George Fern

List of Publications by Year in Descending Order

64 papers	1,257 citations	18 h-index	33 g-index
71 ext. papers	1,343 ext. citations	2.9 avg, IF	3.91 L-index

#	Paper	IF	Citations
64	Luminescence properties of □Ag2WO4 nanorods co-doped with Li+ and Eu3+ cations and their effects on its structure. *Journal of Luminescence*, **2019**, 206, 442-454	3.8	18
63	Reassignment of electronic transitions in the laser-activated spectrum of nanocrystalline Y2O3:Er3+. *Journal of Luminescence*, **2018**, 196, 337-346	3.8	6
62	Cathodoluminescence of Y2O3:Ln3+ (Ln = Tb, Er and Tm) and Y2O3:Bi3+ nanocrystalline particles at 200 keV. *RSC Advances*, **2018**, 8, 396-405	3.7	3
61	ZnCdS:Cu,Al,Cl: A Near Infra-Red Emissive Family of Phosphors for Marking, Coding, and Identification. *ECS Journal of Solid State Science and Technology*, **2018**, 7, R3057-R3063	2	2
60	Effective MgO-doped TiO2 nanoaerogel coating for crystalline silicon solar cells improvement. *International Journal of Energy Research*, **2018**, 42, 3915-3927	4.5	7
59	On the Photo- and Cathodoluminescence of LaB3O6:Gd,Bi, Y3Al5O12:Pr, Y3Al5O12:Gd, Lu3Al5O12:Pr, and Lu3Al5O12:Gd. *ECS Journal of Solid State Science and Technology*, **2018**, 7, R206-R214	2	5
58	Ultrathin YO:Eunanodiscs: spectroscopic investigations and evidence for reduced concentration quenching. *Nanotechnology*, **2018**, 29, 455703	3.4	4
57	Development of high temperature, radiation hard detectors based on diamond. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2017**, 845, 128-131	1.2	6
56	Diamond based detectors for high temperature, high radiation environments. *Journal of Instrumentation*, **2017**, 12, C01066-C01066	1	14
55	AC electroluminescent lamps: shedding some light on their mysteries. *Journal of Materials Science: Materials in Electronics*, **2017**, 28, 7006-7012	2.1	6
54	Low temperature micro Raman and laser induced upconversion and downconversion spectra of europium doped silver tungstate Ag2□xEuxWO4 nanorods. *Journal of Materials Science: Materials in Electronics*, **2017**, 28, 7029-7035	2.1	10
53	Structure and luminescence analyses of simultaneously synthesised (LuGd)OS:Tb and (LuGd)O:Tb. *Dalton Transactions*, **2017**, 46, 7693-7707	4.3	8
52	Cathodoluminescence and Photoluminescence of YPO4:Pr3+, Y2SiO5:Pr3+, YBO3:Pr3+, and YPO4:Bi3+. *ECS Journal of Solid State Science and Technology*, **2017**, 6, R47-R52	2	21
51	New Developments in Cathodoluminescence Spectroscopy for the Study of Luminescent Materials. *Materials*, **2017**, 10,	3.5	5
50	Evaluation of Thermally Stable Phosphor Screens for Application in Laser Diode Excited High Brightness White Light Modules. *ECS Journal of Solid State Science and Technology*, **2016**, 5, R3001-R3006	2	11
49	Photoluminescence, cathodoluminescence and micro-Raman investigations of monoclinic nanometre-sized Y2O3 and Y2O3:Eu3+. *Journal of Materials Chemistry C*, **2016**, 4, 8930-8938	7.1	7
48	Red Shift of CT-Band in Cubic Y2O3:Eu3+upon Increasing the Eu3+Concentration. *ECS Journal of Solid State Science and Technology*, **2016**, 5, R59-R66	2	12

47	Ultraviolet and blue cathodoluminescence from cubic Y2O3 and Y2O3:Eu3+ generated in a transmission electron microscope. *Journal of Materials Chemistry C*, **2016**, 4, 7026-7034	7.1	18
46	Investigating the Emission Characteristics of Single Crystal YAG When Activated by High Power Laser Beams. *ECS Journal of Solid State Science and Technology*, **2016**, 5, R172-R177	2	7
45	Laser Diode Induced Lighting Modules. *ECS Journal of Solid State Science and Technology*, **2016**, 5, R26-R33	2	6
44	Nanosized (Y1−xGdx)2O2S:Tb3+ particles: synthesis, photoluminescence, cathodoluminescence studies and a model for energy transfer in establishing the roles of Tb3+ and Gd3+. *RSC Advances*, **2016**, 6, 42561-42571	3.7	8
43	Symmetry-Related Transitions in the Spectrum of Nanosized Cubic Y2O3:Tb3+. *ECS Journal of Solid State Science and Technology*, **2015**, 4, R105-R113	2	14
42	Contrast and decay of cathodoluminescence from phosphor particles in a scanning electron microscope. *Ultramicroscopy*, **2015**, 157, 27-34	3.1	7
41	Symmetry-Related Transitions in the Photoluminescence and Cathodoluminescence Spectra of Nanosized Cubic Y2O3:Tb3+. *ECS Journal of Solid State Science and Technology*, **2015**, 4, R145-R152	2	11
40	Cathodoluminescence and electron microscopy of red quantum dots used for display applications. *Journal of the Society for Information Display*, **2015**, 23, 50-55	2.1	9
39	Cathodoluminescence studies of phosphors in a scanning electron microscope. *Journal of Physics: Conference Series*, **2015**, 619, 012051	0.3	
38	Photovoltaic cells energy performance enhancement with down-converting photoluminescence phosphors. *International Journal of Energy Research*, **2015**, 39, n/a-n/a	4.5	2
37	Materials Suitable for preparing Inorganic Nanocasts of butterflies and other insects. *Journal of Physics: Conference Series*, **2015**, 619, 012050	0.3	
36	Cathodoluminescent images and spectra of single crystals of Y2O2S:Tb3+and Gd2O2S:Tb3+nanometer sized phosphor crystals excited in a field emission scanning transmission electron microscope. *Journal of Physics: Conference Series*, **2015**, 619, 012049	0.3	1
35	Effects of the host lattice and doping concentration on the colour of Tb3+ cation emission in Y2O2S:Tb3+ and Gd2O2S:Tb3+ nanometer sized phosphor particles. *Nanoscale*, **2013**, 5, 8640-6	7.7	43
34	Contrasting behaviour of the co-activators in the luminescence spectra of Y2O2S:Tb3+,Er3+ nanometre sized particles under UV and red light excitation. *Nanoscale*, **2013**, 5, 1091-6	7.7	20
33	A novel method for the preparation of non-agglomerated nanometre sized particles of lanthanum phosphate phosphors utilising a high surface area support in the firing process. *Journal of Materials Chemistry*, **2012**, 22, 21529		5
32	Surface plasmon resonance imaging detection of silver nanoparticle-tagged immunoglobulin. *Journal of the Royal Society Interface*, **2011**, 8, 1204-11	4.1	29
31	Achieving structured colour in inorganic systems: Learning from the natural world. *Optics and Laser Technology*, **2011**, 43, 401-409	4.2	4
30	Structure and Morphology of ACEL ZnS:Cu,Cl Phosphor Powder Etched by Hydrochloric Acid. *Journal of the Electrochemical Society*, **2009**, 156, J326	3.9	9

29	Characterisation of Gd2O2S:Pr phosphor screens for water window X-ray detection. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2009**, 600, 434-439	1.2	14
28	Light-emitting nanocasts formed from bio-templates: FESEM and cathodoluminescent imaging studies of butterfly scale replicas. *Nanotechnology*, **2008**, 19, 095302	3.4	21
27	Low-voltage cathodoluminescent red emitting phosphors for field emission displays. *Journal of Luminescence*, **2007**, 122-123, 562-566	3.8	17
26	P-84: Experimental and Theoretical Luminous Efficacies of Phosphors used for Producing White Light from Blue-emitting LEDs. *Digest of Technical Papers SID International Symposium*, **2007**, 38, 515-518	0.5	
25	Stimulation of visible luminescence by irradiation of a novel phosphor screen with an infrared beam. *Optical Engineering*, **2006**, 45, 024001	1.1	2
24	Oxygen and sulfur isotopic composition of volcanic sulfate aerosol at the point of emission. *Journal of Geophysical Research*, **2006**, 111,		48
23	Investigation of near-source basaltic glasses using 57Fe Mössbauer spectroscopy. *Hyperfine Interactions*, **2006**, 166, 705-708	0.8	1
22	Redox properties of a green emitting ZnGa2O4:Mn low voltage cathodoluminescent phosphor. *Journal of Materials Science: Materials in Electronics*, **2006**, 17, 745-753	2.1	2
21	UV photoluminescence from small particles of calcium cadmium sulfide solid solutions. *Journal of Optics*, **2005**, 7, S265-S269		5
20	Novel nano-structured phosphor materials cast from natural Morpho butterfly scales. *Journal of Modern Optics*, **2005**, 52, 999-1007	1.1	27
19	The use of a novel phosphor screen for visualising the infrared beam of a gas detector **2005**, 5826, 425		
18	A study of the binding of the biologically important hematin molecule to a novel imidazole containing poly(N-isopropylacrylamide) microgel. *Reactive and Functional Polymers*, **2004**, 58, 165-173	4.6	17
17	Photonic phosphors based on cubic Y2O3:Tb3 infilled into a synthetic opal lattice. *Journal of Optics*, **2003**, 5, S81-S85		23
16	Yttrium Oxide Upconverting Phosphors. Part 4: Upconversion Luminescent Emission from Thulium-Doped Yttrium Oxide under 632.8-nm Light Excitation. *Journal of Physical Chemistry B*, **2003**, 107, 1548-1553	3.4	18
15	High Pressure Mössbauer Spectroscopic Studies of Molecular Solids. The Importance of Free Space in Molecular Lattices. *Hyperfine Interactions*, **2002**, 141/142, 109-117	0.8	1
14	An Interesting Spin-State Transition for [Fe(PPIX)OH] Induced by High Pressure in a Diamond Anvil Cell. *Hyperfine Interactions*, **2002**, 144/145, 359-363	0.8	2
13	A Synthetic Method for the Production of a Range of Particle Sizes for Y[sub 2]O[sub 3]:Eu Phosphors Using a Copolymer Microgel of NIPAM and AMPS. *Journal of the Electrochemical Society*, **2002**, 149, H53	3.9	15
12	Rare-earth element anti-Stokes emission from three inverse photonic lattices. *Journal of Modern Optics*, **2002**, 49, 965-976	1.1	12

11	Electrostatic field effects manifested in ferrocenyl metal complexes and the crystal structure of [Fe(η5-C5H5)(η5-C5H4CH?NNHC5H4N)]HCl. *Journal of Organometallic Chemistry*, **2001**, 637-639, 311-317	2.3	3
10	A New Application for Microgels: Novel Method for the Synthesis of Spherical Particles of the Y2O3:Eu Phosphor Using a Copolymer Microgel of NIPAM and Acrylic Acid. *Langmuir*, **2001**, 17, 7145-7149	4	123
9	The Effect of Particle Morphology and Crystallite Size on the Upconversion Luminescence Properties of Erbium and Ytterbium Co-doped Yttrium Oxide Phosphors. *Journal of Physical Chemistry B*, **2001**, 105, 948-953	3.4	220
8	Up-conversion emission phosphors based on doped silica glass ceramics prepared by sol–gel methods: control of silica glass ceramics containing anatase and rutile crystallites. *Journal of Materials Chemistry*, **2001**, 11, 1447-1451		19
7	Novel seven coordination geometry of Sn(IV): crystal structures of phthalocyaninato bis(undecylcarboxylato)Sn(IV), its Si(IV) analogue, and phthalocyaninato bis(chloro)silicon(IV). The electrochemistry of the Si(IV) analogue and related compounds. *Inorganic Chemistry*, **2001**, 40, 5434-9	5.1	26
6	Yttrium Oxide Upconverting Phosphors. 3. Upconversion Luminescent Emission from Europium-Doped Yttrium Oxide under 632.8 nm Light Excitation. *Journal of Physical Chemistry B*, **2001**, 105, 9107-9112	3.4	54
5	Effects of Temperature and Pressure on the Mössbauer Spectra of Models for the [4Fe-4S]2+ Clusters of Iron–Sulfur Proteins and the Structure of [PPh4]2[Fe4S4(SCH2CO2C2H5)4]. *Inorganic Chemistry*, **1999**, 38, 4256-4261	5.1	14
4	Control of Y 2 O 3:Eu Spherical Particle Phosphor Size, Assembly Properties, and Performance for FED and HDTV. *Journal of the Electrochemical Society*, **1999**, 146, 4654-4658	3.9	168
3	Alkyne insertions into the Pd–C(sp2, ferrocene) bond of cyclopalladated complexes containing Schiff bases derived from ferrocene. Crystal structures of [Pd{[(EtCCEt)2(η5-C5H3CRNCH2Ph)]Fe(η5-C5H5)}Cl](R = H or Me). *Journal of the Chemical Society Dalton Transactions*, **1995**, 1839-1849		23
2	Palladium(II)-induced preferential activation of the [C–Csp2(phenyl)–Cl] bond versus [C–sp2(ferrocene)–H]. Crystal structure of [Fe(η5-C5H5){η5-C5H4CH2NCH(C6H3Cl2-2,6)}]. *Journal of the Chemical Society Dalton Transactions*, **1995**, 4053-4058		11
1	Effects of the nature of the nitrogen donor atom (sp2versus sp3) upon the properties and chemistry of palladated complexes with (Pd–C sp2, ferrocene) bonds. *Journal of the Chemical Society Dalton Transactions*, **1994**, 3039-3046		26