P Stanley May Jr

List of Publications by Year
in descending order

78 papers	3,098 citations	186254 28 h-index	161844 54 g-index
78 all docs	78 docs citations	78 times ranked	3490 citing authors

#	Article	IF	Citations
1	Security printing of covert quick response codes using upconverting nanoparticle inks. Nanotechnology, 2012, 23, 395201.	2.6	213
2	Near-Infrared (NIR) to Red and Green Up-Conversion Emission from Silica Solâ”Gel Thin Films Made with La0.45Yb0.50Er0.05F3Nanoparticles, Hetero-Looping-Enhanced Energy Transfer (Hetero-LEET):Â A New Up-Conversion Process. Journal of the American Chemical Society, 2007, 129, 620-625.	13.7	199
3	Red-green-blue printing using luminescence-upconversion inks. Journal of Materials Chemistry C, 2014, 2, 2221.	5.5	182
4	Temperature Dependence of the Eu3+ 5D0 Lifetime in Europium Tris(2,2,6,6-tetramethyl-3,5-heptanedionato). The Journal of Physical Chemistry, 1996, 100, 9216-9222.	2.9	176
5	Revisiting the NIR-to-Visible Upconversion Mechanism in Î²-NaYF₄:Yb³⁺,Er³⁺. Journal of Physical Chemistry Letters, 2014, 5, 36-42.	4.6	169
6	Disputed Mechanism for NIR-to-Red Upconversion Luminescence in NaYF₄:Yb³⁺,Er³⁺. Journal of Physical Chemistry A, 2015, 119, 9805-9811.	2.5	149
7	Enhancement of Near-Infrared-to-Visible Upconversion Luminescence Using Engineered Plasmonic Gold Surfaces. Journal of Physical Chemistry C, 2011, 115, 19028-19036.	3.1	115
8	Patterned direct-write and screen-printing of NIR-to-visible upconverting inks for security applications. Nanotechnology, 2012, 23, 185305.	2.6	114
9	Highly Luminescent NIR-to-Visible Upconversion Thin Films and Monoliths Requiring No High-Temperature Treatment. Chemistry of Materials, 2009, 21, 3406-3413.	6.7	108
10	Preparation and optical properties of silver nanowires and silver-nanowire thin films. Journal of Colloid and Interface Science, 2011, 356, 151-158.	9.4	104
11	Explaining the Nanoscale Effect in the Upconversion Dynamics of Î²-NaYF₄:Yb³⁺, Er³⁺ Core and Coreâ€“Shell Nanocrystals. Journal of Physical Chemistry C, 2017, 121, 16592-16606.	3.1	84
12	Dipicolinate Sensitization of Europium Luminescence in Dispersible 5%Eu:LaF3 Nanoparticles. Journal of Physical Chemistry C, 2010, 114, 14740-14747.	3.1	82
13	Sensitization of Eu³⁺ Luminescence in Eu:YPO₄ Nanocrystals. Journal of Physical Chemistry C, 2013, 117, 5953-5962.	3.1	62
14	Two-Color Surface Plasmon Polariton Enhanced Upconversion in NaYF₄:Yb:Tm Nanoparticles on Au Nanopillar Arrays. Journal of Physical Chemistry C, 2014, 118, 3251-3257.	3.1	60
15	Calculation of Judd-Ofelt parameters for Er3+ in Î²-NaYF4: Yb3+, Er3+ from emission intensity ratios and diffuse reflectance spectra. Journal of Luminescence, 2015, 160, 276-281.	3.1	55
16	Luminescence Properties and Water Coordination of Eu3+ in the Binary Solvent Mixture Water/1-Butyl-3-methylimidazolium Chloride. Inorganic Chemistry, 2007, 46, 7121-7128.	4.0	44
17	Real-Time-Monitoring of the Synthesis of Î²-NaYF₄:17% Yb,3% Er Nanocrystals Using NIR-to-Visible Upconversion Luminescence. Journal of Physical Chemistry C, 2014, 118, 13238-13247.	3.1	44
18	Circular dichroism spectra and electronic rotatory strengths of the samarium 4fâ†’ 4ftransitions in Na3[Sm(oxydiacetate)3]Â·2NaClO4Â·6H2O. Molecular Physics, 1987, 62, 341-364.	1.7	43

#	Article	IF	Citations
19	Near Infrared-to-Near Infrared Upconversion Nanocrystals for Latent Fingerprint Development. ACS Applied Nano Materials, 2019, 2, 4518-4527.	5.0	41
20	Layer-by-layer assembly of freestanding thin films with homogeneously distributed upconversion nanocrystals. Journal of Materials Chemistry, 2010, 20, 8356.	6.7	40
21	Upconversion polymeric nanofibers containing lanthanide-doped nanoparticles via electrospinning. Nanoscale, 2012, 4, 7369.	5.6	36
22	Electric dipole intensity parameters for the samarium 4fâ†' 4ftransitions in Na3[Sm(oxydiacetate)3] Â· 2NaClO4Â· 6H2O. Molecular Physics, 1987, 61, 1471-1485.	1.7	35
23	Luminescence Properties and Quenching Mechanisms of Ln(Tf₂N)₃ Complexes in the Ionic Liquid bmpyr Tf₂N. Inorganic Chemistry, 2011, 50, 6509-6520.	4.0	34
24	DFT Calculation of Russellâ€"Saunders Splitting for Lanthanide Ions Doped in Hexagonal (Î²)-NaYF4 Nanocrystals. Journal of Physical Chemistry C, 2013, 117, 17177-17185.	3.1	31
25	Temperature Dependence of Rate Constants for Tb3+(5D3) Cross Relaxation in Symmetric Tb3+ Pairs in Tb-Doped CsCdBr3, CsMgBr3, CsMgCl3. Journal of Physical Chemistry B, 2003, 107, 4002-4011.	2.6	30
26	Monoporphyrinate ytterbium(iii) complexes with new ancillary ligands: synthesis, structural analysis and photophysical investigation. Dalton Transactions, 2009, , 4766.	3.3	30
27	Sequential hydrogen dissociation from a charged Pt₁₃H₂₄ cluster modeled by ab initio molecular dynamics. International Journal of Quantum Chemistry, 2012, 112, 3896-3903.	2.0	29
28	Measuring the internal quantum yield of upconversion luminescence for ytterbium-sensitized upconversion phosphors using the ytterbium(<scp>iii</scp>) emission as an internal standard. Nanoscale, 2018, 10, 17212-17226.	5.6	29
29	Optical spectra, energy levels and crystal-field analysis of Sm3+in Na3[Sm(oxydiacetate)3] Â· 2NaClO4Â· 6H2O. Molecular Physics, 1987, 61, 1455-1470.	1.7	28
30	Infrared luminescence properties of Ni2+ in various chloride lattices: CsCdCl3, CsMgCl3, CdCl2, and MgCl2. Journal of Luminescence, 1990, 46, 277-290.	3.1	26
31	Effect of Ligand Deuteration on the Decay of Eu3+(5D0) in Tris(2,2,6,6-tetramethyl-3,5-heptanedionato)europium(III). Journal of Physical Chemistry A, 1998, 102, 8690-8694.	2.5	26
32	Photodissociation and Photoionization Mechanisms in Lanthanide-based Fluorinated Î²-Diketonate Metalâ^'Organic Chemical-Vapor Deposition Precursors. Chemistry of Materials, 2009, 21, 5801-5808.	6.7	26
33	Time-dependent excited-state molecular dynamics of photodissociation of lanthanide complexes for laser-assisted metal-organic chemical vapour deposition. Molecular Physics, 2014, 112, 508-517.	1.7	26
34	Photofragmentation of the Gas-Phase Lanthanum Isopropylcyclopentadienyl Complex: Computational Modeling vs Experiment. Journal of Physical Chemistry A, 2015, 119, 10838-10848.	2.5	26
35	The Dynamics of Nanoparticle Growth and Phase Change During Synthesis of Î²-NaYF₄. Journal of Physical Chemistry C, 2016, 120, 9482-9489.	3.1	26
36	Photoinduced Charge Transfer versus Fragmentation Pathways in Lanthanum Cyclopentadienyl Complexes. Journal of Chemical Theory and Computation, 2017, 13, 4281-4296.	5.3	26

#	Article	IF	Citations
37	Structure and photophysics of near-infrared emissive ytterbium(iii) monoporphyrinate acetate complexes having neutral bidentate ligands. Dalton Transactions, 2009, , 7454.	3.3	25
38	(BMI)₃LnCl₆ Crystals as Models for the Coordination Environment of LnCl₃ (Ln = Sm, Eu, Dy, Er, Yb) in 1-Butyl-3-methylimidazolium Chloride Ionic-Liquid Solution. Inorganic Chemistry, 2014, 53, 5494-5501.	4.0	25
39	Radiative and nonradiative processes affecting higherâ€excitedâ€state luminescence of Ni2+ in several chloride lattices. Journal of Chemical Physics, 1991, 95, 6343-6354.	3.0	23
40	Hybridization of near-infrared emitting erbium(iii) and ytterbium(iii) monoporphyrinate complexes with silica xerogel: synthesis, structure and photophysics. Dalton Transactions, 2010, 39, 6466.	3.3	23
41	Spectroscopic Imaging and Power Dependence of Near-Infrared to Visible Upconversion Luminescence from NaYF₄:Yb³⁺,Er³⁺ Nanoparticles on Nanocavity Arrays. Journal of Physical Chemistry C, 2015, 119, 24976-24982.	3.1	23
42	Thin Film Deposition and Photodissociation Mechanisms for Lanthanide Oxide Production from Tris(2,2,6,6-tetramethyl-3,5-heptanedionato)Ln(III) in Laser-Assisted MOCVD. Chemistry of Materials, 2010, 22, 6056-6064.	6.7	22
43	Higher excited-state luminescence of Ni2+ in various chloride lattices: CsCdCl3, CsMgCl3, CdCl2 and MgCl2. Chemical Physics Letters, 1989, 164, 612-616.	2.6	21
44	Tb3+Luminescence in Tb-Doped and Tb/Gd-Doped CsCdBr3Crystals:Â5D4â†'5D3Cross-Relaxation Rates in Tb3+Pairs. Journal of Physical Chemistry A, 1997, 101, 9571-9577.	2.5	21
45	Spectroscopic Evidence for Equilibrium between Eight- and Nine-Coordinate Eu3+(aq) Species in 0.1 M EuCl3(aq). Journal of Physical Chemistry A, 2004, 108, 6624-6628.	2.5	21
46	Tutorial on the acquisition, analysis, and interpretation of upconversion luminescence data. Methods and Applications in Fluorescence, 2019, 7, 023001.	2.3	21
47	Cross-Relaxation from Er³⁺(²H_{11/2},⁴S_{3/2}) and Er³⁺(²H_{9/2}) in Î²-NaYF₄:Yb,Er and Implications for Modeling Upconversion Dynamics. Journal of Physical Chemistry C, 2020, 124, 2193-2201.	3.1	21
48	Non-radiative deactivation of the europium 5D0 excited state by water molecules outside the primary coordination sphere of Eu3+ in Na3 [Eu (C4H4O5) 3] Â·2NaClO4Â·6H2O. Chemical Physics Letters, 1991, 179, 277-281.	2.6	20
49	Influence of colloidal-gold films on the luminescence of Eu(TTFA)3 in PMMA. Journal of Luminescence, 2010, 130, 1907-1915.	3.1	20
50	A previously unobserved luminescence of Ni2+ in Ni2+ : KMgF3 and Ni2+ : KZnF3. Chemical Physics Letters, 1990, 175, 488-492.	2.6	19
51	Geometry dependence of field enhancement in 2D metallic photonic crystals. Optics Express, 2009, 17, 22179.	3.4	19
52	Non-collinear spin DFT for lanthanide ions in doped hexagonal NaYF₄. Molecular Physics, 2014, 112, 546-556.	1.7	19
53	Measurement and analysis of electronic energy transfer between Tb3+ and Eu3+ ions in Cs2NaY1â^'xâ^'y TbxEuyCl6. Chemical Physics, 1994, 186, 77-103.	1.9	18
54	Quenching of coumarin emission by CdSe and CdSe/ZnS quantum dots: Implications for fluorescence reporting. Journal of Luminescence, 2013, 141, 99-105.	3.1	18

#	Article	IF	Citations
55	Insight into band positions and inter-particle electron transfer dynamics between CdS nanoclusters and spatially isolated TiO₂dispersed in cubic MCM-48 mesoporous materials: a highly efficient system for photocatalytic hydrogen evolution under visible light illumination. Physical Chemistry Chemical Physics, 2014, 16, 2048-2061.	2.8	17
56	Stable Inks Containing Upconverting Nanoparticles Based on an Oil-in-Water Nanoemulsion. Langmuir, 2018, 34, 1535-1541.	3.5	16
57	Optical Properties of Eu-Doped and Euâ^'Gd Co-Doped CsMgCl3:Â Temperature Dependence of Rate Constants for5D2and5D1Cross Relaxation in Symmetric Eu(III)â^'Eu(III) Pairs. Journal of Physical Chemistry A, 2000, 104, 209-216.	2.5	15
58	Photofragmentation Pathways for Gas-Phase Lanthanide Tris(isopropylcyclopentadienyl) Complexes. Organometallics, 2016, 35, 3461-3473.	2.3	14
59	Wavelength and Metal Dependence in the Photofragmentation of a Gas-Phase Lanthanide Î²-Diketonate Complex. Journal of Physical Chemistry A, 2007, 111, 4144-4149.	2.5	12
60	Wavelength Dependent Photofragmentation Patterns of Tris(2,2,6,6-tetramethyl-3,5-heptanedionato)Ln (III) (Ln = Eu, Tb, Gd) in a Molecular Beam. Journal of Physical Chemistry A, 2006, 110, 7751-7754.	2.5	11
61	Optical properties of host material for phosphor computational modeling. International Journal of Quantum Chemistry, 2012, 112, 3889-3895.	2.0	10
62	Molecular dynamics in finding nonadiabatic coupling for Î²-NaYF₄: Ce³⁺nanocrystals. Molecular Physics, 2015, 113, 385-391.	1.7	10
63	Photofragmentation of Gas-Phase Lanthanide Cyclopentadienyl Complexes: Experimental and Time-Dependent Excited-State Molecular Dynamics. Organometallics, 2014, 33, 1574-1586.	2.3	8
64	Self-limiting adsorption of Eu3+ on the surface of rod-shape anatase TiO2 nanocrystals and post-synthetic sensitization of the europium-based emission. Journal of Colloid and Interface Science, 2015, 459, 63-69.	9.4	8
65	Photoinduced dynamics to photoluminescence in Ln³⁺ (Ln = Ce, Pr) doped Î²-NaYF₄ nanocrystals computed in basis of non-collinear spin DFT with spin-orbit coupling. Molecular Physics, 2018, 116, 697-707.	1.7	8
66	BODIPY-functionalized 1,10-phenanthroline as a long wavelength sensitizer for near-infrared emission of the ytterbium(<scp>iii</scp>) ion. Dalton Transactions, 2019, 48, 13880-13887.	3.3	7
67	Optical observation of the kinetics of thermalization between the 3P0 and 3P1 excited states of Pr3+ in symmetrical Pr3+â€"Gd3+ pairs in CsCdBr3. Journal of Luminescence, 2005, 111, 131-138.	3.1	6
68	Multi-layered covert QR codes for increased capacity and security. International Journal of Computers and Applications, 2015, 37, 17-27.	1.3	6
69	Temperature dependence of excited-state relaxation processes of Pr3+ in Pr-doped and Pr, Gd-doped CsCdBr3. Journal of Luminescence, 2006, 118, 147-157.	3.1	5
70	Rare-Earth Doped Nanoparticles in Security Printing Applications. Materials Research Society Symposia Proceedings, 2012, 1471, 62.	0.1	4
71	Relationship between Site Symmetry, Spin State, and Doping Concentration for Co(II) or Co(III) in Î²-NaYF₄. Journal of Physical Chemistry C, 2016, 120, 7785-7794.	3.1	4
72	Enhancement of electromagnetic field intensity by metallic photonic crystal for efficient upconversion. , 2010, , .		3

#	Article	IF	Citations
73	A conjugated porphyrin as a red-light sensitizer for near-infrared emission of ytterbium(<scp>iii</scp>) ion. New Journal of Chemistry, 2020, 44, 18756-18762.	2.8	3
74	Di-Î¼-pivalato-Îº3O,Oâ€²:Oâ€²;Îº3O:O,Oâ€²-bis[(methanol-ÎºO)bis(2,2,6,6-tetramethylheptane-3,5-dionato)praseodymium(III)]. Acta Crystallographica Section E: Structure Reports Online, 2011, 67, m1514-m1515.	0.2	1
75	catena-Poly[1-butyl-3-methylimidazolium [[dichlorido(methanol-ÎºO)(propan-2-ol-ÎºO)lanthanate(III)]-di-Î¼-chlorido]]. Acta Crystallographica Section E: Structure Reports Online, 2012, 68, m292-m293.	0.2	1
76	Surface plasmon polariton enhanced upconversion in rare earth doped nano crystals on plasmonic substrates. , 2014, , .		1
77	One- and two-photon electron-transfer induced uncaging of coumarin from cinnamate-capped CdSe quantum dots. Journal of Luminescence, 2020, 222, 117112.	3.1	1
78	Non-Linear Density Dependent Upconversion Luminescence Enhancement of Î²-NaYF4: Yb3+: Er3+ Nanoparticles on Random Ag Nanowire Aggregates. MRS Advances, 2016, 1, 2677-2682.	0.9	0