Ram Seshadri: Publications and Patents

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Awarded US Patents:

5. K. A. Denault, S. P. DenBaars, and R. Seshadri, Laser-driven white lighting system for high-brightness applications United State Patent 9,574,728 (February 21, 2017)

4. R. Seshadri, A. Birkel, B. Hong, and J. A. Gerbec, Single phase and full-color phosphor, United State Patent 9,228,125 B2 (January 5, 2016).

3. W.-B. Im, R. Seshadri, and S. P. DenBaars, Solid solution phosphors based on oxyfluoride and white light emitting diodes including the phosphors for solid state white lighting applications, United State Patent 8,535,565 (September 17, 2013).

2. W.-B. Im, R. Seshadri, and S. P. DenBaars, Oxyfluoride phosphors and white light emitting diodes including the oxyfluoride phosphor for solid-state lighting applications, United State Patent 8,344,611 B2 (January 1, 2013).

1. W.-B. Im, R. Seshadri, and S. P. DenBaars, Yellow emitting phosphors based on Ce^{3+}-doped aluminate and via solid solution for solid-state lighting applications, United States Patent 8,163,203 (April 24, 2012).

In press, or submitted:

M. M. Butala, V. V. T. Doan-Nguyen, A. Lehner, C. Göbel, M. A. Lumley, S. Arnon, K. Wiaderek, O. Borkiewicz, K. Chapman, P. Chupas, M. Balasubramanian, and R. Seshadri, Local structure studies reveal the origin of capacity fade in the Li–CoS_2 system.

I. Spanopoulos, W. Ke, C. Stoumpos, E. C. Schueller, O. Kontsevoi, R. Seshadri, and M. Kanatzidis, Unraveling the chemical nature of the 3D "hollow" hybrid halide perovskites.

J. D. Bocarsly, R. F. Need, R. Seshadri, and S. D. Wilson, Magnetoentropic signatures of skyrmionic phase behavior in FeGe, *Phys. Rev. B*. [arxiv.org/1802.09115]

Appeared:

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312. A. M. Zieschang, J. Bocarsly, M. Duerrschnabel, H.-J. Kleebe, R. Seshadri, and B. Albert, Low-temperature synthesis and magnetostructural transition in antiferromagnetic, refractory nanoparticles: Chromium nitride, CrN, *Chem. Mater.* **30** (2018) 1610–1616. [**DOI: 10.1021/acs.chemmater.7b04815**] & [**UC-eScholarship**]

311. J. Grebenkemper, J. Bocarsly, E. Levin, G. Seward, C. Heikes, C. Brown, S. Misra, F. Seeler, K. Schierle-Arndt, S. Wilson, and R. Seshadri, Rapid microwave preparation and composition tuning of the high-performance magnetocalorics $(Mn,Fe)_2(P,Si)$, *ACS Appl. Mater. Interfaces* **10** (2018) 7208–7213. [**DOI: 10.1021/acsami.7b16988**] & [**UC-eScholarship**]

310. C. Cozzan, G. Lheureux, N. O'Dea, E. Levin, J. Graser, T. Sparks, S. Nakamura, S. DenBaars, C. Weisbuch, and R. Seshadri, Stable, heat conducting phosphor composites for high-power laser lighting, *ACS Appl. Mater. Interfaces* **10** (2018) 5673–5681. [**DOI: 10.1021/acsami.8b00074**] & [**UC-eScholarship**]

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