswitching of bis-spiropyran using near-infrared excited upconverting nanoparticles. Chemical Communications, 2012, 48, 7244.	2.2	55
60	Water dispersible ultra-small multifunctional KGdF ₄ :Tm ³⁺ , Yb ³⁺ nanoparticles with near-infrared to near-infrared upconversion. Journal of Materials Chemistry, 2011, 21, 16589.	6.7	161
61	NIR-to-NIR Two-Photon Excited CaF ₂ :Tm ³⁺ , Yb ³⁺ Nanoparticles: Multifunctional Nanoprobes for Highly Penetrating Fluorescence Bio-Imaging. ACS Nano, 2011, 5, 8665-8671.	7.3	381
62	Synthesis of Ligand-Free Colloidally Stable Water Dispersible Brightly Luminescent Lanthanide-Doped Upconverting Nanoparticles. Nano Letters, 2011, 11, 835-840.	4.5	714
63	CdTe Quantum Dots as Nanothermometers: Towards Highly Sensitive Thermal Imaging. Small, 2011, 7, 1774-1778.	5.2	127
64	Upconversion in Er ³⁺ -doped Gd ₂ O ₃ nanocrystals prepared by propellant synthesis and flame spray pyrolysis. Materials Research Bulletin, 2010, 45, 927-932.	2.7	17
65	Temperature Sensing Using Fluorescent Nanothermometers. ACS Nano, 2010, 4, 3254-3258.	7.3	1,284
66	Nanoparticles for highly efficient multiphoton fluorescence bioimaging. Optics Express, 2010, 18, 23544.	1.7	77
67	Carbohydrate-coated lanthanide-doped upconverting nanoparticles for lectin recognition. Journal of Materials Chemistry, 2010, 20, 7543.	6.7	98
68	CdSe Quantum Dots for Two-Photon Fluorescence Thermal Imaging. Nano Letters, 2010, 10, 5109-5115.	4.5	276
69	Intracellular imaging of HeLa cells by non-functionalized NaYF ₄ :Er ³⁺ , Yb ³⁺ upconverting nanoparticles. Nanoscale, 2010, 2, 495-498.	2.8	179
70	Luminescence resonance energy transfer from an upconverting nanoparticle to a fluorescent phycoobiliprotein. Nanoscale, 2010, 2, 1185.	2.8	29
71	The Active-Core/Active-Shell Approach: A Strategy to Enhance the Upconversion Luminescence in Lanthanide-Doped Nanoparticles. Advanced Functional Materials, 2009, 19, 2924-2929.	7.8	677
72	Colloidal Tm ³⁺ /Yb ³⁺ -Doped LiYF ₄ Nanocrystals: Multiple Luminescence Spanning the UV to NIR Regions via Low-Energy Excitation. Advanced Materials, 2009, 21, 4025-4028.	11.1	400

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73	Sensitized Ce ³⁺ and Gd ³⁺ Ultraviolet Emissions by Tm ³⁺ in Colloidal LiYF ₄ Nanocrystals. Chemistry - A European Journal, 2009, 15, 9660-9663.	1.7	63
74	Controlled Synthesis and Water Dispersibility of Hexagonal Phase NaGdF ₄ :Ho ³⁺ /Yb ³⁺ Nanoparticles. Chemistry of Materials, 2009, 21, 717-723.	3.2	357
75	Structural and optical investigation of colloidal Ln ³⁺ /Yb ³⁺ co-doped KY ₃ F ₁₀ nanocrystals. Journal of Materials Chemistry, 2009, 19, 3149.	6.7	84
76	Near-Infrared-to-Blue Upconversion in Colloidal BaYF ₅ :Tm ³⁺ , Yb ³⁺ Nanocrystals. Chemistry of Materials, 2009, 21, 1847-1851.	3.2	230
77	Bright White Upconversion Emission from Tm ³⁺ /Yb ³⁺ /Er ³⁺ -Doped Lu ₃ Ga ₅ O ₁₂ Nanocrystals. Journal of Physical Chemistry C, 2008, 112, 17745-17749.	1.5	148
78	Lanthanide-doped fluoride nanoparticles: luminescence, upconversion, and biological applications. International Journal of Nanotechnology, 2008, 5, 1306.	0.1	108
79	Synthesis of Colloidal Upconverting NaYF ₄ :Er ³⁺ /Yb ³⁺ and Tm ³⁺ /Yb ³⁺ Monodisperse Nanocrystals. Nano Letters, 2007, 7, 847-852.	4.5	693
80	Synthesis, Characterization, and Spectroscopy of NaGdF ₄ :Ce ³⁺ , Tb ³⁺ /NaYF ₄ Core/Shell Nanoparticles. Chemistry of Materials, 2007, 19, 3358-3360.	3.2	153
81	Synthesis of Colloidal Upconverting NaYF ₄ Nanocrystals Doped with Er ³⁺ , Yb ³⁺ and Tm ³⁺ , Yb ³⁺ via Thermal Decomposition of Lanthanide Trifluoroacetate Precursors. Journal of the American Chemical Society, 2006, 128, 7444-7445.	6.6	978
82	A theoretical study of trivalent lanthanide ion microsolvation in water clusters from first principles. International Journal of Mass Spectrometry, 2005, 241, 283-294.	0.7	21
83	Structural Investigation and Anti-Stokes Emission of Scandium Oxide Nanocrystals Activated with Trivalent Erbium. Journal of the Electrochemical Society, 2005, 152, H19.	1.3	12
84	A Spectroscopic Analysis of Blue and Ultraviolet Upconverted Emissions from Gd ₃ Ga ₅ O ₁₂ :Tm ³⁺ , Yb ³⁺ Nanocrystals. Journal of Physical Chemistry B, 2005, 109, 17400-17405.	1.2	177
85	Wet chemical synthesis and luminescence properties of erbium-doped nanocrystalline yttrium oxide. Journal of Materials Research, 2004, 19, 3398-3407.	1.2	16
86	Optical spectroscopy of lanthanide ions in Al ₂ O ₃ -Nb ₂ O ₅ -TeO ₂ glasses. Optical Materials, 2004, 25, 215-222.	1.7	32
87	Nanostructured Lanthanide-Doped Lu ₂ O ₃ Obtained by Propellant Synthesis. Chemistry of Materials, 2004, 16, 1330-1335.	3.2	47
88	Significance of Yb ³⁺ concentration on the upconversion mechanisms in codoped Y ₂ O ₃ :Er ³⁺ , Yb ³⁺ nanocrystals. Journal of Applied Physics, 2004, 96, 661-667.	1.1	514
89	Superoxide Dismutase Targets NO from GSNO to Cys1 ⁹³ of Oxyhemoglobin in Concentrated but Not Dilute Solutions of the Protein. Journal of the American Chemical Society, 2003, 125, 14370-14378.	6.6	47
90	Effect of Yb ³⁺ Codoping on the Upconversion Emission in Nanocrystalline Y ₂ O ₃ :Er ³⁺ . Journal of Physical Chemistry B, 2003, 107, 1107-1112.	1.2	232

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91	Luminescence Spectroscopy and Near-Infrared to Visible Upconversion of Nanocrystalline Gd ₃ Ga ₅ O ₁₂ :Er ³⁺ . Journal of Physical Chemistry B, 2003, 107, 10747-10752.	1.2	60
92	Concentration-Dependent Near-Infrared to Visible Upconversion in Nanocrystalline and Bulk Y ₂ O ₃ :Er ³⁺ . Chemistry of Materials, 2003, 15, 2737-2743.	3.2	290
93	Heme Nitrosylation of Deoxyhemoglobin by S-Nitrosoglutathione Requires Copper. Journal of Biological Chemistry, 2002, 277, 24135-24141.	1.6	20
94	980 nm excited upconversion in an Er-doped ZnO/TeO ₂ glass. Applied Physics Letters, 2002, 80, 1752-1754.	1.5	167
95	Fluorescence line-narrowing spectroscopy of a sodium phosphotantalate glass doped with Eu ³⁺ . The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2002, 82, 587-596.	0.6	1
96	Enhancement of Red Emission (4F _{9/2} → 4I _{15/2}) via Upconversion in Bulk and Nanocrystalline Cubic Y ₂ O ₃ :Er ³⁺ . Journal of Physical Chemistry B, 2002, 106, 1181-1187.	1.2	272
97	NIR to Visible Upconversion in Nanocrystalline and Bulk Lu ₂ O ₃ :Er ³⁺ . Journal of Physical Chemistry B, 2002, 106, 5622-5628.	1.2	123
98	Metal Chelators Inhibit S-Nitrosation of Cys ²⁹³ in Oxyhemoglobin. Journal of the American Chemical Society, 2001, 123, 1782-1783.	6.6	34
99	Electron paramagnetic resonance of Er ³⁺ doped in YVO ₄ : hyperfine parameters. Chemical Physics, 1999, 240, 313-318.	0.9	8
100	Notes. Trace element content of northern Ontario peat. Environmental Science & Technology, 1982, 16, 187-188.	4.6	19
101	Geochemistry of a subarctic salt marsh environment. Marine Geology, 1980, 37, 231-240.	0.9	1
102	Metal content of Sphagnum mosses from two Northern Canadian bog ecosystems. Water, Air, and Soil Pollution, 1978, 10, 215-220.	1.1	43