Le Wang

List of Publications by Year
in descending order

42 papers	3,866 citations	147801 31 h-index	265206 42 g-index
42 all docs	42 docs citations	42 times ranked	2113 citing authors

#	Article	IF	Citations
1	Down-Conversion Nitride Materials for Solid State Lighting: Recent Advances and Perspectives. Chemical Reviews, 2018, 118, 1951-2009.	47.7	598
2	Two-Site Occupation for Exploring Ultra-Broadband Near-Infrared Phosphorâ€"Double-Perovskite La₂MgZrO₆:Cr³⁺. Chemistry of Materials, 2019, 31, 5245-5253.	6.7	357
3	Achieving High Quantum Efficiency Narrow-Band Î²-Sialon:Eu²⁺ Phosphors for High-Brightness LCD Backlights by Reducing the Eu³⁺ Luminescence Killer. Chemistry of Materials, 2018, 30, 494-505.	6.7	250
4	Color Conversion Materials for Highâ€Brightness Laserâ€Driven Solidâ€State Lighting. Laser and Photonics Reviews, 2018, 12, 1800173.	8.7	239
5	Ca1â^'xLixAl1â^'xSi1+xN3:Eu2+ solid solutions as broadband, color-tunable and thermally robust red phosphors for superior color rendition white light-emitting diodes. Light: Science and Applications, 2016, 5, e16155-e16155.	16.6	186
6	Unique Color Converter Architecture Enabling Phosphor-in-Glass (PiG) Films Suitable for High-Power and High-Luminance Laser-Driven White Lighting. ACS Applied Materials & Interfaces, 2018, 10, 14930-14940.	8.0	177
7	Broadband near-infrared (NIR) emission realized by the crystal-field engineering of Y_{3â^'x}Ca_xAl_{5â^'x}Si_xO₁₂:Cr³⁺(<i>x<=) Tj ETQq1 1 0.78	5.5	156
8	Highly efficient narrow-band green and red phosphors enabling wider color-gamut LED backlight for more brilliant displays. Optics Express, 2015, 23, 28707.	3.4	150
9	Î²-Sialon:Eu phosphor-in-glass: a robust green color converter for high power blue laser lighting. Journal of Materials Chemistry C, 2015, 3, 10761-10766.	5.5	115
10	CaAlSiN₃:Eu²⁺ translucent ceramic: a promising robust and efficient red color converter for solid state laser displays and lighting. Journal of Materials Chemistry C, 2016, 4, 8197-8205.	5.5	115
11	Extra-Broad Band Orange-Emitting Ce³⁺-Doped Y₃Si₅N₉O Phosphor for Solid-State Lighting: Electronic, Crystal Structures and Luminescence Properties. Chemistry of Materials, 2016, 28, 4829-4839.	6.7	105
12	A robust red-emitting phosphor-in-glass (PiG) for use in white lighting sources pumped by blue laser diodes. Journal of Alloys and Compounds, 2017, 702, 193-198.	5.5	97
13	Unique Design Strategy for Laserâ€Driven Color Converters Enabling Superhighâ€Luminance and Highâ€Directionality White Light. Laser and Photonics Reviews, 2019, 13, 1900147.	8.7	93
14	A search for extra-high brightness laser-driven color converters by investigating thermally-induced luminance saturation. Journal of Materials Chemistry C, 2019, 7, 11449-11456.	5.5	90
15	A Thermally Robust La₃Si₆N₁₁:Ceâ€inâ€Glass Film for Highâ€Brightness Blueâ€Laserâ€Driven Solid State Lighting. Laser and Photonics Reviews, 2019, 13, 1800216.	8.7	86
16	Moisture-induced degradation and its mechanism of (Sr,Ca)AlSiN₃:Eu²⁺, a red-color-converter for solid state lighting. Journal of Materials Chemistry C, 2015, 3, 3181-3188.	5.5	75
17	Structure, Luminescence, and Application of a Robust Carbidonitride Blue Phosphor (Al_{1â€"<i>x</i>}Si_{<i>x</i>}C_{<i>x</i>}N_{1â€"<i>x</i>}:Eu²⁺) for Near UV-LED Driven Solid State Lighting. Chemistry of Materials, 2015, 27, 8457-8466.	6.7	75
18	Improved stability of CsPbBr₃ perovskite quantum dots achieved by suppressing interligand proton transfer and applying a polystyrene coating. Nanoscale, 2018, 10, 21441-21450.	5.6	75

#	ARTICLE	IF	CITATIONS
19	Structure, luminescence and energy transfer in Ce³⁺ and Mn²⁺ codoped Î³-AlON phosphors. Journal of Materials Chemistry C, 2019, 7, 733-742.	5.5	66
20	On the luminance saturation of phosphor-in-glass (PiG) films for blue-laser-driven white lighting: Effects of the phosphor content and the film thickness. Journal of the European Ceramic Society, 2019, 39, 1909-1917.	5.7	62
21	Crystal structure, tunable emission and applications of Ca_{1â^'x}Al_{1â^'x}Si_{1+x}N_{3â^'x}O_x:RE (x = 0â€“0.22,) Tj ETQq1 1 0.7843 14 Journal of Materials Chemistry C, 2016, 4, 11219-11230.	5.5	61
22	Transparent YAG:Ce ceramic with designed low light scattering for high-power blue LED and LD applications. Journal of the European Ceramic Society, 2021, 41, 735-740.	5.7	57
23	Strong Energy-Transfer-Induced Enhancement of Luminescence Efficiency of Eu²⁺- and Mn²⁺-Codoped Gamma-AlON for Near-UV-LED-Pumped Solid State Lighting. Inorganic Chemistry, 2015, 54, 5556-5565.	4.0	51
24	Realizing high-brightness and ultra-wide-color-gamut laser-driven backlighting by using laminated phosphor-in-glass (PiG) films. Journal of Materials Chemistry C, 2020, 8, 1746-1754.	5.5	49
25	Ternary solid solution phosphors Ca1--Li Al1--Si1++N3-O :Ce3+ with enhanced thermal stability for high-power laser lighting. Chemical Engineering Journal, 2021, 404, 126575.	12.7	45
26	Large-scale room-temperature synthesis of high-efficiency lead-free perovskite derivative (NH4)2SnCl6:Te phosphor for warm wLEDs. Chemical Engineering Journal, 2021, 420, 129740.	12.7	42
27	Composition-dependent thermal degradation of red-emitting (Ca_{1â^'x}Sr_x)AlSiN₃:Eu²⁺ phosphors for high color rendering white LEDs. Journal of Materials Chemistry C, 2018, 6, 890-898.	5.5	41
28	Realizing superior white LEDs with both high R9 and luminous efficacy by using dual red phosphors. RSC Advances, 2017, 7, 25964-25968.	3.6	40
29	A Facile Synthesis of Waterâ€Resistant CsPbBr₃ Perovskite Quantum Dots Loaded Poly(methyl methacrylate) Composite Microspheres Based on In Situ Polymerization. Advanced Optical Materials, 2019, 7, 1901075.	7.3	40
30	Structural evolutions and significantly reduced thermal degradation of red-emitting Sr₂Si₅N₈:Eu²⁺via carbon doping. Journal of Materials Chemistry C, 2017, 5, 8927-8935.	5.5	35
31	Discovery of the Yb²⁺â€“Yb³⁺ couple as red-to-NIR persistent luminescence emitters in Yb-activated (Ba_{1â^'x}Sr_x)AlSi₅O₂N₇ phosphors. Journal of Materials Chemistry C, 2017, 5, 7095-7101.	5.5	33
32	Thermally Robust Orangeâ€Redâ€Emitting Color Converters for Laserâ€Driven Warm White Light with High Overall Optical Properties. Laser and Photonics Reviews, 2022, 16, .	8.7	32
33	Bi-color phosphor-in-glass films achieve superior color quality laser-driven stage spotlights. Chemical Engineering Journal, 2022, 444, 136591.	12.7	32
34	Unraveling the Luminescence Quenching of Phosphors under High-Power-Density Excitation. Acta Materialia, 2021, 209, 116813.	7.9	31
35	Achieving deep-red-to-near-infrared emissions in Sn-doped Cuâ€“Inâ€“S/ZnS quantum dots for red-enhanced white LEDs and near-infrared LEDs. Nanoscale, 2018, 10, 9788-9795.	5.6	23
36	Europium(<scp>ii</scp>)-activated oxonitridosilicate yellow phosphor with excellent quantum efficiency and thermal stability â€“ a robust spectral conversion material for highly efficient and reliable white LEDs. Physical Chemistry Chemical Physics, 2015, 17, 15797-15804.	2.8	17

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37	Passivation Layer of Potassium Iodide Yielding High Efficiency and Stable Deep Red Perovskite Light-Emitting Diodes. ACS Applied Materials & Interfaces, 2022, 14, 16404-16412.	8.0	17
38	Microscale Perovskite Quantum Dot Lightâ€Emitting Diodes (Microâ€PeLEDs) for Fullâ€Color Displays. Advanced Optical Materials, 2022, 10, .	7.3	17
39	Combined control of the cation and anion to make ZnSnON thin films for visible-light phototransistors with high responsivity. Journal of Materials Chemistry C, 2017, 5, 6480-6487.	5.5	12
40	Sandwich structured phosphor-in-glass films enabling laser lighting with superior optical properties. Ceramics International, 2022, 48, 13626-13633.	4.8	10
41	Synthesis and upâ€conversion of Er 3+ and Yb 3+ Coâ€doped LiY(MoO 4) 2 @SiO 2 for optical thermometry applications. Journal of the American Ceramic Society, 2020, 103, 1046-1056.	3.8	8
42	An optimal spectral model for phosphorâ€converted white lightâ€emitting diodes used in the mesopic vision. Journal of the American Ceramic Society, 2019, 102, 260-266.	3.8	6