Ram Seshadri: Publications and Patents

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In press, or submitted:

A. Reach, S .Stevens, C. Wang, G. Seward, A. K. Cheetham, R. Seshadri, and J. Sakamoto, Site-selective K-for-Na exchange at room temperature in a NaSICON solid electrolyte.

A. S. Mulligan, A. Chezhiyan, A. McNarney, G. Kent, S. Peifer, G. Wu, R. Schaller, M. G. Kanatzidis, B. F. Chmelka, A. K. Cheetham, and R. Seshadri, Dormant lone-pairs in vacancy–ordered selenium halide double perovskites.

D. Rout, C. Robison, L. Reimanis, G. Zhu, H. Z. Porter, E. A. Lawrence, C. Benyacko, R. Seshadri, S. Stemmer, and S. D. Wilson, Probing the limits of flat band tunability in Ni_3In.

Appeared:

458. M. A. Wright, E. Moya, S. Browne, A. Bologna, K. Brockmeyer, A. Reach, and R. Seshadri, Na-ion cathodes in minutes: Microwave synthesis across the Na–Mn–Fe–Ni–Cu–O composition space, *ACS Appl. Energy Mater.* **9** (2026) 13010–13020. [**DOI: 10.1021/acsaem.6c02255**]

457. A. Au II, A. Balvanz, H. Tian, G. Joalland, J. Hu, Jerry; A. K. Cheetham, G. Volonakis, R. Seshadri, and M. G. Kanatzidis, Mapping and controlling 0D to 2D polymorphism and bandgap bowing in the perovskite-related halides $Cs_3Bi_{2-x}Sb_xI_9$, *J. Am. Chem. Soc.* **148** (2026) 37909–37929. [**DOI: 10.1021/jacs.6c08526**]

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455. A. Reach, M. Wright, A. Mulligan, Z. Fang, K.-T. Tseng, C. Wang, J. Hu, M. Chi, A. K. Cheetham, R. Seshadri, and J. Sakamoto, Enhanced sodium dynamics in biphasic NaSICON solid electrolytes, *Chem. Mater.* **38** (2026) 5356–5368. [**DOI: 10.1021/acs.chemmater.5c03070**]

454. B. E. Rhodes, J. A. Mayer, W. S. Cunningham, A. Genc, S. Comby-Dassonneville, T. W. Cornelius, O. Thomas, R. Seshadri, Y. M. Eggeler, I. J. Beyerlein, and D. S. Gianola, Origins of the giant magnetoplastic effect in $L2_1$–ordered intermetallics, *Phys. Rev. Mater.* **10** (2026) 054405. [**DOI: 10.1103/k8bj-j1tp**]

453. H. Tian, T. Li, A. Mulligan, J. Tregidga, M. Wright, A. Zohar, A. Chezhiyan, M. Preefer, K. Stone, J. Hu, G. Wu, A. Manjón-Sanz, S. Lapidus, J. Harter, A. K. Cheetham, and R. Seshadri, Structural propensities in Cs_2MBiX_6 (M = Na, Ag; X = Cl, Br) bismuth halide double perovskites. *Chem. Mater.* **38** (2026) 3350–3360 [**DOI: 10.1021/acs.chemmater.5c03072**]

452. A. Watkins, A. K. Cheetham, and R. Seshadri, Metallic oxides and the overlooked role of bandwidth, *Chem. Mater.* **38** (2026) 1551–1565. [**DOI: 10.1021/acs.chemmater.5c02578**]

451. K. Brockmeyer, A. Bologna, M. Wright, J. Wong, C. Rodriguez, T. Li, R. A. Segalman, and R. Seshadri, Direct microwave pyrolysis of cellulose to hard carbon anodes for sodium-ion batteries, *Chem. Mater.* **38** (2026) 1377–1384. [**DOI: 10.1021/acs.chemmater.5c02824**]

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445. M. A. Wright and R. Seshadri, Linking battery electrode science with correlated and quantum materials, *Phys. Rev. Mater.* **9** (2025) 110302. [**DOI:10.1103/zwkw-zc5n**]

444. K. E. Wyckoff, A. Zohar, T. Li, Y. Zhou, L. Kautzsch, W. Wang, A. Kepper, A. Patterson, H. C. Mandujano, K. P. Koirala, A. Kallistova, W. Xu, J. Liu, L. Pilon, A. K. Cheetham, and R. Seshadri, Metallicity, atomic disorder, and Li–ion storage in fast-charging anodes, *J. Am. Chem. Soc.* **147** (2025) 33432–33441. [**DOI: 10.1021/jacs.5c06578**]

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